

ACCESS SERVICE

Regulations, Rates and Charges
applying to the provision of Access Services
within the combined area of the State of Wisconsin and the State of Michigan
for connection to interstate communications facilities
of the Issuing Carriers listed on the attached Title Page

(C)
|
(C)

Access Services are provided by means of wire, fiber optics, radio or any other suitable technology or a combination thereof.

ISSUING CARRIERS

Alpha Connect, LLC
Competitive Local Exchange Carrier
OCN 760G

Alpha Connect LLC
Competitive Access Provider
OCN 900G

Transmittal 1

ACCESS SERVICE**CHECK SHEET**

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ACCESS SERVICE

CONCURRING CARRIERS

NONE

CONNECTING CARRIERS

NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS

NO OTHER PARTICIPATING CARRIERS

REGISTERED SERVICE MARKS

NONE

REGISTERED TRADEMARKS

NONE

ACCESS SERVICE**EXPLANATION OF SYMBOLS**

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

EXPLANATION OF ABBREVIATIONS

ADA	- Abbreviated Dialing Arrangement
ADM	- Add/Drop Multiplexing
ADSL	- Asymmetric Digital Subscriber Line
AML	- Actual Measured Loss
ANI	- Automatic Number Identification
AP	- Program Audio
AT&T	- American Telephone and Telegraph Company
ATM	- Asynchronous Transfer Mode
ATM-CRS	- Synchronous Transfer Mode Cell Relay Access Service
BHMC	- Busy Hour Minutes of Capacity
CBR	- Constant Bit Rate
CDP	- Customer Designated Premises
CCS	- Common Channel Signaling
CI	- Channel Interface
CIR	- Committed Information Rate
CN	- Charge Number
CO	- Central Office
Cont'd	- Continued
CPE	- Customer Provided Equipment
CPN	- Calling Party Number
CSP	- Carrier Selection Parameter
DA	- Directory Assistance
dB	- decibel
dBrnC	- Decibel Reference Noise C-Message Weighting
dBrnC0	- Decibel Reference Noise C-Message Weighted O
dc	- direct current
DDD	- Direct Distance Dialing
DSL	- Digital Subscriber Line
EAS	- Extended Area Service
EDD	- Envelope Delay Distortion
EML	- Expected Measured Loss
EPL	- Echo Path Loss
ERL	- Echo Return Loss
ESS	- Electronic Switching System
ESSX	- Electronic Switching System Exchange
f	- frequency
F.C.C.	- Federal Communications Commission

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ACCESS SERVICE**EXPLANATION OF ABBREVIATIONS** (Cont'd)

FRAS	- Frame Relay Access Service
HC	- High Capacity
Hz	- Hertz
C	- Interexchange Carrier
ICB	- Individual Case Basis
ICL	- Inserted Connection Loss
ISDN BRI	- Integrated Services Digital Network Basic Rate Interface
ISDN PRI	- Integrated Services Digital Network Primary Rate Interface
kbps	- kilobits per second
kHz	- kilohertz
LAN	- Local Area Network
LATA	- Local Access and Transport Area
LNP	- Local Number Portability
LRN	- Location Routing Number
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
MTSO	- Mobile Telephone Switching Office
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
SSP	- Service Switching Point
SS7	- Signaling System 7
STP	- Signal Transfer point
STS	- Synchronous Transport Signal
SWC	- Serving Wire Center
TDM	- Time Division Multiplexing
TG	- Telegraph Grade

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ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

TLP	- Transmission Level Point
TV	- Television
UBR	- Unspecified Bit Rate
UNI	- User Network Interface
V & H	- Vertical & Horizontal
VBR-nrt	- Variable Bit Rate – Non-real time
VBR-rt	- Variable Bit Rate – Real Time
VCC	- Virtual Circuit Channel
VG	- Voice Grade
VP	- Virtual Path
WATS	- Wide Area Telecommunications Service(s)
WSO	- WATS Serving Office

ACCESS SERVICE**REFERENCE TO OTHER TARIFFS**

Whenever reference is made in this tariff to other tariffs of the Telephone Company, the reference is to the tariffs in force as of the effective date of this tariff, and to amendments thereto and successive issues thereof.

The following tariffs are referenced in this tariff and may be obtained from the Federal Communications Commission's commercial contractor:

National Exchange Carrier
Association, Inc.
Special Construction
Tariff F.C.C. No. 3

National Exchange Carrier
Association, Inc.
Wire Center Information
Tariff F.C.C. No. 4

National Exchange Carrier
Association, Inc.
Tariff F.C.C. No. 5

REFERENCE TO TECHNICAL PUBLICATIONS

The following technical publications are referenced in this tariff and may be obtained from Telcordia Technologies Inc. (formerly Bell Communications Research, Inc. (Bellcore), Direct Sales, 8 Corporate Place, Piscataway, NJ 08854-4156.

Technical Reference:

GR-253-CORE Issue 4 Synchronous Optical Network (SONET)
Transport Systems: Common Generic Criteria
Issued: July 20, 2012 December 2005

GR-1374-CORE Issue 1 SONET Inter-Carrier Interface Physical Layer Generic Criteria
for Carriers
Issued: July 20, 2012 December 1994

PUB 41004 (MDP-326-584) Data Communications Using Voiceband Private Line
Channels
Issued: July 20, 2012 October 1973

PUB 62310 (MDP-326-726) Digital Data System Channel Interface Specification
Issued: July 20, 2012 September 1983

TR-NPL-000258 Compatibility Information for Feature Group D Switched Access
Service
Issued: July 20, 2012 October 1985

GR-334-CORE Issue 1 Switched Access Service - Transmission Parameter Limits and
Interface Combinations
Issued: July 20, 2012 June 1994

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ACCESS SERVICE**REFERENCE TO TECHNICAL PUBLICATIONS** (Cont'd)

TR-NWT-000335, Issue 3 Voice Grade Special Access Service - Transmission
Parameter Limits and Interface Combinations
Issued: July 20, 2012 May 1993

TR-NPL-000336 Metallic and Telegraph Grade Special Access Service - Transmission
Parameter Limits and Interface Combinations
Issued: July 20, 2012 October 1987

GR-337-CORE, Issue 1 Program Audio Special Access Service and Local Channel
Services
Issued: July 20, 2012 December 1995

GR-338-CORE, Issue 1 Television Special Access and Local Channel Services -
Transmission Parameter Limits and Interface Combinations
Issued: July 20, 2012 December 1995

TR-NWT-000341 Digital Data Special Access Service - Transmission
Parameter and Interface Combinations
Issued: July 20, 2012 Issue 2, February 1993

GR-342-CORE, Issue 1 High Capacity Digital Special Access Service - Transmission
Parameter Limits and Interface Combinations
Issued: July 20, 2012 December 1995

SR-307 Common Language NC/NCI Dictionary
Issued: July 20, 2012 Issue 5, June 2006

GR-506-CORE, Issue 2 LATA Switching Systems Generic Requirements (LSSGR)
Issued: July 20, 2012 December 2006

GR-54-CORE, Issue 1 DS1 High Capacity Digital Service
End User Metallic Interface Specifications
Issued: July 20, 2012 December 1995

GR-905-CORE, Issue 9 Common Channel Signaling Network Interface Specification
Available: December 2006

TR-TSV-001370 Generic Requirements for Exchange Access Frame Relay PVC Service
Issued: July 20, 2012 Issue 1, May 1993

GR-394-CORE Issue 7 Switching System Generic Requirements for Interexchange
Carrier Interconnection Using the Integrated Services Digital Network User Part
(ISDNUP)
Issued: July 20, 2012 December 2003

GR-2936-CORE Issue 3 Local Number Portability (LNP) Capability Specification
Service Provider Portability
Issued: July 20, 2012 November 1997

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REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

Telecommunications Transmission Engineering
Volume 3 - Networks and Services (Chapters 6 and 7)
Third Edition, 1980
Issued: July 20, 2012 August 1989

The following technical publication is referenced in this tariff and may be obtained from the National Exchange Carrier Association, Inc., Director - Tariff and Regulatory Matters, 80 So. Jefferson Road, Whippany, NJ 07981 and the Federal Communications Commission's commercial contractor.

PUB AS No. 1, Issue II Access Service
Issued: July 20, 2012 May, 1984
Addendum: March 1987

The following publications are referenced in this tariff and may be obtained from the Government Printing Office, Superintendent of Documents, Document Control Branch, 941 N. Capital St., N.E., Washington, D.C. 20401.

Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook, National Communications System (NCSH 3-1-2).

Issued July, 1990
Available August, 1990

Telecommunication Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service User Manual, National Communications System (NCSM 3-1-1).

Issued July, 1990
Available August, 1990

ACCESS SERVICE**REFERENCE TO TECHNICAL PUBLICATIONS** (Cont'd)

The following publication is referenced in this tariff and may be obtained from Director-Sales Operations, Integrated Network Corporation, P.O. Box 6875, Bridgewater, NJ 08807.

Integrated Network Corporation
Document CB-INC-100
Available: June 1990

The following technical publications are referenced in this tariff and may be obtained from American National Standards Institute, 1430 Broadway, New York, New York 10018.

ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.

ANSI T1.105-2001, Synchronous Optical Network (SONET) – Basic Description including Multiplex Structure, Rates and Formats.

ANSI T1.602-1996, Integrated Services Digital Network (ISDN) – Data-Link Layer Signaling Specification for Application at the User-Network Interface.

ANSI T1.606-1990, Integrated Services Digital Network (ISDN) - Architectural Framework and Service Description for Frame-Relaying Bearer Service.

ANSI T1.606a-1992, Supplement to ANSI T1.606-1990 Integrated Services Digital Network (ISDN) - Architectural Framework and Service Description for Frame-Relaying Bearer Service (Congestion Management and Frame Size).

ANSI T1.617-1991, Integrated Services Digital Network (ISDN) - Signaling Specification for Frame Relay Bearer Service for Digital Subscriber Signaling System Number 1 (DSS1).

ANSI T1.617a-1994, Integrated Services Digital Network (ISDN) - Signaling Specification for Frame Relay Bearer Service for Digital Subscriber Signaling System Number 1 (DSS1) Protocol Encapsulation and PICS).

ANSI T1.618-1991, Integrated Services Digital Network (ISDN) - Core Aspects of Frame Protocol for Use with Frame Relay Bearer Service.

ANSI T1.413-1998, Network and Customer Installation Interfaces - Asymmetric Digital Subscriber Line (ADSL) Metallic Interface.

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ACCESS SERVICE**REFERENCE TO TECHNICAL PUBLICATIONS** (Cont'd)

The following technical publication is referenced in this tariff and may be obtained from the Institute of Electrical and Electronics Engineers, Inc. (IEEE), 445 Hoes Lane, , Piscataway, NJ 08854-4141 (www.ieee.org).

IEEE Std. 802.3 - 2005, Information Technology – Telecommunications and Information Exchange Between Systems – Local and Metropolitan Area Networks – Specific Requirements, Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications, Section 1, Clauses 14 and 15; Section 2, Clauses 21, 26 and 29; Section 3, Clauses 34 through 38; Section 5, Clauses 56 through 67.

The following technical publications are referenced in this tariff and may be obtained from the Alliance for Telecommunications Industry Solutions (ATIS), 1200 G Street N.W., Suite 500, Washington, DC 20005 (www.atis.org).

Multiple Exchange Carrier Access Billing (MECAB) Guidelines
Issued: July 20, 2012 December, 2006

Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines
Issued: July 20, 2012 November, 2006

The following technical publications are referenced in this tariff and may be obtained from IP/MPLS Forum, 48377 Fremont Blvd. Suite 117, Fremont, CA 94538 (www.ipmplsforum.org).

The ATM Forum Technical Committee, ATM User-Network Interface (UNI) Signaling Specification, Version 4.1, af-sig-0061.002, April, 2002.

The ATM Forum Technical Committee, BISDN Inter Carrier Interface (B-ICI) Specification, Version 2.0 (Integrated), af-bici-0013.003, December, 1995.

The ATM Forum Technical Committee, Private Network – Network Interface Specification, Version 1.0 (PNNI 1.1) af-pnni-0055.002, April, 2002.

The following technical publications are referenced in this tariff and may be viewed online without charge on the Internet Engineering Task Force web site (www.ietf.org) using the “RFC Pages” link.

Request For Comments (RFC) 791, Internet Protocol, DARPA Internet Program Protocol Specification, September 1981.

Request For Comments (RFC) 1483, Multiprotocol Encapsulation over ATM Adaptation Layer 5, July 1993.

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ACCESS SERVICE**REFERENCE TO TECHNICAL PUBLICATIONS** (Cont'd)

The following technical publications are referenced in this tariff and may be obtained from the International Telecommunication Union Telecommunication Standardization Sector (ITU-T) Place des Nations, 1211 Geneva 20, Switzerland (www.itu.int/rec/T-REC-G/e).

ITU-T G.983.1-January 2005, Broadband Optical Access Systems Based on Passive Optical Networks (PON).

ITU-T G.983.2-July 2005, ONT Management and Control Interface Specification for B-PON.

ITU-T G.983.3-March 2001, A Broadband Optical Access System with Increased Service Capability by Wavelength Allocation.

ITU-T G.983.4-November 2001, A Broadband Optical Access System with Increased Service Capability Using Dynamic Bandwidth Assignment.

ITU-T G.984.1-March 2008, Gigabit-Capable Passive Optical Networks (GPON): General Characteristics.

ITU-T G.984.2-March 2003, Gigabit-Capable Passive Optical Networks (GPON): Physical Media Dependent (PMD) Layer Specification.

ITU-T G.984.3-March 2008, Gigabit-Capable Passive Optical Networks (GPON): Transmission Convergence Layer Specification.

ITU-T G.984.4-February 2008, Gigabit-Capable Passive Optical Networks (GPON): ONT Management and Control Interface Specification.

ITU-T G.992.5-January 2005, Asymmetric Digital Subscriber Line (ADSL) Transceivers—Extended Bandwidth ADSL2 (ADSL2+).

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ACCESS SERVICE

1. Application of Tariff

- 1.1 This tariff contains regulations, rates and charges applicable to the provision of Carrier Common Line, End User Access, Switched Access, Special Access, Lifeline Assistance, Universal Service Fund and other miscellaneous services, hereinafter referred to collectively as service(s). These services are provided to customers by the Issuing Carriers 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.

ACCESS 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.
- (F) The Telephone Company provides only those services that are contained in this tariff that the Telephone Company is technically capable of providing.

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

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.2 Limitations (Cont'd)(A) Assignment or Transfer of Services (Cont'd)

- (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.

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.

ACCESS SERVICE2. General Regulations (Cont'd)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.

ACCESS SERVICE2. 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;

ACCESS SERVICE2. 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)(1) By the End User (Cont'd)

- (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 users 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) 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.

ACCESS SERVICE2. 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.

ACCESS SERVICE**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 intrabuilding 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.

ACCESS SERVICE**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,

- 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.

ACCESS SERVICE**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 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.

ACCESS SERVICE**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, Charges 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.

ACCESS SERVICE2. 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 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.

ACCESS SERVICE**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 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 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.

ACCESS SERVICE2. 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.
- (I) If the Customer has failed to comply with Section 3.9 herein (Federal Universal Service Charge), including any Customer's failure to make payments on the date and times specified therein, the Telephone Company may, on thirty calendar days' written notice to the Customer by Certified U.S. Mail, or overnight delivery to the person designated by that customer to receive such notices of noncompliance, take any of the following actions:
- refuse additional applications for service
 - refuse to complete any pending orders for service
 - discontinue the provision of service to the Customer.

In the case of discontinuance, all applicable charges including termination charges shall become due.

ACCESS SERVICE**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).

ACCESS SERVICEGeneral Regulations (Cont'd)2.2 Use2.2.1 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.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer2.3.1 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.

ACCESS SERVICE**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.

ACCESS SERVICE2. 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.

ACCESS SERVICE2. 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.
- (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.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)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.

* Digital Subscriber Line Access Service used for connections to the Internet is classified as interstate service provided under this tariff in compliance with the Federal Communications Commission's Memorandum Opinion and Order released October 30, 1998 (FCC 98-292).

ACCESS SERVICE2. 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 Service 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.

ACCESS SERVICE2. 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 C or 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.

For purposes of developing the projected interstate percentage for Feature Group A or Feature Group B, pursuant to Federal Communications Commission Order FCC 85-145 released April 16, 1985, interstate usage is to be developed as though every call that enters a customer network at a point within the same state as that in which the called station (as designated by the called station telephone number) is situated is an intrastate communication and every call for which the point of entry is a state other than that where the called station (as designated by the called station telephone number) is situated, is an interstate communication.

ACCESS SERVICE2. 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)

- (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.

ACCESS SERVICE2. 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. For originating access minutes, when the call detail is adequate to determine the appropriate jurisdiction and when the Feature Group C or 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. For terminating access minutes, 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.

ACCESS SERVICE2. 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)

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.

- (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.

ACCESS SERVICE2. 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 a customer orders Feature Group A or Feature Group B Switched Access Service, the customer shall, in its order, state the projected percentage for interstate usage for each Feature Group A or Feature Group B Switched Access Service group ordered. The term group shall be construed to mean single lines or trunks as well. For all groups the number of access minutes (either measured or assumed) for a group will be multiplied by the projected interstate percentage to develop the interstate access minutes. The number of access minutes for the group minus the developed interstate access minutes for the group will be developed intrastate access minutes.
- (d) When a customer orders Directory Assistance Service, the customer shall, in its order, provide the projected interstate percentage for terminating use.
- (e) When the customer has both interstate and intrastate Operator Services traffic, the percentage interstate usage determined for the customer's FGC or FGD service will be applied to the customer's Operator Services charges.

ACCESS SERVICE2. 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.

ACCESS SERVICE2. 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.

ACCESS SERVICE2. 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.

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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)

ACCESS SERVICE2. 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.

ACCESS SERVICE2. 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.

ACCESS SERVICE2. 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 over-stated 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.

ACCESS SERVICE2. 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 an 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.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances2.4.1 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 services, such deposit will not exceed the actual rates and charges for a two (2) 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. 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.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(A) Deposits (Cont'd)

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.

ACCESS SERVICE2. 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 Access Service under this tariff), the period of service each bill covers and the payment date will be as follows:

(1) End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service and Presubscription

For End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service and Presubscription Service, 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 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 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 and Presubscription Service will be applied to this bill. Such bills are due when rendered.

ACCESS SERVICE2. 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) Access Services Other Than End User, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service and Presubscription

For Service other than End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service and Presubscription Service, 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.

ACCESS SERVICE2. 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 and Presubscription Service, 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, then 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.

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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)

(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 last non-Holiday day preceding such Saturday or Legal Holiday.

ACCESS SERVICE2. 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)

- (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.

ACCESS SERVICE2. 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) Disputes may not be filed more than six (6) months after the bill date of the disputed invoice/BAN.
- (5) Should be it be determined that a billing error was in fact made, the Company credit will be no more than six (6) months from the date of the bill that was disputed.

ACCESS SERVICE2. 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)

- (4) 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.
- (5) 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.

ACCESS SERVICE2. 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.
- (6) 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.

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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)

(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.

ACCESS SERVICE2. 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 those services set forth in Section 6 (Switched Access 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), Section 7 (Special Access Part-time Video and Program Audio, Special Access High Capacity Service, Special Access Synchronous Optical Channel Service, Frame Relay Access Service), and Section 16 (Asynchronous Transfer Mode Cell Relay Access Service Ports, Ethernet Transport Service), or as otherwise specified.

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.

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 Sections 5.5.1, 7.2.8, 7.2.9 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.

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ACCESS SERVICE2. 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 Digital Data Access, SD Codes (DA1 through DA6), High Capacity (DS1), and Synchronous Optical Channel Service (OB, OD), any period during which the error performance is below that specified for the service will be considered as an interruption.

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.

ACCESS SERVICE2. 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, and for flat rated Switched Access Service rate elements (i.e., Entrance Facility, Direct Trunked Transport and 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).

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ACCESS SERVICE2. 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 and flat rated Switched Access Service and Digital Subscriber Line 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.

ACCESS SERVICE2. 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 and flat rated Switched Access Service and Digital Subscriber Line 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.

ACCESS SERVICE2. 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.

ACCESS SERVICE2. 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

For Switched Access Service, 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.

ACCESS SERVICE2. 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 1 monthly billing period.

(C) When a Credit Allowance Does Not Apply

No credit allowance will be made for:

- (1) Interruptions 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;

ACCESS SERVICE2. 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 determined by a separate ICB agreement. 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; or
- (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.

ACCESS SERVICE2. 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).

ACCESS SERVICE2. 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.

(A) Non Meet Point Billing/Feature Group A

Non Meet Point Billing under a Revenue Sharing Agreement is the generally accepted billing method for Feature Group A Switched Access Service. At the agreement of the participating Telephone Companies, Meet Point Billing may apply to jointly provided Feature Group A services as set forth in (B) following.

ACCESS SERVICE2. 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(A) Non Meet Point Billing/Feature Group A (Cont'd)(1) Single Company Billing/Revenue Sharing

All Telephone Companies jointly providing Feature Group A service will receive an order or a copy of the order, from the customer, as specified in 5.3.1(A) following. The telephone company that provides the dial tone will arrange to provide the service, determine the applicable charges and bill the customer for the entire service in accordance with its Access Services tariff as provided for under a Feature Group A Revenue Sharing Agreement.

(B) Meet Point Billing

Meet Point Billing is required when an access service is provided by multiple Telephone Companies for Feature Groups B, C, and D Switched Access Services and Special Access. It is optional for Feature Group A Switched Access Service.

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 generally be determined by the recording company. Where the recording company is not the Bill Rendering Company, the recording company will provide detailed usage records to the Bill Rendering Company to develop the access minutes.

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)

The Bill Rendering Company in a single bill arrangement for Feature Groups B, C, and 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. 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 can not 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 30 days prior to changing an existing meet point arrangement. The notification should include the following:

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)

- 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.

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 include cross reference(s) to the other telephone Company(s) providing service and 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.

ACCESS SERVICE2. 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(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.

ACCESS SERVICE2. 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(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. For switched access Multiple bills the end office company is generally the Initial Billing Company (IBC). The IBC is the company that calculates the access minutes to be billed to the customer and provides this data to each connecting company providing service, i.e., the Subsequent Billing Company(s). Each company, IBC and SBC, will:

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(2) Multiple Bill Option (Cont'd)

- 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;
- reflect its Billing Account Reference (BAR) and all connecting company Billing Account Cross Reference (BACR) code(s);
- 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 and Channel Mileage Charges

Each Telephone Company's portion of the Local 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

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

- (a) (Cont'd)
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.
- (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 Groups A, B, C and 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 this Tariff, multiply the Tandem Switching rate times the number of originating and terminating access minutes that are switched at the tandem.

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local 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 Groups A, B, C, and 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.)

(e) For Feature Groups A, B, C, and D.

- When the Entrance Facility and/or Multiplexing equipment is located within the operating territory of a Telephone Company participating in this Tariff, the Entrance Facility and/or Multiplexing charge will apply.
- The Billing Percentage (BP) is not applicable to the Entrance Facility and Multiplexer charges.

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

- (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.

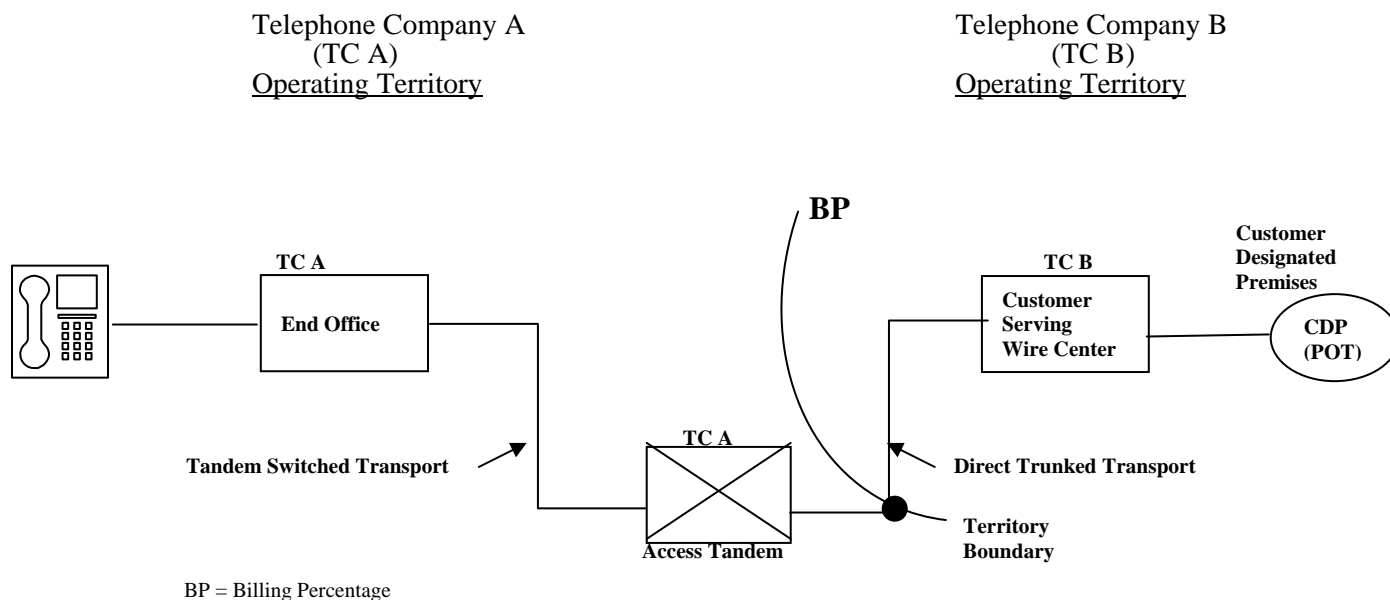
The Special Access Channel Mileage Termination rate and nonrecurring charges are applied as set forth in 7.2.1(B)(2) and 7.2.2(C) following. (Note: The BP is not applied to either the Channel Mileage Termination Recurring Rate or any Nonrecurring Charge.)

- (g) When three or more Telephone Companies are involved in providing an Access Service, the intermediate Telephone Company(s) will determine the appropriate charges as set forth in (c) through (f) 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).

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)(h) 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 Telephone Company A (TC A).
- Customer designated premises is in the operating territory of Telephone Company B (TC B).



ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)(h) Example 1 - Switched Access (Cont'd)

The following example reflects the rate calculations for TC A. Rates for a company not participating in this tariff 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 (AM) = 9000

Tandem Switched Facility Rate = TSF

Tandem Switched Termination Rate = TST

Tandem Switching Rate = TS

End Office Charges = EO

Direct Trunked Facility Rate = DTF

Direct Trunked Termination Rate = DTT

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)(h) Example 1 - Switched Access (Cont'd)

- Telephone Company A charges are:

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 x TS rate

End Office Charges
= 9,000 min. x EO rates

Direct Trunked Facility charge
= 26 miles x DTF rate x 40%

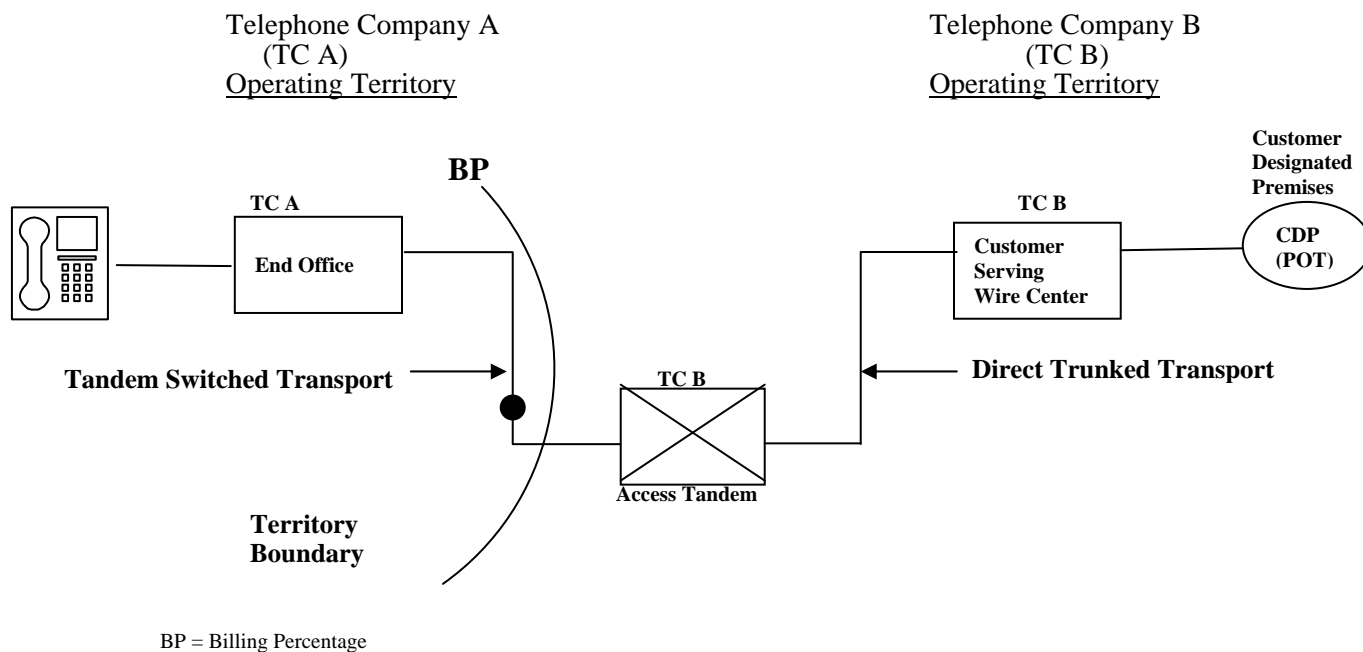
Direct Trunked Termination charge
= 1 termination x DTT rate

(

ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)(i) Example 2 - Switched Access

Layout

- Feature Group D Switched Access is ordered to End Office.
- End office is in the operating territory of Telephone Company (TC-A).
- Access Tandem and Customer Designated Premises are in the Operating territory of Telephone Company (TC-B).



ACCESS SERVICE2. 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(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)(i) Example 2 - Switched Access (Cont'd)

The following example reflects the Rate calculations for TC-A. Rates for a company not participating in this tariff would appear in that company's access tariff.

- 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

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

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local 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

ACCESS SERVICE

2. General Regulations (Cont'd)

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.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 Definitions**

Certain terms used herein are defined as follows:

800 Series Service

800 Series Service is a generic term for access services associated with toll free numbers, which include 800, 888, 877, 866, 855, 844, 833 and 822.

800 Series Data Base Access Service

800 Series Data Base Access Service is a generic term for data base access services associated with toll free numbers, which include 800, 888, 877, 866, 855, 844, 833 and 822.

Access Code

The term "Access Code", with the exception of Feature Group B (FGB) with an Abbreviated Dial Arrangement (ADA), denotes a uniform access code assigned by the Telephone Company to an individual customer in the form of 10XXX or 101XXX X 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 Order

For Local Number Portability Query Service, N-1 telecommunications carriers who arrange in advance for the Telephone Company to perform queries on their behalf must identify where calls will terminate, i.e., which end office or tandem switch, and provide rolling three months estimates of the volume of traffic including estimated total monthly traffic and maximum busy hour volumes and the Telephone Company switch to which this traffic volume is routed.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 Definitions (Cont'd)****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.

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.

Asymmetrical Digital Subscriber Line (ADSL)

The term "Asymmetrical 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.

Transmittal No. 143

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 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.

Billing Name and Address

The term "Billing Name and Address" (BNA) means the name and address provided to a local exchange company by each of its local exchange customers to which the local exchange company directs bills for its services.

Bit

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

Broadband

The term "broadband", in the context of telecommunications services provided under this tariff, refers to services providing data or information transmission speeds over 200 kbps in at least one direction. Full broadband transmission services provide transmission at speeds over 200 kbps for both upstream and downstream transmissions.

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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 and/or Directory Assistance 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 and/or Directory Assistance 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 or Common Carrier

See Interexchange Carrier.

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 B or 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.

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

Channelize

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

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 Definitions (Cont'd)****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.

Coin Station

See Pay Telephone.

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.

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.

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.

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.

Transmittal No. 160

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Customer Designated Premises

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

Customer Node

The term "Customer Node" denotes Telephone Company provided equipment located at a customer designated premises that terminates a high speed optical channel.

Data-Only DSL Access Service

The term "Data-Only" when used in the context of Asymmetrical Digital Subscriber Line (ADSL) Access Service, Symmetrical Digital Subscriber Line (SDSL) Access Service, or High Speed Internet (HSI) Access Service refers to provision of the service over a line that does not also carry local exchange switched voice telephone service to the customer premises. Data-Only DSL may also be referred to in the industry as "Naked DSL."

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Decibel Reference Noise C-Message Referenced to O

The term "Decibel Reference Noise C-Message Referenced to O" 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 Subscriber Line (DSL) Access Service Connection Point

The term "Digital Subscriber Line (DSL) Access Service Connection Point" is a location designated by the Telephone Company that serves as an aggregation point for the collection of Telephone Company DSL traffic from multiple Digital Subscriber Line Access Multiplexers (DSLAMs) or comparable packet-mode data modem equipment.

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.

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.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 Definitions (Cont'd)****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.

Directory Number (DN)

Denotes a unique NPA-NXX-XXXX assigned to a subscriber of a Local Service Provider.

Downstream

The term "Downstream" as used in the context of DSL is the transmission path from the Telephone Company's DSL Access Service Connection Point to the point of demarcation at the customer designated end user customer premises.

Dual Tone Multifrequency Address Signaling

The term "Dual Tone Multifrequency Address Signaling" denotes a type of signaling that is an optional feature of Switched Access Feature Group A. It may be utilized when Feature Group A is being used in the terminating direction (from the point of termination with the customer to the local exchange end office). An office arranged for Dual Tone Multifrequency Signaling would expect to receive address signals from the customer in the form of Dual Tone Multifrequency signals.

Donor Switch

Denotes the original switch source of an NXX that has been designated as portable and from which a subscriber has moved their service, while retaining their Directory Number, to a different service provider's switch.

Echo Control

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

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 Definitions (Cont'd)****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.

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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

Ethernet is a local area network (LAN) used for connecting computers, terminals, servers, etc. within the same building or office campus. Ethernet operates over twisted wire or coaxial cable at speeds up to ten million bits per second (10 Mbps). "Fast Ethernet" can operate at speeds up to 100 Mbps. In the LAN context, Ethernet is a physical link protocol reflecting the two lowest layers of the DNA/OSI model. Ethernet LANs can generally connect to Asynchronous Transfer Mode (ATM) Cell Relay Service (CSR) networks at port speeds of 10 Mbps, 100 Mbps and one billion bits per second (1 Gigabit or "Gbps"). Standards for CPE connected to Telephone Company ATM-CRS ports are specified in Technical Reference IEEE Std. 802.3, Part 3, Clause 15 for 10BASE-F, Clause 26 for 100BASE-F and Clauses 34 through 38 for 1000BASE-X connections.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-end 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.

Extended Area Service

See Exchange.

Extended PVC

The term "Extended PVC" denotes the interconnection of a port on a telephone company's frame relay switch with a port on another interconnected telephone company's frame relay switch.

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 (FRAC)

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

Frame Relay Access Customer Port

The term "Frame Relay Access Customer Port" denotes the physical location in the telephone company switching offices 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.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 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 end user customer premises equipment for the purpose of connecting to an access customer's interstate 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 receives the data frame from the end user customer's Local Area Network or other compatible CPE devices and verifies that the end user connection and the corresponding access customer connection are valid before relaying the frame to the destination end point.

Frame Relay Inter-network Connection (FRIC)

The term "Frame Relay Inter-network Connection (FRIC)" 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.

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Hub

A wire center at which bridging or multiplexing functions are performed for customers served out of any wire center.

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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

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).

Internet Protocol

Internet Protocol (IP) is designed for use in interconnected systems of packet-switched computer communication networks. The internet protocol provides for transmitting blocks of data called datagrams from sources to destinations, where sources and destinations are hosts identified by fixed length addresses. The internet protocol also provides for fragmentation and reassembly of long datagrams, if necessary, for transmission through "small packet" networks. Use of IP for transmission by services provided under this tariff must comport with technical standards recognized in Request for Comments (RFC) 791, Internet Protocol, Defense Advanced Research Projects Agency (DARPA) Internet Program Protocol Specification, September 1981 or successor technical references indicated in this tariff.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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.

Inverse Multiplexing – ATM (IMA)

Inverse Multiplexing – ATM (IMA) is a specification defined by the ATM Forum that provides a way to combine an ATM cell stream over two or more circuits (i.e., DS1 lines), thus allowing an organization to lease just the bandwidth it needs. When more than DS1 capacity and less than DS3 capacity is required, IMA allows ordering bandwidth at higher than a DS1 1.544 Mbps level but lower than a DS3 44.736 Mbps level where Asynchronous Transfer Mode (ATM) service is available.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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 Area Network

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

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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.

MultiMedia

MultiMedia refers to data transport services that include data, text, audio, and visual content.

MultiMedia Virtual Circuit Channel (MM-VCC)

A "MultiMedia Virtual Circuit Channel (MM-VCC) is a pre-defined logical circuit used to route ATM cells carrying MultiMedia between two customer designated premises.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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.

Nonpublished Number

A nonpublished number is a number omitted from both the published telephone directory and directory assistance records at the request of the customer. A nonpublished number is not available through directory assistance.

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.

On-hook

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

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Payphone Service Provider

The term "Payphone Service Provider" denotes any 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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)P rearranged Query

A Company will order LNP query service to perform queries that company will be responsible for performing prior to delivering any traffic to the incumbent local Telephone Company.

Premises

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

Query Default

In LNP Query Service, a signaling message requesting the Local Routing Number (LRN) contained in the LNP Data Base for which a query has not yet been performed by the N-1 Carrier and where the N-1 carrier has not prearranged with the Telephone Company to have the queries performed on the N-1 carrier's behalf.

Recipient Switch

Denotes any end office switch that serves Directory Numbers (DN) within a number portable NXX that is not originally assigned to the switch. Customers assigned a DN within indicated NXX that were working out of a switch other than the one originally designated are said to have ported their number to this recipient switch.

Regional Service Management System/Number Portability Administration Center

Denotes the third party administered database which maintains the information on all ported numbers in the Telephone Company's region.

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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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)

A 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.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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 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.

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 singing (instability) problems are most likely to occur.

Special Order

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

Standard PVC

The term "Standard PVC" denotes the interconnection of ports on the same frame relay switch.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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

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.

Symmetrical Digital Subscriber Line (SDSL)

The term "Symmetrical 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.

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.).

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 Definitions (Cont'd)****Tandem Switched Transport**

The term "Tandem Switched Transport" denotes transport from the serving wire center to the end office, or 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

A wire center at which bridging or multiplexing functions are performed only for Customers served directly by the same wire center.

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.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.6 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).

Unlisted Number

An unlisted number is a listing omitted from the published telephone directory at the request of the customer. A number that is unlisted rather than nonpublished remains available for directory assistance.

Upstream

The term "Upstream" as used in the context of DSL Access Service is the transmission path from the point of demarcation at the customer designated end user premises to the DSL Access Service Connection Point.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 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.

Voice-Data DSL Access Service

The term "Voice-Data" when used in the context of Asymmetrical Digital Subscriber Line (ADSL) Access Service, Symmetrical Digital Subscriber Line (SDSL) Access Service or High Speed Internet (HSI) Access Service refers to provision of the service over a line that also carries local exchange switched voice service to the customer premises.

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.

ACCESS SERVICE**3. Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port****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 the FUSC either through flat-rated, monthly line charges assessed to end users under this Tariff or through application of the FUSC Surcharge Percentage Factor.

3.1.1 Applicability of FUSC Charges under this Tariff

The FUSC as set forth in Section 17.1.3, following, will be billed by only those Issuing Carriers contributing to the universal service funds and who bill common line charges based on rates, terms and conditions in this Tariff. For purposes of application of FUSC charges under this Tariff, end users shall include wholesale purchasers of Public Packet Data Network Services under Section 16 of this Tariff. FUSC charges will not apply to any Interstate Common Line, Interstate Special Access or Public Packet Data Network Services purchased by customers who resell these services to end users as part of an interstate telecommunications service and are thereby 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.

3.1.2 Rate Application

- (A) Unless otherwise indicated in the respective issuing carrier's rate section in this Tariff, all recurring and nonrecurring interstate charges billed by the Telephone Company to end users under this Tariff will be subject to FUSC charges based on application of the FUSC Surcharge Percentage Factor as set forth in Section 17.1.3.
- (B) Where indicated in the respective issuing carrier's rate section in this Tariff, FUSC charges related to specific end user charges will be billed by the Telephone Company at a flat rate amount as set forth for the respective end user charge as set forth in Section 17.1.3. For issuing carriers indicating flat rate amounts for FUSC charges related to certain end user charges, FUSC charges for end user charges without indication of a flat rate amount will be billed by the Telephone Company at the FUSC Surcharge Percentage Factor as set forth in Section 17.1.3.

ACCESS SERVICE3. **Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port (Cont'd)**3.1.3 **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.

3.1.3.A **Rate Application**

Rates for ISDN Line Ports are set forth in Section 17.1.4, 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.

3.1.4 **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.

3.1.4 A **Rate Application**

The DS1 Line Port rate is set forth in Section 17.1.5, 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 provides for the use of an End User Common Line (EUCL).

4.2 Limitations**(A) Exclusions**

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

(B) Lifeline Assistance

Lifeline Assistance plans may reduce or eliminate End User Access Charges to certain qualifying end users. Jurisdictions where such locally approved assistance plans are in effect are set forth in 17.1.3 following.

4.3 Undertaking of the Telephone Company

The Telephone Company will provide End User Access at rates and charges as set forth in 17.1.2 as follows:

- Use of an 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.

ACCESS SERVICE4. 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 Allowances4.5.1 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 an EUCL, requested End User Access credit allowances for interruptions will be provided as set forth for credit allowance for interruptions in 2.4.4 preceding.

4.5.5 Temporary Suspension of Service

When an end user temporarily suspends its local exchange service which is associated with EUCL, one-half of the EUCL per month charge will be temporarily suspended for the time period the local exchange service is suspended.

ACCESS SERVICE4. End User Access Service (Cont'd)4.6 Rate Regulations4.6.1 Who Is Billed

EUCL per month 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 17.1.2(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 an EU

ACCESS SERVICE4. 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 17.1.2(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 an EUCL.

ACCESS SERVICE4. 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 17.1.2(A) following. Business charges for lines to the university, college or school offices will apply as set forth in 17.1.2(C) following. Charges shall be based on the number of residence and business lines reported to the Telephone Company by the end user.

ACCESS SERVICE4. 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.

ACCESS SERVICE4. 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 17.1.2(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 an EUCL.

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

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 17.1.2(A), following, or, one (1) EUCL Single Line Business – Individual line or trunk charge as set forth in Section 17.1.2(B), following, applies to each ISDN BRI arrangement.

ACCESS SERVICE4. End User Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.8 Integrated Services Digital Network (ISDN) Services (Cont'd)(A) ISDN Basic 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 17.1.2(C), following, apply to each ISDN PRI arrangement.

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 17.1.2 (C), following, apply to each DS1 channel service.

ACCESS 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 and 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 separate individual based contract.

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.

ACCESS SERVICE5. 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 SERVICE5. 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 in a separate individual based contract. Authorization to incur the costs and to bill the customer will be in a separate individual based contract.

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.

ACCESS SERVICE

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.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements5.2.1 Switched Access Service

When ordering Switched Access service, the customer must specify whether the service is to be provided as (1) Direct Trunked Transport to the end office, (2) Direct Trunked Transport to a tandem which connects with Tandem Switched Transport from the tandem to the end office or (3) Tandem Switched Transport 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 or High Capacity DS1 or DS3).

The Customer must also specify the type of Entrance Facility to be used for Switched Access (e.g., Voice Grade or High Capacity). For High Capacity 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.

Normally, Direct Trunked Transport of originating 800 calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 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 6.4.6 following.

At the customer's request, its 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.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements5.2.1 Switched Access Service (Cont'd)(A) Feature Group A

Orders for Feature Group A Switched Access Service shall be in lines.

When placing an order for Feature Group A Switched Access Service, the customer shall provide the following information in addition to that set forth in 5.1 preceding:

- The number of lines and the first point of switching (i.e., Dial Tone Office);
- Optional Features;
- Whether the Off-hook Supervisory Signaling is provided by the customer's equipment before the called party answers, or is forwarded by the customer's equipment when the called party answers;
- Lines to be provided as single lines;
- Lines to be arranged in multiline hunt group arrangements;
- Directionality (1-way, 2-way, etc.);
- A projected Percentage of Interstate Use (PIU) as set forth in 2.3.11 preceding; and
- The Interexchange Carrier to which the service is connected or, in the alternative, specify the means by which the FGA access communications are transported to another state .

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(B) Feature Group B

Orders for Feature Group B Switched Access Service shall be in trunks.

When placing an order for Feature Group B Service, the customer shall provide, the following information in addition to that set forth in 5.1 preceding:

- The number of trunks;
- The end office, except when FGB is provided through a centralized equal access arrangement, when direct routing is desired;
- The access tandem office when tandem routing is desired;
- Optional Features;
- Trunks to be provided as single trunks;
- Trunks to be arranged in trunk group arrangements;
- Directionality (1-way, 2-way, etc.);
- A projected Percentage of Interstate Use (PIU) as set forth in 2.3.11 preceding;
- The Interexchange Carrier to which the service is connected or, in the alternative, specify the means by which the FGB access communications are transported to another state;
- The access code dialing arrangement (i.e., a uniform access code of 950-XXXX); and
- For Feature Group B switched access service to a Wireless Switching Center 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.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Order Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(C) Feature Group C, Feature Group D, Operator Transfer Service and SS7 Signaling

(C)

When placing an order for Feature Group C and 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;
- Operator Transfer Service option;
- A projected Percentage of Interstate Use (PIU) as set forth in 2.3.11 preceding; and
- 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.

(D)

When BHMC information is provided it is used to determine the number of transmission paths as set forth in 6.2.5 following.

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 20 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 20 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.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

(C) Feature Group C, Feature Group D, Operator Transfer Service and SS7
Signaling (Cont'd)

(C)

(D)

(D)

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(C) Feature Group C, Feature Group D, Operator Transfer Service and SS7 Signaling (Cont'd) (C)

For the Operator Transfer Service Option ordered in conjunction with Feature Group C or 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 .

(D) SS7 Optional Feature

When Feature Group C or D is ordered with the SS7 optional feature, in addition to information listed in 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.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(D) SS7 Optional Feature (Cont'd)

For 800 Data Base Access Service, as described in 6.1.3(A) & (C) following, the customer must order FGC or 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. All traffic originating from end offices not equipped to provide SS7 signaling and routing or not able to accommodate direct trunking of originating 800 calls require routing via an access tandem where SSP functionality is available.

ACCESS SERVICE5. 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 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; and
- 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 (e.g., Digital Data , High Capacity Multiplexing, etc.) and 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.

ACCESS SERVICE5. 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 Synchronous Optical Channel Service (SOCS) Optional Rate Plans, as described in Sections 7.2.8(A) and 7.2.9(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 7.2.8 following, will not apply if the conditions set forth in 7.2.8 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; and
- Reference continuation of the existing Term Discount period and the minimum service period on both the installation and disconnect orders.

DS3 Capacity Discounts - Upgrades

- The customer's order for the disconnect of the current DS3 Capacity Interface and order for the installation of the upgraded DS3 Capacity Interface are received by the telephone company at the same time and specifically reference the application of upgrade in capacity.

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

ACCESS SERVICE5. 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)(4), 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) or ETS Port(s) as described in Section 7.2.8(A)(3), 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) 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) or ETS Port(s) in the customer's new SOCS Optional Rate 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 7.1.1(B), following.

ACCESS SERVICE5. 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 7.2.9(A), following, will not apply if the conditions set forth in Section 7.2.9(A), 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.

ACCESS SERVICE5. 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 7.2.9(A)(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 ETS Port(s) as described in Section 7.2.9(A)(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 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 ETS Port(s) 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 7.1.1(B) following.

ACCESS SERVICE5. 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 FGA, FGB, FGC or 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 FGA, FGB, FGC or 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); and
- 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 facilities. Mixed use facilities to a hub 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.

ACCESS SERVICE5. 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(B) 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(A) and (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%.

ACCESS SERVICE5. 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 number of Permanent Virtual Connections (PVCs) required;
- the location of the ports for each PVC;
- 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.

ACCESS SERVICE5. 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 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. (C)

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 Non Meet Point Billing Ordering - FGA(A) Single Company Billing Ordering

The Telephone Company receiving the order from the customer will arrange to provide the service and bill the customer as set forth in 2.4.7(A)(1). The customer will place the order with the Telephone Company as follows:

For FGA Switched Access Service the customer will place the order with the Telephone Company in whose territory the first point of switching is located. The first point of switching is the dial tone office.

When the first point of switching is not in the same Telephone Company's territory as the Interexchange Carrier premises, the customer must supply a copy of the order to the Telephone Company in whose territory the Interexchange Carrier premises is located and any other Telephone Company(s) involved in providing the service. When service is provided through a centralized equal access provider, the customer must supply a copy of the order to that provider.

ACCESS SERVICE5. Access Ordering (Cont'd)5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)5.3.2 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 A and B Switched Access Services, the customer must place an order with the Telephone Company in whose territory the first point of switching is located, (i.e., FGA - dial tone office, FGB - access tandem or end office). The Telephone Company will designate the first point(s) of switching for FGB 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.
- (B) For Feature Group C and 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.

ACCESS SERVICE

5. Access Ordering (Cont'd)

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

5.3.2 Meet Point Billing Ordering (Cont'd)

- (C) 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.
- (D) 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.
- (E) 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.

(D)
|
(D)

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering5.4.1 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, and Asymmetric 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 Asymmetric 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 6.4.1(B)(3), 7.2.2(C)(3), 8.1.5(D), 16.1.2(B)(2)(b), and 16.7.4(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;
- (D)
- When a Miscellaneous Service Order Charge is applicable;
 - When a PIC Change Charge is applicable;
 - 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 Local Number Portability (LNP) Services as set forth in Section 13.14 following.

ACCESS SERVICE5. 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 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; or
- When a Billing Name and Address Order charge is applicable.
- When a 900 Blocking Service charge is applicable.
- When a customer with a Special Access DS3 Capacity Discount converts to Special Access Synchronous Optical Channel Service.
- To the ADSL Access Service Voice-Data option as set forth in Section 8.1, following.
- When an ADSL Access Service Line customer provides 30 days notice to the Telephone Company to convert simultaneously from one ADSL Access Service Line option to the other ADSL Access Service Line option as set forth in Section 8.1.5 (E), following.
- When a DSL Network Reconfiguration Charge is applicable.
- To Government Emergency Telecommunications Service (GETS) as set forth in Section 10.5.1(C), following.
- When an ATM-CRS MM-VCC Design Change Charge is applicable.
- When an ETS Design Change Charge is applicable.
- 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), following, for High Capacity Service Optional Rate Plan Replacements.
- When a SOCS Optional Rate Plan customer makes changes to its existing High Capacity Optional Rate Plan as specified in Section 7.2.9(A), following, for SOCS Optional Rate Plan Replacements.
- When an ETS customer establishes a new ETS Term Discount Plan or makes changes to an existing ETS Term Discount Plan.
- 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.

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.1 Access Order Charge (Cont'd)

- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or from direct-trunked transport to tandem-switched transport or requests to rearrange switched access service between lower capacity and higher capacity facilities (e.g. voice grade to/from DS1 or DS1 to/from DS3), providing :
 - the change is ordered no later than July 1, 1994 , and
 - the change is completed no later than October 1 , 1994, and
 - the orders to disconnect existing trunks and to connect the new trunks are placed at the same time, and
 - the number of installed trunks does not exceed the number of trunks disconnected. If the number of installed trunks exceeds the number of trunks disconnected, the Access Order Charge will apply unless the customer provides justification based upon standard engineering methods to show that the additional capacity is required to maintain the same level of service.
- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or orders the disconnection of overprovisioned trunks, providing:
 - the change is ordered anytime between June 17, 1997 and December 31, 1998 and
 - the change is completed no later than March 31, 1999 and
 - the orders to disconnect existing trunks and to connect the new trunks are placed at the same time.

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, and is in addition to other applicable charges as set forth in this and other sections of this tariff.

(C)

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.

ACCESS SERVICE5. 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 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), Billing Name and Address Service (13.9), 900 Blocking Service (13.8), and Flex ANI (13.14), which does 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); and
- Maintenance of Service (13.3.2).
- Originating Line Screening (OLS) Service (13.10).

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)); and
- International Blocking Service (13.8).

ACCESS SERVICE5. 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)); and
- 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 5.1.2 preceding. All charges for Access Order change as set forth in 17.4.1(B) and (C) will apply on a per occurrence basis.

Any increase in the number of Special Access Service channels or Switched Access Service lines, trunks, busy hour minutes of capacity or Frame Relay Ports and/or PVCs or CCS/SS7 Port 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.

