

**COMMONWEALTH TELEPHONE COMPANY d/b/a FRONTIER COMMUNICATIONS COMMONWEALTH
TELEPHONE COMPANY**

ACCESS SERVICE

RATES AND RULES

GOVERNING THE FURNISHING OF TELEPHONE SERVICE IN
EXCHANGE AREAS OF ALL OF WYOMING COUNTY, AND PORTIONS OF BERKS, BRADFORD,
BUCKS, CARBON, CHESTER, COLUMBIA, DAUPHIN, LACKAWANNA, LANCASTER, LEHIGH,
LUZERNE, LYCOMING, MONROE, NORTHAMPTON, SCHUYLKILL, SULLIVAN, SUSQUEHANNA,
TIOGA, AND YORK COUNTIES
IN THE STATE OF PENNSYLVANIA

ISSUED: May 16, 2023

EFFECTIVE: July 1, 2023

by

ALLISON ELLIS
SVP REGULATORY AFFAIRS FRONTIER COMMUNICATIONS
COMMONWEALTH TELEPHONE COMPANY DALLAS, PENNSYLVANIA

NOTICE

See Sheet 2

Supplement No. 17 to Tariff PA P.U.C. No. 26

COMMONWEALTH TELEPHONE COMPANY

CHANGES MADE BY THIS SUPPLEMENT

CHANGES:

The purpose of this filing is to revise the tariff rates as required in the FCC's 8YY Access Charge Reform, Report and Order FCC 20-143, WC Docket No. 18-156, Released October 9, 2020, Adopted October 7, 2020. Erratum Released October 30, 2020. Second Erratum Released November 27, 2020.

Section 17	Sixth Revised Page 17-3
Section 17	Sixth Revised Page 17-4
Section 17	Ninth Revised Page 17-5

ACCESS SERVICE

TABLE OF CONTENTS

<u>No.</u>		<u>Page</u>
1.	<u>APPLICATION OF TARIFF</u>	1-1
2.	<u>GENERAL REGULATIONS</u>	2-1
2.1	<u>Undertaking of the Telephone Company</u>	2-1
2.1.1	Scope	2-1
2.1.2	Limitations	2-1
2.1.3	Liability	2-3
2.1.4	Provision of Services	2-7
2.1.5	Facility Terminations	2-7
2.1.6	Service Maintenance	2-7
2.1.7	Changes and Substitutions	2-8
2.1.8	Refusal and Discontinuance of Service	2-9
2.1.9	Notification of Service-Affecting Activities	2-12
2.1.10	Coordination with Respect to Network Contingencies	2-12
2.1.11	Provision and Ownership of Telephone Numbers	2-12

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>	
2. <u>GENERAL REGULATIONS</u> (Cont'd)		
2.2 <u>Use</u>	2-13	
2.2.1 Interference or Impairment	2-13	
2.2.2 Unlawful and Abusive Use	2-13	
2.3 <u>Obligations of the Customer</u>	2-14	
2.3.1 Damages	2-14	
2.3.2 Ownership of Facilities and Theft	2-14	
2.3.3 Equipment Space and Power	2-15	
2.3.4 Availability for Testing	2-15	
2.3.5 Limitation of Use of Metallic Facilities	2-15	
2.3.6 Balance	2-16	
2.3.7 Design of Customer Services	2-16	
2.3.8 References to the Telephone Company	2-16	
2.3.9 Claims and Demands for Damages	2-17	
2.3.10 Coordination with Respect to Network Contingencies	2-18	
2.3.11 Jurisdictional Report and Certification Requirements	2-18	
2.3.12 Determination of Interstate Charges for Mixed Interstate and Intrastate Access Service	2-26	
2.3.13 Identification and Rating of VoIP-PSTN Traffic	2-26.1	(C)
2.4 <u>Payment Arrangements and Credit Allowances</u>	2-27	
2.4.1 Payment of Rates, Charges and Deposits	2-27	
2.4.2 Minimum Periods	2-34	
2.4.3 Cancellation of an Order for Service	2-35	
2.4.4 Credit Allowance for Service Interruptions	2-35	
2.4.5 Re-establishment of Service Following Fire, Flood or Other Occurrence	2-45	
2.4.6 Title or Ownership Rights	2-46	
2.4.7 Access Services Provided By More Than One Telephone Company	2-46	
2.5 <u>Connections</u>	2-68	

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. GENERAL REGULATIONS (Cont'd)	
2.6 <u>Definitions</u>	
800 Series	2-68
Access Code	2-68
Access Minutes	2-69
Access Tandem	2-69
Add/Drop Multiplexing	2-69
Aggregator	2-69
Answer/Disconnect Supervision	2-70
Attenuation Distortion	2-70
Balance (100 Type) Test Line	2-70
Bit	2-70
Business Day	2-70
Busy Hour Minutes of Capacity (BHMC)	2-71
Call	2-71
Carrier Identification Code (CIC)	2-71
Carrier or Common Carrier	2-71
CCS	2-71
Central Office	2-71
Central Office Maintenance Technician	2-72
Central Office Prefix	2-72
Channel(s)	2-72
Channel Service Unit	2-72
Channelize	2-72
Clear Channel Capability	2-73
C-Message Noise	2-73
C-Notched Noise	2-73
Committed Information Rate	2-73
Common Channel Signalling	2-73
Common Line	2-74
Communications System	2-74
Customer(s)	2-74
Customer Node	2-74
Customer Designated Premises	2-75
Data Transmission (107 Type) Test Line	2-75
Decibel	2-75
Decibel Reference Noise C-Message Weighting	2-75
Decibel Reference Noise C-Message Referenced to 0	2-75
Detail Billing	2-76
Digital Switched 56 Service	2-76
Direct Trunked Transport	2-76
Dual Tone Multifrequency Address Signaling	2-77

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. <u>GENERAL REGULATIONS</u> (Cont'd)	
2.6 <u>Definitions</u> (Cont'd)	
Echo Control	2-77
Echo Path Loss	2-77
Echo Return Loss	2-77
Effective 2-wire	2-77
Effective 4-wire	2-78
End Office	2-78
End User	2-78
Enhanced Service	2-79
Entrance Facility	2-79
Entry Switch	2-79
Envelope Delay Distortion	2-79
Equal Level Echo Path Loss	2-79
Exchange	2-80
Exit Message	2-80
Expected Measured Loss	2-80
Extended Area Service	2-80
First Point of Switching	2-81
Frequency Shift	2-81
Grandfathered	2-81
Host Central Office	2-81
Hub	2-81
Immediately Available Funds	2-82
Impedance Balance	2-82
Impulse Noise	2-82
Individual Case Basis	2-82
Initial Address Message	2-83
Inserted Connection Loss	2-83
Installation and Repair Technician	2-83
Interexchange Carrier (IC) or Interexchange Common Carrier	2-83
Intermediate Hub	2-84
Intermodulation Distortion	2-84
Interstate Communications	2-84
Intrastate Communications	2-84
Legal Holiday	2-84
Line Side Connection	2-85
Local Access and Transport Area (LATA)	2-85
Local Area Network	2-85
Loss Deviation	2-85

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. <u>GENERAL REGULATIONS</u> (Cont'd)	
2.6 <u>Definitions</u> (Cont'd)	
Major Fraction Thereof	2-85
Message	2-85
Milliwatt (102 Type) Test Line	2-86
Network Control Signaling	2-86
Nonsynchronous Test Line	2-86
North American Numbering Plan	2-86
Off-hook	2-86
On-hook	2-87
Open Circuit Test Line	2-87
Originating Direction	2-87
Phase Jitter	2-87
Point of Termination	2-87
Premises	2-87
Release Message	2-87
Remote Switching Modules/Systems	2-88
Return Loss	2-88
Registered Equipment	2-88
Service Access Code	2-88
Service Switching Point	2-88
Serving Wire Center	2-89
Seven Digit Manual Test Line	2-89
Shortage of Facilities or Equipment	2-89
Short Circuit Test Line	2-89
Signal-To-C-Notched Noise Ratio	2-89
Signaling Point	2-89
Signaling System 7	2-90
Signaling Transfer Point	2-90
Signaling Transfer Point Port	2-90
Signaling Return Loss	2-90
Study Area	2-91
Subtending End Office of an Access Tandem	2-91
Super Intermediate Hub	2-91

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)Page No.2. GENERAL REGULATIONS (Cont'd)2.6 Definitions (Cont'd)

Tandem Switched Transport	2-92
Terminating Direction	2-92
Terminus Hub	2-92
Throughput	2-92
Transmission Measuring (105 Type) Test Line/Responder	2-92
Transmission Path	2-93
Trunk	2-93
Trunk Group	2-93
Trunk Side Connection	2-93
Two-Wire to Four-Wire Conversion	2-93
V and H Coordinates Method	2-94
WATS Serving Office - Grandfathered	2-94
Wireless Switching Center	2-94
Wire Center	2-94

(C)

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>	
3. <u>CARRIER COMMON LINE ACCESS SERVICE</u>	3-1	
3.1 <u>General Description</u>	3-1	
3.2 <u>Limitations</u>	3-1	
3.2.1 Exclusions	3-1	
3.2.2 Access Groups	3-2	
3.2.3 WATS Access Lines - Grandfathered	3-2	(C)
3.3 <u>Undertaking of the Telephone Company</u>	3-3	
3.3.1 Provision of Service	3-3	
3.3.2 Determination of Jurisdiction	3-3	
3.4 <u>Obligations of the Customer</u>		
3.4.1 Switched Access Service requirement	3-3	
3.4.2 Supervision	3-3	
3.5 <u>Carrier Charge</u>	3-4	

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>	
4. <u>WATS ACCESS LINE</u> - Grandfathered	4-1	(C)

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
5. <u>ACCESS ORDERING</u>	5-1
5.1 <u>General</u>	5-1
5.1.1 Service Installation	5-2
5.1.2 Expedited Orders	5-3
5.1.3 Selection of Facilities for Access Orders	5-4
5.2 <u>Ordering Requirements</u>	5-4
5.2.1 Switched Access Service	5-4
5.2.2 Special Access Service	5-13
5.2.3 WATS or WATS-type Service - Grandfathered	5-15
5.2.4 Mixed Use Facilities - Switched and Special Access	5-15
5.2.5 Miscellaneous Services	5-16
5.3 <u>Access Orders for Services Provided by More Than One Telephone Company</u>	5-17
5.3.1 Non Meet Point Billing Ordering	5-17
5.3.2 Meet Point Billing Ordering	5-18
5.4 <u>Charges Associated with Access Ordering</u>	5-20
5.4.1 Access Order Charge	5-20
5.4.2 Miscellaneous Service Order Charge	5-23
5.4.3 Access Order Change Charges	5-24
5.5 <u>Minimum Periods and Cancellations</u>	5-27
5.5.1 Minimum Periods	5-27
5.5.2 Development of Minimum Period Charges	5-28
5.5.3 Cancellation of an Access Order	5-29
5.5.4 Partial Cancellation Charge	5-31

(C)

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
6. <u>SWITCHED ACCESS SERVICE</u>	6-1
6.1 <u>General</u>	6-1
6.1.1 Description and Provision of Switched Access Service Arrangements	6-2
6.1.2 Ordering Options and Conditions	6-5
6.1.3 Rate Categories	6-5
6.1.4 Special Facilities Routing	6-30
6.1.5 Design Layout Report	6-30
6.2 <u>Undertaking of the Telephone Company</u>	6-30
6.2.1 Network Management	6-30
6.2.2 Transmission Specifications	6-31
6.2.3 Provision of Service Performance Data	6-32
6.2.4 Testing	6-32
6.2.5 Determination of Number of Transmission Paths	6-34
6.2.6 Trunk Group Measurement Reports	6-35
6.3 <u>Obligations of the Customer</u>	6-36
6.3.1 Report Requirements	6-36
6.3.2 Trunk Group Measurement Reports	6-37
6.3.3 Supervisory Signaling	6-37
6.3.4 Short Duration Mass Calling Requirements	6-37

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
6. <u>SWITCHED ACCESS SERVICE (Cont'd)</u>	
6.4 <u>Rate Regulations</u>	6-38
6.4.1 Description and Application of Rates and Charges	6-38
6.4.2 Minimum Monthly Charge	6-53
6.4.3 Change of Switched Access Service Arrangements	6-54
6.4.4 Moves	6-55
6.4.5 Local Information Delivery Services	6-55
6.4.6 Mileage Measurement	6-56
6.4.7 Mixed Use	6-61
6.4.8 Message Unit Credit for Feature Group A	6-61
6.4.9 Application of Rates for Feature Group A Extension Service	6-62
6.5 <u>Description and Provision of Feature Group A (FGA)</u>	6-63
6.5.1 Description	6-63
6.5.2 Optional Features	6-67
6.5.3 Optional Features Provided in Local Tariffs	6-69
6.5.4 Measuring Access Minutes	6-69
6.5.5 Testing Capabilities	6-73
6.6 <u>Description and Provision of Feature Group B (FGB)</u>	6-74
6.6.1 Description	6-74
6.6.2 Optional Features	6-78
6.6.3 Design and Traffic Routing	6-80
6.6.4 Measuring Access Minutes	6-80
6.6.5 Testing Capabilities	6-85

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
6. <u>SWITCHED ACCESS SERVICE (Cont'd)</u>	
6.7 <u>Description and Provision of Feature Group C (FGC)</u>	6-86
6.7.1 Description	6-86
6.7.2 Optional Features	6-91
6.7.3 Design and Traffic Routing	6-94
6.7.4 Measuring Access Minutes	6-95
6.7.5 Design Blocking Probability	6-99
6.7.6 Testing Capabilities	6-101
6.8 <u>Description and Provision of Feature Group D (FGD)</u>	6-102
6.8.1 Description	6-102
6.8.2 Optional Features	6-107
6.8.3 Design and Traffic Routing	6-109
6.8.4 Measuring Access Minutes	6-110
6.8.5 Design Blocking Probability	6-112
6.8.6 Network Blocking Charge	6-114
6.8.7 Testing Capabilities	6-115
6.9 <u>Chargeable and Nonchargeable Optional Features</u>	6-116
6.9.1 Common Switching Nonchargeable Optional Features	6-117
6.9.2 Transport Termination Nonchargeable Optional Features	6-136
6.9.3 Chargeable Optional Features	6-137

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
7. <u>SPECIAL ACCESS SERVICE</u>	7-1
7.1 <u>General</u>	7-1
7.1.1 Rate Categories	7-1
7.1.2 Facility Interface Combination	7-4
7.1.3 Optional Features and Functions	7-4
7.1.4 Service Configuration	7-5
7.1.5 Alternate Use	7-9
7.1.6 Special Facilities Routing	7-9
7.1.7 Design Layout Report	7-9
7.1.8 Acceptance Testing	7-10
7.1.9 Ordering Options and Conditions	7-10
7.1.10 Jurisdictional Report Requirements	7-11
7.2 <u>Technical Service Description for Special Access Service</u>	7-12
7.2.1 Analog Services	7-13
7.2.2 Digital Services	7-168
7.2.3 Service Designator/ Network Channel Code Conversion Table	7-192
7.3 <u>Facility Interface Codes</u>	7-194
7.3.1 Glossary of Facility Interface Codes and Options	7-194
7.3.2 Impedance	7-200
7.3.3 Digital Hierarchy Facility Interface Codes	7-201

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
7. <u>SPECIAL ACCESS SERVICE</u> (Cont'd)	
7.4 <u>Rate Regulations</u>	7-202
7.4.1 Types of Rates and Charges	7-202
7.4.2 Surcharge for Special Access Service	7-206
7.4.3 Minimum Periods	7-208
7.4.4 Moves	7-209
7.4.5 Rate Application Exception Rule	7-210
7.4.6 Mileage Measurement	7-211
7.4.7 Facility Hubs	7-212
7.4.8 Shared Use Analog and Digital High Capacity Services	7-213
7.5 <u>Rates and Charges</u>	7-214
7.5.1 Access Connections	7-214
7.5.2 Special Transport	7-217
7.5.3 Features and Functions	7-223
7.5.4 Special Access Lines	7-268

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
8. <u>BILLING AND COLLECTION SERVICES</u>	8-1
8.1 <u>Recording Service</u>	8-1
8.1.1 General Description	8-1
8.1.2 Undertaking of the Telephone Company	8-2
8.1.3 Liability of the Telephone Company	8-4
8.1.4 Obligations of the IC	8-4
8.1.5 Payment Arrangements and Audit Provision	8-5
8.1.6 Rate Regulations	8-7
8.1.7 Rates and Charges	8-8
8.2 <u>Billing Service</u>	8-9
8.2.1 Message Billing Service	8-9
8.2.2 Private Line Billing Service	8-54
8.2.3 Purchase of Accounts Receivable	8-73
8.2.4 Billing Arrangements When the Telephone Company Acts as Billing Agent for the IC	8-80
8.3 <u>Billing Analysis Service</u>	8-81
8.3.1 General Description	8-81
8.3.2 Undertaking of the Telephone Company	8-82
8.3.3 Liability of the Telephone Company	8-88
8.3.4 Obligations of the IC	8-88
8.3.5 Payment Arrangements	8-90
8.3.6 Rate Regulations	8-91
8.3.7 Rates and Charges	8-93

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
8.4 <u>Billing Information Service</u>	8-94
8.4.1 General Description	8-94
8.4.2 Undertaking of the Telephone Company	8-94
8.4.3 Liability of the Telephone Company	8-101
8.4.4 Obligations of the IC	8-101
8.4.5 Payment Arrangements	8-103
8.4.6 Rate Regulations	8-104
8.4.7 Rates and Charges	8-106
9. <u>RESERVED FOR FUTURE USE</u>	9-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
10. <u>SPECIAL FEDERAL GOVERNMENT ACCESS SERVICES</u>	10-1
10.1 <u>General</u>	10-1
10.2 <u>Emergency Conditions</u>	10-2
10.3 <u>Facility Availability</u>	10-2
10.4 <u>Federal Government Regulations</u>	10-2
10.5 <u>Service Offerings to the Federal Government</u>	10-3
10.5.1 Type and Description	10-3
10.5.2 Mileage Application	10-6
10.6 <u>Rates and Charges</u>	10-7
10.6.1 General	10-7
10.6.2 Voice Grade Special Access	10-7
10.6.3 Move Charges	10-7
11. <u>SPECIAL FACILITIES ROUTING OF ACCESS SERVICES</u>	11-1
11.1 <u>Description</u>	11-1
11.1.1 Diversity	11-1
11.1.2 Avoidance	11-1
11.1.3 Diversity and Avoidance Combined	11-1
11.1.4 Cable-Only Facilities	11-1
12. <u>SPECIALIZED SERVICE OR ARRANGEMENTS</u>	12-1
12.1 <u>General</u>	12-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
13. <u>ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES</u>	13-1
13.1 <u>Additional Engineering</u>	13-1
13.2 <u>Additional Labor</u>	13-2
13.2.1 Overtime Installation	13-2
13.2.2 Overtime Repair	13-3
13.2.3 Standby	13-3
13.2.4 Testing and Maintenance with Telephone Companies	13-3
13.2.5 Other Labor	13-3
13.3 <u>Miscellaneous Services</u>	13-3
13.3.1 Testing Services	13-3
13.3.2 Maintenance of Service	13-11
13.4 <u>IntraLATA Toll Presubscription</u>	13-12

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
14. <u>RESERVED FOR FUTURE USE</u>	14-1
15. <u>ACCESS SERVICE INTERFACES AND TRANSMISSION SPECIFICATIONS</u>	15-1
15.1 <u>Switched Access Service</u>	15-1
15.1.1 Local Transport Interface Groups	15-1
15.1.2 Standard Transmission Specifications	15-12
15.1.3 Data Transmission Parameters	15-21
16. <u>RESERVED FOR FUTURE USE</u>	16-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
17. <u>RATES AND CHARGES</u>	17-1
17.1 <u>Common Line Access Service</u>	17-1
17.1.1 Carrier Common Line Access Service	17-1
17.2 Switched Access Service	17-2
17.2.1 Nonrecurring Charges	17-2
17.2.2 Local Transport	17-3
17.2.3 End Office	17-5
17.2.4 Assumed Minutes of Use	17-6
17.2.5 Operator Transfer Services	17-6
17.3 <u>Special Access Service</u>	17-6
17.3.1 Surcharge for Special Access Service	17-6
17.4 <u>Other Services</u>	17-7
17.4.1 Access Ordering	17-7
17.4.2 Additional Engineering	17-8
17.4.3 Additional Labor	17-9
17.4.4 Miscellaneous Services	17-11
17.4.5 Special Federal Government Access Services	17-14
17.4.6 Special Facilities Routing of Access Services	17-15
17.4.7 Specialized Service or Arrangements	17-16

ACCESS SERVICE

EXPLANATION OF SYMBOLS

C - to signify changed regulation. D - to signify decrease rate.
I - to signify increase rate.

EXPLANATION OF ABBREVIATIONS

ADM	-	Add/Drop Multiplexing
AML	-	Actual Measured Loss
ANI	-	Automatic Number Identification
AP	-	Program Audio
BHMC	-	Busy Hour Minutes of Capacity
CCS	-	Common Channel Signaling
CDP	-	Customer Designated Premises
CI	-	Channel Interface
CNP	-	Charge Number Parameter
CO	-	Central Office
Cont'd	-	Continued
CPE	-	Customer Provided Equipment
CPN	-	Calling Party Number
CSP	-	Carrier Selection Parameter
dB	-	decibel
dBrnC	-	Decibel Reference Noise C-Message Weighting
dBrnCO	-	Decibel Reference Noise C-Message Weighted O
dc	-	direct current
DDD	-	Direct Distance Dialing
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

ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

HC	-	High Capacity
Hz	-	Hertz
IC	-	Interexchange Carrier
ICB	-	Individual Case Basis
ICL	-	Inserted Connection Loss
kbps	-	kilobits per second
kHz	-	kilohertz
LAN	-	Local Area Network
LATA	-	Local Access and Transport Area
ma	-	milliamperes
Mbps	-	Megabits per second
mcs	-	Microsecond
MHz	-	Megahertz
MRC	-	Monthly Recurring Charge
MT	-	Metallic
MTS	-	Message Telecommunications Service(s)
NPA	-	Numbering Plan Area
NRC	-	Nonrecurring Charge
NXX	-	Three-Digit Central Office Prefix
PBX	-	Private Branch Exchange
PIC	-	Presubscribed Interexchange Carrier
POT	-	Point of Termination
SAC	-	Service Access Code
SNAL	-	Signaling Network Access Line
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
TG	-	Telegraph Grade
TLP	-	Transmission Level Point
TV	-	Television
VG	-	Voice Grade
V & H	-	Vertical & Horizontal
WATS	-	Wide Area Telecommunications Service(s)
WSC	-	Wireless Switching Center
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.
Wire Center Information Tariff F.C.C. No. 4

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 (www.telcordia.com).

Technical Reference:

Multiple Exchange Carrier Access Billing (MECAB) Guidelines
Issued: February 1998

Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines
Issued: May 1994

PUB 41004 Data Communications Using Voiceband Private Line
Channels
Issued: October 1973

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

PUB 62411 High Capacity Digital Service Channel Interface
Specification
Issued: September 1983, Addendum October 1984

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

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

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

TR-TSY-000335, Issue 2 Voice Grade Special Access Service -
Transmission Parameter Limits and Interface Combinations Issued:
May 1990

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

TR-NPL-000337 Program Audio Special Access Service and Local
Channel Services
Issued: 0July 1987

TR-NPL-000338 Television Special Access and Local Channel
Services
- Transmission Parameter Limits and Interface Combinations
Issued: December 1986

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

TR-INS-000342 High Capacity Digital Special Access Service
Issued: February 1991

SR-STS-000307 Issue 5 NC/NCI Code Dictionary Issued: May 1994

TR-TSY-000506 LATA Switching Systems Generic Requirements (LSSGR)
Section 6
Issued: October 1987, Revised December 1988, Revised June 1990

TR-NPL-000054 High Capacity Digital Service (1.544 Mbs) Interface
Generic Requirements for End Users
Issued: April 1989
Available: April 1989

TR-TSV-000905 Common Channel Signaling Network Interface
Specification Supplement 1
Available: August 1989

GR-394-CORE Issue 2 Switching System Generic Requirements for
Interexchange Carrier Interconnection Using the Integrated
Services Digital Network User Part (ISDNUP)
Issued: November 1998

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

Telecommunications Transmission Engineering
Volume 3 - Networks and Services (Chapters 6 and 7) Second
Edition, 1980
Issued: June 1980

The following technical publication is referenced in this tariff and may be obtained from the National Exchange Carrier Association, Inc., Director - Access Tariffs, 100 So. Jefferson Road, Whippany, NJ 07981 and the Federal Communications Commission's commercial contractor.

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

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 publication is referenced in this tariff and may be obtained from AT&T, 26 Parsippany Road, Whippany, NJ 07981.

AT&T PUB 62310
(and its Addendum 2 and Addendum 3) Available: October 1989

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 T1.602-1989, Integrated Services Digital Network (ISDN) - Data-Link Layer Signaling Specification for Application at the User-Network Interface.

ACCESS SERVICE

REGULATIONS AND SCHEDULE OF CHARGES

APPLYING TO THE PROVISION OF
ACCESS SERVICES WITHIN A LOCAL
ACCESS AND TRANSPORT AREA (LATA)
OR EQUIVALENT MARKET AREA FOR
CONNECTION TO INTRASTATE
COMMUNICATIONS FACILITIES

FOR INTRASTATE
CUSTOMERS WITHIN THE
OPERATING TERRITORY OF THE
STATE OF PENNSYLVANIA

Issued by: Michael P. Sharry
Senior Manager,
Regulatory and Public Affairs
Commonwealth Telephone Company
Dallas, Pennsylvania

This Tariff is filed in compliance
with the Order of the Pennsylvania
Public Utility Commission at
Docket Nos. P-00991648 and
P-00991649

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, and other miscellaneous services, hereinafter referred to collectively as service(s). These services are provided to customers by Commonwealth Telephone Company, 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 Regulations2.1 Undertaking of the Telephone Company2.1.1 Scope

- (A) The Telephone Company does not undertake to transmit messages under this tariff.
- (B) The Telephone Company shall be responsible only for the installation, operation and maintenance of the services it provides.
- (C) The Telephone Company will, for maintenance purposes, test its service only to the extent necessary to detect and/or clear troubles.
- (D) Services are provided 24 hours daily, seven days per week, except as set forth in other applicable sections of this tariff.
- (E) The Telephone Company does not warrant that its facilities and services meet standards other than those set forth in this tariff.

2.1.2 Limitations(A) Assignment or Transfer of Services

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

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

ACCESS SERVICE

2. 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 SERVICE

2. 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 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 SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(B) Acts or Omissions

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

(C) Damages to Customer Premises

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

(D) Indemnification of Telephone Company(1) By the End User

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

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(D) Indemnification of Telephone Company (Cont'd)(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 SERVICE

2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(E) Explosive Atmospheres

The Telephone Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. The Telephone Company shall be indemnified, defended and held harmless by the customer from any and all claims by any person relating to such customer's use of services so provided.

(F) No License Granted

No license under patents (other than the limited license to use) is granted by the Telephone Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff. The Telephone Company will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.

(G) Circumstances Beyond the Telephone Company's Control

The Telephone Company's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotion, 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 7.4.4 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 interfacemeans 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,
- substitution of metallic facilities for carrier or derived 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.

(C)

(C)

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 on 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 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)

- (D) The provisions in (A) and (B), above, shall not apply to charges that a customer does not pay based on the submission of a good faith dispute pursuant to Section 2.4.1(D), following (Billing Disputes).
- (E) If a customer fails to comply with Section 2.2.2, following (Unlawful and Abusive Use), the Telephone Company may, upon written request from a customer, or another exchange carrier, terminate service to any subscriber or customer identified as having utilized service provided under this tariff in the completion of abusive or unlawful telephone calls. Service shall be terminated by the Telephone Company as provided for in its general and/or local exchange service tariffs.

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

(C)
|
(C)

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 Section 2.2.1, following (Interference or Impairment), the Telephone Company will, where practicable, notify the customer that temporary discontinuance of the use of a service may be required; however, where prior notice is not practicable, the Telephone Company may temporarily discontinue service forthwith if such action is reasonable in the circumstances. In case of such temporary discontinuance, the customer will be notified promptly and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance. During such period of temporary discontinuance, credit allowance for service interruptions as set forth in Section 2.4.4, following, is not applicable.

(G) When access service is provided by more than one Telephone Company, the companies involved in providing the joint service may individually or collectively deny service to a customer for nonpayment. Where the Telephone Company(s) affected by the nonpayment is incapable of effecting discontinuance of service without cooperation from the other joint providers of Switched Access Service, such other Telephone Company(s) will, if technically feasible, assist in denying the joint service to the customer.

Service denial for such joint service will only include calls originating or terminating within, or transiting, the operating territory of the Telephone Companies initiating the service denial for nonpayment. When more than one of the joint providers must deny service to effectuate termination for nonpayment, in cases where a conflict exists in the applicable tariff provisions, the tariff regulations of the end office Telephone Company shall apply for joint service discontinuance.

(C)

(C)

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)

- (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.

(C)

(C)

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 SERVICE

2. General 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 SERVICE

2. 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 SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.6 Balance

All signals for transmission over the facilities used to provide services under this tariff shall be delivered by the customer balanced to ground except for groundstart, 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 SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.9 Claims and Demands for Damages

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.9 Claims and Demands for Damages (Cont'd)

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

2.3.10 Coordination with Respect to Network Contingencies The

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

2.3.11 Jurisdictional Report and Certification Requirements(A) Certification Requirements - Special Access and Public Packet Data Network

When the customer orders Special Access Service and Public Packet Data Network, and the customer certifies to the Telephone Company in writing that ninety-one percent or more of the traffic is intrastate, the service is considered to be intrastate and is provided under this tariff.

Following initial certification, should the jurisdictional nature of the customer's Special Access or Public Packet Data Network Service 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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements
(Cont'd)

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

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

(C)
|
(C)

(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.

(C)
|
(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements
(Cont'd)

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

(1) Percentage of Interstate Use (PIU)

(a) For purposes of developing the projected interstate percentage for Feature Group 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.

(C)
|
(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

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

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

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

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(2) Use of PIU Factors

- (a) As specified in Section 5.2.1, following, the customer will provide a projected PIU for each Switched Access Service for each end office when placing its order. Such PIU factors are applied to all usage rated elements (including but not limited to Carrier Common Line, 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 orders 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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

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

(2) Use of PIU Factors (Cont'd)

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 service.

- (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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(2) Use of PIU Factors (Cont'd)

- (f) For each service, the customer may only provide a PIU factor that is in a whole number format, i.e., a number from 0 to 100. When the customer provides the PIU factor, the Telephone Company will subtract the provided PIU from 100 and the difference is the percent intrastate usage. The sum of the interstate and intrastate percentages will equal 100 percent. The customer provided factors will be used by the Telephone Company as described in (1) (b), above, until the customer provides updated PIU factors as required in (2) (g) or (h), below.
- (g) When the customer adds or discontinues Busy Hour Minutes of Capacity (BHMC) lines or trunks to an existing Switched Access Service group, the customer shall furnish a revised projected interstate percentage for the remaining BHMC lines or trunks in the end office group. The revised report will serve as the basis for future billing, where applicable, and will be effective on the next bill date. No prorating or back billing will be done based on such revised report.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(2) Use of PIU Factors (Cont'd)

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

If the customer does not supply the revised reports, the Telephone Company will assume the percentages to be the same as those provided in the last quarterly report. For those cases which a 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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements
(Cont'd)

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

(3) Maintenance of Customer Records

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

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

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

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements
(Cont'd)

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

(4) Disputes Involving Jurisdictional Reports -
Switched Access

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

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report and Certification Requirements
(Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(4) Disputes Involving Jurisdictional Reports -
Switched Access (Cont'd)

- (b) If the customer does not provide the requested data to the Telephone Company or independent auditor within thirty (30) days of the notice of audit, the customer will be in violation of the Tariff and subject to the provisions specified in Section 2.1.8(A), preceding.
- (c) Audits may be conducted by: (1) the Telephone Company when the customer agrees; (2) an independent auditor under contract to the Telephone Company; (3) a mutually agreed upon independent auditor paid for equally by the customer and the Telephone Company; or (4) an independent auditor selected and paid for by the customer. If the customer selects option (4), where it pays for its own independent audit, the selected auditor must certify that the audit was performed following Commission procedures for measuring interstate traffic as established by Commission Order and provide the Telephone Company a report with supporting documentation to verify such procedures.
- (d) Verification audits may be conducted no more frequently than once per year except in extreme circumstances. The Telephone Company and customer will attempt to limit the audit to a reasonable time to effectively complete the audit. The Telephone Company and customer shall respond promptly to requests generated during the audit to ensure timely completion of the audit.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

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) (C)(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 percentage 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.

(C)

(C) Indicates Change

ACCESS SERVICE

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 -

(C) 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.

(C)
|
(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.12 Determination of Interstate Charges for Mixed Interstate and Intrastate Switched Access Service

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

The percentage of a Switched Access Service to be charged as interstate is applied in the following manner:

(A) Monthly and Nonrecurring Charges

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

(B) Usage Sensitive Charges

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

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic

(A) Scope

1. VoIP-PSTN Traffic is defined as traffic exchanged between the Telephone Company end user and the customer in time division multiplexing ("TDM") format that originates and/or terminates in Internet protocol ("IP") format. This section governs the identification of VoIP-PSTN Traffic that is required to be compensated at interstate access rates by the Federal Communications Commission in its Report and Order in WC Docket Nos. 10-90, etc., FCC Release No. 11-161 (Nov. 18, 2011) ("FCC Order"). Specifically, this section establishes the method of separating such traffic (referred to in this tariff as "Relevant VoIP-PSTN Traffic") from the customer's traditional intrastate access traffic, so that such Relevant VoIP-PSTN Traffic can be billed in accordance with the FCC Order.
2. This section will be applied to the billing of switched access charges to a customer that is a local exchange carrier only to the extent that the customer has also implemented billing of interstate access charges for Relevant VoIP-PSTN Traffic in accordance with the FCC Order.

(B) Rating of VoIP-PSTN Traffic

The Relevant VoIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Telephone Company's applicable tariffed interstate switched access rates as specified in this tariff.

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(C) Calculation and Application of Percent-VoIP-Usage Factor

(C)

The Telephone Company will determine the number of Relevant VoIP-PSTN Traffic minutes of use ("MOU") to which interstate rates will be applied under subsection (B), above, by applying a Percent VoIP Usage ("PVU") factor to the total terminating intrastate access MOU received by The Telephone Company from the customer. The PVU will be derived and applied as follows:

1. The customer will calculate and furnish to the Telephone Company a factor (the "PVU") representing the percentage of the total intrastate and interstate access MOU that the customer terminates to the Telephone Company in the State, that is sent to the Telephone Company and that originated in IP format. This PVU shall be based on information such as traffic studies, actual call detail, or other relevant and verifiable information.
2. The Telephone Company will apply the PVU factor to the total terminating intrastate access MOU received from the customer to determine the number of Relevant VoIP-PSTN Traffic MOUs.
3. If the customer does not furnish the Telephone Company with a PVU pursuant to the preceding paragraph 1, the Telephone Company will utilize a PVU equal to zero.

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(D) Initial PVU Factor

If the PVU factor is not available and/or cannot be implemented in the Telephone Company's billing systems by January 1, 2012, once the factor is available and can be implemented the Telephone Company will adjust the customer's bills to reflect the PVU retroactively to January 1, 2012. This retroactive adjustment will be made to January 1, 2012, provided that the customer provides the factor to the Telephone Company no later than April 15, 2012; otherwise, it will set the initial PVU equal to zero, as specified in subsection (C) (1), above.

(E) PVU Factor Updates

The customer may update the PVU factor quarterly using the method set forth in subsection (C) (1), above. If the customer chooses to submit such updates, it shall forward to the Telephone Company, no later than 15 days after the first day of January, April, July and/or October of each year, a revised PVU factor based on data for the prior three months, ending the last day of December, March, June and September, respectively. The revised PVU factor will apply prospectively and serve as the basis for billing until superseded by a new PVU.

(F) PVU Factor Verification

Not more than four times in any year, the Telephone Company may ask the customer to verify the PVU factor furnished to the Telephone Company. The party so requested shall comply and shall reasonably provide the records and other information used to determine the PVU factors.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(G) Rates and Charges

Switched Access Rate Element	NECA	
Local Switching	*	(C)
Shared Trunk Port/Common Trunk Port	*	
Information Surcharge per MOU	*	
Tandem Transport Facility per minute-mile	*	
Tandem Transport Termination	*	
Tandem Switching	*	(C)

* See Frontier Telephone Companies Tariff FCC No. 10 for rates.

(C)

(C) Indicates Change

ACCESS SERVICE

2. 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 service(s), such deposit will not exceed the actual rates and charges for a two-month period associated with each individual bill that met the criteria for late payments specified above. The fact that a deposit has been made in no way relieves the customer from complying with the Telephone Company's regulations as to the prompt payment of bills. 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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances

2.4.1 Payment of Rates, Charges and Deposits

(A) Deposits (Cont'd)

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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(B) Bill Dates

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

For End User 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 charges for the ensuing billing period except for End User Access Service for the Federal Government which will be billed in arrears.

Any applicable Presubscription Charges, any known unbilled charges for prior periods and any known unbilled adjustments for prior periods for End User Access Service and Presubscription Service will be applied to this bill. Such bills are due when rendered.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(B) Bill Dates (Cont'd)(2) Access Services Other Than End User and Presubscription

For Service other than End User 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 following. If payment is not received by the payment date, a late payment penalty will apply as set forth in (C) following.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(C) Payment Dates and Late Payment Penalties

- (1) All bills dated as set forth in (B) (2) preceding for service, other than End User Service 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.

ACCESS SERVICE

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)

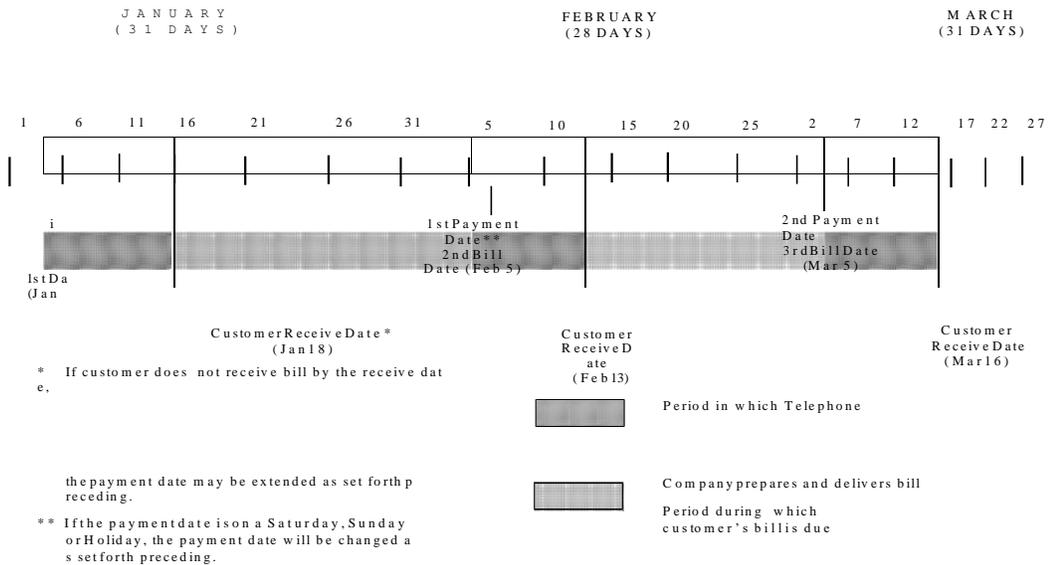
(C) Payment Dates and Late Payment Penalties (Cont'd)

(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.

EXAMPLE: CALCULATION OF PAYMENT DATES



ACCESS SERVICE

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)

(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.

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(D) Billing Disputes

- (1) A good faith dispute requires the customer to provide a written claim to the Telephone Company. Instructions for submitting a dispute can be obtained by calling the billing inquiry number shown on the customer's bill, or, when available, by accessing such information on the Telephone Company's website also shown on the customer's bill. Such claim must identify in detail the basis for the dispute, and if the customer withholds the disputed amounts, it must identify the account number under which the bill has been rendered, the date of the bill, and the specific items on the bill being disputed to permit the Telephone Company to investigate the merits of the dispute.
- (2) The date of the dispute shall be the date on which the customer furnishes the Telephone Company the account information required in (D) (1), above.
- (3) The date of resolution is the date the Telephone Company completes its investigation, provides written notice to the customer regarding the disposition of the claim, i.e., resolved in favor of the customer or resolved in favor of the Telephone Company, and credits the customer's account, if applicable.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(D) Billing Disputes (Cont'd)

- (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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(D) Billing Disputes (Cont'd)

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

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(F) Rounding of Charges

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

2.4.2 Minimum Periods

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

- Switched Access usage rated services
- Directory Assistance usage rated services
- Switched Access High Capacity DS3 Entrance Facility and Direct Trunked Transport
- Special Access Part-time Video
- Special Access Program Audio
- Special Access High Capacity Service

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

- 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.

(C)

(C)

(C) Indicates Change

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.2 Minimum Periods (Cont'd)

(B) When a service with a minimum period greater than one month is discontinued prior to the expiration of the minimum period, the applicable charge will be the lesser of (1) the Telephone Company's total nonrecoverable costs less the net salvage value for the discontinued service or (2) the total monthly charges, at the rate level in effect at the time service is discontinued, for the remainder of the minimum period.

2.4.3 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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies

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

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

- Digital Data (DA1 through DA6)
- High Capacity (HC1)

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.

Credit allowances are computed as follows:

- (1) Special Access Service other than Program Audio and Video and flat rated Switched 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, Multiplexing, Add/Drop Multiplexing, Customer Node, and Customer Premise Port), 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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(1) Special Access Service other than Program Audio and Video and flat rated Switched Access Service rate elements (Cont'd)

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).

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(1) Special Access Service other than Program Audio and Video and flat rated Switched Access Service rate elements (Cont'd)(c) Multiplexed Services

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(1) Special Access Service other than Program Audio and Video and flat rated Switched Access Service rate elements (Cont'd)(c) Multiplexed Services (Cont'd)

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.

(d) Flat rated Switched Access 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., Carrier Charge, Entrance Facility, Direct Trunked Transport and Multiplexing).

(e) Public Packet Data Network Services

For Public Packet Data Network Service rate elements, the monthly charge shall be the total of all monthly rate element charges associated with the service (i.e., End User Port, Inter-network Customer Port, and Permanent Virtual Connections).

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(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 SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(3) Switched Access Service Usage Rated Elements

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

(4) Credit Allowances Cannot Exceed Monthly Rate

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

(C) When a Credit Allowance Does Not Apply No credit allowance will be made for:

- (1) 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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(C) When a Credit Allowance Does Not Apply (Cont'd)

- (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.
- (5) Interruptions of a service which continue because of the failure of the customer to authorize replacement of any element of special construction. The period for which no credit allowance is made begins on the seventh day after the customer receives the Telephone Company's written notification of the need for such replacement and ends on the day after receipt by the Telephone Company of the customer's written authorization for such replacement.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(C) When a Credit Allowance Does Not Apply (Cont'd)

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

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

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

Should the customer elect to use an alternative service provided by the Telephone Company during the period that a service is interrupted, the customer must pay the tariffed rates and charges for the alternative service used.

(E) Temporary Surrender of a Service

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.5 Re-establishment of Service Following Fire, Flood or
Other Occurrence(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).

(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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)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 SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(A) 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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)

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.

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 cannot be agreed to by all telephone companies providing service, the multiple bill option is the default.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)

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

- The Meet Point Billing Option that will be used,
- The Telephone Company(s) that will render the bill(s),
- The Telephone Company(s) to whom payment(s) should be remitted, and
- The Telephone Company(s) that will provide the bill inquiry function.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(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 three billing alternatives:

- Single Bill/Multiple Tariff
- Single Bill/Pass Through Billing, and
- Single Bill/Single Tariff

These options are described following in (a), (b) and (c) respectively.

(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:

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(a) Single Bill/Multiple Tariff (Cont'd)

- 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 SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(b) Single Bill/Pass-Through Billing

The single bill/pass-through bill is compiled by the Bill Rendering Company. Each Telephone Company will prepare a bill for its portion of the access service and forward it to the Bill Rendering Company. Normally, these connecting telephone company bills are forwarded to the Bill Rendering Company without usage to eliminate possible delays.

Each non Bill Rendering Company will:

- prepare its own bill;
- determine its rates and charges for Local Transport and/or Channel Mileage as set forth in (3) following;
- determine and include all applicable recurring and nonrecurring rates and charges of its access tariff; and
- forward the bill to the Bill Rendering Company for the meet point access service.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(b) Single Bill/Pass Through Billing (Cont'd)

The Bill Rendering Company will:

- apply usage data, when needed, to the bills and calculate the charges;
- combine all the bills of the involved Telephone Companies providing the meet point access service;
- forward the bill to the customer; 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 SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(c) 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) (SBC). Each company, IBC and SBC, will:

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(2) Multiple Bill Option (Cont'd)

- prepare its own bill;
- determine its charge(s) for Local 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:

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)

- (a) Determine the appropriate Local Transport or Channel Mileage by computing the number of airline miles between the Telephone Company premises (end office, access tandem or serving wire centers for Switched Access or serving wire centers for Special Access) using the V&H method set forth respectively in 6.4.6 and 7.4.6 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:
 - When Tandem Switched Transport is provided to a terminating carrier different from a Frontier Telephone ILEC Company, Terminating - Tandem 3rd party rates are applicable otherwise Terminating - Tandem Affiliate rates are applicable. When originating Tandem Switched Transport is provided, Originating rates are applicable.
 - 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;

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)

(c) For Feature Groups A, B, C and D Tandem Switched Transport: (cont'd)

- 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 using this tariff, multiply the Tandem Switching rate times the number of originating and terminating access minutes that are switched at the tandem.

The Tandem Switched Termination rate is applied as set forth in 6.1.3(A) (3) 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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)

(d) For Feature Groups A, B, C, and D Direct Trunked Transport: (Cont'd)

- The Direct Trunked Termination rate is applied as set forth in 6.1.3(A) (2) 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 end office (which may be a Remote Switching Module or WATS Serving Office) is located within the operating territory of a Telephone Company using this tariff, if applicable, multiply the Transport Interconnection Charge rate times the number of originating and terminating access minutes that are switched at the end office.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)(e) For Feature Groups A, B, C, and D:
(Cont'd)

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

(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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)

(f) (Cont'd)

The Special Access Channel Mileage Termination rate and nonrecurring charges are applied as set forth in 7.5.3 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 charges as set forth in (c) through (g) preceding.

Additionally, when a segment of the Tandem Switched Facility, Direct Trunked Facility or Channel Mileage Facility is measured to the intermediate office(s), the Tandem Switched Termination, Direct Trunked Termination or Channel Mileage Termination rates are also applied at the intermediate Telephone Company(s) office(s).

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)Example 1 - Originating Switched Access

- Feature Group D Switched access is ordered to End Office.
- Originating End Office and Access Tandem are in the operating territory of a Telephone Company (TC-A).
- Customer Designated Premises is in the operating territory of a Telephone Company (TC-B)
- Assumptions:
 - TC-A Direct Trunk Transport BP = 40%
 - TC-B Direct Trunk Transport BP = 60%
 - Direct Trunked Transport mileage = 26 mi.
 - Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
 - End Office charges = 9,000 min. x EO rate
 - Tandem Switched Transport Facility charge = 9,000 min. x 23 mi. x TSF rate
 - Tandem Switched Transport Termination charge = 2 terminations x 9,000 min. x TST rate
 - Tandem Switching Rate = 9,000 min. x TS rate
 - Direct Trunked Facility charge = 26 mi. x DTF rate x 40%
 - Direct Trunked Termination charge = 1 termination x DTT rate
 - Shared Multiplexing charge = 9,000 min. x 23 mi. x SM rate

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)Example 2 - Terminating Switched Access - Tandem 3rd Party

- Feature Group D Switched Access is ordered to End Office.
- Terminating Access Tandem is owned by Frontier Telephone ILEC Companies (TC-A) and end office is owned by a non-Frontier Telephone ILEC Company.
- Assumptions:
 - TC-A Direct Trunk Transport BP = 40%
 - TC-B Direct Trunk Transport BP = 60%
 - Direct Trunk Transport mileage = 26 mi.
 - TC-A Tandem Switched Transport BP = 20%
 - TC-B Tandem Switched Transport BP = 80%
 - Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
 - Tandem Switched Transport Facility-3rd Party charge = 9,000 min. x 23 mi. x TSF-3rd Party rate x 20%
 - Tandem Switched Transport Termination-3rd Party charge = 1 termination x 9,000 min. x TST - 3rd Party rate
 - Tandem Switching-3rd Party Rate = 9,000 min. x TS-3rd Party rate
 - Direct Trunked Facility charge = 26 mi. x DTF rate x 40%
 - Direct Trunked Termination charge = 1 termination x DTT rate
 - Shared Multiplexing 3rd Party Charge = 9,000 min. x 23 mi. x SM-3rd Party rate

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)Example 3 -Terminating Switched Access Tandem End Office

- Feature Group D Switched Access is ordered to End Office.
- Terminating End Office and Access Tandem are both owned by Frontier Telephone ILEC Companies (TC-A).
- Assumptions:
 - TC-A Direct Trunk Transport BP = 40%
 - TC-B Direct Trunk Transport BP = 60%
 - Direct Trunk Transport mileage = 26 mi.
 - Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
 - End office Charges = 9,000 min. x EO rate
 - Tandem Switched Facility - End Office charge = 9,000 min. x 23 mi. x TSF-End Office rate.
 - Tandem Switched Transport Termination -End Office charge = 2 terminations x 9.000 min. x TST-End Office rate.
 - Tandem Switching - End Office charge = 9,000 min. x TS-End Office rate
 - Direct Trunked Facility Charge = 26 mi x DTF rate x 40%
 - Direct Trunked Termination charge - 1 termination x DTT rate
 - Shared Multiplexing charge = 9,000 min. x 23 mi. x SM rate

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)Example 4 -Terminating Switched Access-Tandem 3rd Party

- Feature Group D Switched Access is ordered to End Office.
- Terminating Access Tandem is owned by Frontier Telephone ILEC Companies (TC-A). Terminating End Office is owned by a non-Frontier Telephone ILEC Company.
 - Assumptions:
 - Direct Trunk Transport mileage = 26 mi.
 - TC-A Tandem Switched Transport BP = 20%
 - TC-B Tandem Switched Transport BP = 80%
 - Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
 - Tandem Switched Transport Facility-3rd Party charge = 9,000 min. x 23 mi. x TSF-3rd Party rate x 20%
 - Tandem Switched Transport Termination-3rd Party charge = 1 termination x 9,000 min. x TST - 3rd Party rate
 - Tandem Switching-3rd Party Rate = 9,000 min. x TS-3rd Party rate
 - Direct Trunked Facility charge = 26 mi. x DTF rate
 - Direct Trunked Termination charge = 2 terminations x DTT rate
 - Shared Multiplexing-3rd Party Charge = 9,000 min. x 23 mi. x SM-3rd Party rate

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)Example 5 - Originating Switched Access
Frontier Telephone ILEC Company
owns only the End Office.

- Feature Group D Switched Access is ordered to End Office.
- End Office is owned by Frontier Telephone ILEC Companies (TC-A).
- Access Tandem is owned by a non-Frontier Telephone ILEC Company (TC-B)
- Assumptions:
 - Direct Trunk Transport mileage = 26 mi.
 - TC-A Tandem Switched Transport BP = 80%
 - TC-B Tandem Switched Transport BP = 20%
 - Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
 - End Office Charges = 9,000 min. x EO rate
 - Tandem Switched Transport Facility charge = 9,000 min. x 23 mi. x TSF rate x 80%.
 - Tandem Switched Transport Termination charge = 1 termination x 9.000 min. x TST rate.

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided By More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)Example 6 - Terminating Switched Access - Tandem 3rd Party

- Feature Group D Switched Access is ordered to End Office.
- End Office is owned by Frontier Telephone ILEC Companies (TC-A).
- Access Tandem is owned by a non-Frontier Telephone ILEC Company (TC-B)
- Telephone Company A charges are:
 - End Office Charges = 9,000 min. x EO rate
 - Tandem Switched Transport Facility-3rd Party charge = 9,000 min. x 23 mi. x TSF-3rd Party rate x 80%.
 - Tandem Switched Transport Termination-3rd Party charge = 1 termination x 9.000 min. x TST-3rd Party rate.

(C)

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

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

(B) Meet Point Billing (Cont'd)

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

Reserved for future use

(C)

(C)

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, Special and Public Packet Data Network Access Service furnished by the Telephone Company where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

2.6 Definitions

Certain terms used herein are defined as follows: 800 Data Base

Access Service

The term "800 Data Base Access Service" denotes a service which uses a data base system to identify 800 access customers on a 10-digit basis. For purposes of administering the rules and regulations set forth in this tariff regarding the provision of 800 Data Base Access, except where otherwise specified, 800 Data Base Access Service shall include the following service access codes 800, 888, 877, 866, 855, 844, 833, and 822.

800 Series

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

Access Code

The term "Access Code", 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 10XXX or 101XXXX and 950-XXXX.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd) Access Minutes

For the purpose of calculating chargeable usage, the term "Access Minutes" denotes customer usage of exchange facilities in the provision of intrastate service or foreign service. On the originating end of an intrastate 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 intrastate 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 intrastate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating exchanges, as applicable.

Access Tandem

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

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.).

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

Attenuation Distortion

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

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.

Bit

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

Business Day

The term "Business Day" denotes the times of day that a company is open for business. Generally, in the business community, these are 8:00 or 9:00 a.m. to 5:00 or 6:00 p.m., respectively, with an hour for lunch, Monday through Friday, resulting in a standard forty (40) hour work week. However, Business Day hours for the Telephone Company may vary based on company policy, union contract and location.

ACCESS SERVICE

2. 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.

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.

Carrier or Common Carrier See Interexchange Carrier. 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).

Central Office See End Office.

ACCESS SERVICE

2. 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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Clear Channel Capability

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

C-Message Noise

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

C-Notched Noise

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

Committed Information Rate

The term "Committed Information Rate" denotes the transmission speed specified by the customer at which the Frame Relay Access Service network commits to transfer data between two ports.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Common Line

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

Communications System

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

Customer(s)

The term "Customer(s)" denotes any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the services offered under this tariff, including both Interexchange Carriers (ICs) and End Users.

Customer Node

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

ACCESS SERVICE

2. 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.

Data Transmission (107 Type) Test Line

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

Decibel

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

Decibel Reference Noise C-Message Weighting

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

Decibel Reference Noise C-Message Referenced to 0

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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 Switched 56 Service

A switched access optional feature available with Feature Group C and 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)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.

Echo Control

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

Echo Path Loss

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

Echo Return Loss

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

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.

ACCESS SERVICE

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

2. 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 intrastate 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 (send) + TLP (receive)].

ACCESS SERVICE

2. 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.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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.

Hub

The term "Hub" denotes a wire center at which bridging or multiplexing functions are performed for customers served out of any wire center.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Immediately Available Funds

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

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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 intrastate communication by wire or radio, between two or more exchanges.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Intermediate Hub

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

Intermodulation Distortion

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

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.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Milliwatt (102 Type) Test Line

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

Network Control Signaling

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

Nonsynchronous Test Line

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

North American Numbering Plan

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

Off-hook

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)On-hook

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

Open Circuit Test Line

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

Originating Direction

The term "Originating Direction" denotes the use of access service for the origination of calls from an End User Premises to an IC Premises.

Phase Jitter

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

Point of Termination

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

Premises

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

Release Message

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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 to an IC.

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)

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

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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 signing (instability) problems are most likely to occur.

ACCESS SERVICE

2. 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

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

ACCESS SERVICE

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

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

Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from an IC premises to an End User Premises. Terminus Hub

The term "Terminus Hub" denotes a wire center at which bridging or multiplexing functions are performed only for Customers served directly by the same wire center.

Throughput

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

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.

ACCESS SERVICE

2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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.

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).

ACCESS SERVICE

2. 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.

WATS Serving Office¹ - Grandfathered

(C)

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.

¹ This service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations.

(C)
(C)

ACCESS SERVICE

3. Carrier Common Line Access Service

The Telephone Company will provide Carrier Common Line Access Service (Carrier Common Line Access) to customers in conjunction with Switched Access Service provided in Section 6. of this tariff or the appropriate Switched Access Service section of other Access Service tariffs.

3.1 General Description

Carrier Common Line Access provides for the use of end users' Telephone Company provided common lines by customers for access to such end users to furnish Intrastate Communications.

Premium Access is (1) Switched Access Service provided to customers under this tariff which furnish intrastate MTS/WATS, and (2) Switched Access Service in an end office converted to equal access.

A Special Access Surcharge, as set forth in 17.3.1 following, will apply to intrastate special access service provided by the Telephone Company to a customer, in accordance with regulations as set forth in 7.4.2 following.

3.2 Limitations3.2.1 Exclusions

Neither a telephone number nor detail billing are provided with Carrier Common Line Access. Additionally, directory listings and intercept arrangements are not included in the rates and charges for Carrier Common Line Access.

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.2 Limitations (Cont'd)

3.2.2 Access Groups

All line side connections provided in the same access group will be limited to the same features and operating characteristics.

All trunk side connections provided in the same access group will be limited to the same features and operating characteristics.

3.2.3 WATS Access Lines¹ - Grandfathered

(C)

Where Switched Access Services are connected with Special Access Services at Telephone Company Designated WATS Serving Offices for the provision of WATS or WATS-type Services, Switched Access Service minutes which are carried on that end of the service (i.e., originating minutes for outward WATS and WATS-type services and terminating minutes for inward WATS and WATS-type services) shall not be assessed Carrier Common Line Access charges.

¹ This service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations.

(C)
(C)

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)3.3 Undertaking of the Telephone Company3.3.1 Provision of Service

Where the customer is provided Switched Access Service under other sections of this or other Access Service tariffs, the Telephone Company will provide the use of Telephone Company common lines by a customer for access to end users at rates and charges as set forth in 17.1.1 following.

3.3.2 Determination of Jurisdiction

When the customer reports interstate and intrastate use of Switched Access Service, the associated Carrier Common Line Access used by the customer for intrastate will be determined as set forth in Section 2.

3.4 Obligations of the Customer3.4.1 Switched Access Service Requirement

The Switched Access Service associated with Carrier Common Line Access shall be ordered by the customer under other sections of this tariff.

3.4.2 Supervision

The customer facilities at the premises of the ordering customer shall provide the necessary on-hook and off-hook supervision.

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.5 Carrier Charges

The Carrier Charge is implemented as a result of access reform as directed by the PA PUC via Docket Nos. P-00991648 and P-00991649 entered September 30, 1999. The Telephone Company's Carrier Charge as directed by the PA PUC in the same dockets, is as set forth in Section 17.1.1 following.

The Carrier Charge is tariffed on a per line bases and is assessed on all intrastate toll carriers based on each toll carrier's intrastate toll minutes that are originated and terminated in the Telephone Company's territory relative to the total intrastate toll minutes that are originated and terminated in the Telephone Company's territory. An Originating Carrier Charge is assessed based on each toll carrier's originating toll minutes and a Terminating Carrier Charge is assessed based on each toll carrier's terminating toll minutes.

The Telephone Company at its sole discretion may convert the Carrier Charge per line to an equivalent rate per minute. Should the Telephone Company choose to use an equivalent rate per minute, the Carrier Charge revenue will be reviewed and the Carrier Charge adjusted as necessary to ensure the appropriate recovery.

(C)
|
(C)

ACCESS SERVICE

4. WATS Access Line¹ - Grandfathered

(C)

The WATS access line associated with the provision of intrastate OutWATS and intrastate 800 service is provided subject to the rules and regulations contained in its Wide Area Telecommunications Service Tariff. The monthly recurring rate for a WATS access line is as follows:

	<u>Monthly Rate</u>
WATS/800 Access Rate Charge	\$46.60

¹ This service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations.

(C)

(C)

ACCESS SERVICE

5. Access Ordering5.1 General

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

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

The regulations, rates and charges for special construction are set forth on a time and material basis and are in addition to the regulations, rates and charges specified in this section.

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

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

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

ACCESS SERVICE

5. Access Ordering (Cont'd)5.1 General (Cont'd)5.1.1 Service Installation

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

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

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

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

ACCESS SERVICE

5. Access Ordering (Cont'd)5.1 General (Cont'd)5.1.2 Expedited Orders

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

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

To develop, determine and bill the customer the extraordinary costs which may be involved, the Special Construction terms and conditions as set forth on a time and material basis will be used by the Telephone Company. Authorization to incur the costs and to bill the customer will be in accordance with the terms and conditions on a time and material basis.

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.

5.2 Ordering Requirements5.2.1 Switched Access Service

When ordering Switched Access Service, the customer must specify the directionality of the service and whether the service is to be provided as (1) Direct Trunked Transport from the serving wire center to the end office or (2) Direct Trunked Transport from the serving wire center to a tandem which connects with Tandem Switched Transport from the tandem to the end office. When all or a portion of service is ordered as Direct Trunked Transport, the customer must specify the type and quantity of Direct Trunked Transport facility (e.g., Voice Grade or High Capacity DS1 or DS3) and the hubs or ADM equipped wire centers involved.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)

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

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

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)

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.

(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 intrastate 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 FGA access communications are transported to another state.

ACCESS SERVICE

5. 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 intrastate 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 LATA.
- The access code dialing arrangement (i.e., a uniform access code of 950-XXXX or an Abbreviated Dialing Arrangement (ADA) access code of N or NX)
- For Feature Group B 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.

ACCESS SERVICE

5. 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, Interim NXX Translation, Operator Transfer Service and SS7 Signaling

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
- Interim NXX Translation options
- Operator Transfer Service option
- A projected percentage of intrastate use (PIU) asset forth in 2.3.11 preceding
- For Feature Group D switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer shall provide information to the Telephone Company indicating the NXX code(s) to be accessed.

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

ACCESS SERVICE

5. 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, Interim NXX Translation, Operator Transfer Service and SS7 Signaling (Cont'd)

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

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

ACCESS SERVICE

5. 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, Interim NXX Translation and Operator Transfer Service and SS7 Signaling (Cont'd)

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

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

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

ACCESS SERVICE

5. 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, Interim NXX Translation, Operator Transfer Service And SS7 Signaling (Cont'd)

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.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Order Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(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.

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 FCC NO. 4, WIRE CENTER INFORMATION. Certain SSP equipped end offices that cannot accommodate direct trunking of originating 800 series (other than the 800 service access calls) calls are designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC NO. 4, WIRE CENTER INFORMATION. All traffic originating from end offices not equipped to provide SS7 signalling and routing, not able to accommodate direct trunking of originating 800 series calls or equipped with SS7 signalling but not able to accommodate direct trunking of originating 800 series (other than the 800 service access code) calls, require routing via an access tandem where SSP functionality is available.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Order Requirements (Cont'd)5.2.2 Special Access Service

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

- the customer designated premises or hubs or ADM equipped wire centers involved
- type of service (e.g., Voice Grade, High Capacity, etc.)
- the channel interface(s)
- technical specification package
- options desired
- for multipoint services, the channel interface at each customer designated premises may, at the request of the customer, be different but all such interfaces shall be compatible
- that the traffic consists of more than ninety percent intrastate 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 7.4.2 following the customer shall furnish written certification to that effect as set forth in 7.4.2(C) following.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Order Requirements (Cont'd)5.2.2 Special Access Service (Cont'd)

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 and Add/Drop Multiplexing) 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.

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 where the number of DS1s or DS3s remains constant and the customer wishes to maintain the existing minimum service period must:

- Be received at the same time.
- Reference continuation of the minimum service period on both the installation and disconnect orders.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Order Requirements (Cont'd)5.2.3 WATS or WATS-Type Services¹ - Grandfathered (C)

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)
- 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 Section 7 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 or ADM equipped wire center will be ordered and provided as Special Access Service. Where mixed use is employed, individual services utilizing these facilities must be ordered either as Switched Access Service or Special Access Service as further elaborated and set forth in 6.4.7 and Section 7 following. When placing the order for the individual service(s), the customer must specify a channel assignment for each service ordered.

¹ This service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations. (C)
(C)

ACCESS SERVICE

5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.5 Miscellaneous Services

Testing Service, Additional Labor, Telecommunications Service Priority and Special Facilities Routing shall be ordered with an Access Order or may subsequently be added to a pending order at any time up to and including the service date for the access service. When miscellaneous services are added to a pending order a service date change may be required. When a service date change is required, the service date change charge as set forth in 17.4.1(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(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 SERVICE

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

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

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

5.3.1 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 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

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.

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)

- (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.
- (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.

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)

- (F) For initiation, additions, changes or deletions to the Interim NXX Translation code(s), the customer must place an order with the Telephone Company who provides the Interim NXX Translation. The customer must also provide a copy of the order to the Telephone Companies subtending the Interim NXX Translation office.
- (G) For a Special Access Service connection to a frame relay network, the customer must place the order with the Telephone Company that provides the frame relay switch. Special Access Service in this situation must be ordered to the wire center equipped with a frame relay switch.

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 and Switched Access. In addition, the Access Order Charge is applicable to customer requests for additions, changes or rearrangements to existing Special Access, Public Packet Data Network and Switched Access, 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.

ACCESS SERVICE

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

- To administrative changes as set forth in 6.4.1(B) (3) and Section 7 following.
- When a change to a pending order does not result in the cancellation of the pending order and the issuance of a new order.
- When the Interim NXX Translation charge is applicable.
- When a Miscellaneous Service Order Charge is applicable.
- When a Presubscription Charge is applicable.
- When a Telephone Company initiated network reconfiguration requires a customer's existing access service to be reconfigured.
- When a service with an ICB rate is converted to a similar service with a non-ICB tariff rate prior to the expiration of the ICB.
- When a Billing Name and Address Order charge is applicable.
- When a 900 Blocking Service charge is applicable.
- When a customer with a Special Access DS3 Capacity Discount converts to Special Access Synchronous Optical Channel Service.

ACCESS SERVICE

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

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

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

The Access Order Charge will be applied on a per order basis for any change, rearrangement or addition of CICs to an existing Feature Group B or Feature Group D trunk group.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.2 Miscellaneous Service Order Charge

A Miscellaneous Service Order Charge, as set forth in 17.4.1(D) following, applies to any service, or combination of services ordered simultaneously from Section 13. of the tariff for which a service order is not already pending (with the exception of Presubscription (13.4), 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),
- Maintenance of Service (13.3.2).

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

- Telecommunications Service Priority (13.3.3),
- Controller Arrangement (13.3.4(A),
- International Blocking Service (13.8),
- Originating Line Screening (OLS) Service (13.10).

ACCESS SERVICE

5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.2 Miscellaneous Service Order Charge (Cont'd)

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

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

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 Connections 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 SERVICE

5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges (Cont'd)(A) Service Date Change

The customer may request a change of service date on a pending Access Order prior to the service date.

A change of service date is a change of the scheduled service date by the customer to either an earlier date or a later date which does not exceed 30 calendar days from the original service date.

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

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

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

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

ACCESS SERVICE

5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges (Cont'd)(B) Design Change

The customer may request a design change to the service ordered prior to the requested service date.

A design change is any change to an Access Order which requires engineering review. An engineering review is a review by Telephone Company personnel, of the service ordered and the requested changes to determine what changes in the design, if any, are necessary to meet the changes requested by the customer. Design changes include such things as the addition or deletion of optional features or functions or a change in the type of Transport Termination (Switched Access only), type of channel interface, type of Interface Group or technical specification package, or a change in the destination or speed of PVC. Design changes do not include a change of customer designated premises, first point of switching, Feature Group type or channel type. Changes of this nature will require the issuance of a new order and the cancellation of the original order with appropriate cancellation charges applied.

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

ACCESS SERVICE

5. 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 as set forth in 7.2.4 following even though the service will be provided only for the duration of the event specified on the order (e.g., one-half hour, two hours, five hours, etc.).

The minimum period for Switched Access High Capacity DS3 and Direct Trunked Transport is as set forth in 6.1.3 (A) (2) following. The minimum period for Special Access High Capacity Service is as set forth in 7.4.3 following.

Switched Access usage rated services (i.e., End Office, Common Line, Tandem Switched Transport, and Tandem 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.

ACCESS SERVICE

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

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

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

- (A) For flat-rated Switched Access Service, the charge for a month or fraction thereof is equal to the applicable recurring charges plus any nonrecurring and/or Special Construction charge(s) that may be due.
- (B) For Special Access Service and Public Packet Data Network Service, the charge for a month or fraction thereof is the applicable monthly rates for the appropriate channel type plus any optional features, nonrecurring and/or special construction charge(s) that may apply.
- (C) The Minimum Period Charge for part-time Video and Program Audio Services is the applicable daily rate for the appropriate channel type as set forth in 7.4.3 following.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.5 Minimum Periods and Cancellations (Cont'd)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.

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

- (1) Installation of Switched Access, Special Access or Public 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.

ACCESS SERVICE

5. Access Ordering (Cont'd)5.5 Minimum Periods and Cancellations (Cont'd)5.5.3 Cancellation of an Access Order (Cont'd)

(B) (Cont'd)

- (2) Where the customer cancels an Access Order prior to the start of installation of access facilities, no charges shall apply.
- (3) Where installation of access facilities has been started prior to the cancellation, the charges specified in (a) or (b) following, whichever is lower, shall apply.
 - (a) A charge equal to the costs incurred in such installation, less estimated net salvage. Such costs include the nonrecoverable cost of equipment and material ordered, provided or used, plus the nonrecoverable cost of installation and removal including the costs of engineering, labor, supervision, transportation, rights-of-way and other associated costs;
 - (b) The minimum period charges for Switched Access, Special Access or Public Packet Data Network Service ordered by the customer, as set forth in 5.5.2 preceding.
- (C) When a customer cancels an order for the discontinuance of service, no charges apply for the cancellation.
- (D) 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 commotion), the customer may cancel the Access Order without incurring cancellation charges.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.5 Minimum Periods and Cancellations (Cont'd)

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 Connections 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 Service6.1 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 in the LATA where it is provided. Specific references to material describing the elements of Switched Access Service are provided in 6.1.3 and 6.5 through 6.9 following.

Rates and charges for Switched Access Service depend generally on the specific Feature Group ordered by the customer, e.g., for MTS or WATS services or MTS/WATS equivalent services, and whether it is provided in a Telephone Company end office that is equipped to provide equal or non equal access. Rates and charges for Switched Access Service are set forth in 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 interLATA toll message service, may also be applicable when Switched Access Service is used in conjunction with these other services. Descriptions of such applicability are provided in 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.

ACCESS SERVICE

6. 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 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)(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. In addition, the Interim NXX Translation and Operator Transfer Service optional features are available with Feature Group C and Feature Group D.

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 6.10 following, unless specifically stated otherwise, are available at all Telephone Company end office switches.

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

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 two major BHMC categories identified as: Originating and Terminating. Originating BHMCs represent access capacity within a LATA for carrying traffic from the end user to the customer; and Terminating BHMCs represent access capacity within a LATA for carrying traffic from the customer to the end user. 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.