ACCESS SERVICE5. 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.

ACCESS SERVICE5. 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 of PVC, speed of PVC or speed of the end user port. Design changes do not include a change of customer designated premises, first point of switching, Feature Group type or Special Access Service 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.

ACCESS SERVICE5. Access Ordering (Cont'd)5.5 Minimum Periods and Cancellations5.5.1 Minimum Periods

The minimum period for part-time Video and Program Audio Special Access Services is one day even though the service will be provided only for the duration of the event specified on the order (e.g., 1/2 hour, 2 hours, 5 hours, etc.). The minimum period for Switched Access High Capacity DS3 Entrance Facilities and Direct Trunked Transport is as set forth in 6.1.3 following. The minimum period for High Capacity DS1 and DS3 Special Access Services and the Frame Relay Access Service 1.544 Mbps Port is as set forth in 7.2.8 following.

Switched Access usage rate services (i.e., End Office Common Line, Tandem Switched Transport, and Residual Interconnection Charge) have no minimum period. The minimum period for which all other Access Service is provided and for which charges are applicable, is one month.

5.5.2 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 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; and
- (B) For Special Access Service, flat rated Switched 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 type plus any optional features, nonrecurring and/or special construction charge(s) that may apply.

ACCESS SERVICE5. Access Ordering (Cont'd)5.5 Minimum Period and Cancellations (Cont'd)5.5.2 Development of Minimum Period Charges (Cont'd)

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 7.2.4 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.

ACCESS SERVICE

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 Service, 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; or
 - (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.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.5 Minimum Period and Cancellations (Cont'd)

5.5.3 Cancellation of an Access Order (Cont'd)

- (D) 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 Special Access Service channels or Switched Access Service lines, trunks, busy hour minutes of capacity or Frame Relay Ports and/or PVCs or CCS/SS7 Port Terminations will be treated as a partial cancellation and charges will be determined as set forth in 5.5.3(B) preceding.

ACCESS SERVICE**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. It provides for the use of common terminating, switching, and trunking facilities and for the use of common subscriber plant of the Telephone Company. Switched Access Service provides for the ability to originate calls from an end user's premises to a customer designated premises, and to terminate calls from a customer designated premises to an end user's premises. Specific references to material describing the elements of Switched Access Service are provided in 6.1.3 and 6.5 through 6.9 following.

(C)

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 17.2 following. The application of rates for Switched Access Service is described in 6.4 following. Rates and charges for services other than Switched Access Service, e.g., a customer's 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 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 6.4.8 following.

(C)

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).

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements(A) Description

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.

The provision of each Feature Group requires Local Transport facilities including an Entrance Facility where required and the appropriate End Office functions. In addition, Special Access Service may, at the option of the customer, be connected with Feature Groups A, B, C, or D at Telephone Company designated WATS Serving Offices.

There are three specific transmission specifications (i.e., Types A, B and C) that have been identified for the provision of Feature Groups. 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 and High Capacity 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 15.1.2 following.

ACCESS SERVICE6. 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)

Feature Groups are arranged for either 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. Terminating calling permits the delivery of calls from the customer designated premises 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.

There are various optional features associated with Local Transport, Common Switching and Transport Termination available with the Feature Groups.

(C)

Operator Transfer Services will be provided over FGC or FGD switched access service trunks from the operator service location to the customer's premises. Where required by technical limitations, a separate FGC or 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 each of the available Feature Groups are set forth in 6.5 through 6.9 following. Each 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 6.9 following, unless specifically stated otherwise, are available at all Telephone Company end office switches.

ACCESS SERVICE6. 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). FGA Access and FGB Access are furnished on a per-line or per-trunk basis respectively. FGC Access and FGD Access are furnished on a BHMC basis and on a per trunk basis as set forth in 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; Terminating BHMCs represent access capacity for carrying traffic from the customer to the end user; and, Directory Assistance BHMCs represent access capacity for carrying Directory Assistance traffic from the customer to a Directory Assistance location. When ordering capacity for FGC Access or FGD Access in BHMCs, the customer must at a minimum specify such access capacity in terms of Originating BHMCs and/or Terminating BHMCs.

(C)
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(C)

ACCESS SERVICE**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, 900, Operator, IDDD and Operator Transfer Services. Domestic BHMCs represent access capacity for carrying only domestic traffic other than 700, 800, 900, Operator and Operator Transfer Services traffic; IDDD BHMCs represent access capacity for carrying only international traffic; and, 700, 800, 900, Operator and Operator Transfer Services BHMCs represent access capacity for carrying, respectively, only 700, 800, 900, Operator or Operator Transfer Services traffic. When ordering such types of access capacity, the customer must specify Domestic, 700, 800, 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 four rate categories which apply to Switched Access Service:

- Local Transport (described in 6.1.3(A) following)
- End Office (described in 6.1.3(B) following)
- Chargeable Optional Features (described in 6.1.3(C) following)
- Common Line (described in Section 3 preceding)

ACCESS SERVICE

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.

ACCESS SERVICE6. 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. Mileage measurement rules are set forth in 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 or High Capacity DS1 or DS3) to be used in the provision of the Direct Trunked Transport or Entrance Facility.

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, and (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, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)

When service is to be routed through an access tandem switch, the facility between the serving wire center and the tandem will be provided as Direct Trunked Transport.

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office that is not collocated with a tandem, the customer will be provided Alternate Traffic Routing as set forth in 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, (2) from end offices that lack recording or measurement capability.

Normally, Direct Trunked Transport of originating 800 series type calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series type calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)

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.

ACCESS SERVICE6. 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 following. The application of these rates with respect to individual 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 classes 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.

Three types of Entrance Facility are available: (1) Voice Grade 2 or 4 wire (an analog channel with an approximate bandwidth of 300 to 3000 Hz), (2) High Capacity DS1 (an isochronous serial digital channel with a rate of 1.544 Mbps) and (3) High Capacity DS3 (an isochronous serial digital channel with a rate of 44.736 Mbps). The minimum period for which a DS3 Entrance Facility is provided is twelve months.

ACCESS SERVICE6. 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)

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.

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.

(2) Direct Trunked Transport

The Direct Trunked Transport rate elements recover a portion of the cost associated with the communications path between a serving wire center and an end office or serving wire center and a tandem on circuits dedicated to the use of a single customer.

Direct Trunked Transport is available to 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, (2) from end offices that lack recording or measurement capability.

Normally, Direct Trunked Transport of originating 800 series type calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series type calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

ACCESS SERVICE6. 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)

Three types of Direct Trunked Transport are available: (1) Voice Grade (an analog channel with an approximate bandwidth of 300 to 3000 Hz), (2) High Capacity DS1 (an isochronous serial digital channel with a rate of 1.544 Mbps), and (3) High Capacity DS3 (an isochronous serial digital channel with a rate of 44.736 Mbps). The minimum period for which a High Capacity DS3 Direct Trunked Transport is provided is twelve months.

High Capacity DS3 Direct Trunked Transport can not be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing. Additionally, DS1 Direct Trunked Transport can not 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 are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

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, hub, tandem, 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.

ACCESS SERVICES6. 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)

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.

(3) Tandem Switched Transport

The Tandem Switched Transport rate elements recover tandem switching costs and a portion of the costs associated with the communications path between a tandem and an end office on circuits that are switched at a tandem switch, or between a host and a remote switch.

Tandem Switched Transport rates consist of a Tandem Switching rate, a Tandem Switched Facility rate, and a Tandem Switched Termination rate. The Tandem Switching rate is applicable at the Tandem, when a customer orders Direct Trunk Transport to the tandem and Tandem Switched Transport from the tandem to the end office.

In those instances where an SSP equipped end office is capable of handling 800 SAC Traffic on a direct trunked basis but incapable of handling 888 SAC traffic on a direct trunked basis, a full credit will be provided for Tandem Switched Transport Charges associated with FGC and FGD service for 888 SAC 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 888 SAC traffic on a direct trunked basis. Those SSP equipped end offices that cannot accommodate direct trunking of originating 888 SAC traffic are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.- 212 of the Federal Communication Commission.

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ACCESS SERVICE6. 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)

- (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.
- (b) The Tandem Switched Facility rate recovers a portion of the costs of the transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits. The Tandem Switched Facility rate specified in Section 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 the circuit equipment that is necessary for the termination of each end of the Tandem Switched Facility. The Tandem Switched Termination rate specified in Section 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, Feature Group A dial tone office, host office, tandem, and serving wire center). When the Tandem switched Facility mileage is zero, neither the Tandem Switched Facility rate nor the Tandem Switched Termination rate will apply.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(5) Multiplexing

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 Facility is connected with High Capacity DS1 Direct Trunked Transport. The DS3 to DS1 multiplexer will convert a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing. DS1 to Voice Grade Multiplexing charges apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Facility 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 DS1 to Voice Grade multiplexer will convert a 1.544 Mbps channel to 24 Voice Grade channels.

Multiplexing is only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C NO. 4, WIRE CENTER INFORMATION.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(6) 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 15.1 following.

(7) Nonchargeable 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 15.1.1(E) following.

- Supervisory Signaling
- Customer Specified Entry Switch Receive Level
- Customer Specification of Local Transport Termination

When a customer subscribes to Common Channel Signaling Network Connection Service (CCSNC Service), the following optional features are made available and are described in 6.9.1 following.

- Signaling System 7 (SS7) Signaling
- Calling Party Number
- Carrier Selection Parameter
- Charge Number Parameter

ACCESS SERVICE**6. Switched Access Service (Cont'd)****6.1 General (Cont'd)****6.1.3 Rate Categories (Cont'd)****(A) Local Transport (Cont'd)****(8) 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 6.9.5 following.

800 Series Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. A Basic or Vertical Feature Query charge, as set forth in 17.2.2 (B) following, is assessed for each query launched to the 800 series data base. 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 type 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 type calls); (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series type 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)).

(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.

ACCESS SERVICE

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

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.

ACCESS SERVICE6. 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 Centers (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 FGC or FGD equipped end office.

Rates for Local Switching are set forth in 17.2.3 following. The application of these rates with respect to individual Feature Groups is as set forth in 6.4.1(C) 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.

ACCESS SERVICE6. 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 nonchargeable optional features which the customer can order to meet the customer's specific communications requirements. These optional features are described in 6.9.1 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 nonchargeable optional termination arrangements. These optional terminating arrangements are described in 6.9.2 following.

The number of Transport Terminations provided will be determined by the Telephone Company as set forth in 6.2.5 following.

ACCESS SERVICE6. 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 multifrequency address signaling.

ACCESS SERVICE6. 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.

ACCESS SERVICE

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.

(D)

(D)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) Chargeable Optional Features (Cont'd)

(D)

(D)

(2) Operator Transfer Services

Operator Transfer Service may be provided with Feature Group C or Feature Group D Switched Access Service at Telephone Company designated Operator Services location. Operator Transfer Service is an originating service. The rate is assessed per 0- call transferred to a customer's operator. An 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 6.9.4 following, Feature Group C or Feature Group D Switched Access rates and charges as set forth in 6.4.1(B)(1) and 6.4.1(C) following and Carrier Common Line Charges set forth in 3.8.5 preceding will apply per minute of use for Operator Transfer Service.

ACCESS SERVICE6. 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 Series Data Base Access Service

800 Series Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. When a 1+800+XXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 series 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 FGC or FGD switched access.

A Basic or Vertical Feature Query charge, as set forth in 17.2.2(B) following, is assessed for each query launched to the data base which identifies the customer to whom the call will be delivered. 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 type calls by telephone companies to different inter-exchange 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 type 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).

ACCESS 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)

(3) 800 Series Data Base Access Service (Cont'd)

The description and application of this charge with respect to Feature Group C or Feature Group D is as set forth in 6.4.1(C) following.

ACCESS SERVICE6. 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)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 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)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.

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 TR-NWT-000334. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

Feature Group C and Feature Group D trunks equipped for Operator Transfer Service are subject to Feature Group C and Feature Group D transmission specifications, respectively, unless otherwise specified.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)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.

ACCESS SERVICE6. 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.

ACCESS SERVICE6. 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 Groups A and B, which are ordered on a per line or per trunk basis respectively, and Feature Groups C and 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 C and 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 6.1.1(B) preceding) for the end offices for each Feature Group ordered from a customer's designated premises. 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.

ACCESS SERVICE

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.

ACCESS SERVICE**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.

ACCESS SERVICE6. 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 Telephone 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 telephone Company may invoke network management controls, (e.g., call gapping and code blocking) to reduce the probability of excessive network congestion. The Telephone Company will work cooperatively with the customer to determine the appropriate level of such control.

ACCESS SERVICE6. 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.

ACCESS SERVICE6. 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.

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, and service rearrangements. These charges are in addition to the Access Order Charge as specified in 17.4.1(A) following.

(C)

ACCESS SERVICE6. 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

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. Additionally, a nonrecurring trunk activation charge as set forth in 17.2.1(E) following, will be applied at each end office when ordered to the end office on a per order per end office basis or at the tandem when ordered to the tandem for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated (*i.e.*, designated by the customer to be used to carry switched access). 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 Activated 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 Activated nonrecurring charge. These charges are in addition to the Access Order charge as specified in 17.4.1(A) following .

ACCESS SERVICE

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)

(D)

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ACCESS SERVICE

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 and the off-hook supervisory signaling of FGA Access Services, 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.

For conversion of FGD trunks to SS7 Signaling reconfiguration, charges apply as set forth in Section 17.2.1(C).

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ACCESS SERVICE6. 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; and
- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or from direct-trunked transport to tandem-switched transport or requests to rearrange switched access services between lower capacity and higher capacity facilities (e.g. voice grade to/from DS1 or DS1 to/from DS3), the non recurring charges set forth in (1) preceding do not apply providing :
- the orders to disconnect existing trunks and to connect the new trunks are placed at the same time, and the number of installed trunks does not exceed the number of trunks disconnected. If the number of installed trunks exceeds the number of trunks connected, all non-recurring charges will apply to the excess trunks unless the customer provides justification based upon standard engineering methods to show that the additional capacity is required to maintain the same level of service.

ACCESS SERVICE

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)

HELD FOR FUTURE USE

ACCESS SERVICE6. 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. 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).

For conversion of FGC and FGD trunks from multifrequency address signaling to SS7 signaling or from SS7 signaling to multifrequency address signaling, nonrecurring charges will apply as set forth in 17.2.1(C).

(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.

ACCESS SERVICE6. 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)

In those instances where an SSP equipped end office is capable of handling 800 SAC traffic on a direct trunked basis, and the customer has direct trunked transport facilities in place at the end office, but the end office is incapable of handling 888 SAC traffic on a direct trunked basis, a full credit will be provided for Tandem Switched Transport Charges associated with FGC and FGD service for 888 SAC 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 888 SAC traffic on a direct trunked basis.

The credit will expire when 888 SAC SSP functionality is implemented in the end office.

ACCESS SERVICE6. 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)

The following rules provide the basis for applying the rates and charges:

(1) Premium Rates

Premium rates apply to all FGC access minutes when the service is provided to customers which furnish interstate MTS/WATS, and to all access minutes that originate or terminate at end offices equipped with equal access (i.e., FGD) capabilities. Premium rates also apply to FGB and FGD access minutes that originate or terminate at a Wireless Switching Center (WSC) that is directly connected to a Telephone Company access tandem office. In addition, premium rates apply to FGA and FGB access minutes when utilized in the provision of MTS/WATS service.

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

ACCESS SERVICE

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)

(2) Non-premium Rates

Non-premium rates (i.e., discounted access minute rates) apply to all FGA and FGB access minutes (measured or assumed) originating or terminating in an end office which is not equipped with equal access capabilities.

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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

ACCESS SERVICE6. 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)(3) Transition Billing Arrangement

When FGA, or FGB Switched Access Service, except as set forth in (1) preceding, provided to an entry switch (i.e., dial tone office for FGA and access tandem for FGB) has usage originating from and/or terminating at both end offices that have been converted to equal access and end offices that have not been converted, the premium and non-premium rates will apply in the following manner:

- (a) All access minutes that originate from or terminate at the equal access end office(s) will be billed at premium rates. Access minutes that originate from or terminate at end offices not equipped with equal access capabilities, hereinafter referred to as non-premium access minutes, will continue to be billed at non-premium rates. Non-premium rates will apply as follows depending on the type of service.
 - (i) For FGA and FGB services, the number of non-premium access minutes to be billed at non-premium rates is derived by subtracting the number of premium rated access minutes from the total number of access minutes.
 - (ii) Premium access minutes will be determined as set forth in (b) following.

ACCESS SERVICE6. 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)(3) Transition Billing Arrangement (Cont'd)

(b) 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).
- (ii) Where end office specific usage data is not available for originating and/or terminating FGA or FGB, the total originating and/or terminating usage will be measured or assumed usage at the entry switch as set forth respectively in 6.5.4 and 6.6.4 following. Originating and/or terminating usage will then be apportioned between premium and non-premium access minutes.

ACCESS SERVICE6. 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)(3) Transition Billing Arrangement (Cont'd)

(b) (Cont'd)

(ii) (Cont'd)

Such apportionment will be based on the ratio of the number of subscriber lines in the access area (i.e., local calling areas for FGA originating minutes, LATA for FGA terminating minutes and end offices subtending the access tandem for FGB minutes) 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. The ratio thus developed is applied to the total measured or assumed originating FGA usage, terminating FGA usage, originating FGB usage or terminating FGB usage, as applicable, to determine the usage to be billed at premium rates, unless adjusted as set forth in (iii) following.

ACCESS SERVICE6. 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)(3) 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; (2) the access area is defined as the local calling area of the dial tone office for originating FGA, the entire LATA for terminating FGA, and all end offices subtending the access tandem for originating and terminating FGB; and (3) the local calling area of the dial tone office is as defined in the Telephone Company's local and/or general exchange service tariff.

ACCESS SERVICE6. 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)(3) Transition Billing Arrangement (Cont'd)

(b) (Cont'd)

- (iii) Where FGD Switched Access Service is provided to a customer in an end office(s) where that customer's FGA or FGB premium access minutes have been determined in accordance with (ii) preceding, such premium access minutes will be adjusted in the following manner. For each FGD access minute originating from or terminating at that end office, excluding those FGD minutes of use associated with Operator Transfer Service, the originating or terminating FGA or FGB premium access minutes determined as set forth in (ii) preceding will be reduced on a one for one basis, but in no event shall the reduction exceed the total number of FGA or FGB premium access minutes originating from or terminating at that end office. For each FGA or FGB premium minute of use reduction in either the originating or terminating direction, a corresponding originating or terminating non-premium minute of use will be apportioned to those end offices in the access area that are non-equal. Such apportionment will be based upon a ratio of the number of subscriber lines in each non-equal end office to the total subscriber lines that are served by all non-equal end offices in the access area. The customer will be billed for the revised number of premium or non-premium access minutes.

ACCESS SERVICE6. 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) Unmeasured FGA and FGB Access Services

Where originating and/or terminating measurement capability does not exist for Feature Group A or Feature Group B Switched Access Services provided to the first point of switching, the number of access minutes that will be assumed are as set forth following in 6.5.4 and 6.6.4 respectively.

(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.

ACCESS SERVICE6. 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)(6) 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.

(7) 800 Series Data Base Access Service

A Basic Query or Vertical Feature Query charge applies for each query that is launched to an 800 series data base and identifies the customer to whom the call will be delivered. 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.

ACCESS SERVICE6. 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) 800 Series Data Base Access Service (Cont'd)

When Feature Group C or Feature Group D switched access service is used for the provision of 800 Series 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 can not 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 type 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 min. of 800 series type use
 EO-2 measures 3,000 min. of 800 series type use
 EO-3 measures 5,000 min. of 800 series type use
 10,000 TOTAL

- The tandem delivers 800 series type 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%

2,000/10,000

- The minutes of use to be billed by EO-1 are

800 to IC-A (20% X 4,000)
1,200 to IC-B (20% X 6,000)
 2,000 TOTAL

ACCESS SERVICE6. 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) Shared Transport

Shared Transport refers to a rate application that is applicable only when the customer orders High Capacity Direct Trunked Transport between a serving wire center and a Telephone Company hub where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Direct Trunked Transport and Tandem Switched Transport. When the same customer also orders Special Access Service to be provided over this same high capacity facility, this service is considered to be Mixed Use and the regulations set forth in 7.2.7 following must first be applied to separate the portion to be charged as Switched Access Service from the portion to be charged as Special Access Service.

Except as noted above, the switched Access Service will be ordered, provided and rated as Direct Trunked Transport (i.e., Direct Trunked Facility and Direct Trunked Termination). As each derived channel is activated for Tandem switched Transport, the High Capacity Direct Trunked Transport and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a High Capacity DS1 service, 1/672nd for a High Capacity DS3 service, etc.). Tandem Switched Transport rates and charges, as set forth in 17.2.2 following, will apply for each channel that is used to provide the Tandem Switched Transport.

ACCESS SERVICE6. 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) Shared Transport (Cont'd)

The following example, while not all inclusive, illustrates the application of the Shared Transport provisions cited above and the Mixed Use provision set forth in 7.2.7 following. The sample calculations explained below depict the application of charges as they apply to the shared facilities only. All other rate elements that would apply to this example (e.g., Residual Interconnection, Carrier Common Line, End Office, Voice Grade Direct Trunked Transport from EO-B to the Tandem, Voice Grade Channel Mileage from EO-C to the Tandem, etc.) are billed as described elsewhere in this tariff.

Assume:

The customer orders:

- 3 tandem routed Switched Access trunks to End Office-A (EO-A)
- 4 direct routed Switched Access trunks to End Office-B (EO-B)
- 12 Voice Grade Special Access channels to End Office-C (EO-C)
- 1 DS1 facility between its POT and the Tandem/Multiplexer
- Usage at EO-A is 10,000 Minutes of Use (MOU)

ACCESS SERVICE6. 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) Shared Transport (Cont'd)Calculation of Charges POT to Serving Wire Center

Since this facility carries both Switched and Special Access Services, the Mixed Use provisions set forth in 7.2.7 following must be applied. This service is initially ordered and rated as a Special Access DS1 High Capacity Channel Termination (DS1-CT). This Special Access Charge is then reduced for each activated Switched Access Service. High Capacity DS1 Entrance Facility (DS1-EF) charges apply for the portion of this service that is activated for Switched Access Service.

DS1-CT charge=DS1-CT rate x (capacity of a DS1 minus the number of activated Switched Access Services)/(capacity of a DS1)

$$= \text{DS1-CT rate} \times (24 - 7)/(24)$$

$$= \text{DS1-CT rate} \times (17/24)$$

DS1-EF charge=DS1-EF rate x (number of activated Switched Access Services)/(capacity of a DS1)

$$= \text{DS1-EF rate} \times (7/24)$$

ACCESS SERVICE6. 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) Shared Transport (Cont'd)Calculation of Charges Facility from Serving Wire Center to Tandem and Multiplexer

Since the interoffice facility and the multiplexer both carry Switched and Special Access Services, it must first be apportioned between these two categories by applying the Mixed Use provisions set forth in 7.2.7 following. Using the same ratios calculated above, the Special Access DS1 High Capacity Channel Mileage Facility (DS1-CMF), Channel Mileage Termination (DS1-CMT), and Multiplexer (Spcl.-MUX) charges are:

$DS1-CMF = DS1-CMF \text{ rate} \times \text{airline miles between Tandem/Multiplexer and Serving Wire Center} \times (17/24)$

$DS1-CMT = DS1-CMT \text{ rate} \times 2 \text{ terminations} \times (17/24)$

$Spcl.-MUX = DS1 \text{ to Voice Grade multiplexer rate} \times (17/24)$

After applying the Mixed Use provisions to determine the Switched Access portion of these facilities, the Switched Access Facilities must then be apportioned between direct routed and tandem routed. This is accomplished by subtracting the portion of channels used for tandem routing from the portion of Switched Access channels. The remaining portion of channels are considered direct routed.

ACCESS SERVICE6. 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) Shared Transport (Cont'd)Calculation of Charges Facility from Serving Wire Center to Tandem and Multiplexer

The Direct Trunked Facility (DS1-DTF), Direct Trunked Termination (DS1-DTT) and Switched Access Multiplexer (Sw-MUX) charges are:

DS1-DTF = DS1-DTF rate x airline miles between Tandem/Multiplexer and Serving Wire Center x ((number of activated Switched Access Services/capacity of a DS1) minus (number of channels activated for Tandem Switched Transport/capacity of a DS1))
 = DS1-DTF rate x miles x ((7/24) - (3/24))
 = DS1-DTF rate x miles x (4/24)

DS1-DTT = DS1-DTT rate x 2 terminations x same ratio of (4/24)

Sw.-MUX = DS1 to Voice Grade multiplexer rate x same ratio of (4/24)

Tandem Routing Charges (EO-A to Serving Wire Center)

No adjustments are used to calculate the Tandem Switched Facility (TSF), Tandem Switched Termination (TST), or Tandem Switching charges. They are calculated as follows:

TSF = TSF rate x airline miles between EO-A and the serving wire center x 10,000 MOU

TST = TST rate x 2 termination x 10,000 MOU

TS = TS rate x 10,000 MOU

ACCESS SERVICE6. 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 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 17.2.2 following prorated to the number of days or major fraction of days on a 30 day month.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.3 Change of Switched Access Service Arrangements

Changes from one type of Feature Group to another will be treated as a discontinuance of one type of service and a start of another. Nonrecurring charges will apply, with one exception. When a customer upgrades a Feature Group A or B service to a Feature Group D service and when Feature Group C is upgraded to Feature Group D coincident with the availability of Feature Group D in an end office, the nonrecurring charges associated with the equal access conversion will not apply. Non-recurring charges for other associated service requests, (e.g., a simultaneous change from multi-frequencies, address signaling to SS7 signaling) will apply. Minimum period obligations will not change, i.e., the time elapsed in the existing minimum period obligation will be credited to the minimum period obligations for FGD service, subject to the following limitations.

In order to avoid the imposition of nonrecurring charges a customer which is a participant in the presubscription allocation process (i.e., is on the presubscription ballot) must:

- submit its order to disconnect Feature Group A and/or B within 30 days after the date the results of the final allocation of customers in an end office are actually received by the customer, and
- make the effective date for disconnection of the Feature Group A and/or B Access Services no later than 60 days after the final allocation results are received by the customer.

A customer which is not a participant in the allocation process (i.e., is not on the presubscription ballot) is subject to the same rules preceding. The time frames for the non-participating customer(s) are the same as those which apply to the last customer to receive the results of the final allocation of customers in an end office who is a participant in the allocation process. For all other changes from one type of Feature Group to another, new minimum period obligations will be established.

ACCESS SERVICE6. 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.

ACCESS SERVICE6. 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 the airline distance. 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 Switch 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 (I) 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).

Mileage rates are as set forth in 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:

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(B) Feature Group A - Originating Usage

Direct Trunked Transport Mileage for premium and non-premium rated access minutes in the originating direction over Feature Group A Switched Access Service will be calculated on an airline basis, using the V&H coordinates method. The mileage measurement will be between the first point of switching (end office switch where the Feature Group A switching dial tone is provided) and the customer's serving wire center for the Switched Access Service provided.

(C) Feature Group A Terminating Usage

The Local Transport mileage for terminating Feature Group A Switched Access Service will be measured in two segments. Direct Trunked Transport mileage will be measured between the customer's serving wire center and the first point of switching (i.e., the end office switch where the Feature Group A switching dial tone is provided). Tandem Switched Transport mileage will be measured between the first point of switching and the terminating end office.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(D) Feature Groups B, C and D - Alternate Traffic Routing

When the Alternate Traffic Routing optional feature is provided with Feature Groups B, C and 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 6.9.1(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 (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local Transport calculation.

(E) Feature Group C - Multiple CDPs

When terminating Feature Group C Switched Access Service is provided from multiple customer designated premises to an end office not equipped with measurement capabilities, the total Local Transport access minutes for that end office will be apportioned among the trunk groups accessing the end office on the basis of the individual busy hour minutes of capacity ordered for each of those trunk groups. This apportionment will serve as the basis for Local Transport mileage calculation.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(F) Feature Groups A, B, C and D - WATS

The Local Transport Facility for Feature Groups A, B, C and D Switched Access Service connected with Special Access Service at a WATS Serving Office will be measured between the WATS Serving Office (when measured access minutes of use are used) or between the Feature Group A entry switch (when assumed minutes of use are used) and the serving wire center for the customer designated premises.

(G) Feature Groups B and D - WSCs Directly Interconnected to Access Tandems

The Local Transport mileage for Feature Groups B and 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.

(H) Feature Groups B, C, and D - Remote Offices

The Local Transport mileage for Feature Groups B, C, and 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 directly trunked to a tandem, 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 would be applicable at the tandem.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(H) Feature Groups B, C, and D - Remote Offices (Cont'd)

When service to the remote is ordered as only Tandem Switched Facility, mileage will be separately measured between the serving wire center and the host and between the host and the end office. The tandem Switching charge would be applicable at the tandem.

(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).

ACCESS SERVICE6. 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 service 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 Message Unit Credit for Feature Group A

Calls from end users to the seven digit local telephone numbers associated with Feature Group A Switched Access Service are subject to Telephone Company local and/or general exchange service tariff charges (including message unit and toll charges as applicable). The monthly bills rendered to customers for their Feature Group A Switched Access Service will include a credit to reflect any message unit charges collected from their end users under the Telephone Company's local and/or general exchange service tariffs. When the customer is provided FGA service where measurement capability does not exist, the credit will apply to access minutes not to exceed the assumed originating access minutes. No credit will apply for any terminating FGA access minutes. The message unit credit for originating access minutes will be based on the generally applicable message unit charges of the Telephone Company.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.9 Application of Rates for Feature Group A Extension Service

Feature Group A Switched Access Service is available with extensions, i.e., additional terminations of the service at different customer designated premises in the same LATA as the FGA dial tone office or a LATA other than the LATA where the FGA dial tone office is located. Feature Group A extensions within the same LATA and same state as the dial tone office are provided and charged under the Telephone Company's local and/or general exchange service tariffs. Feature Group A extensions located in a LATA other than the LATA where the dial tone office is located or in a different state in the same LATA as the dial tone office are provided and charged as Special Access Service. The rate elements which apply are: A Voice Grade Channel Termination, Channel Mileage, if applicable, and Signaling Capability (optional features and functions), if applicable. All appropriate monthly rates and nonrecurring charges set forth in 17.3.4 following will apply.

In the above example, two CDPs are utilized to better illustrate the concept. From a practical standpoint, both the Switched Access and Special Access Services could be routed via the same CDP.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA)6.5.1 Description

- (A) FGA Access, which is available to all customers, provides line side access to Telephone Company end office switches with an associated seven digit local telephone number for the customer's use in originating communications from and terminating communications to an Interexchange Carrier's Interstate Service or a customer - provided interstate communications capability. The customer must specify the Interexchange Carrier to which the FGA service is connected or, in the alternative, specify the means by which the FGA access communications is transported to another state. Special Access Services utilized for connection with FGA 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 who orders the FGA Switched Access Service for the provision of WATS-type services. Special Access Services are ordered as set forth in 5.2 preceding.
- (B) FGA Switching is provided at all end office switches. At the option of the customer, FGA is provided on a single or multiple line group basis and is arranged for originating calling only, terminating calling only, or two-way calling which are specified by the customer's order for service.
- (C) FGA provides a line side termination at the first point of switching (dial tone office). The line side termination will be provided with either ground start supervisory signaling or loop start supervisory signaling. The type of signaling is at the option of the customer.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.1 Description (Cont'd)

(D) The Telephone Company shall select the first point of switching, within the selected LATA, at which the line side termination is to be provided unless the customer requests a different first point of switching and Telephone Company facilities and measurement capabilities, where necessary, are available to accommodate such a request.

(E) A seven digit local telephone number assigned by the Telephone Company is provided for access to FGA switching in the originating direction. The seven digit local telephone number will be associated with the selected end office switch and is of the form NXX-XXXX.

If the customer requests a specific seven digit telephone number that is not currently assigned, and the Telephone Company can, with reasonable effort, comply with that request, the requested number will be assigned to the customer.

(F) FGA switching, when used in the terminating direction, is arranged with dial tone start-dial signaling. When used in the terminating direction FGA switching may, at the option of the customer, be arranged for dial pulse or dual tone multifrequency address signaling, subject to availability of equipment at the first point of switching. When FGA switching is provided in a hunt group or uniform call distribution arrangement, all FGA switching will be arranged for the same type of address signaling.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.1 Description (Cont'd)

- (G) No address signaling is provided by the Telephone Company when FGA switching is used in the originating direction. Address signaling in such cases, if required by the customer, must be provided by the customer's end user using inband tone signaling techniques. Such inband tone address signals will not be regenerated by the Telephone Company and will be subject to the ordinary transmission capabilities of the Local Transport provided.
- (H) FGA switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, local operator service (0- and 0+), Directory Assistance (411 where available and 555-1212), emergency reporting service (911 where available), exchange telephone repair (611 where available), 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 digits).

Charges for FGA terminating calls requiring operator assistance or calls to 611 or 911 will only apply where sufficient call details are available. Additional non-access charges will also be billed on

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.1 Description (Cont'd)

(H) (Cont'd)

a separate account for (1) an operator surcharge, as set forth in the local exchange tariffs, for local operator assistance (0- and 0+) calls, (2) calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL IT) Network Services, and, (3) calls from a FGA line 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.

(I) When a FGA switching arrangement for an individual customer (a single line or entire hunt group) is discontinued at an end office, an intercept announcement is provided. This arrangement provides, for a limited period of time, an announcement that the service associated with the number dialed has been disconnected.

(J) FGA will be provisioned over an Entrance Facility from the customer's premises to the customer's serving wire center.

FGA service, when used in the originating direction, will be provisioned as Direct Trunked Transport from the first point of switching (i.e., the end office switch where FGA switching dial tone is provided) to the customer's serving wire center.

FGA service, when used in the terminating direction, will be provisioned as Direct Trunked Transport from the customer's serving wire center to the first point of switching and provisioned as Tandem Switched Transport from the first point of switching to the terminating end office. The Tandem Switching charge will not apply.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.2 Optional Features

Following are the various nonchargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group A. They are provided as Common Switching, Transport Termination or Local Transport options.

(C) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.9 following.

- (1) Call Denial on Line or Hunt Group
- (2) Service Code Denial on Line or Hunt Group
- (3) Hunt Group Arrangement
- (4) Uniform Call Distribution Arrangement
- (5) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement
- (6) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services
- (7) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services
- (8) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services
- (9) Nonhunting Number Associated with a Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision or WATS-Type Services

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.2 Optional Features (Cont'd)(B) Transport Termination

- (1) Two-way operation with dial pulse address signaling and loop start supervisory signaling
- (2) Two-way operation with dial pulse address signaling and ground start supervisory signaling
- (3) Two-way operation with dial tone multifrequency address signaling and loop start supervisory signaling
- (4) Two-way operation with dial tone multifrequency address signaling and ground start supervisory signaling
- (5) Terminating operation with dial pulse address signaling and loop start supervisory signaling
- (6) Terminating operation with dial pulse address signaling and ground start supervisory signaling
- (7) Terminating operation with dual tone multifrequency address signaling and loop start supervisory signaling
- (8) Terminating operation with dual tone multifrequency address signaling and ground start supervisory signaling
- (9) Originating operation with loop start supervisory signaling
- (10) Originating operation with ground start supervisory signaling

(C) Local Transport Options

- (1) Supervisory Signaling (as set forth in 15.1.1(E) following)
- (2) Customer Specified Entry Switch Receive Level (as set forth in 15.1.1(E) following)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.3 Optional Features Provided In Local Tariffs

Certain other features which may be available in connection with Feature Group A (e.g., Speed Calling, Remote Call Forwarding, Bill Number Screening, IntraLATA extensions) are provided under the Telephone Company's local and/or general exchange service tariffs.

6.5.4 Measuring Access Minutes

Customer Feature Group A traffic to end offices will be measured (i.e., recorded) or assumed by the Telephone Company at end office switches. Originating and terminating calls will be measured (i.e., recorded) or assumed by the Telephone Company 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.

For terminating calls over FGA and for originating calls over FGA (when the off-hook supervisory signal is provided by the customer's equipment before the called party answers), the measured minutes are the chargeable access minutes. For originating calls over FGA (when the off-hook supervisory signal is forwarded by the customer's equipment when the called party answers), chargeable originating access minutes are derived from recorded minutes using the same formula as set forth in 6.7.4 following for Feature Group C.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

For originating calls over FGA, usage measurement begins when the originating FGA first point of switching receives an off-hook supervisory signal forwarded from the customer's point of termination. This off-hook signal may be provided by the customer's equipment before the called party answers, or forwarded by the customer's equipment when the called party answers.

The measurement of originating call usage over FGA ends when the originating FGA first point of switching receives an on-hook supervisory signal 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.

For terminating calls over FGA, usage measurement begins when the terminating FGA first point of switching receives an off-hook supervisory signal from the terminating end user's end office, indicating the terminating end user has answered. The measurement of terminating call usage over FGA ends when the terminating FGA first point of switching receives an on-hook supervisory signal 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.

FGA 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 line or hunt group, and are then rounded up to the nearest access minute for each line or hunt group.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

Assumed minutes are used for FGA services which originate or terminate in end offices not equipped with measurement capabilities and in such cases are the chargeable access minutes.

Where originating and terminating measurement capability does not exist for Feature Group A provided to the first point of switching, the number of access minutes will be assumed as set forth in 17.2.5 following.

Where measurement capability exists for either originating or terminating usage, but not both, on a line arranged for two way calling, the number of access minutes per line per month will be assumed usage, as set forth in 17.2.5 following, or the measured usage, whichever is greater. If the usage in the measured direction exceeds the assumed access minutes per line per month, no usage will be assigned in the unmeasured direction. If the measured usage is less than the assumed access minutes per line per month, the usage in the unmeasured direction will be the assumed usage, as set forth in 17.2.5 following, for that unmeasured direction except that the total of measured and assumed minutes in such instances will not exceed the total assumed usage designated for two way calling set forth in 17.2.5 following. If the total exceeds the assumed minutes set forth in 17.2.5 following, the assigned minutes shall be reduced so that the total of measured and unmeasured minutes equals the assumed minutes for two way calling set forth in 17.2.5 following.

Additionally, when the line is arranged for one way calling and there is no measurement capability for that direction, assumed originating access minutes, as set forth in 17.2.5(B) following, will be assigned for originating calling only lines and assumed terminating access minutes, as set forth in 17.2.5(C) following, will be assigned for terminating calling only lines.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

The following matrix illustrates the application of assumed access minutes for FGA as set forth in 17.2.5(A), (B) and (C) following.

<u>Service Ordered As</u>	<u>Can Measure Originating</u>	<u>Can't Measure Originating</u>	<u>Can Measure Terminating</u>	<u>Can't Measure Terminating</u>
Originating Only	Actual	1,510	N/A	N/A
Terminating Only	N/A	N/A	Actual	2,685
Both Originating and Terminating (originating measurement greater than 4195)	Actual	N/A	N/A	0
Both Originating and Terminating (originating measurement equal or less than 4195)	Actual	N/A	N/A	0 to 2685*
Both Originating and Terminating (terminating measurement greater than 4195)	N/A	0	Actual	N/A
Both Originating and Terminating (terminating measurement equal or less than 4195)	N/A	0 to 1510*	Actual	N/A

* Sum of actual and assumed cannot exceed 4195. Reduce assumed minutes of use if necessary.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

Notwithstanding the preceding, when Feature Group A is used for the provision of WATS-type service where measurement capability exists at the WATS Serving Office but not at the Feature Group A first point of switching, the measured WATS-type originating and/or terminating minutes of use shall be separately summed and compared to their respective total assumed originating and/or terminating minutes of use. The number of access minutes per line per month will be the assumed or the measured usage, whichever is greater.

6.5.5 Testing Capabilities

FGA is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line and milliwatt (102 type) 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 and Additional Manual Testing are available as set forth in 13.3.1 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB)6.6.1 Description

- (A) FGB Access, which is available to all customers, provides trunk side access to Telephone Company end office switches with an associated uniform 950-XXXX access code. FGB trunk side access is provided for the customer's use in originating communications from and terminating communications to an Interexchange Carrier's Interstate Service or a customer provided interstate communications capability. The customer must specify the Interexchange Carrier to which the FGB service is connected or, in the alternative, specify the means by which the FGB access communications is transported to another state. Special Access Services utilized for connection with FGB 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 FGB Switched Access Service for the provision of WATS or WATS-type services. Special Access Services are ordered as set forth in 5.2 preceding.
- (B) FGB, when directly routed to an end office (i.e., provided without the use of an access tandem switch), is provided at appropriately equipped Telephone Company electronic end office switches. When provided via Telephone Company designated electronic access tandem switches, FGB switching is provided at Telephone Company electronic and electromechanical end office switches.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.1 Description (Cont'd)

- (C) FGB 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) FGB switching is provided with multifrequency address signaling in both the originating and terminating directions. Except for FGB switching provided with the automatic number identification (ANI) or rotary dial station signaling arrangements as set forth respectively in 6.9.1(F) and 6.9.2(A) following, any other address signaling in the originating direction, if required by the customer, must be provided by the customer's end user using inband tone signaling techniques. Such inband tone address signals will not be regenerated by the Telephone Company and will be subject to the ordinary transmission capabilities of the Local Transport provided.
- (E) The access code for FGB switching is a uniform access code. The form of the uniform access code is 950-XXXX. A uniform access code(s) will be assigned to the customer for the customer's domestic communications and another will be assigned to the customer for its international communications, if required. These access codes will be the assigned access numbers of all FGB switched access service provided to the customer by the Telephone Company.
- (F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGB switching is ordered. When required by technical limitations, a separate trunk group will be established for each type of FGB switching arrangement provided. Different types of FGB or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.1 Description (Cont'd)

- (G) FGB switching, when used in the terminating direction, may be used to access valid NXXs, 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 digits). When directly routed to an end office, only those valid NXX codes served by that end 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.

(C)

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 FGB 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 the 950-XXXX access code, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 or 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGB switching is combined with Directory Assistance (DA) switching. FGB may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.6 Description and Provision of Feature Group B (FGB) (Cont'd)

6.6.1 Description (Cont'd)

- (H) When all FGB switching arrangements are discontinued at an end office and/or at a tandem, an intercept announcement is provided. This arrangement provides, for a limited period of time, an announcement that the service associated with the number dialed has been disconnected. (C)
- (I) For FGB 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 FGB usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in 6.4.6(H) preceding.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.2 Optional Features

Following are descriptions of the various nonchargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group B. They are set forth in (A), (B) and (C) following and are provided as Common Switching, Transport Termination and Local Transport options. Additionally, other optional features provided in local tariffs are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.9 following.

- (1) Automatic Number Identification (ANI)
- (2) Up to 7 Digit Outpulsing of Access Digits to Customer
- (3) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (4) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (5) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (6) Nonhunting 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

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.2 Optional Features (Cont'd)(B) Transport Terminations Options(1) Rotary Dial Station Signaling(C) Local Transport Options

(1) Customer Specification of Local Transport Termination

(2) Optional Supervisory Signaling

(3) Customer Specified Entry Switch Receive Level

Inasmuch as these options concern transmission levels and signaling they are set forth in 15.1.1 following.

(D) Optional Features Provided In Local Tariffs

Another feature, Bill Number Screening, which may be available in connection with FGB, is provided under the Telephone Company's local and/or general exchange service tariffs.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.3 Design and Traffic Routing

For Feature Group B, the trunk directionality and traffic routing of the Switched Access Service between the customer designated premises and the entry switch are determined by the customer's order for service; except 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. Additionally, the customer may order the optional feature Customer Specification of Local Transport Termination as set forth in 15.1.1 following.

6.6.4 Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded) or assumed by the Telephone Company at end office switches or access tandem switches. Originating and terminating calls will be measured (i.e., recorded) or assumed by the Telephone Company 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.

For both originating and terminating calls over FGB the measured minutes are the chargeable access minutes.

For originating calls over FGB, usage measurement begins when the originating FGB first point of switching receives answer supervision forwarded from the customer's point of termination, indicating the customer's equipment has answered.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

The measurement of originating call usage over FGB ends when the originating FGB 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.

For terminating calls over FGB, usage measurement begins when the terminating FGB first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered.

The measurement of terminating call usage over FGB ends when the terminating FGB 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.

FGB 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.

Assumed minutes are used for FGB services which originate or terminate in end offices not equipped with measurement capabilities and in such cases are the chargeable access minutes.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

Where originating and terminating measurement capability does not exist for Feature Group B provided to the first point of switching, the number of access minutes will be assumed, as set forth in 17.2.5(D) following, when the trunk is arranged for two way calling.

Where measurement capability exists for either originating or terminating usage, but not both, on a trunk arranged for two way calling, the number of access minutes per trunk per month will be assumed usage, as set forth in 17.2.5(D) following, or the measured usage, whichever is greater. If the usage in the measured direction exceeds the assumed access minutes per trunk per month, no usage will be assigned in the unmeasured direction. If the measured usage is less than the assumed access minutes per trunk per month, the usage in the unmeasured direction will be the assumed usage, as set forth in 17.2.5 following, for that unmeasured direction except that the total of measured and assumed minutes in such instances will not exceed the total assumed usage designated for two way calling set forth in 17.2.5(D) following. If the total exceeds the assumed minutes set forth in 17.2.5 following, the assigned minutes shall be reduced so that the total of measured and unmeasured minutes equals the assumed minutes for two way calling set forth in 17.2.5(D) following.

Additionally, when the trunk is arranged for one way calling and there is no measurement capability for that direction, assumed originating access minutes, as set forth in 17.2.5(E) following, will be assigned for originating calling only lines and assumed terminating access minutes, as set forth in 17.2.5(F) following, will be assigned for terminating calling only lines.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

The following matrix illustrates the application of assumed access minutes for FGB as set forth in 17.2.5(D), (E) and (F) following.

<u>Service Ordered As</u>	<u>Can Measure Originating</u>	<u>Can't Measure Originating</u>	<u>Can Measure Terminating</u>	<u>Can't Measure Terminating</u>
Originating Only	Actual	3,132	N/A	N/A
Terminating Only	N/A	N/A	Actual	5,568
Both Originating and Terminating (originating measurement greater than 8700)	Actual	N/A	N/A	0
Both Originating and Terminating (originating measurement equal or less than 8700)	Actual	N/A	Actual	0 to 5568*
Both Originating and Terminating (terminating measurement greater than 8700)	N/A	0	Actual	N/A
Both Originating and Terminating (terminating measurement equal or less than 8700)	N/A	0 to 3132*	Actual	N/A

* Sum of actual and assumed cannot exceed 8700. Reduce assumed minutes of use if necessary.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

Notwithstanding the preceding, when Feature Group B is used for the provision of WATS or WATS-type service where measurement capability exists at the WATS Serving Office but not at the Feature Group B first point of switching, the measured WATS or WATS-type originating and/or terminating minutes of use shall be separately summed and compared to their respective total assumed originating and/or terminating minutes of use. The number of minutes per trunk per month will be the assumed or the measured usage, whichever is greater.

When Feature Group B is ordered at an access tandem and end office specific usage measurement is not available, the actual or assumed originating and/or terminating minutes of use as determined by the exchange carrier providing the access tandem will be apportioned among all subtending end offices. For each end office, such apportionment shall be based on the ratio of the total number of subscriber lines in each end office subtending the access tandem to the total number of subscriber lines associated with all end offices subtending the access tandem. For purposes of administering this regulation, subscriber lines are defined as exchange service lines, Centrex lines and Centrex-type lines provided by the telephone companies under local and/or general exchange service tariffs. The resulting ratio for each end office is then applied to the total access area originating and/or terminating minutes of use to determine originating and/or terminating minutes of use to be assigned for billing purposes to each subtending end office in the access area.

The ratio used to calculate the access minutes will be determined by the Telephone Company and provided to the customer upon his request within fifteen (15) days of the receipt of such request.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB) (Cont'd)6.6.5 Testing Capabilities

FGB 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.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC)

6.7.1 Description

- (A) FGC Access provides trunk side access to Telephone Company end office switches for the customer's use in originating and terminating communications. Originating and terminating FGC Access is available to providers of MTS and WATS. Existing FGC Access will be converted to Feature Group D Access when Feature Group D Access becomes available in an end office. Special Access Services utilized for connection with FGC 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 FGC Switched Access Service (i.e., a provider of MTS and WATS) for the provision of WATS Services. Special Access Services are ordered as set forth in 5.2 preceding.

(C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

(B) Feature Group C switching is provided at all end office switches unless Feature Group D end office switching is provided in the same office. When FGD switching is available, FGC switching will not be provided. FGC is provided at Telephone Company end office switches on a direct trunk basis or via Telephone Company designated access tandem switches. Feature Group C switching is furnished to providers of MTS and WATS.

(C)

(C) FGC 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 answer and disconnect supervisory signaling. Wink start start-pulsing signals are provided in all offices where available. In those offices where wink start start-pulsing signals are not available, delay dial start-pulsing signals will be provided, unless immediate dial pulse signaling is provided, in which case no start-pulsing signals are provided.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

- (D) FGC is provided with multifrequency address signaling except in certain electromechanical end office switches where multifrequency signaling is not available. In such switches, the address signaling will be dial pulse or immediate dial pulse signaling, whichever is available. Up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such called party number signals will be subject to the ordinary transmission capabilities of the Local Transport provided.
- (E) No access code is required for FGC switching. The telephone 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

- (F) FGC switching, when used in the terminating direction, may be used to access valid NXXs, time or weather announcement services of the Telephone Company, community information services of an information provider, and other customer's services (by dialing the appropriate codes) when the 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 offices subtending the access tandem may be accessed. Where measurement capabilities exist, 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 Services. Additionally, non-access charges will also be billed for calls from a FGC 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 FGC switching is combined with Directory Assistance switching. FGC may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.

(C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

- (G) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGC switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGC switching arrangement provided. Different types of FGC or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.

(D)

(D)

- (I) Operator Transfer Service may be provided with FGC 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 offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in 6.9.4 following.

- (J) FGC switching is provided with multifrequency address signaling or out of band SS7 signaling where technically feasible. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features

Following are descriptions of the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group C. Nonchargeable 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 6.9 following.

- (1) Automatic Number Identification (ANI)
- (2) Signaling Options
 - (a) Delay Dial Start-Pulsing Signaling
 - (b) Immediate Dial Pulse Address Signaling
 - (c) Dial Pulse Address Signaling
- (3) Service Class Routing
- (4) Alternate Traffic Routing
- (5) Trunk Access Limitation
- (6) Band Advance Arrangement Associated with Special Access Service Utilized in the Provision of WATS Service
- (7) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS Service
- (8) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS Service

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features (Cont'd)(A) Common Switching Options (Cont'd)

- (9) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS Services
- (10) Nonhunting Number Associated with a Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS Services
- (11) Digital Switched 56 Service

(B) Transport Termination Options

- (1) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin

The Operator Trunk option is set forth in 6.9.2(B) 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 receive signals for out of band call set up and is available with Feature Group C. This option requires the establishment of a signaling connection between the customer's designated premises/SPOI and a Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGC and each signaling connection is provisioned for two way SS7 signaling information.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features (Cont'd)(C) Local Transport Options (Cont'd)

(2) (Cont'd)

The SS7 optional feature is only available where designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 to providers of MTS WATS for all traffic and to all other customers for originating calls to 800 numbers.

(3) Multifrequency Address Signaling(4) Calling Party Number (CPN)(5) Charge Number Parameter (CNP)(D) Chargeable Optional Features(D)
—
(D)

(2) The Operator Transfer Service Optional Feature is provided as set forth in 6.9.4 following.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.9.5 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.3 Design and Traffic Routing

For Feature Group C, the Telephone Company shall design and determine the routing of Switched Access Service. Additionally, for Tandem Switched Transport, the Telephone Company will design and determine the routing from the first point of switching to the end office. 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.

Selection of facilities and equipment and traffic routing of the service are based on standard engineering methods, available facilities and equipment, and actual traffic patterns .

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded) by the Telephone Company at end office switches or access tandem switches. Originating and terminating calls will be measured or imputed by the Telephone Company 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.

For terminating calls over FGC when measurement capability exists, the measured minutes are the chargeable access minutes. For originating calls over FGC, chargeable originating access minutes are derived from recorded minutes in the following manner:

Step 1: Obtain recorded originating minutes and messages from the appropriate recording data.

Step 2: Obtain the total attempts by dividing the originating measured messages by the completion ratio. Completion ratios (CR) are obtained separately for the major call categories such as DDD, operator, 800, 900, directory assistance and international from a sample study which analyzes the ultimate completion status of the total attempts which receive acknowledgement from the customer. That is, Measured Messages divided by Completion Ratio equals Total Attempts.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)

Step 3: Obtain the total non-conversation time additive (NCTA) by multiplying the total attempts (obtained in Step 2) by the NCTA per attempt ratio. The NCTA per attempt ratio is obtained from the sample study identified in Step 2 by measuring the non-conversation time associated with both completed and incomplete attempts. The total NCTA is the time on a completed attempt from customer acknowledgement of receipt of call to called party answer (set up and ringing) plus the time on an incomplete attempt from customer acknowledgment of call until the access tandem or end office receives a disconnect signal (ring - no answer, busy or network blockage). That is, Total Attempts times Non-Conversation Time per Attempt Ratio equals Total NCTA.

Step 4: Obtain total chargeable originating access minutes by adding the total NCTA (obtained in Step 3) to the recorded originating measured minutes (obtained in Step 1). That is, Measured Minutes plus NCTA equals Chargeable Originating Access Minutes.

Following is an example which illustrates how the chargeable originating access minutes are derived from the measured originating minutes using this formula.

Where:

Measured Minutes (M. Min.)	= 7,000
Measured Messages (M. Mes.)	= 1,000
Completion Ratio (CR)	= .75
NCTA per Attempt	= .4

$$(1) \quad \text{Total Attempts} = \frac{1,000(\text{M. Mes})}{.75 (\text{CR})} = 1,333.3$$

$$(2) \quad \text{Total NCTA} = .4 (\text{NCTA per Attempt}) \times 1,333.33 = 533.33$$

$$(3) \quad \text{Total Chargeable Originating Access Minutes} = 7,000 (\text{M. Min}) + 533.33 (\text{NCTA}) = 7,533.33$$

FGC 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)Originating Usage

For originating calls over FGC, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGC first point of switching receives answer supervision from the customer's point of termination, indicating the called party has answered.

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC 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 FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is routed through a tandem for connection to the customer, usage measurement begins when the FGC end office receives the SS7 Exit Message from the tandem.

The measurement of originating call usage over FGC provided with Multi-Frequency Signaling ends when the originating FGC 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 FGC provided with SS7 Signaling ends when the originating FGC end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

Terminating Usage

For terminating calls over FGC the chargeable access minutes are either measured or derived. For terminating calls over FGC where measurement capability does not exist, terminating FGC usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)Terminating Usage (Cont'd)

For terminating calls over FGC provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGC 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 FGC first point of switching receives an on-hook supervisory signal from 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.

For terminating calls over FGC 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 FGC call usage ends when the entry switch receives or sends a Release Message, whichever occurs first.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGC to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group C, 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 first point of switching when traffic is directly routed without an alternate route. Standard traffic engineering methods 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) 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.5 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:

Number of Transmission Paths Per Trunk Group	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			
	15-20	11-14	7-10	3-6
	Measurements	Measurements	Measurements	Measurements
2	7%	8%	9%	14%
3	5%	6%	7%	9%
4	5%	6%	7%	8%
5-6	4%	5%	6%	7%
7 or more	3%	3.5%	4%	6%

- (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:

Number of Transmission Paths Per Trunk Group	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			
	15-20	11-14	7-10	3-6
	Measurements	Measurements	Measurements	Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.6 Testing Capabilities

FGC 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.

ACCESS SERVICE6. 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 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.
- (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 multifrequency address signaling or out of band SS7 signaling. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (E) FGD switching, when used in the terminating direction, may be used to access valid NXXs, 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. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.

(C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)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 service.

(C)

(D)

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(D)

(J) When a customer has had FGB access in an end office and subsequently replaces the FGB access with FGD access, at the mutual agreement of the customer and the Telephone Company, the Telephone Company will direct calls dialed by the customer's end users using the customer's previous FGB access code to the customer's FGD access service. The customer must be prepared to handle normally dialed FGD calls, as well as calls dialed with the FGB access code which requires the customer to receive additional address signaling from the end user. Such calls will be rated as FGD. The Telephone Company may, with 90 days' written notice to the customer, discontinue this arrangement.

(K) 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(H) preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.1 Description (Cont'd)

- (L) 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 offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in 6.9.4 following.

ACCESS SERVICE6. 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 nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Nonchargeable 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 6.9 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) Nonhunting 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

ACCESS SERVICE6. 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 6.9.2(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 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) Multifrequency Address Signaling(4) Calling Party Number (CPN) Parameter(5) Charge Number Parameter (CNP)(6) Carrier Selection Parameter (CSP)(D) Chargeable Optional Features

(D)

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(D)

(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 6.9.5 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Access 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 specified 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.

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.

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.

ACCESS SERVICE6. 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)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.

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 Service 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.

ACCESS SERVICE6. 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)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.

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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)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.

ACCESS SERVICE6. 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:

Number of Transmission Paths Per Trunk Group	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			
	15-20	11-14	7-10	3-6
	Measurements	Measurements	Measurements	Measurements
2	7%	8.0%	9%	14.0%
3	5%	6.0%	7%	9.0%
4	5%	6.0%	7%	8.0%
5-6	4%	5.0%	6%	7.0%
7 or more	3%	3.5%	4%	6.0%

- (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:

Number of Transmission Paths Per Trunk Group	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			
	15-20	11-14	7-10	3-6
	Measurements	Measurements	Measurements	Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

ACCESS SERVICE6. 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

<u>Trunks in Service</u>	<u>1%</u>	<u>1/2%</u>
1-2	7.0%	4.5%
3-4	5.0%	3.5%
5-6	4.0%	2.5%
7 or greater	3.0%	2.0%

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.

ACCESS SERVICE6. 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 References TR-TSV 000905.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.9 Chargeable and Nonchargeable Optional Features

Following are descriptions of the various optional features that are available in lieu of, or in addition to, the standard features provided with the Feature Groups. They are provided as Common Switching, Transport Termination, or Operator Transfer Service option.

(C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features

The following table shows the Feature Groups with which the optional features are available.

<u>Option</u>	<u>Available Feature Groups</u>			
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
A) Call Denial on Line or Hunt Group	X			
B) Service Code Denial on Line or Hunt Group	X			
C) Hunt Group Arrangement	X			
D) Uniform Call Distribution Arrangement	X			
E) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement	X			
F) Automatic Number Identification (ANI)		X	X	X
G) Up to 7 Digit Outpulsing of Access Digits to Customer	X			
H) Delay Dial Start-Pulsing Signaling		X		
I) Immediate Dial Pulse Address Signaling		X		
J) Dial Pulse Address Signaling		X		
K) Service Class Routing		X	X	
L) Alternate Traffic Routing		X	X	
M) Trunk Access Limitation		X	X	
N) Call Gapping Arrangement			X	
O) International Carrier Option			X	
P) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
Q) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services			X	X
R) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
S) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
T) Nonhunting 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	X	X	X	X
U) Digital Switched 56 Service			X	X
V) Multifrequency Address Signaling			X	X
W) Signaling System 7 (SS7) Signaling			X	X
X) Calling Party Number (CPN)				
Y) Carrier Selection Parameter (CSP)				X
Z) Charge Number Parameter (CNP)			X	X
AA) Flexible Automatic Number Identification (Flex ANI)				X (N)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(A) Call Denial on Line or Hunt Group

This option allows for the screening of terminating Feature Group A calls. There are two screening arrangements available with this option as follows: 1) limiting terminating calls for completion to only 411 or 555-1212 whichever is available, 611, 911, 800 series service and a Telephone Company specified set of NXXs within the Telephone Company local exchange calling area of the dial tone office in which the arrangement is provided or, 2) limiting terminating calls to completion to only the NXXs associated with all end offices in the LATA, i.e., the call cannot be further switched or routed out of the LATA nor will calls be completed to 411 or 555-1212 whichever is available, 611, 911 or 800 series service. All other calls are routed to a reorder tone or recorded announcement. Arrangement 1 is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices. Arrangement 2 is provided where available. This feature is available with Feature Group A.

(B) Service Code Denial on Line or Hunt Group

This option allows for the screening of terminating calls within the LATA, and for disallowing completion of calls to 0-, 555 and N11 (e.g., 411, 611, and 911). This feature is provided where available in all Telephone Company end offices. It is available with Feature Group A.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(C) Hunt Group Arrangement

This option provides the ability to sequentially access one of two or more line side connections in the originating direction, when the access code of the line group is dialed. This feature is provided in all Telephone Company end offices. It is available with Feature Group A. All Feature Group A access services in the same hunt group must provide off-hook supervisory signaling from the same point in time in the call sequence i.e., all off-hook supervisory signals must either be provided by the customer's equipment before the called party answers or all must be forwarded by the customer's equipment when the called party answers.

(D) Uniform Call Distribution Arrangement

This option provides a type of multiline hunting arrangement which provides for an even distribution of calls among the available lines in a hunt group. Where available, this feature is provided in Telephone Company electronic end offices only. It is available with Feature Group A.

(E) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement

This option provides access to an individual line within a multiline hunt or uniform call distribution group. When the nonhunting number is dialed, access is provided when it is idle, or busy tone is provided when it is busy. Where available, this feature is provided in Telephone Company electronic end offices only. It is available with Feature Group A.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) 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 originating calls to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with: (C)
- (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.
- (2) The seven digit ANI telephone number is generally available with Feature Groups B and C. With these Feature Groups, technical limitations may exist in Telephone Company switching facilities which require ANI to be provided only on a directly trunked basis. ANI will be transmitted on all calls except those originating from multiparty lines, pay telephones using Feature Group B, or when an ANI failure has occurred. Seven digit ANI is not available with SS7 Signaling.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

- (3) 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 multifrequency address signaling or SS7 signaling.
- (4) With Feature Group C, at the option of the customer, ANI may be ordered from end offices where Telephone Company recording for end user billing is not provided. Additionally, ANI is provided from end offices where message detail recording is not required by the Telephone Company; as with 800 series service. ANI is not provided from end offices where the Telephone Company forwards ANI to its recording equipment.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

- (5) 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 Groups B, C, and D.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

(6) 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 Optional Feature Option of Feature Group D as described in 6.9.1(AA) following.

(7) 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)(7) 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(G) Up to 7 Digit Outpulsing of Access Digits to Customer

This option provides for the end office capability of providing up to 7 digits of the uniform access code (950-XXXX) to the customer designated premises.

The customer can request that only some of the digits in the access code be forwarded. The access code digits would be provided to the customer designated premises using multifrequency signaling, and transmission of the digits would precede the forwarding of ANI if that feature were provided. This feature is available with Feature Group B.

(H) Delay Dial Start-Pulsing Signaling

Where available, this option provides a method of indicating to the near end trunk circuit readiness to accept address signaling information by the far end trunk circuit. Delay dial is often referred to as an off-hook, on-hook signaling sequence. The delay dial signal is the off-hook interval and the start-pulsing signal is the on-hook interval. With integrity check, the calling office will not outpulse until a delay dial (off-hook) signal followed by a start-pulsing (on-hook) signal has been identified at the calling office. This option is available with Feature Group C.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(I) Immediate Dial Pulse Address Signaling

Where available, this option provides for the forwarding of dial pulses from the Telephone Company end office to the customer without the need of a start-pulsing signal from the customer. It is available with Feature Group C.

(J) Dial Pulse Address Signaling

Where available, this trunk side option provides for the transmission of number information, e.g., called number, between the end office switching system and the customer designated premises (in either direction) by means of direct current pulses. It is available with Feature Group C.

(K) 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., 800, 888 or 900). It is provided in suitably equipped end office or access tandem switches. It is available with Feature Groups C and D.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(L) 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 Groups B, C and D.

(M) 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 Groups C and D.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(N) 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.

(O) 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(P) 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 Groups A, B, C and D.

(Q) 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 Groups C and D.

(R) 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 Groups A, B, C and D.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(S) 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 Groups A, B, C and D.

(T) Nonhunting 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 nonhunting 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 Groups A, B, C and D.

(U) 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 C and Feature Group D offices as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(V) Multifrequency Address Signaling

Multifrequency Address Signaling is available as an optional feature with FGC and 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). Multifrequency 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.

(W) 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/Signaling System 7 Network Connection Service (CCSNC) as specified in 6.1.3(A)(3) preceding. This feature is available with FGC and FGD and will be provided in accordance with the SS7 Interconnect specifications described in Technical Reference TR-TSV-000905.

(X) Calling Party Number (CPN)

This feature provides for the automatic transmission of the ten digit directory number, associated with a calling station, to the customer's premises for originating calls. 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 FGC and FGD with SS7 signaling. CPN is available where technically feasible.

(C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(X) 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(Y) 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.

(Z) Charge Number Parameter (CNP)

(1) The CNP Parameter is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGC where technically feasible and FGD with MF signaling. The CNP Parameter 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 FGC and 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(Z) 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 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(Z) 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 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.1 Common Switching Nonchargeable Optional Features (Cont'd)(AA) 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 6.9.1 (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.

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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.2 Transport Termination Nonchargeable Optional Features(A) Rotary Dial Station Signaling

This option provides for the transmission of called party address signaling from rotary dial stations to the customer designated premises for originating calls. This option is provided in the form of a specific type of Transport Termination. It is available with Feature Group B, only on a directly trunked basis.

(B) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin

This option may be ordered to provide coin, non- coin, or combined coin and non-coin operation. It is available only with Feature Group C and is provided in electronic end offices and other Telephone Company end offices where equipment is available. It is provided as a trunk type of Transport Termination.

Coin, Non-Coin:

This arrangement provides for initial coin return control, except in the case of non-coin, and routing of 0+, 0-, 1+, 01+ or 011+ prefixed originating coin and non-coin calls requiring operator assistance to the customer designated premises. Because operator assisted coin calling traffic is routed over a trunk group dedicated to operator assisted calls, this arrangement is only provided in association with the Service Class Routing option.

This arrangement is normally ordered by the customer in conjunction with the ANI optional feature, since the preponderance of trunk groups equipped with this arrangement will be terminated in the customer's automated operator services systems, rather than in the customer's manual cord boards.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.2 Transport Termination Nonchargeable Optional Features(B) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin (Cont'd)Combined Coin and Non-Coin:

When so equipped, the ANI optional feature provides for the forwarding of information digits which identify that the call has originated from a hotel or motel, and whether room number identification is required, or that special screening is required, e.g., for coinless pay telephones, dormitory or inmate stations, or other screening arrangements agreed to between the customer and the Telephone Company.

(C) 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.

ACCESS SERVICE

- 6. Switched Access Service (Cont'd)
- 6.9 Chargeable and Nonchargeable Optional Features (Cont'd)
- 6.9.3 Chargeable Optional Features

(D)

(D)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.3 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 C and 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 FGC or 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.3 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 TR-TSY-000506 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 Groups C or D apply to Operator Transfer Service. Additionally, a charge as specified in 6.1.3 (C)(2) preceding and 17.2.6 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 C and D, where technically feasible as designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, 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.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.3 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 rate elements; a Signaling Network Access Link (SNAL) 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 TR-TSV 000905 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 does 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 17.2.2 following.

(D) 800 Series Data Base ACCESS SERVICE

800 Series Data Base Access Service is provided with FGC or FGD switched access service. When a call using a toll free service access code (SAC) (e.g., 1+800 or 888+NXX-XXXX) is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 series service data base to perform the identification function. The call will then be routed to the identified customer over FGC or FGD switched access.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.9 Chargeable and Nonchargeable Optional Features (Cont'd)6.9.3 Chargeable Optional Features (Cont'd)(D) 800 Series Data Base Access Service (Cont'd)

The manner in which 800 Series 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 Series 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 service type calls, all such service will be provisioned from that end office. If the end office is not equipped with the 888 SAC SSP capability the customer must order Tandem Switched Transport to receive such traffic until the 888 SAC SSP capability becomes available. See Section 6.4.1(C) for credit applicability.
- When 800 Series Data Base Access Service originates at an end office not equipped with SSP customer identification capability, the 800 series service type 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 C or Feature Group D Switched Access Service .

ACCESS SERVICE**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 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 either analog, digital or optical. Analog connections are differentiated by spectrum and bandwidth. Digital and optical connections are differentiated by bit rate.

The Telephone Company does not provide wireline broadband Internet access transmission on a common carrier basis. The Telephone Company provides wireline broadband Internet access transmission on a non-common-carrier basis. Contact the Telephone Company for information on this service.

(N)
|
(N)

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.

* 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Channel Types (Cont'd)A. Channel Type Descriptions

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.

Telegraph Grade - a channel for the transmission of binary signals at rates of 0 to 75 baud or 0 to 150 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Channel Types (Cont'd)A. Channel Type Descriptions (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 (i.e., 1.544 Mbps, 3.152 Mbps, 6.312 Mbps, 44.736 Mbps and 274.176 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 3.152 Mbps High Capacity channel from a customer designated premises to a Telephone Company hub for multiplexing to two 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 following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Channel Types (Cont'd)B. Issuing Carrier Special Access Offerings

Special Access Channel Types and Optional Features and Functions Offered by individual issuing carrier Telephone Companies under regulations herein are indicated by an "X" in the column for the respective service. Telephone Company rates for Special Access Services are established at individual Telephone Company Section rate pages at 17.3 of the respective Telephone Company rate pages.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Service Descriptions

For the purposes of ordering, there are seven categories of Special Access Service. These are:

	<u>Service Designator Codes</u>
Metallic	MT
Telegraph Grade	TG
Voice	VG
Program Audio	AP
Video	TV
Digital Data	DA
High Capacity	DS
Synchronous Optical	OC

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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Service Descriptions

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, or 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Service Descriptions

- (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.

ACCESS SERVICE7. 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:
- | | |
|-------------------------------|---------------------------------------|
| Metallic | TR-NPL-000336 |
| Telegraph Grade | TR-NPL-000336 |
| Voice Grade | TR-NWT-000335 |
| | PUB 41004 |
| | (MDP-326-584) Table 4 |
| Program Audio | GR-337-CORE and associated Addendum |
| Video | GR-338-CORE |
| Digital Data | TR-NWT-000341 and associated Addendum |
| For 2.4, 4.8, 9.6 & 56.0 Kpbs | Pub 62310 (MDP-326-726) |
| For 19.2 Kpbs | INC Bulletin CB-INC-100 |
| For 64.0 Kpbs | PUB 62310 (MDP-326-726) |
| High Capacity | GR-342-CORE |
| | GR-54-CORE |
| Synchronous Optical | GR-243-CORE |
| For OC3, OC3c and OC12 | GR-1374-CORE |
| | ANSI T1.105 |
| | ANSI T1.102 |

ACCESS SERVICE7. 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 wire center equipped with a Public Packet Data Network Services, or a customer designated premises and a WATS Serving Office (WSO).

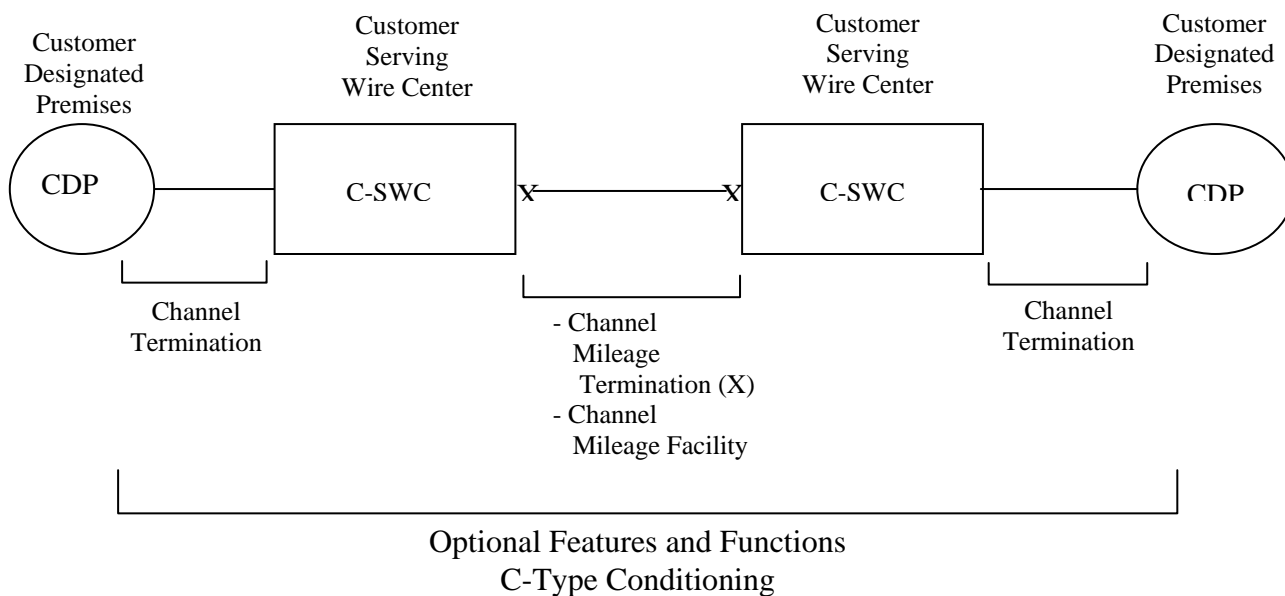
Applicable rate elements are:

- Channel Terminations
- Channel Mileage (as applicable)
- Optional Features and Functions (when applicable)

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(A) Two-Point Service (Cont'd)

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.

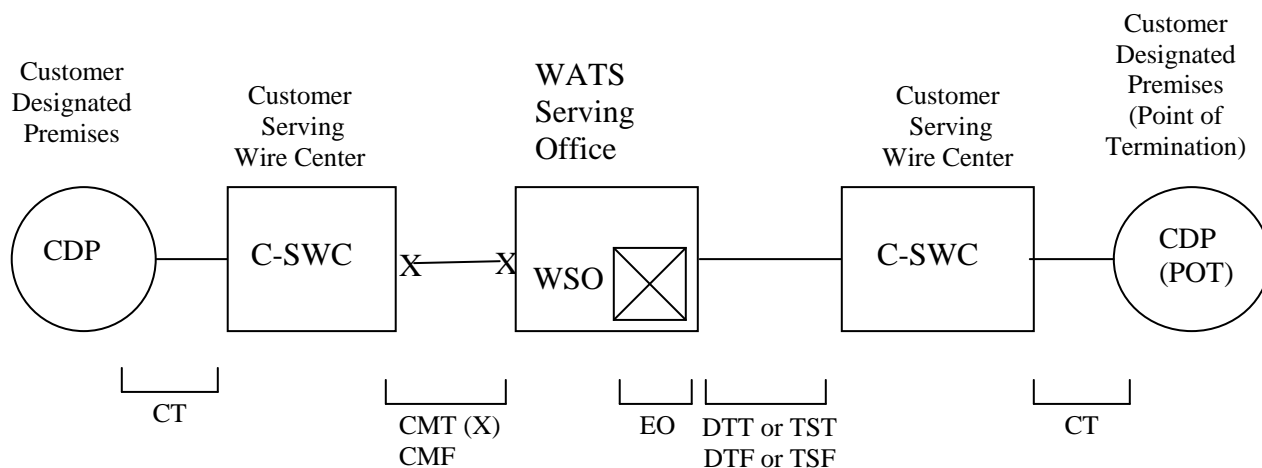


Applicable rate elements are:

- 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

ACCESS SERVICE7. 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.



Special Access
 CT - Channel Termination
 CMT - Channel Mileage Termination
 CMF - Channel Mileage Facility

Switched Access
 EO - End Office Elements
 DTT - Direct Trunked Termination
 TST - Tandem Switched Termination
 DTF - Direct Trunked Facility
 TSF - Tandem Switched Facility
 CT - Channel Termination

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*

* May not apply if exemption certification is provided.

ACCESS SERVICE7. 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).

ACCESS SERVICE7. 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.

CT - Channel Termination
CMT - Channel Mileage Termination
CMF - Channel Mileage Facility
● - Bridging Port

Applicable rate elements are:

- Channel Terminations (4 applicable)
- Channel Mileage
 - o 2 Channel Mileage Terminations per Channel Mileage Facility section for a total of 8, plus
 - o 4 sections, Channel Mileage Facility per mile
- Bridging Optional Feature (6 applicable, i.e., each bridge port)

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service

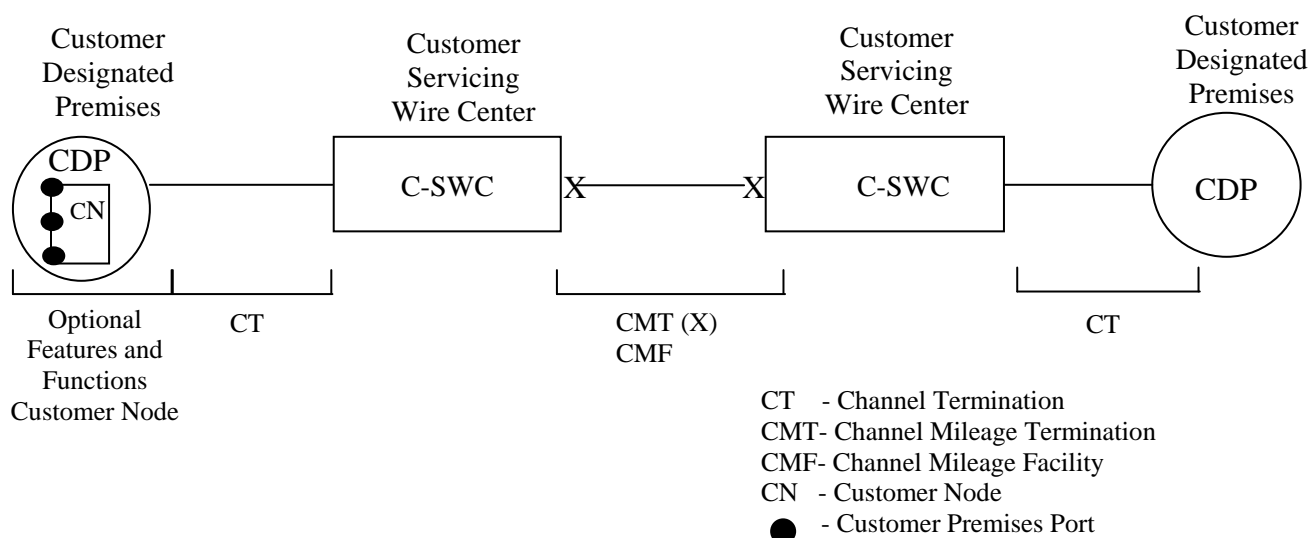
A Synchronous Optical Channel Service connects two customer designated premises, or a customer designated premises and a DSL Access Service Connection Point, or a customer designated premises and a wire center equipped for Add/Drop Multiplexing, or a customer designated premises and a wire center equipped 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.

Applicable rate elements are:

- Channel Terminations
- Channel Mileage (where applicable)
- Optional Features and Functions

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service (Cont'd)

(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.

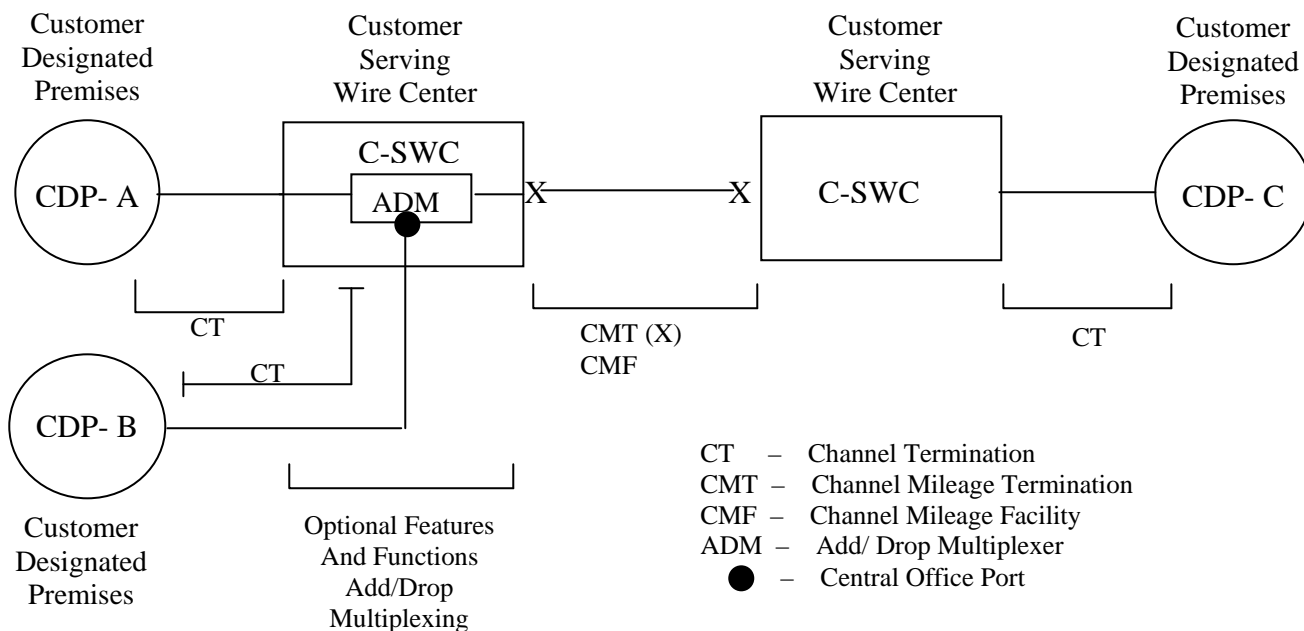


Applicable rate elements are:

- 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 Premises Ports

ACCESS SERVICE7. 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. Rates and charges are as set forth in 17.3.8 and 17.3.11 following.



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)

ACCESS SERVICE**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.

ACCESS SERVICE**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, Telegraph, 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.).

7.1.9 Service Provisioning

Special Access Service is provisioned over existing Telephone Company facilities. Special Access Service will be provided subject to the availability and limitations of the Telephone Company wire centers and cable and wire facilities. Where new construction, including installation of cable and wire facilities is required to provide a Special Access Service requested by the customer, the Company may, at its option, undertake such new construction and make a Special Construction Tariff filing for regulations, rates, charges and liabilities applicable to the new construction that apply in addition to all regulations, rates and charges set forth in this tariff.

ACCESS SERVICE**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 Termination

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. 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.

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ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)

This section contains the specific regulations governing the rates and charges that apply for Special Access.

7.2.1 Rate Categories (Cont'd)(A) Channel Termination (Cont'd)

For a Special Access Digital Data Service 56.0 or 64.0 Kbps Bit Rate or 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 either an Ethernet Transport Service as described in Section 16.3, following, a Multi-Megabit Ethernet Transmission Service (METS) as described in Section 16.5, following, or a Stand-Alone Broadband Network Transport Service as described in Section 16.8, 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 the respective Wireline Broadband Internet Access Transmission Services under either Section 8.1 (ADSL), Section 8.2 (SDSL), Section 16.2 (ADSL), 16.3 (SDSL) or Section 16.6 (High Speed Internet Access Service) following, for interconnection with wireline broadband Internet 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(A) Channel Termination (Cont'd)

For a Metallic Service connecting to a DSL Access Service Connection Point as described in the respective individual rate sections for Wireline Broadband Internet Access Transmission Services, following, for interconnection with Wireline Broadband Internet Access Transmission 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.

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 16.7, 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 16, following, 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 16, following, there will be a charge for two Channel Terminations for each DSL Access Service Connection function ordered.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(B) Channel Termination (Cont'd)

(1) Synchronous Optical Channel Service Mileage-Based Channel Termination Alternative

For the Telephone Companies listed above, Channel Termination systems include the transport common equipment and the first half mile of local channel facilities at rates specified in Section 17.3 following. Rates for additional lengths of local channel facilities are as specified in Section 17.3 following.

There are two channel termination rates for each Synchronous Optical Channel Service capacity.

- channel termination with an optical customer termination or an optical central office termination (under which configuration the channel termination fiber trunk between the customer designated premises and the central office are not channelized)
- channel terminations without both an optical customer termination or optical central office termination (under which configuration the channel termination fiber trunk between the customer designated premises and the central office is channelized)

ACCESS SERVICE7. 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 or 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 Telephone Company serving wire center quipped with ATM-CRS and another telephone company ATM-equipped serving wire center, between a Telephone Company serving wire enter equipped with FRAS and another telephone company serving wire center quipped 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.

ACCESS SERVICE7. 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 (ETS), or between a Telephone Company serving wire center equipped with TS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

ACCESS SERVICE7. 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.

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.

ACCESS SERVICE7. 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

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(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.

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 7.12 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.

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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.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. 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; or
- 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 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.3 Moves (Cont'd)

(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 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 Special Access services except part-time Video and Program Audio services and DS3 High Capacity Service and Synchronous Optical Channel Services 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 Services 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), 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 7.2.9(A), following.

ACCESS SERVICE7. 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 associated with a customer designated premises and a wire center equipped for Frame Relay Access Service,
- 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 or a High Speed Internet (HSI) Access Service Connection Point
- 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,
- two Telephone Company hubs,
- 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.

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.

ACCESS SERVICE7. 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., Telegraph, Voice, Program Audio, etc.).

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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Facility Hubs (Cont'd)

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 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 and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Facility Hubs (Cont'd)

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 in 17.3.5 and 17.3.6 following 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.7 Mixed Use

Mixed use refers to a rate application applicable only 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. If the customer has Switched Access Service between a customer designated premises and an end office that is multiplexed at a Telephone Company hub and subsequently orders the derived channels as Special and Switched Access Service, rates and charges will apply as if the service were ordered as mixed use.

Except as noted above, the High Capacity 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 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. 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, Telegraph, 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.7 Mixed Use (Cont'd)

As each individual channel is activated for Switched Access Service, the High Capacity 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, etc.). 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).

Switched Access Service rates and charges, as set forth in 7.2 following, will apply for each channel that is used to provide a Switched Access Service. Additionally, the Switched Access Service Entrance Facility, Direct Trunked Transport, and Multiplexing charges, if applicable, will be reduced by multiplying their respective rates by the ratio of derived Switched Access Service channels to the total number of Voice Grade channels that can be derived.

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.

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.

ACCESS SERVICE7. 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.

High Capacity or Synchronous Optical Channel Service	DS3 Quantities	DS1 Quantities	Voice Grade Equivalents
DS1	n/a	1	24
DS3	1	28	672
OC3	3	84	2,016
OC12	12	336	8,064

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.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 High Capacity Optional Rate Plans

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 17.3.8 following.

Discounts for the Term Discount plan are only applied to High Capacity Service provided to a customer within the same state by the same Telephone Company.

(C)

The Term Discount Optional Rate Plan is only available from those Telephone Companies listed in 7.1.1 preceding.

The minimum service period on a monthly rate basis is one month for DS1 service and twelve months for DS3 service.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) 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)(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 in 17.3.8 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.

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 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 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)(3), 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 (4) following will not apply.

(C)

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (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 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.

(2) 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (Cont'd)(2) 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 capacity of 3 is installed 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 Channel rate elements 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 when service is provided by the same telephone company, discontinuance charges will not apply.

(C)

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (Cont'd)(3) 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 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 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 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 ETS Term Discount Plan or established in the new SOCS Optional Rate 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);
- (ii) The bandwidth capacity of the newly committed SOCS channel(s) included in the new SOCS Optional Rate 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);

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (Cont'd)(3) High Capacity Service Optional Rate Plan Replacements
(Cont'd)

- (iii) The customer commits to retain the newly committed ETS Port(s) in-service at the same bandwidth capacity for the remaining term commitment period for its existing ETS Term Discount Plan or for the entire term commitment period of its new SOCS Term Discount Optional Rate Plan, or new ETS Term Discount Plan;
- (iv) 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 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 ETS Ports are added to the customer's ETS Term Discount Plan before the last year of the existing term commitment period; and
- (vi) Any newly committed SOCS channels added to a new SOCS Optional Rate 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).

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (Cont'd)(3) High Capacity Service Optional Rate Plan Replacements
(Cont'd)

- (b) If any of the requirements specified in (i), above, are not met, replacement SOCS channels and/or replacement ETS Port(s) will not qualify for the provisions under Section 7.2.8(A)(3). Discontinuance charges will apply to replace all or a portion of the services in an existing High Capacity Optional Rate Plan as described in (4), below.
- (c) 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 or with a newly committed ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided pursuant to Sections 7.2.9 and 16.4, 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.
- (d) The term discount percentage for the replacement SOCS Optional Rate 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)(3).
- (e) When a customer replaces all or a portion of its existing High Capacity Optional Rate Plan with a committed ETS Port(s) added to its existing ETS Term Discount Plan, the customer's existing ETS Term Discount Plan term commitment period would continue uninterrupted.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (Cont'd)(3) High Capacity Service Optional Rate Plan Replacements
(Cont'd)

(f) 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) and ETS Port(s).

(g) Terms and conditions for the SOCS Optional Rate Plan and ETS Term Discount Plan are specified in Sections 7.2.9 and 16.4, following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 High Capacity Optional Rate Plans (Cont'd)(A) Term Discounts (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 its service prior to the expiration of the term commitment period.

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 fifty percent for DS3 service, 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 for DS1 Service, and fifty percent for DS3 Service, of the total undiscounted monthly charges will apply to the remaining portion of the discount 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans(A) Synchronous Optical Channel Service Optional Rate Plan A

Telephone Companies offering Synchronous Optical Channel Service Optional Rate Plan A are indicated at Section 7.1.1 preceding.

The Synchronous Optical Channel Service Optional Rate Plan A offers a Term Discount. The Term Discount applies to Channel Terminations, Channel Mileage and Optional Features and Functions monthly rates, as set forth following. The Term Discount percentages for the Synchronous Optical Channel Service Term Discount are as set forth in 17.3.10(D) following.

Discounts for the Synchronous Optical Channel Service Optional Rate Plan A are only applied to Synchronous Optical Channel Service provided to a customer within the same state by the same Telephone Company. (C)

OC3 and OC12 Synchronous Optical Channel Service may be ordered at the customer's option on a monthly rate basis for a minimum term of 12 months or for Term Discount periods of 36 months (3 years) or 60 months (5 years) or greater up to and including 84 months.

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 7.2.9(A)(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 months (3 years) or 60 months (5 years) or greater up to and including 84 months, the Term Discount percentage as set forth in 17.3.10(D) 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.

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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (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 submit an access service request or other written notice of election for a new Term Discount plan fifteen business days prior to 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 or greater) 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 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 by the same Telephone Company. As long as the number of OC3/OC3s or OC12s included in a Term Discount plan remains constant, except for qualifying SOCS Optional Rate Plan Replacements as set forth in Section 7.2.9(A)(3), following, customer requests to install and disconnect OC3, OC3c or OC12 service, 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.

(C)

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (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 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

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (Cont'd)(2) Upgrades in Capacity (OC3/OC3c to OC12) (Cont'd)

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.

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 when service is provided by the same telephone company, discontinuance charges will not apply. (C)

(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 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (Cont'd)(3) SOCS Optional Rate Plan Replacements (Cont'd)

- (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 ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided:
 - (1) The term commitment period remaining in the customer's existing ETS Term Discount Plan or established in the ETS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing SOCS Optional Rate Plan(s);
 - (2) The bandwidth capacity of 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);
 - (3) The customer commits to retain the newly committed ETS Port(s) in-service at the same bandwidth capacity for the remaining term commitment period for its existing ETS Term Discount Plan or for the entire term commitment period of its new ETS Term Discount Plan;

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (Cont'd)(3) SOCS Optional Rate Plan Replacements (Cont'd)

- (4) 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 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;
 - (5) Any newly committed ETS Ports are added to the customer's existing ETS Term Discount Plan before the last year of the existing term commitment period; and
 - (6) Any 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).
- (b) If any of the requirements specified in (a), above, are not met, replacement ETS Port(s) will not qualify for the provisions under Section 7.2.9(A)(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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (Cont'd)(3) SOCS Optional Rate Plan Replacements (Cont'd)

- (c) When a customer replaces all or a portion of the services included in its existing SOCS Optional Rate Plan with a newly committed ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided pursuant to Section 16.4, 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 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 7.2.9(A)(3).
- (e) When a customer replaces all or a portion of its existing SOCS Optional Rate Plan with a newly committed ETS Port(s) added to its existing ETS Term Discount Plan, the customer's 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 ETS Port(s).
- (g) Terms and conditions for the ETS Term Discount Plan are specified in Section 16.4.5, following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(A) Synchronous Optical Channel Service Optional Rate Plan A (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.

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 (15%) for OC3/OC3c and fifty percent (50%) for OC12 service 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 for OC3 service of the total undiscounted monthly charges will apply to the remaining portion of the discount period. For example, a customer has an OC3 service which it chooses to discontinue after 33 months into a 84 month service term. For an OC3, the discontinuance charge would be 0.15 times 51 months times the undiscounted monthly rates for that service.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(B) Alternative Synchronous Optical Channel Service Term Discount Plan B

(1) Alternative Synchronous Optical Channel Service Term Discount Plan B (TDPB) is a payment plan which allows customers to pay fixed or variable rates for Synchronous Optical Channel Service equipment and facilities over fixed TDPB committed payment periods as follows.

(a) Synchronous Optical Channel Service 12 month fixed TDP monthly rates and charges.

(b) Synchronous Optical Channel Service 36 month fixed TDP monthly rates and charges.

(c) Synchronous Optical Channel Service 60 month fixed TDP monthly rates and charges.

(2) When the customer extends Synchronous Optical Channel Service beyond the final month of a committed service period, the current regular non-TDPB monthly rate applicable to service will apply until the service is cancelled or covered by a new TDPB. Rate stabilization shall not apply after the conclusion of the committed fixed term TDPB service period.

(3) Termination Liability Charge

The termination liability charge is dependent on the TDPB term commitment period subscribed to by the customer and will be equal to the number of months remaining in the TDPB term commitment period multiplied by the monthly rate provided under the TDPB term commitment period.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(B) Alternative Synchronous Optical Channel Service Term Discount Plan B
(Cont'd)

(4) Application of TDPB Rates and Charges

- (a) Rates stabilized under a TDP arrangement are exempt from Company initiated increases until the end of the committed fixed term service period, however, decreases for any rate element will automatically flow through to the customer.
- (b) In the event that all or any part of a service is disconnected at customer request prior to expiration of any selected committed fixed term payment period of greater than one month's duration, the customer will be required to pay a termination liability charge.
- (c) When customers renew or change the length of their fixed term committed payment period, the rates applicable for the new period are those currently in effect at the time of the renewal for the length of the new fixed term committed payment period. A service order charge will not be applicable for such renewals or changes to the fixed term committed payment period.
- (d) Recurring rates and installation, termination, service establishment, Service Connection and other nonrecurring charges apply according to the appropriate schedules for services offered as associated items to Synchronous Optical Channel Service, and are filed elsewhere in this Tariff.
- (e) Customer requests for inside moves of service will not affect the TDP commitment period.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(B) Alternative Synchronous Optical Channel Service Term Discount Plan B
(Cont'd)

(5) Additions

- (a) Additions of services or rate elements for activating spare or unused capacities of a service under a TDP arrangement will be considered part of the existing TDP arrangement.
- (b) Additions of services or rate elements, i.e. new local channels, interoffice channels, etc., other than for activating spare or unused capacities, must be under a new TDP arrangement.
- (c) Termination liability charges for premature disconnection of added services subject to a TDP commitment will apply as set forth under Disconnects as stated in Section 7.2.9(B)(6) following.
- (d) Additions under TDP are exempt from Company-initiated rate changes for all committed payment periods longer than one month. However, decreases for any rate element will automatically flow through to the customer.
- (e) Installation, service order, service establishment, and any other nonrecurring charges, as specified in this Tariff, will apply to the added Synchronous Optical Channel Service.

(6) Disconnects

- (a) When a service or rate element, included under a Synchronous Optical Channel Service TDPB arrangement, is disconnected prior to expiration of the selected fixed term commitment service period, termination liability charges apply. Remaining services or rate elements will not be affected by such disconnections.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(B) Alternative Synchronous Optical Channel Service Term Discount Plan B
(Cont'd)

(6) Disconnects (Cont'd)

(b) When a tariffed service under a TDPB arrangement is disconnected prior to the expiration of a selected fixed term commitment service period as a result of a customer requested change to a higher order of a separately tariffed service, termination liability charges will not apply when:

- the completed service period is twelve months, or twenty-five percent of the length of the originally selected TDP service period, whichever is greater, and
- the service period of the new TDP arrangement for the higher equals/exceeds the remaining service period of the disconnected arrangement, whichever is greater, and
- the service orders to install the new higher order of service and disconnect the old service are related together and there is no lapse in service between installation of the higher order of service and disconnection of the existing service, and
- the service orders are for the same customer at the same location.

(7) Moves of Equipment

Customer requests for moves of service(s) under TDPB, other than inside moves, will be subject to the conditions stated in Section 7.2.9(B)(9) following.

(8) Transfer of Service

Service may be transferred to a new customer at the same location upon prior written concurrence by the new customer as specified in this Tariff. This does not constitute a disconnect of service or a discontinuance of an existing TDPB arrangement. The new customer will be subject to all provisions and equipment configurations currently in effect for the previous customer. Regulations concerning transfer of service between customers as stated in other sections of this Tariff also apply under TDPB.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(B) Alternative Synchronous Optical Channel Service Term Discount Plan B
(Cont'd)

(9) Moves of Service(s) Under TDPB

Termination Liability Charges will not apply to customer requests for moves of service under TDPB from one location to another location subject to the following:

- (a) The original and new premises locations must be in Company territory within the same state.
- (b) The move from the original location to the new location must be completed within thirty days of the original premises disconnect date.
- (c) No lapse in billing will occur for moves of service under a TDPB.
- (d) Orders to disconnect the existing service and reestablish it at the new location must be related.
- (e) Any local channels, interoffice channels, and/or optional features and functions from the original location that are not reestablished at the new location will be subject to applicable Termination Liability charges.
- (f) Any additions made at the new location will be treated as coterminous additions in accordance with 7.2.9(B)(5) preceding.
- (g) All regulations and charges for changes made to the service coincident to the move shall apply.
- (h) All appropriate nonrecurring charges for moves of service as specified in this Tariff will apply.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(C) Special Access Service Minimum Monthly Payment Discount Plan

- (1) The Special Access MMPD Plan provides discounts based on term and minimum monthly payment commitments made for combined Special Access Service charges billed pursuant to the Telephone Company's rates, terms and conditions established in this Tariff. If an issuing carrier Telephone Company is not indicated above, the Telephone Company does not offer the MMPD Plan.
- (2) The MMPD Plan discount percentage is based on a commitment by the Customer to both a term and a Minimum Monthly Payment (MMP). The discount percentages for each combination of term commitment and MMP commitment are indicated in the respective Special Access Service rate section for the Telephone Companies listed above, Section 17.3.11.
- (3) The discount for the combination of term and MMP commitments made by the Customer are applied to all Special Access Service amounts billed under this tariff by the Telephone Companies listed above, including both monthly recurring charges and nonrecurring charges with the exception of Special Access Service charges billed pursuant to an existing Term Discount Plan.

Special Access charges subject to the MMPD Plan Discount include the following:

Metallic Service (See Section 7.4)
Telegraph Grade Service (See Section 7.5)
Voice Grade Service (See Section 7.6)
Program Audio Service (See Section 7.7)
Video Service (See Section 7.8)
Digital Data Service (See Section 7.9)
High Capacity Service (See Section 7.10)
Synchronous Optical Channel Service (See Section 7.11)

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.9 Other Optional Rate Plans (Cont'd)(C) Special Access Service Minimum Monthly Payment Discount Plan
(Cont'd)

- (4) Term commitments available under the MMPD Plan are for either three years or five years.
- (5) MMPs available under the MMPD Plan are established on a Telephone Company basis and are indicated for Telephone Companies offering the MMPD Plan at Section 17.3.11.
- (6) A Customer electing an MMPD is liable for payment to the Telephone Company for all Special Access Service charges billed pursuant to this tariff at an amount equal to the greater of the Monthly Minimum Charge to which the Customer has committed or total Special Access Service charges assessed under this tariff net of either the Term Discount Plan (TDP) to which the Customer has committed for a service or, for Special Access Services not subject to a TDP, rates established in this tariff net of the discount determined based on the MMPD discount percentage applicable to the commitments made by the Customer for both term and Monthly Minimum Payment.
- (7) Termination of Term and Discount Plans for Special Access Services by a Telephone Customer electing a MMPD Plan for a Special Access Service not being disconnected will be allowed by the Telephone Company without liability to the Customer for service order charges or termination liability if the remaining term commitment under the TDP is less than the term commitment remaining for a MMPD commitment by the Customer. After termination of the TDP, the Special Access Service will be billed at the MMPD discounted rate for purposes of application of Section 7.2.9(B)(6) preceding.
- (8) Customers may terminate a Special Access Service MMPD by providing the Telephone Company written notice of termination. The termination of the MMPD will be effective on the first bill date after the 30th day following receipt of the notice by the Telephone Company. A Customer terminating a MMPD prior to completion of the committed term will be liable for an early termination liability calculated as follows. The early termination liability is equal to the lesser of the amount billed by the Telephone Company under the MMPD less the MMC or the amount that would have been billed without the MMPD less the total amount billed under the MMPD for each month billed under the MMPD for up to 24 months preceding the effective date of the termination of the MMPD. Months billed under the MMPD prior to 24 months preceding the effective date of the termination of the MMPD, if any, are not subject to refund. If the customer received no discount in a given month, no penalty will be assessed for that month.

ACCESS SERVICE7. Special Access Service (Cont'd)7.3 Surcharge for Special Access Service7.3.1 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

ACCESS SERVICE7. Special Access Service (Cont'd)7.3 Surcharge for Special Access Service (Cont'd)7.3.2 Application (Cont'd)

(B) (Cont'd)

- (5) a termination that interconnects either directly or indirectly to the local exchange network where the usage is subject to Carrier Common Line charges such as, where the Special Access Service accesses only FGA and 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.

7.3.3 Exemption of Special Access Service

- (A) Special Access Services which are terminated as set forth in 7.3.2(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;
 - at such time as the service is reterminated to a device which does not interconnect the service to local exchange facilities; or

ACCESS SERVICE7. Special Access Service (Cont'd)7.3 Surcharge for Special Access Service (Cont'd)7.3.3 Exemption of Special Access Service (Cont'd)

- (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 7.3.2(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 reterminated 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.

7.3.4 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:

<u>Special Access Service</u>	<u>Voice Grade Equivalent</u>		<u>Surcharge</u>		<u>Monthly Charge</u>
DS1	24	x	\$25	=	\$600.00

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.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.4 Metallic Service7.4.1 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.

Rates and charges for Special Access Metallic Service are as set forth in 17.3.2 following.

7.4.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(A) following. Compatible network channel interfaces are set forth in 15.2.2(C)(1) following.

7.4.3 Optional Features and Functions(A) Central Office Bridging Capability

- (1) 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.
- (2) Series Bridging of up to 26 customer designated premises.

The table set forth in 15.2.1(A) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE7. Special Access Service (Cont'd)7.4 Metallic Service (Cont'd)7.4.3 Optional Features and Functions (Cont'd)(B) DSL Access Service Connection

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 16.2, following, with SDSL Access Service as described in Section 16.3, and with Wholesale DSL Transport Service as described in Section 16.8 following.

This function provides the ability to transmit data at speeds of up to 10 Mbps (i.e., 10BASE-T), and 100 Mbps (i.e., 100BASE-T) over distances no greater than 300 feet as specified in Technical Reference IEEE Std. 802.3, Part 3, Clause 14 for 10BASE-T and Clauses 21 and 29 for 100BASE-T.

Rates and charges for the 10BASE-T and 100BASE-T DSL Access Service Connection functions are as set forth in Section 17.3.2, following. Each 10BASE-T 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 the DSL Access Service Connection Point.

ACCESS SERVICE7. Special Access Service (Cont'd)7.4 Metallic Service (Cont'd)7.4.3 Optional Features and Functions (Cont'd)(C) High Speed Internet (HSI) Access Service Connection

The HSI Access Service Connection function provides for the interconnection of a customer's Ethernet-based local area network (LAN) with HSI Access Service as described in Section 16.6 following.

This function provides the ability to transmit data at speeds of up to 10 Mbps (i.e., 10BASE-T), and 100 Mbps (i.e., 100BASE-T) over distances no greater than 300 feet as specified in Technical Reference IEEE Std. 802.3, Part 3, Clause 14 for 10BASE-T and Clauses 21 and 29 for 100BASE-T.

Rates and charges for the 10BASE-T and 100BASE-T HSI Access Service Connection functions are as set forth in Section 17.3.2, following. Each 10BASE-T 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 the DSL Access Service Connection Point.

ACCESS SERVICE7. Special Access Service (Cont'd)7.5 Telegraph Grade Service7.5.1 Basic Channel Description

Telegraph Grade channel is an unconditioned channel capable of transmitting binary signals at rates of 0-75 baud or 0-150 baud. This channel is furnished for half- duplex or duplex operation. Telegraph Grade channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

Telegraph Grade Special Access Services are typically used for applications such as teletypewriter, telegraph grade control/remote metering, telegraph grade channel, telegraph grade extension, and telegraph grade entrance facilities. 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.

Rates and charges for Special Access Telegraph Grade Service are as set forth in 17.3.3 following.

7.5.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(B) following. Compatible network channel interfaces are set forth in 15.2.2(C)(2) following.

7.5.3 Optional Features and Functions

Telegraph Bridging (two-wire and four-wire)

The table set forth in 15.2.1(B) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE**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.

Rates and charges for Special Access Voice Grade Service are as set forth in 17.3.4 following.