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 BHCs are further categorized into Domestic, 700, 800 series, 900, Operator, IDDD and Operator Transfer Services. Domestic BHCs represent access capacity for carrying only domestic traffic other than 700, 800 series, 900, Operator and Operator Transfer Services traffic; IDDD BHCs represent access capacity for carrying only international traffic; and, 700, 800 series, 900, Operator and Operator Transfer Services BHCs represent access capacity for carrying, respectively, only 700, 800 series, 900, Operator or Operator Transfer Services traffic. When ordering such types of access capacity, the customer must specify Domestic, 700, 800 series, 900, Operator, IDDD or Operator Transfer Services BHCs.

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

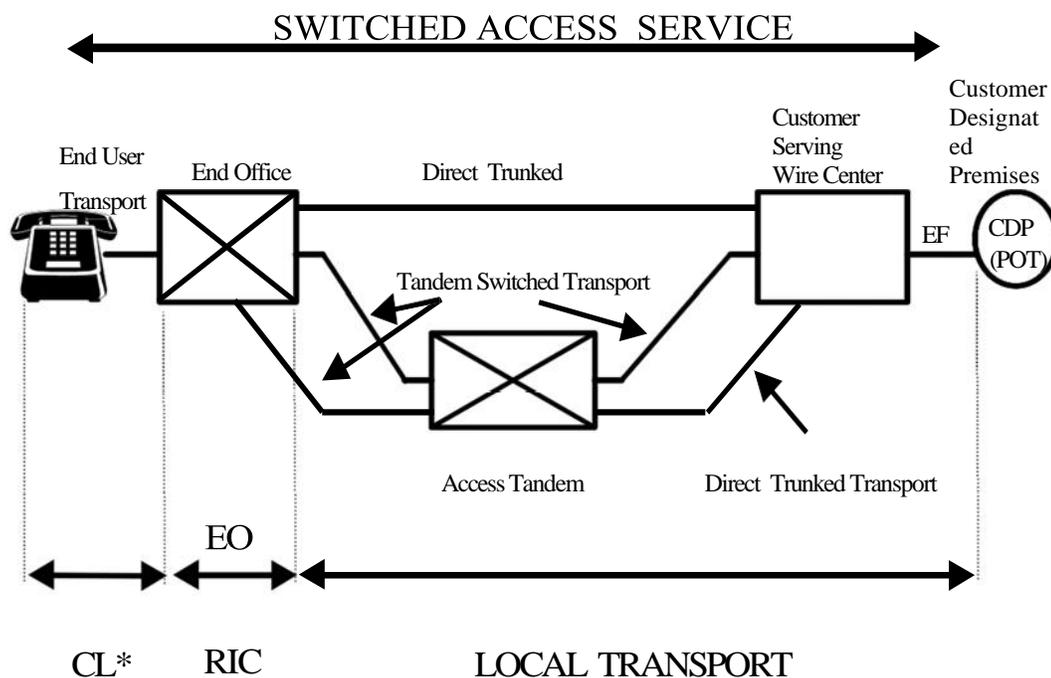
There are four rate categories which apply to Switched Access Service:

- 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.



CL - Common Line
EO - End Office
EF - Entrance Facility
RIC - Residual Interconnection Charge
Direct Trunked Transport
- Direct Trunked Facility
- Direct Trunked Termination

Tandem Switched Transport
- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching
- Local Transport Facility
- Local Transport Termination

* Common Line Access Service is provided under Section 3. Preceding

ACCESS SERVICE

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

The Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the customer designated premises and the end office switch(es), which may be a Remote Switching Module(s) or WATS Serving Office, where the customer's traffic is switched to originate or terminate the customer's communications. 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, (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 SERVICE

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

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

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

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

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)

Where the Telephone Company elects to provide equal access through a Centralized Equal Access arrangement, the Telephone Company will designate the serving wire center. The designated SWC will normally be that wire center which provides dial tone to the telephone company Centralized Equal Access tandem office identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. When service is provided in cooperation with a non-telephone company provider of Centralized Equal Access, the SWC will be that wire center which would normally provide dial tone to the telephone company point of interconnection with the non telephone company provider of Centralized Equal Access specified in the tariff of the Centralized Equal Access provider. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.

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)

Local Transport is provided at the rates and charges set forth in 17.2.2 and 17.5.1 following. The application of these rates with respect to individual 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 five classifications of rate elements: (1) Entrance Facility, (2) Direct Trunked Transport, (3) Tandem Switched Transport, (4) Transport Interconnection Charge, and (5) 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.

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)(1) Entrance Facility (Cont'd)

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. One charge applies for each Entrance Facility that is terminated at a customer designated premises. This charge specified in 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 a 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.

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)(2) Direct Trunked Transport (Cont'd)

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 series calls from an end office is available only from Service Switching Point (SSP) equipped end offices.

However, certain SSP equipped end offices cannot accommodate the direct trunking of the 800 series (other than the 800 service access code) service access code. These end offices are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4. Additionally, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

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 cannot be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing.

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)(2) Direct Trunked Transport (Cont'd)

Additionally, DS1 Direct Trunked Transport cannot be terminated at end offices that are not identified as hub offices that provide DS1 to Voice Grade multiplexing or are not electronic endoffices. 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 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.

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 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 a portion of the costs associated with a communications path between a tandem and an end office on circuits that are switched at a tandem switch. When Tandem Switched Transport to a terminating carrier's end office, and not an end office owned by a Frontier Telephone ILEC Company, the Terminating Tandem 3rd Party and Dedicated Trunk Port rates are applicable.

(C)

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)(3) Tandem Switched Transport (Cont'd)

Tandem Switched Transport rates consist of a Tandem Switching rate, a Tandem Switched Facility rate, and a Tandem Switched Termination rate.

In those instances where an SSP equipped end office is capable of handling 800 traffic on a direct trunked basis but incapable of handling 800 series (other than the 800 service access code) traffic on a direct trunked basis, a full credit will be provided for tandem switched transport charges associated with FGC and FGD service for 888 traffic delivered at the tandem. This results in all 800 series traffic being rated as direct trunked transport regardless of whether the SSP equipped end office is capable of handling 800 series (other than the 800 service access code) traffic on a direct trunked basis. Those SSP equipped end offices that cannot accommodate direct trunking of originating 800 series (other than the 800 service access code) traffic are identified in NECA TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

- (a) The Tandem Switching rate recovers a portion of the costs of switching traffic through an access tandem. The Tandem Switching rate specified in 17.2.2 following is applied on a per access minute per tandem basis for all originating and all terminating minutes of use switched at the tandem. Tandem locations are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

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)(3) Tandem Switched Transport (Cont'd)

- (b) The Tandem Switched Facility rate recovers a portion of the costs of transmission facilities, including intermediate transmission circuit equipment, between the end points of interoffice circuits. The Tandem Switched Facility rate specified in 17.2.2 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over the facility.

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)

(3) Tandem Switched Transport (Cont'd)

(c) The Tandem Switched Termination rate recovers a portion of the costs of circuit equipment necessary for the termination of each end of each measured segment of the Tandem Switched Facility. The Tandem Switched Termination rate specified in 17.2.2 following is applied on a per access minute basis (for all originating and terminating minutes of use routed over the facility) at each end of each measured segment of Tandem Switched Facility (e.g., at the end office, Feature Group A dial tone office, host office and the access tandem). When the Tandem Switched Facility mileage is zero, neither the Tandem Switched Facility rate nor the Tandem Switched Termination rate will apply.

(d) Pursuant to FCC 20-143, released October 9, 2020, tandem switching and transport for originating 800 traffic will be charged via a single usage sensitive Joint Tandem Switched Transport Access Service rate applied per access minute.

(C)
|
(C)

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)(4) Transport Interconnection Charge

The Transport Interconnection Charge recovers the costs associated with Local Transport that are not recovered by the Entrance Facility, Direct Trunked Transport, Tandem Switched Transport, Multiplexing, or dedicated signaling (i.e., SS7) rates. The Transport Interconnection Charge specified in 17.2.2 and 17.5.1 following applies to both Tandem Switched and Direct Trunked access minutes of use.

(5) Multiplexing

DS3 to DS1 Multiplexing charges specified in 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.

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)(5) Multiplexing (Cont'd)

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.

(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.

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)(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 (SS7) Network Connection Service (CCSNC Service), the following optional features are made available and are described in 6.10.1 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) Chargeable Optional Features(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 6.10.3 following. 800 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 completed query returned from the 800 data base whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. The Basis Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides this same customer identification function in addition to vertical features which may include: (1) call validation (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series number (which is generally necessary for the routing of 800 series calls); (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series call 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. Directory Assistance Service is set forth in Section 9. following.

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 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 (cont'd)

Local Switching does not apply to Feature Groups B and D Switched Access Services associated with Wireless Switching Center (WSCs) directly interconnected to a Telephone Company access tandem office.

Where end offices are appropriately equipped, international dialing may be provided as a capability associated with Local Switching which provides local dial switching for Feature Groups C and D. International dialing provides the capability of switching international calls with service prefix and address codes having more digits than are capable of being switched through a standard FGC or FGD equipped end office.

Rates for Local Switching are set forth in 17.2.3 and 17.5.1 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 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(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 6.10.1 following.

(b) Transport Termination

Transport Termination functions provide for the line or trunk side arrangements which terminate the Local Transport facilities. Included as part of these functions are various nonchargeable optional termination arrangements. These optional terminating arrangements are described in 6.10.2 following.

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

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 (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 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 (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 accesstandem 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.

(1) Interim NXX Translation

The Interim NXX Translation rate element provides for customer identification of non-data base services when calls are directed by end users in the 1+SAC+NXX-XXXX (e.g., 1+900+NXX-XXXX) format. The NXX codes are assigned to specific customers in conformance with the North American Numbering Plan (NANP). NXX code assignment(s) will be made by the NANP Coordinator. The Telephone Company will use the NXX code to identify the customer to whose point of termination the traffic is to be delivered, (i.e., at appropriately equipped electronic end offices, access tandems or through contracted arrangements with other parties.) It is then the responsibility of the customer to do any further translation the customer deems necessary to route the call. Customer assigned NXX codes which have not been ordered will be blocked.

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)(1) Interim NXX Translation (Cont'd)

A nonrecurring charge, as set forth in 17.2.1 following, is associated with this optional feature. This nonrecurring charge is assessed by the Telephone Company on a per order, per LATA or Market Area basis and is applied in lieu of the Access Order Charge specified in 17.4.1(A) following. The nonrecurring charge is assessed only by the Telephone Company that provides the final translation function. A Telephone Company is said to have provided the final Interim NXX Translation when its translation identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation. The description and application of this charge with respect to Feature Group C and Feature Group D is as set forth in 6.4.1(B) (2) and 6.4.1(C) (2) following.

(2)

Operator Transfer Services

Operator Transfer Service may be provided with Feature Group 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 6.10.3(B) 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.1

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)(2) Operator Transfer Services (Cont'd)

Operator Transfer Service charges, provided for in this tariff, are applied only to those calls actually transferred by the Telephone Company to the customer's operator.

(3) 800 Data Base Access Service

800 Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. When a 1+800 series+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 data base to identify the customer to whom the call will be delivered and provide vertical features based on the dialed ten digits. The call will then be routed to the identified customer over FGC or FGD switched access. The 800 series includes the following service access codes: 800, 888, 877, 866, 855, 844, 833 and 822. 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 calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides the same customer identification as the basic query and vertical features which may include: (1) call validation, (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers; (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series calls based on factors such as time of day, place or origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3)).

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 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) (2) and 6.4.1(C) (8) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.4 Special Facilities Routing

Any customer may request that the facilities used to provide Switched Access Service be specially routed. The regulations for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in Section 11. following.

6.1.5. Design Layout Report

At the request of the customer, the Telephone Company will provide to the customer the makeup of the facilities and services provided from the customer's premises to the first point of switching. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge and will be reissued or updated whenever these facilities are materially changed.

6.2 Undertaking of the Telephone Company

In addition to the obligations of the Telephone Company set forth in Section 2. preceding, the Telephone Company has certain other obligations concerning only the provision of Switched Access Service. These obligations are as follows:

6.2.1 Network Management

The Telephone Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Telephone Company's network services. Generally, service levels are considered acceptable only when both end users and 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 SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.1.1 Transmission Specifications

Each Switched Access Service transmission path is provided with standard transmission specifications. There are three different standard specifications (Types A, Band 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.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.2 Transmission Specifications (Cont'd)

The transmission specifications concerning Switched Access Service are limits which, when exceeded, may require the immediate corrective action of the Telephone Company. The transmission specifications are set forth in 15.1.2 following. Acceptance limits are set forth in Technical Reference GR-334-CORE. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

Feature Group 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.

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 SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.4 Testing (Cont'd)(B) Routine Testing

At no additional charge, the Telephone Company will, at the customer's request, test after installation on an automatic or manual basis, 1004 Hz loss, C-message noise and Balance (Improved Return loss).

In the case of automatic testing, the customer shall provide remote office test lines and 105 test lines with associated responders or their functional equivalent.

The frequency of these tests will be that which is mutually agreed upon by the customer and the Telephone Company, but shall consist of not less than quarterly 1004 Hz Loss and C-message noise tests and an annual Balance test. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

Additional tests may be ordered as set forth in 13.3.1 following. Charges for these additional tests are set forth in 17.4.4 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.5 Determination of Number of Transmission Paths

For Feature 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 intrastate 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 SERVICE

6. Switched Access Service (Cont'd)6.3 Obligations of the Customer (Cont'd)6.3.2 Trunk Group Measurement Reports

With the agreement of the customer, trunk group data in the form of usage in CCS, peg count and overflow for its end of all access trunk groups, where technologically feasible, will be made available to the Telephone Company. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

6.3.3 Supervisory Signaling

The customer's facilities shall provide the necessary on-hook, off-hook, answer and disconnect supervision.

6.3.4 Short Duration Mass Calling Requirements

When a customer offers service for which a substantial call volume is expected during a short period of time (e.g., 900 service media stimulated events), the customer must notify the 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 SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations

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

6.4.1 Description and Application of Rate

There are two types of rates and charges that apply to Switched Access Service: recurring (usage and flat rates) and nonrecurring charges. These rates and charges are applied differently to the various rate elements as set forth in (C) following.

(A) Recurring Rates

- (1) Usage Rates for Switched Access Service are rates that apply on a per access minute or a per call basis. Access minute charges and per call charges are accumulated over a monthly period.
- (2) Flat Rates for Switched Access Service are rates that apply on a per month per rate element basis.

(B) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service, Interim NXX Translation optional feature, service rearrangements. These charges, with the exception of the Interim NXX Translation optional feature, are in addition to the Access Order Charge as specified in 17.4.1(A) following.

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)(1) Installation of Service

For Entrance Facilities, a Local Transport nonrecurring installation charge, as set forth in 17.2.1(A) following, will be applied at the serving wire center for each Entrance Facility installed.

For Direct Trunked Transport ordered to the end office, a Local Transport nonrecurring trunk activation charge as set forth in 17.2.1 (E) following, will be applied at the end office on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the end office.

For Direct Trunked Transport ordered to the access tandem, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1 (E) following, will be applied at the access tandem on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the access tandem.

For Tandem Switched Transport, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1(E) following, will be applied at the access tandem on a per order basis for each group of 24 dedicated trunks or fraction thereof that is activated at the access tandem.

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)(1) Installation of Service (Cont'd)

A maximum of 24 trunks can be activated on a DS1 facility and a maximum of 672 trunks can be activated on a DS3 facility.

For example, if a customer orders a DS1 Entrance Facility and requests activation of 18 of the available circuits, the customer will be charged one Local Transport High Capacity DS1 Installation nonrecurring charge at the serving wire center and one Direct Trunked Transport Activation nonrecurring charge at the end office. If at a later date the customer requests the activation of three more circuits, the customer will then be charged an additional Direct Trunked Transport Activation nonrecurring charge. These charges are in addition to the Access Order Charge as specified in 17.4.1(A) following.

(2) Interim NXX Translation Optional Feature

This nonrecurring charge applies to the initial order for the installation of the Interim NXX Translation optional feature with Feature Group C or Feature Group D Switched Access Service and for each subsequent order received to add or change NXX translation codes. This charge, if applicable, applies whether this optional feature is installed coincident with or at any time subsequent to the installation of Switched Access Services. This charge is applied by the Telephone Company per order, per LATA or Market Area. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the Telephone Company that provides the final translation function which identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation.

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.

- If, due to technical limitations of the Telephone Company, a customer could not combine its Interim NXX traffic with its other trunk side Switched Access Services, no charge shall apply to combine these trunk groups when it becomes technically possible.

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)

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.

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)

- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or orders the disconnection of overprovisioned trunks, the nonrecurring charges set forth in (1) preceding do not apply providing:
 - the change is ordered anytime between July 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.

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)

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(D).

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

Rates are applied either as premium rates or non-premium rates.

The application of these rates is dependent upon the Feature Group, type of Entrance Facility, type of transport (e.g., Direct Trunked Transport, Tandem Switched Transport, type of Multiplexing) and the availability of equal access capabilities in the end office to which the service is provided.

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

(1) Premium Rates

Premium rates apply to all FGC access minutes when the service is provided to customers which furnish interstate MTS/WATS, to all access minutes that originate or terminate at end offices equipped with equal access (i.e., FGD) capabilities, and to Directory Transport Service. Premium rates also apply to 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.

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)(1) Premium Rates (Cont'd)

In addition, premium rates always apply to the following Local Transport rate elements:

- Entrance Facility
- Direct Trunked Facility
- Direct Trunked Termination
- Multiplexing
- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching

(2) Non-premium Rates

Non-premium rates do not apply to the following Local Transport rate elements:

- Entrance Facility
- Direct Trunked Facility
- Direct Trunked Termination
- Multiplexing
- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching

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.

Non-premium rates do not apply to FGA and FGB access minutes when utilized in the provision of MTS/WATS service.

In addition, non-premium rates apply to FGC access minutes originating in an end office which is not equipped with equal access capabilities when the FGC service is used in conjunction with the Interim NXX Translation optional feature or 800 Data Base services by customers who do not furnish interstate MTS/WATS.

Non-Premium rates do not apply to FGB ADA access minutes.

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)(3) Abbreviated Dialing Arrangement (ADA)

At end offices that are equipped with equal access capabilities, premium rates apply to all FGB and ADA access minutes.

At end offices that are not equipped with equal access capabilities:

- Premium rates multiplied by the ADA rate factor as set forth in 17.2.4 following apply to the following FGB rate elements:
 - Local Switching
 - Information Surcharge
 - Transport Interconnection Charge
- Premium rates apply to the following FGB rate elements with ADA access minutes:
 - Entrance Facility
 - Direct Trunked Termination
 - Directed Trunked Facility
 - Tandem Switched Termination
 - Tandem Switched Facility
 - Tandem Switching
 - Multiplexing

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)(4) 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 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)(4) 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 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)(4) 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 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)(4) Transition Billing Arrangement (Cont'd)

(b) (Cont'd)

(ii) (Cont'd)

The ratios used to calculate the premium usage will be determined on a quarterly basis. The ratios to be used for the succeeding quarter will be provided to the customer with the last bill rendered in the quarter or mailed separately within five working days after the first day of the new quarter (i.e., January, April, July and October).

For purposes of administering this provision: (1) subscriber lines are defined as exchange service lines, Centrex lines and Centrex-type lines provided by the Telephone Company under its local and/or general exchange service tariff; (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 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)(4) 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 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)(5) 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.

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

The CCS/SS7 Network Connection is comprised of a Signaling Mileage Facility charge, a Signaling Mileage Termination charge, a Signaling Entrance Facility charge, and a Signaling Transfer Point (STP) Port charge.

The Signaling Mileage Facility charge is assessed on a per facility per mile basis. The Signaling Mileage Termination charge is assessed on a per termination basis (i.e., at each end of the Signaling Mileage Facility). When the Signaling Mileage Facility mileage measurement is zero, Signaling Mileage Termination charges do not apply.

The Signaling Entrance Facility charge is assessed on a per facility basis for the connection between the customer's designated premises (Signaling Point of Interface) and the serving wire center of that premises.

The STP Port charge is assessed on a per port basis for each termination of a Signaling Mileage Facility at an STP.

(8) 800 Data Base Access Service

A Basic Query or Vertical Feature Query charge applies for each query that is launched to an 800 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 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)(8) 800 Data Base Access Service (Cont'd)

When Feature Group C or Feature Group D switched access service is used for the provision of 800 Data Base Access Service and the total minutes of use and/or count of queries can be determined for each customer at a tandem or SSP but cannot be determined by individual end office, an allocation method will be utilized to determine minutes of use and/or queries by end office and customer. For each end office a ratio will be developed and applied against the total minutes of use and/or count of queries for a given customer as determined by the tandem or SSP. These ratios will be developed by dividing the unidentified originating 800 series minutes of use at an end office by the total unidentified originating minutes of use in all end offices subtending the tandem or SSP. For example, assume:

- Three end office (EO-1, EO-2, and EO-3) subtend a tandem

EO-1 measures 2,000 minutes of 800 use	
EO-2 measures 3,000 minutes of 800 use	
EO-3 measures <u>5,000</u> minutes of 800 use	
10,000	TOTAL
- The tandem delivers 800 usage to two customers: IC-A has 4,000 minutes of use
IC-B has 6,000 minutes of use
- The allocation ratio for EO-1 is 20%

2,000/10,000

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

are 800 to IC-A (20% X 4,000)	
<u>1,200</u> to IC-B (20% X 6,000)	
2,000	TOTAL

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.2 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided.

The minimum monthly charge is calculated as follows. For the 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, 17.2.3 and 17.5.1 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 SERVICE

6. 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. Nonrecurring charges for other associated service requests, (e.g., a simultaneous change from multifrequency 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 SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.4 Moves

A move involves a change in the physical location of one of the following:

- The point of termination at the customer designated premises
- The customer designated premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the installation nonrecurring charge for the capacity affected. This charge is in addition to the Access Order Charge as specified in 17.4.1(A) following.

There will be no change in the minimum period requirements.

(B) Moves to a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new service. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

6.4.5 Local Information Delivery Services

Calls over Switched Access Service in the terminating direction to certain community information services will be rated under the applicable rates for Switched Access Service as set forth in 17.2 following. In addition, the charges per call as specified under the Telephone Company's local and/or general exchange service tariffs, e.g., 976 (DIAL-IT) Network Services, will also apply.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement

The mileage to be used to determine the monthly rate for Local Transport is calculated on the airline distances between the end office switch, which may be a Remote Switching Module, (where the call carried by Local Transport originates or terminates) and the customer's serving wire center. When Direct Trunked Transport is ordered between the serving wire center and the end office, mileage is normally measured in one segment from the serving wire center to the end office. When Direct Trunked Transport is ordered between a serving wire center and a tandem and Tandem Switched Transport is ordered between the tandem and the end office, mileage is calculated separately for each segment.

Exceptions to these methods are as set forth in (B) through (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 SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(A) 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.

(B) Feature Group A Terminating Usage

The Local Transport mileage for terminating Feature Group A Switched Access Service when the Telephone Company provides Direct Trunked Transport 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 SERVICE

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

When the Alternate Traffic Routing optional feature is provided with Feature Groups B, C or D, the Local Transport access minutes will be apportioned between the two trunk groups used to provide this feature. Such apportionment will be made using: (1) actual minutes of use if available, (2) standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group, as described in 6.10.1(L) following (Alternate Traffic Routing), and the total busy hour minutes of capacity ordered to the end office, when the feature is provided at an endoffice switch, or to the subtending end offices when the feature is provided at an access tandem switch, or (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local Transport calculation.

(D) 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 SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(E) 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.

(F) 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 WCS is interconnected.

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

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 routed through a tandem to the Host Office, Direct Trunked Facility will be measured from the Serving Wire Center to the tandem, Tandem Switched Facility will be measured from the tandem to the host, and another segment of Tandem Switched Facility will be measured from the host to the remote. A Tandem Switching charge will be applicable at the tandem.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.6 Mileage Measurement (Cont'd)

(H) 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 SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.7 Mixed Use

Mixed use occurs when Switched Access Service and Special Access Service are provided over the same High Capacity 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 SERVICE

6. 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 SERVICE

6. 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 Intrastate Service or a customer - provided intrastate 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 which 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 SERVICE

6. 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 SERVICE

6. 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 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.

For calls to Directory Assistance (411 and 555-1212, whichever is available), Local Transport rates for FGA Switched Access Service will apply. Additionally, calls to Directory Assistance are subject to the Directory Assistance Service Call rate set forth in 17.2.5(A) following.

ACCESS SERVICE

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

(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 SERVICE

6. 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.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.10 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 of WATS-Type Services

ACCESS SERVICE

6. 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 Options

- (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 SERVICE

6. 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 SERVICE

6. 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 SERVICE

6. 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 where actual usage is unavailable from another local exchange telephone company. In such cases, The assumed minutes are the chargeable access minutes.

Actual minutes of use are required in an end office where at least one access customer in that office has in excess of 24 FGA lines. Actual minutes for that end office must be obtained from measurement equipment installed in the end office or obtained from another local exchange telephone company willing and able to provide actual measurement data to the telephone company. During the interim period when the telephone company is installing measurement equipment or working with an alternate source to obtain actual data, access customer=s FGA lines totaling more than 24 will be billed using assumed minutes of use. Upon 60 days advance notification of the telephone company=s conversion to actual measurement, all FGA customers, regardless of line size, served by that end office would be billed based upon actual 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 17.2.6 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 17.2.6 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 17.2.6 following, 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 17.2.6 following. If the total exceeds the assumed minutes set forth in 17.2.6 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 17.2.6 following.

ACCESS SERVICE

6. 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)

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 17.2.6(B) following, will be assigned for originating calling only lines and assumed terminating access minutes, as set forth in 17.2.6(C) following, will be assigned for terminating calling only lines.

The following matrix illustrates the application of assumed access minutes for FGA as set forth in 17.2.6(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 SERVICE

6. 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 SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of FeatureGroup 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 Intrastate Service or a customer provided intrastate 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 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)

- (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 6.10.1(F) and 6.10.2(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 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)

- (G) FGB switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, community information services of an information service provider and other customers' services (by dialing the appropriate 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.

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. The combination of FGB Switched Access Service with DA service is provided as set forth in Section 9. following. 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 in a LATA, 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.
- (I) The Telephone Companies listed in 17.2.4 following will make available in certain Telephone Company designated end offices FGB with an Abbreviated Dialing Arrangement (ADA). Such FGB with an ADA will be provisioned in the same manner in which FGB is provisioned with the exceptions described in 6.9.2(A) following. When FGB with an ADA is made available in a non-equal end office, the Telephone Company will continue to make FGB with an associated 950-XXX access code available to customers at non-premium rates.
- (J) 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(G) preceding.

ACCESS SERVICE

6. 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 6.10 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 SERVICE

6. 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 SERVICE

6. 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 SERVICE

6. 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 SERVICE

6. 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 17.2.6(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 17.2.6(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 17.2.6 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 17.2.6(D) following. If the total exceeds the assumed minutes set forth in 17.2.6 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 17.2.6(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 17.2.6(E) following, will be assigned for originating calling only lines and assumed terminating access minutes, as set forth in 17.2.6(F) following, will be assigned for terminating calling only lines.

ACCESS SERVICE

6. 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 17.2.6(D), 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 5568* (originating measurement equal or less than 8700)	Actual	N/A	Actual	0 to
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 SERVICE

6. 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 15 days of the receipt of such request.

ACCESS SERVICE

6. 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. Originating FGC Access is available to all customers when used to provide the Interim NXX Translation optional feature or 800 Data Base service. Terminating FGC access is available to all customers other than providers of MTS and WATS when such access is used in conjunction with the provision of the Interim NXX Translation optional feature or 800 Data Base service, but only for purposes of testing. 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.

ACCESS SERVICE

6. 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. Additionally, originating Feature Group C switching is available to all customers when used to provide the Interim NXX Translation optional feature or 800 Data Base service. Terminating Feature Group C switching is available to all customers who are not MTS and WATS providers only when such terminating access is for purposes of testing Feature Group C facilities provided in conjunction with the Interim NXX Translation optional feature or 800 Data Base service.

- (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 SERVICE

6. 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 SERVICE

6. 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 in the LATA, 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. The combination of FGC Switched Access Service with DA Service is provided as set forth in Section 9. following. FGC may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.

ACCESS SERVICE

6. 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.
- (H) Unless prohibited by technical limitations the providers of MTS and WATS may, at their option, combine Interim NXX Translation and/or 800 Data Base traffic in the same trunk group arrangement with their non-Interim NXX Translation traffic. When required by technical considerations, or when provided to a customer other than the provider of MTS and WATS, or at the request of the customer (i.e., provider of MTS and WATS), a separate trunk group will be established for Interim NXX Translation and/or 800 Data Base.
- (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 6.10.4 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 SERVICE

6. 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 6.10 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 SERVICE

6. 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 6.10.2(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 send and 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/Signaling Point of Interface (SPOI) and a Telephone Company 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 SERVICE

6. 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)(3) Multifrequency Address Signaling(4) Calling Party Number (CPN)(5) Charge Number Parameter (CNP)(D) Chargeable Optional Features(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

(2) The Operator Transfer Service Optional Feature is provided as set forth in 6.10.4 following.

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

The CCSNC Optional Feature is provided as set forth in 6.10.5 following.

ACCESS SERVICE

6. 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 SERVICE

6. 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 series, 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 SERVICE

6. 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

$$(1) \text{ Total Attempts} = \frac{1,000 \text{ (m. Mes)}}{.75 \text{ (CR)}} = 1,333.33$$

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

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

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 SERVICE

6. 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 SERVICE

6. 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 Release Message, whichever occurs first.

ACCESS SERVICE

6. 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 SERVICE

6. 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 p.m. 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			
	Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 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 Measurements	11-14 Measurements	7-10 Measurements	3-6 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 SERVICE

6. 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 SERVICE

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

- (A) FGD Access, which is available to all customers, provides trunk side access to Telephone Company end office switches. Special Access Services utilized for connection with FGD at Telephone Company designated WATS Serving offices as set forth in Section 7. following may be ordered separately by a customer other than the customer which orders the FGD Switched Access Service for the provision of WATS or WATS-type services. Special Access Services are ordered as set forth in 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 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)

- (E) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, community information services of an information service provider, and other customers' services (by dialing the appropriate codes) when such services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed. The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGD trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGD switching is combined with Directory Assistance switching. The combination of FGD Switched Access Service with DA Service is provided as set forth in Section 9. following. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.

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)

- (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 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)

- (H) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 101XXXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 101XXXX code its calls will be directed to for interLATA service.
- (I) Unless prohibited by technical limitations, the customer's Interim NXX Translation and/or 800 Data Base traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non- Interim NXX Translation and/or 800 Database traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX Translation and/or 800 Data Base traffic.
- (J) 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(G) 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 6.10.4 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features

Following are the various 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 6.10 following.

- (1) Automatic Number Identification (ANI)
- (2) Service Class Routing
- (3) Alternate Traffic Routing
- (4) Trunk Access Limitation
- (5) Call Gapping Arrangement
- (6) International Carrier Option
- (7) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (8) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (9) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (10) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (11) 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 SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features (Cont'd)(B) Transport Termination Options(1) Operator Trunk - Full Feature

The Operator Trunk optional feature is set forth in 6.10.2(C) following.

(C) Local Transport Options(1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.

(2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group D. This option requires the establishment of a signaling connection between the customer's designated premises/Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP).

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

(3) Multifrequency Address Signaling(4) Calling Party Number (CPN) Parameter(5) Charge Number Parameter (CNP)(6) Carrier Selection Parameter (CSP)(D) Chargeable Optional Features(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

(2) Operator Transfer Service

The Operator Transfer Services Optional Feature is provided as set forth in 6.10.4 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features (Cont'd)(D) Chargeable Optional Features (Cont'd)(3) Common Channel Signaling/Signaling System
7 (CCS/SS7) Network Connection Service
(CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.3 following.

6.8.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Transport Service, including the selection of the first point of switching and the selection of facilities from the interface to any switching point and to the end offices where busy hour minutes of capacity are ordered. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

For Feature Group D Direct Trunked Transport service, the Telephone Company will determine the routing of Switched Access Service from the point of interface to the first point of switching or, if the customer specifies one or more hub locations for multiplexing, from the point of interface to the hub location, from one hub location to another hub location, and/or from a hub location to the first point of switching.

ACCESS SERVICE

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

Selection of facilities and equipment and traffic routing of the service are based on standard engineering methods, available facilities and equipment, and actual traffic patterns. The Telephone Company will designate the first point(s) of switching and routing to be used where equal access is provided through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO 4.

6.8.4 Measuring Access Minutes

Customer traffic to end offices will be recorded at end office switches or access tandem switches. Originating and terminating calls will be measured or derived to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

FGD access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office and are then rounded up to the nearest access minute for each end office.

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.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.4 Measuring Access Minutes (Cont'd)

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.

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.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.4 Measuring Access Minutes (Cont'd)

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGD with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

6.8.5 Design Blocking Probability

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

(A) For Feature Group D, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the end office switch, whether the traffic is directly routed without an alternate route or routed via an access tandem. Standard traffic engineering methods as set forth in reference document Telecommunications Transmission Engineering - Volume 3 - Networks and Services (Chapters 6-7) will be used by the Telephone company to determine the number of transmission paths required to achieve this level of blocking.

(B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity or trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

ACCESS SERVICE

6. 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 Measurements Transmission Paths and 11:00 p.m. Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Taken Between 8:00 a.m.			
	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 11:00 p.m. Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and			
	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 SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.6 Network Blocking Charge

The customer will be notified by the Telephone Company to increase its capacity (busy hour minutes of capacity or quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Telephone Company within 15 days of the notification, the Telephone Company will bill the customer, at the rate set forth in 17.2.2 following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

<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 SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.7 Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding, which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing, are available as set forth in 13.3.1 following.

When SS7 Signaling is ordered, network compatibility and other testing will be performed cooperatively by the Telephone Company and the customer as specified in Technical 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, Interim NXX Translation options or Operator Transfer Service option. Local Transport options associated with Common Channel Signaling Network Connection Service (CCSNC) are described in 6.10.1 following. All other Local Transport options, due to their technical nature, are described in 15.1.1 following.

ACCESS SERVICE

6. 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	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 ¹ or WATS-Type ¹ Services	X	X	X	X	(C)
Q) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS ¹ or WATS-Type ¹ Services			X	X	(C)
R) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS ¹ or WATS-Type ¹ Services	X	X	X	X	(C)
S) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS ¹ or WATS-Type ¹ Services	X	X	X	X	(C)
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 ¹ or WATS-Type ¹ Services	X	X	X	X	(C)
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)			X	X	
Y) Carrier Selection Parameter (CSP)				X	
Z) Charge Number Parameter (CNP)			X	X	
AA) AA) Flexible Automatic Number Identification (Flex ANI)				X	

¹ WATS service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations.

ACCESS SERVICE

6. 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 41 or 555-1212 whichever is available, 611, 911, 800 series 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. 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 SERVICE

6. 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 SERVICE

6. 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 calls originating in the LATA, to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with:

(a) all individual transmission paths in a trunk group routed directly between an end office and a customer designated premises or, where technically feasible, with

(b) all individual transmission paths in a trunk group between an end office and an access tandem, and a trunk group between an access tandem and a customer designated premises.

(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 SERVICE

6. 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 SERVICE

6. 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 SERVICE

6. 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 Nonchargeable Optional Feature of Feature Group D as described in 6.10.1(AA) following.

(7) Restrictions on Use and Sale of ANI

(a) Intrastate 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 SERVICE

6. 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) Intrastate 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 SERVICE

6. 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 SERVICE

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

ACCESS SERVICE

6. 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 SERVICE

6. 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 SERVICE

6. 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 Services¹

(C)

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 Services¹

(C)

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 Services¹

(C)

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.

¹ WATS service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations.

(C)

(C)

ACCESS SERVICE

6. 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 Services¹

(C)

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 Services¹

(C)

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.

¹ WATS service offering is grandfathered as of August 18, 2020 and limited to existing subscribers at their existing locations.

(C)

(C)

ACCESS SERVICE

6. 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) (8) 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 telephone number, associated with a calling station, to the customer's premises for calls originating in the LATA. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "privacy indicator" for delivery to the called end user. This feature is automatically provided with originating FGC and FGD with SS7 signaling. CPN is available where technically feasible.

ACCESS SERVICE

6. 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) Intrastate 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) Intrastate 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 SERVICE

6. 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 is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGC where technically feasible and FGD with MF signaling. The CNP provides for the automatic transmission of the ten digit billing number of the calling station and the originating line information. This feature is provided with originating FGC and FGD with SS7 signaling.

(2) Restrictions on Use and Sale of CNP

(a) Intrastate 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 SERVICE

6. 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) Intrastate 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, and 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.

(AA) Flexible Automatic Number Identification (FlexANI)

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.10.1(F) preceding) by allowing Feature Group D (FGD) customers to receive additional information digits. Flex ANI provides additional values for these information digits over and above the values currently available with ANI and is used to identify additional call types, e.g., 27 for pay telephones requiring central office coin supervision capability, 29 for prison/inmate pay telephones, and 70 for pay telephones not requiring central office coin supervision.

Flex ANI can also be used to provide Originating Line Screening (OLS) service. OLS service is described in 13.10 following.

ACCESS SERVICE

6. 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)
(Cont'd)

Flex ANI information digits are two digits in length and are activated through switched software program updates. These codes precede the 10-digits directory number of the calling line and are part of the signaling protocol in equal access end offices. The information digits are outputted by the switching system along with the directory number from the originating end office and are sent to the receiving office for billing, routing, or special handling purposes.

Customers who have ANI but do not order Flex ANI, will continue to receive the information digits associated with ANI. Flex ANI digits are assigned by the North American Numbering Plan Administrator. The Telephone Company will make available those information digits that are mutually agreed to by the customer and the Telephone Company.

Flex ANI is available to customers with FGD Switched Access Service equipped with ANI. Flex ANI is available in suitably equipped end offices as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

ACCESS SERVICE

6. 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 SERVICE

6. 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(A) Interim NXX Translation

This service is an originating offering utilizing trunk side Switched Access Service and provides a customer identification function based on the dialed SAC and NXX code.

For example, when a 1+900+NXX-XXXX call is originated by an end user, the Telephone Company will perform the customer identification function based on the dialed digits to determine the customer location to which the call is to be routed. If the call originates from an end office switch not equipped to provide the customer identification function, the call will be routed to an office at which the function is available. Once customer identification has been established, the call will be routed to that customer. Calls originating from an end office switch at which the customer identification function is performed, but to which the customer has not ordered Interim NXX Translation, will be blocked.

Calls to a 900 number dialed via 1+ from coin telephones, 0-, 101XXXX, Inmate Service, and Hotel/Motel Service will be blocked. Calls to a 900 number dialed via 0+ will normally be blocked. Orders received from customers to unblock 0+ calls to a 900 number will be accommodated where suitably equipped facilities exist.

The manner in which Interim NXX Translation is provided is dependent on the status of the end office from which the service is provided (i.e., equipped with equal access capabilities or not equipped with equal access capabilities). When Interim NXX Translation is provided from an end office not equipped with equal access capabilities, it will be provided in conjunction with FGC Switched Access Service.

The charge for Interim NXX Translation is as set forth in 17.2.1(C) following.

ACCESS SERVICE

6. 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 SERVICE

6. 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 signalling as specified in TR-TSY-000506 and TR-NPL-000258.

The customer may receive inband, multi-wink, or expanded inband coin control signalling, where available, from end offices served by an Operator Services Access Point. Different signalling 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 17.2.7 following, is assessed the customer per 0 minus call transferred.

(C) Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC)

Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC), which is available with Feature Group C and D, where technically feasible as designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC NO. 4, WIRE CENTER INFORMATION, provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Signaling Transfer Point (STP). This service provides customers with the use of a two-way signaling path for accessing information necessary for the completion of their end user's calls.

ACCESS SERVICE

6. 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 parts: a Signaling Network Access Link (SNAL, consisting of Signaling Mileage Facility, Signaling Mileage Termination and Signaling Entrance Facility) and a Signaling Transfer Point (STP) Port. The SNAL is provided as a dedicated 56 Kbps out-of-band signaling connection between the customer's SPOI and the STP port on the STP.

The CCS/SS7 Network Connection Service is provisioned by a mated pair of STPs as described in Technical Reference 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 signalling 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 Data Base Access Service

800 Data Base Access Service is provided with FGC or FGD switched access service. When a 1+800series+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signalling System 7 (SS7) network to query an 800 data base to perform the identification function. The call will then be routed to the identified customer over FGC or FGD switched access. The 800 series includes the following service area codes: 800, 888, 877, 866, 855, 844, 833 and 822.

ACCESS SERVICE

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

The manner in which 800 data base access service is provided is dependent on the availability of SS7 service at the end office from which the service is provided as outlined following:

- When 800 data base access service originates at an end office equipped with Service Switching Point (SSP) capability for querying centralized data bases or at a non-SSP equipped end office that can accommodate direct trunking of originating 800 series calls, all such service will be provisioned from that end office.
- When 800 data base access service originates at an end office not equipped with SSP customer identification capability, the 800 series call will be delivered to the access tandem on which the end office is homed for 800 series service and which is equipped with the SSP feature to query centralized data bases.
- When 800 data base access service originates at an end office equipped with SSP capability that is not capable of accommodating direct trunking of originating 888 (other than the 800 service access codes) calls, the 800 series (other than the 800 service access codes) call will be delivered to the access tandem on which the end office is homed and which is equipped with the SSP feature to query centralized data bases.

Query charges as set forth in 17.2.2 following are in addition to those charges applicable for the Feature Group C or Feature Group D switched access service.

The Federal Communications Commission ("FCC") has concluded that hoarding, defined as the acquisition of more toll free numbers than one intends to use for the provision of toll free service, as well as the sale of a toll free number by a private entity for a fee, is contrary to the public interest in the conservation of the scarce toll free number resource and contrary to the FCC's responsibility to promote the orderly use and allocation of toll free numbers.

ACCESS SERVICE

7. Special Access Service7.1 General

Special Access Service provides a transmission path to directly connect an IC terminal location and an end user premises*, two IC terminal locations, an IC terminal location and a Hub, or two end user premises. Special Access Service includes all exchange access not utilizing Telephone Company endoffice switches. This type of Access Service is used, for example, by ICs for the provision of private line service.

The connections provided by Special Access Service can be either analog or digital. Analog connections are differentiated by spectrum and bandwidth. Digital connections are differentiated by bit rate. The specific types of services (e.g., Narrowband, Voice Grade, Wideband Digital) provided under Special Access Service are described in 7.2 following.

7.1.1 Rate Categories

There are four basic rate categories which apply to Special Access Service:

- Access Connection
- Special Transport
- Features and Functions
- Special Access Line

Unless specifically stated otherwise, each of the rate categories will apply for each Special Access Service provided to an IC.

- Telephone Company Centrex Co-like switches are considered to be end users premises for purposes of this Tariff.

ACCESS SERVICE

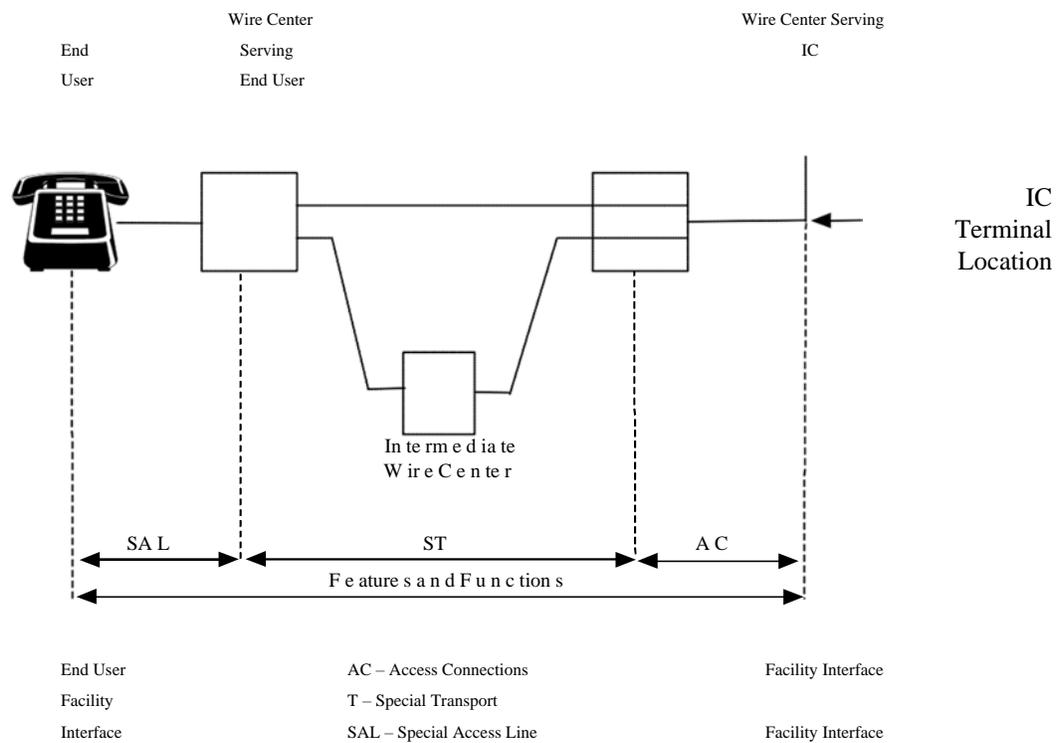
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Rate Categories (Cont'd)

The following diagram depicts a generic view of the components of Special Access Service and the manner in which the components are combined to provide complete Access Service.

SPECIAL ACCESS SERVICE



ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Rate Categories (Cont'd)(A) Access Connection

This rate category provides a channel between the IC terminal location and the wire center serving the IC terminal location. This rate category varies by type of facility.

(B) Special Transport

This rate category provides the actual physical transmission facilities between (1) an IC terminal location serving wire center and the end user serving wire center, (2) an IC terminal location serving wire center and a Hub, (3) a Hub and an end user serving wire center. The facilities may be either analog or digital. This rate category is distance sensitive and varies by type of facility.

(C) Features and Functions

This rate category provides available facility interface combinations (including signaling), Hub functions (i.e., bridging and multiplexing) and optional features or functions that improve the quality or utility of a service to meet specific communications requirements. In addition, there is a separate charge for Voice Grade Performance which is also included in this rate category. The Voice Grade Performance charge applies for all Voice Grade Services (i.e., VG1-13) ordered by the IC.

(D) Special Access Line

This rate category provides a channel between the wire center serving the end user premises and the end user premises. This rate category varies by type of facility.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Facility Interface (FI) Combinations

When ordering Special Access Service, the IC must specify the facility interface (FI) that is desired for the service ordered. The FI defines the technical characteristics associated with the type of signaling and type of facilities presented for connection to the Access Service at both the IC terminal location and the end user premises.

The FIs specified for the IC terminal location and the end user premises may be asymmetrical or symmetrical. However, only certain combinations are technically possible. Therefore, for purposes of this Tariff, FIs are being described in terms of available combinations for all services. These combinations are set forth in 7.2 following.

7.1.3 Optional Features and Functions

Optional features and functions may be added to a service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific facilities, 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 facilities. Although the facilities necessary to perform a specified function may be installed at various locations along the path of the service, including the premises of the end office, they will be charged for as a single rate element and are provided on an •equipment available basis•.

Examples of features or functions that are available include, but are not limited to, the following:

- Conditioning
- Transfer Arrangement
- Automatic Protection Switching

Descriptions and rates for each of the available features and functions are set forth in 7.5.3(D) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.4 Service Configurations

There are two types of service configurations over which Special Access Services are provided: two-point service and multipoint service.

(A) Two-Point Service

A two-point service is a channel which is provided to connect two locations. The locations connected may be:

- An IC terminal location and an end user premises, whether provided direct or through a Telephone Company designated facility Hub
- An IC terminal location and a Telephone Company Central Office in which a Centrex CO is located
- An IC terminal location and a Hub
- Two IC terminal locations
- Two end user premises

All Special Access Services may be provided as two-point service.

(B) Multipoint Service

A multipoint service is a channel that is provided to connect three or more locations. The locations connected may be:

- an IC terminal location and two or more end user premises
- all IC terminal locations
- all end users premises
- multiple IC terminal locations and multiple end user premises.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.4 Service Configurations (Cont'd)(B) Multipoint Service (Cont'd)

Only certain types of Special Access Service are provided as multipoint services. These are so designated in the Technical Service Descriptions set forth in 7.2.1 and 7.2.2 following.

Multipoint Service is available with a maximum of three mid-links in tandem. However, the specific number of bridges on a given service will be determined by the Telephone Company.

Multipoint service is provided in the following manner:

- The Telephone Company will designate serving wire centers where bridging (by service type) is available. These serving wire centers are referred to as Hubs.
- The IC will specify the bridging serving wire center (i.e., Hub), selected from the Telephone Company list of available locations.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.4 Service Configurations (Cont'd)(B) Multipoint Service (Cont'd)

i Service will be priced as provided:

- Access Connection from the designated IC terminal location to IC serving wire center. (Additional IC terminal locations will be treated as end user premises.)
- Special Transport from the IC serving wire center to the bridging serving wire center (may also be end user serving wire center).
- Appropriate facility interface combination (per end user premises bridged) and bridging equipment charge. The facility interfaces at the end user premises do not have to be the same at each end user premises on a multipoint service, but all must work in combination with a common IC terminal location facility interface. The rates to be applied at the IC terminal location are those for the facility interface combination with the highest rates at the initial installation of service.
- Special Transport from the bridging serving wire center to the end user serving wire center, if required.
- Special Access Lines from the end user serving wire center to end user premises (per end user location).
- Special Access Service Surcharge (per end user premises).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.4 Service Configurations (Cont'd)(B) Multipoint Service (Cont'd)

As each additional leg is added to an existing multipoint service, additional Special Transport, an end user facility interface, a Special Access Line and a Special Access Service Surcharge will be charged to the IC as required. If another bridge is connected, additional Special Transport, end user facility interface(s), Special Access Line(s) and Special Access Service Surcharge will be charged to the IC as required.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.5 Alternate Use

Alternate Use occurs when an IC uses a service for different types of transmission at different times. The IC may transfer from one type of operation to another at will, but only one type of transmission can be used at a time.

The Telephone Company will review each request for alternate use on an individual case basis. If it agrees to allow the alternate use, 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., Specialized Service or Arrangements. The IC will pay the (i.e., Access Connection, Special Transport, Facility Interface Combination and Special Access Line).

7.1.6 Special Facilities Routing

An IC 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 11. following.

7.1.7 Design Layout Report

The Telephone Company will provide to the IC the make-up of the facilities and services provided under this Tariff as Special Access to aid the IC 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 IC at no charge.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.8 Acceptance Testing

At no additional charge, the Telephone Company will, at the IC's request, cooperatively test, at the time of installation, the following parameters:

For Voice Grade (VG) Services 1, 2, 3, 6, 7, 8, 9, 10, 11 and 12: loss, 3-tone slope, dc continuity and operational signaling. When the Access Connection provides a four-wire voice transmission interface and the network interface provides two-wire voice transmission, (i.e., there is a four-wire to two-wire conversion in Special Transport), balance (equal level echo path loss) may also be tested. Additionally, C- Notched noise tests will be provided on VG6, 7, 8, 9, 10, 11 and 12.

All other Access Services will be tested to the performance parameters specified for the individual services.

If acceptance tests are not started within 30 minutes after the scheduled appointment time for such tests, as negotiated between the Telephone Company and the IC, additional charges will apply, as set forth in 13.2.6(B) following.

7.1.9 Ordering Options and Conditions

There are two ordering options available to an IC in the provision of Special Access Service. These are:

- Access Order
- Planned Facilities Order

These options are set forth in detail in 5. preceding, as are the conditions under which the options may be elected. Cancellation charges associated with these options are also included in 5. preceding, as are the conditions under which the options may be elected. Cancellation charges associated with these options are also included in 5. preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.10 Jurisdictional Report Requirements

When an IC orders Special Access Service for both interstate and intrastate use, the IC is responsible for providing reports set forth in 2.3.14 preceding. Charges will be apportioned in accordance with these reports. The method to be used for determining the intrastate charges is set forth in 2.3.15 preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service

Special Access Service may be either analog or digital. Analog services are differentiated by spectrum and bandwidth. Digital services are differentiated by bit rate.

There are five major categories of analog service and three digital services. These are:

- Analog: Narrowband
Voice Grade Program Audio Video Wideband
- Digital: Wideband
Digital Data High Capacity

Each of these are further broken down into a number of subcategories.

This section includes the technical service descriptions for each type of analog and digital service provided, typical applications for which each type of service can be used, the optional features or functions available with specific services, transmission performances and the available facility interface (FI) combinations with which service can be provided. The facility interface codes are described in 7.3 following.

The Telephone Company will maintain existing transmission performance on service configurations installed prior to January 1, 1984. All service configurations installed after January 1, 1984 will conform to the transmission performance standards contained in this Tariff, except as follows. Where local facility conditions cannot support the transmission performance standards contained in this Tariff, transmission standards that can be supported will be uniformly applied to all ICs.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service
(Cont'd)7.2.1 Analog Services(A) Narrowband Services(1) Narrowband 1 (NB1) Special Access Service(a) Description

Special Access Service NB1 provides a channel for a balanced metallic pair between an IC terminal location and an end user premises. Service will be provided only where appropriate metallic facilities are available. Signal transfer rates up to 30 baud will be accommodated.

(b) Illustrative Applications

Special Access Service NB1 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Protective Alarm (Direct Wire)
- Wire Pair Facility

(c) Optional Features

- Bridging: provision of tip-to-tip and ring-to-ring connection in central office of a metallic pair to a second end user location.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(1) Narrowband 1 (NB1) Special Access Service
(Cont'd)(d) Transmission Performance• Leakage

Remedial action will be initiated when the dc resistance between the conductors in each customer pair or the resistance between individual serving pair conductors and ground is observed to be less than 30,000 ohms.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
2DC8-3	2DC8-3

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(2) Narrowband 2 (NB2) Special Access Service(a) Description

Special Access Service NB2 provides a channel for simplex low-frequency, narrowband electrical transmission which may be provided to a number of end user premises (up to a maximum of 25) to form a series electrical path from the IC terminal location to each end user premises. The electrical path is capable of transporting the three-level signal used in the McCulloh signaling system at speeds up to 15 bps.

Service will be provided only where appropriate metallic or other facilities are available.

(b) Illustrative Application

Special Access Service NB2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Protective Alarm (McCulloh)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(2) Narrowband 2 (NB2) Special Access Service
(Cont'd)(c) Optional Features

- Series Bridging: up to 25 end user premises.

(d) Transmission Performance

- Leakage

Remedial action will be initiated when the dc resistance between the conductors in each serving pair or the resistance between individual serving pair conductors and ground is observed to be less than 30,000 ohms.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End User</u>
2DC8-2	2DC8-1	4AH5-B**	2DC8-1
2DC8-1	2DC8-2	4AH5-B**	2DC8-2
4DS9-*	2DC8-1	4AH6-C**	2DC8-2
4DS9-*	2DC8-2	4AH6-D**	2DC8-1
4AH6-D**	2DC8-2	4AH6-C**	2DC8-1

* See 7.3.3 following for explanation

** Available only to ICs selecting the multiplexed 4-wire High Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(3) Narrowband 3 (NB3) Special Access Service(a) Description

Special Access Service NB3 provides a channel for the transmission of direct current and/or low frequency control signals between an IC terminal location and an end user premises. Central office bridging for connection to a third point is available.

This service provides to continuity which may be continuously monitored. Service is available only where appropriate metallic facilities exist.

(b) Illustrative Applications

Special Access Service NB3 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Σ Protective Relaying Telegraph Grade
- Σ Protective Relaying Signal Grade

(c) Optional Features

- Σ Bridging: provision of tip-to-tip and ring-to-ring connection in a central office of a metallic pair to a second end user location.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(3) Narrowband 3 (NB3) Special Access Service
(Cont'd)(d) Transmission Performancei Loop Resistance

For protective relaying services, the end-to-end dc loop resistance will not exceed 2000 ohms for two-point channels. For three-point channels, the maximum dc loop resistance per leg is 500 ohms.

ii Shunt Capacitance

For protective relaying services, the end-to-end shunt capacitance between the two conductors will not exceed 1.5 microfarads for a two-point channel. For three-point channels, the maximum total shunt capacitance is 1.8 microfarads.

Inability to meet the resistance and capacitance requirements constitutes a condition under which Access Service is not available.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
2DC8-3	2DC8-3

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(4) Narrowband 4 (NB4) Special Access Service(a) Description

Special Access Service NB4 provides a channel for transmission of asynchronous transitions between two current levels at rates up to 75 baud between an IC terminal location and an end user premises. This service is furnished for half-duplex or duplex operation on a two point or multipoint configuration. Neither direct current continuity of this service nor the capability to transport continuously varying alternating current is assured.

(b) Illustrative Applications

Special Access Service NB4 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Telegraph Grade Facilities
- Entrance Facilities - Telegraph Grade
- Extension Service - Telegraph Grade
- Teletypewriter Service
- Alarm Circuits
- Control/Remote Metering - Telegraph Grade

(c) Optional Features

- Central office bridging capability.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Descriptions for Special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(A) Narrowband Services (Cont'd)

(4) Narrowband 4 (NB4) Special Access Service
(Cont'd)

(d) Transmission Performance

- Telegraph Distortion

Remedial action will be initiated whenever the telegraph distortion is observed to exceed 9%.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(4) Narrowband 4 (NB4) Special Access Service
(Cont'd)(e) Available Facility Interface
Combinations

<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End User</u>
2TT2-2	2TT2-2	4DS9-*	2TT2-2
2TT2-3	2TT2-2	4DS9-*	4TT2-2
2DB2-10	2TT2-2	4DS9-*	2TT2-6
2DB2-43+	2TT2-2	4DS9-*	4TT2-6
4DB2-10	2TT2-2	4AH5-B**	2TT2-2
2DB2-43+	2TT2-2	4AH5-B**	4TT2-2
2TT2-3	4TT2-2	4AH5-B**	2TT2-6
2DB2-10	4TT2-2	4AH5-B**	4TT2-6
2DB2-43+	4TT2-2	4AH6-C**	2TT2-2
4TT2-2	4TT2-2	4AH6-C**	4TT2-2
4DB2-10	4TT2-2	4AH6-C**	2TT2-6
4DB2-43+	4TT2-2	4AH6-C**	4TT2-6
2TT2-6	4TT2-2	4AH6-D**	2TT2-2
2DB2-43+	4TT2-2	4AH6-D**	4TT2-2
2DB2-10	4TT2-2	4AH6-D**	2TT2-6
4DB2-43+	2TT2-6	4AH6-D**	4TT2-6
2DB2-43+	2TT2-6		
4TT2-6	2TT2-6		
4DB2-43+	2TT2-6		

+ Supplemental Channel Assignment information required.

* See 7.3.3 following for explanation.

** Available only to ICs selecting the multiplexed 4-wire High Capacity analog facility interface option of the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(5) Narrowband 5 (NB5) Special Access Service(a) Description

Special Access Service NB5 provides a channel for transmission of asynchronous transitions between two current levels at rates up to 150 baud between an IC terminal location and an end user premises. This service is furnished for half-duplex or duplex operation on a two-point or multipoint configuration.

Neither direct current continuity of this service nor the capability to transport continuously varying alternating currents is assured.

(b) Illustrative Applications

Special Access Service NB5 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Extension Service - Telegraph Grade
- Teletypewriter Service
- Alarm Circuits
- Type II Telegraph
- Control/Remote Metering - Telegraph Grade

(c) Optional Features

- Central office bridging capability.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(A) Narrowband Services (Cont'd)(5) Narrowband 5 (NB5) Special Access Service
(Cont'd)(d) Transmission Performance• Telegraph Distortion

Remedial action will be initiated whenever the telegraph distortion is observed to exceed 12%.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End User</u>
2DB2-10	10IA2	4DS9-*	10IA2
4DB2-10	10IA2	4AH5-B**	10IA2
2DB2-43+	10IA2	4AH6-C**	10IA2
4DB2-43+	10IA2	4AH6-D**	10IA2

+ Supplemental channel assignment information required.

* See 7.3.3 following for explanation.

** Available only to ICs selecting the 4-wire multiplexed High Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services

There are 13 types of Voice Grade Service, each having a different transmission performance. The transmission performances determine the applications that the various types of Voice Grade Service can be used for. VG1 through VG4 services are intended for voice applications only. VG5 through VG10 are suitable for voiceband data or voice/data applications.

VG11 is suitable for telephoto service and suitable for physically intraLATA, jurisdictionally intrastate services.

(1) Voice Grade 1 (VG1) Special Access Service(a) Description

Special Access Service VG1 provides a channel for voice frequency transmission capability. Usable frequencies are nominally 300 to 3000Hz between an IC terminal location and an end user premises. The transmission interface can be either two-wire or four-wire at both the IC terminal location and the end user premises. Various interface options are available. This service will support effective two-wire or effective four-wire transmission.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(1) Voice Grade 1 (VG1) Special Access Service (Cont'd)(b) Illustrative Applications

Special Access Service VG1 is suitable for use as part of the facilities used to provide intrastate telecommunications services such as:

- Overseas Connecting Facility
- Voice Grade Facility
- Access Facility
- Alarm Circuits
- Back-Up Facility

(c) Optional Features

Σ Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(1) Voice Grade 1 (VG1) Special Access Service (Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message noise shall be less than:

<u>Channel</u> <u>(dBrnC0) *</u>	<u>Limit</u> <u>Mileage (mi)</u>	<u>Type</u>
<u>V1</u>	<u>Type V2</u>	
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where the type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(1) Voice Grade 1 (VG1) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, and expressed as Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

Effective Two-Wire Transmission

	Echo Return Loss	Singing Return Loss
Two-Wire		
Interface (Return Loss)	4 dB	2.5 dB
Four-Wire		
Interface (Equal level Echo Path Loss)	15 dB	11 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(1) Voice Grade 1 (VG1) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Four-Wire Transmission

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
Four-Wire		
Interface (Return Loss)	24 dB	18 dB
Four-Wire		
Interface (Equal Level Echo Path Loss)	20 dB	14 dB

(For Centrex application 2 dB pad is "in")

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(1) Voice Grade 1 (VG1) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)iii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>		<u>Improved RL</u>	
ERL	5 dB	ERL	20 dB
SRL	2.5 dB	SRL	13.5 dB

iv Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +4.0 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(1) Voice Grade 1 (VG1) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)v Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -2.0 dB and +10.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 504 Hz and 2504 Hz shall be within -2.0 dB and +8.0 dB and between 304 Hz and 3004 Hz shall be within -3.0 dB and +12.0 dB.

(e) Available Facility Interface Combinations

VG1 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1 (B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service(a) Description

Special Access Service VG2 provides a channel for voice frequency transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises or Telephone Company Central Office where a Centrex CO switch is located. The transmission interface at the end user premises or Telephone Company Central Office is two-wire or four-wire and the IC terminal location interface is four-wire. This service will support effective two-wire or effective four-wire transmission.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)(b) Illustrative Applications

Special Access Service VG2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Centrex C.O. Line
- Concentrator Identifier Trunk
- Extension Service
- Off-Premises Intercommunications Line
- Private Line Voice Circuit
- Paging Circuit
- Sampling Circuit
- Call and Talk Circuit
- Radio Land Line
- Emergency Patching Circuit
- Order Circuit
- Management Circuit
- Dictation Line
- Foreign Exchange Line
- Long Distance Terminal Line
- Centrex Station Line - Off Premises
- Off-Premises Extension
- Off-Premises PBX Station Line
- Turret or ACD Line
- Secretarial Line

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)(c) Optional Features

- Central office bridging capability
- Improved return loss for effective two-wire transmission at the end user premises.
- IC specified end user premises receive level within a range acceptable to the Telephone Company on effective four-wire transmission.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnCO) *	Limit Mileage (mi)	Type
<u>V1</u>	<u>Type V2</u>	
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where the Type V2 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Description for Special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)

(d) Transmission Performance (Cont'd)

ii 'Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Two-Wire Transmission

(Four-wire interface at the IC terminal location and two-wire interface at the end user premises).

	Echo	Singing
	Return	Return
	<u>Loss</u>	<u>Loss</u>

Standard
Return

Loss	5 dB	2.5 dB
(at Two Wire Interface)		

Improved Return		
Loss	13 dB	8 dB
(at Two Wire Interface)		

Four-Wire		
Interface	16 dB	11 dB
(Equal Level Echo Path Loss)		

(For Centex application 2 dB pad is "in")

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Four-Wire Transmission

	Echo Return Loss	Singing Return Loss
--	------------------------	---------------------------

Two-Wire

Interface	24 dB	18 dB
(Return Loss)		

Four-Wire

Interface	24 dB	18 dB
(Equal level Echo Path Loss)		

iii Improved Return Loss The

Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

	<u>Standard RL</u>	<u>Improved RL</u>
ERL	5 dB	20 dB
SRL	2.5 dB	13.5 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(2) Voice Grade 2 (VG2) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)iv Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

v Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -1.0 dB and +4.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB.

(e) Available Facility Interface Combinations

VG2 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(3) Voice Grade 3 (VG3) Special Access Service(a) Description

Special Access Service VG3 provides a channel for voice frequency transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises or Telephone Company Central Office where a Centrex CO is located. The transmission interface at the end user premises or Telephone Company Central Office is two-wire or four-wire and the IC terminal location interface is four-wire. This service will support effective two-wire or four-wire transmission.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)(b) Illustrative Applications

Special Access Service VG3 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Foreign Exchange Trunk (Closed End)
- Long Distance Terminal Trunk
- Remote Attendant Trunk
- Alternate Use Service
- PBX/CTX Tie Trunks
- SSN Access Line
- SSN Station Line
- SSN Network Line
- SSN Tie Trunk
- ACD Trunks
- Off Net-Equivalent Service
- Station and Premises Connecting Facilities

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Description for Special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)

(c) Optional Features

- Improved return loss for effective two-wire transmission at the end user premises.
- IC specified end user premises receive level within a range acceptable to the Telephone Company on effective four-wire transmission.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message noise shall be less than:

Channel (dBrnC0)*	Limit Mileage (mi)	Type
V1	Type V2	
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Description for Special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)

(d) Transmission Performance (Cont'd)

ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Two-Wire Transmission

(Four-wire interface at the IC terminal location and two-wire interface at the end user premises).

	Echo	Singing
	Return	Return
	<u>Loss</u>	<u>Loss</u>

Standard
Return

Loss	5 dB	2.5 dB
(at Two Wire Interface)		

Improved Return		
Loss	13 dB	8 dB
(at Two Wire Interface)		

Four-Wire		
Interface	16 dB	11 dB
(Equal level Echo Path Loss)		

(For Centrex application 2 dB pad is "in")

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Four-Wire Transmission

(Two-wire interface at the end user premises).

Echo	Singing
Return	Return
<u>Loss</u>	<u>Loss</u>

Two-Wire

Interface	24 dB	18 dB
(Return Loss)		

Four-Wire

Interface	20 dB	14 dB
(Equal Level Echo Path Loss)		

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)iii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>	<u>Improved RL</u>
ERL 5 dB	ERL 20 dB
SRL 2.5 dB	SRL 13.5 dB

iv Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

v Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -1.0 dB and +3.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Description for Special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(3) Voice Grade 3 (VG3) Special Access Service (Cont'd)

(e) Available Facility Interface Combinations

VG3 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B)(14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(4) Voice Grade 4 (VG4) Special Access Service

This service is available for use only by the Federal Government.

(a) Description

Special Access Service VG4 provides a channel for voice frequency transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises. The transmission interface will be four-wire at both the IC terminal location and the end user premises. This service will support effective four-wire transmission.

(b) Illustrative Applications

Special Access Service VG4 is suitable for use as part of the facilities required to provide intrastate telecommunications services to the Federal Aviation Agency (FAA) for voice plus control tone transmission under FAA Specifications S-1142a.

(c) Optional Features

- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(4) Voice Grade 4 (VG4) Special Access Service (Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnCO)*	Mileage	Limit (mi)	Type
V1		Type	V2
0 - 50		32	38
51 - 100		33	39
101 - 200		35	41
201 - 400		37	43
401 - 1000		39	45

ii Improved Return Loss The

Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

Standard RL	Improved RL
ERL 5 dB	ERL 20 dB
SRL 2.5 dB	SRL 13.5 dB

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(4) Voice Grade 4 (VG4) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)iii Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.0 dB.

iv Attenuation Distortion

The attenuation distortion shall be within the following limits:

- -1 to +3.5 dB between 304 and 504 Hz
- -1 to +2.0 dB between 5-4 and 2504 Hz
- -1 to +3.0 dB between 2504 and 2804 Hz
- -1 to +4.0 dB between 2804 and 3004 Hz

v Signal-to-C Message Noise

The signal-to-C Message Noise ratio should not be less than 41 dB, measured with a -9 dBm0 test tone. The Signal-to-C Message Noise ratio shall not be less than 21 dB for signals over 2600-3000 Hz, measured with a -15 dBm0 test tone.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Description for Special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(4) Voice Grade 4 (VG4) Special Access Service (Cont'd)

(e) Available Facility Interface Combinations

VG4 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B)(14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(5) Voice Grade Services (Cont'd)(a) Description

Special Access Service VG5 provides channel for voiceband data transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises. The transmission interface can be either two-wire or four-wire at the end user premises and the IC terminal location. This service will support effective two-wire or four-wire transmission.

(b) Illustrative Applications

Special Access Service VG5 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Alarm Circuits
- Autoscript
- Protective Alarm
- DATAPHONE Select-A-Station

(c) Optional Features

- C-Conditioning
- Central office bridging capability.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(5) Voice Grade 5 (VG5) Special Access Service (Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnC0) * <u>V1</u>	Limit Mileage (mi) <u>Type V2</u>	Type
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where the Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(5) Voice Grade 5 (VG5) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

Effective Two-Wire Transmission

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
Two-Wire		
Interface (Return Loss)	4 dB	2.5 dB
Four-Wire		
Interface (Equal Level Echo Path Loss)	16 dB	11 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(5) Voice Grade 5 (VG5) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Four-Wire Transmission

(Two-wire interface at the end user premises).

	<u>Echo</u>	<u>Singing</u>
	<u>Return</u>	<u>Return</u>
	<u>Loss</u>	<u>Loss</u>

Two-Wire

Interface	24 dB	18 dB
(Return Loss)		

Four-Wire

Interface	20 dB	14 dB
(Equal Level Echo Path Loss)		

(For Centrex application 2 dB pad is "in")

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(5) Voice Grade 5 (VG5) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)iii Improved Return Loss The

Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>		<u>Improved RL</u>	
ERL	5 dB	ERL	20 dB
SRL	1.5 dB	SRL	13.5 dB

iv Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

v Attenuation Distortion

The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(5) Voice Grade 5 (VG5) Special Access Service (Cont'd)(d) Transmission Performance (Cont'd)vi Signal-to-C Notch Noise

The Signal-to-C Notch noise ratio shall not be less than 26 dB.

vii Impulse Noise

The number of impulse noise counts exceeding threshold of 67 dBrnCO in 15 minutes shall be less than 15.