7.6.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(C) following. Compatible network channel interfaces are set forth in 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

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(A) Central Office Bridging Capability (Cont'd)

(5) Telemetry and Alarm Bridging

Split Band, Active Bridging
Passive Bridging
Summation, Active Bridging

The rates for these options are set forth in 17.3.4(C)(1)(e) following.

(B) Central Office Multiplexing

Voice to Telegraph Grade. An arrangement that converts a Voice Grade channel to Telegraph Grade channels using frequency division multiplexing.

The rate for this option is set forth in 17.3.4(C)(5) following.

(C) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services. The rates for these options are set forth in 17.3.4(C) following.

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.

ACCESS SERVICE7. 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)(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-TSY-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 TR-TSY-000335. This option is available only 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-TSY-000335. This option is available only when ordered in combination with C-Type Conditioning.

* Improved Attenuation Distortion and Improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE7. 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-TSY-000335. The rate for this option is set forth in 17.3.4(C)(2) following.

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-TSY-000335 .

The rate for this option is set forth in 17.3.4(C)(2) following.

(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.

ACCESS SERVICE7. 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-TSY-000335. The rate for this option is set forth in 17.3.4(C)(4) following.

(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-TSY-000335. The rate for this option is set forth in 17.3.4(C)(3) following.
- (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-TSY-000335. The rate for this option is set forth in 17.3.4(C)(3) following.

ACCESS SERVICE7. 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 rate for this option is set forth in 17.3.4(C)(6) following.

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

An arrangement that permits code selective ringing for up to ten codes on a multipoint service. The rate for this option is set forth in 17.3.4(C)(7) following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(H) Transfer Arrangement

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. The rate for this option is set forth in 17.3.4(C)(8) following.

(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. This option is provided on an Individual Case Basis as set forth in 17.3.4(C)(9) following.

(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 as set forth in 17.3.4(A) following 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 SERVICE7. 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:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	35 dBrnc
51 to 100	37 dBrnc
101 to 200	40 dBrnc
201 to 400	43 dBrnc
401 to 1000	45 dBrnc

(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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.7 Program Audio Service7.7.1 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 nor to imply that the channel is limited to a particular use.

Rates and charges for Special Access Program Audio Service are as set forth in 17.3.5 following.

7.7.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(D) following. Compatible network channel interfaces are set forth in 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 \pm 0.5 dB.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.8 Video Service7.8.1 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.

Rates and charges for Special Access Video Service are as set forth in 17.3.6 following.

7.8.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(E) following.
Compatible network channel interfaces are set forth in 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:

<u>NCI</u>	<u>Audio Bandwidth</u>	<u>Provision</u>
2TV6-1	15kHz1	Channel, diplexed
2TV6-2	15kHz2	Channels, diplexed
2TV7-1	15kHz1	Channel, diplexed
2TV7-2	15kHz2	Channels, diplexed
4TV6-5	5kHz1	Channel, separate
4TV6-15	15kHz1	Channel, separate
4TV7-5	5kHz1	Channel, separate
4TV7-15	15kHz1	Channel, separate
6TV6-5	5kHz2	Channels, separate
6TV6-15	15kHz2	Channels, separate
6TV7-5	5kHz2	Channels, separate
6TV7-15	15kHz2	Channels, separate

ACCESS SERVICE7. Special Access Service (Cont'd)7.9 Digital Data Service7.9.1 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., 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 PUB62310 .

Rates and charges for Special Access Digital Data Service are as set forth in 17.3.7 following.

7.9.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(F) following. Compatible channel interfaces are set forth in 15.2.2(C)(6) following.

* When 64.0 Kbps service is multiplexed on a DS1 High Capacity service, the DS1 must be equipped to provide Clear Channel Capability.

ACCESS SERVICE7. 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:

<u>NCI</u>	<u>Bit Rate</u>
DU-24	2.4 Kbps
DU-48	4.8 Kbps
DU-96	9.6 Kbps
DU-19	19.2 Kbps
DU-56	56.0 Kbps
DU-64	64.0 Kbps

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.

(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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.9 Digital Data Service (Cont'd)7.9.3 Optional Features and Functions (Cont'd)(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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service7.10.1 Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 64.0 Kbps* or 1.544, 3.152, 6.132, 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 designated premises or between a customer designated 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.

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. A term discount is only available from those Telephone Companies listed in Section 7.1.1.B preceding for whom High Capacity Term Discount availability is indicated.

Rates and charges for Special Access High Capacity Service are as set forth in 17.3.8 following.

- * Available only as a channel of a 1.544 Mbps facility to a Telephone Company Digital Data hub or as a cross connect of two 2.4, 4.8, 9.6, 56.0 or 64.0 Kbps channels of two 1.544 Mbps facilities to a Digital Data hub(s). The customer must provide system and channel assignment data.

ACCESS SERVICE7. 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:

<u>NCI</u>	<u>Bit Rate</u>
DS-15*	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

- * A 64.0 Kbps channel is available as a channel(s) of a 1.544 Mbps channel to a Telephone Company hub.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. 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.

ACCESS SERVICE7. 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 TR-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., 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.

* Available only on a DS1-to-Digital multiplexed configuration.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(E) 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 8.1 or 16.2.1, following and Technical Reference ANSI T1.413-1998, and with SDSL Access Service as described in 16.3.1, 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.

Rates and charges for the DSL Access Service Connection function are as set forth in 17.3.8, following. This function applies to each 1.544 Mbps or 44.736 Mbps High Capacity Service terminated at a DSL Access Service Connection Point.

(F) High Speed Internet (HSI) Access Service Connection

- (1) The High Speed Internet (HSI) Access Service Connection function provides for the interconnection of a 1.544 Mbps or 44.736 Mbps High Capacity Service with HSI Access Service as described in 16.6.1, following.

Rates and charges for the HSI Access Service Connection function are as set forth in 17.3.8, following. This function applies to each 1.544 Mbps or 44.736 Mbps High Capacity Service terminated at an HSI Access Service Connection Point.

(G) 44.736 Mbps-STIS-1 Interface

- (1) For customers who subscribe to a 44.736 Mbps High Capacity Service Channel Termination, the Telephone Company will provide as a non-chargeable Optional Feature a connection of the Channel Termination to the customer's STIS-1 (Synchronous Transport Signal-1) at the Customer Designated Premises. The H44.736 Mbps- STIS-1 Interface does not include any multiplexing or optical to electrical interface functions.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)

(H) 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 selfhealing 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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service7.11.1 Basic Channel Description

A Synchronous Optical Channel Service (SOCS) channel provides dedicated transport utilizing Synchronous Optical Network (SONET) transmission standards. SOCS provides optical network capability to customers requiring connections at transmission rates of 155.52 Mbps (OC3) and 622.08 Mbps (OC12). SOCS is provided between two customer designated premises (CDP) through one or more Telephone Company wire center(s) or between a CDP and a wire center equipped with Asynchronous Transfer Mode Cell Relay Service or a wire center equipped with 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 premises, Public Packet Data Network Service or another wire center.

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 transmission.

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 (N) 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.

Each channel will be configured with one working and 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.

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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.1 Basic Channel Description (Cont'd)

Telephone Carriers may make available term discounts for SOCS rate elements and optional features and functions under either Synchronous Optical Channel Service Optional Rate Plan A as set forth in Section 7.2.9(A) preceding or Synchronous Optical Channel Service Optional Rate Plan B as set forth in Section 7.2.9(B) preceding. Telephone Companies offering discounts under Synchronous Optical Channel Service Option Plan A are listed at the beginning of Section 7.2.9(A). Telephone Companies offering discounts under Synchronous Optical Channel Service Optional Plan B are listed at the beginning of Section 7.2.9(B).

SOCS is available at the wire centers as identified in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

Rates and charges for SOCS are as set forth in 17.3.10 following.

Telephone Companies offering SOCS provide services under either SOCS Rate Regulations I at Section 7.11.3 or SOCS Rate Regulations II at Section 7.11.4. Telephone Companies offerings SOCS under SOCS Rate Regulations I are listed at the beginning of Section 7.11.23 and Telephone Companies offering SOCS under Rate Regulations II are listed at the beginning of Section 7.11.4.

7.11.2 Network Channel Interfaces

Compatible channel interfaces for Synchronous Optical Channel Service are as set forth in 15.2.2(C)(8) following

The following network channel interfaces (NCIs) define the bit rates that are available for a synchronous optical channel:

<u>NCI</u>	<u>Bit Rate</u>
FCF-B	155.52 Mbps (OC3, OC3c)
FCF-D	622.08 Mbps. (OC12)

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 SOCS Rate Regulations I

The Telephone Companies offering SOCS under Rate Regulations I following are indicated in the carrier list at Section 7.1.1.B preceding.

SOCS Channel Terminations, Channel Mileage Terminations and Channel Mileage Facility provided under SOCS Rate Regulations I are provided pursuant to Special Access rate regulations under Section 7.2 preceding. SOCS Optional Features and Functions are offered under the following regulations.

(A) Customer Node

A Customer Node charge applies when the Telephone Company provides terminal equipment at the customer designated premises for termination of a SOCS 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. Rates and charges for the Customer Node are as set forth in 7.3.11 following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 SOCS Rate Regulations I (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:

<u>Customer Premises Port</u>	<u>Speed</u>
OC3, OC3c	155.52 Mbps
STS-1	51.84 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

(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:

<u>Central Office Port</u>	<u>Speed</u>
OC3, OC3c	155.52 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

OC12 service may only be multiplexed to OC3/OC3c 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 as set forth in 17.3.8(D)(1) 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 as set forth in 17.3.8(D)(1) will also apply. Rates and charges for the Central Office Port are as set forth in 17.3.11(E)(2) following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 SOCS Rate Regulations I (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.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 SOCS Rate Regulations I (Cont'd)

(E) DSL Access Service Connection

- (1) The DSL Access Service Connection function provides for the interconnection of an OC3, OC3c, OC12 or 100 Mbps Ethernet or Synchronous Optical Channel Service with ADSL Access Service as described in 8.1 or 16.2.1, following, and with SDSL Access Service as described in 16.3.1, following, provided by the Telephone Company under this tariff. The function also provides for the interconnection of an OC3, OC3c or OC12 Synchronous Optical Channel Service with a wireline broadband Internet transmission access service provided on a non-tariffed, common carrier basis.

Rates and charges for the DSL Access Service Connection function are as set forth in 17.3.11, following. This function applies to each OC3, OC3c or OC12 Synchronous Optical Channel or 100 Mbps Ethernet Channel terminated at a DSL Access Service Connection Point.

(F) High Speed Internet (HSI) Access Service Connection

- (1) The High Speed Internet (HSI) Access Service Connection function provides for the interconnection of an OC3, OC3c, OC12 or 100 Mbps Ethernet Synchronous Optical Channel Service with HSI Access Service as described in 16.6.1, following.

Rates and charges for the HSI Access Service Connection function are as set forth in 17.3.10, following. This function applies to each OC3, OC3c or OC12 Synchronous Optical Channel or 100 Mbps Ethernet Channel terminated at an HSI Access Service Connection Point.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.4 SOCS Rate Regulations II

SOCS Channel Terminations, Channel Mileage Terminations and Channel Mileage Facility provided under SOCS Rate Regulations II are provided pursuant to Special Access rate regulations under Section 7.2. preceding. SOCS Optional Features and Functions are offered under the following regulations.

(A) Channel Interfaces

Channel Interface Charges consist of the following:

- Central Office Channel Interfaces
- Customer Interfaces

Channel interfaces are required for SOCS based upon the following guidelines:

- (1) Channel interfaces are required at both the customer's location and the serving wire center for SOCS local channel systems and at both termination points of a SOCS interoffice channel, except as specified in (2) following.
- (2) A SOCS central office channel interface is not required for a SOCS local channel system with optical termination in the serving wire center. A SOCS local channel system with optical termination in the serving wire center may connect in one of the following ways:
 - to another SOCS channel termination or interoffice channel at the compatible optical level, or
 - to a compatible optical level channel interface from a higher level SOCS channel termination or interoffice channel.

A SOCS customer interface is not required for a SOCS channel termination with optical termination at the customer designated premises. A SOCS channel termination with optical termination at the customer designated premises must be connected in the following way:

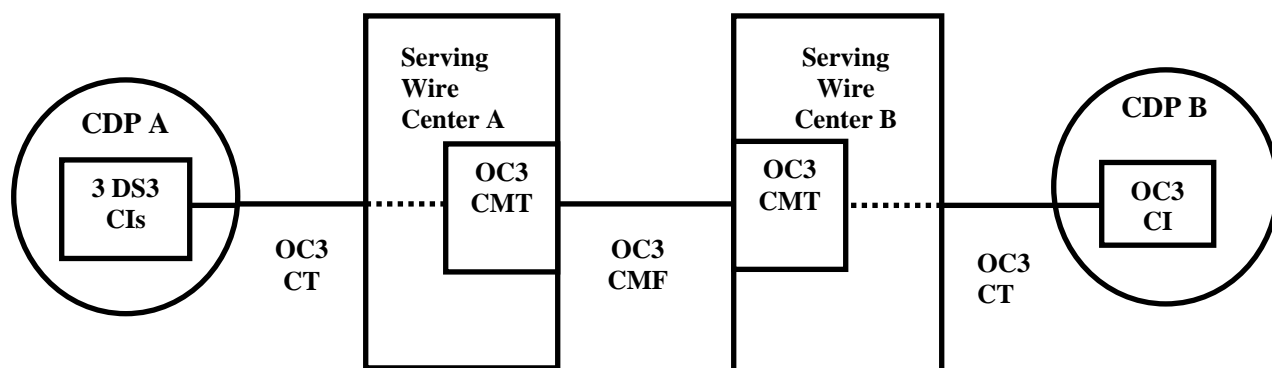
- to a customer provided channel at the compatible optical level.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.4 SOCS Rate Regulations II (Cont'd)(A) Channel Interfaces (Cont'd)

- (3) Channel Interfaces are available at 2 Wire and 4 Wire capacities.
- (4) OC12 service local channel systems require a 28 DS1, STS1, or OC3 channel system in addition to DS1 channel interfaces in the central office to derive DS1 channels in the serving wire center.
- (5) OC3 SOCS local channel systems which require a DS3 termination at one location and DS1 terminations at the other, have two options available:
 - A DS3 channel interface at the customer location and a 28 DS1 channel system in addition to DS1 channel interfaces at the serving wire center, or
 - A DS3 (asymmetrical with DS1) interface at one termination point and DS1 channel interfaces at the other termination point.
- (6) For SOCS interoffice channel systems the following are applicable:
 - A 28 DS1 channel system in addition to DS1 channel interfaces provides DS1 channel termination capability with SOCS.
 - An OC3 channel system in addition to DS1 channel interfaces provides DS1 channel termination capability with OC3 and OC12 SOCS.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.4 SOCS Rate Regulations II (Cont'd)(B) Sample Application of SOCS Rate Elements**Diagram A**

Connection between Customer Designated Premises (CDPs) served by different Company Wire Centers (assumes interstate connection by another service from one of the CDPs)



Synchronous Optical Channel Service Charges:

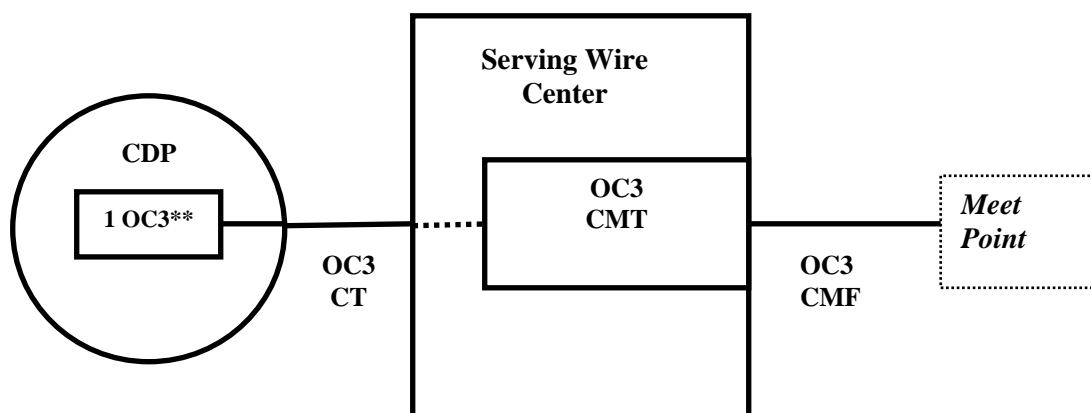
- 3 DS3 CIs - (Customer Interface between OC3 Local Channel and 3 customer DS3s)
- 2 OC3 CTs- (Channel Terminations – including mileage charges in excess of first ½ mile for each CT)*
- 2 OC3 CMTs (Channel Terminations)
- 1 OC3 CMF (Channel Mileage Facility at applicable mileage)
- 1 OC3 CI (Customer Interface between OC3 LC and customer OC3 or STS-1)

Note: Because an OC3 channel is established from CDP A to CDP B, there is no requirement for a Central Office Channel Interface.

* The Channel Termination charges will be based on the rates established for Channel Terminations without optical customer termination or optical central office termination because Customer Interfaces are provided by the Telephone Company at both customer designated premises at the applicable Customer Interface rate. See Section 7.2.1(A)(1) regarding rate regulations applicable to Channel Terminations for Telephone Companies providing Synchronous Optical Channel Service under SOCS Rate Regulations II.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.4 SOCS Rate Regulations II (Cont'd)(B) Sample Application of SOCS Rate Elements (Cont'd)**Diagram B**

Connection between Customer Designated Premises (CDP) to Company Wire Center with connection to Interexchange Carrier or other Telecommunications Service Provider.



Synchronous Optical Channel Service Charges:

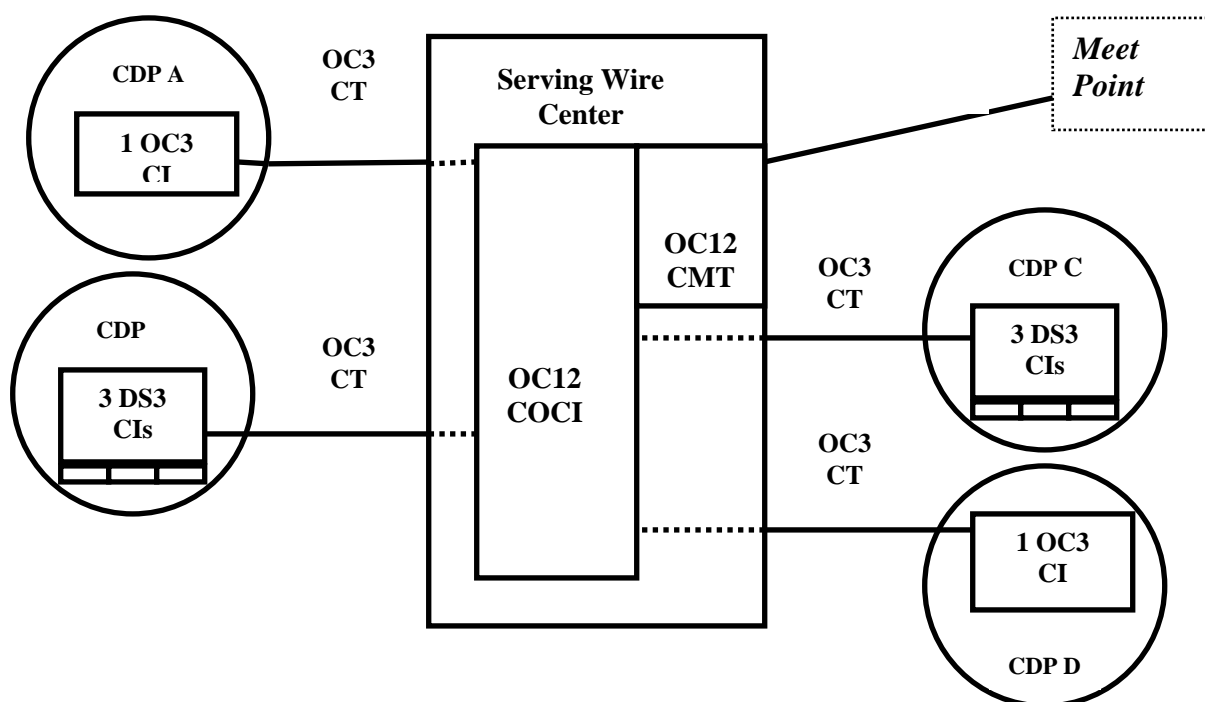
- 1 OC3 CT- (Channel Termination – including mileage charges in excess of first ½ mile*)
- 1 OC3 CMT (Channel Mileage Termination)
- 1 OC3 CMF (Channel Mileage Facility to Meet Point at applicable mileage)

* The Channel Termination charge will be based on the rate established for a Channel Termination with an optical customer termination and/or optical central office termination because neither a Customer Interface nor a Central Office Channel Interface is provided by the Telephone Company at the customer designated premises at the applicable Customer Interface rate. See Section 7.2.1(A)(1) regarding rate regulations applicable to Channel Terminations for Telephone Companies providing Synchronous Optical Channel Service under SOCS Rate Regulations II.

** Customer provides compatible synchronous optical channel connection at CDP.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.4 SOCS Rate Regulations II (Cont'd)(B) Sample Application of SOCS Rate Elements (Cont'd)**Diagram C**

Connection between four Customer Designated Premises (CDPs) to Company Wire Center with connection to Interexchange Carrier or other Telecommunications Service Provider.

**Synchronous Optical Channel Service Charges:**

- 1 OC12 CMT (Channel Mileage Termination)
- 1 OC12 CMF (Channel Mileage Facility to Meet Point at applicable mileage)
- 1 OC12 COCI (Central Office Channel Interface)
- 4 OC3 CTs- (Channel Terminations – including mileage charges in excess of first ½ mile for each CT*)
- 2 OC3 CIs (Customer Interfaces for CDP A and CDP B)
- 6 DS3 CIs - (Customer Interfaces between OC3 Local Channels and CDP CPE DS3s at CDP B and CDP D)

* The Channel Termination charges will be based on the rates established for Channel Terminations without optical customer termination or optical central office termination because each Channel Termination has at least a Customer Interface provided by the Telephone Company at the customer designated premises at the applicable Customer Interface rate. See Section 7.2.1(A)(1) regarding rate regulations applicable to Channel Terminations for Telephone Companies providing Synchronous Optical Channel Service under SOCS Rate Regulations II.

ACCESS SERVICE7. Special Access Service (Cont'd)7.12 Digital Access Cross Connect Service7.12.1 Service Description

Digital Access Cross Connect Service (DACCS) allows a customer to connect or disconnect a single or multiple switched and/or special service circuits to an access customer's interstate network. Such connections and disconnections must be performed by Company personnel based on an order received from the Customer. DACCS can only be ordered by those Customers of the Company already subscribing to High Capacity special access service (see Section 7 preceding) and will only be provided at a DS1 to DS1 cross-connect level.

DACCS is available from Telephone Companies indicated as offering DACCS at Section 7.1.1.B preceding. Rates and charges for DACCS are set forth in 17 following for the respective Telephone Companies offering DACCS.

The customer is responsible for providing the terminal equipment required for DACCS.

A Customer may differentiate the types of services that DACCS is to be used for. For example, a Customer may elect to use some of the capacity to cross-connect switched access services and some of the capacity to cross-connect with special access services. When provided as shared use, the Customer must provide the Telephone Company with the number of channels cross-connected to switched access services. The Company will use the number of channels cross-connected to switched access services to apply percent interstate usage (PIU) factors as set forth in section 2 preceding. When the cross-connect is provided as shared use and the Customer does not furnish the Company with the channels used to cross-connect with switched access service, the Company will, for purposes of PIU factor application, designate all channels for the purposes of cross-connect as special.

7.12.2 Service Configuration

The service includes an End User Port which permits connection of the end user customer's facilities to the Company's cross-connect equipment. A special access facility (ordered out of Section 7 preceding) is used to connect to the Company's cross-connect equipment. All regulations, rates and charges as specified in Section 7 will apply in addition to the rates and charges associated with DACCS. Connections are available at 1.544 Mbps.

In addition to the monthly charge for an End User Port, a charge will be assessed for any reconfiguration in DACCS ordered by a Customer. There are no restrictions in the number of monthly reconfigurations ordered by a Customer.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.13 Individual Case Filings

Certain services set forth in Special Access Service, Section 7, are provided on an Individual Case Basis. Rates and charges for Special Access Service provided on an individual Case Basis are set forth in 17.3.9 following .

ACCESS SERVICE**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

The Telephone Company will offer ADSL Access Service under the provisions specified in Section 8.1:

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)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.

ACCESS SERVICE**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.

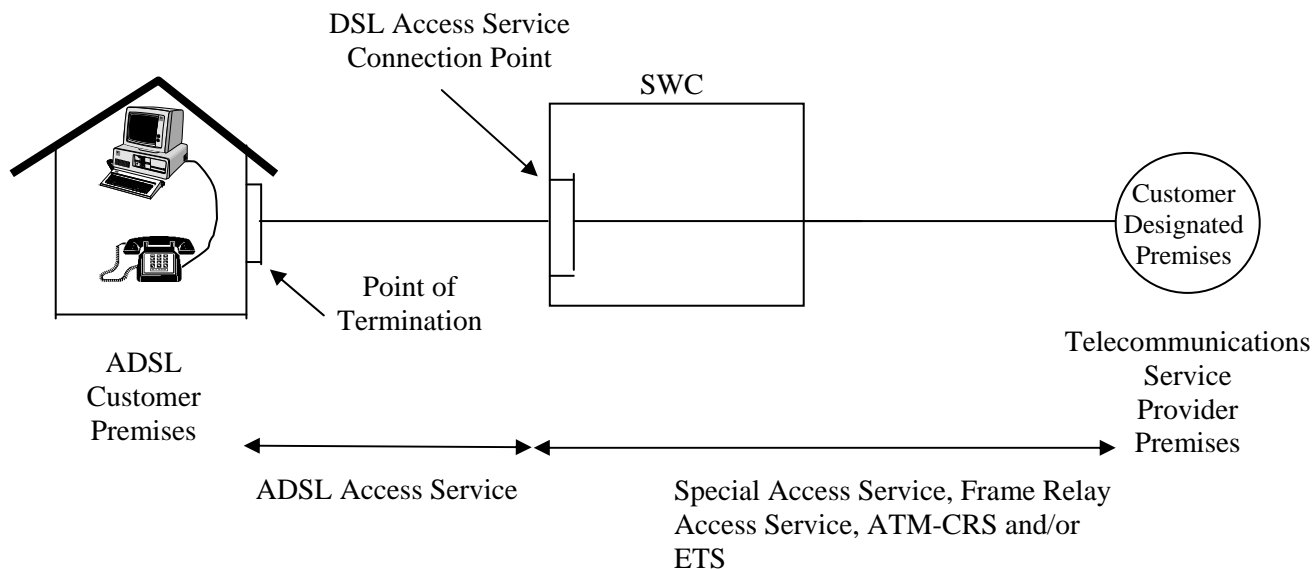
ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.1 General (Cont'd)

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. The Telephone Company may offer one or more of the following peak data transmission speeds where technically feasible: 384 kbps upstream/512 kbps downstream, 512 kbps upstream/1.5 Mbps downstream, 768 kbps upstream/ 3 Mbps downstream, 512 kbps upstream/6 Mbps downstream, 1 Mbps upstream/6 Mbps downstream, 1 Mbps upstream/8 Mbps downstream, 1.5 Mbps upstream/10Mbps downstream, 2 Mbps upstream/12 Mbps downstream, 2 Mbps upstream/15 Mbps downstream, 3 Mbps upstream/15 Mbps downstream, 5 Mbps upstream/50 Mbps downstream, or 10 Mbps upstream/100 Mbps downstream. The ADSL 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. The Telephone Company may offer one or more of the following peak data transmission speeds where technically feasible: 384 kbps upstream/512 kbps downstream, 512 kbps upstream/1.5 Mbps downstream, 768 kbps upstream/ 3 Mbps downstream, 512 kbps upstream/6 Mbps downstream, 1 Mbps upstream/6 Mbps downstream, 1 Mbps upstream/8 Mbps downstream, 1.5 Mbps upstream/10Mbps downstream, 2 Mbps upstream/12 Mbps downstream, 2 Mbps upstream/15 Mbps downstream, 3 Mbps upstream/15 Mbps downstream, 5 Mbps upstream/50 Mbps downstream, or 10 Mbps upstream/100 Mbps downstream. The ADSL Data-Only option does not provide the ability to transmit voice communications.

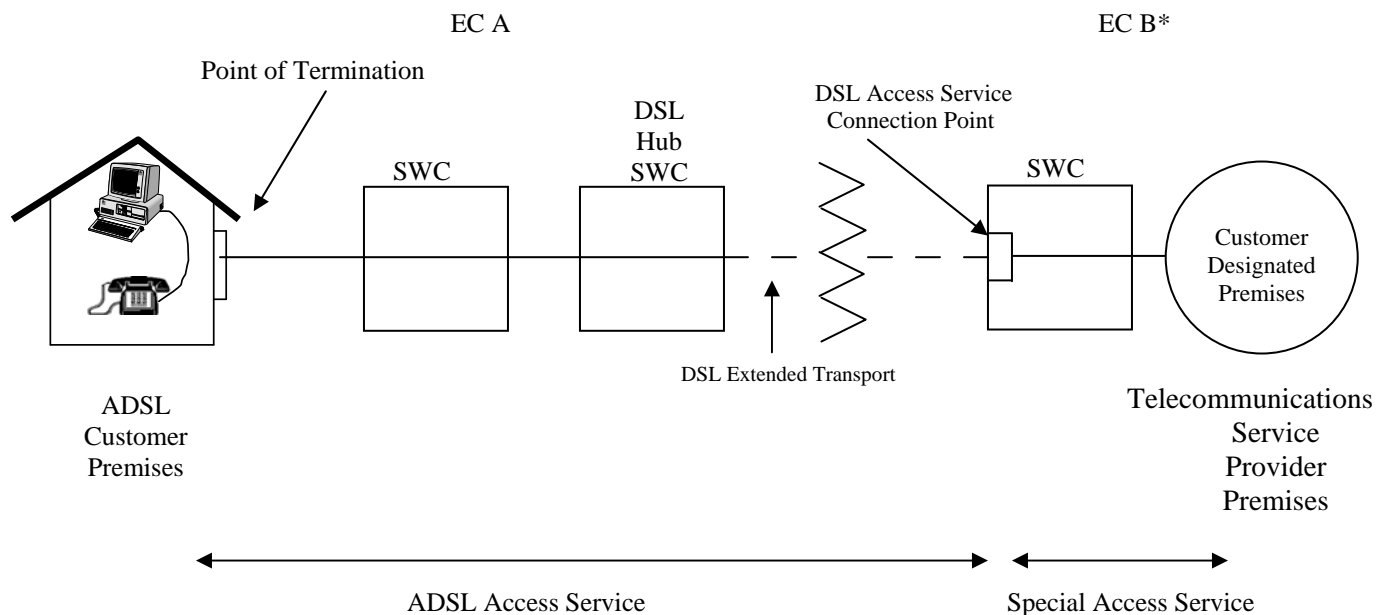
ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.1 General (Cont'd)

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 Section 16, following, to connect its customer designated premises to the DSL Access Service Connection Point.

ADSL ACCESS SERVICE

ACCESS SERVICE8. 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.

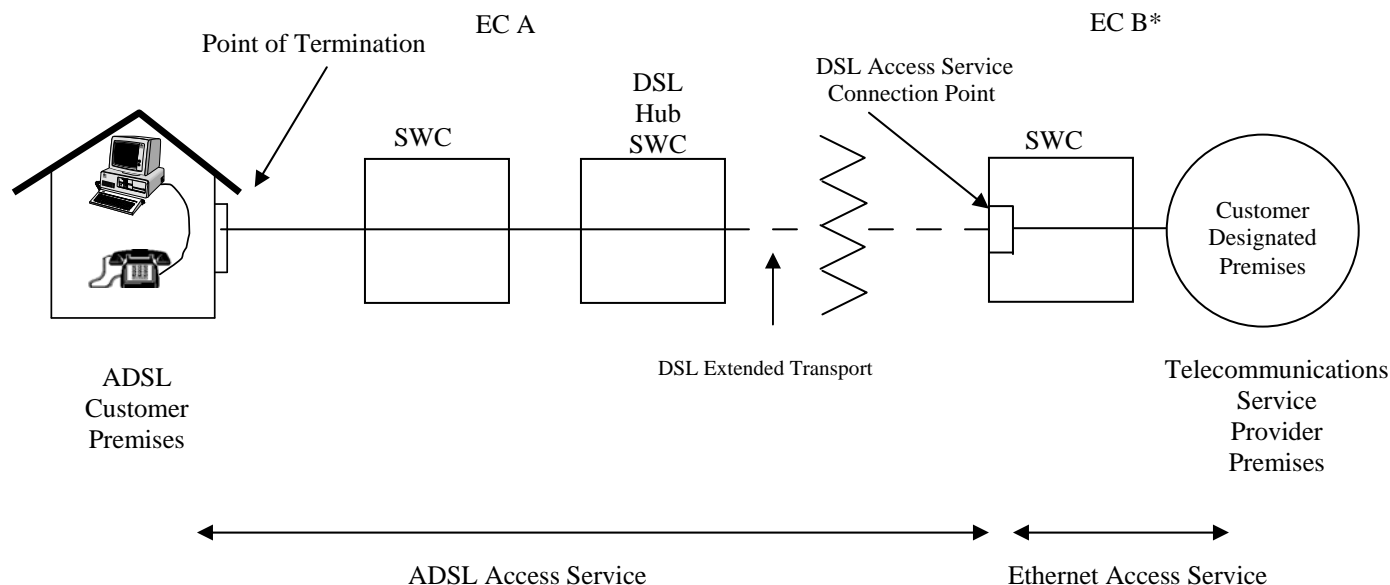
ADSL ACCESS SERVICE

* The application of charges for EC B will depend on its access tariff.

ACCESS SERVICE8. 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

* The application of charges for EC B will depend on its access tariff.

ACCESS SERVICE**8. Digital Subscriber Line Access Services (Cont'd)****8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)****8.1.2 Limitations**

- (A) ADSL Access Service is available as two service options as described in Section 8.1.1, preceding. Where offered by the Telephone Company and suitable facilities exist, one or more of the following maximum (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) 512 kbps upstream/6 Mbps downstream or 1 Mbps upstream/6 Mbps downstream in compliance with the requirements specified in Technical Reference ANSI T1.413-1998, unless otherwise specified in Section 8.1.6, following.
 - (2) 3 Mbps upstream/15 Mbps downstream in compliance with the requirements specified in Technical Reference ITU-T G.992.5-January 2005.
 - (3) 5 Mbps upstream/50 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,
and/or IEEE Std. 802.3-2005, 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 local exchange service facilities, and any capacity limitations in the TSP's network design.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.2. Limitations

- (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.
- (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.

ACCESS SERVICE**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 Section 16, following.

8.1.3 Undertaking of the Telephone Company

The Telephone Company will provide ADSL Access Service at rates and charges as set forth in the applicable rate sections for the Telephone Companies offering the respective services, 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.

ACCESS SERVICE8. 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 Customer provided equipment (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 8.1.5(D), following.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.2 Rate Regulations (Cont'd)

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 Section 16, 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 ADLS 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(C) Temporary Suspension of Service

When the associated local exchange service line over which the ADSL Voice-Data option is provided is temporarily suspended, the ADSL Access Service and one-half of the ADSL Line Charge monthly rate will be temporarily suspended for the time period that the associated local exchange service is suspended.

(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, following, or equivalent Ethernet access service provided by the adjacent telephone company.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(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 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 associated 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(D) DSL Extended Transport (Cont'd)

Where required, DSL Extended Transport is used to transmit ADSL 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 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 500 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 10 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(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, following.

The following example is an illustrative mode, 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, 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(D) DSL Extended Transport (Cont'd)(1) Mileage Measurement (Cont'd)

Monthly charges for DSL Extended Transport are determined as follows:

- 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.
- Total mileage charges for DSL Extended Transport in this example equal \$122.48 per month (i.e., \$61.24 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, 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(E) Rate Categories

There are two types of rates and charges applicable to ADSL Access Service. These are a monthly rate, and a nonrecurring charge.

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 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 12 months following installation of service. If the ADSL Access Line is disconnected for any reason prior to the end of the 12-month minimum commitment period other than for ADSL service conversion as described below, the Telephone Company will bill the customer an amount equal to the waived nonrecurring charge.

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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(E) Rate Categories (Cont'd)

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 512 kbps with ADSL Voice-Data 1 Mbps), or any combination of a simultaneous change of service option and speed level (e.g., replacing ADSL Voice-Data 512 kbps with ADSL Data-Only 1 Mbps). When a customer orders an ADSL service conversion but has not met its 12-month minimum commitment on the existing ADSL service, the Telephone Company will not bill the previously waived nonrecurring charge if the customer commits to a new minimum 12-month period for the newly converted ADSL service.

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 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.5 Rate Regulations(E) Rate Categories (Cont'd)

Rates and charges are as set forth in Section 17, following, for ADSL Access Service, ADSL Access Service under the DSL Access Services Wholesale Rate Plan described in Section 8.3, when offered by the Telephone Company and ADSL Access Service under the DSL Access Services Wholesale Pricing Plan as described in Section 8.4, when offered by the Telephone Company. Additionally, rates and charges are as set forth in Section 17 for the DSL Extended Transport.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)8.1.6 Exceptions

- (A) The Telephone Companies listed below offer ADSL Access Service as described in 8.1 preceding, with the following exceptions:
 - (1) In lieu of the provision specified in 8.1.3(B), preceding, the Telephone Company, after determining if the facilities are suitable for ADSL 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 ADSL Access Service.
 - (2) In lieu of the provision specified in 8.1.4(B), preceding, the customer is responsible for providing and maintaining all required customer provided equipment (CPE), which is compatible with ADSL Access Service.

ACCESS SERVICE

8. Digital Subscriber Line Access Services (Cont'd)

8.2 Reserved for Future Use

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan8.3.1 General

The telecommunications services offered under the DSL Access Services Wholesale Rate Plan (DSL WRP) are provided at wholesale rates to the customer under the conditions listed below.

- (A) The customer purchases ADSL Access Service as described in Section 8.1, 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 Section 8.1.4, 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 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 Voice-Data Access Service over the customer's end user's existing telephone exchange service line.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.1 General (Cont'd)

When the customer purchases ADSL Access Service under the DSL WRP, the DSL WRP rates and charges in Section 17, following, will apply in lieu of the rates and charges specified in Section 17, following, for ADSL Access Service. The DSL WRP is only available from those Telephone Companies listed in Section 8.3, preceding.

Services provided under the DSL WRP are available under a DSL WRP Monthly Plan, or under a DSL WRP Term Plan described in 8.3.2, below, at the rates and charges specified in Section 17, following.

A monthly charge applies for each ADSL Access Service line covered under the DSL WRP. A nonrecurring charge applies for the installation of each ADSL Access Service line under the DSL WRP. A DSL Network Reconfiguration Charge would apply for each requested reconfiguration for each ADSL Access Service line covered under the DSL WRP.

The Telephone Company will bill the customer an Access Order Charge, per order, to convert in-service ADSL Access Service lines originally purchased under the provisions specified in Sections 8.1, preceding, and 16.3, following, to the DSL WRP, provided the customer obtains written authorization from its end users authorizing such conversions, where necessary. Per line nonrecurring charges specified in Section 17, following, do not apply to conversion of in-service ADSL Access Lines to a DSL WRP.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan(A) Description

The DSL WRP Term Plan provides the customer with reduced rates based on the length of the customer's term commitment and its selected pricing option. The DSL WRP Term Plan is available for term lengths of one or three years with a choice of two pricing options. As used in this section, a WRP Serving Wire Center (WRP SWC) denotes an ADSL equipped host or standalone end office at which the customer elects to make a term plan commitment. The Telephone Company will establish a separate term plan commitment for each WRP SWC identified in the customer's order. An Access Order Charge applies per order to establish the initial term plan commitment(s).

When the customer subscribes to a DSL WRP Term Plan, all in-service ADSL Access Service lines provided out of and subsequently installed at the WRP SWC, including any lines served by a remote SWC that subtends an associated host SWC covered by a term plan commitment, will be billed the rates and charges specified in Section 17, following, for the length of the term commitment. In addition to the applicable ADSL Line Charges, the customer will be billed a recurring monthly DSL WRP Term Plan Charge for each WRP SWC, as specified in Section 17, following, based on its selected pricing option. The monthly DSL WRP Term Plan Charge does not apply to SWCs designated in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4 as remote SWCs.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan (Cont'd)(A) Description (Cont'd)

If the Telephone Company decreases the rates specified in Section 17, 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 WRP Term Plan, the customer may elect to establish a new DSL WRP Term Plan commitment, convert to the rates available under the DSL WRP Monthly Plan, or discontinue service. If the customer does not make an election by the end of the DSL WRP Term Plan, the rates for all in service ADSL Access Service lines will automatically be converted to the rates available under the DSL WRP Monthly Plan specified in Section 17.4.9(G)(1), following. An Access Order Charge will not apply to any election made by the customer at the end of the DSL WRP Term Plan.

A DSL WRP Term Plan is subject to payment for early termination as described in (D), below.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan (Cont'd)(B) Upgrades in DSL WRP Term Plan

A customer may terminate a DSL WRP Term Plan without the application of a termination liability charge when the customer replaces its original DSL WRP Term Plan commitment with a new DSL WRP Term Plan commitment provided the length and pricing option of the new DSL WRP Term Plan commitment is equal to or greater than the length and pricing option of the original DSL WRP Term Plan commitment. An Access Order Charge will not apply when the customer replaces an existing DSL WRP Term Plan commitment with a new DSL WRP Term Plan commitment under this provision.

(C) Termination without Liability

A customer may terminate a DSL WRP Term Plan commitment without the application of a termination liability charge if the Telephone Company increases the DSL WRP Term Plan rates described in Section 17, 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 WRP Term Plan commitment under this section; otherwise, the increased rates will apply for the remainder of the commitment period.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan (Cont'd)(D) Termination with Liability

If the customer elects to terminate its DSL WRP Term Plan(s) 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. For each DSL WRP Term Plan terminated prior to the end of the commitment period, the Telephone Company will bill the customer a charge equal to the monthly DSL WRP Term Plan Charge for its selected pricing option as specified in Section 17, following, multiplied by the number of months remaining in each commitment period.

DSL WRP Monthly Plan rates as described in Section 17, following, will apply to all in-service ADSL Access Lines following the early termination of a DSL WRP Term Plan.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan (Cont'd)(E) DSL Volume Pricing Commitment Plan

The DSL Volume Pricing Commitment Plan (DSL VPCP) is an optional pricing plan that provides the DSL WRP Term Plan customer with a discount applied against the monthly ADSL Line Charges for lines served by a WRP SWC at which the customer made a DSL WRP Term Plan commitment. In order to subscribe to and retain the DSL VPCP, the customer must have at least one existing DSL WRP Term Plan commitment with the Telephone Company. The amount of the DSL VPCP discount applied is based on the level of the monthly volume commitment selected by the DSL WRP Term Plan customer. The DSL VPCP commitment period is for one year. The DSL VPCP discount does not apply to any rate elements other than the monthly recurring DSL WRP Term Plan Line Charges specified in Section 17, following.

The customer will select its monthly volume commitment level based on its projected number of monthly in-service ADSL Access Service lines served by all WRP SWCs within the Telephone Company's operating territory at which the customer made a DSL WRP Term Plan commitment, i.e., qualifying in-service lines. Qualifying in-service lines also include any ADSL Access Service lines served by any remote SWC that subtends an associated host SWC covered by a DSL WRP Term Plan commitment.

In-service ADSL Access Service lines billed under the WRP Monthly Plan are not eligible for the discount under the DSL VPCP and are not counted towards the customer's achievement of its monthly volume commitment.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan (Cont'd)(E) DSL Volume Pricing Commitment Plan (Cont'd)

Available DSL VPCP commitment levels and associated discounts are specified in Section 17, following.

The customer may order the DSL VPCP at the same time it establishes a DSL WRP Term Plan commitment or at any time during the term of an existing DSL WRP Term Plan. In both instances, the DSL VPCP discount and commitment apply during the following twelve months. An Access Order Charge will not apply to establish a new or change an existing DSL VPCP.

Each month on the bill date, the Telephone Company will determine if the DSL WRP Term Plan customer achieved its monthly volume commitment level of qualifying in-service ADSL Access Service lines. In any month in which the monthly volume commitment was not met, the Telephone Company will bill the customer a DSL VPCP 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 WRP 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 qualifying 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 qualifying in-service lines.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.3 DSL Access Services Wholesale Rate Plan (Cont'd)8.3.2 DSL WRP Term Plan (Cont'd)(E) DSL Volume Pricing Commitment Plan (Cont'd)

Upon providing thirty (30) days written notice to the Telephone Company, a customer with an existing DSL VPCP will be permitted to increase its existing volume commitment when it establishes a new twelve-month commitment period at a higher volume commitment level. The DSL VPCP discount associated with the higher level of commitment will apply on a prospective basis during the following twelve months.

Upon providing thirty (30) days written notice to the Telephone Company, a customer with an existing DSL VPCP 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 VPCP prior to the end of the twelve-month commitment period for any reason, it will be prohibited from establishing a new DSL VPCP 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 VPCP 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.

Upon providing written notice to the Telephone Company within thirty (30) days prior to the end of its twelve-month DSL VPCP commitment period, the customer may opt to renew, increase or decrease its existing DSL VPCP commitment for the next twelve months. If the customer does not notify the Telephone Company of its election, the customer will not be eligible for the DSL VPCP discount following expiration of its existing commitment period.

ACCESS SERVICE**8. Digital Subscriber Line Access Services (Cont'd)****8.4 DSL Access Services Wholesale Pricing Plan****8.4.1 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 Access Service as described in Section 8.1, preceding, for the purpose of combining this telecommunications service 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 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 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 Voice-Data Access Service over the customer's end user's existing telephone exchange service line.

ACCESS SERVICE**8. Digital Subscriber Line Access Services (Cont'd)****8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)****8.4.1 General (Cont'd)**

When the customer purchases ADSL Access Service under the DSL WPP, the DSL WPP rates and charges in Section 17, following, will apply in lieu of the rates and charges specified in Section 17, following, for ADSL Access Service. The DSL WPP is only available from those Telephone Companies listed in Section 8.4, preceding.

Services provided under the DSL WPP are available under a DSL WPP Monthly Plan at the rates and charges specified in Section 17, following, or under a DSL WPP Term Plan described in 8.4.2, below, at the rates and charges specified in Section 17, following. A customer with a DSL WPP Term Plan cannot also have a DSL WPP Monthly Plan as all ADSL Access Service lines within the Telephone Company's study area are included in the DSL WPP Term Plan.

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 Access Service line covered under the DSL WPP. A nonrecurring charge applies for the installation of each ADSL Access Service line under the DSL WPP.

The Telephone Company will convert in-service ADSL Access Service lines originally purchased under the provisions specified in Sections 8.1, 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, following, do not apply to the conversion of in-service ADSL Access Lines to a DSL WPP.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.1 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 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 Access Service lines in the Telephone Company's study area.

When the customer subscribes to a DSL WPP Term Plan, all in-service ADSL 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, following, for the length of the term commitment. In addition to the applicable ADSL Line Charges, the customer will be billed a recurring monthly DSL WPP Term Plan Charge per study area as specified in Section 17, following, based on its selected pricing plan.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.2 DSL WPP Term Plan (Cont'd)(A) Description (Cont'd)

If the Telephone Company decreases the rates specified in Section 17, 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 Access Service lines will automatically be converted to the rates available under the DSL WPP Monthly Plan specified in Section 17, following.

A DSL WPP Term Plan is subject to payment for early termination as described in (D), below.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.2 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, 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.2 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, following, multiplied by the number of months remaining in the commitment period.

DSL WPP Monthly Plan rates as described in Section 17, following, will apply to all in-service ADSL Access Lines following the early termination of a DSL WPP Term Plan.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.2 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 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, following.

The customer will select its monthly volume commitment level based on its projected number of monthly in-service ADSL Access Service lines within the Telephone Company's study area.

In-service ADSL Access Service lines billed under the DSL WPP Monthly Plan are not eligible for the DSL VPP discount.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.2 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, 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 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.

ACCESS SERVICE8. Digital Subscriber Line Access Services (Cont'd)8.4 DSL Access Services Wholesale Pricing Plan (Cont'd)8.4.2 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.

ACCESS SERVICE

9. Reserved for Future Use

ACCESS SERVICE10. Special Federal Government Access Services10.1 General

This section covers Special Access Services that are provided to a customer for use only by agencies or branches of the Federal Government and other users authorized by the Federal Government. Services provided to state emergency operations centers are included. These services provide for command and control communications, including communications for national security, emergency preparedness and presidential requirements. They are required to assure continuity of Government in emergency and crisis situations and to provide for national security.

Services for command and control communications and for national security and emergency preparedness sometimes require short notice and short duration service provisions. These provisions are especially needed to meet presidential requirements or in response to natural, man-made, or declared emergencies. Requirements of this type cannot be forecasted and are usually needed for a relatively short period. The provision of service under these conditions may require the availability of facilities, such as portable microwave equipment, which are provided on a temporary basis by the Telephone Company or customer.

ACCESS SERVICE**10. Special Federal Government Access Services (Cont'd)****10.2 Emergency Conditions**

These services will be provided on the date requested or as soon as possible thereafter when the emergency falls into one of the following categories:

- State of crisis declared by the National Command Authorities (includes commitments made to the National Communications System in the "National Plan for Emergencies and Major Disasters").
- Efforts to protect endangered U.S. personnel or property both in the U.S. and abroad. (Includes space vehicle recovery and protection efforts.)
- Communications requirements resulting from hostile action, a major disaster or a major civil disturbance.
- The Director (Cabinet level) of a Federal department, Commander of a Unified/Specified Command, or head of a military department has certified that a communications requirement is so critical to the protection of life and property or to the National Defense that it must be processed immediately.
- Political unrest in foreign countries which affect the national interest.
- Presidential service.

10.3 Facility Availability

In order to insure communications during periods of emergency, the Telephone Company will, within the limits of good management, make available the necessary facilities to restore service in the event of damage or to provide temporary emergency service.

In order to meet the requirements of agencies or branches of the Federal Government, the Telephone Company may utilize government- owned facilities, when necessary to provide service.

10.4 Federal Government Regulations

In accordance with Federal Government Regulations, all service provided to the Federal Government will be billed in arrears. However, this provision does not apply to other customers that obtain services under the provisions of this tariff to provide their services to the Federal Government.

ACCESS SERVICE10. Special Federal Government Access Services (Cont'd)10.5 Service Offerings to the Federal Government

The following unique services are provided to a customer for use only by agencies or branches of the Federal Government, other authorized users and state emergency operations centers. The rates and charges for these services shall be developed on an individual case basis and shall be consistent with the rates and charges for services offered in other sections of this tariff.

10.5.1 Type and Description(A) Voice Grade Special Access Services(1) Voice Grade Secure Communications Type I

Approximate bandwidth of 10-50,000 Hz. Furnished for two-point secure communications on two-wire or four-wire metallic facilities between a customer designated premises and an end user's premises. Services are conditioned as follows:

T-3 Conditioning - The absolute loss (referenced to 1 milliwatt) with respect to frequency shall not exceed:

15 dB	at 10 Hz
13 dB	at 100 Hz
9 dB	at 1,000 Hz
20 dB	at 10,000 Hz
30 dB	at 50,000 Hz

Additional conditioning (available in one or two directions on four-wire facilities only) to provide the following characteristics:

The absolute loss (referenced to one milliwatt) with respect to frequency shall not exceed:

0 dB at 1,000 Hz
+ 1 dB between 1,000 Hz and 40,000 Hz
+ 2 dB between 10 Hz and 50,000 Hz
(+ means more loss)

ACCESS SERVICE10. Special Federal Government Access Services (Cont'd)10.5 Service Offerings to the Federal Government (Cont'd)10.5.1 Type and Description (Cont'd)(A) Voice Grade Special Access Services (Cont'd)(1) Voice Grade Secure Communications Type I (Cont'd)

The net loss of the conditioned service (with or without additional conditioning) shall not vary by more than four dB at 1,000 Hz from the levels specified preceding. Voice frequency signaling or supervisory tones can be transmitted.

(2) Voice Grade Secure Communications Type II

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communications between a customer designated premises and an end user's premises. Services are conditioned as follows:

G-1 Conditioning - The absolute loss with respect to frequency and the net loss variation shall be the same as Voice Grade Secure Communications Type I services without additional conditioning. Voice frequency signaling or supervisory tones can be transmitted.

ACCESS SERVICE10. Special Federal Government Access Services (Cont'd)10.5 Service Offerings to the Federal Government (Cont'd)10.5.1 Type and Description (Cont'd)(A) Voice Grade Special Access Services (Cont'd)(3) Voice Grade Secure Communications Type III

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communications between a customer designated premises and an end user's premises. Services are conditioned as follows:

G-2 Conditioning - The absolute loss with respect to frequency and the net loss variation from the customer designated premises to the end user's premises shall be the same as Voice Grade Secure Communications Type I services without additional conditioning; from the end user's premises to the customer designated premises shall be the same as Voice Grade Secure Communications Type I services with additional conditioning. Voice frequency signaling or supervisory tones can be transmitted.