(e) Available Facility Interface Combinations

VG5 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(6) Voice Grade 6 (VG6) Special Access Service(a) Description

Special Access Service VG6 provides a channel for voiceband data transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises. The transmission interface is four-wire at both the IC terminal location and the end user premises. This service will support effective four-wire transmission.

(b) Illustrative Applications

Special Access Service VG6 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Private Line Data Circuit
- Multiplex Line
- CSACC Link
- CNCC Link
- Control/Remote Metering
- Measuring and Recording Circuits
- Switching Control and Transfer Circuits

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(6) Voice Grade 6 (VG6) Special Access Service(c) Optional Features

- C-Conditioning
- DA-Conditioning
- Central office bridging capability.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.
- Central office multiplexing.

(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnCO)*	Limit Mileage (mi)	Type
V1	Type V2	
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Description for Special Access Service
(Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(6) Voice Grade 6 (VG6) Special Access Service (Cont'd)

(d) Transmission Performance (Cont'd)

ii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>	<u>Improved</u>
<u>RL</u>	<u>RL</u>
ERL 5 dB	ERL 20 dB
SRL 2.5 dB	SRL 13.5 dB

iii Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Description for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(6) Voice Grade 6 (VG6) Special Access Service
(Cont'd)(d) Transmission Performance (Cont'd)iv Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -1.0 dB and -4.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss).

The attenuation distortion between 504 Hz and 2504 Hz shall be within -1.0 dB and +3.0 dB with reference to the loss at 1004 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB.

v Signal-to-C Notch Noise

The Signal-to-C Notch Noise ratio shall not be less than 30 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Descriptions for special Access Service (Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(6) Voice Grade 6 (VG6) Special Access Service (Cont'd)

(d) Transmission Performance (Cont'd)

vi Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 700 microseconds between 800 and 2600 Hz.

vii Impulse Noise

The number of impulse noise counts exceeding a threshold of 67 dBrnC0 in 15 minutes shall be less than 15.

viii Intermodulation Distortion

The intermodulation distortion based upon the four-tone method shall be such that R2 is not less than 33 dB and R3 not less than 40 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)
- 7.2 Technical Service Descriptions for special Access Service (Cont'd)
- 7.2.1 Analog Services (Cont'd)
- (B) Voice Grade Services (Cont'd)
- (6) Voice Grade 6 (VG6) Special Access Service (Cont'd)
- (d) Transmission Performance (Cont'd)
- ix Phase Jitter
- The phase jitter over 20-300 Hz shall not exceed 5 degrees peak-to-peak and over 4-300 Hz shall not exceed 10 degrees peak-to-peak.
- x Frequency Shift
- The frequency shift shall not exceed ± 1 Hz.
- (e) Available Facility Interface Combinations
- VG6 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B)(14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service(a) Description

Special Access Service VG7 provides a channel for voiceband data transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises or Telephone Company Central Office where a Centrex CO switch is located. The transmission interface at the end user premises or Telephone Company Central Office is two-wire or four-wire and the IC terminal location interface is four-wire. This service will support effective two-wire or four-wire transmission.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(b) Illustrative Applications

Special Access Service VG7 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Centrex Station Line Off-Premises Stations
- PBX Off-Premises Stations
- Foreign Exchange Trunks (Closed End)
- Foreign Exchange Lines (Closed End)
- Long Distance Terminal Trunks
- PBX Tie Trunks
- SSN Tie Trunks
- Centrex C.O. Lines
- Voice Grade Data Connecting Facilities
- Off-Net Equivalent Service

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Descriptions for special Access Service
(Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)

(c) Optional Features

- Improved return loss for effective two-wire transmission at the end user premises.
- C-Conditioning
- DA-Conditioning
- IC specified end user premises receive level within a range acceptable to the Telephone Company on effective four-wire transmission.
- Improved return loss at four-wire point of interface, applicable to each two-wire of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnCO) *	Limit Mileage (mi)	Type
<u>V1</u>	<u>Type</u>	<u>V2</u>
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Descriptions for special Access Service
(Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)

(d) Transmission Performance (Cont'd)

ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Two-Wire
Transmission

(Four-wire interface at the IC terminal location and two-wire interface at the end user premises).

	<u>Echo</u> <u>Return</u> <u>Loss</u>	<u>Singing</u> <u>Return</u> <u>Loss</u>
--	---	--

Standard
Return

Loss	5 dB	2.5 dB
------	------	--------

(at Two Wire Interface)

Improved Return Loss	13 dB	8 dB
-------------------------	-------	------

(at Two Wire Interface)

Four-Wire Interface	16 dB	11 dB
------------------------	-------	-------

(Equal Level Echo Path Loss)

(For Centrex application 2 dB pad is "in")

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control (Cont'd)Effective Four-Wire
Transmission(Two-wire interface at the
end user premises).

	<u>Echo</u> <u>Return</u> <u>Loss</u>	<u>Singing</u> <u>Return</u> <u>Loss</u>
--	---	--

Two-Wire

Interface	24 dB	18 dB
(Return Loss)		

Four-Wire

Interface	20 dB	14 dB
(Equal Level Echo Path Loss)		

iii Improved Return Loss TheReturn Loss (RL),
expressed as Echo Return Loss
(ERL) and Singing Return Loss
(SRL), on two-wire ports of a
four-wire point of interface
shall be equal to or greater
than:

<u>Standard RL</u>		<u>Improved RL</u>	
ERL	5 dB	ERL	20 dB
SRL	2.5 dB	SRL	13.5 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(d) Transmission Performance (Cont'd)iv Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

v Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -1.0 dB and +2.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB.

vi Signal-to-C Notch Noise

The Signal-to-C Notch noise ratio shall not be less than 30 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(d) Transmission Performance (Cont'd)vii Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 700 microseconds between 800 and 2600 Hz.

viii Impulse Noise

The number of impulse noise counts exceeding a threshold of 67 dBrnC0 in 15 minutes shall be less than 15.

ix Intermodulation Distortion

The intermodulation distortion based upon the four tone method shall be such that R2 is not less than 33 dB and R3 not less than 40 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(7) Voice Grade 7 (VG7) Special Access Service
(Cont'd)(d) Transmission Performance (Cont'd)x Phase Jitter

The phase jitter over 20-300 Hz shall not exceed 5 degrees peak-to-peak and over 4-300 Hz shall not exceed 10 degrees peak-to-peak.

xi Frequency Shift

The frequency shift shall not exceed +1 Hz.

(e) Available Facility Interface Combinations

VG7 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services(a) Description

Special Access Service VG8 provides a channel for voiceband data transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises or Telephone Company Central Office.

The standard transmission interface at the end user premises or Telephone Company Central Office is two-wire or four-wire and the IC terminal location interface is four-wire. This service will support effective four-wire transmission.

(b) Illustrative Applications

Special Access Service VG8 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- SSN Access Line
- SSN Station Line

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services
(Cont'd)(c) Optional Features

- C-Conditioning
- IC specified end user premises receive level within a range acceptable to the Telephone Company for effective four-wire transmission.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnC0)*	Limit Mileage (mi)	Type
V1	Type V2	
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services
(Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

Effective Four-Wire Transmission

(Two-wire interface at the end user premises).

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
Two-Wire		
Interface (Return Loss)	24 dB	18 dB
Four-Wire		
Interface (Equal Level Echo Path Loss)	20 dB	14 dB

(For Centrex application, 2 dB pad is "in")

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services
(Cont'd)(d) Transmission Performance (Cont'd)iii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>	<u>Improved RL</u>
ERL 5 dB	ERL 20 dB
SRL 2.5 dB	SRL 13.5 dB

iv Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services
(Cont'd)(d) Transmission Performance (Cont'd)v Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -1.0 dB and +2.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB.

vi Signal-to-C Notch Noise

The Signal-to-C Notch noise ratio shall not be less than 32 dB.

vii Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 700 microseconds between 800 and 2600 Hz.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services
(Cont'd)(d) Transmission Performance (Cont'd)viii Impulse Noise

The number of impulse noise counts exceeding a threshold of 67 dBrnCO in 15 minutes shall be less than 15.

ix Intermodulation Distortion

The intermodulation distortion based upon the four tone method shall be such that R2 is not less than 45 dB and R3 not less than 48 dB.

x Phase Jitter

The phase jitter over 20-300 Hz shall not exceed 4 degrees peak-to-peak and over 4-300 Hz shall not exceed 9 degrees peak-to-peak.

xi Frequency Shift

The frequency shift shall not exceed +1 Hz.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(8) Voice Grade 8 (VG8) Special Access Services
(Cont'd)(e) Available Facility Interface
Combinations

VG8 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1 (B) (14) following.

(9) Voice Grade 9 (VG9) Special Access
Service(a) Description

Special Access Service VG9 provides a channel for voiceband data transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and another IC terminal location or a Telephone Company Central office which serves as an SSN Switch. The transmission interface at the end user premises or Telephone Company Central Office is four-wire and the IC terminal location interface is four-wire. This service will support effective four-wire transmission.

(b) Illustrative Applications

Special Access Service VG9 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as SSN Network Trunks.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(9) Voice Grade 9 (VG9) Special Access Service
(Cont'd)(c) Optional Features

- C-Conditioning
- IC specified end user premises receive level within a range acceptable to the Telephone Company for effective four-wire transmission.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

<u>Mileage (mi)</u>	<u>Limit</u> <u>(dBrnCO)*</u>	
	<u>Type V1</u>	<u>Type V2</u>
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(9) Voice Grade 9 (VG9) Special Access Service
(Cont'd)ii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>	<u>Improved RL</u>
ERL 5 dB	ERL 20 dB
SRL 2.5 dB	SRL 13.5 dB

iii Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +1.5 dB.

iv Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -1.0 dB and +2.0 dB with reference to the loss at 1004 Hz and between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB. (minus equals less loss, plus equals more loss).

v Signal-to-C Notch Noise

The Signal-to-C Notch noise ratio shall not be less than 34 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(9) Voice Grade 9 (VG9) Special Access
Service
(Cont'd)(d) Transmission Performance (Cont'd)vi Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 700 microseconds between 800 and 2600 Hz.

vii Impulse Noise

The number of impulse noise counts exceeding a threshold of 67 dBrnC0 in 15 minutes shall be less than 15.

viii Intermodulation Distortion

The intermodulation distortion based upon the four tone method shall be such that R2 is not less than 50 dB and R3 not less than 54 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(9) Voice Grade 9 (VG9) Special Access
Service
(Cont'd)(d) Transmission Performance (Cont'd)ix Phase Jitter

The phase jitter over 20-300 Hz shall not exceed 3 degrees peak-to-peak and over 4-300 Hz shall not exceed 8 degrees peak-to-peak.

x Frequency Shift

The frequency shift shall not exceed ± 1 Hz.

(e) Available Facility Interface
Combinations

VG9 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B)(14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(10) Voice Grade 10 (VG10) Special Access Service(a) Description

Special Access Service VG10 provides a channel for voiceband data transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises. The transmission interface at the end user premises or Telephone Company Central Office and the IC terminal location is four-wire. This service will support effective four-wire transmission.

(b) Illustrative Applications

Special Access Service VG10 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Data Off-Net Extension
- Voice Grade Data Facility

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(10) Voice Grade 10 (VG10) Special Access Service(c) Optional Features

- Central office bridging capability.
- Improved return los at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.
- C-Conditioning
- DA-Conditioning

(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnC0)*	<u>Limit</u>	
<u>Mileage (mi)</u>	<u>Type V1</u>	<u>Type V2</u>
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(10) Voice Grade 10 (VG10) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)ii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>		<u>Improved RL</u>	
ERL	5 dB	ERL	20 dB
SRL	2.5 dB	SRL	13.5 dB

iii Loss Variation

The long term loss variation from the nominal 1004 Hz EML shall not exceed +4 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(10) Voice Grade 10 (VG10) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)iv Attenuation Distortion

The attenuation distortion between 404 Hz and 2804 Hz shall be within -2.0 dB and +10.0 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 504 Hz and 2504 Hz shall be within -2.0 dB and +8.0 dB with reference to the loss at 1004 Hz. The attenuation distortion between 304 Hz and 3004 Hz shall be within -3.0 dB and +12.0 dB.

v Signal-to-C Notch Noise

The Signal-to-C Notch Noise ratio shall not be less than 24 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(10) Voice Grade 10 (VG10) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)vi Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 1750 microseconds between 800 and 2600 Hz.

vii Impulse Noise

The number of impulse noise counts exceeding threshold of 71 dBrnC0 in 15 minutes shall be less than 15.

viii Intermodulation Distortion

The intermodulation distortion based upon the four-tone method shall be such that R2 is not less than 27 dB and R3 not less than 32 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(10) Voice Grade 10 (VG10) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)ix Phase Jitter

The phase jitter over 20-300 Hz shall not exceed 10 degrees peak-to-peak and over 4-300 Hz shall not exceed 15 degrees peak-to-peak.

x Frequency Shift

The frequency shift shall not exceed +3 Hz.

(e) Available Facility Interface
Combinations

VG10 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1 (B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access Service(a) Description

Special Access Service VG11 provides a channel for telephone/facsimile transmission capability. Usable frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises.

The transmission interfaces at the end user premises can be either two-wire or four-wire and at the IC terminal location the interface is four-wire. This service will support either effective two-wire or four-wire transmission.

(b) Illustrative Applications

Special Access Service VG11 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as telephoto/facsimile.

(c) Optional Features

- Central office bridging capability
- Telephoto conditioning
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnCO) *	Mileage	Limit	
		Type V1	Type V2
0 - 50		32	38
51 - 100		33	39
101 - 200		35	41
201 - 400		37	43
401 - 1000		39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Descriptions for special Access Service
(Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)

(d) Transmission Performance

ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)(d) Transmission Performanceii Echo Control (Cont'd)Effective Two-Wire
Transmission

(Four-wire interface at the IC terminal location and two-wire interface at the end user premises).

	<u>Echo</u> <u>Return</u> <u>Loss</u>	<u>Singing</u> <u>Return</u> <u>Loss</u>
Two-Wire		
Interface (Return Loss)	5 dB	2.5 dB
Four-Wire		
Interface (Equal Level Echo Path Loss)	16 dB	11 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)(d) Transmission Performanceii Echo Control (Cont'd)Effective Four-Wire
Transmission(Two-wire interface at end
user premises.)

	<u>Echo</u> <u>Return</u> <u>Loss</u>	<u>Singing</u> <u>Return</u> <u>Loss</u>
Two-Wire		
Interface (Return Loss)	24 dB	18 dB
Four-Wire		
Interface (Equal Level Echo Path Loss)	20 dB	14 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)(d) Transmission Performanceiii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>		<u>Improved RL</u>	
ERL	5 dB	ERL	20 dB
SRL	2.5 dB	SRL	13.5 dB

iv Loss Variation

The long term loss variation from the nominal 2204 Hz EML shall not exceed +1.5 dB.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)(d) Transmission Performancev Attenuation Distortion

The attenuation distortion between 1204 Hz and 2604 Hz shall be within -1.0 dB and +1.0 dB with reference to the loss at 2204 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +5.0 dB.

vi Signal-to-C Notch Noise

The Signal-to-C Notch noise ratio shall not be less than 30 dB.

vii Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 700 microseconds between 1200 and 2600 Hz.

viii Impulse Noise

The number of impulse noise counts exceeding a threshold of 67 dBrnCO in 15 minutes shall be less than 15.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(11) Voice Grade 11 (VG11) Special Access
Service (Cont'd)(d) Transmission Performanceix Intermodulation Distortion

The intermodulation distortion based upon the four-tone method shall be such that R2 is not less than 33 dB and R3 not less than 40 dB.

x Phase Jitter

The phase jitter over 20-300 Hz shall not exceed 5 degrees peak-to-peak and over 4-300 Hz shall not exceed 10 degrees peak-to-peak.

xi Frequency Shift

The frequency shift shall not exceed ± 1 Hz.

(e) Available Facility Interface
Combinations

VG11 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(12) Voice Grade 12 (VG12) Special Access Service(a) Description

Special Access Service VG12 provides a channel for voice frequency transmission capability. Usage frequencies are nominally 300 to 3000 Hz between an IC terminal location and an end user premises. Such services are used by electric power utilities for the transmission of control signals (voice frequency tones) which are critical to the operation and protection of power systems during fault intervals. The service may be one-way, effective two-wire or two-way, effective four-wire and may be ordered in two-point or multipoint configurations. The transmission interface at the IC terminal location and the end user premises can be either two-wire or four-wire.

(b) Illustrative Applications

Special Access Service VG12 is suitable for use as part of the facilities required to provide intrastate voice grade private line audio tone protective relaying service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(12) Voice Grade 12 (VG12) Special Access
Service (Cont'd)(c) Optional Features

- Central office bridging capability.
- Improved return loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel.

(d) Transmission Performancei C-Message Noise

The C-Message Noise shall be less than:

Channel (dBrnCO)* V1	Limit Mileage (mi) Type V2	Type
0 - 50	32	38
51 - 100	33	39
101 - 200	35	41
201 - 400	37	43
401 - 1000	39	45

* Where facility network conditions will support the parameters, Type V1 will be provided. Where Type V1 parameters cannot be supported, Type V2 will be provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(12) Voice Grade 12 (VG12) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)ii Echo Control

Echo Control, identified as Equal Level Echo Path Loss at four-wire interfaces or Return Loss at two-wire interfaces, for both Echo Return Loss and Singing Return Loss, at either the end user premises or IC terminal location shall be not less than the following limits:

Effective Two-Wire
Transmission

(Two-wire interface at the end user premises).

	<u>Echo</u> <u>Return</u> <u>Loss</u>	<u>Singing</u> <u>Return</u> <u>Loss</u>
Two-Wire		
Interface (Return Loss)	5 dB	2.5 dB
Four-Wire		
Interface (Equal Level Echo Path Loss)	16 dB	11 dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(12) Voice Grade 12 (VG12) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)iii Improved Return Loss

The Return Loss (RL), expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), on two-wire ports of a four-wire point of interface shall be equal to or greater than:

<u>Standard RL</u>	<u>Improved</u>
<u>RL</u>	<u>RL</u>
ERL 5 dB	ERL 20
dB	
SRL 2.5 dB	SRL 13.5 dB

iv Loss Variation

The long term loss variation from the nominal EML shall not exceed +1.5 dB.

v Attenuation Distortion

The attenuation distortion between 304 Hz and 3004 Hz shall be within -1.0 dB and +2.5 dB with reference to the loss at 1004 Hz (minus equals less loss, plus equals more loss). The attenuation distortion between 504 Hz and 2804 Hz shall be within -0.5 dB and +1.0 dB with reference to the loss at 1004 Hz.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(12) Voice Grade 12 (VG12) Special Access
Service (Cont'd)(d) Transmission Performance (Cont'd)vi Signal-to-C Notch Noise

The Signal-to-C Notch noise ratio shall not be less than 32 dB.

vii Envelope Delay Distortion

The Envelope Delay Distortion (EDD) shall not exceed 715 microseconds between 800 and 2600 Hz.

viii Impulse Noise

The number of impulse noise counts exceeding a threshold of 67 dBrnC0 in 15 minutes shall be less than 15.

ix Frequency Shift

The frequency shift shall not exceed ± 1 Hz.

(e) Available Facility Interface
Combinations

VG12 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B)(14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(13) Voice Grade 13 (VG13) Special Access Service(a) Description

Special Access Service VG13 provides a channel for voiceband transmission capability. Usable frequencies are nominally 300 to 3000 Hz between end user premises. This channel will provide for physically intraLATA services that are jurisdictionally classified as intrastate.

(b) Illustrative Applications

Special Access Service VG13 is suitable for the provision of the intrastate telecommunications services such as:

- PBX/Centrex Tie Trunks
- Remote Attendant Lines
- Turret or ACD Trunks or Lines
- Off-Premises Stations
- Voice Grade Data Service

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(13) Voice Grade 13 (VG13) Special Access
Service (Cont'd)(c) Optional Features

- Central office bridging capability.

(d) Transmission Performance

The transmission performance is the same as for similar private line services offered by the Telephone Company.

(e) Available Facility Interface
Combinations

VG13 is available only with specific facility interface combinations. These combinations are set forth in 7.2.1(B) (14) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Technical Service Descriptions for special Access Service
(Cont'd)

7.2.1 Analog Services (Cont'd)

(B) Voice Grade Services (Cont'd)

(14) Available Facility Interface (FI)
Combinations

The following table shows the available facility interface (FI) combinations and the Voice Grade Services with which they may be ordered.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AB2	4AC2			X											
4AB3	4AC2			X											
4AB2	2AC2			X											
4AB3	2AC2			X											
2AB2	2AC2			X											
2AB3	2AC2			X											
4AB2	4SF2			X											
4AB3	4SF2			X											
4AH6-D+	4AC2			X											
4AH6-D+	2AC2			X											
4AH6-C+	4AC2			X											
4AH6-C+	2AC2			X											
4AH5-B+	4AC2			X											
4AH5-B+	2AC2			X											
4AH6-D+	6DA2						X	X				X			
4AH6-D+	4DA2							X				X			
4AH6-D+	2DA2							X				X			

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AH6-C+	6DA2							X				X			
4AH6-C+	4DA2							X				X		X	
4AH6-C+	2DA2					X	X								X
4AH5-B+	6DA2							X				X			
4AH5-B+	4DA2							X				X		X	
4AH5-B+	2DA2					X	X								X
4AH6-D+	4DE2						X								
4AH6-C+	4DE2						X								
4AH5-B+	4DE2						X								
4AH6-D+	4DX3											X			
4AH6-C+	4DX3											X			
4AH5-B+	4DX3											X			
4AH5-D+	4DX2											X			
4AH6-C+	4DX2											X			
4AH5-B+	4DX2											X			
4AH6-D+	9DY2				X				X	X					
4AH6-D+	9DY3				X				X	X					
4AH6-D+	6DY2				X				X	X					
4AH6-D+	6DY3				X				X	X					
4AH6-D+	4DY2				X				X	X					
4AH6-D+	2DY2				X				X	X					

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AH6-C+	9DY2				X				X	X					
4AH6-C+	9DY3				X				X	X					
4AH6-C+	6DY2				X				X	X					
4AH6-C+	6DY3				X				X	X					
4AH6-C+	4DY2				X				X	X					
4AH6-C+	2DY2				X				X	X					
4AH5-B+	9DY2				X				X	X					
4AH5-B+	9DY3				X				X	X					
4AH5-B+	6DY2				X				X	X					
4AH5-B+	6DY3				X				X	X					
4AH5-B+	4DY2				X				X	X					
4AH6-D+	9EA2				X				X	X					
4AH6-D+	9EA3				X				X	X					
4AH6-D+	6EA2-E				X				X	X					
4AH6-D+	6EA2-M				X				X	X			X		
4AH6-D+	4EA2-E				X				X	X					
4AH6-D+	4EA2-M				X				X	X					
4AH6-C+	9EA2				X				X	X					
4AH6-C+	9EA3				X				X	X					
4AH6-C+	6EA2-E				X				X	X					
4AH6-C+	6EA2-M				X				X	X			X		

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AH6-C+	4EA2-E				X				X	X					
4AH6-C+	4EA2-M				X				X	X					
4AH5-B+	9EA2				X				X	X					
4AH5-B+	9EA3				X				X	X					
4AH5-B+	6EA2-E				X				X	X					
4AH5-B+	6EA2-M				X				X	X	X				
4AH5-B+	4EA2-E				X				X	X					
4AH5-B+	4EA2-E				X				X	X					
4AH6-D+	8EB2-E				X				X	X					
4AH6-D+	8EB2-M				X				X	X	X				
4AH6-D+	6EB2-E				X				X	X					
4AH6-D+	6EB2-M				X				X	X					
4AH6-C+	8EB2-E				X				X	X					
4AH6-C+	8EB2-M				X				X	X	X				
4AH6-C+	6EB2-E				X				X	X					
4AH6-C+	6EB2-M				X				X	X					
4AH5-B+	8EB2-E				X				X	X					
4AH5-B+	8EB2-M				X				X	X	X				
4AH5-B+	6EB2-E				X				X	X					
4AH5-B+	6EB2-M				X				X	X					

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AH6-D+	2GO2		X												
4AH6-C+	2GO2		X												
4AH5-B+	2GO2		X												
4AH6-D+	6GS2				X				X						
4AH6-D+	4GS2				X				X						
4AH6-D+	2GS3				X				X						
4AH6-D+	2GS2		X		X				X						
4AH6-C+	6GS2				X				X						
4AH6-C+	4GS2				X				X						
4AH6-C+	2GS3				X				X						
4AH6-C+	2GS2		X		X				X						
4AH5-B+	6GS2				X				X						
4AH5-B+	4GS2				X				X						
4AH5-B+	2GS3				X				X						
4AH5-B+	2GS2		X		X				X						
4AH6-D+	2LA2			X					X						
4AH6-C+	2LA2			X					X						
4AH5-B+	2LA2			X					X						

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AH6-D+	2LB2			X					X						
4AH6-C+	2LB2			X					X						
4AH5-B+	2LB2			X					X						
4AH6-D+	2LC2			X					X						
4AH6-C+	4LC2			X					X						
4AH5-B+	2LC3			X					X						
4AH6-D+	2LO3			X					X						
4AH6-D+	2LO2	X													
4AH6-C+	2LO3			X					X						
4AH6-C+	2LO2	X													
4AH5-B+	2LO3			X					X						
4AH5-B+	2LO2	X													
4AH6-D+	4LR2			X											
4AH6-D+	2LR2			X											
4AH6-C+	4LR2			X											
4AH6-C+	2LR2			X											
4AH5-B+	4LR2			X											
4AH5-B+	2LR2			X											

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4AH6-D+	6LS2			X	X				X						
4AH6-D+	4LS2			X	X				X						
4AH6-D+	2LS2	X	X	X					X	X					
4AH6-D+	2LS3		X	X					X						
4AH6-C+	6LS2		X	X					X						
4AH6-C+	4LS2		X	X					X						
4AH6-C+	2LS2	X	X	X					X	X					
4AH6-C+	2LS3		X	X					X						
4AH5-B+	6LS2		X	X					X						
4AH5-B+	4LS2		X	X					X						
4AH5-B+	2LS2	X	X	X					X	X					
4AH5-B+	2LS3		X	X					X						
4AH6-D+	4NO2	X	X		X	X	X	X			X				
4AH6-D+	2NO2	X	X			X	X	X							
4AH6-C+	4NO2	X	X		X	X	X	X			X				
4AH6-C+	2NO2	X	X			X	X	X							
4AH5-B+	4NO2	X	X		X	X	X	X			X				
4AH5-B+	2NO2	X	X			X	X	X							

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
4AH6-D+	4RV2-T			X				X						
4AH6-D+	2RV2-T			X				X						
4AH6-C+	4RV2-T			X				X						
4AH6-C+	2RV2-T			X				X						
4AH5-B+	4RV2-T			X				X						
4AH5-B+	2RV2-T			X				X						
4AH6-D+	4SF2		X	X				X	X	X				
4AH6-C+	4SF2		X	X				X	X	X				
4AH5-B+	4SF2		X	X				X	X	X				
4AH6-D+	4SF3									X				
4AH6-C+	4SF3									X				
4AH5-B+	4SF3									X				
4AH6-D+	4TF2												X	
4AH6-D+	2TF2												X	
4AH6-C+	4TF2												X	
4AH6-C+	2TF2												X	
4AH5-B+	4TF2												X	
4AH5-B+	2TF2												X	

+ Available only to ICs selecting the multiplexed 4-wire Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
6DA2	6DA2											X			
	X														
6DA2	4DA2											X			
	X														
4DA2	6DA2											X			
	X														
4DA2	4DA2											X			
	X														
4DB2	6DA2							X				X			
4DB2	4DA2							X				X		X	
4DB2	2DA2						X	X				X		X	
2DB3	2DA2													X	
2DB2	2DA2						X	X							
4DB2	4NO2							X							
4DD3	4DE2						X								
2DD3	2DE2						X								
4DS9-*	4AC2		X												
4DS9-*	2AC2		X												
4DS9-*	6DA2							X				X		X	
4DS9-*	4DA2							X				X		X	
4DS9-*	2DA2						X	X							
4DS9-*	4DE2						X								
4DS9-*	4DX3											X			
4DS9-*	4DX2											X			

+ See 7.3.3 following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4DS9-*	9DY3				X				X	X					
4DS9-*	9DY2				X				X	X					
4DS9-*	6DY3				X				X	X					
4DS9-*	6DY2				X				X	X					
4DS9-*	2DY2				X				X	X					
4DS9-*	9EA2				X				X	X					
4DS9-*	9EA3				X				X	X					
4DS9-*	6EA2-E				X				X	X					
4DS9-*	6EA2-M				X				X	X	X				
4DS9-*	4EA2-E				X				X	X					
4DS9-*	4EA2-M				X				X	X					
4DS9-*	8EB2-E				X				X	X					
4DS9-*	8EB2-M				X				X	X	X				
4DS9-*	6EB2-E				X				X	X					
4DS9-*	6EB2-M				X				X	X					
4DS9-*	2GO2		X												
4DS9-*	6GS2				X				X						
4DS9-*	4GS2				X				X						
4DS9-*	2GS2	X			X				X						
4DS9-*	2GS3				X				X						

+ See 7.3.3 following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4DS9-*	2LA2			X					X						
4DS9-*	2LB2			X					X						
4DS9-*	2LC2			X					X						
4DS9-*	2LO2		X												
4DS9-*	2LO3			X					X						
4DS9-*	4LR2			X											
4DS9-*	2LR2			X											
4DS9-*	6LS2			X	X				X						
4DS9-*	4LS2			X	X				X						
4DS9-*	2LS2		X	X	X				X	X					
4DS9-*	2LS3			X	X				X						
4DS9-*	4NO2		X	X		X	X	X	X				X		
	X														
4DS9-*	2NO2		X	X			X		X						
	X														
4DS9-*	4RV2-T				X				X						
4DS9-*	2RV2-T				X				X						
4DS9-*	4SF2			X	X				X	X	X				
4DS9-*	4SF3										X				

+ See 7.3.3 following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4DS9-*	4TF2														X
4DS9-*	2TF2														X
4DX2	4DX2											X			
4DX3	4DX2											X			
4DX2	4DX3											X			
4DX3	4DX3											X			
6DX2	9DY3				X				X	X					
6DX2	9DY2				X					X					
6DX2	6DY3				X				X	X					
6DX2	6DY2				X					X					
6DX2	4DY2				X				X	X					
6DX2	2DY2				X					X					
4DX2	9DY3				X				X	X					
4DX3	9DY3				X					X					
4DX2	9DY2				X				X	X					
4DX3	9DY2				X					X					
4DX2	6DY3				X				X	X					
4DX3	6DY3				X					X					
4DX2	6DY2				X				X	X					
4DX3	6DY2				X					X					
4DX2	4DY2				X				X	X					
4DX3	4DY2				X					X					
4DX2	2DY2				X				X	X					
4DX3	2DY2				X					X					

+ See 7.3.3 following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
6DX2	9EA3				X				X	X					
6DX2	9EA2				X				X	X					
6DX2	6EA2-E				X				X	X					
6DX2	6EA2-M				X				X	X					
6DX2	4EA2-E				X				X	X					
6DX2	4EA2-M				X				X	X					
4DX2	9EA2				X				X	X					
4DX3	9EA2				X				X	X					
4DX2	9EA3				X				X	X					
4DX3	9EA3				X				X	X					
4DX2	6EA2-E				X				X	X					
4DX3	6EA2-E				X				X	X					
4DX2	6EA2-M				X				X	X	X				
4DX3	6EA2-M				X				X	X	X				
4DX2	4EA2-E				X				X	X					
4DX3	4EA2-E				X				X	X					
4DX2	4EA2-M				X				X	X					
4DX3	4EA2-M				X				X	X					
6DX2	8EB2-E				X				X	X					
6DX2	8EB2-M				X				X	X					
6DX2	6EB2-E				X				X	X					
6DX2	6EB2-M				X				X	X					
4DX2	8EB2-E				X				X	X					
4DX2	8EB2-M				X				X	X	X				
4DX3	8EB2-E				X				X	X					
4DX3	8EB2-M				X				X	X	X				
4DX2	6EB2-E				X				X	X					

+ See 7.3.3 following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
4DX2	6EB2-M			X				X	X					
4DX3	6EB2-E			X				X	X					
4DX3	6EB2-M			X				X	X					
4DX2	2LA2		X					X						
4DX3	2LA2		X					X						
2DX3	2LA2		X					X						
4DX2	2LB2		X					X						
4DX3	2LB2		X					X						
2DX3	2LB2		X					X						
4DX3	2LC2		X					X						
4DX3	2LC2		X					X						
2DX3	2LC2		X					X						
4DX2	2LO3		X					X						
4DX3	2LO3		X					X						
2DX3	2LO3		X					X						
4DX2	6LS2		X	X				X						
4DX3	6LS2		X	X				X						
4DX3	4LS2		X	X				X						
4DX2	4LS2		X	X				X						
4DX3	2LS3		X	X				X						
4DX2	2LS3		X	X				X						
4DX3	2LS2		X	X				X						
4DX2	2LS2		X	X				X	X					
2DX3	2LS2		X	X				X	X					
2DX3	2LS3		X	X				X						

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
4DX3	4RV2-T			X				X						
4DX2	4RV2-T			X				X						
4DX3	2RV2-T			X				X						
4DX2	2RV2-T			X				X						
6DX2	4SF2			X				X	X					
4DX2	4SF2		X	X				X	X	X				
4DX3	4SF2		X	X				X	X	X				
4DX2	4SF3									X				
4DX3	4SF3									X				
9DY3	9DY3													X
9DY3	9DY2													X
9DY2	9DY2													X
9DY2	9DY3													X
9DY3	6DY3													X
9DY3	6DY2													X
9DY2	6DY2													X
9DY2	6DY3													X
9DY3	4DY2													X
9DY2	4DY2													X
6DY3	9DY3													X
6DY3	9DY2													X
6DY2	9DY3													X
6DY2	9DY2													X
6DY3	6DY3													X
6DY3	6DY2													X
6DY2	6DY3													X
6DY2	6DY2													X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
6DY3	4DY2														X
6DY2	4DY2														X
4DY2	9DY3														X
4DY2	9DY2														X
4DY3	6DY2														X
4DY2	6DY3														X
4DY2	4DY2														X
6EA2-E	4AC2			X											
6EA2-M	4AC2			X											
6EA2-E	2AC2			X											
6EA2-M	2AC2			X											
6EA2-E	4DX2										X				
6EA2-M	4DX2										X				
6EA2-E	4DX3										X				
6EA2-M	4DX3										X				
9EA2	9DY3														X
9EA2	9DY2														X
9EA2	6DY3														X
9EA2	6DY2														X
9EA2	4DY2														X
9EA3	9DY3														X
9EA3	9DY2														X
9EA3	6DY3														X
9EA3	6DY2														X
9EA3	4DY2														X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
6EA2-E	9DY3				X				X	X					
6EA2-E	9DY2				X				X	X					
6EA2-E	6DY3				X				X	X					
6EA2-E	6DY2				X				X	X					
6EA2-E	4DY2				X				X	X					
6EA2-M	9DY3				X				X	X					
6EA2-M	9DY2				X				X	X					
6EA2-M	6DY3				X				X	X					
6EA2-M	6DY2				X				X	X					
6EA2-M	4DY2				X				X	X					
6EA2-M	2DY2				X				X	X					
6EA2-E	2DY2				X				X	X					
4EA2-E	9DY3														X
4EA2-E	9DY2														X
4EA3-E	9DY3				X				X						
4EA3-E	9DY2				X				X						
4EA3-E	6DY3				X				X						
4EA3-E	9DY3				X				X						
4EA3-E	9DY3				X				X						
4EA3-E	9DY3				X				X						
4EA2-E	6DY3														X
4EA2-E	6DY2														X
4EA2-E	4DY2														X
4EA2-E	9DY3														X
4EA2-E	9DY2														X
4EA2-E	6DY3														X
4EA2-E	6DY2														X
4EA2-E	4DY2														X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
9EA2	9EA2														X
9EA2	9EA3														X
9EA2	6EA2-E														X
9EA2	6EA2-M														X
9EA2	4EA2-E														X
9EA2	4EA2-M														X
9EA3	9EA2														X
9EA3	9EA3														X
9EA3	6EA2-E														X
9EA3	6EA2-M														X
9EA3	4EA2-E														X
9EA3	4EA2-M														X
6EA2-E	9EA2				X				X	X					X
6EA2-E	9EA3				X				X	X					X
6EA2-M	9EA2				X				X	X					X
6EA2-M	9EA3				X				X	X					X
6EA2-E	6EA2-E				X				X	X					X
6EA2-E	6EA2-M				X				X	X	X				X
6EA2-M	6EA2-E				X				X	X					X
6EA2-M	6EA2-M				X				X	X	X				X
6EA2-E	4EA2-E				X				X	X					X
6EA2-E	4EA2-M				X				X	X					X
6EA2-M	4EA2-E				X				X	X					X
6EA2-M	4EA2-M				X				X	X					X
4EA2-E	9EA2														X
4EA2-E	9EA3														X
4EA2-E	6EA2-E														X
4EA2-E	6EA3-M														X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations		Voice Grade Service VG													
	End User		1	2	3	4	5	6	7	8	9	10	11	12	13	
4EA2-E	4EA2-E															X
4EA3-E	6EA2-E				X				X							
4EA3-E	6EA2-M				X				X							
4EA3-E	4EA2-E				X				X							
4EA3-E	4EA2-M				X				X							
4EA2-E	4EA2-M															X
4EA2-M	9EA2															X
4EA3-E	9EA2				X				X							
4EA3-E	9EA3				X				X							
4EA2-M	9EA3															X
4EA2-M	6EA2-E															X
4EA2-M	6EA2-M															X
4EA2-M	4EA2-E															X
4EA2-M	4EA2-M															X
9EA2	8EB2-E															X
9EA2	8EB2-M															X
9EA2	6EB2-E															X
9EA2	6EB2-M															X
9EA3	8EB2-E															X
9EA3	8EB2-M															X
9EA3	6EB2-E															X
9EA3	6EB2-M															X
6EA2-E	8EB2-E				X				X	X						X
6EA2-E	8EB2-M				X				X	X	X					X
6EA2-E	6EB2-E				X				X	X						X
6EA2-E	6EB2-M				X				X	X						X
6EA2-M	8EB2-E				X				X	X						X
6EA2-M	8EB2-M				X				X	X	X					X
6EB3-E	6EB2-E				X				X							

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
6EA3-E	6EB2-M			X				X						
6EA2-M	6EB2-E			X				X	X					X
6EA2-M	6EB2-M			X				X	X					X
4EA2-E	8EB2-E													X
4EA2-E	8EB2-M													X
4EA3-E	8EB2-E			X				X						
4EA3-E	8EB2-M			X				X						
4EA2-E	6EB2-E													X
4EA2-E	6EB2-M													X
4EA3-E	6EB2-E			X				X						
4EA3-E	6EB2-M			X				X						
4EA2-M	8EB2-E													X
4EA2-M	8EB2-M													X
4EA2-M	6EB2-E													X
4EA2-M	6EB2-M													X
6EA2-E	2LA2		X					X						
6EA2-M	2LA2		X					X						
6EA2-E	2LB2		X					X						
6EA2-M	2LB2		X					X						
6EA2-E	2LC2		X					X						
6EA2-M	2LC2		X					X						
6EA2-E	2LO3		X					X						
6EA2-M	2LO3		X					X						
6EA2-E	6LS2		X	X				X						
6EA2-M	6LS2		X	X				X						

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
6EA2-E	4LS2			X	X				X						
6EA2-M	4LS2			X	X				X						
6EA2-E	2LS2			X	X				X	X					
6EA2-M	2LS2			X	X				X	X					
6EA2-E	2LS3			X	X				X						
6EA2-M	2LS3			X	X				X						
6EA2-E	4RV2-T				X				X						
6EA2-M	4RV2-T				X				X						
6EA2-E	2RV2-T				X				X						
6EA2-M	2RV2-T				X				X						
6EA2-E	4SF3										X				
6EA2-M	4SF3										X				
6EA2-E	4SF3			X	X				X	X	X				
6EA2-M	4SF2			X	X				X	X	X				
4EA2-E	4SF2				X				X						
8EB2-E	4AC2			X											
8EB2-M	4AC2			X											
8EB2-E	4AC2			X											
8EB2-M	4AC2			X											
8EB2-E	4DX2										X				
8EB2-M	4DX2										X				
8EB2-E	4DX3										X				
8EB2-M	4DX3										X				
8EB2-E	9DY3				X				X	X					X
8EB2-E	9DY2				X				X	X					X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
8EB2-E	6DY3				X				X	X					X
8EB2-E	6DY2				X				X	X					X
8EB2-E	4DY2				X				X	X					X
8EB2-E	2DY2				X				X	X					X
8EB2-M	9DY3				X				X	X					X
8EB2-M	9DY2				X				X	X					X
8EB2-M	6DY3				X				X	X					X
8EB2-M	6DY2				X				X	X					X
8EB2-M	4DY2				X				X	X					X
8EB2-M	2DY2				X				X	X					X
6EB2-E	9DY2														X
6EB2-E	9DY3														X
6EB2-E	9DY2				X				X						
6EB2-E	9DY3				X				X						
6EB2-E	6DY2														X
6EB2-E	6DY2				X				X						
6EB2-E	6DY3														X
6EB2-E	6DY3				X				X						
6EB2-E	4DY2														X
6EB2-E	2DY2				X				X						
6EB3-E	4DY2				X				X						
6EB2-M	9DY2														X
6EB2-M	9DY3														X
6EB2-M	6DY2														X
6EB2-M	6DY3														X
6EB2-M	4DY2														X
8EB2-E	9EA2				X				X	X					X
8EB2-E	9EA3				X				X	X					X
8EB2-M	9EA2				X				X	X					X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
8EB2-M	9EA3				X				X	X					X
8EB2-E	6EA2-E				X				X	X					X
8EB2-E	6EA2-M				X					X	X				X
8EB2-M	6EA2-E				X				X	X					X
8EB2-M	6EA2-M				X				X	X	X				X
8EB2-E	4EA2-E				X				X	X					X
8EB2-E	4EA2-M				X				X	X					X
8EB2-M	4EA2-E				X				X	X					X
8EB2-M	4EA2-M				X				X	X					X
6EB2-E	9EA2														X
6EB2-E	9EA3														X
6EB3-E	9EA2				X				X						
6EB3-E	9EA3				X				X						
6EB2-M	9EA2														X
6EB2-M	9EA3														X
6EB2-M	6EA2-E														X
6EB2-E	6EA2-M														X
6EB3-E	6EA2-E				X				X						
6EB3-E	6EA2-M				X				X						
6EB2-M	6EA2-E														X
6EB2-M	6EA2-M														X
6EB2-E	4EA2-E														X
6EB2-E	4EA2-M														X
6EB3-E	4EA2-E				X				X						
6EB3-E	4EA2-M				X				X						
6EB2-M	4EA2-E														X
6EB2-M	4EA2-M														X

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
8EB3-E	8EB2-E			X				X	X					X
8EB2-E	8EB2-M			X				X	X	X				X
8EB2-M	8EB2-E			X				X	X					X
8EB2-M	8EB2-M			X				X	X	X				X
8EB2-E	6EB2-E			X				X						
8EB3-E	6EB2-M			X				X						
8EB3-M	6EB2-E			X				X						
8EB2-M	6EB2-M			X				X						
6EB2-E	8EB2-E													X
6EB2-E	8EB2-M													X
6EB2-M	8EB2-E													X
6EB2-M	8EB2-M													X
6EB2-E	6EB2-E													X
6EB2-E	6EB2-M													X
6EB3-E	8EB2-E			X				X						
6EB3-E	8EB2-M			X				X						
6EB2-M	6EB2-E													X
6EB2-M	6EB2-M													X
8EB2-E	2LA2		X					X						
8EB2-M	2LA2		X					X						
8EB2-E	2LB2		X					X						
8EB2-M	2LB2		X					X						
8EB2-E	2LC2		X					X						
8EB2-M	2LC2		X					X						
8EB2-E	2LO3		X					X						
8EB2-M	2LO3		X					X						

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
8EB2-E	6LS2			X	X				X						
8EB2-M	6LS2			X	X				X						
8EB2-E	4LS2			X	X				X						
8EB2-M	4LS2			X	X				X						
8EB2-E	2LS2			X	X				X	X					
8EB2-M	2LS2			X	X				X	X					
8EB2-E	2LS2			X	X				X						
8EB2-M	2LS2			X	X				X						
8EB2-E	4RV2-T				X				X						
8EB2-M	4RV2-T				X				X						
8EB2-E	2RV2-T				X				X						
8EB2-M	2RV2-T				X				X						
8EB2-E	4SF2			X	X				X	X	X				
8EB2-M	4SF2			X	X				X	X	X				
8EB2-E	4SF2										X				
8EB2-M	4SF2										X				
6EB3-E	4SF2				X				X						
8EC2	9DY2				X				X	X					
8EC2	9DY2				X				X	X					
8EC2	6DY2				X				X	X					
8EC2	6DY2				X				X	X					
8EC2	4DY2				X				X	X					
8EC2	2DY2				X				X	X					
8EC2	9EA2				X				X	X					
8EC2	9EA2				X				X	X					
8EC2	6EA2-E				X				X	X					

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
8EC2	6EA2-M			X				X	X					
8EC2	4EA2-E			X				X	X					
8EC2	4EA2-M			X				X	X					
8EC2	8EB2-E			X				X	X					
8EC2	8EB2-M			X				X	X					
8EC2	6EB2-E			X				X	X					
8EC2	6EB2-M			X				X	X					
8EC2	4SF2			X				X	X					
6EX2-A	6GS2			X				X						
6EX2-A	4GS2			X				X						
6EX2-A	2GS2			X				X						
6EX2-A	2GS2			X				X						
6EX2-B	2LA2		X					X						
6EX2-B	2LB2		X					X						
6EX2-B	2LC2		X					X						
6EX2-B	2LO2	X												
6EX2-B	2LO2		X					X						
6EX2-B	4LR2		X											
6EX2-B	2LR2		X											
6EX2-A	6LS2		X	X				X						
6EX2-A	4LS2		X	X				X						

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
6EX2	2LS2	X		X				X						
6EX2	2LS3		X	X				X						
6EX2	4SF2	X	X	X				X						
6EX2	4SF2	X												
6GO2	6GS2			X				X						
6GO2	4GS2			X				X						
6GO2	2GS2	X		X				X						
6GO2	2GS3			X				X						
4GO2	6GS2			X				X						
4GO3	6GS2			X				X						
4GO2	4GS2			X				X						
4GO3	4GS2			X				X						
4GO2	2GS2	X		X				X						
4GO2	2GS3			X				X						
4GO3	2GS2	X		X				X						
4GO3	2GS3			X				X						
2GO2	2GS2	X		X				X						
2GO3	2GS2	X		X				X						
2GO2	2GS3			X				X						
2GO3	2GS3			X				X						
6GO2	4SF2			X				X						
4GO2	4SF2			X				X						
4GO3	4SF2			X				X						
6GS2	2GO2	X												
4GS2	2GO2	X												
4GS3	2GO2	X												

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
2GS2	2GO2	X												
2GS3	2GO2	X												
6LO2	6LS2		X	X				X						
6LO2	4LS2		X	X				X						
6LO2	2LS2	X	X	X				X						
6LO2	2LS3		X	X				X						
4LO2	6LS2		X	X				X						
4LO2	4LS2		X	X				X						
4LO3	6LS2		X	X				X						
4LO3	4LS2		X	X				X						
4LO3	2LS3		X	X				X						
4LO3	2LS2	X	X	X				X		X				
4LO2	2LS2	X	X	X				X						
4LO2	2LS3		X	X				X						
2LO3	2LS3		X	X				X						
2LO3	2LS2	X	X	X				X	X					
2LO2	2LS2	X	X	X				X	X					
2LO2	2LS3		X	X				X						
6LO2	4SF2		X	X				X						
4LO2	4SF2		X	X				X						
4LO3	4SF2		X	X				X						
4LR3	4LR2		X											
4LR3	2LR2		X											
4LR2	4LR2		X											
4LR2	2LR2		X											
2LR2	2LR2		X											
2LR3	2LR2		X											

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4LR2	4SF2			X											
4LR3	4SF2			X											
6LS2	2LA2			X					X						
4LS2	2LA2			X					X						X
4LS3	2LA2			X					X						
2LS2	2LA2			X					X						X
2LS3	2LA2			X					X						
6LS2	2LB2			X					X						
4LS2	2LB2			X					X						X
4LS3	2LB2			X					X						
2LS2	2LB2			X					X						X
2LS3	2LB2			X					X						
6LS2	2LC2			X					X						
4LS2	2LC2			X					X						X
4LS3	2LC2			X					X						
2LS2	2LC2			X					X						X
2LS3	2LC2			X					X						
6LS2	2LO3			X					X						
6LS2	2LO2		X												
4LS2	2LO2		X												
4LS2	2LO3			X					X						X
4LS3	2LO2		X												
4LS3	2LO3			X					X						
2LS2	2LO2		X												

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
2LS3	2LO2		X												
2LS2	2LO3			X					X						X
2LS3	2LO3			X					X						
6LS2	4SF2			X											
4LS3	4SF2			X											
4NO2	6DA2							X				X			
4NO2	4DA2							X				X		X	
4NO2	2DA2							X							
2NO3	2DA2														X
4NO2	4NO2		X	X		X	X	X	X		X				
4NO2	2NO2		X	X			X		X						
2NO2	2NO2		X	X			X		X						
2NO3	2NO2		X	X			X		X						
4RV2-O	4RV2-T				X				X						
4RV3-O	2RV2-T				X				X						
2RV3-O	2RV2-T				X				X						
4RV2-O	4RSF				X				X						
4SF2	4AC2			x											
4SF2	2AC2			x											
4SF3	4DX3										x				
4SF3	4DX2										x				
4SF2	4DX2										x				
4SF2	4DX3										x				

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
4SF3	9DY3				X				X	x					
4SF2	9DY2				X				X	x					
4SF3	9DY2				X				X	x					
4SF2	9DY3				X				X	x					
4SF3	6DY3				X				X	x					
4SF2	6DY2				X				X	x					
4SF2	6DY3				X				X	x					
4SF3	6DY2				X				X	x					
4SF2	4DY2				X				X	x					
4SF3	4DY2				X				X	x					
4SF3	2DY2				X				X	x					
4SF2	2DY2				X				X	x					
4SF2	9EA2				X				X	x					
4SF3	9EA2				X				X	x					
4SF2	9EA3				X				X	x					
4SF3	9EA3				X				X	x					
4SF2	6EA2-E				X				X	x					
4SF2	6EA2-M				X				X	x			X		
4SF3	6EA2-E				X				X	x					
4SF3	6EA2-M				X				X	x			X		
4SF2	4EA2-E				X				X	x					
4SF2	4EA2-M				X				X	x					
4SF3	4EA2-E				X				X	x					
4SF3	4EA2-M				X				X	x					
4SF2	8EB2-E				X				X	x					
4SF2	8EB2-M				X				X	x			X		
4SF3	8EB2-E				X				X	x					
4SF3	8EB2-M				X				X	x			X		

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	<u>FI Combinations</u>		<u>Voice Grade Service VG</u>												
	<u>End User</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	
4SF2	6EB2-E			X				X							
4SF2	6EB2-M			X				X							
4SF3	6EB2-E			X				X							
4SF3	6EB2-M			X				X							
4SF3	6GS2			X				X							
4SF2	6GS3			X				X							
4SF2	4GS2			X				X							
4SF3	4GS2			X				X							
4SF2	2GS2	X		X				X							
4SF2	2GS2			X				X							
4SF3	2GS3	X		X				X							
4SF3	2GS2			X				X							
4SF2	2LA2		X					X							
4SF3	2LA3		X					X							
4SF2	2LB3		X					X							
4SF3	2LB2		X					X							
4SF2	2LC2		X					X							
4SF3	2LC3		X					X							
4SF2	2LO2		X					X							
4SF2	2LO2	X													
4SF3	2LO2	X													
4SF3	2LO2		X					X							

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(B) Voice Grade Services (Cont'd)(14) Available Facility Interface (FI)
Combinations (Cont'd)

IC	FI Combinations End User	Voice Grade Service VG												
		1	2	3	4	5	6	7	8	9	10	11	12	13
4SF2	4LR2		X											
4SF2	2LR2		X											
4SF3	4LR2		X											
4SF3	2LR2		X											
4SF3	6LS2		X	X				X						
4SF2	6LS2		X	X				X						
4SF2	4LS2		X	X				X						
4SF3	4LS2		X	X				X						
4SF2	2LS2		X	X				X	X					
4SF2	2LS3		X	X				X						
4SF3	2LS2		X	X				X	X					
4SF3	2LS3		X	X				X						
4SF3	4RV2-T			X				X						
4SF2	4RV2-T			X				X						
4SF2	4RV2-T			X				X						
4SF3	4RV2-T			X				X						
4SF3	4SF2									X				
4SF3	4SF2		X	X				X	X	X				
4SF2	4SF2		X	X				X	X	X				
4SF2	4SF3									X				
4TF2	4TF2												X	
4TF2	2TF2												X	
2TF3	4TF2												X	

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services(1) Program Audio 1 (AP1) Special Access Service(a) Description

Special Access Service AP1 provides a channel with a nominal bandwidth from 200 to 350 Hz for the transmission of a complex signal voltage, such as speech or music, between an IC terminal location and an end user premises. Only one-way transmission is provided.

(b) Illustrative Applications

Special Access Service AP1 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Full-Time Noncommercial Educational Audio
- Commercial Audio (Full- and Part- Time)
- Wired Music
- Audio Facilities

(c) Optional Features

- Gain Conditioning - control of 1004 Hz AML at initiation of service to 0 dB + 0.5 dB.
- Central office bridging capability (wired music).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(1) Program Audio 1 (AP1) Special Access
Service (Cont'd)(d) Transmission Performance- Actual Measured Loss (AML)

When the service is initiated, the 1004 Hz AML will be less than 10.0 dB. With the addition of optional gain conditioning, the initial AML will be 0 + 4.0 dB.

- Gain/Frequency Distortion

Over the frequency band from 200 to 3500 Hz, the gain at any frequency will be within the range from +3.0 dB to -10.0 dB with respect to the gain 1004 Hz.

- Signal-to-Idle Circuit Noise

The ratio of received 1004 Hz signal power to C message weighted idle circuit noise will be at least 65 dB. The received signal power level is determined by subtracting the channel AML from +18 dBm (the instantaneous peak signal level).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for special Access Service
(Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(1) Program Audio 1 (AP1) Special Access Service (Cont'd)(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End</u>
<u>User</u>	2PG2-3	2PG2-3	2PG2-3
	2PG1-3		
4DS9-15E*	2PG2-3	4DS9-15E*	2PG1-3
4AH5-B**	2PG2-3	4AH5-B**	2PG1-3
4AH6-C**	2PG2-3	4AH6-C**	2PG1-3
4AH6-D**	2PG2-3	4AH6-D**	2PG1-3

(2) Program Audio 2 (AP2) Special Access Service(a) Description

Special Access Service AP2 provides a channel with a nominal bandwidth from 100 to 500 Hz for the transmission of a complex signal voltage, such as speech or music, between an IC terminal location and an end user premises. Only one-way transmission is provided.

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

** Available only to ICs selecting the multiplexed 4-wire High Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(2) Program Audio 1 (AP2) Special Access Service (Cont'd)(b) Illustrative Applications

Special Access Service AP2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Full-Time Noncommercial Educational Audio
- Commercial Audio (Full- and Part-Time)
- Wired Music
- Audio Facilities

(c) Optional Features

- Gain Conditioning - control of 1004 Hz AML at initiation of service to 0 dB + 0.5 dB.
- Central office bridging capability (wired music).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(2) Program Audio 1 (AP2) Special Access Service (Cont'd)(d) Transmission Performancei Actual Measured Loss (AML)

When the service is initiated, the 1004 Hz AML will be less than 32 dB. With the addition of optional gain conditioning, the initial AML will be 0 + 0.5 dB. Remedial action will be taken when the loss variation at 1004 Hz exceeds the initial AML by + 4.0 dB.

ii Gain/Frequency Distortion

Over the frequency band from 100 to 5000 Hz, the gain at any frequency will be within 1.0 dB of the gain at 1004 Hz.

iii Signal-to-Idle Circuit Noise

The ratio of received 1004 Hz signal power to 15 kHz flat weighted idle circuit noise will be at least 64 dB. The received signal power level is determined by subtracting the channel AML from +18 dBm (the instantaneous peak signal level).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(2) Program Audio 2 (AP2) Special Access Service (Cont'd)(e) Available Facility Interface Combinations

	<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End User</u>
	2PG2-5	2PG2-5	2PG2-5	2PG1-5
	4DS9-15F*		2PG2-5	4DS9-
15E*	2PG1-5			
	4AH5-B**	2PG2-5	4AH5-B**	2PG1-5
	4AH6-C**	2PG2-5	4AH6-C**	2PG1-5
	4AH6-D**	2PG2-5	4AH6-D**	2PG1-5

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

** Available only to the ICs selecting the multiplexed 4-wire High Capacity analog facility interface option at the IC terminal location and providing subsequent system assignment data. Channels 5 and 6 are assigned for AP2.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(3) Program Audio 3 (AP3) Special Access Service(a) Description

Special Access Service AP3 provides a channel with a nominal bandwidth from 50 to 8000 Hz for the transmission of a complex signal voltage, such as speech or music, between an IC terminal location and an end user premises. Only one-way transmission is provided.

(b) Illustrative Applications

Special Access Service AP3 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Full-Time Noncommercial Educational Audio
- Commercial Audio (Full- and Part-Time)
- Wired Music
- Audio Facilities

(c) Optional Features

- Gain Conditioning - control of 1004 Hz AML at initiation of service to 0 dB + 0.5 dB.
- Central office bridging capability (wired music).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(3) Program Audio 3 (AP3) Special Access Service (Cont'd)(d) Transmission Performancei Actual Measured Loss (AML)

When the service is initiated, the 1004 Hz AML will be less than 32 dB. With the addition of optional gain conditioning, the initial AML will be 0 + 0.5 dB. Remedial action will be taken when the loss variation of 1004 Hz exceeds the initial AML by + 4.0 dB.

ii Gain/Frequency Distortion

Over the frequency band from 50 to 8000 Hz, the gain at any frequency will be within 1 dB of the gain at 1004 Hz.

iii Signal-to-Idle Circuit Noise

The ratio of received 1004 Hz signal power to 15 kHz flat weighted idle circuit noise will be at least 62 dB. The received signal power level is determined by subtracting the channel AML from +18 dBm (the instantaneous peak signal level).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(3) Program Audio 3 (AP3) Special Access Service (Cont'd)(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End User</u>
2PG2-8	2PG2-8	2PG2-8	2PG1-8
4DS9-15G*	2PG2-8	4DS9-15G*	2PG1-8
4AH5-B**	2PG2-8	4AH5-B**	2PG1-8
4AH6-C**	2PG2-8	4AH6-C**	2PG1-8
4AH6-D**	2PG2-8	4AH6-D**	2PG1-8

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

** Available only to the ICs selecting the multiplexed 4-wire High Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data. Channels 5, 6, and 7 are assigned for AP3.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(4) Program Audio 4 (AP4) Special Access Service(a) Description

Special Access Service AP4 provides a channel with a nominal bandwidth from 50 to 15000 Hz for the transmission of a complex signal voltage, such as speech or music, between an IC terminal location and an end user premises. Only one-way transmission is provided.

(b) Illustrative Applications

Special Access Service AP4 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Full-Time Noncommercial Educational Audio
- Commercial Audio (Full- and Part-Time)
- Wired Music
- Audio Facilities

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(4) Program Audio 4 (AP4) Special Access Service (Cont'd)(c) Transmission Performancei Optional Features

- Gain Conditioning - Control of 1004 Hz AML at initiation of service to 0 dB \pm 0.5 dB.
- Stereo - provision of pair gain/phase equalized channels for stereo applications.
- Central office bridging capability (wired music)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(4) Program Audio 4 (AP4) Special Access Service (Cont'd)(c) Transmission Performance (Cont'd)ii Actual Measured Loss (AML)

When the service is initiated, the 1004 Hz AML will be less than 32 dB. With the addition of optional gain conditioning, the initial AML will be 0 + 0.5 dB. Remedial action will be taken when the loss variation of 1004 Hz exceeds the initial AML by + 4.0 dB.

iii Gain/Frequency Distortion

Over the frequency band from 50 to 8000 Hz, the gain at any frequency will be within 1 dB of the gain at 1004 Hz.

iv Signal-to-Idle Circuit Noise

The ratio of received 1004 Hz signal power to 15 kHz flat weighted idle circuit noise will be at least 67 dB. The received signal power level is determined by subtracting the channel AML from +18 dBm (the instantaneous peak signal level).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(C) Program Audio Services (Cont'd)(4) Program Audio 4 (AP4) Special Access Service (Cont'd)(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>	<u>IC</u>	<u>End User</u>
2PG2-1	2PG2-1	2PG2-1	2PG1-1
4DS9-15H*	2PG2-1	4DS9-15H*	2PG1-1

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(D) Video Services(1) Television 1 (TV1) Special Access Service(a) Description

Special Access Service TV1 provides 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 15 kHz audio signal (s) between an IC terminal location and an end user premises.

(b) Illustrative Applications

Special Access Service TV1 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Commercial Television (Full- and Part-Time)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(D) Video Services (Cont'd)(1) Television 1 (TV1) Special Access Service
(Cont'd)(c) Transmission Performancei Video Performance(1) Insertion Gain Variation

One hour 0 dB + 0.5 dB

(2) Luminance Signal/CCIR
Weighted Noise

65 dB

ii Audio Performance(1) Insertion Gain

0 dB + 1.0 dB

(2) Signal/15 kHz Flat Weighted
Noise

The ratio of received 1004 Hz signal power to 15 kHz flat weighted idle circuit noise will be at least 65 dB. The received signal power level is determined by subtracting the channel AML from +18 dBm (the instantaneous peak signal level).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(D) Video Services (Cont'd)(1) Television 1 (TV1) Special Access Service
(Cont'd)(d) Available Facility Interface
Combinations

<u>IC</u>	<u>End User</u>
2TV6-1	4TV6-15
2TV6-1	4TV7-15
2TV7-1	4TV6-15
2TV7-1	4TV7-15
4TV6-15	4TV6-15
4TV6-15	4TV7-15
4TV7-15	4TV6-15
4TV7-15	4TV7-15
2TV6-2	6TV6-15
2TV6-2	6TV7-15
2TV7-2	6TV6-15
2TV7-2	6TV7-15
6TV6-15	6TV6-15
6TV6-15	6TV7-15
6TV7-15	6TV6-15
6TV7-15	6TV7-15

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(D) Video Services (Cont'd)(2) Television 2 (TV2) Special Access Service(a) Description

Special Access Service TV2 provides 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 kHz audio signal (s) between an IC terminal location and an end user premises.

(b) Illustrative Applications

Special Access Service TV2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Noncommercial Television (Full-Time)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(D) Video Services (Cont'd)(2) Television 2 (TV2) Special Access Service
(Cont'd)(c) Transmission Performancei Video Performance(1) Insertion Gain VariationOne hour 0 dB + 0.5 dB(2) Luminance Signal/CCIR
Weighted Noise

65 dB

ii Audio Performance(1) Insertion Gain0 dB + 1.5 dB(2) Signal/15 kHz Flat
Weighted Noise

The ratio of received 1004 Hz signal power to 15 kHz flat weighted idle circuit noise will be at least 64 dB. The received signal power level is determined by subtracting the channel AML from +18 dBm (the instantaneous peak signal level).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(D) Video Services (Cont'd)(2) Television 2 (TV2) Special Access Service
(Cont'd)(d) Available Facility Interface
Combinations

<u>IC</u>	<u>End User</u>
4TV6-5	4TV6-5
4TV6-5	4TV7-5
4TV7-5	4TV6-5
4TV7-5	4TV7-5
6TV6-5	6TV6-5
6TV6-5	6TV7-5
6TV7-5	6TV6-5
6TV7-5	6TV7-5

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services(1) Wideband Analog 1 (WA1) Special Access Service(a) Description

Special Access Service WA1 provides a high capacity channel with a bandwidth from 60 kHz to 108 kHz for the transmission of a wideband signal between an IC terminal locations or premises, between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Application Special

Access Service WA1 is suitable for the transmission of a 12 channel FDM group.

(c) Optional Features

- Central office multiplexing

(d) Transmission Performance

- Nominal Bandwidth

60 kHz to 108 kHz with pilot slot reserved at 104.08 kHz.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(1) Wideband Analog 1 (WA1) Special Access Service (Cont'd)(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4AH5-B	4AH5-B
4AH6-C*	4AH5-B
4AH6-D*	4AH5-B

(2) Wideband Analog to Digital (WA1T) Special Connector Service(a) Description

Special Access Service WA1T provides two WA1 channels from an IC terminal location for connection to an HC1 Special Access Service at a Telephone Company designated Hub location via a Group to DS1 multiplexer. The HC1 service may only be extended to another Hub for multiplexing to voice or other service.

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(2) Wideband Analog to Digital (WA1T) Special Connector Service (Cont'd)(b) Illustrative Application Special

Access Service WA1T is suitable for the transmission of 24 FDM channels connected via multiplexing to 24 TDM channels.

(c) Optional Features

Σ Central office multiplexing.

(d) Transmission Performance Provides

two Special Access WA1 channels each with the performance shown for WA1 in (1)(d) preceding.

Note: The Access Connection and Special Transport rate elements for WA1 apply for WA1T. Two of each are required.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(3) Wideband Analog 2 (WA2) Special Access Service(a) Description

Special Access Service WA2 provides a high capacity channel with a bandwidth from 312 kHz to 552 kHz for the transmission of a wideband signal between an IC terminal location and an end user premises, between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Application

Special Access Service WA2 is suitable for the transmission of a 60 channel FDM supergroup.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(3) Wideband Analog 2 (WA2) Special Access Service (Cont'd)(c) Optional Features

- Central office multiplexing.

(d) Transmission Performance

- Nominal Bandwidth

312 kHz to 552 kHz with pilot slot reserved at 315.92 kHz.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4AH6-C	4AH6-C
4AH6-D*	4AH6-C**

* Available only to ICs selecting the multiplexed 4-wire High Capacity analog facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

** Available only via a Telephone Company designated Hub where multiplexing is offered.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(4) Wideband Analog 2A (WA2A) Special Access Service(a) Description

Special Access Service WA2A provides a high capacity channel with a bandwidth from 564 kHz to 3084 kHz for the transmission of a wideband signal between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Application Special

Access Service WA2A is suitable for the transmission of a 600 channel FDM mastergroup.

(c) Optional Features

- Central Office multiplexing.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(4) Wideband Analog 2A (WA2A) Special Access Service (Cont'd)(d) Transmission Performance• Nominal Bandwidth

564 kHz to 3084 kHz with
pilot slot reserved at 2840
kHz.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User*</u>
4AH6-D	4AH6-D

* 7.4.5 (B) following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(5) Wideband Analog 3 (WA3) Special Access Service(a) Description

Special Access Service WA3 provides a channel for the transmission of a wideband signal falling approximately within the 10 Hz to 20 kHz (actually 300 Hz to 18 kHz) frequency band at an end user premises. The actual frequency range varies and is limited by the interface available at the IC terminal location. Service is provided between an IC terminal location and an end user premises. A voiceband coordinating channel is provided with this service.

(b) Illustrative Applications

Special Access Service WA3 is suitable for use as part of the facilities required to provide intrastate facsimile service.

(c) Transmission Performance

- Nominal Bandwidth
300 Hz to 18 kHz

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4WD5-1	4WA5-1
4WD5-2	4WA5-1

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.1 Analog Services (Cont'd)(E) Wideband Analog Services (Cont'd)(6) Wideband Analog 4 (WA4) Special Access Service(a) Description

Special Access Service WA4 provides a channel with a frequency from approximately 29 kHz to 44 kHz for the transmission of a wideband signal between an IC terminal location and an end user premises. A voiceband coordinating channel is provided with this service.

(b) Illustrative Application

Special Access Service WA4 is suitable for use as part of the facilities required to provide intrastate facsimile service.

(c) Transmission Performance

- Nominal Bandwidth
29 kHz to 44 kHz

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4WD5-3	4WA5-2

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services(A) Wideband Digital Services(1) Wideband Digital 1 (WD1) Special Access Service(a) Description

Special Access Service WD1 kbps synchronous serial data between an IC terminal location and an end user premises. Optional arrangements are available for transmission at 18.75 kbps or for transmission of nonsynchronous data with a minimum signal element width of 52 microseconds. A voiceband coordinating channel is provided with this service.

(b) Illustrative Applications The

nonsynchronous option is suitable for use as part of the facilities required to provide intrastate facsimile transmission.

(c) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 98.75%.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(A) Wideband Digital Services (Cont'd)(1) Wideband Digital 1 (WD1) Special Access Service (Cont'd)(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
8WB5-19S	12WC6-19
8WB5-18S	12WC6-18
8WB5-19A	10WC6-19

(2) Wideband Digital 2 (WD2) Special Access Services(a) Description

Special Access Service WD2 provides a channel for the transmission of 50 kbps synchronous or isochronous serial data between an IC terminal location and an end user premises. Optional arrangements are available for transmission of synchronous serial data at 40.8 kbps or for transmission of nonsynchronous data with a minimum signal element width of 20 microseconds. An arrangement may also be included to accommodate the nonsimultaneous transmission of signal and supervisory tones between the frequencies of 300 and 3000 Hz. A voiceband coordinating channel is provided with this service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(A) Wideband Digital Services (Cont'd)(2) Wideband Digital 2 (WD2) Special Access Services (Cont'd)(b) Illustrative Applications

Special Access Service WD2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Facsimile Transmission
- Overseas Connecting Facility

(c) Transmission Performance

- Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 98.75%.

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
8WB5-50S	12WC6-50
8WB5-40S	12WC6-40
8WB5-50A	10WC6-50

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(A) Wideband Digital Services (Cont'd)(3) Wideband Digital 3 (WD3) Special Access Service(a) Description

Special Access Service WD3 provides a channel for the transmission of 230.4 kbps synchronous serial data between an IC terminal location and an end user premises. Optional arrangements are available for the transmission of nonsynchronous data with a minimum signal element width of 4.3 microseconds. A voiceband coordinating channel is provided with this service.

(b) Illustrative Applications The

nonsynchronous option is suitable for use as part of the facilities required to provide intrastate facsimile transmission.

(c) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 98.75%.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(A) Wideband Digital Services (Cont'd)(3) Wideband Digital 3 (WD3) Special Access Service (Cont'd)(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
8WB5-23S12WC6-23S	8WB5-23S12WC6-
8WB523A	10WC6-23

(4) Wideband Digital 4 (WD4) Special Access Service(a) Description

Special Access Service WD4 provides for the transmission of 56 kbps synchronous serial data between an IC terminal location and an end user premises. No voiceband coordinating channel is included with this service.

(b) Illustrative Applications

When using the DATAPHONE Digital Service timing option, this service is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Overseas Connecting Facility
- Digital Data Off-Net Extension

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(A) Wideband Digital Services (Cont'd)(4) Wideband Digital 4 (WD4) Special Access Service (Cont'd)(c) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 98.75%.