(4) Voice Grade Secure Communications Type IV

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communication between two customer designated premises. Services are conditioned as follows:

G-3 Conditioning - The absolute loss with respect to frequency and the net loss variation shall be the same in both directions of transmission as Voice Grade Secure Communications Type I services with additional conditioning. Voice frequency signaling or supervisory tones can be transmitted.

ACCESS SERVICE10. Special Federal Government Access Services (Cont'd)10.5 Service Offerings to the Federal Government (Cont'd)10.5.1 Type and Description (Cont'd)(B) Wideband Digital Special ACCESS SERVICE

Service arrangements for secured communications to accommodate the transmission of binary digital baseband signals in a random polar format.

(1) Wideband Secure Communications Type I

For transmission at the rate of 18,750 bits per second.

(2) Wideband Secure Communications Type II

For transmission at the rate of 50,000 bits per second.

(3) Wideband Secure Communications Type III

To accommodate the transmission of restored polar two-level facsimile signals with a minimum signal element width of twenty micro- seconds at a rate of 50,000 bits per second.

To accommodate the transmission of binary digital baseband signals in a random polar format at the rate of 50,000 bits per second.

10.5.2 Mileage Application

Mileage, when used for rate application between the serving wire centers of two customer designated premises, shall be determined by the V and H Coordinates Method as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. , TARIFF F.C.C. NO. 4 and administered as set forth in 7.2.5 preceding.

ACCESS SERVICE10. Special Federal Government Access Services (Cont'd)10.6 Rates and Charges10.6.1 General

The rates and charges for special offerings to the Federal Government, such as those set forth in 10.5 preceding, are developed on an individual case basis and are set forth in 17.4.5 following.

10.6.2 Voice Grade Special Access

The provision of T-3 and G conditioned services contemplates station and tandem switching operations, using customer provided equipment, as well as Special Access Service. Separate narrowband or voice grade services, where required by the customer provided equipment or switching operation, are furnished in accordance with the applicable sections of this tariff.

10.6.3 Move Charges

- (A) When a service without a termination charge associated with that service, as set forth in 17.4.5 following, is moved to a different building, the nonrecurring charge applies; when moved to a new location in the same building, a charge of one-half of the nonrecurring charge applies.
- (B) When service with a termination charge associated with that service, as set forth in 17.4.5 following, is moved and reinstalled at a new location, the customer may elect:
 - to pay the unexpired portion of the termination charge for the service, if any, with the application of a nonrecurring charge and the establishment of a new termination charge for such service at the new location, or
 - to continue service subject to the unexpired portion of the termination charge, if any, and pay the estimated costs of moving such service, provided that the customer requests these charges be quoted prior to ordering the service move. Charges for moving such service will be based on estimated costs attributable to the move.

ACCESS SERVICE

10. Special Federal Government Access Services (Cont'd)

10.6 Rates and Charges (Cont'd)

10.6.3 Move Charges (Cont'd)

(B) (Cont'd)

Move charges include the estimated costs of removal, restoration of services or facilities necessitated by the move, transportation, storage, reinstallation, engineering, labor, supervision, materials, administration, and any other specific items of cost directly attributable to the move.

ACCESS SERVICE**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 Diversity and Avoidance Combined**11.1.4 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.

ACCESS SERVICE11. 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.

ACCESS SERVICE12. Specialized Service or Arrangements12.1 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. (C)
- 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.

ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services**

13.1 addresses Additional Engineering. 13.2 addresses Additional Labor (which is comprised of Overtime Installation, Overtime Repair, Standby, Testing and Maintenance with Other Telephone Companies, and Other Labor). 13.3 addresses Miscellaneous Services (which are comprised of Testing Services, Maintenance of Service and Telecommunications Service Restoration Priority). 13.4 addresses Presubscription.

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.

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.

ACCESS SERVICE13. 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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services13.3.1 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).

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)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 Dial Tone Office for FGA, to the access tandem or end office for FGB (wherever the FGB service is ordered) and to the end office for FGs C and D. 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:

- o Impulse Noise
- o Phase Jitter
- o Signal to C-Notched Noise Ratio
- o Intermodulation (Nonlinear) Distortion
- o Frequency Shift (Offset)
- o Envelope Delay Distortion
- o Dial Pulse Percent Break

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)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 Groups B, C and 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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)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 Groups A, B, C, and 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.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(4) Obligations of the Customer

- (A) 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.
- (B) The customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)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

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)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 detariffed 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.

In addition, TSP System service shall be provided in accordance with the guidelines set forth in "Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook" (NCSH 3-1-2) dated July 9, 1990, and "Telecommunications Service Priority System for National Security Emergency Preparedness Service User Manual" (NCSM 3-1-1) .

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (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.

ACCESS SERVICE13. 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.

ACCESS SERVICE13. 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, will be available for inspection in the Public Reference Room of the Tariff Division 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 predesignated IC.
- (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 primary IC for all of its lines,
 - indicate a different IC for each of its lines.

Only one IC 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. 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 (10XXX or 101XXXX) for all interLATA calls.

After the end user's initial selection of a predesignated IC or the designation that they do not want to presubscribe to any IC, for any change in selection after conversion to Equal Access in the serving end office, a nonrecurring charge, as set forth in 13.4(J) following applies.

ACCESS SERVICE13. 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 predesignated IC 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 primary IC that has been assigned to them if they fail to respond to the second notification.

After the allocation process has been completed, end users assigned to an IC via the allocation process may change their IC one time within 6 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 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.

ACCESS SERVICE13. 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 presubscribe to an IC 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.

- designate a primary IC for all of its lines,
- designate a different IC for each of its lines.

Only one IC may be selected for each individual line, or lines terminating in the same hunt group. Subsequent to the installation of Telephone Exchange Service and after the end user's initial selection of a predesignated IC, for any change in selection, a nonrecurring charge, as set forth in 13.4(J) following, applies.

- (G) If the new end user fails to designate an IC as its predesignated IC prior to the date of installation of Telephone Exchange Service, the Telephone Company will (1) allocate the end user to an IC based upon current IC presubscription ratios, (2) require the end user to dial an access code (10XXX or 101XXXX) for all interLATA calls, or (3) block the end user from interLATA calling. The end user will be notified which option will be applied if they fail to presubscribe to an IC. An allocated or blocked end user may designate another, or initial, IC as its predesignated IC one time at no charge, if it is requested within six months after the installation of Telephone Exchange Service.

For any change in selection after 6 months from the installation of Telephone Exchange Service, a nonrecurring charge, as set forth in 13.4(J) following applies.

ACCESS SERVICE**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 which selected them that they are cancelling their service and that they should contact the Telephone Company to select a new primary IC. The IC will also inform the end user that it will pay the presubscription change charge. The cancelling 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 predesignated carrier code of each end user identified by the IC to the new CIC and bill the IC the nonrecurring charge set forth in 13.4(J) following for each end user line or trunk that is changed.
- (J) As specified above, a nonrecurring charge will apply for subsequent changes to the end user's selection of a predesignated IC (PIC), including the establishment or removal of a no PIC selection. The nonrecurring 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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.4 Presubscription (Cont'd)

(J) (Cont'd)

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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.5 Reserved for Future Use13.6 Unauthorized Predesignated 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.

13.7 Reserved for future use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.8 Blocking Service

13.8.1 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 and to customers who obtain Feature Group A Switched Access service under this

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.8 Blocking Service (Cont'd)13.8.1 International Blocking Service (Cont'd)

tariff. 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 10XXX-011+ or 101XXX-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 or Feature Group A Switched Access line to which International Blocking Service is added or removed. This charge does not apply when blocking is removed from an exchange line or trunk or Feature Group A Switched Access line at the same time that it is disconnected.

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) or Feature Group A Switched Access line(s). This charge does not apply when blocking is removed from an exchange line or trunk or Feature Group A Switched Access line at the same time that it is disconnected.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.8 Blocking Service (Cont'd)13.8.2 900 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 and to customers who obtain Feature Group A Switched Access service under this tariff. 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, trunk, or Feature Group A Switched Access service 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 or Feature Group A Switched Access line at the same time that it is disconnected.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.9 Billing Name and Address Service13.9.1 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 assigned by the Telephone Company. An interstate telecommunications 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 requirements, and information associated with Local Exchange Carrier (LEC) calling card calls, collect calls 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 affirmatively requested that its BNA not be disclosed.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.9 Billing Name and Address Service (Cont'd)13.9.2 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.
- (C) Where facilities are available, BNA will be provided in digitally encoded formats on digital data storage devices. Telephone Companies providing BNA in digitally encoded formats will make available one or more of the following digital data storage devices for transmission of the BNA data: magnetic tapes, compact discs (CDs), 3.5 inch floppy discs and/or Internet transmitted file. Individual Telephone Company availability of optional digital formats and transmission media are indicated in the Telephone Company's respective Section 17.4.4 rate section for BNA.
- (D) Where facilities are available, the customer may request an optional specialized output format required to meet a specific customer need.
- (E) 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.
- (F) The Telephone Company will not disclose BNA information to parties other than interstate telecommunications service providers as defined in 13.9.1(A), preceding, and their authorized billing agents. An authorized billing agent means a third party hired by a telecommunications service provider to perform billing and collection services for the telecommunications service provider. BNA disclosure is limited to those purposes as defined in 13.9.1(B), preceding.
- (G) 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 interstate service provider 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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.9 Billing Name and Address Service (Cont'd)13.9.3 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 requests, the customer will provide to the Telephone Company the source data upon which the customer has based an order from BNA service. The Telephone Company will not process the order until such time as the customer provides the requested data.

13.9.4 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 in a digitally encoded format on a digital data storage device. For each type of digital data storage device that is available from a Telephone Company, an Optional Charge is specified in the respective Telephone Company's Section 17.4.4 BNA rate section. The Optional Charge for the digital data device 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 or digital data device listed in Section 17.4.4 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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.10 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 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.

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.

13.11 Nonchargeable Confirmation Services13.11.1 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.

13.11.2 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.

ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)****13.12 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.

Coin Supervision Additive Service provides the capability of central office line equipment to pass signals and/or tones from an 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 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 exchange service line for which Coin Supervision Additive Service is provided.

13.13 Central Office Blocking Service

Central Office Blocking With Operator Screening - Central office blocking with operator screening is offered to provide a choice of restrictions at the subscriber's option. These options will be available where line controlled public telephone service is provided on a usage rate service basis. Options are as follows:

Option 1 - Two-Way Service. Provides that third number and collect calls to Line Controlled Public Telephone Service are not allowed.

Option 2 - Two-Way Service. Provides screening information to the operator to prevent operator assisted sent-paid calls from being billed to the line. Further, third number and collect calls to Line Controlled Public Telephones are not allowed.

Option 3 - Two-Way Service. Provides central office blocking of seven digit local and 976 calls. Provides screening information to the operator to prevent operator assisted sent-paid calls from being billed to the lines. Further, third number and collect calls to Line Controlled Public Telephones are not allowed.

Option 4 - Two-Way Service. Provides central office blocking of 976 calls. Provides screening information to the operator to prevent operator-assisted sent-paid calls from being billed to the line. Further, third number and collect calls to Line Controlled Public Telephones are not allowed.

Option 5 - Two-Way Service. Provides central office blocking of sent-paid international calling upon certification by the payphone provider that the incidence of fraud in such calling is high. This service may be offered individually or in addition to either of the four options preceding.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.14 Flexible Automatic Number Identification (Flex ANI)

The Telephone Company will provide Flex ANI Service to Payphone Service Providers (PSPs) who order tariffed local exchange service lines for the provision of pay service. 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.

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.9.1 (F) preceding) by allowing FGD customers to receive additional information digits. Flex ANI provides additional information digits (described in 6.9.1 (AA) preceding). Flex ANI is available in suitably equipped end offices.

A monthly recurring charge, as set forth in 17.4.4(O) following, is associated with Flex ANI service. A Miscellaneous Service Order Charge as set forth in 17.4.1(D) will apply to orders for Flex ANI service placed subsequent to the initial installation of the associated exchange service line.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.15 Local Number Portability

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 based upon receipt of a request by another local exchange telecommunications carrier. 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.

13.15.1 LNP End User Service

(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 implementing and providing LNP.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.15 Local Number Portability (Cont'd)13.15.1 LNP End User Service (Cont'd)

(B) Rate Regulations

The Telephone Company will bill a monthly LNP End User Charge as set forth in 17.4.4, following with the following exceptions:

- Each PBX trunk shall be assessed the equivalent of nine monthly LNP End User Charges as specified in 17.4.4, following.
- Each ISDN PRI arrangement shall be assessed the equivalent of five monthly LNP End User Charges as specified in 17.4.4, following.
- Lifeline end user customers shall not be assessed the LNP End User Charge.

The Telephone Company will recover the LNP End User Charge for a 60 month period beginning with the effective date of the rate as specified therein.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.15 Local Number Portability (Cont'd)13.15.2 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 local exchange 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 numer 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 17.4.4, following, regardless of whether the call is completed.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.15 Local Number Portability (Cont'd)13.15.2 LNP Query Service(A) Description (Cont'd)

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, 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, following.

(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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.15 Local Number Portability (Cont'd)13.15.2 LNP Query Service(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 17.4.4, 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 17.4.4, following, to those customers that have ordered LNP Query Service. The LNP Billing Charge will be applied per account as set forth in 17.4.4, 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.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.16 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). The ARC will be billed by those Telephone Companies that have tariffed ARC rates in Section 17.4.4, following.

13.16.1 Description

Pursuant to 47 CFR 51.917(e), the Issuing Carriers indicating assessment of ARC charges in their respective rate sections at Section 17.4.4 have tariffed an ARC, on a per month basis, for each line other than lines of Lifeline Customers, assessed a primary residential, or single-line business end user common line charge, or a multi-line business end user common line charge assessed pursuant to 47 CFR § 69.104.

13.16.2 Rate Regulations

- (A) Except as specified below, the Telephone Company will bill an ARC each month as follows:
- (1) For each line or trunk assessed a Residence End User Common Line (EUCL), as specified in Section 4.6.1 or 4.6.2, preceding, one (1) Residential ARC charge as set forth in Section 17.4.4, following, will apply.
 - (2) 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 17.4.4, following, will apply.
 - (3) 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 17.4.4, following, will apply.
 - (4) The Telephone Company's Residential (Res ARC), Single Line Business ARC (SLB ARC) and Multiline Business ARC (MLB ARC) rates are set forth in Section 17.4.4, following.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.16 Access Recovery Charge (Cont'd)13.16.2 Rate Regulations (Cont'd)

- (5) Each line used by a Payphone Service Provider obtaining service from the Company and for which each line used for Payphone Service is assessed a Multiline Business (MLB) EUCL as specified in Section 4.6.3 preceding, one (1) Multiline Business ARC charge as set forth in Section 17.4.4, following, will apply.
- (B) 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.
- (C) 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.

13.16.3 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 17.4.4, following, will not apply to lines qualifying for Lifeline support.

(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 17.4.4, following, applies to each ISDN BRI arrangement.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.16 Access Recovery Charge (Cont'd)13.16.3 Exceptions (Cont'd)

(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 17.4.4, following, apply to each ISDN PRI arrangement.

(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 17.4.4, 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.

13.16.4 ARC Election

All Issuing Carriers as identified in Title Pages 2, 3, and 4 preceding have elected to implement an ARC effective July 3, 2012.

ACCESS SERVICE

14. Reserved for Future Use

ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications**

15.1 contains Switched Access Service Options (which are comprised of Interface Groups, Supervisory Signaling, Entry Switch Receive Level and Local Transport Termination) and Transmission Specifications. 15.2 describes Special Access Service Network Channel (NC) codes and Network Channel Interface (NCI) codes. 15.3 contains Interface Group, Premises Interface Code and Standard Transmission Specifications applicable to Directory Access Service.

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 SERVICE15. 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 FGC and FGD when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGB, FGC or FGD when the first point of switching provides only four-wire terminations.

ACCESS SERVICE15. 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 point of switching 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 FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC or 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 SERVICE15. 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 FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC or 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.

	<u>Interface Group Identification No.</u>	<u>Transmission Frequency Bandwidth</u>	<u>Analog Hierarchy Level</u>	<u>Maximum No. Of Channelized Voice Freq. Trans. Paths</u>
12	3	60-108kHz	Group	
	4	312-552 kHz	Supergroup	
60	5	564-3084 kHz	Mastergroup	600

ACCESS SERVICE15. 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.

<u>Interface Group Identification No.</u>	<u>Nominal Bit Rate (Mbps)</u>	<u>Digital Hierarchy Level</u>	<u>Max. No. of Channnelized Voice Freq. Trans. Paths</u>
6	1.544	DS1	24
7	3.152	DS1C	48
8	6.312	DS2	96
9	44.736	DS3	672
10	274.176	DS4	4032

ACCESS SERVICE15. 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 nonchargeable optional features are added subsequent to the installation of service.

- Customer Specified Entry Switch Receive Level

Customer Specified Entry Switch Receive Level allows the customer to specify the receive transmission level at the first point of switching. The range of transmission levels which may be specified is described in Technical Reference TR-NPL-000334. This feature is available with Interface Groups 2 through 10 for Feature Groups A and B.

- Customer Specification of Local Transport Termination

Customer Specification of Local Transport Termination allows the customer to specify, for Feature Group B routed directly to an end office or access tandem, a four-wire termination of the Local Transport at the first point of switching in lieu of a Telephone Company selected two-wire termination. This option is available only when the Feature Group B arrangement is provided with Type B Transmission Specifications.

- 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.

ACCESS SERVICE15. 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 FGB, FGC or 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 FGB, FGC or 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.

These optional Supervisory Signaling arrangements are 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 SERVICE15. 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.

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	A	Feature B	Group C	D
1	LO	2LS2	X			
	LO	2LS3	X			
	GO	2GS2	X			
	GO	2GS3	X			
	LO, GO	2DX3	X			
	LO, GO	4EA3-E	X			
	LO, GO	4EA3-M	X			
	LO, GO	6EB3-E	X			
	LO, GO	6EB3-M	X			
	RV, EA, EB, EC	2DX3		X	X	X
	RV, EA, EB, EC	4EA3-E		X	X	X
	RV, EA, EB, EC	4EA3-M		X	X	X
	RV, EA, EB, EC	6EB3-E		X	X	X
	RV, EA, EB, EC	6EB3-M		X	X	X
	EA, EB, EC	6EC3			X	X
	RV	2RV3-0		X	X	X
	RV	2RV3-T		X	X	X
	SS7	2NO2			X	X
2	LO, GO	4SF2	X			
	LO, GO	4SF3	X			
	LO	4LS2	X			
	LO	4LS3	X			
	LO	6LS2	X			

ACCESS SERVICE15. 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)

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	A	Feature B	Group C	D
2 (Cont'd)	GO	4GS2	X			
	GO	4GS3	X			
	GO	6GS2	X			
	LO,GO	4DX2	X			
	LO,GO	4DX3	X			
	LO,GO	6EA2-E	X			
	LO,GO	6EA2-M	X			
	LO,GO	8EB2-E	X			
	LO,GO	8EB2-M	X			
	LO,GO	6EX2-B	X			
	RV,EA,EB,EC	4SF2		X	X	X
	RV,EA,EB,EC	4SF3		X		
	RV,EA,EB,EC	4DX2		X	X	X
	RV,EA,EB,EC	4DX3		X		
	RV,EA,EB,EC	6DX2			X	
	RV,EA,EB,EC	6EA2-E		X	X	X
	RV,EA,EB,EC	6EA2-M		X	X	X
	RV,EA,EB,EC	8EB2-E		X	X	X
	RV,EA,EB,EC	8EB2-M		X	X	X
	EA,EB,EC	8EC2-M			X	X
	RV	4RV2-O		X	X	X
	RV	4RV2-T		X	X	X
	RV	4RV3-O		X	X	
	RV	4RV3-T		X	X	
	SS7	4NO2			X	X
3	LO,GO	4AH5-B	X			
	RV,EA,EB,EC	4AH5-B		X	X	X
	SS7	4AH5-B			X	X
4	LO,GO	4AH6-C	X			
	RV,EA,EB,EC	4AH6-C		X	X	X
	SS7	4AH6-C			X	X
5	LO,GO	4AH6-D	X			
	RV,EA,EB,EC	4AH6-D		X	X	X
	SS7	4AH6-D			X	X

ACCESS SERVICE15. 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)

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	A	Feature B	Group C	D
6	LO, GO	4DS9-15	X			
	LO, GO	4DS9-15L	X			
	RV, EA, EB, EC	4DS9-15		X	X	X
	RV, EA, EB, EC	4DS9-15L		X	X	X
	SS7	4DS9-15			X	X
7	LO, GO	4DS9-31	X			
	LO, GO	4DS9-31L	X			
	RV, EA, EB, EC	4DS9-31		X	X	X
	RV, EA, EB, EC	4DS9-31L		X	X	X
	SS7	4DS9-31			X	X
8	LO, GO	4DS0-63	X			
	LO, GO	4DS0-63L	X			
	RV, EA, EB, EC	4DS0-63		X	X	X
	RV, EA, EB, EC	4DS0-63L		X	X	X
	SS7	4DS0-63			X	X
9	LO, GO	4DS6-44	X			
	LO, GO	4DS6-44L	X			
	RV, EA, EB, EC	4DS6-44		X	X	X
	RV, EA, EB, EC	4DS6-44L		X	X	X
	SS7	4DS6-44			X	X
10	LO, GO	4DS6-27	X			
	LO, GO	4DS6-27L	X			
	RV, EA, EB, EC	4DS6-27		X	X	X
	RV, EA, EB, EC	4DS6-27L		X	X	X
	SS7	4DS6-27			X	X

ACCESS SERVICE15. 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 each Feature Group as a function of the Interface Group selected by the customer, are set forth in (A) through (D) following. 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 A

FGA is provided with either Type B or Type C Transmission Specifications. The specifications for the associated parameters are guaranteed to the first point of switching. Type C Transmission Specifications are provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. Type DB Data Transmission Parameters are provided with FGA to the first point of switching.

(B) Feature Group B

FGB is provided with either Type B or Type C Transmission Specifications. The specifications for the associated parameters are guaranteed to the end office when routed directly or to the first point of switching when routed via an access tandem. Type C Transmission Specifications are provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. Type DB Data Transmission Parameters are provided with FGB to the first point of switching.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(C) Feature Group C

FGC is provided with either Type B or Type C Transmission Specifications as follows:

- When routed directly to the end office either Type B or Type C is provided.
- When routed to an access tandem only Type B is provided.
- Type B or Type C is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1 when routed directly to an end office. Type B is provided with Interface Groups 2 through 10, whether routed directly to an end office or to an access tandem.

Type DB Data Transmission Parameters are provided with FGC for the transmission path between the customer designated premises and the end office when directly routed to the end office, and 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 SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(D) 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.

(E) 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

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(E) Type A Transmission Specifications (Cont'd)(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:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
401 to 1000	42 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBrnCO.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(E) 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:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	N/A	N/A
- Via Access Tandem	16 dB	11 dB

(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:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
5 dB	2.5 dB

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(F) 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:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type B1</u>	<u>Type B2</u>
less than 50	32 dBrnCO	35 dBrnCO
51 to 100	33 dBrnCO	37 dBrnCO
101 to 200	35 dBrnCO	40 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

* For Feature Groups C and D only Type B2 will be provided. For Feature Groups A and B, Type B1 or B2 will be provided as set forth in Technical Reference TR-NPL-000334.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(F) Type B Transmission Specifications (Cont'd)(5) Echo Control

Echo Control, identified as Impedance Balance for FGA and FGB and Equal Level Echo Path Loss for FGC and 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:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem		
- Terminated in		
4-Wire trunk	21 dB	14 dB
- Terminated in		
2-Wire trunk	16 dB	11 dB
POT to End Office		
- Direct	16 dB	11 dB
- Via Access Tandem		
. For FGB access	8 dB	4 dB
. For FGC access		
(Effective		
4-Wire trans-		
mission path		
at end office)	16 dB	11 dB
. For FGC access		
(Effective		
2-Wire trans-		
mission path		
at end office)	13 dB	6 dB

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(F) 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:

Echo Return LossSinging Return Loss

5 dB

2.5 dB

(G) 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.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(G) 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:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type C1</u>	<u>Type C2</u>
less than 50	32 dBrnCO	38 dBrnCO
51 to 100	33 dBrnCO	39 dBrnCO
101 to 200	35 dBrnCO	41 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

* For Feature Groups C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference TR-NPL-000334.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(G) 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:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	13 dB	6 dB
POT to End Office		
- Direct	13 dB	6 dB
- Via Access Tandem	8 dB	4 dB
	(for FGB only)	

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 Groups A, B and C and also 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.

ACCESS SERVICE15. 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 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)	33 dB
Third Order (R3)	37 dB

ACCESS SERVICE15. 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 5 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

ACCESS SERVICE15. 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 SERVICE15. 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 Special Access Service offerings contained in Section 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 (e.g., TG1 = Telegraph). 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 SERVICE15. 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 Special Report SR-STIS-000307. However, not all services contained in this Special Report may be offered by the Telephone Company at this time.

Lastly, 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:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
LG-R	04DB2	04DA2-S

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 SERVICE15. 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:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
LC--	04LO2	02LS2

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:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
HC--	04DS9-15	04DS9-15

NC Code:

HC = High Capacity Channel Service, HC1
-- = 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 Special Report SR-ST5-000307.

ACCESS SERVICE15. 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 (G) 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

SD Code NC Code	<u>Package</u>			
	<u>MTC*</u>	<u>MT1</u>	<u>MT2</u>	<u>MT3</u>
	<u>MQ</u>	<u>NT</u>	<u>NU</u>	<u>NV</u>
<u>Parameter</u>				
DC Resistance				
Between Conductors	X	X	X	
Loop Resistance	X			X
Shunt Capacitance	X			X
<u>Optional Features and Functions</u>				
Three Premises Bridging	X	X		X
Series Bridging	X		X	

The technical specifications are described in Technical Reference TR-NPL-000336.

* All parameters are available within ranges selected by the customer where technically feasible.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(B) Technical Specifications Packages Telegraph Grade Service

SD Code NC Code	<u>Package</u>		
	<u>TGC*</u> <u>NO</u>	<u>TG1</u> <u>NW</u>	<u>TG2</u> <u>NY</u>
<u>Parameter</u>			
Telegraph Distortion	X	X	X
<u>Optional Features</u> <u>and Functions</u>			
Telegraph Bridging	X	X	X

The technical specifications are described in
Technical Reference TR-NPL-000336 .

* All parameters are available within ranges selected by the customer where technically feasible.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(C) Technical Specifications Packages Voice Grade Service

		Package VG-												
SD Code	C*	1	2	3	4	5	6	7	8	9	10	11	12	W
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE
Parameter														
Attenuation														
Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message														
Noise	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Echo Control	X	X	X	X		X		X	X			X	X	X
Envelope Delay														
Distortion	X						X	X	X	X	X	X	X	X
Frequency														
Shift	X						X	X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X	X
Intermodulation														
Distortion	X							X	X	X	X	X		X
Loss Deviation	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phase Hits, Gain														
Hits, and														
Dropouts	X													
Phase Jitter	X							X	X	X	X	X		X
Signal-to-C														
Message Noise						X								
Signal-to-C														
Notch Noise	X				X		X	X	X	X	X	X	X	X

The technical specifications for these parameters (except for dropouts, phase hits, and gain hits) are described in Technical References TR-NPL-000334 and TR-TSY-000335. The technical specifications for dropouts, phase hits, and gain hits are described in Technical Reference PUB 41004, Table 4 .

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(C) Technical Specifications Packages Voice Grade Service (Cont'd)

		Package VG-												
SD Code	C*	1	2	3	4	5	6	7	8	9	10	11	12	W
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE
<u>Optional Features and Functions</u>														
Central Office Bridging Capability	X		X			X	X				X	X	X	
Central Office Multiplexing	X						X							
Conditioning: . C-Type	X					X	X	X	X	X	X			
. Improved Attenuation Distortion	X					X	X	X	X	X	X			
. Improved Envelope Delay Distortion		X				X	X	X	X	X	X			
. Sealing Current	X						X							
. Data Capability	X					X	X	X						
. Telephoto Capability	X												X	
Customer Specified Premises Receive Level	X		X	X			X	X	X					
Improved Return Loss for Effective Four-Wire Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X	
For Effective Two-Wire Transmission	X		X	X				X						
Improved Two-Wire Voice Transmission														X
PPSN Interface Arrangement	X									X				
Selective Signaling Arrangement	X		X			X	X				X	X	X	
Signaling Capability Transfer		X	X	X	X			X	X	X				
Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	X	

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(D) Technical Specifications Packages Program Audio Service

SD Code NC Code	<u>APC*</u> <u>PQ</u>	Package				<u>AP4</u> <u>PK</u>
		<u>AP1</u> <u>PE</u>	<u>AP2</u> <u>PF</u>	<u>AP3</u> <u>PJ</u>		
<u>Parameter</u>						
Actual Measured Loss	X	X	X	X	X	
Amplitude Tracking	X					
Crosstalk	X	X	X	X	X	X
Distortion Tracking	X					
Gain/Frequency						
Distortion	X	X	X	X	X	X
Group Delay	X					
Noise	X	X	X	X	X	X
Phrase Tracking	X					
Short-Term Gain						
Stability	X					
Short-Term Loss	X					
Total Distortion	X	X	X	X	X	X
Optional Features and Functions						
Central Office Bridging						
Capability	X	X	X	X	X	X
Gain Conditioning	X	X	X	X	X	X
Stereo	X					X

The technical specifications are described in Technical Reference
TR-NPL-000337 and associated Addendum .

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(E) Technical Specifications Packages Video Service

SD Code NC Code	Package		
	<u>TVC*</u> <u>TQ</u>	<u>TV1</u> <u>TV</u>	<u>TV2</u> <u>TW</u>
<u>Video Parameters</u>			
Insertion Gain	X	X	X
Field-Time Distortion	X	X	X
Line-Time Distortion	X	X	X
Short-Time Distortion	X	X	X
Chrominance-Luminance Gain Inequality	X	X	X
Chrominance-Luminance Delay Inequality	X	X	X
Amplitude/Frequency Characteristic	X	X	X
Luminance Non-Linear Distortion	X	X	X
Chrominance Non-Linear Gain Distortion	X	X	X
Chrominance Non-Linear Phase Distortion	X	X	X
Transient Synchronizing Signal Non-Linearity	X	X	X
Dynamic Gain Distortion			
- Picture Signal	X	X	X
- Synchronizing Signal	X	X	X
Differential Gain	X	X	X
Differential Phase	X	X	X
Chrominance-Luminance Intermodulation	X	X	X

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(E) Technical Specifications Packages Video Service (Cont'd)

SD Code NC Code	Package		
	<u>TVC*</u> <u>TQ</u>	<u>TV1</u> <u>TV</u>	<u>TV2</u> <u>TW</u>
<u>Audio Channel Parameters</u> <u>Associated with Video Service</u>			
Insertion Gain	X	X	X
Amplitude/Frequency Characteristic	X	X	X
Total Harmonic Distortion & Noise	X	X	X
Maximum Steady-State Test Levels	X	X	X
Gain Differential Between Channels	X	X	
Phase Differential Between Channels	X	X	
Crosstalk	X	X	X
Audio-To-Video Time Differential	X	X	X

The technical specifications are described in Technical Reference
TR-NPL-000338 .

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(F) Technical Specifications Packages Digital Data Service

	Package					
SD Code NC Code	<u>D1</u> <u>XA</u>	<u>D2</u> <u>XB</u>	<u>D3</u> <u>XG</u>	<u>D4</u> <u>XH</u>	<u>D5</u> <u>XE</u>	<u>D6</u> <u>YN</u>
<u>Parameter/Hubbed</u>						
Error-Free Seconds	X	X	X	X	X	X
<u>Optional Features and Functions/Hubbed</u>						
Central Office Bridging Capability	X	X	X	X	X	X
PPSN Interface Transfer Arrangement	X	X	X	X	X	X
Transfer Arrangement	X	X	X	X	X	X

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.

Optional Features
and Functions/Non-Hubbed

Public Packet Data Arrangement	X	X
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Voltages which are compatible with Digital Data Service are delineated in Technical Reference TR-NWT-000341.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(G) Technical Specifications Packages High Capacity Service

SD Code NC Code	Package					
	<u>HC0</u> <u>HS</u>	<u>HC1</u> <u>HC</u>	<u>HC1C</u> <u>HD</u>	<u>HC2</u> <u>HE</u>	<u>HC3</u> <u>HF</u>	<u>HC4</u> <u>HG</u>
<u>Parameters</u>						
Error-Free Seconds		X				
<u>Optional Features and Functions</u>						
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 HC1 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 PUB 62411 .

* Available only on a channel of 1.544 Mbps facility to a Telephone Company Hub.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(H) Technical Specifications Packages Synchronous Optical Channel Service

	<u>Package</u>	
	<u>SD Code</u> ⁽¹⁾ <u>NC Code</u> ⁽²⁾	<u>OC3</u> <u>OB</u> <u>OC12</u> <u>OD</u>
<u>Parameters</u>		
<u>Error-Free Seconds</u>		X
<u>Optional Features and Functions</u>		
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	

Technical specifications are delineated in Technical Reference GR-253-CORE, GR-1374-CORE, ANSI T1.102-1993 and ANSI T1.105-1995.

⁽¹⁾SD = Service Designation Code

⁽²⁾NC = Network Channel Code

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes

The electrical interface with the Telephone Company for Special Access Services, 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 preceeding.

ACCESS SERVICE15. 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 OptionsParameter

<u>Code</u>	<u>Option</u>	<u>Definition</u>
AB-		accepts 20 Hz ringing signal at customer's point of termination
AC-		accepts 20 Hz ringing signal at customer's end user's point of termination
AH-		analog high capacity interface
	- B	60 kHz to 108 kHz (12 channels)
	- C	312 kHz to 552 kHz (60 channels)
	- D	564 kHz to 3084 kHz (600 channels)
CT -		Centrex Tie Trunk Termination
CS -		digital hierarchy interface at Digital Cross Connect System (DCS)
	- 15	1.544 Mbps (DS1) ANSI Extended Superframe (ESF) Format and B8ZS Clear Channel Capability
	- 15A	1.544 Mbps (DS1) Superframe (SF) format
	- 15B	1.544 Mbps (DS1) Superframe (SF) format and B8ZS Clear Channel Capability
	- 15K	1.544 Mbps (DS1) Extended Superframe (ESF)
DA -		data stream in VF frequency band at customer's end user's point of termination
DB -		data stream in VF frequency band at customer's point of termination
	- 10	VF for TG1 and TG2
	- 43	VF for 43 Telegraph Carrier type signals, TG1 and TG2
DC -		direct current or voltage
	- 1	monitoring interface with series RC combination (McCulloh format)
	- 2	Telephone Company energized alarm channel
	- 3	Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud)
DD -		DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination
DE -		DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination

ACCESS SERVICE15. 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)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
DS -		digital hierarchy interface
	- 15	1.544 Mbps (DS1) format per PUB 62411 plus D4
	- 15E	8-bit PCM encoded in one 64 kbps of the DS1 signal
	- 15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
	- 15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
	- 15H	14/11-bit PCM encoded in six 64 kbps of the DS1 signal
	- 15J	1.544 Mbps format per PUB 62411
	- 15K	1.544 Mbps format per PUB 62411 plus extended framing format
	- 15L	1.544 Mbps (DS1) with SF signaling
	- 27	274.176 Mbps (DS4)
	- 27L	274.176 Mbps (DS4) with SF signaling
	- 31	3.152 Mbps (DS1C)
	- 31L	3.152 Mbps (DS1C) with SF signaling
	- 44	44.736 Mbps (DS3)
	- 44L	44.736 Mbps (DS3) with SF signaling
	- 63	6.312 Mbps (DS2)
	- 63L	6.312 Mbps (DS2) with SF signaling
DU -		digital access interface
	- 24	2.4 kbps
	- 48	4.8 kbps
	- 19	19.2 kbps
	- 56	56.0 kbps
	- 96	9.6 kbps
	- 64	64.0 kbps
	- A	1.544 Mbps format per PUB 62411
	- B	1.544 Mbps format per PUB 62411 plus D4
	- C	1.544 Mbps format per PUB 62411 plus extended framing format
	- 1KN	1.544 Mbps ANSI Extended Superframe (ESF) Format without line power
	- 1SN	1.544 Mbps ANSI Extended Superframe (ESF) Format with B8ZS Clear Channel Capability and without line power
	- AN	1.544 Mbps free-framing format without line power (only avail. to U.S. Govt. agencies)
	- BN	1.544 Mbps Superframe (SF) Format without line power
	- DN	1.544 Mbps Superframe (SF) Format with B8ZS Clear Channel Capability without line power
DX -		duplex signaling interface at customer's point of termination
DY -		duplex signaling interface at customer's end user's point of termination

ACCESS SERVICE15. 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)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
EA -	E	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EA -	M	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EB -	E	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EB -	M	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EC -		Type III E&M signaling at customer POT
EX -	A	tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions.
EX -	B	tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions.
GO -		ground start loop signaling - open end function by customer or customer's end user
GS -		ground start loop signaling - closed end function by customer or customer's end user
IA -		E.I.A. (25 pin RS-232)
LA -		end user loop start loop signaling - Type A OPS registered port open end
LB -		end user loop start loop signaling - Type B OPS registered port open end
LC -		end user loop start loop signaling - Type C OPS registered port open end
LO -		loop start loop signaling - open end function by customer or customer's end user
LR -		20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR
LS -		loop start loop signaling - closed end function by customer or customer's end user
NO -		no signaling interface, transmission only

ACCESS SERVICE15. 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)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
PG -		program transmission - no dc signaling
	- 1	nominal frequency from 50 to 15000 Hz
	- 3	nominal frequency from 200 to 3500 Hz
	- 5	nominal frequency from 100 to 5000 Hz
	- 8	nominal frequency from 50 to 8000 Hz
PR	-	protective relaying*
RV	- 0	reverse battery signaling, one way operation, originate by customer
	- T	reverse battery signaling, one way operation, terminate function by customer or customer's end user
SF -		single frequency signaling with VF band at either customer POT or customer's end user POT
TF -		telephotograph interface
TT -		telegraph/teletypewriter interface at either customer POT or customer's end user POT
	- 2	20.0 milliamperes
	- 3	3.0 milliamperes
	- 6	62.5 milliamperes
TV -		television interface
	- 1	combined (diplexed) video and one audio signal
	- 2	combined (diplexed) video and two audio signals
	- 5	video plus one (or two) audio 5 kHz signal(s) or one (or two) two wire
	- 15	video plus one (or two) audio 15 kHz signal(s)

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

ACCESS SERVICE15. 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:

<u>Value (ohms)</u>	<u>Code(s)</u>
110	0
150	1
600	2
900	3+
135	5
75	6
124	7
Variable	8
100	9

+ 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.

ACCESS SERVICE15. 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

<u>Compatible</u>	<u>CIs</u>
2DC8-1	2DC8-2
2DC8-3	2DC8-3
4DS8-	2DC8-1
4DS8-	2DC8-2

(2) Telegraph Grade

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
2DB2-10	10IA8 2TT2-2 4TT2-2	4DB2-10	10IA8 2TT2-2 4TT2-2
2DB2-43*	10IA8 2TT2-2 2TT2-6 4TT2-2	4DB2-43*	10IA8 2TT2-6 4TT2-2
2TT2-2	2TT2-2	4DS8-	10IA8 2TT2-2 2TT2-6 4TT2-2 4TT2-6
2TT2-3	2TT2-2 4TT2-2		
2TT2-6	2TT2-6 4TT2-6	4TT2-2	4TT2-2
		4TT2-6	2TT2-6

* Supplemental Channel Assignment information required.

ACCESS SERVICE15. 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

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
2AB2	2AC2	2DB2	2DA2	2LR2	2LR2
2AB3	2AC2	2DB3	2DA2	2LR3	2LR2
2CT3	2DY2	2DX3	2LA2	2LS	2GS
	4DS8		2LB2		2LS
	4DX2		2LC2		4GS
	4DX3		2LO3		4LS
	4DY2		2LS2		
	4EA2-E		2LS3	2LS2	2LA2
	4EA2-M				2LB2
	4SF2	2GO2	2GS2		2LC2
	4SF3		2GS3		
	6DX2			2LS3	2LA2
	6DY2	2GO3	2GS2		2LB2
	6DY3		2GS3		2LC2
	6EA2-E				
	6EA2-M	2GS	2GS	2NO2	2DA2
	6EB2-E		2LS		2NO2
	6EB2-M		4GS		
	6EB3-E		4LS	2NO3	2NO2
	8EB2-E				2PR2
	8EB2-M	2L02	2LS2		
	8EC2		2LS3	2TF3	2TF2
	9DY2				
	9DY3	2L03	2LS2		
	9EA2		2LS3		
	9EA3				

ACCESS SERVICE15. 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)

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
4AB2	2AC2				
4AB2					
4AC2					
4SF2					
4AB3	2AC2				
4AC2					
4SF2					
4AC2	2AC2				
4AC2					
		4DS8-	2AC2	4DS8-	4DG2
			2DA2		4LR2
			2DY2		4LS2
			2GO2		4NO2
4DA2	4DA2		2GO3		4PR2
4DB2	2DA2			2GS2	4RV2-T
	2NO2		2GS3		4SF2
	2PR2		2LA2		4SF3
	4DA2		2LB2		4TF2
	4DB2		2LC2		6DA2
	4NO2		2LO2		6DY2
	4PR2		2LO3		6DY3
	6DA2		2LR2		6EA2-E
			2LS2		6EA2-M
			2LS3		6EB2-E
4DD3	2DE2		2NO2		6EB2-M
	4DE2		2PR2		6GS2
			2RV2-T		6LS2
			2TF2		8EB2-E
			4AC2		8EB2-M
			4DA2		9DY2
			4DE2		9DY3
			4DX2		9EA2
			4DX3		9EA3
			4DY2		
			4EA2-E		
			4EA2-M		

ACCESS SERVICE15. 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)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4DX2	2DY2	4DX2	8EB2-E	4DX3	6DY2
	2LA2		8EB2-M		6DY3
	2LB2		9DY2		6EA2-E
	2LC2		9DY3		6EA2-M
	2LO3		9EA2		6EB2-E
	2LS2		9EA3		6EB2-M
	2LS3				6LS2
	2RV2-T	4DX3	2DY2	4DY2	8EB2-E
	4DX2		2LA2		8EB2-M
	4DY2		2LB2		9DY2
	4EA2-E		2LC2		9DY3
	4EA2-M		2LO3		9EA2
	4LS2		2LS2		9EA3
	4RV2-T		2LS3		
	4SF2		2RV2-T		2DY2
	4SF3		4DX2		4DY2
	6DY2		4DX3		
	6DY3		4DY2		
	6EA2-E		4EA2-E		
	6EA2-M		4EA2-M		
	6EB2-E		4LS2		
	6EB2-M		4RV2-T		
	6LS2		4SF2		
			4SF3		

ACCESS SERVICE15. 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)

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
4EA2-E	2DY2	4EA3-E	2DY2	4GO2	2GO2
	4DY2		4DY2		2GO3
	4EA2-E		4EA2-E		2GS2
	4EA2-M		4EA2-M		2GS3
	4SF2		4SF2		4GS2
	6DY2		6DY2		4SF2
	6DY3		6DY3		6GS2
	6EB2-E		6EA2-E	4GO3	
	6EB2-M		6EA2-M		2GO2
	8EB2-E		6EB2-E		2GS2
	8EB2-M		6EB2-M		2GS3
	9DY2		8EB2-E		4GS2
	9DY3		8EB2-M		4SF2
4EA2-M			9DY2		6GS2
	2DY2		9DY3	4GS	
	4DY2		9EA2		
	4EA2-M		9EA3		2GS
	4SF2				2LS
	6DY2				4GS
	6DY3				4LS
	6EB2-E				
	6EB2-M				
	8EB2-E				
	8EB2-M				
	9DY2				
	9DY3				

ACCESS SERVICE15. 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)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4LO2	2LS2	4LS3	2LA2	4SF2	2LO3
	2LS3		2LB2		2LR2
	4LS2		2LC2		2LS2
	4SF2		2LO2		2LS3
	6LS2		2LO3		2RV2-T
4LO3	2LS2	4NO2	4SF2	4SF3	4AC2
			2DA2		4DY2
			2DE2		4LS2
			2NO2		4RV2-T
			4DA2		4SF2
4LR2	2LR2	4RV2-0	4DE2		6DY2
			4NO2		6DY3
			6DA2		6GS2
			2RV2-T		9DY2
			4RV2-T		9DY3
4LR3	4LR2	4SF2	4SF2	4SF3	2DY2
					2GO3
					2GS2
4LS	2GS	4SF2			2GS3
			2AC2		2LA2
			2DY2		2LB2
			2GS2		2LC2
			2GS3		2LO3
4LS2	2LA2		2LA2		2LR2
			2LB2		
			2LC2		
			2LO2		
			2LO3		

ACCESS SERVICE15. 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)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4SF3	2LS2	6DA	4DA2	6DY32	DY2
	2LS3		6DA2		4DY2
	2RV2-T	6DX2	2DY2	6EA2-E	6DY2
	4DY2				6DY3
	4EA2-E				2AC2
	4EA2-M				
	4GS2			6EA2-E	2DY2
	4LR2				
	4LS2				2LA2
	4RV2-T				2LB2
	4SF2				2LC2
	4SF3				2LO3
	6DY2				2LS2
	6DY3				2LS3
	6EB2-E				2RV2-T
	6EB2-M				4AC2
	6GS2				4DY2
	6LS2				4EA2-E
	9DY2				4EA2-M
	9DY3				4LS2
	9EA2				4RV2-T
	9EA3				4SF2
4TF2	2TF2 4TF2	6DY2	2DY2		4SF3
			4DY2		6DY2
			6DY2		6DY3
					6EA2-E
					6EA2-M

ACCESS SERVICE15. 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)

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
6EA2-E	6EB2-E 6EB2-M 6LS2 8EB2-E 8EB2-M 9DY2 9DY38	6EA2-M	6DY2 6DY3 6EA2-M 6EB2-E 6EB2-M 6LS2 EB2-E 8EB2-M 9DY2 9DY3	6EB3-E	2DY2 4DY2 4EA2-E 4EA2-M 4SF2 6DY2 6DY3 6EA2-E 6EA2-M 8EB2-E 8EB2-M 9DY2 9DY3 9EA2 9EA3
6EA2-M	2AC2 2DY2 2LA2 2LB2 2LC2 2LO3 2LS2 2LS3 2RV2-T 4AC2 4DY2 4EA2-E 4EA2-M 4LS2 4RV2-T 4SF2 4SF3	6EB2-E	2DY2 4DY2 4SF2 6DY2 6DY3 6EB2-E 6EB2-M 9DY2 9DY3	6EX2-A	2GS2 2GS3 2LS2 2LS3 4GS2 4LS2 4SF2 6GS2 6LS2
		6EB2-M	2DY2 4DY2 4SF2 6DY2 6DY3 6EB2-M 9DY2 9DY3		

ACCESS SERVICE15. 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)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
6EX2-B	2GO3	8EB2-E	2AC2	8EB2-M	2AC2
	2LA2		2DY2		2DY2
	2LB2		2LA2		2LA2
	2LC2		2LB2		2LB2
	2LO2		2LC2		2LC2
	2LO3		2LO3		2LO3
	2LR2		2LS2		2LS2
	4LR2		2LS3		2LS3
	4SF2		2RV2-T		2RV2-T
			4AC2		4AC2
6GO2	2GO2		4DY2		4DY2
	2GS2		4LS2		4LS2
	2GS3		4RV2-T		4RV2-T
	4GS2		4SF2		4SF2
	4SF2		4SF3		4SF3
	6GS2		6DY2		6DY2
6LO2	2LS2		6DY3		6DY3
	2LS3		6EB2-E		6EB2-E
	4LS2		6EB2-M		6EB2-M
	4SF2		6LS2		6LS2
	6LS2		8EB2-E		8EB2-M
6LS2			8EB2-M		9DY2
	2LA2		9DY2		9DY3
	2LB2		9DY3		
	2LC2				
	2LO2				
	2LO3				
	4SF2				

ACCESS SERVICE15 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)

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
8EC2	2DY2	9DY2	2DY2	9EA3	2DY2
	4DY2		4DY2		4DY2
	4EA2-E		6DY2		4EA2-E
	4EA2-M		6DY3		4EA2-M
	4SF2		9DY2		6DY2
	6DY2				6DY3
	6DY3	9DY3	2DY2		6EA2-E
	6EA2-E		4DY2		6EA2-M
	6EA2-M		6DY2		6EB2-E
	6EB2-E		6DY3		6EB2-M
	6EB2-M		9DY2		8EB2-E
	8EB2-E		9DY3		8EB2-M
	8EB2-M				9DY2
	9DY2	9EA2	2DY2		9DY3
	9DY3		4DY2		9EA3
	9EA2		4EA2-E		
	9EA3		4EA2-M		
			6DY2		
			6DY3		
			6EA2-E		
			6EA2-M		
			6EB2-E		
			6EB2-M		
			8EB2-E		
			8EB2-M		
			9DY2		
			9DY3		
			9EA2		
			9EA3		

ACCESS SERVICE15. 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

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
2PG2-1	2PG1-1 2PG2-1	4DS8-15E	2PG1-3 2PG2-3
2PG2-3	2PG1-3 2PG2-3	4DS8-15F	2PG1-5 2PG2-5
2PG2-5	2PG1-5 2PG2-5	4DS8-15G	2PG1-8 2PG2-8
2PG2-8	2PG1-8 2PG2-8	4DA8-15H	2PG1-1 2PG2-1

ACCESS SERVICE15. 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

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
2TV6-1	4TV6-15 4TV7-15	4TV7-5	4TV6-5 4TV7-5
2TV6-2	6TV6-15 6TV7-15	4TV7-15	4TV6-15 4TV7-15
2TV7-1	4TV6-15 4TV7-15	6TV6-5	6TV6-5 6TV7-5
2TV7-2	6TV6-15 6TV7-15	6TV6-15	6TV6-15 6TV7-15
4TV6-5	4TV6-5 4TV7-5	6TV7-5	6TV6-5 6TV7-5
4TV6-15	4TV6-15 4TV7-15	6TV7-15	6TV6-15 6TV7-15

ACCESS SERVICE15. 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)(6) Digital Data

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4DS8-15	4DS8-15+	4DU5-24	4DU5-24	6DU5-24	6DU5-24
4DU5-24		4DU5-48	4DU5-48	6DU5-48	6DU5-48
4DU5-56		4DU5-96	4DU5-96	6DU5-56	6DU5-56
6DU5-24		6DU5-48	4DU8-56	4DU5-56	6DU5-96
6DU5-96					

+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company hub.

ACCESS SERVICE15. 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

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
4DS0-63	4DS0-63 4DU8-A,B or C 6DU8-A,B or C	4DS8-15J	4DU8-A 6DU8-A
4DS6-27	4DS6-27 4DU8-A,B or C 6DU8-A,B or C	4DS8-15K	4DU8-B 4DU8-C 6DU8-B 6DU8-C
4DS6-44	4DS6-44 4DU8-A,B or C 6DU8-A,B or C	4DS8-31	4DS8-31 4DU8-A,B or C 6DU8-A,B or C
4DS8-15	4DS8-15+ 4DU8-B 6DU8-8	4DU8-A,B or C	4DU8-A,B or C

(8) Synchronous Optical Channel Service

<u>Compatible</u>	<u>CIs</u>	<u>Compatible</u>	<u>CIs</u>
4DS9-1S	4DU9-1S	02S0F-A	02S0F-A
4DS9-1K	4DU9-1K	02S0F-B	02S0F-B
		02S0F-C	02S0F-C
		02S0F-D	02S0F-D
		02S0F-E	02S0F-E
		02S0F-F	02S0F-F

+ Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.

ACCESS SERVICE16. Public Packet Data Network

Public Packet Data Networks utilize separate data networks, comprised of switching and transmission facilities. The networks provide for the transfer of data provided by a customer in a frame format. The data is separated into discrete segments for transmission through the public packet data network.

The Telephone Company does not provide wireline broadband Internet access transmission on a common carrier basis. The Telephone Company provides wireline broadband Internet access transmission on a non-common-carrier basis. Contact the Telephone Company for information on this service.

(N)
|
(N)

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service(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 end user customer premises equipment for the purpose of connecting to an access customer's interstate network. 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 American National Standards Institute and Committee Consultant de International Telegraphique et Telephonique (CCITT) standards.

FRAS permits customers to share network bandwidth for data transmissions.

Rates and charges for FRAS are set forth in 17.4 following. The application of rates for FRAS is described in 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.