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4WB5-64	6DU5-56
4D05	6DU5-56

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services

Digital Data Access Services are only available via Telephone Company designated Digital Data Hubs.

(1) Digital Data Access 1 (DA1) Special Access Service(a) Description

Special Access Service DA1 provides a channel for duplex four-wire transmission capability of serial synchronous data at the 2.4 kbps rate between an IC terminal location and an end user premises. The service is synchronous with timing provided through the Telephone Company's facilities to the end user on the received bit stream.

DA1 is available only between the IC terminal location and locations designated by the Telephone Company which are served by digital facilities. All other locations are connectible to the Telephone Company designated digital Hub only through an analog off-network extension which is provided as a Voice Grade Service as set forth in 7.2.1 (B) preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(1) Digital Data Access 1 (DA1) Special
Access Service (Cont'd)(b) Illustrative Applications

Special Access Service DA1 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Data - 2.4 kbps

(c) Optional Features

- Loop transfer arrangement.
- Central office bridging capability.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(1) Digital Data Access 1 (DA1) Special Access Service (Cont'd)(d) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 99.875%.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
6DS9-15*	6DU5-24
6DU5-24	6DU524

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(2) Digital Data Access 2 (DA2) Special Access Service(a) Description

Special Access Service DA2 provides a channel for duplex four-wide transmission capability of serial synchronous data at the 4.8 kbps rate between an IC terminal locations and an end user premises.

The service is synchronous with timing provided through the Telephone Company's facilities to the end user on the received bit stream.

DA2 is available only between the IC terminal location and locations designated by the Telephone Company which are served by digital facilities. All other locations are connectible to the Telephone Company designated digital Hub only through an analog off-network extension which is provided as a Voice Grade Service as set forth in 7.2.1 (B) preceding.

(b) Illustrative Applications

Special Access Service DA2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Data - 4.8 kbps

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(2) Digital Data Access 2 (DA2) Special Access Service (Cont'd)(c) Optional Features

- Loop transfer arrangement.
- Central office bridging capability.

(d) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 99.875%.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4DS9-15*	6DU5-48
6DU5-48	6DU5-48

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(3) Digital Data Access 3 (DA3) Special
Access Service(a) Description

Special Access Service DA3 provides a channel for duplex four-wire transmission capability of serial synchronous data at the 9.6 kbps rate between an IC terminal location and an end user premises. The service is synchronous with timing provided through the Telephone Company's facilities to the end user on the received bit stream.

DA3 is available only between the IC terminal location and locations designated by the Telephone Company which are served by digital facilities. All other locations are connectible to the Telephone Company designated digital Hub only through an analog off-network extension which is provided as a Voice Grade Service as set forth in 7.2.1 (B) preceding.

(b) Illustrative Applications

Special Access Service DA3 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Data - 9.6 kbps

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(3) Digital Data Access 3 (DA3) Special Access Service (Cont'd)(c) Optional Features

- Loop transfer arrangement.
- Central office bridging capability.

(d) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 99.875%.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4DS9-15*	6DU5-96
4DU5-96	6DU5-96

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(4) Digital Data Access 4 (DA4) Special Access Service(a) Description

Special Access Service DA4 provides a channel for duplex four-wire transmission capability of serial synchronous data at the 56 kbps rate between an IC terminal location and an end user premises. The service is synchronous with timing provided through the Telephone Company's facilities to the end user on the received bit stream.

DA4 is available only between the IC terminal location and locations designated by the Telephone Company which are served by digital facilities. All other locations are connectible to the Telephone Company designated digital Hub only through an analog off-network extension which is provided as a Wideband Digital Service as set forth in (A) preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(4) Digital Data Access 4 (DA4) Special
Access Service (Cont'd)(b) Illustrative Applications

Special Access Service DA4 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Packet Access Line
- Packet Switch Trunk
- Packet Off-Net Access Line
- Digital Data - 56 kbps

(c) Optional Features

- Loop transfer arrangement.
- Central office bridging capability.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(4) Digital Data Access 4 (DA4) Special Access Service (Cont'd)(d) Transmission Performance• Error-Free Seconds

While in service, the monthly average of the error-free seconds will be equal to or greater than 99.875%.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4DS9-15*	6DU5-56
6DU5-56	6DU5-56

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(5) Subrate Multiplexed Digital Data Access 1
(SR1) Special Connector Service(a) Description

Special Access Service SR1 provides the ability to combine up to 20 DA1 Special Access Services into a single channel of a HC1 Special Access Service. Note: The only rate elements applicable to this service are the Carrier Submultiplexing Unit and the Carrier Multiplexing Plug-Ins per 64 kbps channel.

(6) Subrate Multiplexed Digital Data Access 2
(SR2) Special Connector Service(a) Description

Special Access Service SR2 provides the ability to combine up to 10 DA2 Special Access Service. Note: The only rate elements applicable to this service are the Carrier Submultiplexing Unit and the Carrier Multiplexing Plug-Ins per 64 kbps channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(B) Digital Data Access Services (Cont'd)(7) Subrate Multiplexed Digital Data Access 3
(SR3) Special Connector Service(a) Description

Special Access Service SR3 provides the ability to combine up to five DA3 Special Access Services into a single channel of a HC1 Special Access Service. Note: The only rate elements applicable to this service are the Carrier Submultiplexing Unit and the Carrier Multiplexing Plug- Ins per 64 kbps channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(C) High Capacity Services(1) High Capacity 1 (HC1) Special Access Service(a) Description

Special Access Service HC1 provides a channel for the transmission of nominal 1.544 Mops isochronous serial data between an IC terminal location and an end user premises, between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Applications

Special Access Service HC1 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- 1.544 Mbps Access Line
- Digital Service
- 3.0 Mbps Access Line
- Hub to Earth Station Trunk

(c) Optional Features

- Automatic Protection Switching.
- Central office multiplexing.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(C) High Capacity Services(1) High Capacity 1 (HC1) Special Access Service (Cont'd)(d) Transmission Performance• Error-Free Seconds

While in service, 98.75% of the one-second intervals will be error-free measured over a continuous 24 hour period.

(e) Available Facility Interface Combinations

<u>IC</u>	<u>End User</u>
4DS9-15J	6DU9-A
4DS9-15	6DU9-B
4DS9-15K	6DU9-B
4DS9-15K	6DU9-C
4DS9-31*	6DU9-A, B or C
4DS0-63*	6DU9-A, B or C
4DS6-44*	6DU9-A, B or C
4DS6-27*	6DU9-A, B or C

* Available only to ICs selecting the multiplexed 4-wire DSX facility interface option at the IC terminal location and providing subsequent system and channel assignment data.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(C) High Capacity Services (Cont'd)(2) High Capacity 1C (HC1C) Special Access Service(a) Description

Special Access Service HC1C provides a channel for the transmission of nominal 3.152 Mbps isochronous serial data between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Applications

Special Access Service HC1C is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Service - High Speed

(c) Optional Features

- Central office multiplexing.

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User*</u>
4DS9-31	4DS9-31

* See 7.4.5 (B) following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(C) High Capacity Services (Cont'd)(3) High Capacity 2 (HC2) Special Access Service(a) Description

Special Access Service HC2 provides a channel for the transmission of nominal 6.312 Mbps isochronous serial data between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Applications

Special Access Service HC2 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

Σ Digital Service - High Speed

(c) Optional Features

- Central office multiplexing.

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User*</u>
4DS0-63	4DS0-63

* See 7.4.5 (B) following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(C) High Capacity Services (Cont'd)(4) High Capacity 3 (HC3) Special Access Service(a) Description

Special Access Service HC3 provides a channel for the transmission of 44.736 Mbps isochronous serial data between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Applications

Special Access Service HC3 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Service - High Speed

(c) Optional Features

- Central office multiplexing.

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User*</u>
4DS6-44	4DS6-44

* See 7.4.5 (B) following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Digital Services (Cont'd)(C) High Capacity Services (Cont'd)(5) High Capacity 4 (HC4) Special Access Service(a) Description

Special Access Service HC4 provides a channel for the transmission of 274.176 Mbps isochronous serial data between IC terminal locations or between an IC terminal location and a Telephone Company designated Hub where multiplexing is offered.

(b) Illustrative Applications

Special Access Service HC4 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- Digital Service - High Speed

(c) Optional Features

- Central office multiplexing.

(d) Available Facility Interface Combinations

<u>IC</u>	<u>End User*</u>
4DS6-27	4DS6-27

* See 7.4.5 (B) following for explanation.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.2 Service Designator/Network Channel Code Conversion Table

The purpose of this table is to show the relationship between the service designator codes (e.g. VG1, NB2, etc.) and the network channel codes that are used for various administrative purposes.

<u>Service Designator Code</u>	<u>Network Channel Code</u>
NB1	NT
NB2	NU
NB3	NV
NB4	NW
NB5	NY
VG1	LB
VG2	LC
VG3	LD
VG4	LE
VG5	LF
VG6	LG
VG7	LH
VG8	LJ
VG9	LK
VG10	LN
VG11	LP
VG12	LR
VG13	LU
AP1	PE
AP2	PF
AP3	PJ
AP4	PK

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Technical Service Descriptions for Special Access Service (Cont'd)7.2.3 Service Designator/Network Channel Code Conversion Table (Cont'd)

<u>Service Designator Code</u>	<u>Network Channel Code</u>
TV1	TV
TV2	TW
WA1	WJ
WA1T	WQ
WA2	WL
WA2A	WR
WA3	WN
WA4	WP
DALS (Standard)	SE
DALS (Improved)	SF
WD1	WB
WD2	WE
WD3	WF
WD4	WH
DA1	XA
DA2	XB
DA3	XG
DA4	XH
SR1	RB
SR2	RC
SR3	RD
HC1	HC
HC1C	HD
HC2	HE
HC3	HF
HC4	HG

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes

This section explains the facility interface codes set forth in 7.2.1 and 7.2.2 preceding that the IC can specify when ordering Special Access Service. Included is an example which explains the specific characters of the code, a glossary of facility interface codes and impedance levels.

Example: If the IC specifies a 2DC8-3 facility interface at the IC terminal location, it is requesting the following:

2 = Number of physical wires at IC terminal location
 DC = Facility interface for direct current or voltage
 8 = Variable impedance level
 3 = Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 band)

7.3.1 Glossary of Facility Interface Codes and Options

<u>Code</u>	<u>Option</u>	<u>Definition</u>
AB-		accepts 20 Hz ringing signal at IC point of interface
AC-		accepts 20 Hz ringing signal at end user network interface
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)
DA-		data stream in VF frequency band at end user network interface
DB-		data stream in VF frequency band at IC point of interface location
	- 10	VF for NB4 and NB5
	- 43	VF for 43 Telegraph Carrier type signals, NB4 and NB5

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.1 Glossary of facility Interface Codes and Options
(Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
DC-		direct current or voltage
-	1	monitoring interface with series RC combination (McCulloch 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 IC point of interface
DE-		DATAPHONE Select-A-Station (and TABS) interface at the end user NI
DO-		digital interface at IC terminal location at the digital signal level zero A (DS-OA)
DS-		digital hierarchy interface
-	15	1.544 Mbps (DS1) format per PUB41451 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 six 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 41451
-	15K	1.544 Mbps format per PUB 41451 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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.1 Glossary of facility Interface Codes and Options
(Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
-	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
-	56	56.0 kbps
-	96	9.6 kbps
-	A	1.544 Mbps format per PUB 41451
-	B	1.544 Mbps format per PUB 41451 plus D4
-	C	1.544 Mbps format per PUC 41451 plus extended framing format
DX-		duplex signaling interface at IC POI
DY-		duplex signaling interface at end user NI
EA-	E	Type I E&M Lead Signaling. IC at POI or end user at NI originates on E Lead.
EA-	M	Type I E&M Lead Signaling. IC at POI or end user at NI originates on M Lead.
EB-	E	Type II E&M Lead Signaling. IC at POI or end user at NI originates on E Lead.
EB-	M	Type II E&M Lead Signaling. IC at POI or end user at NI originates on M Lead.
EC-		Type III E&M signaling at IC terminal POI

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.1 Glossary of facility Interface Codes and Options
(Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
EX-	A	tandem channel unit signaling for loop start or ground start and IC supplies open end (dial tone, etc.) functions.
EX-	B	tandem channel unit signaling for loop start or ground start and IC supplies closed end (dial pulsing, etc.) functions.
GO-		ground start loop signaling - open end function by IC or end user
GS-		ground start loop signaling - closed end function by IC or 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 IC or end user
LR-		20 Hz automatic ringdown interface at IC with Telephone Company provided PLAR
LS-		loop start loop signaling - closed end function by IC or end user
NO-		no signaling interface, transmission only

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.1 Glossary of facility Interface Codes and Options
(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
RV-		0 reverse battery signaling, one way operation, originate by IC
	- T	reverse battery signaling, one way operation, terminate function by IC or end user
SF-		single frequency signaling with VF band at either IC POI or end user NI
TF-		telephotograph interface
TT-		telegraph/teletypewriter interface at either IC POI or end user NI
	- 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)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.1 Glossary of facility Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
WA-		wideband bandwidth interface at end user NI
-	1	limited bandwidth
-	2	nominal passband from 29000 to 44000 Hz
WB-		wideband data interface at IC POI
-	18S	18.75 kbps, synchronous
-	19A	up to 19.2 kbps asynchronous
-	19S	19.2 kbps synchronous
-	23A	up to 230.4 kbps, asynchronous
-	23S	230.4 kbps, synchronous
-	40S	40.8 kbps, synchronous
-	50A	up to 50.0 kbps, asynchronous
-	50S	50.0 kbps, synchronous
-	64	64.0 kbps, restored polar
WC-		wideband data interface at end user NI
-	18	18.75 kbps, synchronous
-	19	for 12-wire interface: 19.2 kbps, synchronous
		for 10-wire interface: up to 19.2 kbps, asynchronous
-	23	up to 230.4 kbps, asynchronous
-	23S	230.4 kbps, synchronous
-	40	40.8 kbps, synchronous
-	50	for 12-wire interface: 50.0 kbps, synchronous
		for 10-wire interface: up to 50.0 kbps, asynchronous
WD-		wideband bandwidth interface at IC POI
-	1	nominal passband from 300 to 18000 Hz
-	2	nominal passband from 28000 to 44000 Hz
-	3	nominal passband from 29000 to 44000 Hz

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.2 Impedance

The nominal reference impedance with which the IC or end user will terminate the channel for the purpose of evaluating transmission performance:

<u>Value (ohms)</u>	<u>Code(s)</u>
110	0
150	1
600	2
900	3+
1200	4
135	5
75	6
124	7
Variable	8
100	9

1 For those interface codes with a 4-wire transmission path at the POI at the IC's terminal location, rather than a standard 900 ohm impedance the code (3) denotes an IC provided transmission equipment termination. Such terminations were provided to ICs in accordance with the F.C.C. Docket No. 20099 Settlement Agreement.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Facility Interface Codes (Cont'd)7.3.3 Digital Hierarchy Facility Interface Codes (4DS9-*)

This facility interface is available only to ICs that select the multiplexed four-wire DSX-1 or higher facility interface option at the IC terminal location and provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ the facility interface code 4DS9 plus the speed options indicated below:

<u>Interface Code And Speed Option</u>	<u>Nominal Bit Rate (Mbps)</u>	<u>Digital Hierarchy Level</u>
4DS9-15	.544	DS1
4DS9-15L	1.544	DS1
4DS9-31	3.152	DS1C
4DS9-31L	3.152	DS1C
4DS0-63	6.312	DS2
4DS0-63L	6.312	DS2
4DS6-44	44.736	DS3
4DS6-44L	44.736	DS3
4DS6-27	274.176	DS4
4DS6-27L	274.176	DS4

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations

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

7.4.1 Types of Rates and Charges

There are three types of rates and charges. These are monthly rates, daily rates and nonrecurring charges.

In addition, there are three types of nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

Monthly rates are flat 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 flat recurring rates that apply each day or fraction thereof that a Program Audio or Video Special Access Service is provided for part-time or occasional use.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(C) 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 three types of nonrecurring charges that apply for Special Access Service are: installation of service, installation of feature (s) and function (s), and service rearrangements.

(1) Installation of Service

Nonrecurring charges apply to each service installed. When multiple identical services (i.e., services between the same locations and for the same customer) are ordered and installed at the same time, there is a charge for the first service installed and a lower charge for each additional identical service installed.

Nonrecurring charges for the installation of all services apply per service termination (i.e., IC terminal location and end user premises). The nonrecurring charges for these services are set forth in the rate schedule with the facility interface combinations in 7.5.3 (A) following.

In addition, there is a separately stated nonrecurring charge associated with the installation of Voice Grade Service (i.e., VG1-13), which varies by the specific performance desired (e.g., VG2, VG3, etc.). These nonrecurring charges, which apply per two-point service or each section of a multipoint service, are set forth in the rate schedule in 7.5.3(B) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(2) Installation of Features and Functions

Nonrecurring charges apply for the installation of the various features and functions available with Special Access Service. For some features and functions there is a lower charge if installed coincident with the service and a higher charge if installed subsequent to the installation of the service.

(3) Service Rearrangements

Nonrecurring charges apply for service rearrangements. Service rearrangements are changes to existing services that do not result in a change to any of the following: (1) address of the IC terminal location, (2) address of the end user premises, (3) type of service or (4) the WATS or WATS type service office (for use with WATS access line service provided under the local exchange carriers WATS tariff). Changes of this nature constitute a discontinuance and start of service.

Service Rearrangement Charges are based on the nonrecurring (i.e., installation) charge of the service being changes. Following are the service rearrangements that are allowable for Special Access Service and the appropriate levels of charging.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)(a) Service Rearrangements for Services Types

<u>of Change</u>	<u>Level of Charging</u>
Change from two-wire to four-wire or from four-wire to two-wire	Full nonrecurring charge associated with the facility interface combination for the service being changed
Change in facility interface that does not result in a change to any other rate element (e.g., 2LS2 to 2GS2)	1/2 of the non-recurring charge associated with the facility interface combination for the service being changed
Change in facility interface that results in changes to other rate element(s), (e.g., 4GS2 to 4DS9-15)	Full nonrecurring charge associated with the facility interface combination for the service being changed

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.2 Surcharge for Special Access Service(A) General

In addition to the rates and charges described in 7.4.1 preceding, there is a monthly surcharge of \$25.00 that applies to two-point sub-voice grade, voice grade and equivalent voice grade Special Access Services (e.g., the surcharge for a group level service would be \$300.00 or 12 x \$25.00). For multipoint services, the \$25.00 surcharge applies for each end user location on the service. This surcharge is to compensate the Telephone Company for use of the local exchange network by Special Access Services.

(B) Exceptions to the Surcharge Application

Recognizing that not all services can utilize the local exchange network, certain uses of Special Access Service are exempt from the surcharge. Following is a listing of the exempt categories:

- (1) Any termination of an analog service that is used for television or program audio transmission.
- (2) Any termination of a service that is used for Telex service.
- (3) Any termination of a service that by nature of its operating characteristics could not make use of common lines.
- (4) Any termination of a service that is associated with Switched Access Service that is subject to Carrier Common Line Charges.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.2 Surcharge for Special Access Service (Cont'd)(C) Self Reporting

In order for the Telephone Company to determine the application of the surcharge with respect to specific services, the IC must report the intended use of all services when placing orders for Special Access Service. In addition, when ordering high capacity analog or digital services, the IC must also report the use for each voice equivalent channel of the high capacity service. When any service or channel of a service is reported to be used in any manner described in (B) preceding, the surcharge will not apply. If the intended use is not reported, the Telephone Company will automatically bill the appropriate surcharge on each Special Access Service installed.

The Telephone Company reserves the right to audit the use of the service at any time. If the service is found to be used for a type of operation other than that reported by the IC, and a surcharge would apply for that type of operation, the Telephone Company will notify the IC and will begin to apply the surcharge.

(D) Crediting the Surcharge

If, at any time after the installation of a service which is subject to the surcharge, the IC reports that the service is being used in association with a Switched Access Service that is subject to Carrier Common Line Charges, the Telephone Company will credit the IC for the surcharge. The credit will be effective on the date that the Special Access Service became associated with the Switched Access Service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.3 Minimum Periods

Special Access Service is provided for a specified minimum period. The minimum period and the applicable charges for that period are dependent on the interval (i.e., standard, negotiated, or short notice) under which service is provided. An exception to the minimum period exists for part-time and occasional Video and Program Audio services which may be ordered and paid for on a daily basis. Minimum periods and minimum period charges are described in detail in 5. preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.4 Moves

A move involves a change in the physical location of one of the following:

- The point of interface at the IC terminal location
- The IC terminal location
- The network interface at the end user premises
- The end user 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, for all services, 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, i.e., the IC terminal location or the end user premises. There will be no change in the minimum period requirements. If a move is made at the same time a service rearrangement is made, the total charge will never exceed a full non-recurring charge for the basic service.

(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 IC will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.5 Rate Application Exception Rules(A) Intrabuilding Access Services

Intrabuilding cable facilities, provided by the Telephone Company to connect two IC terminal locations or an IC terminal location and an end user premises in the same public building, will be rated as an Access Connection and an appropriate facility interface combination. The Special Transport and Special Access Line rate elements will not apply to this type of service, nor will the Special Access Service Surcharge set forth in 7.4.2 preceding apply.

(B) IC Terminal Location to IC Terminal Location

When two IC terminal locations are connected together via Special Access Service, the IC will be billed as though the service were connecting an IC terminal location and an end user premises, i.e., Access Connection, Special Transport, Features and Functions (facility interface combination) and Special Access Line.

One of the IC terminal locations will be treated as an end user premises.

(C) End User to End User

When two end user premises are connected together via Voice Grad 13 (VG13) Special Access Service, the IC will be billed as though the service were connecting an IC terminal location and an end user premises, i.e., Access Connection, Special Transport, Features and Functions (facility interface combination) and Special Access Line. The end user premises at which the service connects to interstate service will be treated as an IC terminal location. No Special Access Service Surcharge will apply for this service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.6 Mileage Measurement

The mileage to be used to determine the monthly rate for the Special Transport is calculated on the airline distance between the serving wire centers involved (i.e., IC serving wire center, Hub serving wire center or end user serving wire center). The V&H coordinates method is used to determine mileage. This method is explained in the EXCHANGE ASSOCIATION TARIFF F.C.C. No. 2 Serving Wire Center Information (V&H coordinates).

Mileage is shown in 7.5.2 following in terms of mileage bands. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, then find the band into which the computed mileage falls and apply the rates shown for that band to the actual number of miles. There are two rates that apply for each mileage band, i.e., a flat rate for the band and a rate per mile.

When Hubs are involved, mileage rates are computed separately for each section of the Special Transport mileage, i.e., IC serving wire center to Hub, Hub to Hub and/or Hub to end user serving wire center.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.7 Facility Hubs

An IC has the option of ordering high capacity analog or digital facilities (i.e., Group, Supergroup, Mastergroup, DS1, DS1C, DS2, DS3 or DS4) to a facility Hub for channelizing to individual services requiring lower capacity facilities (e.g., Voice, Program, Audio, etc).

The Telephone Company will designate the facility Hub locations. 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. The IC will choose the desired Hub from a list that the Telephone Company will make available.

Some of the types of multiplexing provided include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from digital to Voice Grade Service
- from digital to Program Audio Service

The transmission performance for the end to end service provided from the IC terminal location to the end user premises will be that of the lower capacity or bit rate. For example, when a 1.544 Mbps service is multiplexed to voice frequency channels, the transmission performance will be voice grade, not high capacity.

The Telephone Company will commence billing the monthly rate for the Access Connection and the Special Transport for the high capacity facility to the Hub as soon as it is provided, even though individual services utilizing those facilities may not be ordered and installed until a later date. If the IC has designated the type of multiplexing to be provided, the nonrecurring charge for the multiplexer will be billed to the IC at that time and the billing for the monthly rate will begin.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.7 Facility Hubs (Cont'd)

Individual service rates (by service type) will apply for the facility interface combination, the Special Access Line, and additional Special Transport (if required) for each channelized service. These will be billed to the IC as each individual service is installed.

Although not requiring multiplexing, the Telephone Company will designate certain serving wire centers as Hubs for Video and Program Audio Services. Full-time service will be provided to the Hub and billed accordingly at the monthly rates set forth in 7.5.1 and 7.5.2 following for the Access Connection and the Special Transport respectively. The IC may order part-time and occasional Video and Program Audio Services from the Hub to the end user premises. The rate elements required to provide service from the Hub to the end user premises (i.e., Special Transport, Facility Interface Combinations and Special Access Lines) will be billed at daily rates for the duration of the service requested by the IC.

7.4.8 Shared Use Analog and Digital High Capacity Services

Shared use occurs when Special Access Service and Switched Access Service are provided over the same high capacity facilities through a common high capacity interface. This sharing arrangement is available only for existing services. The Special Access Service portion of the shared facilities will be billed at individual service rates (i.e., Voice Grade, Program Audio or Digital Data Access). No multiplexing charge will apply. See also 5.2.7 preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges Cont'd)7.5.1 Access Connections

Each:	Monthly Rates	Daily Rates
2-Wire (for use with NB1-5, VG1-13 and AP1-4)	\$3.67	\$0.35*
4-Wire (for use with NB4-5, VG113 and DA1-4 with DU facility interface)	7.98	-
TV (for use with TV1-2)	215.61	43.67
Group (for use with WA1 & WA1T- required for WA1T)	ICB rates and two are charges apply	-
Supergroup (for use with WA2)	ICB	-
Mastergroup	ICB rates and charges apply	-
20 kHz (for use with WA3)	ICB rates and charges apply	-

* Daily rates are applicable only when used with AP1-4.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Access Connections (Cont'd)

Each:	Monthly Rates
13 kHz (for use with WA4)	ICB rates and charges apply
19.2 kbps (for use with WD1)	ICB rates and charges apply
50 kbps (for use with WD2)	ICB rates and charges apply
230.4 kbps (for use with WD3)	ICB rates and charges apply
56 kbps (for use with WD4)	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Access Connections (Cont'd)

Each:	<u>Monthly Rates</u>
DS1 - 1.544 Mbps (for use with HC1)	\$102.35
DS1C - 3.152 Mbps (for use with HC1C)	ICB rates and charges apply
DS2 - 6.312 Mbps (for use with HC2)	ICB rates and charges apply
DS3 - 44.736 Mbps (for use with HC3)	ICB rates and charges apply
DS4 - 274.176 Mbps (for use with HC4)	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)
 7.5 Rates and Charges (Cont'd)
 7.5.2 Special Transport

	Mileage <u>Each</u>	Monthly Bands <u>Rates</u>	
		<u>Fixed</u>	<u>Mile</u>
2-Wire - Metallic (for use with NB1-3)	0 to 4	None	5.80
	Over 4 to 8	None	5.80
	Over 8 to 16	None	5.80
	Over 16 to 25	None	5.80
	Over 25 to 50	None	5.80
	Over 50 to 100	None	5.80
	Over 100	None	5.80
75 Baud (for use with NB4)	0 to 4	10.19	5.90
	Over 4 to 8	21.99	2.95
	Over 8 to 16	29.67	1.99
	Over 16 to 25	29.67	1.99
	Over 25 to 50	46.67	1.31
	Over 50 to 100	65.17	0.94
	Over 100	94.17	0.65
150 Baud (for use with NB5)	0 to 4	7.81	3.86
	Over 4 to 8	8.73	3.63
	Over 8 to 16	20.65	2.14
	Over 16 to 25	20.65	2.14
	Over 25 to 50	29.65	1.78
	Over 50 to 100	57.65	1.22
	Over 100	77.65	1.02
2-Wire 4-Wire voice (for use with VG1-13)	0 to 4	4.42	8.35
	Over 4 to 8	17.03	5.20
	Over 8 to 16	37.88	2.60
	Over 16 to 25	47.80	1.98
	Over 25 to 50	72.63	0.99
	Over 50 to 100	86.52	0.70
	Over 100	121.77	0.36

* Also used to provide NB4 and NB5 on 43 Carrier, using 43 CXR to NB4 or NB5 multiplexing.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.2 Special Transport (Cont'd)

Each:	Mileage Bands	Monthly Rates		Daily Rates	
		Fixed	Per Mile	Fixed	Per Mile
3.5 kHz Audio (for use with AP1)	0 to 4	\$ 8.17	\$3.71	\$0.82	\$0.37
	Over 4 to 8	11.01	3.00	1.10	0.30
	Over 8 to 16	11.01	3.00	1.10	0.30
	Over 16 to 25	18.85	2.51	1.89	0.25
	Over 25 to 50	18.85	2.51	1.89	0.25
	Over 50 to 100	23.35	2.42	2.34	0.24
	Over 100	49.35	2.16	4.94	0.22
5kHz Audio (for use with AP2)	0 to 4	8.72	4.26	0.87	0.43
	Over 4 to 8	8.72	4.26	0.87	0.43
	Over 8 to 16	15.04	3.47	1.50	0.35
	Over 16 to 25	15.04	3.47	1.50	0.35
	Over 25 to 50	19.79	3.28	1.98	0.33
	Over 50 to 100	32.29	3.03	3.23	0.30
	Over 100	32.29	3.03	3.23	0.30
8 kHz Audio (for use with AP3)	0 to 4	10.82	6.69	1.08	0.67
	Over 4 to 8	10.82	6.69	1.08	0.67
	Over 8 to 16	22.34	5.25	2.23	0.53
	Over 16 to 25	28.42	4.87	2.84	0.49
	Over 25 to 50	28.42	4.87	2.84	0.49
	Over 50 to 100	40.92	4.62	4.09	0.46
	Over 100	58.92	4.44	5.89	0.44
15 kHz Audio	0 to 4	22.57	9.33	2.26	0.93
	Over 4 to 8	22.57	9.33	2.26	0.93
	Over 8 to 16	22.57	9.33	2.26	0.93
	Over 16 to 25	38.57	8.33	3.86	0.83
	Over 25 to 50	42.07	8.19	4.21	0.82
	Over 50 to 100	56.07	7.91	5.61	0.79
	Over 100	56.07	7.91	5.61	0.79

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.2 Special Transport (Cont'd)

Each:	Mileage Bands	Monthly Rates		Daily Rates	
		Fixed	Per Mile	Fixed	Per Mile
TV	0 to 4	\$227.76	\$246.97	\$140.73	\$98.20
(for use with TV1&2)	Over 4 to 8	227.76	246.97	140.73	98.20
	Over 8 to 16	227.76	246.97	140.73	98.20
	Over 16 to 25	227.76	246.97	140.73	98.20
	Over 25 to 50	227.76	246.97	140.73	98.20
	Over 50 to 100	227.76	246.97	140.73	98.20
	Over 100	227.76	246.97	140.73	98.20
Group (for use with WA1 & WA1T. Two are Required for WA1T)	All	ICB rates and charges apply		-	-
Supergroup (for use with WA2)	All	ICB rates and charges apply		-	-
Mastergroup (for use with WA2A)	All	ICB rates and charges apply		-	-
20 kHz (for use with WA3)	All	ICB rates and charges apply		-	-
13 kHz (for use with WA4)	All	ICB rates and charges apply		-	-

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.2 Special Transport (Cont'd)

Each:	<u>Mileage Bands</u>	<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>
19.2 kbps (for use with WD1)	All	ICB rates and charges apply	
50.0 kbps (for use with WD2)	All	ICB rates and charges apply	
230.4 kbps (for use with WD3)	All	ICB rates and charges apply	
56.0 kbps (for use with WD4)	All	ICB rates and charges apply	
Digital Data 1 (for use with DA1)	0 to 4	\$45.05	\$1.23
	Over 4 to 8	45.05	1.23
	Over 8 to 16	49.21	0.71
	Over 16 to 25	49.21	0.71
	Over 25 to 50	54.46	0.50
	Over 50 to 100	54.46	0.50
	Over 100	59.46	0.45
Digital Data 2 (for use with DA2)	0 to 4	39.14	1.46
	Over 4 to 8	39.14	1.46
	Over 8 to 16	44.66	0.77
	Over 16 to 25	44.66	0.77
	Over 25 to 50	44.91	0.76
	Over 50 to 100	51.91	0.62
	Over 100	51.91	0.62

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.2 Special Transport (Cont'd)

Each:	Mileage Bands	Monthly Rates	
		Fixed	Per Mile
Digital Data 3 (for use with DA3)	0 to 4	\$47.21	\$1.37
	Over 4 to 8	47.21	1.37
	Over 8 to 16	51.77	0.80
	Over 16 to 25	54.49	0.63
	Over 25 to 50	54.49	0.63
	Over 50 to 100	60.49	0.51
	Over 100	60.49	0.51
Digital Data 4 (for use with DA4)	0 to 4	75.08	9.19
	Over 4 to 8	93.44	4.60
	Over 8 to 16	111.84	2.30
	Over 16 to 25	130.24	1.15
	Over 25 to 50	141.24	0.71
	Over 50 to 100	156.24	0.41
	Over 100	176.24	0.21
DS1 - 1.544 Mbps* (for use with HC1)	0 to 4	38.02	15.09
	Over 4 to 8	38.02	15.09
	Over 8 to 16	38.02	15.09
	Over 16 to 25	38.02	15.09
	Over 25 to 50	38.02	15.09
	Over 50 to 100	38.02	15.09
	Over 100	38.02	15.09
DS1C - 3.152 Mbps* (for use with HC1C)	All	ICB rates and charges apply	

* Additional applications are obtainable through the use of suitable multiplexing at the Hub.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.2 Special Transport (Cont'd)

Each:	<u>Mileage Bands</u>	Monthly Rates Per	
		<u>Fixed</u>	<u>Mile</u>
DS2 - 6.312 Mbps* (for use with HC2)	All	ICB rates and charges apply	
DS3 - 44.736 Mbps* (for use with HC3)	All	ICB rates and charges apply	
DS4 - 274.176 Mbps	All	ICB rates and Charges apply	

* Additional applications are obtainable through the use of suitable multiplexing at the Hub.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions(A) Facility Interface Combinations(1) Narrowband Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DC (for use with NB1, 2&3)	DC	None	\$163.59	\$ 78.23
TT (for use with NB4)	TT	\$2.63	318.45	184.87
DB-10 (for use with NB4)	TT	0.36	290.78	166.49
DB-43+ (for use with NB4)	TT	7.55	272.43	158.70
DB-10 (for use with NB5)	IA	0.36	290.78	166.49
DB-43+ (for use with NB5)	IA	7.55	272.43	158.70
AH* (for use with NB2)	DC	10.29	225.05	119.99
AH* (for use with NB4)	TT	12.72	260.75	155.44
AH* (for use with NB5)	IA	10.29	260.75	155.44

* Requires Voice to Telegraph multiplexer.