ACCESS SERVICE16. 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 service includes: the End User Port, either Standard or Channelized, (also referred to as the User Network Interface (UNI)) connection, the Access Customer Port (also referred to as the Network-to-Network interface (NNI)) connection, and Permanent Virtual Connections (PVC) which have associated Committed Information Rates (CIRs). A special access facility (ordered out of Section 7 preceding) is used to connect to the frame relay switch. In addition to the foregoing services, the Telephone Company may also provide Frame Relay Access Connection arrangements described at Section 16.1.1(E) following, and Frame Relay Inter-Network Connection arrangements described at Section 16.1.1(F) following.

The Standard End User Port connection 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 may be available at speeds of 56.0 kbps, 64.0 kbps, 1.544 Mbps, or 44.736 Mbps. The Channelized End User Port allows an end user to purchase FRAS at speeds of 56.0/64.0 kbps expandable, in addition to speeds greater than 64.0 kbps and up to 1.544 Mbps. Each End User Port connection requires the identification of a corresponding terminating port connection(s).

The Access Customer Port connection connects the telephone company frame relay switch and the access customer's network. The facility connecting an access customer network to the telephone company frame relay switch may be offered at 1.544 Mbps or 44.736 Mbps as indicated in the Telephone Company's FRAS rates at Section 17.4.8 following.

Connections are provided via Channel Terminations (see Section 7 Special Access Digital Data and High Capacity Services preceding). All regulations, rates and charges as specified in Section 7 will apply in addition to the rates and charges associated with FRAS.

All End User Port connections must be in conformance with American National Standards Institute (ANSI) standards T1.606-1990, T1.606 Addendum 1-1991, T1.606a-1992, T1.617, Annex D-1992. All Access Customer Port connections must be in conformance with ANSI standards T1.606b-1993 and Bellcore Technical Reference TR-TSV-001370, Issued: July 20, 1993.

ACCESS SERVICE16. 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)

PVCs 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 connection) are connected electronically to form a PVC.

There are two types of PVCs available. The standard PVC establishes a communications path between two ports on the same frame relay switch. The extended PVC establishes a communications path between two ports on two interconnected telephone company frame relay switches.

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 FRAM network commits to transfer data. Committed Information Rates provide for frame relay switch throughput at designated speeds. (See 16.1.2 (A) (3) following.) This information is required for network routing purposes.

(C) 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 port connections are required for data to be transported between customer designated premises.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.1 General (Cont'd)(C) Ordering Options and Conditions (Cont'd)

When placing an order for FRAS the customer must specify:

- The number of Permanent Virtual Connections (PVCs) required;
- the location of the ports for each PVC;
- 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.

(D) Acceptance Testing

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test at the time of installation.

(E) Service Description for Frame Relay Access Connection (FRAC)

As an alternative to providing a FRAS connection between the customer designated premises (CDP) and the frame relay switch through a combination of an End User Port and Special Access Digital Data or High Capacity transport, the Telephone Company may provide the FRAS connection by a Frame Relay Access Connection (FRAC). The FRAC combines a frame relay compatible 56.0 kbps, 64.0 kbps, 1.544 Mbps or 44.736 Mbps digital transport facility with an End User Port on a frame relay switch. The FRAC includes the Telephone

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.1 General (Cont'd)(E) Service Description for Frame Relay Access Connection (FRAC)
(Cont'd)

Company facility between the CDP and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a Telephone Company wire center equipped with a frame relay switch, and a Standard End User Port. The Standard End User Port is described at Section 16.1.1(B) preceding.

Telephone Companies offering FRAS under a FRAC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following.

(F) Service Description for Frame Relay Inter-Network Connection (FRIC)

As an alternative to providing a FRAS network to network connection between the Telephone Company's frame relay switch and the CDP through a combination of an Access Customer Port and Special Access High Capacity transport, the Telephone Company may provide the FRAS network to network connection by a Frame Relay Inter-network Connection (FRIC). The FRIC combines a frame relay compatible 1.544 Mbps or 44.736 Mbps digital transport facility with a port on a frame relay switch. The FRIC includes the Telephone Company facility between the customer designated premises (CDP) and the customer's serving wire center, the interoffice transport (if applicable) between the customer's Telephone Company serving wire center and a Telephone Company wire center equipped with a frame relay switch, and the Access Customer Port. The Access Customer Port is described at Section 16.1.1(B) preceding. The FRIC is offered at speeds of 1.544 Mbps or 44.736 Mbps.

A FRIC is not available for connection to customer frame relay networks that are not located within the Telephone Company's service area. Customers with frame relay networks located outside the Telephone Company's service area must separately order a FRAS Access Customer Port and Special Access High Capacity Channel transport in addition to any required PVC or FRAC services.

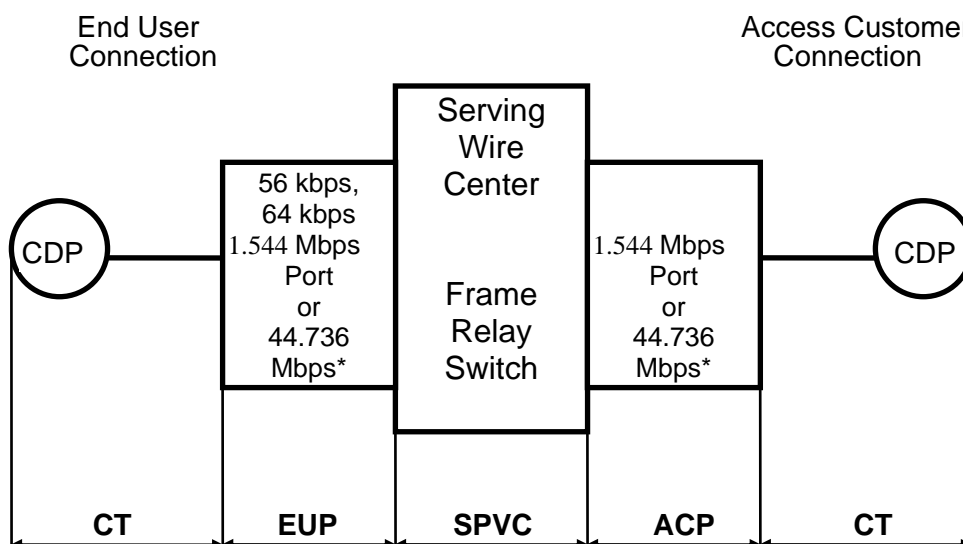
Telephone Companies offering FRAS under a FRIC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following.

ACCESS SERVICE16. 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.

(A) Rate Categories

The following diagrams depict a generic view of the components of FRAS and the manner in which the components are combined to provide Frame Relay Access Service and Interconnected Frame Relay Access Service.

Frame Relay Access Service

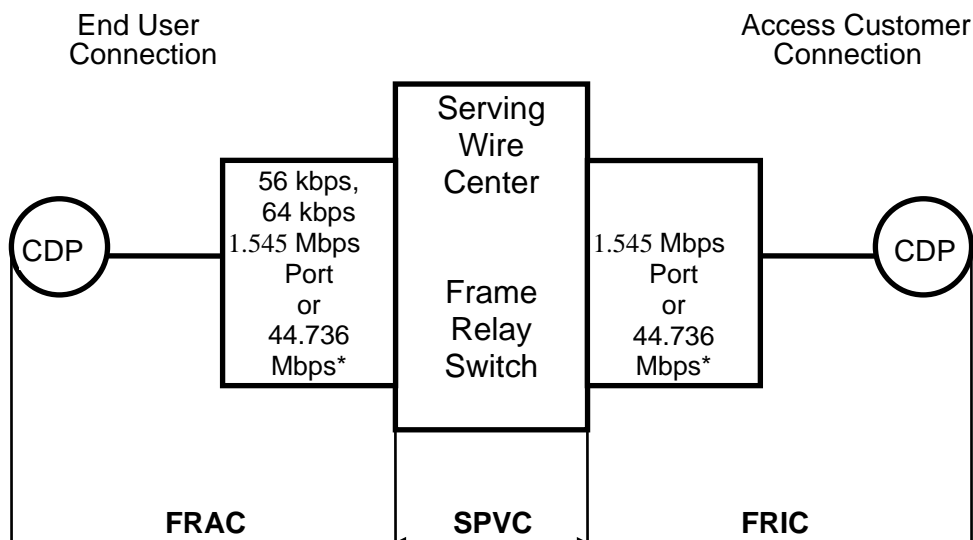
CDP - Customer Designated Premises
CT - Channel Termination
EUP - End User Port

SPVC- Standard Permanent Virtual Connection
ACP - Access Customer Port

* 44.736 Data speed availability is subject to individual Telephone Company offerings as indicated in Section 17.4.8 following.

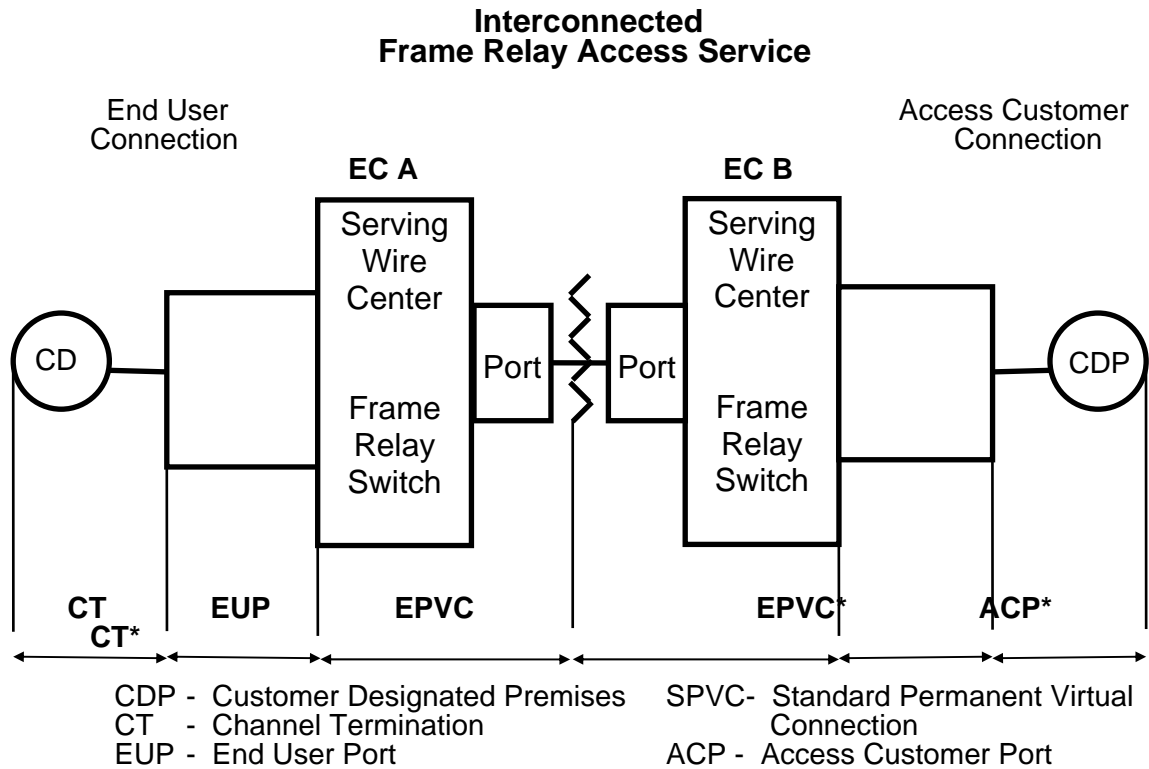
ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.2 Rate Regulations**Frame Relay Access Service**

For Telephone Companies with Frame Relay Access Connection (FRAC) and Frame Relay Inter-network Connection (FRIC) rate elements (access customer located in Telephone Company service area)



CDP - Customer Designated Premises SPVC - Standard Permanent Virtual Connection
FRAC - Frame Relay Access Connection FRIC - Frame Relay Inter-Network Connection

* 44.736 Data speed availability is subject to individual Telephone Company offerings as indicated in Section 17.4.8 following.

ACCESS SERVICE16. 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)

* The application of these charges by EC B is dependent upon EC B's access tariff.

Frame Relay Access Service is available at designated wire center locations only.

(1) End User Port - Standard

The Standard End User Port is the physical location in the telephone switching office where the special access facility of the customer connects to the FRAS Network. It receives the data frame from the end user customer's Local Area Network or other compatible CPE device and verifies that the end user connection and the corresponding access customer connection are valid before relaying the frame to the destination end point.

ACCESS SERVICE16. 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) End User Port - Standard (Cont'd)

The Standard End User Port consists of either a 56.0 kbps, 64.0 kbps, or a 1.544 Mbps port interface connection. 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. (See 7.9 and 7.10 preceding.) When a term discount is applied to a special access DS1 facility connecting to a 1.544 port on a frame relay switch, the discount on the port will be equivalent to the discount on the special access DS1 facility. Section 7.2.8(A) preceding specifies the conditions under which a term discount is applicable.

(2) End User Port – Channelized

The Channelized End User Port allows an end user to purchase Frame Relay Access Service at speeds of 56/64 expandable, in addition to speeds greater than 64 kbps and up to 1.544 Mbps. Full DS1 connectivity between the customer designated premises (CDP) and the frame relay switch is required. End users must purchase a dedicated DS1 special access facility from their CDP to a Digital Access Cross-Connect System (DACS) at their serving wire center to access the channelized connection. The Channelized End User Port configuration connects the DACS located at the end user's serving wire center with a DS1 port on the Frame Relay Switch. The channelized DS1 facility from the end user's serving wire center to the frame relay switch is a direct connection between the frame relay switch and the serving wire center DACS and is available only for the provisioning of frame relay service.

End user customers can purchase a non-expandable Channelized End User Port available at speeds of 56 and 64 kbps. The end user must purchase a dedicated 56/64 kbps loop to a DS1 to a voice multiplexor at the serving wire center for each 56/64 kbps channelized port connection.

The Channelized End User Port element is available only for use with Frame Relay Access Service and where sufficient facilities exist to provide the service. In addition, pricing and provisioning of frame relay services provided jointly with other companies will be dependent upon other company's DS1 prices and their agreement to provide channelized transport in their or other companies operating areas.

ACCESS SERVICE16. 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) Access Customer Port

The Access Customer Port is the physical location in the telephone company switching offices where the access customer's special access 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 Access Customer Port is offered at a speed of 1.544 Mbps. 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. (See 7.9 and 7.10 preceding.) Section 7.2.8(A) preceding specifies the conditions under which a term discount is applicable.

(4) Permanent Virtual Connection (PVC)

A PVC is a software defined communications path between two port connections within the FRAS network.

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. Transmissions at a rate above the subscribed CIR will be marked "Discard Eligible" (DE), and, should network congestion occur, are subject to being dropped by the network. If CIR is set equal to zero, then all frames will be marked DE. The CIR value selected cannot exceed the maximum transportation speed of the port at either end of the PVC.

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 between the End User Port and the Access Customer Port on the same frame relay switch. The extended PVC establishes a communications path between the End User Port on a telephone company's frame relay switch and an Access Customer Port on another interconnected telephone company's frame relay switch.

ACCESS SERVICE16. 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) Frame Relay Access Connection (FRAC)

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 (CDP) 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.

One FRAC charge applies per CDP at which the FRAS connection is terminated. This applies even if the CDP and the frame relay switch are collocated in a Telephone Company building.

Telephone Companies offering FRAS under a FRAC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following. Telephone Companies offering FRAS under a FRAC arrangement will assess a single monthly FRAC charge in lieu of separate charges for a Standard End User Port charge under Section 16.1.2(A)(1) preceding and Special Access Digital Data or High Capacity Service under, respectively, Sections 7.9 and 7.10 preceding.

ACCESS SERVICE16. 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)(6) Frame Relay Inter-network Connection (FRIC)

The Frame Relay Inter-network Connection (FRIC) rate element recovers the costs associated with the communication path for a network-to-network connection between the customer designated premises (CDP) and the Telephone Company wire center equipped with a frame relay switch. The FRIC includes the physical transmission facility between the CDP 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 Access Customer Port on the CDP at which the FRAS connection is terminated. This applies even if the CDP and the frame relay switch are collocated in a Telephone Company building.

A FRIC is not available for connection to customer frame relay networks that are not located within the Telephone Company's service area. Customers with frame relay networks located outside the Telephone Company's service area must separately order a FRAS Access Customer Port and Special Access High Capacity Channel transport in addition to any required PVC or FRAC services.

Telephone Companies offering FRAS under a FRIC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following.

ACCESS SERVICE16. 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 Charges as specified in 17.4.1 following:

(a) Installation of Service

Nonrecurring charges apply for the installation of PVCs.

ACCESS SERVICE16. 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) service.

A PVC Rearrangement Charge will be applied whenever a change is made to the CIR of an existing PVC after initial port installation and/or a change is made to the termination 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.2 Rate Regulations (Cont'd)(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). The minimum period for the Frame Relay Service 1.544 Mbps port are as set forth in 2.4.2 and 5.5.1.

(D) Optional Features

The Optional Features rate category provides for optional features which may be added to FRAS in order to improve its quality or utility to meet specific communications requirements.

(1) Data Link Channel Identifiers (DLCI)

This Feature provides for the assignment of DLCIs per end user or access customer port connection. One DLCI is required per end user or access customer port. When any two DLCIs are mapped together, a PVC can be created. An initial DLCI is included with each end user or access customer port. An additional charge applies for every DLCI after the first one for each type of port.

ACCESS SERVICE16. 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 (FRAC) and Frame Relay Inter-network Connection (FRIC) charges. The End User Port, Inter-network Customer Port charges, and Permanent Virtual Connections (PVCs) 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 following.

The Term Discount Optional Rate Plan is only available for those Telephone Companies indicating the Term Discounts within their FRAS rate section in Section 17.4.8 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.

(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 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.3 Optional Rate Plans(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.

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.

(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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.3 Optional Rate Plans(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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.1 Frame Relay Access Service (Cont'd)16.1.3 Optional Rate Plans(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) where service is provided by the 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service16.2.1 General Description(A) Basic Service Description

- (1) Asymmetrical Digital Subscriber Line (ADSL) Service is an access data technology service offered at various downstream (Down) and upstream (Up) speeds. The "Up" speed represents transmission speed in kilobits per second (Kbps), from the point of demarcation at the customer's designated premises to the Telephone Company's ADSL connection point; while the "Down" speed represents transmission speed in Kbps or Mbps from the Telephone Company's ADSL connection point to the point of demarcation at the customer's designated premises. Actual speed may be affected by loop distance and other factors.
- (2) The ADSL Service may require a splitter at both the customer's designated premises and the Telephone Company's serving wire center to split the traffic between data and voice. The customer is responsible for providing and maintaining the splitter at the customer designated premises.
- (3) 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 at peak data transmission speeds of 512 kbps upstream and 1.544 Mbps downstream using the Telephone Company's existing local exchange service line. This option may be used for simultaneous voice and data communications.
 - (b) The ADSL Data-Only option provides transmission of data signals at peak transmission speeds of 512 kbps upstream and 1.544 Mbps downstream using the Telephone Company's existing local exchange copper facilities. This option does not provide the ability to transmit voice communications.

(B) Service Provisioning

ADSL Service is provisioned over existing Telephone Company copper facilities and transported to the Telephone Company's backbone network. ADSL Service provides a connection from the customer's designated location (CDL) to the ADSL Connection Point.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.1 General Description (Cont'd)(B) Service Provisioning (Cont'd)

Access from the Telephone Company's ADSL Connection Point will be provided via High Capacity Special Access Service and/or Frame Relay Access Service, where facilities permit. High Capacity Special Access Service is available in Section 7.10 preceding. Frame Relay Access Service is available in Section 16.1 preceding. If a customer utilizes Special Access Service or Frame Relay Access Service pursuant to sections 7.10 or 16.1 preceding, the associated rates and charges for such facilities shall apply in addition to the rates and charges associated with the ADSL rate element.

The Telephone Company will qualify the local exchange service loop between the customer's designated premises and the serving wire center. The purpose of qualification is to determine the availability and suitability of existing Telephone Company facilities to provide the service, and to determine if Loop Conditioning is required to support ADSL Service. The Telephone Company will not provision this service on facilities which are not suitable for ADSL.

The Telephone Company does not undertake to originate data, but offers the use of its ADSL service, where available, to customers for the purpose of transporting data originated by the customer or a third party.

All customers will be served from the nearest suitably equipped end office. Information pertaining to end offices equipped to provide ADSL Service is set forth in the National Exchange Carrier Association, Inc. (NECA) Tariff F.C.C. No. 4. ADSL Service will be provided subject to the availability and limitations of the Telephone Company wire centers and outside plant facilities. ADSL service is only available where technical capabilities permit such facility distance and type of physical plant.

(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain ADSL Service for the customer up to and including the Network Interface Device (NID) or the protector. The Telephone Company will advise the customer of the customer premises equipment (CPE) necessary to support ADSL Service that the customer will need to purchase.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.1 General Description (Cont'd)(D) Rights of The Telephone Company

ADSL Access Service will be provided over existing Telephone Company local exchange service lines. 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 ADSL Access Service when the associated local exchange service line is disconnected for any reason.

The Telephone Company will not provision ADSL service if the Telephone Company has reasonably determined that (a) it is not technically feasible over existing facilities or (b) it will cause interference problems within the Telephone Company's network or other facilities.

During the Telephone Company's network maintenance and software update period, it may be necessary to temporarily place the ADSL central office equipment out of service. The Telephone Company reserves the right to temporarily interrupt ADSL Service at other times in emergency situations.

(E) Responsibility of the Customer

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 telecommunications service provider with which the customer's ADSL Access Service will interconnect).

The customer is responsible for providing compatible customer premises equipment (CPE) that is used for connection to ADSL Service.

The ISP/NSP customer is responsible for providing the Telephone Company with the necessary information (e.g., Data Link Connection Identifier(s), and/or Internet Protocol) to provision the ADSL Service.

The ISP/NSP customer will obtain the appropriate authorization to allow the Telephone Company to provision ADSL Service over the customer's end user's existing telephone exchange service line.

Where required, the ISP/NSP customer will be responsible for obtaining permission from its subscriber(s) for the Telephone Company's agents or employees to enter the customer's Designated premises at a mutually agreed upon time for the purpose of installing, inspecting, repairing, or upon termination of the service, removing the service components of the Telephone Company.

The ISP/NSP 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.2 Rate Regulations(A) Rate Elements

There are three types of rates and charges applicable to ADSL Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge.

The monthly rate applies each month or fraction thereof for each local exchange service line equipped with ADSL Service.

A nonrecurring charge applies per local exchange service line for the installation of ADSL Service.

A DSL Network Reconfiguration Charge applies when the ADSL Access Service customer's telecommunications service provider requests the Telephone Company to modify the Telephone Company's network to: 1) accommodate a change in the ADSL Access Service customer's existing IP address or 2) limit the data speed delivered over the customer's existing ADSL Access Service line. A nonrecurring charge applies for each request per ADSL Access Service line. The Telephone Company will bill the DSL Network Reconfiguration Charge to the ADSL Access Service customer's telecommunications service provider.

All changes to existing ADSL Access Service (including but not limited to change of telecommunications service provider), other than changes involving DSL network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per ADSL Access Service line for this work activity.

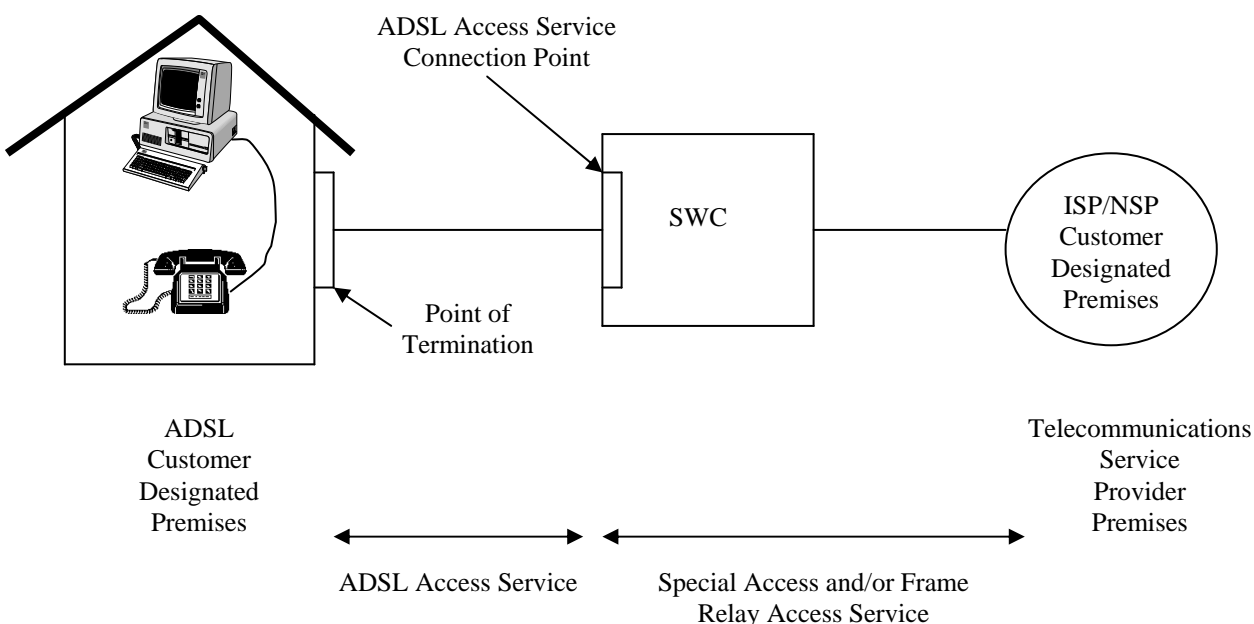
Rates and charges for ADSL Service are set forth in 17.4.8 following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.2 Rate Regulations (Cont'd)(B) Rate Application

ADSL Service is based on differing volume levels of ADSL connections per Section 17.4.8, following.

The rates applicable to ADSL Service provided under an ADSL Term and Volume Plan (ADSL-TVP) arrangement are specified in 17.4.8, following.

The following diagram depicts a typical ADSL Service configuration:

(C) Minimum Period

The minimum period for which ADSL Access Service is provided to a customer and for which charges are applicable is one month.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.2 Rate Regulations (Cont'd)(D) 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's 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.

(E) Term and Volume Plan (TVP)(1) Description

The terms and conditions specified herein are applicable to ADSL Service and are in addition to other regulations as specified in this tariff.

The ADSL Term and Volume Plan (TVP) will allow customers discounted access rates based upon the volume and term commitment. Rates will be based upon the TVP selected by the customer.

Term plans of one (1), two (2) and three (3) years may be available to all customers at applicable rates set forth in the tariff regardless of when the subscription is made for an ADSL Service TVP arrangement. The customer must designate on the order the type of payment plan selected.

The minimum volume commitment of the TVP selected must be met within twelve (12) months after the TVP is initiated.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.2 Rate Regulations (Cont'd)(E) Term and Volume Plan (TVP) (Cont'd)(2) Rate Application

Upon expiration of a TVP period, the customer may choose a new TVP period, convert to month-to-month or terminate service. The month-to-month rates will be those rates that are in effect at the time of conversion. If the customer fails to make a choice by the end of the TVP period, the ADSL Service will continue billing at the existing term and volume commitment level rates and a new TVP period will begin based on previously effective term and volume commitment. All terms and conditions, including Termination Liabilities will apply to the new TVP period.

Conversion to a month-to-month or different TVP period will require the customer to submit a change order. Conversion of existing TVP service to a different TVP period will be allowed without application of any nonrecurring charges.

(3) Changes in Length of TVP Period

The customer may elect to convert to a new TVP period subject to the following conditions:

- (a) Credit will not be given toward the new payment period for payments made under the original TVP arrangement.
- (b) Nonrecurring charges will not be reapplied for existing service(s).
- (c) If the new TVP period is shorter in length than the time remaining under the existing TVP, the change to the new TVP period constitutes a discontinuance of the existing TVP service and termination liability charges apply.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.2 Rate Regulations (Cont'd)(E) Term and Volume Plan (TVP) (Cont'd)(4) Rate Changes

The customer may terminate the TVP without penalty or liability should the rates increase during the term of the existing TVP, with the exception of rate changes that may occur as a result of FCC presubscription for rate increases.

(5) Annual Review

Each customer's TVP will be reviewed annually. The customer will be notified as to the status of the TVP if the in-service quantity of ADSL Services falls below the minimum volume commitment. An allowance of up to 3% will be considered as still having met the volume commitment. Where the customer has less than the volume commitment quantity for a specified discount, charges will be assessed.

If the total number of ADSL Services in service qualifies the customer for a different TVP rate, the customer will have the option of increasing the commitment quantity for the remainder of the plan.

(6) TVP Conditions

After enrolling in the plan, the customer may delete or add ADSL Services rated at the specified term period/threshold level rate at any time during the plan.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.2 Rate Regulations (Cont'd)(E) Term and Volume Plan (TVP) (Cont'd)(7) Shortfall Charges for Failing To Meet Commitment

At the annual review, if the total volume in service does not meet the volume commitment, a payment equal to the difference between the TVP rate and the highest rate that would have been charged for services not under the TVP plan plus 10% will be assessed. The payment will be calculated using the prorated ADSL Service aggregation quantity at the time of the review. The customer may choose to increase the volume commitment within 30 days after enrollment to the TVP and continue the TVP arrangement or choose to be billed on a going forward basis under either a different TVP or under the month-to-month rates. If after 30 days, the TVP volume levels are not met, the TVP will be automatically changed to the standard month-to-month rates.

(8) Termination Liability

When a TVP service is discontinued prior to the end of the commitment period, termination liability charges will apply, as set forth below, based on the remainder of the TVP period in effect at the time of disconnect.

One Year TVP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first year's recurring charges.

Two Year TVP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first and second year's recurring charges.

Three Year TVP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first, second and third year's recurring charges.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.3 ADSL Service Discount Pricing Arrangement(A) General

The telecommunications services offered under an ADSL Access Services Discount Pricing Arrangement (DPA) are provided at wholesale rates to the customer under the conditions listed below.

- (1) The customer purchases ADSL Service as described in Section 6.2.1, 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).
- (2) In addition to the obligations specified in Section 16.2.1(E), preceding, the customer assumes the following obligations:
 - (a) 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.
 - (b) The customer will submit orders for ADSL Access Service to the Telephone Company in a format and manner designated by the Telephone Company.
 - (c) The customer will obtain the appropriate authorization to allow the Telephone Company to provision ADSL Access Service over the customer's end user's existing telephone exchange service line.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd)(A) General (Cont'd)

When the customer purchases ADSL Service under the ADSL Service DPA, the rates and charges specified for a Telephone Company for the ADSL Service DPA will apply. The ADSL Service DPA is only available from those Telephone Companies with rates indicated for ADSL Service DPA in Section 17.4.8 following.

Services provided under the ADSL Service DPA are available under a Monthly Plan at the rates and charges specified in Section 17.4.8, following, or under an ADSL Service DPA Term Plan described in Section 16.2.3(B) following, at the rates and charges specified in Section 17.4.8, following.)

A monthly charge applies for each ADSL Service line covered under the DPA. A nonrecurring charge applies for the installation of each ADSL Service line under the DPA. A DSL Network Reconfiguration Charge as described at Section 16.2.2(a) preceding would apply for each requested reconfiguration for each ADSL Service line covered under the DPA.

The Telephone Company will bill the customer an Access Order Charge, per order, to convert an in-service ADSL Service line originally purchased under the provisions specified in Section 16.2.2, preceding, to the DSL Access Services DPA, provided the customer obtains written authorization from its end user authorizing such conversion, where necessary. Per-line nonrecurring charges specified in Section 17.4.8, following, do not apply to conversion of in-service ADSL lines to a DPA.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd)(B) ADSL Service DPA Term Plan(1) Description

The ADSL Service DPA Term Plan provides the customer with reduced rates based on the length of the customer's term commitment and its selected pricing option. The ADSL Service DPA Term Plan is available for the terms and pricing options specified in Section 17.4.8. The Telephone Company will establish an ADSL Service DPA Term Plan for each Serving Wire Center (SWC) based on the customer's order notifying the Telephone Company which ADSL-equipped SWC(s) the customer wants included in the plan(s) and its selected term commitment and pricing option for each SWC. An Access Order Charge applies for each order to establish the initial ADSL Service DPA Term Plan(s).

When the customer subscribes to an ADSL Service DPA Term Plan, all in-service ADSL Access Service lines provided out of and subsequently installed at the included SWC will be billed the rates and charges specified in Section 17.4.8, following, for the length of the term commitment. In addition to the applicable ADSL Line Charges, the customer will be billed a recurring monthly ADSL Service DPA Term Plan Charge for each SWC included in an ADSL Service DPA Term Plan, as specified in Section 17.4.8, following, based on its selected pricing option.

If the Telephone Company decreases the rates specified in Section 17.4.8, following, during the term of a commitment period, the decreased rates will automatically be applied for the remainder of the current commitment period.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd)(B) ADSL Service DPA Term Plan (Cont'd)(1) Description (Cont'd)

At the end of the ADSL Service DPA Term Plan, the customer may elect to establish a new ADSL Service DPA Term Plan commitment, convert to the rates available under the Monthly Plan, or discontinue service. If the customer does not make an election by the end of the ADSL Service DPA Term Plan, the rates for all ADSL Service lines will automatically be converted to the rates available under the Monthly Plan specified in Section 17.4.8, following. An Access Order Charge will not apply to any election made by the customer at the end of the ADSL Service DPA Term Plan.

An ADSL Service DPA Term Plan is subject to payment for early termination as described in Section 16.2.3(B)(4), following.

(2) Upgrades in ADSL Service DPA Term Plan

A customer may terminate an ADSL Service DPA Term Plan without the application of a termination liability charge when the customer replaces its original ADSL Service DPA Term Plan commitment with a new ADSL Service DPA Term Plan commitment provided the length and pricing option of the new ADSL Service DPA Term Plan commitment is equal to or greater than the length and pricing option of the original ADSL Service DPA Term Plan commitment. An Access Order Charge will not apply when the customer replaces an existing ADSL Service DPA Term Plan with a new ADSL Service DPA Term Plan commitment under this provision.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd)(B) ADSL Service DPA Term Plan (Cont'd)3) Termination without Liability

A customer may terminate an ADSL Service DPA Term Plan without the application of a termination liability charge if the Telephone Company increases the ADSL Service DPA Term Plan monthly rates described in Section 17.4.8, 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 ADSL Service DPA Term Plan under this section; otherwise, the increased rates will apply for the remainder of the commitment period.

(4) Termination with Liability

If the customer elects to terminate its ADSL Service DPA Term Plan(s) prior to the end of the commitment period for any reason other than specified in (2) or (3), preceding, a termination liability charge will apply. For each ADSL Service DPA Term Plan terminated prior to the end of the commitment period, the Telephone Company will bill the customer a charge equal to the monthly ADSL Service DPA Term Plan Charge for its selected pricing option as specified in Section 17.4.8, following, multiplied by the number of months remaining in the commitment period.

ADSL Service DPA Monthly Plan rates as described in Section 17.4.8, following, will apply to all in-service ADSL Lines following the early termination of an ADSL Service DPA Term Plan.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.3 Symmetrical Digital Subscriber Line Access Service16.3.1 General

Symmetrical 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 copper facilities. A DSL Access Service Connection Point is an interconnection point designated by the Telephone Company that aggregates data traffic from and to Telephone Company SDSL-equipped Serving Wire Centers (SWCs). The DSL Access Service Connection Point may be located within the operating territory of the Telephone Company or in the operating territory of another telephone company, provided both telephone companies agree to such an arrangement.

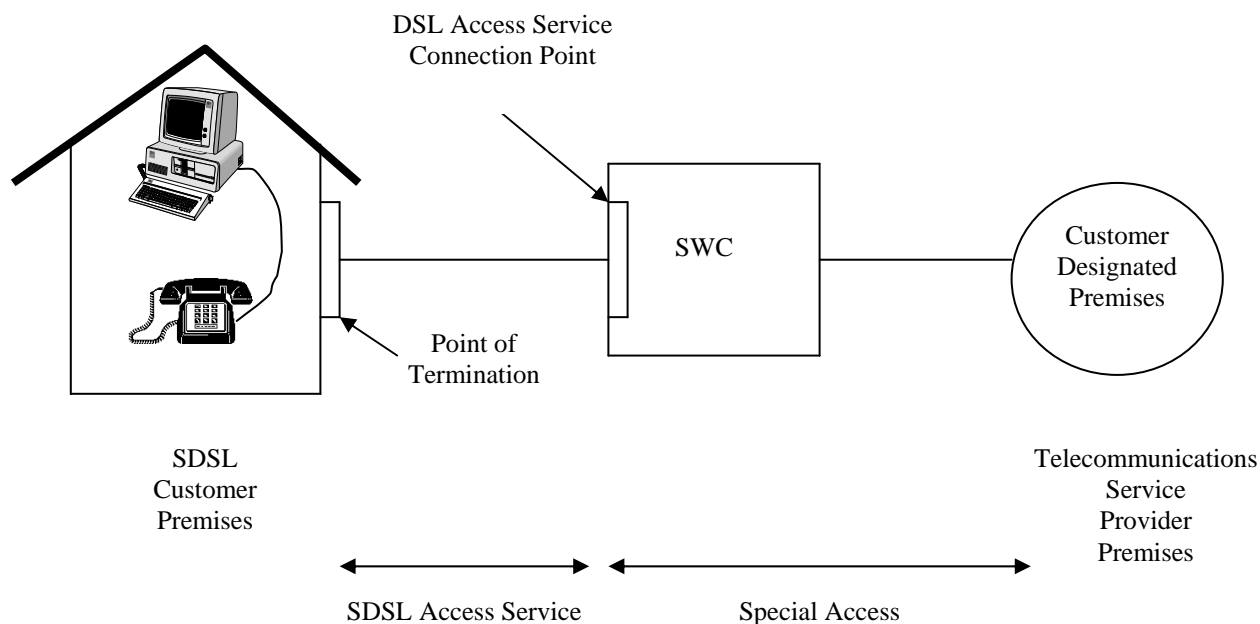
At the DSL Access Service Connection Point, the customer's SDSL Access Service must be connected to a telecommunications service provider's customer designated premise using the Telephone Company's Special Access Services when the Connection Point is located within the Telephone Company's operating territory. When the Connection Point is located in the operating territory of another telephone company, the customer's SDSL Access Service must be connected to a telecommunications service provider's customer designated premises using equivalent access services provided by that telephone company.

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 a peak data transmission speed of up to 1.544 Mbps 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 a peak transmission speed of up to 1.544 Mbps using the Telephone Company's existing local exchange copper facilities. This option does not provide the ability to transmit voice communications.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)16.3.1 General (Cont'd)

A generic view of how SDSL Access Service would be interconnected with a telecommunications service provider's network is depicted in the figure following. In this example, the customer's SDSL-equipped serving wire center is designated as a DSL Access Service Connection Point. The customer orders SDSL Access Service pursuant to the provisions specified in this section. The SDSL Access Service customer's telecommunications service provider orders Special Access Service pursuant to the provisions specified in Section 7.10 preceding to connect its customer designated premises to the DSL Access Service Connection Point.

SDSL ACCESS SERVICE

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)16.3.2 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 copper facilities, and limitations in the telecommunications service provider'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 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 and DSL Access Service Connection Points in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

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.

Rates and regulations for Special Access Service will apply for the access service(s) provided between the telecommunications service provider's customer designated premises and the DSL Access Service Connection Point, as described in Section 7.10 preceding.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)16.3.3 Undertaking of the Telephone Company

The Telephone Company will provide SDSL Access Service at the rates and charges set forth in 17.4 as follows:

- (A) The Telephone Company will determine if the associated local exchange service line or copper 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 Connection Point to the Point of Termination at the SDSL Access Service customer's premises.

16.3.4 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; customer contact name and telephone number and the contact name and telephone number of the telecommunications service provider 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) The ISP/NSP customer will obtain the appropriate authorization to allow the Telephone Company to provision SDSL Voice-Data Access Service over the customer's end user's existing telephone exchange service line.
- (D) The ISP/NSP 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)16.3.5 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 provided under tariff used in conjunction with SDSL Access Service are as specified in Section 7.10 preceding.

(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 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 the associated local exchange service line over which the SDSL Voice-Data option is provided is temporarily suspended, the SDSL Access Service and one-half of the SDSL Line Charge monthly rate will be temporarily suspended for the time period that the associated local exchange service is suspended.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)16.3.5 Rate Regulations (Cont'd)(D) Rate Categories

There are three types of rates and charges applicable to SDSL Access Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge.

The monthly rate applies each month or fraction thereof for each SDSL Voice-Data option and SDSL Data-Only option ordered by the customer.

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.

A DSL Network Reconfiguration Charge applies when the SDSL Access Service customer's telecommunications service provider requests the Telephone Company to modify the Telephone Company's network to: 1) accommodate a change in the SDSL Access Service customer's existing IP address or 2) limit the data speed delivered over the customer's existing SDSL Access Service line. A nonrecurring charge applies for each request per SDSL Access Service line. The Telephone Company will bill the DSL Network Reconfiguration Charge to the SDSL Access Service customer's telecommunications service provider.

All changes to existing SDSL Access Service (including but not limited to change of service option, change of service level speed and/or change of telecommunications service provider), other than changes involving DSL network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per SDSL Access Service line for this work activity.

Rates and charges for SDSL Access Service are as set forth in 17.4.8 following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service16.4.1 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.

16.4.2 Service Description

ETS is provided using a combination of ETS Channel Terminations (ETS CTs), ETS Ports, ETS Ethernet Virtual Connections (ETS EVCs), and ETS Extended Ethernet Virtual Connections (ETS E-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. An ETS Port is required to provide the interface in to 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.2 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, following. The application of rates and charges for ETS is described later in this section.

16.4.3 Obligation of the Customer

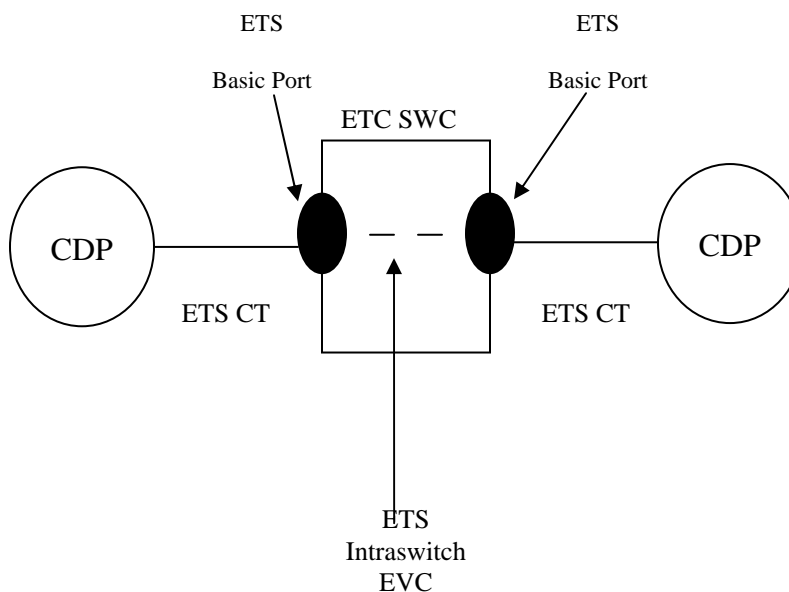
In addition to the regulations described in other sections of this tariff, the following provisions apply to ETS:

- (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 customer premises equipment (CPE), which is compatible with ETS and complies with the standards specified in Technical Reference IEEE Standard 802.3, Part 3.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations

This section contains the regulations governing the rates and charges that apply for ETS. Regulations govern in 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.

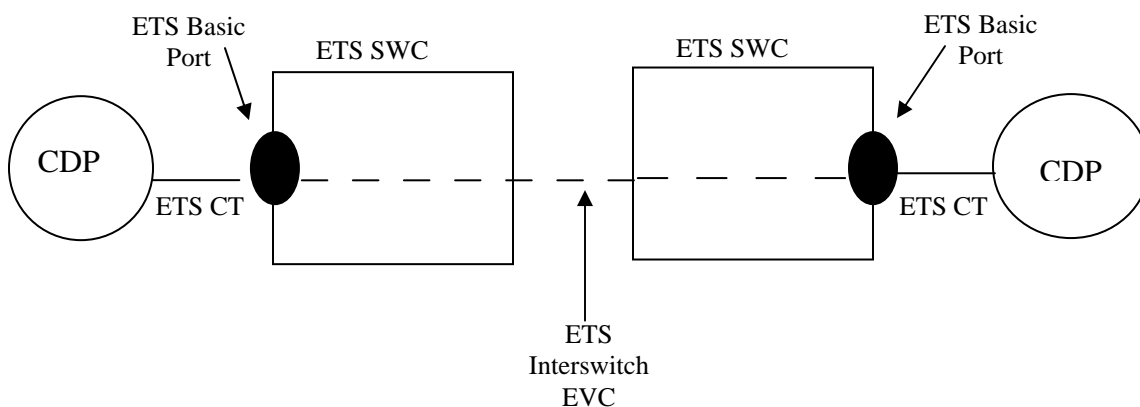
Figure 1



ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)

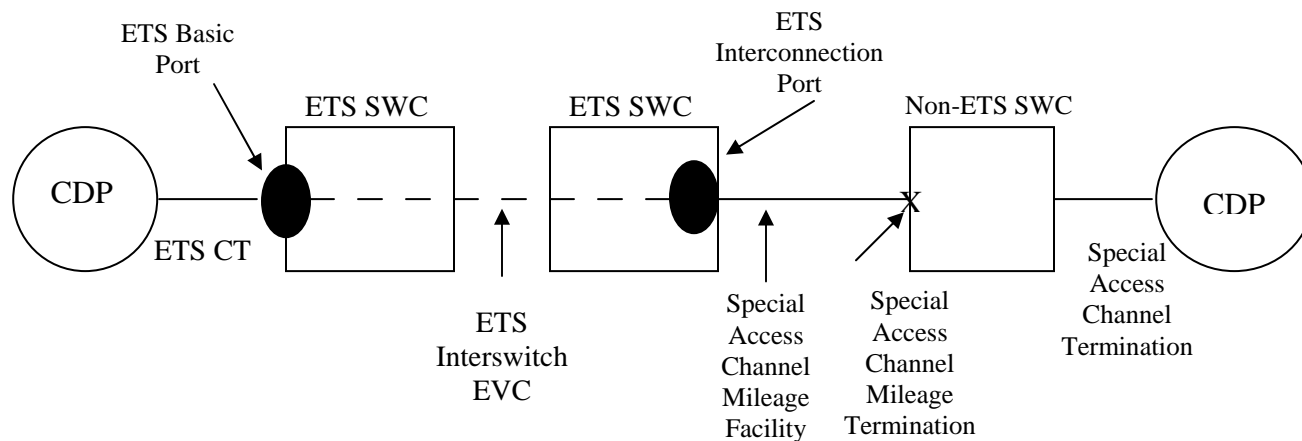
In the second figure, the ETS customer's CDPs are served by different ETS SWCs. ETS EVCs ordered between two ETS Ports in different SWCs are classified as ETS Interswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

Figure 2



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.

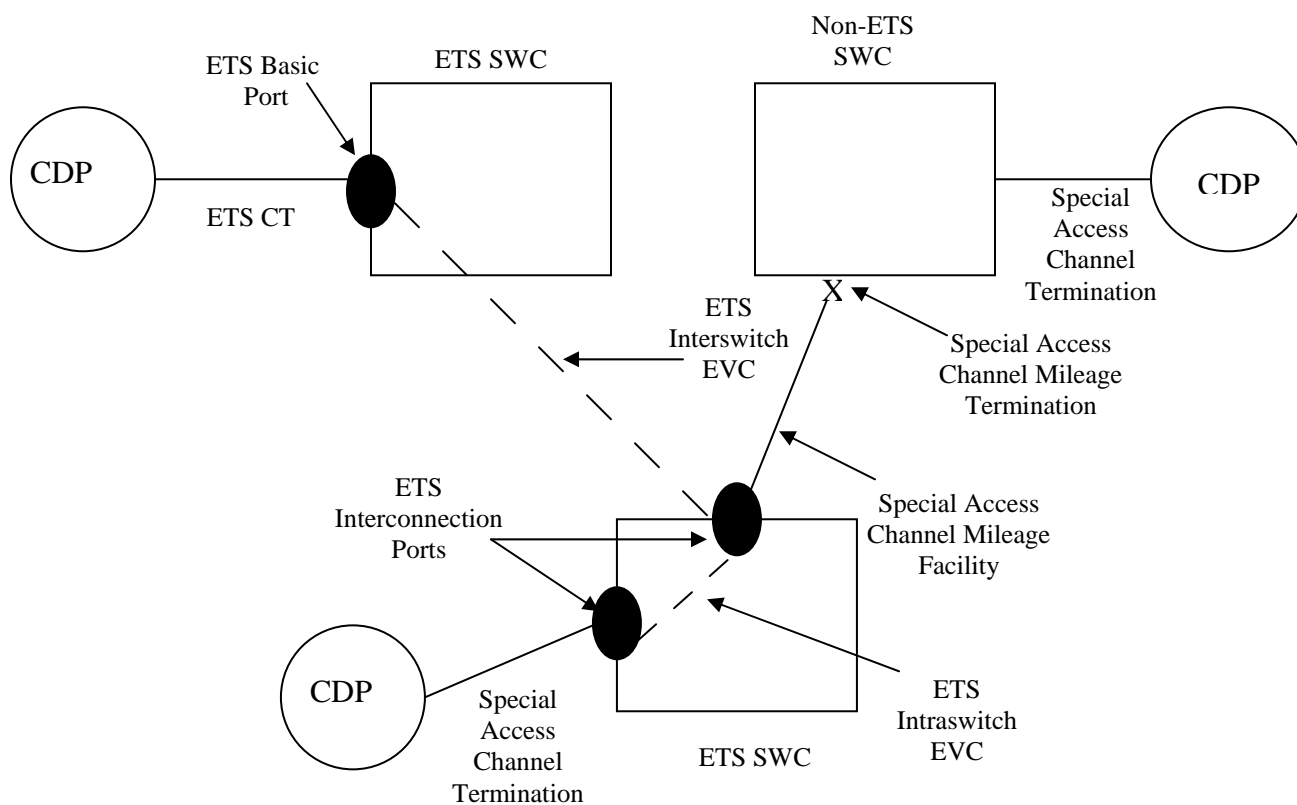
Figure 3



ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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.

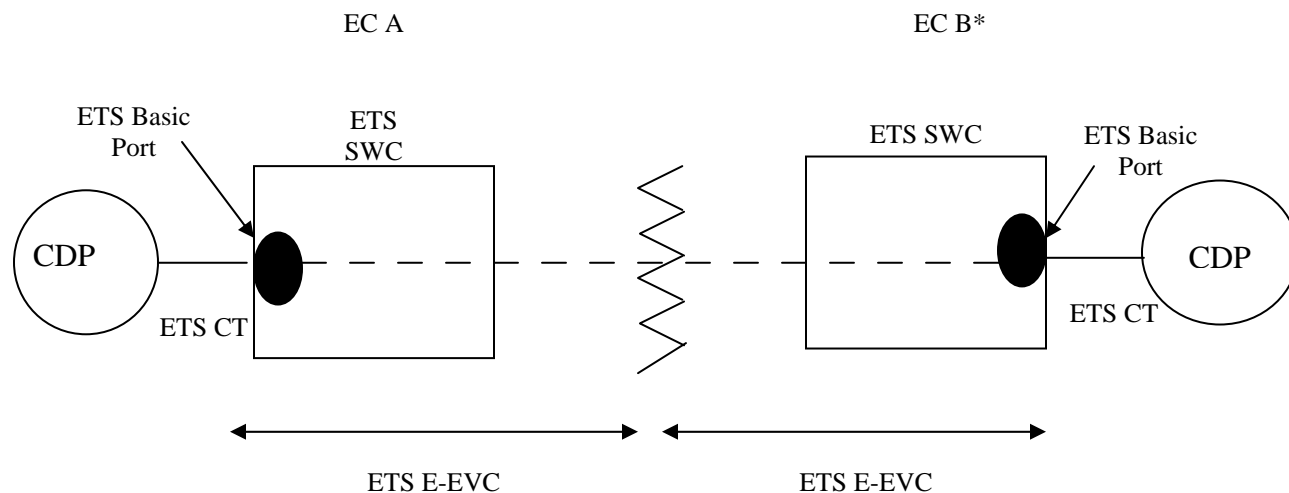
Figure 4



ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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. The application of rates by the adjacent telephone company will be based on the access tariff of the adjacent company.

Figure 5

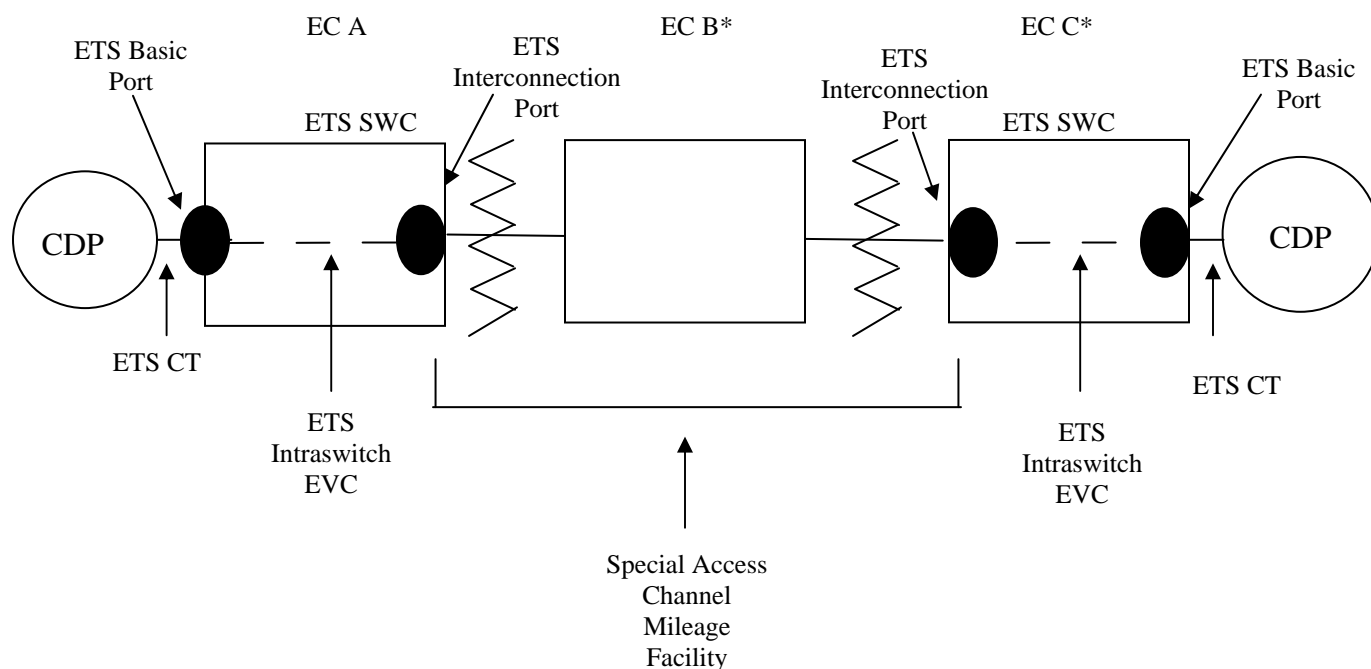


* The application of charges for EC B will depend on its access tariff.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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. 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



* The application of charges for EC B and C will depend on their respective access tariffs.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)

The various ETS Service Elements are described below:

(A) Rate Categories(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.

Monthly and nonrecurring charges apply for each ETS CT ordered. The monthly rate is 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, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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 or one optional DSL Access Service Connection function. An ETS Basic Port may be associated with more than one ETS EVC or ETS E-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.

- (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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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 or one optional DSL Access Service Connection function. An ETS Interconnection Port may be associated with more than one ETS EVC or ETS E-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.

Monthly and nonrecurring charges apply for each ETS Port ordered. The monthly recurring charge is determined by the capacity and type of ETS Port ordered. Rates and charges are specified in Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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.

Monthly and nonrecurring charges apply for each ETS EVC ordered. The monthly recurring charge is 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, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(4) ETS Extended Ethernet Virtual Connections
(ETS 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 bps, 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.

Monthly and nonrecurring charges apply for each ETS E-EVC ordered. The ETS E-EVC monthly recurring charge is based upon the bandwidth capacity of the ETS E-EVC ordered. Rates and charges are specified in Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions(a) DSL Access Service Connections

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, 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 and/or wireline broadband Internet transmission service data traffic from and transmit ADSL 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.

As described in Section 8.1, 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.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connections (Cont'd)

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, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions (Cont'd)(a) DSL Access Service Connections (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 Multi-Media 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 M-VCCs do not increase the bandwidth capacity of ETS CTs, ETS Ports, ETS EVCs and/or Special Access Service Channel Terminations used by the ETS customer to connect its CDP to the DSL Access Service Connection Point SWC.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions (Cont'd)(a) DSL Access Service Connections (Cont'd)

Transmission speed across the ETS MM-VCC is not guaranteed and maybe 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions (Cont'd)(a) DSL Access Service Connections (Cont'd)

In the above example, the Telephone Company would bill the ETS customer for one ETS MM-VCC nonrecurring charge specified in Section 17, following, and one Access Order Charge specified in Section 17.4.1(A), following. The monthly recurring rate for this ETS MM-VCC would be calculated at four times the 10 Mbps increment rate specified in Section 17, following.

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 following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions (Cont'd)(a) DSL Access Service Connections (Cont'd)

The Telephone Company will waive the ETS MM-VCC monthly rate specified in Section 17, following, 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 specified 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 specified in Section 17, following, will not apply. In lieu of such charge, the ETS Design Change Charge will apply, as specified in Section 17, 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 non recurring charge nor the ETS Design Change Charge will apply.

(b) VLAN Service

In connection with ETS, the Telephone Company offers Virtual Local Area Network (VLAN) service through use of Virtual Private Networks (VPN) functions.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions (Cont'd)(b) VLAN Service (Cont'd)

A virtual LAN, commonly known as a VLAN, is a group of hosts with a common set of requirements that communicate as if they were attached to the same broadcast domain, regardless of their physical location. A VLAN has the same attributes as a physical LAN, but it allows for end stations to be grouped together even if they are not located on the same network switch. Network reconfiguration can be done through software instead of physically relocating devices.

Customers subscribing to a VLAN arrangement may order configuration by the Company of VLAN service through use of ETS with the VLAN Aggregation feature. VLAN Aggregation provides multiple LAN connectivity across a common physical connection through use of Virtual Private Network (VPN) functions. This feature supports customer aggregation of traffic from multiple remote customer locations. This aggregated traffic can be transported back to a central location and across a common ETS Service interface. VLAN Aggregation utilizes IEEE 802.1Q VLAN Tagging procedures. There are two charges associated with VLAN provisioning, a VLAN Service Establishment Charge and a VLAN Monthly Service Charge.

(c) VLAN Service Establishment Charge

The VLAN Service Establishment Charge is a non-recurring charge and applies to each individual VLAN provisioned. VLAN Service Establishment Charges apply to the following:

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) Optional Features and Functions (Cont'd)(c) VLAN Service Establishment Charge (Cont'd)

- i. establishment of a VLAN connection for a Telephone Company provided ETS EVC to another Telephone Company provided ETS EVC;
- ii. establishment of a VLAN connection for a Telephone Company provided ETS EVC to an EVC provided by another carrier to an end user outside of the service area of the Telephone Company

A separate Service Establishment Charge applies for each VLAN added to an EVC.

(d) VLAN Monthly Service Charge

The VLAN Monthly Service Charge is a monthly recurring charge and applies to each individual VLAN provisioned. VLAN Monthly Service Charges apply to the following:

- i. where the Telephone Company provides both EVCs comprising a VLAN connection, a single Monthly Service Charge applies to the customer ordering the VLAN Service.
- ii. where the Telephone Company provides only one of the EVCs for an ETS VLAN connection, with another carrier providing the other EVC, a single Monthly Service Charge applies to the Telephone Company customer.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) ETS Meet Point Interface (ETS-MPI)

The ETS Meet Point Interface (ETS-MPI) rate element is for a standard Ethernet defined interface between the SWC Ethernet switch and a customer location outside the Telephone Company's serving area. Customers located in the serving area of an adjacent telephone company may order an ETS-MPI from the Telephone Company for connection to the Ethernet facilities ordered by the customer from a telephone company with a serving area adjacent to that of the Telephone Company at the meet point between the two telephone companies. Interstate interexchange carriers may order an ETS-MPI for connection to Ethernet facilities ordered by the interexchange carrier from a telephone company with a serving area adjacent to that of the Telephone Company. ETS-MPIs will be billed by the Telephone Company subject to the Meet Point Billing provisions of Section 2.4.7(B) preceding. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The ETS-MPI rate element includes termination at the network side of the Telephone Company Ethernet switch and the Telephone Company's portion of the facilities up to the meet point.

An ETS-MPI comprises two elements:

ETS- MPI Channel Mileage Facility

ETS-MPI Channel Mileage Termination

The customer can connect multiple ETS Ports provided by the Telephone Company within its local exchange service area provided that the aggregate capacity of the ETS Ports does not exceed the capacity of the ETS-MPI ordered by the customer. Interface capability will be provided by the Telephone Company as part of the ETS-MPI Channel Termination.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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, and ETS Optional Features and Functions ordered by the ETS 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport 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)

When the ETS customer elects to decrease the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and 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. 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.

When the ETS customer elects to increase the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and 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. New minimum period requirements will be established for the new ETS elements. Any outstanding minimum period charges associated with the discontinued ETS elements that would otherwise be applicable for the bandwidth capacity upgrades described in this paragraph will be waived.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport 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)

When the ETS customer elects to change the bandwidth capacity on existing ETS EVCs, ETS E-EVCs and/or ETS MM-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.

When the ETS customer elects to remove existing ETS EVCs or ETS E-EVCs, the ETS Design Change Charge described in (d), below, will apply per ETS EVC or ETS E-EVC removed.

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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport 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 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

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport 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 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 and ETS E-EVCs are not impacted when an ETS customer moves its Point of Termination to a different 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport 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

ETS Basic and Interconnection Ports, ETS EVCs and ETS E-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.

(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 ETS elements. 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.4 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, following, will apply when the ETS customer elects to: (1) change the bandwidth capacity of existing ETS EVCs, ETS E-EVCs and/or ETS MM-VCCs (2) remove existing ETS EVCs or ETS E-EVCs or (3) remove an existing ETS MM-VCC from its associated ADSL Access Service Line.

When applicable, the ETS Design Change Charge applies in lieu of the ETS EVC, ETS E-EVC and/or ETS MM-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 and ETS Interconnection Ports, and
- One month for all other ETS elements.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 ETS Term Discount Plan (Cont'd)

The monthly rates and term discount percentages for ETS service elements are set forth in Section 17, following. The ETS Term Discount Plan is only available from those Telephone Companies listed in the table at Section 16.4, preceding.

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); 3) ETS Extended Ethernet Virtual Connections (ETS E-EVCs); and 4) ETS MultiMedia Virtual Circuit Channels (ETS MM-VCCs) and ETS VLAN Service. Since there are no bandwidth or in-service requirements for ETS CTs, ETS EVCs, ETS E-EVCs, and ETS MM-VCCs and ETS VLAN Services 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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, ETS E-EVCs, ETS MM-VCCs and ETS VLAN Service that are not associated with a committed ETS Port; 3) ETS nonrecurring charges; 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, 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 Section 17, 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 Section 17, 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 ETS Term Discount Plan (Cont'd)(C) ETS Term Discount Plan Replacements (Cont'd)

- (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.
- (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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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 16.4.4(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).

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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).

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 ETS Term Discount Plan (Cont'd)(E) ETS Volume Discount Plan

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, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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 the table at Section 16.4, preceding, which offer the ETS FRO during the availability window specified in Section 17, following.

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 Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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, following, for an available ETS FRO apply in lieu of the non-stabilized rates specified in Section 17, 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 16.4.5 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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 ETS FRO 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 Section 17, 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, following; or
- revert to the undiscounted monthly rates and nonrecurring charges specified in Sections 17, 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 undiscounted monthly rates and nonrecurring charges specified in Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.4 Ethernet Transport Service (Cont'd)16.4.5 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 Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.1 General Description(A) Basic Service Description

Multi-Megabit Ethernet Transmission Service (METS) is a high-speed packet based service for the transmission of data between a customer designated premises (CDP), the customer's Serving Wire Center, and either another CDP served by the Telephone Company, a CDP served by another telephone company or another telecommunications carrier. METS services between CDP within the Telephone Company's serving areas and CDPs outside the Company's serving areas will be provided either on a joint basis by the Telephone Company and another telephone company or by a telecommunications carrier connecting to the Telephone Company through a CDP within the Company's serving areas. If joint-provisioning by the Telephone Company and another telephone company is required, it is the responsibility of the Customer to order and pay for services provided by the other telephone company. Where joint-provision applies, the Telephone Company will provide its portion of jointly-provided services on a Multiple Bill basis as described at Section 2.4.7(B)(2) preceding.

For purposes of this Section, the term Telephone Company refers individually to the issuing carriers listed as providers of METS services in the METS Provider Table preceding.

METS provides dedicated bandwidth at the capacities indicated for the respective Telephone Companies offering METS listed at the METS Provider Table preceding.

In connection with METS, the Telephone Company offers METS Virtual Local Area Network (VLAN) service through use of Virtual Private Networks (VPN) functions.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.1 General Description (Cont'd)
(B) Service Provisioning

METS is provisioned over existing Telephone Company facilities. METS will be provided subject to the availability and limitations of the Telephone Company wire centers and outside plant facilities. New construction may be undertaken at the option of the Telephone Company at additional cost to the Customer.

The subscriber is provided with an Ethernet electrical interface.

METS is available 24 hours per day, 7 days per week, except for preventative maintenance.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.1 General Description (Cont'd)(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain METS for the customer.

The Telephone Company is not responsible for the installation, operation, or maintenance of any equipment provided by the customer.

Company provided shared network equipment, for use in METS is not accessible for the customer.

(D) Responsibility of the Customer

The customer is responsible for the provision and maintenance of all customer provided equipment and to insure that the operating characteristics of this equipment are comparable with and do not interfere with the service offered by the Telephone Company.

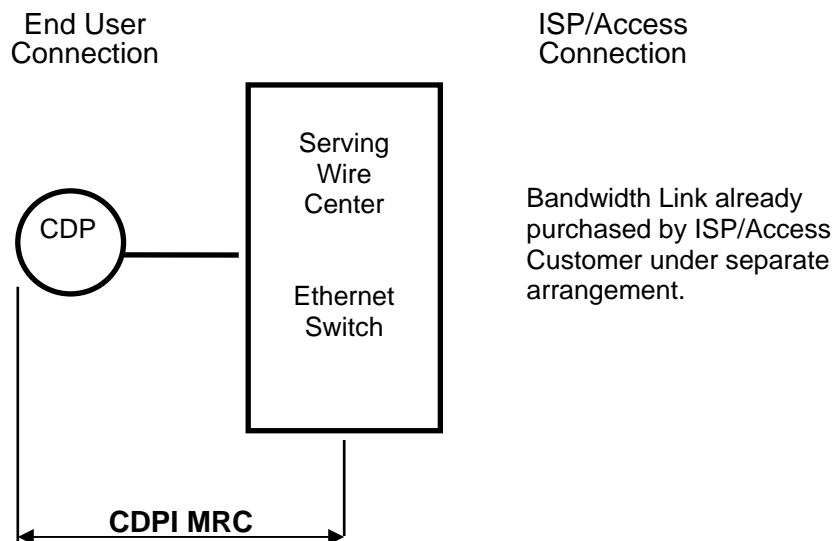
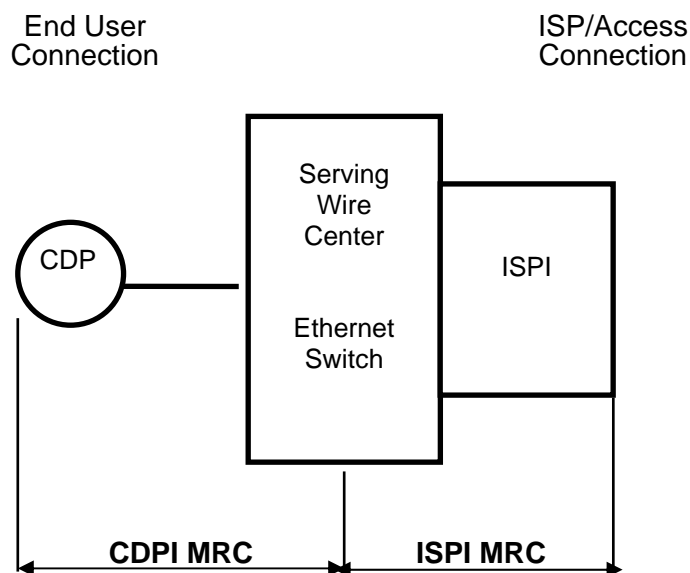
16.5.2 Typical Arrangements

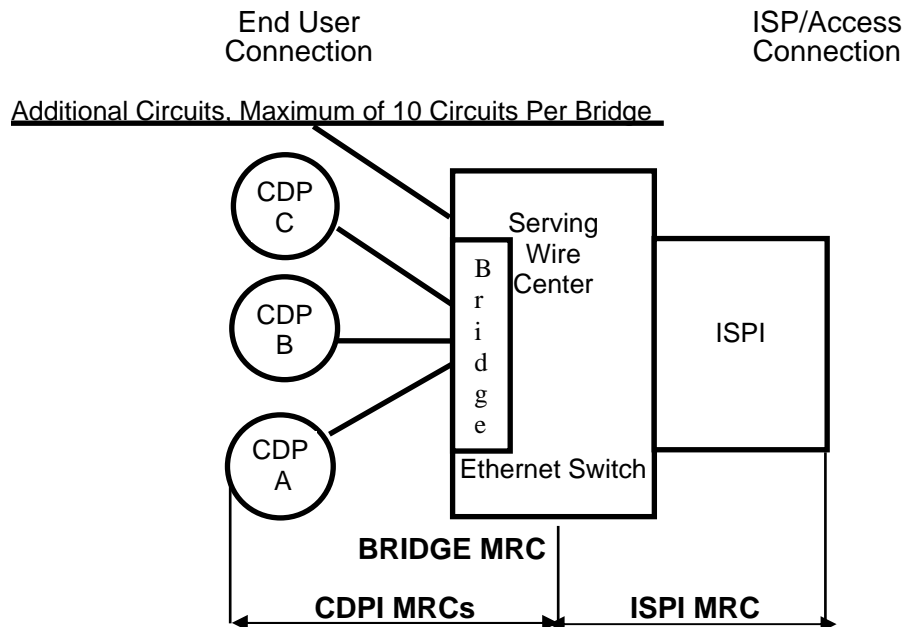
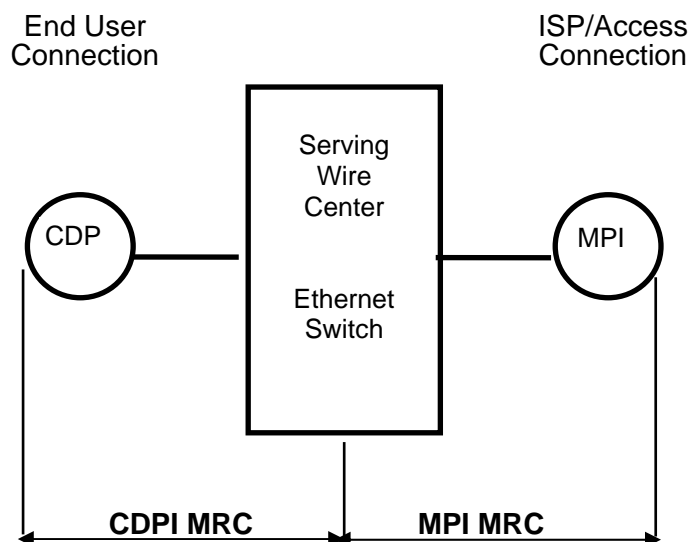
Typical arrangements are shown on the following page. The abbreviations used in the diagrams are as follows:

CDP – Customer Designated Premises
CDPI – Customer Designated Premises Interface
ISPI - Internet Service Provider Interface
MPI – Meet Point Interface
MRC – Monthly Recurring Charge
SWC –Serving Wire Center

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.2 Typical Arrangements

The following diagrams depict generic views of the components of Megabit Ethernet Transmission Service (METS) and the manner in which the components are combined to provide METS.

METS Connection to Existing Access Connection**METS Connection to ISP Interface (ISPI) at Ethernet Serving Wire Center**

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.2 Typical Arrangements (Cont'd)**METS Connection to ISP Interface (ISPI) at Ethernet Serving Wire Center With Bridging****METS Connection to Meet Point Interface (MPI)**

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16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations

This section contains the regulations governing the rates and charges that apply for METS.

(A) Minimum Period

The minimum period for which METS is provided to a customer and for which charges are applicable is twelve months.

(B) (Reserved)

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16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(C) Rate Elements

There are five types of rates and charges applicable to METS. These are a nonrecurring charge and four types of monthly recurring charges.

(1) METS Nonrecurring Charge

A single METS Nonrecurring charge applies to each METS circuit installed by the Telephone Company, whether the circuit is provisioned only between the Customer Designated Premises (CDP) and the SWC Ethernet switch for which an existing link to another carrier or Internet Service Provider (ISP) already exists or is provisioned beyond the SWC Ethernet switch to an Internet Service Provider Interface (ISPI) or to a Meet Point Interface (MPI) with another carrier.

(2) METS Customer Designated Premises Interface (CDPI)

The METS Customer Designated Premises Interface (CDPI) rate element is for a standard Ethernet defined interface between the CDP and the Telephone Company serving wire center (SWC) at which the Ethernet switch or router is located. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The CDPI rate element includes termination at both the CDP and the SWC, the facility from the CDP to the SWC, port access to the Ethernet switch and the Ethernet switch.

A CDPI charge applies to each METS connection between a CDP and the SWC at which the Ethernet switch designated by the Telephone Company is located.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(C) Rate Elements (Cont'd)(3) METS Internet Service Provider Interface (ISPI)

The Internet Service Provider Interface (ISPI) rate element is for a standard Ethernet defined interface between the SWC Ethernet switch and an ISP with a presence in the SWC. ISP presence in the SWC may be either through local facilities for an ISP physically located in the Telephone Company's local exchange service area or through an interexchange carrier with an existing connection for an ISP not located in the Telephone Company's local exchange service area. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The ISPI rate element includes termination at both the network side of the Telephone Company Ethernet switch and the connection to the ISP's existing connection.

An ISPI charge applies to each connection for a METS circuit originating at a CDP and terminating at the Telephone Company Ethernet switch which is, in turn, connected to the ISP's existing connection at the Ethernet switch SWC.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(C) Rate Elements (Cont'd)(4) METS Bridge Interface

The METS Bridge Interface provides for the bridging of up to ten (10) CDPI links to one ISPI link or one CDPI link at the serving wire center. A METS Bridge Interface monthly recurring charge applies to each METS Bridge Interface in addition to the METS CDPI monthly recurring charges for each of the circuits connected to the METS Bridge Interface and, if applicable, METS ISPI or MPI monthly recurring charges. In the event a METS Bridge Interface is installed for existing METS CDPIs, without installation of additional CDPIs at the same time, a METS Nonrecurring charge shall apply in addition to the METS Bridge Interface monthly recurring charges.

(5) METS Meet Point Interface (MPI)

The METS Meet Point Interface (MPI) rate element is for a standard Ethernet defined interface between the SWC Ethernet switch and either a CDL outside the Telephone Company's serving area or an ISP, through a circuit jointly provided by the Telephone Company and another carrier. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The MPI rate element includes termination at the network side of the Telephone Company Ethernet switch and the Telephone Company's portion of the facilities up to the meet point.

An MPI charge applies to each METS circuit connection between the Telephone Company and another carrier.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(C) Rate Elements (Cont'd)(6) METS VLAN Aggregation

A virtual LAN, commonly known as a VLAN, is a group of hosts with a common set of requirements that communicate as if they were attached to the same broadcast domain, regardless of their physical location. A VLAN has the same attributes as a physical LAN, but it allows for end stations to be grouped together even if they are not located on the same network switch. Network reconfiguration can be done through software instead of physically relocating devices.

Customers subscribing to a METS VLAN arrangement may order configuration by the Company of VLAN service through use of METS with the VLAN Aggregation feature. VLAN Aggregation provides multiple LAN connectivity across a common physical connection through use of Virtual Private Network (VPN) functions. This feature supports customer aggregation of traffic from multiple remote customer locations. This aggregated traffic can be transported back to a central location and across a common METS Service interface. VLAN Aggregation utilizes IEEE 802.1Q VLAN Tagging procedures. There is one charge associated with VLAN provisioning, a VLAN Service Establishment Charge.

a) VLAN Service Establishment Charge

The VLAN Service Establishment Charge is a non-recurring charge and applies to each individual VLAN provisioned.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(D) Mileage Bands

The monthly recurring charges described in Section 16.5.1.(B) above are applied on the basis of mileage bands. Mileage bands are determined on the basis of end-to-end airline miles (ALM) from the CDP to the other end of the circuit provided by the Telephone Company. For METS circuits connected to an existing ISP interface located at the Ethernet switch SWC, the ISPI rate will be based on rate band "A" following.

The airline mileage to be used in determining the Mileage Band for METS monthly recurring charges will be calculated under the mileage measurement procedures described at Section 7.2.5 of this Tariff.

The METS mileage bands are as follows:

<u>Band</u>	<u>End-to-End Airline Miles</u>
A	0 to 3
B	Over 3 to 6
C	Over 6

(E) Service Suspension

Suspension of service by the Customer during the service period is not allowed.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(F) Term Discounts

METS may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 36 months (3 years) or a customer specified term of 60 months (5 years) or greater up to 84 months.

The minimum service period for service ordered on a monthly rate basis or under a Term Discount plan 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 months (3 years) or 60 months (5 years) or greater up to 84 months, the Term Discount percentage as set forth in 17.4.8 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.

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 submit an access service request or other written notice of election for a new Term Discount plan fifteen business days prior to 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 METS rate elements must be ordered for the same commitment term (i.e., all 36 months, all 60 months, or all at the specified months ordered greater than 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.

METS ordered for a minimum service period of 12 months or for Term Discount periods of 36 months or 60 months or greater, up to 84 months, will be exempt from Telephone Company initiated rate increases throughout the selected service period established at the beginning of that service commitment period.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(F) Term Discounts (Cont'd)

Eligible METS rate elements are all monthly recurring charges for services provided by the Telephone Company. As long as the number of METS services included in a Term Discount plan remains constant, customer requests to install and disconnect METS 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 (3) following will not apply.

(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, 60 month service period or a customer specified period greater than 60 months up to 84 months. 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 METS that is upgraded.

(2) Upgrades in Capacity

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity (i.e., 10 Mbps to 100 Mbps), discontinuance charges will not apply, provided all the following conditions are met:

- the customer's order for the disconnect of the existing 10 Mbps METS service and the installation of the new 100 Mbps METS service are received at the same time and specifically reference the application of upgrade in capacity;
- the customer's disconnect order for the existing 10 Mbps METS service must reference the 100 Mbps METS Service installation order;

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(F) Term Discounts (Cont'd)(2) Upgrades in Capacity (Cont'd)

- 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 for an equivalent capacity of the existing services being upgraded to the higher speed service will not be assessed.

(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 twenty-five 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 twenty-five percent of the total undiscounted monthly charges will apply to the remaining portion of the discount period. For example, a customer has a 10 Mbps Service which it chooses to discontinue after 33 months into an 84-month service term. The discontinuance charge would be 0.25 times 51 months times the undiscounted monthly rates for that service.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(F) Term Discounts (Cont'd)(4) METS Fixed Rate Option

Where offered, the METS Fixed Rate Option (METS FRO) provides the METS Term Discount Plan customer with stabilized rates that will apply to the customer's METS service elements throughout the length of the customer's selected METS Term Discount Plan commitment period.

When the customer subscribes to a METS FRO, the stabilized rates for the METS service elements included under a METS FRO plan will not be subject to any Telephone Company initiated rate increases and decreases during the customer's selected term commitment period.

The METS FRO is only available from those Telephone Companies listed in the table at Section 16.5, preceding, which offer the METS FRO during the availability window specified in Section 17, following.

The METS FRO is only available when the customer establishes a new 36 month or 60 month METS Term Discount Plan commitment with the Telephone Company. An existing METS Term Discount Plan customer wishing to subscribe to an available METS FRO may replace its existing term plan commitment with a new 36 month or 60 month METS Term Discount Plan commitment. If applicable, term plan discontinuance charges as described in (3), above, would apply to the customer's METS Term Discount Plan being replaced, and would be calculated using the monthly rates specified in Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(F) Term Discounts (Cont'd)(4) METS Fixed Rate Option (Cont'd)

In order to subscribe to an available METS FRO, the customer must notify the Telephone Company in writing during the time period specified in that METS FRO plan that it wishes to establish a new 36 month or 60 month METS Term Discount Plan with METS FRO stabilized rates.

The stabilized rates specified in Section 17, following, for an available METS FRO apply in lieu of the non-stabilized rates specified in Section 17, following. The METS FRO stabilized rates will apply to the customer's METS service elements only during the 36 month or 60 month commitment period established by the customer at the time it subscribes to the METS FRO plan.

Except as provided herein, all other provisions related to the METS Term Discount Plan as specified in Section 16.5.3(F) apply to a METS Term Discount Plan customer that subscribes to a METS FRO plan.

An METS Term Discount Plan customer with METS FRO stabilized rates may replace or discontinue its METS Term Discount Plan at any time during its selected term commitment period subject to the provisions described in (3), above. If applicable, term plan discontinuance charges as described in (3), above, apply and would be calculated using the monthly rates specified in the METS FRO plan to which the customer subscribed.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)16.5.3 Rate Regulations (Cont'd)(F) Term Discounts (Cont'd)(4) METS Fixed Rate Option (Cont'd)

An METS Term Discount Plan customer with METS FRO stabilized rates may not renew or extend its METS FRO plan subscription beyond the end of the term commitment period selected at the time it subscribed to the METS FRO plan. At the end of the customer's term commitment period, a METS Term Discount Plan customer with METS FRO stabilized rates may choose to:

- subscribe to a new METS Term Discount Plan commitment period with the monthly rates and nonrecurring charges specified in Section 17, following;
- subscribe to a new METS Term Discount Plan commitment period with METS FRO stabilized rates, if an alternative METS FRO plan is available at that time, as specified in Section 17, following; or
- revert to the undiscounted monthly rates and nonrecurring charges specified in Sections 17, 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 METS billing for current and future METS service elements to the undiscounted monthly rates and nonrecurring charges specified in Section 17, following.

An Access Order Charge does not apply to establish a new or discontinue an existing METS FRO. An Access Order Charge also does not apply when at the end of the customer's METS Term Discount Plan the customer subscribes to a new METS Term Discount Plan or reverts to billing using the undiscounted monthly rates and nonrecurring charges specified in Section 17, following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service16.6.1 General Description(A) Basic Service Description

High Speed Internet (HSI) Access Service is a high-speed packet based service for the transmission of data between local exchange customer designated premises and Internet Service Providers (ISPs) by the Telephone Company designated data technology and equipment. HSI Access Service is offered at various downstream (Down) and upstream (Up) speeds. The "Up" speed represents transmission speed in kilobits per second (Kbps) or megabits per second (Mbps), from the point of demarcation at the customer's designated premises to the Telephone Company's HSI Access Service Connection Point; while the "Down" speed represents transmission speed in Kbps or Mbps from the Telephone Company's HSI Access Service Connection Point to the point of demarcation at the customer's designated premises. Actual speed may be affected by loop distance and other factors.

The HSI Access Service may require a splitter at both the customer's designated premises and the Telephone Company's serving wire center to split the traffic between data and voice. The customer is responsible for providing and maintaining the splitter at the customer designated premises.

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ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service16.6.1 General Description (Cont'd)(B) Service Provisioning

HSI Access Service is provisioned over existing Telephone Company copper facilities and transported to the Telephone Company's backbone network. HSI Access Service provides a connection from the customer's designated location (CDL) to the HSI Access Service Connection Point.

Access from the Telephone Company's HSI Access Service Connection Point will be provided via Special Access Metallic Service, Special Access High Capacity Special Access Service, Special Access Synchronous Optical Channel Service and/or Frame Relay Access Service, where facilities permit. Special Access Metallic Service is available in Section 7.4 preceding. Special Access High Capacity Special Access Service is available in Section 7.10 preceding. Special Access Synchronous Optical Channel Service is available in Section 7.11 preceding. Frame Relay Access Service is available in Section 16.1 preceding. If a customer utilizes Special Access Service or Frame Relay Access Service pursuant to sections 7 or 16.1 preceding, the associated rates and charges for such facilities shall apply in addition to the rates and charges associated with the HSI Access Service rate element.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.1 General Description (Cont'd)(B) Service Provisioning

The Telephone Company will qualify the local exchange service loop between the customer's designated premises and the serving wire center. The purpose of qualification is to determine the availability and suitability of existing Telephone Company facilities to provide the service, and to determine if Loop Conditioning is required to support HSI Access Service. The Telephone Company will not provision this service on facilities which are not suitable for HSI Access Service.

The Telephone Company does not undertake to originate data, but offers the use of its HSI Access Service, where available, to customers for the purpose of transporting data originated by the customer or a third party.

HSI Access Service is limited to use for transmission of data between the designated premises of a local exchange customer of the Telephone Company and the local exchange customer's ISP. The high speed data transmission path installed by the Telephone Company under an HSI Access Service offering for use for transmission of data between the designated premises of a local exchange customer and the local exchange customer's ISP may also be used by the local exchange customer for transmission of data for purposes of receiving one-way video services. Use of the HSI Access Service for one-way video transmission is subject to the availability and technical capability of the Telephone Company. The video service provider must connect to the Telephone Company HSI Access Service Connection Point. This connection is subject to the technical capability of the Telephone Company's interconnecting facilities. The connection must be provisioned under applicable rates, terms and conditions for appropriate jurisdiction.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.1 General Description (Cont'd)(B) Service Provisioning (Cont'd)

All customers will be served from the nearest suitably equipped end office designated by the Telephone Company. HSI Access Service will be provided subject to the availability and limitations of the Telephone Company wire centers and outside plant facilities. HSI Access Service is only available where permitted by technical capabilities of the Telephone Company, including but not limited to facility distance and type of physical plant.

(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain HSI Access Service for the customer up to and including the Network Interface Device (NID) or the protector. The Telephone Company will advise the customer of the customer premises equipment (CPE) necessary to support HSI Access Service that the customer will need to purchase. The Telephone Company will provide to the ISP technical specifications for connection to the Telephone Company's HSI Access Service applicable to the technology deployed by the Telephone Company.

(D) Rights of the Telephone Company

HSI Access Service will be provided over existing Telephone Company local exchange service lines. Rates and regulations for HSI 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 HSI Access Service when the associated local exchange service line is disconnected for any reason.

The Telephone Company will not provision HSI Access Service if the Telephone Company has reasonably determined that (a) it is not technically feasible over existing facilities or (b) it will cause interference problems within the Telephone Company's network or other facilities.

During the Telephone Company's network maintenance and software update period, it may be necessary to temporarily place the HSI Access Service central office equipment out of service. The Telephone Company reserves the right to temporarily interrupt HSI Access Service at other times in emergency situations.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.1 General Description (Cont'd)(E) Responsibility of the Customer

The customer is responsible for providing the Telephone Company with the necessary information to provision HSI 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 ISP with which the customer's HSI Access Service will interconnect).

The customer is responsible for providing compatible customer premises equipment (CPE) that is used for connection to HSI Access Service.

When HSI Access Service is ordered by the ISP, the ISP customer is responsible for providing the Telephone Company with the necessary information (e.g., Data Link Connection Identifier(s), and/or Internet Protocol) to provision the HSI Access Service.

The ISP customer will obtain the appropriate authorization to allow the Telephone Company to provision HSI Access Service over the customer's end user's existing telephone exchange service line.

Where required, the ISP customer will be responsible for obtaining permission from its subscriber(s) for the Telephone Company's agents or employees to enter the customer's designated premises at a mutually agreed upon time for the purpose of installing, inspecting, repairing, or upon termination of the service, removing the service components of the Telephone Company.

The ISP 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations(A) Rate Elements

There are three types of rates and charges applicable to HSI Access Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge.

(1) Monthly Rates for HSI Access Service

The monthly rate applies each month or fraction thereof for each local exchange service line equipped with HSI Access Service.

For purposes of application of the monthly rate, HSI may be ordered under any of the following options that are offered by the Telephone Company as indicated in the table at Section 16.6.

Monthly Rates Without Discount

Customers may order HSI Access Service at a monthly rate without discount. Monthly rates apply without any volume or term commitment. There is no minimum period for HSI Access Service.

HSI Term and Volume Plan (HSITVP) Rates

For Telephone Companies offering HSI Term and Volume Plan (HSITVP) rates, Customers may order HSI Access Service under Section 16.6.2(E), HSI Term and Volume Plan (HSITVP) Rates.

HSI Term Pricing Arrangement (HSITPA) Rates

For Telephone Companies offering HSI Term Pricing Arrangement rates, Customers may order HSI Access Service under Section 16.6.2(F), HSI Term Pricing Arrangement (HSITPA) rates.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(A) Rate Elements (Cont'd)(1) Monthly Rates for HSI Access Service (Cont'd)Service Classes

HSI is provided under two classes of service, Voice-Data and Data-Only.

Voice-Data

HSI Access Service provided on the basis of voice-data is designed to support affordable high speed Internet access for residential and business end users. The actual throughput achieved by voice-data is not guaranteed and may be affected by many factors, such as Internet congestion. Voice-Data HSI Access Service is provisioned over the end user's existing Telephone Company local exchange telephone service line utilized for voice communications. When provisioned over the end user's existing local exchange telephone service line, HSI utilizes a centrally placed splitter or in-line filters to isolate the voice band service and equipment from the HSI Access Service and equipment.

Data-Only

HSI Access Service provided on a data-only basis is provisioned over a separate, dedicated data-only Telephone Company local exchange line facility.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(A) Rate Elements (Cont'd)(2) Nonrecurring Charge

A nonrecurring charge applies per local exchange service line for the installation of HSI Access Service.

The Telephone Company will waive the Nonrecurring Charge for each new HSI Access Line ordered when the customer commits to retain the HSI Access Line for a minimum period of 12 months following installation of service. If the HSI Access Line is disconnected for any reason prior to the end of the 12-month minimum commitment period, the Telephone Company will bill the customer an amount equal to the waived Nonrecurring Charge.(1)

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(A) Rate Elements (Cont'd)(3) HSI Access Service Network Reconfiguration Charge

An HSI Access Service Network Reconfiguration Charge applies when the HSI Access Service customer's ISP requests the Telephone Company to modify the Telephone Company's network to accommodate a change in the HSI Access Service customer's existing HSI Access Service line. A nonrecurring charge applies for each request per HSI Access Service line. The Telephone Company will bill the HSI Access Service Network Reconfiguration Charge to the HSI Access Service customer's ISP. No HSI Access Service Network Reconfiguration Charge shall apply where the change requested by the HSI Access Service customer is for a change in HSI Access Service transmission speed.

All changes to existing HSI Access Service (including but not limited to change of ISP), other than changes involving HSI Access network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per HSI Access Service line for this work activity.

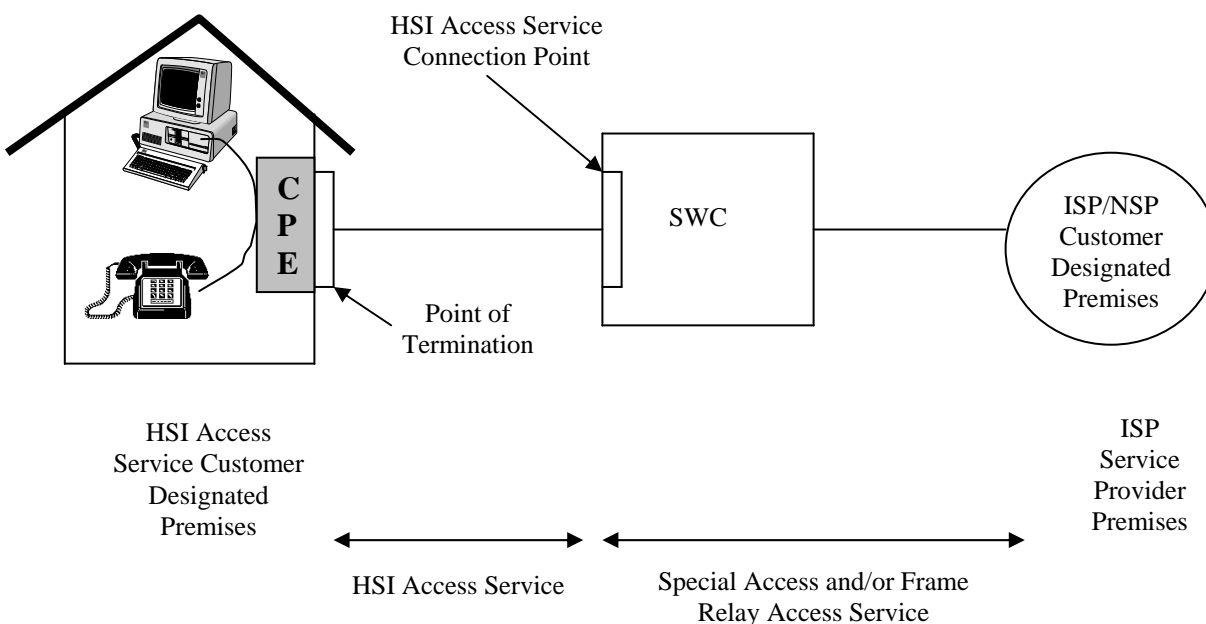
Rates and charges for HSI Access Service are set forth in 17.4.8 following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(B) Rate Application

HSI Access Service is based on differing volume levels of HSI Access Service connections per Section 17.4.8, following.

The rates applicable to HSI Access Service provided under an HSI Access Service Term and Volume Plan (HSI Access Service-TVP) arrangement are specified in 17.4.8, following.

The following diagram depicts a typical HSI Access Service configuration:

(C) Minimum Period

The minimum period for which HSI Access Service is provided to a customer and for which charges are applicable is one month.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(D) 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's designated premises

The provisions for moves of HSI Access Service are the same as those described in Section 7.2.3, preceding, except that an Access Order Charge will not apply.

(E) HSI Term and Volume Plan (HSITVP) Rates(1) Description

The terms and conditions specified herein are applicable to HSI Access Service where the Telephone Company offers an HSI Access Service Term and Volume Plan (HSITVP) and are in addition to other regulations as specified in this tariff. Telephone Companies offering HSITVP are indicated at Section 16.6 preceding.

The HSI Access Service Term and Volume Plan (TVP) will allow customers discounted access rates based upon the volume and/or term commitment. Rates will be based upon the TVP selected by the customer. TVP plans for an HSI Access Service offered by a Telephone Company, if any, will be indicated in the Telephone Company's respective rate section for HSI Access Service in Section 17.4.8 following.

Term plans of one (1), two (2) and three (3) years may be available to all customers at applicable rates set forth in the tariff regardless of when the subscription is made for an HSI Access Service TVP arrangement. The customer must designate on the order the type of payment plan selected.

The minimum volume commitment of the TVP selected must be met within twelve (12) months after the TVP is initiated.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(E) HSI Term and Volume Plan (HSITVP) Rates (Cont'd)(2) Rate Application

Upon expiration of a TVP period, the customer may choose a new TVP period, convert to month-to-month or terminate service. The month-to-month rates will be those rates that are in effect at the time of conversion. If the customer fails to make a choice by the end of the TVP period, the HSI Access Service will continue billing at the existing term and volume commitment level rates and a new TVP period will begin based on previously effective term and volume commitment. All terms and conditions, including Termination Liabilities will apply to the new TVP period.

Conversion to a month-to-month or different TVP period will require the customer to submit a change order. Conversion of existing TVP service to a different TVP period will be allowed without application of any nonrecurring charges.

(3) Changes in Length of TVP Period

The customer may elect to convert to a new TVP period subject to the following conditions:

- (a) Credit will not be given toward the new payment period for payments made under the original TVP arrangement.
- (b) Nonrecurring charges will not be reapplied for existing service(s).
- (c) If the new TVP period is shorter in length than the time remaining under the existing TVP, the change to the new TVP period constitutes a discontinuance of the existing TVP service and termination liability charges apply.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6.2 Rate Regulations (Cont'd)(E) HSI Term and Volume Plan (HSITVP) Rates (Cont'd)(4) Rate Changes

The customer may terminate the HSITVP without penalty or liability should the rates increase during the term of the existing TVP, with the exception of rate changes that may occur as a result of FCC presubscription for rate increases.

(5) Annual Review

Each customer's HSITVP will be reviewed annually. The customer will be notified as to the status of the TVP if the in-service quantity of HSI Access Services falls below the minimum volume commitment. An allowance of up to 3% will be considered as still having met the volume commitment. Where the customer has less than the volume commitment quantity for a specified discount, charges will be assessed.

If the total number of HSI Access Services in service qualifies the customer for a different TVP rate, the customer will have the option of increasing the commitment quantity for the remainder of the plan.

(6) HSITVP Conditions

After enrolling in the plan, the customer may delete or add HSI Access Services rated at the specified term period/threshold level rate at any time during the plan.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6. Rate Regulations (Cont'd)(E) HSI Term and Volume Plan (HSITVP) Rates (Cont'd)(7) Shortfall Charges for Failing To Meet Commitment

At the annual review, if the total volume in service does not meet the volume commitment, a payment equal to the difference between the HSITVP rate and the highest rate that would have been charged for services not under the TVP plan plus 10% will be assessed. The payment will be calculated using the prorated HSI Access Service aggregation quantity at the time of the review. The customer may choose to increase the volume commitment within 30 days after enrollment to the TVP and continue the TVP arrangement or choose to be billed on a going forward basis under either a different TVP or under the month-to-month rates. If after 30 days, the TVP volume levels are not met, the TVP will be automatically changed to the standard month-to-month rates.

(8) Termination Liability

When a HSITVP service is discontinued prior to the end of the commitment period, termination liability charges will apply, as set forth below, based on the remainder of the TVP period in effect at the time of disconnect.

One Year TVP – Prorated payment based on the HSI Access Service Level Package mix times the number of remaining months of the first year's recurring charges.

Two Year TVP – Prorated payment based on the HSI Access Service Level Package mix times the number of remaining months of the first and second year's recurring charges.

Three Year TVP – Prorated payment based on the HSI Access Service Level Package mix times the number of remaining months of the first, second and third year's recurring charges.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6. Rate Regulations (Cont'd)(F) HSI Term Pricing Arrangement (HSITPA) Rates(1) Description

The HSI Term Pricing Arrangement (HSITPA) provides the customer with reduced rates based on a term commitment of one year and payment of a single HSITPA Monthly Charge in addition to the charges for each individual HSI Access Service line. An Access Order Charge applies for each order to establish the initial HSITPA.

When the customer subscribes to a HSITPA, all HSI Access Service arrangement lines currently provided by the Telephone Company will be billed at the rates and charges specified in Section 17.4, following, for the length of the term commitment. In addition to the charge for each HSI arrangement connected to an end user customer, the customer will be billed the single HSITPA Monthly Charge specified in Section 17.4, following.

If the Telephone Company decreases the rates specified in Section 17.4, 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 HSITPA term,, the customer may elect to establish a new HSITPA term commitment, convert to Monthly Rates Without Discount or HSI Term and Volume Plan (HSITVP) rates or discontinue service. If the customer does not make an election by the end of the HSITPA term, the rates for all HSI arrangement lines will automatically be converted to Monthly Rates Without Discount. An Access Order Charge will not apply to any election made by the customer at the end of the HSITP term. An HSITP is subject to payment for early termination as described in (4), following.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6. Rate Regulations (Cont'd)(F) (F) HSI Term Pricing Arrangement (HSITPA) Rates (Cont'd)(2) Upgrades in HSITPA

A customer may terminate a HSITPA without the application of a termination liability charge when the customer replaces its original HSITPA commitment with a new HSITPA commitment provided the pricing option of the new HSITPA commitment is equal to or greater than the pricing option of the original HSITPA commitment. An Access Order Charge will not apply when the customer replaces an existing HSITPA commitment with a new HSITPA commitment under this provision.

(3) Termination Without Liability

A customer may terminate a HSITPA commitment without the application of a termination liability charge if the Telephone Company increases the HSITPA monthly rates described in Section 17.4. 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 HSITPA under this section; otherwise, the increased rates will apply for the remainder of the commitment period.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.6 High Speed Internet (HSI) Access Service (Cont'd)16.6. Rate Regulations (Cont'd)(F) HSI Term Pricing Arrangement (HSITPA) Rates(4) Termination with Liability

If the customer elects to terminate its HSITPA commitment prior to the end of the commitment period for any reason other than specified in (2) or (3), preceding, a termination liability charge will apply. For each HSITPA commitment terminated prior to the end of the commitment period, the Telephone Company will bill the customer a charge equal to the HSITPA Monthly Charge for its selected pricing option as specified in Section 17.4, following, multiplied by the number of months remaining in the commitment period.

HSI Monthly Rates Without Discount as described in Section 17.4, following, will apply to all in-service HSI Access Service arrangement lines following the early termination of a HSITPA term commitment.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS).16.7.1 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.

16.7.2 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.2 Service Description (Cont'd)

For the Telephone Companies under this section, as indicated on Page 16-61, rates and charges for ATM-CRS are specified in the respective Telephone Company Section 17.4, following. The application of rates and charges for ATM-CRS is described later in this section.

16.7.3 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to ATM-CRS:

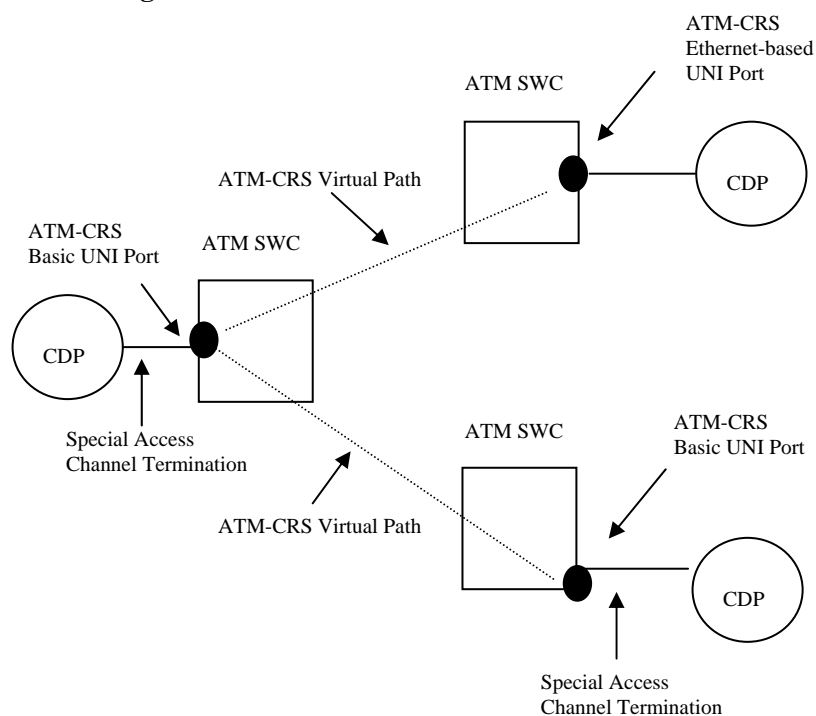
- (A) The customer is responsible for providing the Telephone Company with the necessary information to provision ATM-CRS as specified in Section 5.2 Ordering Requirements, preceding.
- (B) The customer is responsible for providing and maintaining all required customer premises equipment (CPE), which 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) Signaling 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, Part 3, Clause 15 for 10BASE-F, Clause 26 for 100BASE-F and 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).

16.7.4 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 Access Service or other Public Packet Data Network Service provided under this tariff used in conjunction with ATM-CRS are as specified in the respective service's section of this tariff.

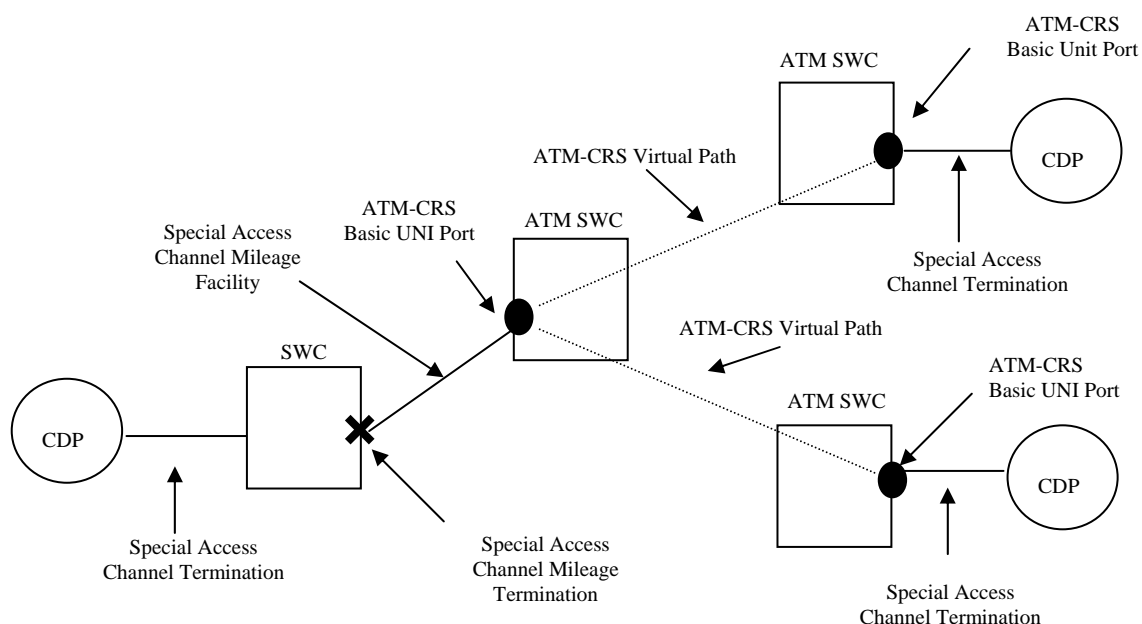
ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)

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.

Figure 1

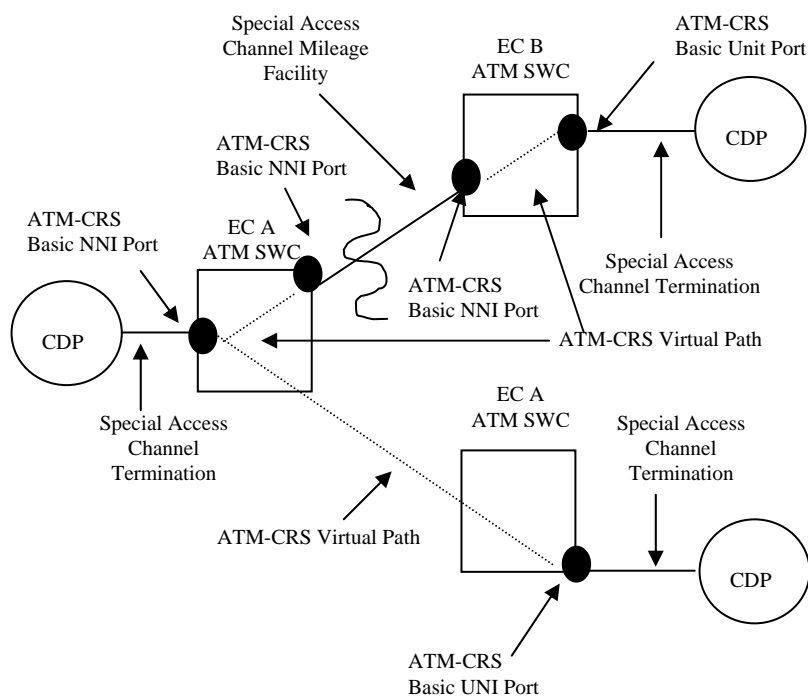
ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)

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

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(A) Rate Categories

Provision of ATM-CRS Access Service by the Telephone Company is indicated by inclusion of ATM-CRS Access Service rates in the Telephone Company's respective Section 17. In the event the Telephone Company offers some but not all elements of ATM-CRS Access Service, the elements offered by the Telephone Company will be indicated by the inclusion of rates for each element offered in the Telephone Company's respective rate section.

The various ATM-CRS Access 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(1) ATM-CRS Ports(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, where available, OC3 or OC12 Synchronous Optical Channel 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, and, where the Telephone Company offers Synchronous Optical Channel Service, 155.52 Mbps and 622.08 Mbps.

(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. Where offered, 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).

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(1) ATM-CRS Ports (Cont'd)(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 Services 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.

(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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(2) ATM-CRS Virtual Paths

An ATM-CRS Virtual Path (VP) is a predefined, 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(2) ATM-CRS Virtual Paths (Cont'd)(c) Variable Bit Rate – non real time (VBR-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, where the fixed path rate is \$5.00 and the variable bandwidth rate is \$17.50 per Megabit, the monthly charges for a 145 Mbps VBR-rt path would be \$2,542.50.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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 the interconnection of ATM-CRS with ADSL Access Service described in either Section 8.1 or Section 16 preceding and Technical Reference ANSI T1.413-1998, and with SDSL Access Service as described in Section 16.3, preceding, provided by the Telephone Company under 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. 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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 Section 8.1, Section 16.2, and 16.3 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 the applicable DSL regulations of this tariff under which the Telephone Company provides DSL Access Service to the customer. The customer 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 SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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 as described in Section 16.2, 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont'd)16.7.4 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 will not apply. In lieu of such charge, the MM-VCC Design Change Charge will apply, as specified in Section 16.7.4, 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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, as specified in Section 17.4.1, following, will apply per order.

(c) Inverse Multiplexing Over ATM (IMA)

Inverse Multiplexing over ATM (IMA) allows a bandwidth option between DS1 (1.544 Mbps) and DS3 (45 Mbps) levels. IMA utilizes 2 to 8 DS1s and bundles them together to create a solid bandwidth increment of 3 Mbps, 4.6 Mbps, 6.1 Mbps, 7.7 Mbps, 9.2 Mbps, 10.7 Mbps or 12.3 Mbps. IMA is available over the following Service Classes Constant Bit Rate (CBR), Variable Bit Rate – non-real time (VBR-nrt) and Unspecified Bit Rate (UBR) as set forth in Section 16.7.4.(2) preceding.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(4) Optional Features and Functions (Cont'd)(c) Inverse Multiplexing Over ATM (IMA) (Cont'd)

Where facilities allow, Customers may order IMA at the capacities indicated below. The customer will order and pay for the number of Special Access High Capacity 1.544 Mbps (DS1) Channel Terminations or Channel Mileage Terminations/ Facilities indicated in the table and the IMA Port Charge as specified in Section 17.4.1 following. The ATM Port charges as described above in Section 16.7.4(A)(1) do not apply.

Capacity	Number of Channel Terminations (or Channel Mileage Circuits) Required
3 Mbps	2
4.6 Mbps	3
6.1 Mbps	4
7.7 Mbps	5
9.2 Mbps	6
10.7 Mbps	7
12.3 Mbps	8

(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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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 and service rearrangements. 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 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

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves

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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves

- (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 will be treated as 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 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)16.7.4 Rate Regulations (Cont'd)(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 16.4, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT)16.8.1 General

- (A) Stand-Alone Broadband Network Transport (SABNT) Service is a high-speed packet-based advanced data service that provides connectivity between Customer Locations, using packet-switching technology and Internet Protocol (IP). In connection with SABNT, the Company offers Virtual Local Area Network (VLAN) service through use of Virtual Private Network (VPN) functions.
- (B) SABNT Service provides transport services with capabilities for various service arrangements that may be used to meet individual customer needs.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.1 General (Cont'd)

- (C) The SABNT customer is responsible for providing and maintaining all required customer premises equipment (CPE), which is compatible with SABNT and complies with the standards for either Ethernet or IP, whichever is utilized by the customer for the SABNT service, specified in one or more of the following technical publications.
- | | |
|----------|---|
| Ethernet | IEEE Std. 802.3 - 2000, Part 3, Clauses 14, 15, 21, 26, 29, and 34 through 38 - Information Technology – Telecommunications and Information Exchange Between Systems – Local and Metropolitan Area Networks – Specific Requirements |
| IP | Request For Comments (RFC) 791, Internet Protocol, DARPA Internet Program Protocol Specification, September 1981. |
| VPN | Request For Comments (RFC) 2547, Border Gateway Protocol/Multiprotocol Label Switching/Virtual Private Networks (BGP/MPLS/VPNs), March 1999. |
- (D) SABNT Service, as provided under the provisions of this tariff section, is offered for Customer premises located within the Telephone Company's local exchange service areas.
- (E) The regulations and rates specified herein are in addition to the applicable regulations and rates specified in other sections of this and other tariffs of the Company.
- (F) For SABNT Service, the Service Date Change Charge, Expedited Orders Charge and Cancellation Charge, as defined in Section 5 preceding, are applicable.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations(A) Explanation of Terms(1) Stand-Alone Broadband Network Transport Service

Stand-Alone Broadband Network Transport Service is a data transport service which emulates the properties of a circuit-switched network allowing Local Area Networks (LANs) to send bi-directional traffic to other LANs.

(2) Local Area Network (LAN)

A Local Area Network (LAN) is a communications network spanning a limited geographical area. A LAN connects computers and other peripheral equipment for data communications purposes typically within a building or campus environment.

(3) Virtual Local Area Network (VLAN)

A Virtual Local Area Network (VLAN) is a logical grouping of SABNT connections that allows data transmission between such connections to occur as if all connections are on the same physical LAN.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(4) Class of Service (CoS)

Class of Service (CoS) is a way of managing traffic in a network by grouping similar types of traffic together and treating each type as a class with its own level of service priority.

(5) Stand-Alone Broadband Network Transport (SABNT) Connection

A SABNT Connection provides high-speed data connections that are a part of a packet-based IP network within Company local service areas. SABNT Service provides the ability to order Ethernet Service or other supported packet-based services where a single customer connection can support multiple applications with varying Classes of Service (CoS).

SABNT Service provides customer capabilities to support different Classes of Service (CoS), i.e., Real-Time, Business Critical, Interactive, and Best Effort, as described in Section 16.8.2.A.9 following, over the same SABNT Connection allowing increased flexibility to provision bandwidth requirements for voice, data, and video applications. The customer specifies the required Class of Service (CoS) Package Profile for each SABNT Connection.

For each SABNT Connection, the customer's bandwidth will be limited to the bandwidth associated with each CoS specified in the CoS Package Profile selected by the customer.

A SABNT Connection is capable of interconnecting with other packet-based connections that are operating within the Company's local service area.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(5) Stand-Alone Broadband Network Transport (SABNT) Connection (Cont'd)

A SABNT Connection provides data channel transport that connects a customer's premise to the SABNT wire center associated with the SABNT Connection. Customer locations greater than 10 miles from the SABNT wire center will have an associated additional mileage charge.

(6) Stand-Alone Broadband Network Transport (SABNT) Connection Additional Mileage Charge

Additional mileage charges associated with a SABNT Connection apply when the total distance from the customer premises to the SABNT wire center serving the customer's premises is greater than the distance in miles covered by the SABNT Connection charge. The distance covered by the SABNT Connection charge for each issuing carrier offering SABNT under this tariff section is indicated below. The additional mileage is measured in airline miles from the customer premises to the SABNT wire center associated with the SABNT Connection. Fractions of miles will be considered as a whole mile.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(7) VLAN Aggregation

Customers subscribing to a SABNT Arrangement are provided with the VLAN Aggregation feature. VLAN Aggregation provides multiple LAN connectivity across a common physical connection. This feature supports customer aggregation of traffic from multiple remote customer locations. This aggregated traffic can be transported back to a central location and across a common SABNT Service interface. VLAN Aggregation utilizes IEEE 802.1Q VLAN Tagging procedures.

The VLAN Aggregation Service Establishment Charge is a charge to provision a SABNT Connection with the VLAN Aggregation feature and identifies the host connection or the "aggregator" connection.

The VLAN Aggregation Network Assignment Charge is a charge to provision any remote connection to the VLAN Aggregation host "aggregator" connection.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(8) Class of Service (CoS) Package Profile

For each SABNT Connection the customer must decide the mix of packet-based applications to be supported on that Connection, the Class of Service (CoS) Package Profile, and the amount of bandwidth to be assigned for each CoS. The customer's bandwidth will be limited to the fixed speed associated with each CoS. Therefore, total bandwidth available to support transmission of a specific CoS will depend upon the size of the customer's SABNT Connection and the specific CoS percentages the customer selects for the SABNT Connection.

A customer may select different CoS Package Profiles for different connections that share the same network VLAN, or SABNT network arrangement. However, technical limitations may limit the total number of different CoS Package Profiles that can be utilized in a single SABNT network arrangement.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(8) Class of Service (CoS) Profile (Cont'd)

SABNT Connections support the following CoS:

- (a) Real-Time. This CoS supports Voice over Internet Protocol (VoIP) applications. The Real-Time CoS is supported by a low latency queue.
- (b) Business Critical. This CoS supports mission-critical business data applications. These applications tend to be data specific and may include medical imaging, electronic funds transfer, medical records transfer, etc.
- (c) Interactive Video. This CoS supports interactive video applications.
- (d) Best-Effort. This CoS is the default CoS for all other traffic that is not defined as Business Critical, Interactive Video, or Real-Time and is included, at no additional charge, with the SABNT Connection charge. Customer traffic that is not marked with a particular CoS will be treated as Best Effort. Traffic with the Best Effort CoS will have the lowest priority on the network and will support lower priority data applications, such as email and file transfer protocol (FTP).

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(9) Reconfiguration Changes

A customer request to modify a SABNT Connection subsequent to the establishment of the connection is considered a reconfiguration change. Nonrecurring charges provided for processing certain reconfiguration changes are the Service Reconfiguration Charge and System Reconfiguration Charge. The appropriate reconfiguration charge is dependent upon the physical work required to fulfill the reconfiguration change request and applies as specifically set forth herein in lieu of other SABNT nonrecurring charges. Such changes are not treated as disconnects and do not change minimum period requirements.

A Service Reconfiguration Charge is applicable for requests where the work required is a minor change that does not involve changing the physical service type. The Service Reconfiguration Charge is applicable as set forth in 16.8.2.C.4.b following for a request to change an existing connection to a different connection that is the same physical service type but is considered to be a lower order of service.

A System Reconfiguration Charge is applicable for requests where the work required involves changing to a different physical service type or involves major support system changes. The System Reconfiguration Charge is applicable as set forth in 16.8.2.C.4.a following for requests to change an existing connection to a different connection that is a different physical service type. The System Reconfiguration Charge is also applicable to changes with the Network Channel Terminating Equipment (NCTE) interface option from optical to electrical, or vice-versa, and to changes to the premises powering options from AC power to DC power (or vice-versa).

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(A) Explanation of Terms (Cont'd)(10) Stand-Alone Broadband Network Transport (SABNT) Meet Point Interface (MPI)

The SABNT Meet Point Interface (MPI) rate element is for a standard Ethernet defined interface between the SWC Ethernet switch and a customer location outside the Telephone Company's serving area. Customers located in the serving area of an adjacent telephone company may order an MPI from the Telephone Company for connection to the Ethernet facilities ordered by the customer from a telephone company with a serving area adjacent to that of the Telephone Company at the meet point between the two telephone companies. Interstate interexchange carriers may order an MPI for connection to Ethernet facilities ordered by the interexchange carrier from a telephone company with a serving area adjacent to that of the Telephone Company. MPIs will be billed by the Telephone Company subject to the Meet Point Billing provisions of Section 2.4.7(B) preceding. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The MPI rate element includes termination at the network side of the Telephone Company Ethernet switch and the Telephone Company's portion of the facilities up to the meet point.

A SABNT MPI comprises two elements:

SABNT MPI Channel Mileage Facility

SABNT MPI Channel Mileage Termination

The customer can connect multiple SABNT Connections provided by the Telephone Company within its local exchange service area provided that the aggregate capacity of the SABNT Connections does not exceed the capacity of the SABNT MPI ordered by the customer. Interface capability will be provided by the Telephone Company as part of the SABNT MPI Channel Termination.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(B) Basis of Offering

- (1) Suspension of service is not allowed.
- (2) SABNT Service is available 24 hours per day, 7 days per week, except for preventive maintenance.
- (3) Obligations of Customer and Company
 - (a) The Company is not responsible for the installation, operation, or maintenance of any equipment provided by the customer.
 - (b) The customer is responsible for the provision and maintenance of all customer provided equipment and for insuring that the operating characteristics of the customer equipment is compatible with, and does not interfere with, the services offered by the Company.
 - (c) At the Service Connection point, the customer's signaling must conform to the standards identified to the customer by the Company in response to the Access Service Request.
- (4) The minimum service period for all SABNT tariff components is twelve months.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(B) Basis of Offering (Cont'd)

- (5) Due to the nature of the SABNT Service, it will be necessary to perform preventive maintenance and software updates. Therefore, SABNT Service will be unavailable during the period of time when preventive maintenance is being performed. This could result in SABNT Service being unavailable during the period of time between 12:00 AM and 6:00 AM Eastern Time on any given morning. The Company, upon written notice to the customer, may adjust the maintenance window.

(C) Provision of Service - Stand-Alone Broadband Network Transport (SABNT) Connection

- (1) Rates and charges contained in this Tariff consist of the following elements:
- (a) Stand-Alone Broadband Network Transport Connection
 - (b) Stand-Alone Broadband Network Transport Connection Additional Mileage Charge
 - (c) Class of Service (CoS) Package Profile
 - (d) Service Reconfiguration
 - (e) System Reconfiguration
 - (f) Stand-Alone Broadband Network Transport Meet Point Interface Channel Mileage Facility
 - (g) Stand-Alone Broadband Network Transport Meet Point Interface Channel Mileage Termination
- (2) All service connection charges for SABNT Service are included in the respective nonrecurring charges specified herein.
- (3) SABNT Connections are provided utilizing various equipment configurations referred to herein as "physical service types".

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(C) Provision of Service - Stand-Alone Broadband Network Transport (SABNT) Connection (Cont'd)

- (4) Requests by a customer to change from one SABNT arrangement to another SABNT arrangement will be considered a Reconfiguration Change.

(a) System Reconfiguration

A customer request to change an existing SABNT arrangement to a new arrangement that is a different physical service type is considered a System Reconfiguration request. As an example, a request to modify the transport medium from copper to fiber would constitute a System Reconfiguration.

(b) Service Reconfiguration

A customer request to change an existing SABNT arrangement to a new arrangement that is the same physical service type is considered a Service Reconfiguration. As an example, a request to modify the bandwidth allocation(s) would constitute a Service Reconfiguration.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(D) Moves

(1) A move involves a change in the physical location of one of the following:

- (a) The point of interface at the customer premises.
- (b) The customer's premises.

(2) 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 the nonrecurring, i.e., installation, charge for the affected service termination at the customer's premises. 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 disconnect at the existing location, and all associated nonrecurring charges will apply at the new location. The customer will remain responsible for satisfying the remainder of the existing contract.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(E) Term Discounts

SABNT Service may be ordered at the customer's option on a monthly rate basis, subject to a minimum service period of twelve months, or for a Term Discount period of either 36 months (3 years) or 60 months (5 years).

The minimum service period for SABNT Service is twelve months.

For customers that subscribe to the Term Discount plan for 36 months (3 years) or 60 months (5 years), discount percentages and monthly recurring charge rates set forth in Section 17.4.8 following will be frozen against, respectively, decreases in discount percentages and increases in monthly recurring charge rates filed in this tariff for the duration of the committed term Discount term. Any increases in discount percentages or decreases in monthly recurring charges filed in the tariff during the committed Term Discount term will be passed through to customers subscribing to the Term Discount plan on a going-forward basis from the effective date of the revised percentage and/or rates.

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 submit an access service request or other written notice of election for a new Term Discount plan fifteen business days prior to 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 SABNT rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months as the case may be) 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.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(E) Term Discounts (Cont'd)

Eligible SABNT service rate elements are all monthly recurring charges for services provided by the Telephone Company. As long as the number of SABNT services included in a Term Discount plan remains constant, customer requests to install and disconnect SABNT 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 (3) following will not apply.

(1) Upgrades in Term Discounts

Services provided under monthly rates may be upgraded to a Term Discount plan at any time without incurring nonrecurring charges or discontinuance charges for existing services. 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 SABNT service that is upgraded.

(2) Upgrades in Capacity

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity, discontinuance charges will not apply, provided all the following conditions are met:

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

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(E) Term Discounts (Cont'd)(2) Upgrades in Capacity (Cont'd)

- 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 for an equivalent capacity of the existing services being upgraded to the higher speed service will not be assessed.

(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 equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period.

Should the customer choose to discontinue service ordered under a 36 month Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges equal to the charges for the months of service rendered at the undiscounted monthly rates less any amounts previously paid will apply.

ACCESS SERVICE16. Public Packet Data Network (Cont'd)16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd)16.8.2 Regulations (Cont'd)(E) Term Discounts (Cont'd)(3) Discontinuance of Service (Cont'd)

Should the customer choose to discontinue service ordered under a 60 month Term Discount plan after the minimum service period but before the completion of the first 36 months of the Term Discount period, discontinuance charges equal to the charges for the months of service rendered at the undiscounted monthly rates less any amounts previously paid will apply.

Should the customer choose to discontinue service ordered under a 60 month Term Discount plan after completion of the first 36 months of the Term Discount period, discontinuance charges equal to the charges for the months of service rendered at 36 month (3 year) Term Discount monthly rates less any amounts previously paid will apply.

ACCESS SERVICE

17. Rates and Charges –

Alpha Connect is a Rural CLEC as defined by the F.C.C. 47 CFR Part 61.26.

17.1 Common Line Access Service

17.1.1 End User Access Service

Rates will be same as applicable for AT&T MI (Ameritech Michigan) as found in Ameritech Operating Companies, Tariff F.C.C. No. 2, Section 4.

17.1.2 Federal Universal Service Charge (FUSC)

Factor will be the same as found in National Exchange Carriers Association, Tariff F.C.C. No. 5, Section 17.1.3(A)

ACCESS SERVICE17. Rates and Charges17.2 Switched Access Service17.2.1 Nonrecurring ChargesRateTariff
Section
Reference(A) Local Transport - Installation
Per Entrance Facility

6.4.1(B)(1)

- Voice Grade Two Wire ICB
- Voice Grade Four Wire ICB
- High Capacity DS1 ICB
- High Capacity DS3 ICB
- Synchronous Optical Channel OC 3 ICB
- Synchronous Optical Channel OC 12 ICB

(D)
|
(D)(C) FGC and FGD Conversion of
Multifrequency Address
Signaling to SS7 Signaling
or SS7 Signaling to
Multifrequency Address
Signaling

- Per 24 Trunks Converted
or Fraction thereof on
a Per Order Basis ICB 6.4.1(B)(3)

(D) Direct Trunked Transport
ActivatedPer Order

- Per 24 Trunks Activated
or Fraction thereof on
a Per Order Basis ICB 6.4.1(B)(1)

(E) Local Transport - Installation
Per Line or Trunk

None 6.4.1(B)(1)

(F) Flexible Automatic Number
Identification (Flex ANI)

- Per End Office, Per CIC None 6.9.1(AA)

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.2 Switched Access Service (Cont'd)17.2.2 Local TransportRateTariff
Section
ReferencePremium Access

- Entrance Facility
Per Termination 6.1.3(A)(1)
 - Voice Grade Two Wire ICB
 - Voice Grade Four Wire ICB
 - High Capacity DS1 ICB
 - High Capacity DS3 ICB
 - Synchronous Optical Channel OC3 ICB
 - Synchronous Optical Channel OC12 ICB
- Direct Trunked Transport 6.1.3(A)(2)
 - Direct Trunked Facility
Per Mile
 - Voice Grade ICB
 - High Capacity DS1 ICB
 - High Capacity DS3 ICB
 - Synchronous Optical Channel OC3 ICB
 - Synchronous Optical Channel OC12 ICB
- Direct Trunked Termination
Per Termination
 - Voice Grade ICB
 - High Capacity DS1 ICB
 - High Capacity DS3 ICB
 - Synchronous Optical Channel OC3 ICB
 - Synchronous Optical Channel OC12 ICB
- Multiplexing
Per Arrangement 6.1.3(A)(5)
 - DS3 to DS1 ICB
 - DS1 to Voice ICB
- Tandem Switched Transport 6.1.3(A)(3)
 - Tandem Switched Facility
Per Access Minute Per Mile *
- Tandem Switched Termination
Per Access Minute
Per Termination *

* Same as highest corresponding rate for same service found in National Exchange Carrier Association, Inc., Tariff F.C.C. No. 5, Section 17

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.2 Switched Access Service (Cont'd)17.2.2 Local Transport (Cont'd)RateTariff
Section
ReferencePremium Access (Cont'd)- Tandem Switching
Per Access Minute
Per Tandem

*

6.1.3(A)(3)

* Same as highest corresponding rate for same service found in National Exchange Carrier Association, Inc., Tariff F.C.C. No. 5, Section 17

- Network Blocking Per Blocked Call
Applies to FGD only

ICB

6.8.6

- 800 Series Data Base Access Service
Queries
Per Query

6.9.3

Basic

\$0.0053

Vertical Feature

\$0.0059

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.2 Switched Access Service (Cont'd)17.2.2 Local Transport (Cont'd)(A) Common Channel Signaling
Network Connection(1) Signaling Network Access Link

	<u>Rate</u>
- Signaling Mileage Facility per mile	ICB
- Signaling Mileage Termination per Termination	ICB

Nonrecurring
Charge

- Signaling Entrance Facility per Facility	ICB	ICB
(2) STP Port		
- per port	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.2 Switched Access Service (Cont'd)17.2.3 End OfficeRateTariff
Section
Reference(A) Local Switching
Premium

- Per Access Minute

ICB

6.1.3(B)(1)

(B) Information Surcharge-Premium
Per 100 Access
Minutes

ICB

6.1.3(B)(2)

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.2 Switched Access Service (Cont'd)

17.2.4 Reserved for future use.

ACCESS SERVICE17. Rates and Charges - (Cont'd)

17.2	<u>Switched Access Service</u> (Cont'd)		<u>Assumed Minutes Per Month</u>	<u>Tariff Section Reference</u>
17.2.5		<u>Assumed Minutes of Use</u>		
	(A)	Feature Group A, Two Way Calling (1510 Originating, 2685 Terminating)	4195	6.5.4
	(B)	Feature Group A, Originating Only	1510	6.5.4
	(C)	Feature Group A, Terminating Only	2685	6.5.4
	(D)	Feature Group B, Two Way Calling (3132 Originating, 5568 Terminating)	8700	6.6.4
	(E)	Feature Group B, Originating Only	3132	6.6.4
	(F)	Feature Group B, Terminating Only	5568	6.6.4

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service

Alpha Connect provides the transmission portion of wireline broadband Internet access on a non-common carrier basis.

17.3.1 Surcharge for Special Access Service

	Monthly <u>Rate</u>	Tariff Section <u>Reference</u>
- Per Voice Grade Equivalent	None	7.3

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.2 Metallic Service

Regulations concerning Metallic Service are set forth in Section 7.4 preceding.

		<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(A)	Channel Termination Per Termination	ICB	ICB
(B)	Channel Mileage		
	(1) Channel Mileage Facility Per Mile	ICB	
	(2) Channel Mileage Termination Per Termination	ICB	
(C)	Optional Features and Functions		
	(1) Bridging		
	(a) Three Premises Bridging Per Port	ICB	
	(b) Series Bridging Per Port	ICB	
	(2) DSL Access Service Connection		
	(a) Per 10BASE-T	ICB	ICB
	(b) Per 100BASE-T	ICB	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.3 Telegraph Grade Service

Regulations concerning Telegraph Grade Service are set forth in Section 7.5 preceding.

		<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(A)	Channel Termination Per Termination		
	- Two-Wire	ICB	ICB
	- Four-Wire	ICB	ICB
(B)	Channel Mileage		
(1)	Channel Mileage Facility Per Mile	ICB	
(2)	Channel Mileage Termination Per Termination	ICB	
(C)	Optional Features and Functions		
(1)	Telegraph Bridging Per Port		
	- Two-Wire	ICB	
	- Four-Wire	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.4 Voice Grade Service

Regulations concerning Voice Grade Service are set forth in Section 7.6 of the Alpha Connect Tariff F. C. C. No. 1.

		Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
(A)	Channel Termination Per Termination		
	- Two-Wire	ICB	ICB
	- Four-Wire	ICB	ICB
(B)	Channel Mileage		
(1)	Channel Mileage Facility Per Mile	ICB	
(2)	Channel Mileage Termination Per Termination	ICB	
(C)	Optional Features and Functions		
(1)	Bridging		
(a)	<u>Voice Bridging</u> Per Port		
	Two-Wire/Four-Wire		
	- Two-Wire	ICB	
	- Four-Wire	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.4 Voice Grade Service (Cont'd)Monthly
Rate

(C) Optional Features and Functions (Cont'd)

(1) Bridging (Cont'd)

(b) Data Bridging
Per Port

- Two-Wire ICB

- Four-Wire ICB

(c) Telephoto Bridging per port

- Two-Wire ICB

- Four-Wire ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.4 Voice Grade Service (Cont'd)

		Monthly Rate
(C)	Optional Features and Functions (Cont'd)	
(2)	Conditioning Per Termination	
	- C Type	ICB
	- Improved Attenuation Distortion*	None
	- Improved Envelope Delay Distortion*	None
	- Data Capability	ICB
	- Telephoto Capability	ICB
	- Sealing Current	None
(3)	Improved Return Loss for Effective Two-Wire or Four-Wire Transmission Per Termination	
	- Two-Wire	ICB
	- Four-Wire	ICB
(4)	Customer Specified Receive Level per two-wire termination	ICB

* Improved Attenuation Distortion and Improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.4 Voice Grade Service (Cont'd)

		Monthly Rate
(C)	Optional Features and Functions (Cont'd)	
(5)	Multiplexing Per arrangement Voice to Telegraph Grade	none
(6)	Signaling Capability Per termination	ICB
(7)	Selective Signaling Arrangement Per arrangement	ICB
(8)	Transfer Arrangement (key activated* or dial up**)	
-	Per four port arrangement including control channel termination***	ICB
-	Per five port arrangement including control channel termination***	ICB
(9)	Public Packet Switching Network (PPSN) Interface Arrangement Per arrangement	ICB

ICB rates and charges are filed in Section 17.3.9 following.

* The key activated control channel is rated as a Metallic Channel Termination and Channel Mileage, if applicable.

** The Dial-up option requires the customer to purchase the Controller Arrangement from Section 13.3.4 of the Alpha Connect Tariff F. C. C. No. 1.

*** An additional Channel Termination charge will apply whenever a spare channel is configured as a leg to the customer designated premises. Additional channel mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.5 Program Audio Service

Regulations concerning Program Audio Service are set forth in Section 7.7 preceding.

		<u>Monthly Rate</u>	<u>Daily*</u> <u>Rate</u>	<u>Nonrecurring Charge</u>	
				<u>Monthly</u>	<u>Daily</u>
(A)	Channel Termination Per Termination				
	- 200 to 3500 Hz	ICB	ICB	ICB	ICB
	- 100 to 5000 Hz	ICB	ICB	ICB	ICB
	- 50 to 8000 Hz	ICB	ICB	ICB	ICB
	- 50 to 15000 Hz	ICB	ICB	ICB	ICB
(B)	Channel Mileage				
(1)	Channel Mileage Facility Per Mile		<u>Monthly Rate</u>	<u>Daily* Rate</u>	
	- 200 to 3500 Hz		ICB	ICB	
	- 100 to 5000 Hz		ICB	ICB	
	- 50 to 8000 Hz		ICB	ICB	
	- 50 to 15000 Hz		ICB	ICB	
(2)	Channel Mileage Termination Per Termination				
	- 200 to 3500 Hz		ICB	ICB	
	- 100 to 5000 Hz		ICB	ICB	
	- 50 to 8000 Hz		ICB	ICB	
	- 50 to 15000 Hz		ICB	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.5 Program Audio Service (Cont'd)

		<u>Monthly Rate</u>	<u>Daily* Rate</u>
(C)	Optional Features and Functions		
(1)	Bridging, Distribution Amplifier Per Port	ICB	ICB
(2)	Gain Conditioning per service	ICB	ICB
(3)	Stereo per service	ICB	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.6 Video Service

Regulations concerning Video Service are set forth in Section 7.8 preceding.

		Monthly <u>Rate</u>	Daily* <u>Rate</u>	Nonrecurring <u>Charge</u>	
				<u>Monthly</u>	<u>Daily</u>
(A)	Channel Termination Per Termination				
	- TV-1 or 2	ICB	ICB	ICB	ICB
	- 4TV-5	ICB	ICB	ICB	ICB
	- 6TV-5	ICB	ICB	ICB	ICB
	- TV-15	ICB	ICB	ICB	ICB
(B)	Channel Mileage		<u>Monthly Rate</u>	<u>Daily Rate*</u>	
(1)	Channel Mileage Facility Per Mile				
	- All		ICB	ICB	
(2)	Channel Mileage Termination Per Termination				
	- All		ICB	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.7 Digital Data Service

Regulations concerning Digital Data Service are set forth in Section 7.9 of the JSI Tariff No. 1.

Monthly
Rate

Nonrecurring
Charge

(A) Channel Termination
Per Termination

- 2.4 kbps
- 4.8 kbps
- 9.6 kbps
- 19.2 kbps
- 56.0 kbps
- 64.0 kbps

ICB
ICB
ICB
ICB
ICB
ICB

ICB
ICB
ICB
ICB
ICB
ICB

(B) Channel Mileage

(1) Channel Mileage Facility
Per Mile

- 2.4 kbps
- 4.8 kbps
- 9.6 kbps
- 19.2 kbps
- 56.0 kbps
- 64.0 kbps

ICB
ICB
ICB
ICB
ICB
ICB

(2) Channel Mileage Termination
Per Termination

- 2.4 kbps
- 4.8 kbps
- 9.6 kbps
- 19.2 kbps
- 56.0 kbps
- 64.0 kbps

ICB
ICB
ICB
ICB
ICB
ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.7 Digital Data Service (Cont'd)

	Monthly Rate
(C) Optional Features and Functions	
(1) Bridging Per port	ICB
(2) Loop Transfer Arrangement Per four port arrangement* Key activated** or Dial-Up***	ICB
(3) Public Packet Switching Network Interface Arrangement	
- Per 9.6 kbps arrangement	ICB
- Per 56.0 kbps arrangement	ICB
(D) Channel Service Unit Per Termination****	
- 2.4 kbps	ICB
- 4.8 kbps	ICB
- 9.6 kbps	ICB
- 56.0 kbps	ICB

* An additional Channel Termination charge will apply whenever a spare channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center. ICB Rates and Charges are filed in Section 17.3.9 following.

** The key activated control channel is rated as a metallic Channel Termination and Channel Mileage, if applicable.

*** The Dial-Up option requires the customer to purchase the Controller Arrangement from Section 13.3.4 of the Alpha Connect Tariff F. C. C. No. 1.

**** Channel Service Units will only be provided under tariff if they existed in the Telephone Company's inventory as of November 18, 1983.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.8 High Capacity Service

Regulations concerning High Capacity Service are set forth in Section 7.10 of the 39.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(A) Channel Termination Per Termination		
- DS1 1.544 Mbps	ICB	ICB
- DS1C 3.152 Mbps	ICB	ICB
- DS2 6.312 Mbps	ICB	ICB
- DS3 44.736 Mbps	ICB	ICB
- DS4 274.176 Mbps	ICB	ICB
(B) Channel Mileage		
	<u>Monthly Rate</u>	
(1) Channel Mileage Facility Per Mile		
- 1.544 Mbps	ICB	
- 3.152 Mbps	ICB	
- 6.312 Mbps	ICB	
- 44.736 Mbps	ICB	
- 274.176 Mbps	ICB	
(2) Channel Mileage Termination Per Termination		
- 1.544 Mbps	ICB	
- 3.152 Mbps	ICB	
- 6.312 Mbps	ICB	
- 44.736 Mbps	ICB	
- 274.176 Mbps	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.8 High Capacity Service (Cont'd)

(C)	Term Discounts	<u>Percentage</u>
	DS1 and DS3 services	
	36 months	ICB
	60 months	ICB
		Monthly
		<u>Rate</u>
(D)	Optional Features and Functions	
(1)	Multiplexing, per arrangement	
	DS4 to DS1	ICB
	DS3 to DS1	ICB
	DS2 to DS1	ICB
	DS1C to DS1	ICB
	DS1 to Voice*	ICB
	DS1 to DSO	ICB
	DSO to Subrates	
	- Up to 20 2.4 kbps services	ICB
	- Up to 10 4.8 kbps services	ICB
	- Up to 5 9.6 kbps services	ICB

* A channel of this DS1 to the Hub can be used for Digital Data service.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.8 High Capacity Service (Cont'd)

		<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(D)	Optional Features and Functions (Cont'd)		
(2)	Automatic Loop Transfer Per arrangement*	ICB	
(3)	Transfer Arrangement (key activated** or dial up***) Per four port arrangement including control channel termination****	ICB	
(E)	Network Channel Terminating Equipment (NCTE) Per termination		
	- 1.544 Mbps	ICB	
	- Automatic Loop Transfer	ICB	
(F)	DSL Access Service Connection		
	- per 1.544 Mbps	ICB	ICB
	- per 44.736 Mbps	ICB	ICB

* An additional Channel Termination charge will apply whenever the spare line is provided as a leg to the customer designated premises.

** The key activated control channel is rated as a Metallic Channel Termination and Channel Mileage, if applicable.

*** The Dial-up option requires the customer to purchase the Controller Arrangement from Section 13.3.4 of the Alpha Connect Tariff F. C. C. No. 1.

**** An additional Channel Termination charge will apply whenever a spare channel is configured as a leg to the customer designated premises. Additional channel mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.3 Special Access Service (Cont'd)

17.3.9 Held for future use

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.10 Synchronous Optical Channel Service

Regulations concerning Synchronous Optical Channel Service are set forth in 7.11 preceding.

		<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(A)	Channel Termination Per Termination		
	- OC3/OC3c ICB0 Mbps	ICB	ICB
	- OC12 ICB Mbps	ICB	ICB
(B)	Channel Mileage Facility Per Mile		
	- OC3/OC3c ICB Mbps	ICB	
	- OC12 ICB Mbps	ICB	
(C)	Channel Mileage Termination Per Termination		
	- OC3/OC3c ICB Mbps	ICB	
	- OC12 ICB Mbps	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.3 Special Access Service (Cont'd)17.3.10 Synchronous Optical Channel Service (Cont'd)

(D) Optional Features and Functions		Monthly Rate	Nonrecurring Charge
(1)	Customer Node		
	Per Node		
	- OC3/OC3c	ICB	ICB
	- OC12	ICB	ICB
	Customer Premises Port		
	Per Port		
	- OC3/OC3c	ICB	ICB
	- STS-1	ICB	ICB
	- DS3	ICB	ICB
	- DS1	ICB	ICB
(2)	Add/Drop Multiplexing		
	Central Office Port		
	Per Port		
	- OC3/OC3c ICB Mbps	ICB	
	- DS3 44.736 Mbps		ICB
	- DS1 1.544 Mbps	ICB	
(E) DSL Access Service Connection			
	- Per OC3/OC3c	ICB	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services17.4.1 Access Ordering

	<u>Charge</u>	<u>Tariff Section Reference</u>
(A) <u>Access Order Charge</u>		
Per order	ICB	5.4.1
(B) <u>Service Date Change Charge</u>		
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	ICB	5.4.3
(C) <u>Design Change Charge</u>		
The Design Change Charge will apply on a per order per occurrence basis, for each order requiring design change. The applicable charge is:		
Design Change Charge, per order	ICB	5.4.3
(D) <u>Miscellaneous Service Order Charge</u>		
Per Occurrence	ICB	5.4.2

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.2 Additional Engineering

<u>Additional Engineering Periods</u>		<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A)	Basic Time per engineer normally scheduled working hours	ICB	13.1
(B)	Overtime per engineer outside of normally scheduled working hours	ICB	13.1
(C)	Premium Time per engineer outside of scheduled work day.	ICB	13.1

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.3 Additional Labor

<u>Additional Labor Periods</u>		<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A) Installation or Repair			
-	Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	ICB*	13.2.1 & 13.2.2
-	Premium Time, outside of scheduled work day, per technician	ICB*	13.2.1 & 13.2.2
(B) Stand by			
-	Basic time, normally scheduled working hours, per technician	ICB	13.2.3
-	Overtime, outside of normally scheduled working hours on a scheduled work day per technician	ICB	13.2.3
-	Premium Time, outside of scheduled work day, per technician	ICB	13.2.3

* 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.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.3 Additional Labor (Cont'd)

		<u>Each Half Hour or Fraction Thereof</u>		
	<u>Additional Labor Periods</u>	<u>Installation and Repair Technician</u>	<u>Central Office Maintenance Technician</u>	<u>Tariff Section Reference</u>
(C)	Testing and Maintenance with other Telephone Companies, or Other Labor			
-	Basic Time per technician	ICB	ICB	13.2.4 & 13.2.5
-	normally scheduled working hours			
-	Overtime per technician	ICB	ICB	13.2.4 & 13.2.5
-	outside of normally scheduled working hours on a scheduled work day			
-	Premium Time per technician	ICB	ICB	13.2.4 & 13.2.5
-	outside of scheduled work day			

* 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.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services(A) Additional Cooperative Acceptance Testing
- Switched Access

<u>Testing Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17.4.3(C) preceding.	13.3.1(A)(1)

(B) Additional Automatic Testing - Switched AccessTo First Point
of Switching

Additional Tests

	<u>Per Test Per Transmission Path</u>	
Gain-Slope Tests	ICB	13.3.1(A)(2)
C-Notched Noise Tests	ICB	13.3.1(A)(2)
1004 Hz Loss**	ICB	13.3.1(A)(2)
C-Message Noise**	ICB	13.3.1(A)(2)
Balance (return loss)**	ICB	13.3.1(A)(2)

* 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.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services (Cont'd)(C) Additional Manual Testing - Switched AccessTo First Point
of Switching

Additional Tests

Each Half Hour
or Fraction
ThereofTariff
Section
ReferenceGain-Slope,
C-Notched Noise and
any other agreed to
tests, per technician
forth in 17.4.3(C)
precedingSee the rates
for Additional
Labor as set

13.3.1(A)(3)

(D) Additional Cooperative Acceptance Testing
- Special AccessTesting PeriodsEach Half
Hour or
Fraction
ThereofTariff
Section
ReferenceBasic Time, Overtime*
and Premium Time*See the rates
for Additional
Labor as set
forth in 17.4.3(C)
preceding.

13.3.1(B)(1)

* 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.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services (Cont'd)(E) Additional Manual Testing - Special Access

<u>Testing Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17.4.3(C) preceding.	13.3.1(B)(2)

(F) Maintenance of Service

<u>Maintenance of Service Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17.4.3(C) preceding.	13.3.2

(G) Restoration Priority

<u>Nonrecurring Charge</u>	Tariff Section Reference
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Per service arranged	ICB	13.3.3
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(H) Controller Arrangement

	Monthly Rate	
Per Arrangement	ICB	13.3.4(A)

* 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.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services (Cont'd)

<u>Presubscribed Interexchange Carrier (PIC) Change Charge*</u>	<u>Nonrecurring Charge</u>	<u>Tariff Section Reference</u>
Per Telephone Exchange Service line or trunk for each interLATA PIC Change:		13.4(J)
(1) Submitted using manual methods	ICB	
(2) Submitted using electronic methods	ICB	
(3) Submitted using manual methods when both the interLATA PIC and intraLATA PIC selections are changed simultaneously	ICB	
(4) Submitted using electronic methods when both the interLATA PIC and intraLATA PIC selections are changed simultaneously	ICB	
(J) <u>Blocking Service**</u>		
Per exchange service line or trunk and/or per Feature Group A Switched Access line	ICB	13.8

* 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 presubscription 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 misassignment on the part of the Telephone Company, no charge shall apply. In the event the subscriber denies requesting a presubscription change, the Telephone Company will credit the subscriber's account for the presubscription 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 presubscription change charge to return the subscriber to its previous authorized carrier and, if initially billed to the subscriber, the presubscription change charge for the alleged unauthorized change.

** 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.

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services (Cont'd)(K) Billing Name and Address Service

		<u>Nonrecurring Charge</u>	<u>Tariff Section Reference</u>
-	Per BNA Order	ICB	13.9.4(A)
-	Per BNA Record	ICB	13.9.4(A)
-	Optional Magnetic Tape Charge - Per Magnetic Tape	ICB	13.9.4(B)
-	Optional Format Programming Charge - Per Hour	ICB	13.9.4(C)

(L) Originating Line
Screening (OLS) Service

-	Per Exchange service line	ICB	13.10
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(M) Coin Supervision
Additive Service

		<u>Monthly Rate</u>	
-	Per exchange service line	ICB	13.12

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services (Cont'd)(N) Access Recovery Charge (ARC)

Regulations concerning the Access Recovery Charge are set forth in Section 13.16 preceding.

(1) Residential ARC

Per line or trunk assessed a
Residence End User Common Line Not Applicable

(2) Single Line Business ARC

Per line or trunk assessed a
Single Line Business
End User Common Line Not Applicable

(3) Multiline Business ARC

Per line or trunk assessed a
Multiline Business
End User Common Line Not Applicable

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.5 Special Federal Government Access Services

(A)	Voice Grade Secure	Monthly	Nonrecurring	Termination
	<u>Communications</u>	<u>Rate</u>	<u>Charges</u>	<u>Charges</u>
	Type I, each T-3 Conditioning,	ICB rates and charges apply		
	Additional Conditioning, per service termination	ICB rates and charges apply		
	Type II, each G-1 Conditioning,	ICB rates and charges apply		
	Type III, each G-2 Conditioning,	ICB rates and charges apply		
	Additional Conditioning, per service termination	ICB rates and charges apply		
	Type IV, each G-3 Conditioning,	ICB rates and charges apply		
	Additional Conditioning, per service termination	ICB rates and charges apply		
(B)	Wideband Digital Special Access Service			
	Wideband Secure <u>Communications</u>	Monthly <u>Rates</u>	Nonrecurring <u>Charges</u>	Termination <u>Charges</u>
	Type I, each	ICB rates and charges apply		
	Type II, each	ICB rates and charges apply		
	Type III, each	ICB rates and charges apply		

ACCESS SERVICE

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, the rates and charges will be developed on an individual case basis.

(B) Avoidance

For each service provided in accordance with 11.1.2, 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, 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, the rates and charges will be developed on an individual case basis.

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.4 Other Services (Cont'd)

17.4.7 Specialized Service or Arrangements

Specialized Service or Arrangements are provided
on an individual case basis as set forth following:

None

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network17.4.8.1 Frame Relay Access Service

Regulations concerning Frame Relay Access Service are set forth in Section 16.1 preceding.

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
(A) Connections		
(1) <u>Frame Relay Access Connection (FRAC)</u> (per FRAC)		
56.0 kbps	ICB	ICB
64.0 kbps	ICB	ICB
1.544 Mbps	ICB	ICB
44.736 Mbps	ICB	ICB
(2) <u>Frame Relay Inter-network Connection (FRIC)</u> (per FRIC)		
1.544 Mbps	ICB	ICB
44.736 Mbps	ICB	ICB
(3) <u>End User Port - Standard</u> (per port)		
56.0 kbps	ICB	
64.0 kbps	ICB	
1.544 Mbps	ICB	
44.736 Mbps	ICB	
(4) <u>Access Customer Port</u> (per port)		
1.544 Mbps	ICB	
44.736 Mbps	ICB	

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.1 Frame Relay Access Service (Cont'd)

(A) Connections (Cont'd)

(5) <u>Term Discounts</u>	<u>Percentage</u>
36 months	ICB
60 months	ICB

(6) Permanent Virtual Connections (PVCs)

(a) Standard

<u>CIR</u>	<u>Monthly Rate</u>
8 kbps	ICB
16 kbps	ICB
28 kbps	ICB
32 kbps	ICB
56 kbps	ICB
64 kbps	ICB
128 kbps	ICB
192 kbps	ICB
256 kbps	ICB
384 kbps	ICB
512 kbps	ICB
768 kbps	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.1 Frame Relay Access Service (Cont'd)

(A) Connections (Cont'd)

(6) Permanent Virtual Connections (PVCs) (Cont'd)

(b) Extended

<u>CIR</u>	<u>Monthly Rate</u>	
8 kbps	ICB	
16 kbps	ICB	
28 kbps	ICB	
32 kbps	ICB	
56 kbps	ICB	
64 kbps	ICB	
128 kbps	ICB	
192 kbps	ICB	
256 kbps	ICB	
384 kbps	ICB	
512 kbps	ICB	
768 kbps	ICB	
		<u>Nonrecurring Charge</u>
(7) PVC Installation Charge	ICB	
(8) PVC Rearrangement Charge	ICB	

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

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

Regulations concerning Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) are set forth in Section 16.7, preceding.

(A) Ports

ICB FOR ALL TYPES AND SIZES

(2) Per Ethernet-based UNI or NNI Port

All NRC for all speeds and types is ICB
All RC for all speeds and types is ICB

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

17.4.8.2 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont'd)

(B) Virtual Paths

All types, sizes and services are ICB

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

17.4.8.2 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont'd)

(D) Optional Features and Functions

(1) DSL Access Service Connection

(a) Per Basic UNI or NNI Port

All speeds and types
are ICB

(b) Per Ethernet-based UNI or NNI Port

All speeds and types are ICB

ACCESS SERVICE

17. Rates and Charges - (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

17.4.8.2 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont'd)

(D) Optional Features and Functions (Cont'd)

(1) DSL Access Service Connection (Cont'd)

(d) Per MM-VCC

All services and types are ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.3 Ethernet Transport Service (ETS)

Regulations concerning Ethernet Transport Service (ETS) are set forth in Section 16.4, preceding.

(A) ETS Channel Terminations

- (1) Per termination when customer designated premises located within 300 feet of ETS SWC

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
10 Mbps	ICB	ICB
20 Mbps	ICB	ICB
50 Mbps	ICB	ICB
100 Mbps	ICB	ICB
500 Mbps	ICB	ICB
1 Gbps	ICB	ICB

- (2) Per termination when customer designated premises located more than 300 feet of ETS SWC

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
10 Mbps	ICB	ICB
20 Mbps	ICB	ICB
50 Mbps	ICB	ICB
100 Mbps	ICB	ICB
500 Mbps	ICB	ICB
1 Gbps	ICB	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.3 Ethernet Transport Service (ETS) (Cont'd)(B) Ports

(1) Per ETS Basic Port

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
10 Mbps	ICB	ICB
20 Mbps	ICB	ICB
50 Mbps	ICB	ICB
100 Mbps	ICB	ICB
500 Mbps	ICB	ICB
1 Gbps	ICB	ICB

(2) Per ETS Interconnection Port

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
44.736 Mbps	ICB	ICB
ICB Mbps	ICB	ICB
ICB Mbps	ICB	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.3 Ethernet Transport Service (ETS) (Cont'd)(C) ETS Ethernet Virtual Connections (EVCs)

(1) Per Intraswitch ETS EVC

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
5 Mbps	ICB	ICB
10 Mbps	ICB	ICB
20 Mbps	ICB	ICB
50 Mbps	ICB	ICB
100 Mbps	ICB	ICB
500 Mbps	ICB	ICB
1 Gbps	ICB	ICB

(2) Per Interswitch ETS EVC

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
5 Mbps	ICB	ICB
10 Mbps	ICB	ICB
20 Mbps	ICB	ICB
50 Mbps	ICB	ICB
100 Mbps	ICB	ICB
500 Mbps	ICB	ICB
1 Gbps	ICB	ICB

(D) ETS Extended Ethernet Virtual Connections (E-EVCs)

Per ETS E-EVC

<u>Capacity</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
5 Mbps	ICB	ICB
10 Mbps	ICB	ICB
20 Mbps	ICB	ICB
50 Mbps	ICB	ICB
100 Mbps	ICB	ICB
500 Mbps	ICB	ICB
1 Gbps	ICB	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.3 Ethernet Transport Service (ETS) (Cont'd)(E) Optional Features and Functions

(1) DSL Access Service Connection

(a) Per ETS Basic Port equipped

<u>Capacity</u>	<u>Nonrecurring Charge</u>
10 Mbps	ICB
20 Mbps	ICB
50 Mbps	ICB
100 Mbps	ICB
500 Mbps	ICB
1 Gbps	ICB

(b) Per ETS Interconnection Port equipped

<u>Capacity</u>	<u>Nonrecurring Charge</u>
ALL Mbps	ICB
1 Gbps	ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.3 Ethernet Transport Service (ETS) (Cont'd)(E) Optional Features and Functions (Cont'd)

(1) DSL Access Service Connection (Cont'd)

(c) Per ETS MM-VCC

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
		ICB
Per 10 Mbps increment	ICB	

(d) Per ETS Design Change

<u>Nonrecurring Charge</u>
ICB

ACCESS SERVICE17. Rates and Charges - (Cont'd)17.4 Other Services (Cont'd)17.4.8 Public Packet Data Network (Cont'd)17.4.8.4 DSL Access Services Wholesale Rate Plan

Regulations concerning the DSL Access Services Wholesale Rate Plan (DSL WRP) are set forth in Section 8.3

(A) DSL Monthly Plan Line Charges

	<u>Monthly Recurring Charge</u>	<u>Nonrecurring Charge</u>
ADSL Line Charge		
Voice-Data Option	ICB	ICB
Data-Only Option	ICB	ICB

(B) DSL WRP Term Plan(1) DSL WRP Term Plan Charges

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
Per WRP Serving Wire Center included in a Term Plan	ICB	None

(2) DSL WRP Term Plan Line Charges

	<u>Monthly Recurring Charge</u> <u>3 Year</u>	<u>Nonrecurring Charge</u>
ADSL Line Charge		
Voice-Data Option	ICB	ICB
Data-Only Option	ICB	ICB

(3) DSL Volume Pricing Commitment Plan

<u>Monthly Volume Commitment Level</u>	<u>Monthly Discount</u>
500 Lines	ICB
2,500 Lines	ICB
5,000 Lines	ICB