+ Requires Voice to Telegraph multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions(A) Facility Interface Combinations (Cont'd)(1) Narrowband Services (Cont'd)

<u>IC</u>	<u>End User</u>	Monthly Rates Per Service <u>Termination</u>	Nonrecurring Charges Per Service <u>Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DS* (for use with NB2)	DC	\$5.05	\$220.03	\$115.49
DS* (for use with NB4)	TT	7.48	272.43	158.70
DS* (for use with NB5)	IA	5.05	272.43	158.70

* Requires intermediate multiplexing.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
AB (for use with VG2)	AC	\$17.77	\$90.85	\$62.34
AB (for use with VG2)	SF	21.56	146.89	90.51
AH* (for use with VG2)	AC	19.30	68.65	39.23
AH* (for use with VG5, 6, 10 & 12)	DA	6.80	73.62	38.91
AH* (for use with VG5	DE	19.72	37.38	17.41
AH* (for use with VG9)	DX	16.65	82.97	48.26
AH* (for use with VG3, 7 & 8)	DY	17.52	78.05	43.34
AH* (for use with VG3, 7, 8 & 9)	EA	22.41	82.97	48.26
AH*	EB	22.41	82.97	48.26

* Requires intermediate multiplexing.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
AH*	GO (for use with VG1)	\$25.58	\$63.31	\$38.88
AH*	GS (for use with VG1, 3 & 7)	26.09	63.31	35.88
AH*	LA (for use with VG2 & 7)	20.75	79.74	47.16
AH*	LB (for use with VG2 & 7)	20.75	68.02	38.60
AH*	LC (for use with VG2 & 7)	20.75	68.65	39.23
AH*	LO (for use with VG1, 2 & 7)	20.75	68.65	39.23
AH*	LR (for use with VG2)	20.75	61.34	33.92
AH*	LS (for use with VG1, 2, 3, 7 & 8)	19.30	61.34	33.92
AH*	NO (for use with VG1, 2, 4, 5, 6, 7, & 9)	13.61	55.77	28.34

* Requires intermediate Group to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
AH*	RV (for use with VG3 & 7)	\$15.43	\$68.65	\$39.23
AH*	SF (for use with VG2, 3, 7, 8 & 9)	23.09	82.97	48.26
AH*	TF (for use with VG11)	13.61	55.77	28.34
DA	DA (for use with VG10 & 13)	5.03	158.90	99.19
DB	DA (for use with VG6 10 & 12)	5.03	158.90	99.19
DB	NO (for use with VG6)	6.81	115.83	70.90
DD	DE (for use with VG5)	13.97	113.72	70.17
DS*	AC (for use with VG2)	14.06	65.20	36.32
DS*	DA (for use with VG5, 6, 10, & 12)	4.75	75.41	41.24

* Requires intermediate Group to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DS* (for use with VG5)	DE	\$13.96	\$35.76	\$16.33
DS* (for use with VG9)	DX	11.41	69.60	35.42
DS* (for use with VG3, 7 & 8)	DY	12.28	69.60	35.42
DS* (for use with VG3, 7, 8 & 9)	EA	17.17	70.61	36.43
DS* (for use with VG3, 7, 8 & 9)	EB	17.17	70.61	36.43
DS* (for use with VG1)	GO	20.34	50.85	23.97
DS* (for use with VG1, 3 & 7)	GS	20.85	50.85	23.97
DS* (for use with VG2 & 7)	LA	15.51	74.34	42.29
DS* (for use with VG2 & 7)	LB	15.51	65.46	36.57

* Requires intermediate DS1 to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DS*	LC (for use with VG2 &7)	\$15.51	\$65.20	\$36.32
DS*	LO (for use with VG1, 2 &7)	15.51	65.20	36.32
DS*	LR (for use with VG2)	13.81	50.85	23.97
DS*	LS (for use with VG1, 2, 3, 7 & 8)	15.76	50.85	23.97
DS*	NO (for use with VG1, 2, 4, 5, 6, 7, 9 & 13)	8.37	55.85	28.96
DS*	RV (for use with VG3 &7)	10.19	65.20	36.32
DS*	SF (for use with VG2, 3, 7, 8 & 9)	17.85	70.61	36.43
DS*	TF (for use with VG11)	8.37	55.85	28.96
DX	DX (for use with VG9)	13.07	133.96	79.51

* Requires intermediate DS1 to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DX (for use with VG3 7 & 8)	DY	\$13.94	\$133.96	\$79.51
DX (for use with VG3, 7, 8 & 9)	EA	18.48	146.41	90.51
DX (for use with VG3, 7, 8 & 9)	EB	18.48	146.41	90.51
DX (for use with VG2 & 7)	LA	16.83	153.42	99.17
DX (for use with VG2 & 7)	LB	16.83	138.07	88.16
DX (for use with VG2 & 7)	LC	16.83	132.49	84.65
DX (for use with VG2, & 7)	LO	16.83	132.49	84.65
DX (for use with VG2, 3, 7 & 8)	LS	18.41	130.97	81.96
DX (for use with VG3 & 7)	RV	11.50	132.49	84.65

* Requires intermediate DS1 to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DX	SF (for use with VG2, 3, 7, 8 & 9)	\$19.16	\$146.41	\$90.51
DY	DY (for use with VG13)	13.93	133.96	79.51
EA	AC (for use with VG2)	20.26	132.49	84.65
EA	DX (for use with VG9)	17.61	161.62	97.89
EA	DY (for use with VG3, 7, 8 & 13)	18.48	133.96	79.51
EA	EA (for use with VG3, 7, 8, 9 & 13)	22.50	162.64	98.90
EA	EB (for use with VG3, 7, 8, 9 & 13)	22.50	162.64	98.90
EA	LA (for use with VG2 & 7)	21.71	153.42	99.17
EA	LB (for use with VG2 & 7)	21.71	138.07	88.16

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
EA (for use with VG2 & 7)	LC	\$21.71	\$132.49	\$84.65
EA (for use with VG2 & 7)	LO	21.71	132.49	84.65
EA (for use with VG2, 3, 7 & 8)	LS	23.30	130.97	81.96
EA (for use with VG3 & 7)	RV	22.12	132.49	84.65
EA (for use with VG2, 3, 7, 8 & 9)	SF	24.05	146.41	90.51
EB (for use with VG2)	AC	20.26	132.49	84.65
EB (for use with VG9)	DX	17.62	161.62	97.89
EB (for use with VG3, 7, 8 & 13)	DY	18.48	133.96	79.51
EB (for use with VG3, 7, 8, 9 & 13)	EA	23.37	162.64	98.90

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
EB (for use with VG3, 7, 8, 9 & 13)	EB	\$23.37	\$162.64	\$98.90
EB (for use with VG2 & 7)	LA	21.71	153.42	99.17
EB (for use with VG2 & 7)	LB	21.71	138.07	88.16
EB (for use with VG2 & 7)	LC	21.71	132.49	84.65
EB (for use with VG2 & 7)	LO	21.71	132.49	84.65
EB (for use with VG2, 3, 7 & 8)	LS	23.30	130.97	81.96
EB (for use with VG3 & 7)	RV	16.39	132.49	84.65
EB (for use with VG2, 3, 7, 8 & 9)	SF	24.05	146.41	90.51
EC (for use with VG3, 7 & 8)	DY	18.48	133.96	79.51

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
EC (for use with VG3, 7 & 8)	EA	\$23.37	\$162.64	\$98.90
EC (for use with VG3, 7 & 8)	EB	23.37	162.64	98.90
EC (for use with VG3, 7 & 8)	SF	24.05	146.41	90.51
EX (for use with VG3 & 7)	GS	20.94	130.97	82.23
EX (for use with VG2 & 7)	LA	15.60	153.42	99.17
EX (for use with VG2 & 7)	LB	15.60	138.07	88.15
EX (for use with VG2 & 7)	LC	15.60	132.49	84.65
EX (for use with VG1, 2 & 7)	LO	15.60	132.49	84.65
EX (for use with VG2)	LR	13.90	132.49	84.65

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
EX (for use with VG1, 2, 3 & 7)	LS	\$17.19	\$130.97	\$81.96
EX (for use with VG1, 3 & 7)	SF	17.94	146.41	90.51
GO (for use with VG1, 3 & 7)	GS	13.90	96.48	61.23
GO (for use with VG3 & 7)	SF	28.09	146.41	90.51
GS (for use with VG1)	GO	30.58	96.48	61.23
LO (for use with VG1, 2, 3, 7 & 8)	LS	22.52	96.12	60.91
LO (for use with VG2, 3 & 7)	SF	23.27	146.41	90.51
LR (for use with VG2)	LR	17.52	96.41	57.83
LR (for use with VG2)	SF	21.55	146.41	90.51

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
LS (for use with VG2, 7 & 13)	LA	\$20.93	\$142.26	\$72.65
LS (for use with VG2, 7 & 13)	LB	20.93	138.69	73.14
LS (for use with VG2, 7 & 13)	LC	20.93	126.45	59.77
LS (for use with VG1, 2, 7 & 13)	LO	20.93	126.45	90.51
LS (for use with VG2)	SF	23.27	146.41	90.51
NO (for use with VG6, 10, 12 & 13)	DA	6.81	115.34	70.90
NO (for use with VG1, 2, 4, 5, 6, 7 & 9)	NO	6.65	106.92	66.89
RV (for use with VG3 & 7)	RV	10.28	96.48	61.23
RV (for use with VG3 & 7)	SF	17.94	146.41	90.51

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
SF (for use with VG2)	AC	\$20.98	\$132.49	\$84.65
SF (for use with VG9)	DX	18.34	146.41	90.51
SF (for use with VG3, 7 & 8)	DY	19.21	133.96	79.51
SF (for use with VG3, 7, 8 & 9)	EA	24.10	146.41	90.51
SF (for use with VG3, 7, 8 & 9)	EB	24.10	146.41	90.51
SF (for use with VG1, 3 & 7)	GS	27.78	131.87	82.23
SF (for use with VG2 & 7)	LA	22.44	153.42	99.17
SF (for use with VG2 & 7)	LB	22.44	138.07	88.16
SF (for use with VG2 & 7)	LC	22.44	132.49	84.65

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(2) Voice Grade Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
SF (for use with VG1, 2 & 7)	LO	\$22.44	\$132.49	\$84.65
SF (for use with VG2)	LR	20.74	130.97	81.96
SF (for use with VG2, 3, 7 & 8)	LS	24.03	130.97	81.96
SF (for use with VG3 & 7)	RV	17.12	132.49	84.65
SF (for use with VG2, 3, 7, 8 & 9)	SF	24.78	138.65	83.70
TF (for use with VG11)	TF	6.65	105.70	66.89

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(3) Program Audio Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Daily Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
				<u>First Service</u>	<u>Additional Service</u>
PG3	PG3 (for use with AP1)	\$ 3.66	\$0.36	\$1129.76	\$812.90
DS*	PG3 (for use with AP1)	3.66	0.36	976.46	856.50
AH**	PG3 (for use with AP1)	3.66	0.36	989.17	868.14
PG5	PG5 (for use with AP2)	18.82	1.88	1129.76	812.90
DS*	PG5 (for use with AP2)	18.82	1.88	976.46	856.50
AH**	PG5 (for use with AP2)	18.82	1.88	989.17	868.14
PG8	PG8 (for use with AP3)	18.02	1.80	1129.76	812.90

* Requires intermediate DS1 to Voice Multiplexer. (One voice channel for AP1, two voice channels for AP2 and three voice channels for AP3 and six voice channels for AP4).

** Requires intermediate Group to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(3) Program Audio Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Daily Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
				<u>First Service</u>	<u>Additional Service</u>
DS*	PG8 (for use with AP3)	\$18.02	\$1.80	\$976.46	\$856.50
AH**	PG8 (for use with AP3)	18.02	1.80	989.17	868.14
PG1	PG1 (for use with AP4)	89.69	8.97	1129.76	812.90
DS*	PG1 (for use with AP4)	89.69	8.97	976.46	856.50

* Requires intermediate DS1 to Voice Multiplexer. (One voice channel for AP1, two voice channels for AP2 and three voice channels for AP3 and six voice channels for AP4).

** Requires intermediate Group to Voice Multiplexer.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(4) Video Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Daily Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
				<u>First Service</u>	<u>Additional Service</u>
TV-1 (for use with TV1)	TV-15	\$42.36	\$17.16	\$13.10	None
TV-2 (for use with TV1)	TV-15	46.16	18.11	13.10	None
TV-15 (for use with TV1)	TV-15	64.42	25.77	13.10	None
4TV-5 (for use with TV2)	4TV-5	35.33	13.36	13.10	None
6TV-5 (for use with TV2)	6TV-5	53.00	25.79	13.10	None

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(5) Wideband Analog Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
AH-D (for use with WA1)	AH-B	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
AH-C (for use with WA1)	AH-B	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
AH-B (for use with WA1)	AH-B	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
AH-C (for use with WA2)	AH-C	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(5) Wideband Analog Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
AH-D (for use with WA2)	AH-C	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
AH-D (for use with WA2A)	AH-D	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WD-1 (for use with WA3)	WA-1	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WD-2 (for use with WA3)	WA-1	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WD-3 (for use with WA4)	WA-2	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(6) Wideband Digital Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
WB-19S (for use with WD1)	WC-19	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-18S (for use with WD1)	WC-18	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-19A (for use with WD1)	WC-19	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-50S (for use with WD2)	WC-50	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-40S (for use with WD2)	WC-40	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(6) Wideband Digital Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
WB-50A (for use with WD2)	WC-50	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-23S (for use with WD3)	WC-23S	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-23A (for use with WD3)	WC-23	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
WB-64 (for use with WD4)	DU-56	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
DO (for use with WD4)	DU-56	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(7) Digital Data Access Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DU-24 (for use with DA1)	DU-24	None	\$1207.53	\$878.93
DS* (for use with DA1)	DU-24	None	1026.52	900.06
DU-48 (for use with DA2)	DU-48	None	1208.05	879.39
DS* (for use with DA2)	DU-48	None	1026.82	900.33
DU-96 (for use with DA3)	DU-96	None	1209.09	880.33
DS* (for use with DA3)	DU-96	None	1027.33	900.79
DU-56 (for use with DA4)	DU-56	\$11.71	1241.01	1086.49
DS* (for use with DA4)	DU-56	20.40	1053.42	926.27

* Digital Data Carrier Multiplexing Equipment is required.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(8) High Capacity Services

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DS-15 (for use with HC1)	DU	\$530.67	\$287.93	\$162.00
DS-31 (for use with HC1C*)	DS-31	532.67	287.93	162.00
DS-31 (for use with HC1C)	DS-15	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
DS-63 (for use with HC2*)	DS-63	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
DS-63 (for use with HC2)	DS-15	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply

* Available only from an IC terminal location to another IC terminal location.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(A) Facility Interface Combinations (Cont'd)(8) High Capacity Services (Cont'd)

<u>IC</u>	<u>End User</u>	<u>Monthly Rates Per Service Termination</u>	<u>Nonrecurring Charges Per Service Termination</u>	
			<u>First Service</u>	<u>Additional Service</u>
DS-44 (for use with HC3*)	DS-44	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
DS-44 (for use with HC3)	DS-15	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
DS-27 (for use with HC4*)	DS-27	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply
DS-27 (for use with HC4)	DS-15	ICB rates and charges apply	ICB rates and charges apply	ICB rates and charges apply

* Available only from an IC terminal location to another IC terminal location.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(B) Voice Grade Performance

<u>End User</u>	<u>Monthly Rates *</u>	<u>Nonrecurring Charges</u>	
		<u>First Service *</u>	<u>Additional Service *</u>
Performance VGP			
VG1	\$5.72	\$355.11	\$187.21
VG2	5.72	355.11	187.21
VG3	5.72	355.11	187.21
VG4	5.72	361.12	189.82
VG5	5.72	355.46	189.82
VG6	5.72	361.12	189.82
VG7	5.72	361.12	189.82
VG8	5.72	364.89	189.82
VG9	5.72	364.89	189.82
VG10	5.72	355.46	189.82
VG11	5.72	361.12	189.82
VG12	5.72	361.12	189.82
VG13	5.72	355.11	187.21

* The monthly rates and nonrecurring charges apply on a per two-point service or each section (i.e., mid link or end link) of a multipoint service basis.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions(1) Multiplexing

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
DS4 to DS1: An arrangement that provides a 274.176 Mbps capacity to multiplex, on a digital time division basis, 168 DS1 channels. (available with HC4)		
-Per Arrangement	\$2815.56	\$1465.73
DS3 to DS1: An arrangement that provides a 44.736 Mbps capacity to multiplex, on a digital time division basis, 28 DS1 channels. (available with HC3)		
-Per arrangement	\$299.92	\$370.68
DS2 to DS1: An arrangement that provides a 6.312 Mbps capacity to multiplex, on a digital time division basis, four DS1 channels. (available with HC2)		
-Per arrangement	\$99.92	\$182.96
Mastergroup to Supergroup: An arrangement that provides a Mastergroup capacity (600 channels) to multiplex, on a frequency division basis, ten Supergroups (60 channels each). (available with WA2A)		
-Per arrangement	ICB rates charges apply	ICB rates and charges apply

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions (Cont'd)(1) Multiplexing (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
DS1C to DS1: An arrangement that provides a 3.152 Mbps capacity to multiplex, on a digital time division basis, two DS1 channels. (available with HC1C) - Per arrangement	\$20.69	\$167.32
Supergroup to Group: An arrangement that provides a Supergroup capacity (60 channels) to multiplex, on a frequency division basis, five groups (12 channels each). (available with WA2) -Per arrangement	ICB rates charges apply	ICB rates and and charges apply
Group to DS1: An arrangement that provides two group capabilities (i.e., WA1T) to multiplex to a DS1 level. (available with WA1T) -Per arrangement	ICB rates charges apply	ICB rates and and charges

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions (Cont'd)(1) Multiplexing (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
DS1 to Voice or Digital Data: An arrangement that provides a 1.544 Mbps capacity to multiplex, on a digital time division basis, 24 Voice or Digital Data* grade channels. (available with HC1) -Per arrangement	\$103.24	\$151.68
Group to Voice: An arrangement that provides a Group capacity to multiplex, on a frequency division basis, 12 Voice grade channels. (available with WA1) -Per arrangement	ICB rates charges apply	ICB rates and charges apply
Voice to Narrowband (43 Type Carrier): An arrangement that provides a voice grade capacity to multiplex, on a frequency division basis, NB4 and NB5 channels. (available with VG6) -Per arrangement	249.43	292.47

* Digital Data channels are only available from the serving wire center serving the Telephone Company designated Digital Hub. Digital Data on DS1 is used only as a component of DA1-4.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions (Cont'd)(1) Multiplexing (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
Digital Data Multiplexing: (Required with Digital Data Access service with DS facility interface at IC terminal location).			
Carrier Multiplexing Unit: An arrangement that provides a 1.544 Mbps capacity to multiplex on a digital time division basis, 23 64 kbps channels.			
- Per Unit	\$150.95	\$140.47	None
Carrier Multiplexing Plug-Ins			
- Per 64 kbps channel equipped*	1.56	53.09	\$135.20
Carrier Sub-Multiplexing Unit: An arrangement that provides a 64 kbps capacity to multiplex on a digital time division basis, subspeed Digital Data Access Services			
- Per Unit			
- 20 2.4 kbps services	146.39	88.66	167.03
- 10 4.8 kbps services	75.45	70.88	151.12
- 5 9.6 kbps services	52.45	70.88	151.12

* Required with DS1 to Digital Data channels hub multiplexing capability
(MQ1)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions (Cont'd)(2) Bridging

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
<u>Narrowband Bridges</u>		
• Two-Wire Bridging: (available with NB1-3)		
- Per Port	\$3.19	\$ 5.25
• Telegraph Bridging: (available with NB4 & NB5)		
Two-Wire		
- Per Port	3.19	6.29
Four-Wire		
- Per Port	3.19	10.45
<u>Voice Grade Bridges</u>		
• Voice Bridging: (available with VG2, 12 & 13)		
Two-Wire		
-Per Port	3.19	6.29
Four-Wire		
-Per Port	3.19	10.45
• Data Bridging: (available with VG5, 6, 10 & 13)		
Two-Wire		
-Per Port	5.27	6.29
Four-Wire		
-Per Port	5.27	10.45

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions (Cont'd)(2) Bridging (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
<u>Voice Grade Bridges</u> (Cont'd)		
Telephoto Bridging: (available with VG11)		
Two-Wire		
- Per Port	\$ 6.59	\$ 6.29
Four-Wire		
- Per Port	6.59	10.45
• DATAPHONE Select-A-Station Bridging: (Available with VG5)		
Sequential Arrangement Ports		
- Per 2-wire channel connected	24.44	6.29
- Per 4-wire channel connected	129.81	10.45
Addressable Arrangement Ports		
- Per 2-wire channel connected	26.21	6.29
- Per 4-wire channel connected	133.35	10.45

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(C) Hub Functions (Cont'd)(2) Bridging (Cont'd)

	<u>Monthly Rates</u>	<u>Daily Rates</u>	<u>Nonrecurring Charges</u>
<u>Voice Grade Bridges</u> (Cont'd)			
Telemetry and Alarm			
Bridging:			
Split Band, Active Bridging Channel Connections			
- Per channel connected	\$ 9.26	-	\$6.29
Passive Bridging			
Channel Connections			
- Per channel connected	0.84	-	6.29
Summation, Active Bridging			
Channel Connections			
- Per channel Connected	1.57	-	6.29
<u>Program Audio Bridges</u> (available with AP1-4)			
• Distribution Amplifiers			
- Per Bridge	42.00	\$4.20	35.39
<u>Digital Data Access Bridges</u> (available with DA1-4)			
• Central office bridge			
- Per Port	7.72	-	10.45

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions(1) Voice Grade Services

<u>Monthly</u> <u>Rates</u>	<u>Nonrecurring Charge</u> <u>Initial</u> <u>Subsequent</u>
--------------------------------	--

(a) Conditioning: Conditioning

provides more specific transmission characteristics for data or telephone services. There are two types of data conditioning, C-Type and DA-Type. C-Type conditioning controls attenuation distortion and envelope delay distortion; DA-Type conditioning controls the signal to C-notched noise ratio and intermodulation distortion. Telephoto conditioning controls attenuation distortion and envelope delay distortion.

Conditioning is charged for on a per two-point service or each section (i.e., mid link or endlink) basis. The parameters listed for each type of conditioning apply from point of interface to network interface. For two-point services, the parameters apply to each service. For multipoint services, the parameters apply to any path between

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(1) Voice Grade Services (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
(a) <u>Conditioning:</u> (Cont'd)			
any two service terminal points. C-Type and DA-Type conditioning are available only for data Services. C-Type and DA-Type conditioning may be combined on the same service. Telephoto conditioning is available only for VG11 services.			
(1) <u>C-Type Conditioning:</u>			
For the additional control of attenuation distortion and envelope delay distortion on data services.			

Attenuation Distortion
(Frequency Response)
Relative to 1004 Hz

<u>Frequency Range (Hz)</u>	<u>Variation (dB)</u>
400-2800	-1.0 to +2.0
300-3000	-1.0 to +3.0
300-3200	-2.0 to +6.0

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(1) Voice Grade Services (Cont'd)

<u>Monthly</u>	<u>Nonrecurring Charge</u>	
<u>Rates</u>	<u>Initial</u>	<u>Subsequent</u>

(a) Conditioning: (Cont'd)(2) DA-Type Conditioning: (Cont'd)

The signal to C-notched noise ratio and intermodulation distortion parameters for DA-Type conditioning are:

- Signal to C-Notched Noise Ratio is equal to or greater than 32dB
- Intermodulation distortion:
 - Signal to second order modulation products (R2) is equal to or greater than 38dB
 - Signal to third order modulation products (R3) is equal to or greater than 42dB

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(1) Voice Grade Services (Cont'd)

<u>Monthly</u>	<u>Nonrecurring Charge</u>	
<u>Rates</u>	<u>Initial</u>	<u>Subsequent</u>

(a) Conditioning: (Cont'd)(2) DA-Type Conditioning: (Cont'd)

When a service equipped with DA-Type conditioning is used for voice communications, the quality of the voice transmission may not be satisfactory.
(available with VG6, 7 & 10)

- Per Two-Point Service or each section (i.e., mid link or end link) of a Multi-point Service	\$1.46	\$9.43	\$681.34
---	--------	--------	----------

(3) Telephoto Conditioning:

For the control of attenuation distortion and envelope delay distortion on tele-photographic services. The attenuation distortion and envelope delay distortion parameters for Tele-photo Conditioning are:

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(1) Voice Grade Services (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
(a) <u>Conditioning:</u> (Cont'd)			
(3) <u>Telephoto Conditioning</u> (Cont'd)			
<u>Attenuation Distortion</u> (1004Hz Reference)			
<u>Frequency</u>	<u>Variation</u>		
<u>Range (Hz)</u>	<u>(dB)</u>		
500-3000	-0.5 to +1.5		
300-3200	-1.0 to +2.5		
<u>Envelope Delay Distortion</u>			
<u>Frequency</u>	<u>Variation</u>		
<u>Range (Hz)</u>	<u>(mcs)</u>		
1000-2600	110		
800-2800	180		
(available with VG11 only)			
- Per Two-Point Service or each section (i.e., mid-link end link) of a Multipoint Service	\$3.23	\$9.13	\$681.04

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(1) Voice Grade Services (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
(b) Improved Return Loss for effective two-wire transmission at the end user premises. This option is applicable to all interfaces except E&M, SF & DX when the impedance code 2 is specified. The Improved Return Loss parameters are set forth in the Transmission Performance descriptions of the services with which this option is available. (available with VG2, 3 & 7)			
- Per end user premises, per service	\$1.95	\$13.59	\$39.80
(c) Improved Return Loss at four-wire point of interface, applicable to each two-wire leg of effective four-wire channel. The Improved Return Loss parameters are set forth in the Transmission Performance descriptions of the services with which this option is available. (available with VG1-12)			
- Per IC terminal location, per service	1.95	24.68	50.89

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(1) Voice Grade Services (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
(d) IC specified end user premises receive level within a range acceptable to the Telephone Company on effective four-wire transmission. (available with VG2, 3, 7, 8 & 9)			
- Per end user premises per service	None	\$9.63	\$35.84

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(2) Program Audio Services

	<u>Monthly Rates</u>	<u>Daily Rates</u>	<u>Nonrecurring Charge</u>	
			<u>Initial</u>	<u>Subsequent</u>
(a) Gain Conditioning: Control of 1004 Hz AML at initiation of service to 0dB+ 0.5 dB. (available with AP1-4) - Per Service	\$4.32	\$0.43	\$57.62	\$338.95
(b) Stereo - provision of a pair of gain/phase equalized channels for stereo applications. (Additional AP channel must be ordered separately). (available with AP4) - Per Service	None	None	57.62	338.95

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(3) Digital Data Access Services

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
(a) Loop Transfer Arrangement: An arrangement that affords the end user an additional measure of protection to its access channel (s) on a 1xN basis. This arrangement is only available from a Telephone Company designated digital hub. A key activated control service is required to operate the transfer arrangement. This control service must be separately ordered from the appropriate Telephone Company IntraLATA tariff. (available with DA1, 2, 3 & 4)			
- Per Arrangement	\$16.92	\$87.96	\$186.33

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.3 Features and Functions (Cont'd)(D) Optional Features and Functions (Cont'd)(4) High Capacity Services

	<u>Monthly Rates</u>	<u>Nonrecurring Charge</u>	
		<u>Initial</u>	<u>Subsequent</u>
(a) Automatic Protection Switching: Switching equipment placed at both ends of a duplicate standby service to automatically switch the standby service to the active state in the event of service failure. Duplicate 1.544 Mbps Service must also be ordered. (available with HC1)			
- Per Arrangement	\$281.15	\$68.27	\$159.66

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 Special Access Lines

Each:	Monthly Rates	Daily Rates	<u>Nonrecurring Charges</u>	
			<u>First</u>	<u>Additional</u>
2-Wire* (for use with NB1-5, VG1-13 and AP1-4)	\$ 34.28	\$ 3.35**		
4-Wire* (for use with NB4-5, VG1-13 and DA1-4)	54.20	-		
TV* (for use with TV1-2)	292.45	249.16		
Group* (for use with WA1)	ICB rates and Charges apply	-		
Supergroup* (for use with WA2)	ICB rates and Charges apply	-		

* See 7.4.2 preceding for application of Special Access Service Surcharge.

** Daily rates are applicable only when used with AP1-4.

ACCESS SERVICE

•

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 Special Access Lines (Cont'd)

Each:	Monthly Rates
Mastergroup* (for use with WA2A)	ICB rates and charges apply
20 kHz* (for use with WA3)	ICB rates and charges apply
13kHz* (for use with WA4)	ICB rates and charges apply
19.2 kbps* (for use with WD1)	ICB rates and charges apply
50 kbps* (for use with WD2)	ICB rates and charges apply
230.4 kbps* (for use with WD3)	ICB rates and charges apply

* See 7.4.2 preceding for application of Special Access Service Surcharge.

ACCESS SERVICE

•

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 Special Access Lines (Cont'd)

Each:

Monthly
Rates56 kbps*
(for use with WD4)ICB rates
and charges
applyDS1*-1.544 Mbps
(for use with HC1)

\$110.83

DS1C*-3.152 Mbps
(for use with HC1C)ICB rates
and charges
applyDS2*-6.312 Mbps
(for use with HC2)ICB rates
and charges
applyDS3*-44.736 Mbps
(for use with HC3)ICB rates
and charges
applyDS4*=274.176 Mbps
(for use with HC4)ICB rates
and charges
apply

* See 7.4.2 preceding for application of Special Access Service Surcharge.

ACCESS SERVICE

•

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 Special Access Lines (Cont'd)

<u>Optional Feature</u>	<u>Monthly Nonrecurring Rates</u>	<u>Charge</u>
Hybrid: Provides conversion from 4-wire SAL to 2-wire termination at end user premises. Required to meet effective four-wire performance with a 2-wire end user premises facility interface.	\$5.36	\$13.59
	<u>Monthly Rates</u>	
<u>Special Access Service Surcharge*</u>		
Per Voice equivalent channel	\$25.00	

* See 7.4.2 preceding for application of Special Access Service Surcharge.

ACCESS SERVICE

8. Billing and Collection Services

The Telephone Company may, at the option of an IC, provide the following services:

- (A) Recording Service,
- (B) Billing Service,
- (C) Billing Analysis Service, and
- (D) Billing Information Service

8.1 Recording Service

The Telephone Company may provide Recording Service in Association with the offering of Feature Groups C and D Switched Access Service for IC messages that can be recorded by Telephone Company provided automatic message accounting equipment. In addition, where the Telephone Company records the IC messages on manual tickets, the Telephone Company may provide Recording Service for the manual tickets.

The Telephone Company may provide Recording Service in its operating territory. The minimum territory for which the Telephone Company will provide Recording Service is all the appropriately equipped offices in a state operating territory for which the IC has ordered Feature Group C or D Switched Access Service.

The term "IC message" used herein denotes a completed call originated by the IC's end user. An IC message begins when answer supervision from the IC terminal location is received by Telephone Company recording equipment indicating that the called party has answered. An IC message ends when disconnect supervision is received by Telephone Company recording equipment from either the IC terminal or the IC end user premises from which the call originated.

8.1.1 General Description

Recording Service is the recording of the details of an IC message and, when requested by the IC, the provision of those details to the IC. Recording Service includes recording, assembly and editing, and provision of recorded IC message detail.

Recording is the entering on magnetic tape or other acceptable media the details of IC messages originated through Switched Access Service for which answer and disconnect supervisor has been received. Recording is provided 24 hours a day, 7 days a week.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.1 General Description (Cont'd)

Assembly and editing is the aggregation of the recorded IC message details to create individual messages and the verification that the data required for rating, in accordance with the standard format established by the Telephone Company, is present. Assembly and editing is performed at least once a week.

Provision of IC message detail is the provision of magnetic tapes containing the assembled and edited IC message detail and when requested by the IC, data-transmitting the assembled and edited IC message detail to the IC. Except for lost or damaged records, the recorded detail will be available to the IC not more than five business days after the date all the detail requested by the IC was processed by the Telephone Company.

8.1.2 Undertaking of the Telephone Company

- (A) The Telephone Company will record all IC messages carried over Features Groups C and D Switched Access Service that are available to Telephone Company provided recording equipment or operators. Unavailable IC messages (i.e., certain Feature Group C operator and TSPS messages which are not accessible by Telephone Company provided recording equipment or operators) will not be recorded. The recording equipment will be provided at locations selected by the Telephone Company. Assembly and editing will be performed on all IC messages recorded during the billing period established by the Telephone Company. Except as set forth in 8.1.2(F) and 8.1.3 following, recorded message detail from previous billing periods will not be recovered and made available to the IC.
- (B) A standard format for the provision of the recorded IC message detail will be established by the Telephone Company and provided to the IC. If, in the course of Telephone Company business, it is necessary to change the format, the Telephone Company will notify the involved ICs six months prior to the change.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.2 Undertaking of the Telephone Company (Cont'd)

- (C) The recorded IC message detail provided to the IC will not be sorted to furnish detail by specific end users, groups of end users, by office or by location.
- (D) Recorded IC message detail will be provided to an IC as set forth in (E) following. The Telephone Company will determine the number of magnetic tapes or data files required to provide the recorded message detail to the IC.
- (E) At the request of an IC, magnetic tapes containing the recorded IC message details will be provided to the IC as part of Recording Service. The magnetic tapes will be provided without the return of previously supplied tapes. The Telephone Company will supply the magnetic tapes. Unless specified otherwise by the IC, the magnetic tapes will be sent to the IC via first class U.S. Mail service. However, the IC may pick up the magnetic tapes at a location designated by the Telephone Company or request that the detail on the magnetic tapes or in a data file be data-transmitted to the IC. When the IC message details are data-transmitted to an IC location, the data transmission charges will be determined on an individual case basis. When the IC does not wish to receive the recorded IC message details, and the Telephone Company receives notice from the IC at least two weeks prior to the date the details would be sent to the IC, the charge as set forth in 8.1.7 (C) following does not apply.
- (F) At the IC's request, the Telephone Company will make every reasonable effort to recover recorded IC message detail previously made available to the IC and make it available again for the IC. The charges as set forth in 8.1.7 (C) following will apply for all such detail provided. When the IC message details are data-transmitted to an IC location, the data transmission charges will be determined on an individual case basis. Such a request must be made within 30 days from the date the details were initially made available to the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.3 Liability of the Telephone Company

Notwithstanding 2.1.3 preceding, the Telephone Company liability for Recording Service is as follows:

- (A) If IC 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 IC messages and associated revenue based on previously known values. This estimated IC message volume will be included along with the IC message detail provided to the IC and/or provided for Message Processing Service. In such events the extent of the Telephone Company's liability for damages shall be limited to the granting of a corresponding credit adjustment to the IC amounts due to account for the unbillable revenue.
- (B) When the Telephone Company is notified that, due to error or omission, incomplete data have been provided to an IC, the Telephone Company will make every reasonable effort to locate and/or recover the data and provide new magnetic tapes to the IC at no additional charge. Such request to recover the data must be made within 30 days from the date the details were initially made available to the IC. If the data cannot be recovered, the extent of the Telephone Company's liability for damages shall be limited as set forth in (A) preceding.
- (C) In the absence of willful misconduct, no liability for damages to the IC or other person or entity other than as set forth in (A) and (B) preceding shall attach to the Telephone Company for its action or the conduct of its employees in providing Recording Service.

8.1.4 Obligations of the IC

- (A) The IC shall order Recording Service under a Special Order where the service is desired.

The IC shall order Recording Service at least one month prior to the date when the IC message detail is to be recorded.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.4 Obligations of the IC (Cont'd)

- (B) The IC shall order provision of recorded IC message detail at least one month prior to the date when it wishes to receive the recorded message detail. However, the IC may wish to receive magnetic tapes of the recorded detail or have the recorded detail data-transmitted to an IC location at sometimes and not at others. Therefore, change in the provision of recorded IC message detail to the IC will be accommodated provided the IC gives two weeks advance written notification to the Telephone Company.
- (C) The IC's terminal location shall provide such signals as may be required for the proper operation of the Telephone Company's automatic message accounting equipment used to perform the detail recordings.

8.1.5 Payment Arrangements and Audit Provision(A) Audit Provision

Upon reasonable written notice by the IC to the Telephone Company, the IC shall have the right through its authorized representative to examine and audit, during normal business hours and at reasonable intervals as determined by the Telephone Company, all such records and accounts as may under recognized accounting practices contain information bearing upon the recording of messages for which amounts may be payable to the IC. Adjustment shall be made by the proper party to compensate for any errors or omissions disclosed by such examination or audit. Neither such right to examine and audit nor the right to receive such adjustment shall be affected by any statement to the contrary, appearing on checks or otherwise, unless such statement expressly waiving such right appears in a letter signed by the authorized representative of the party having such right and delivered to the other party.

All information received or reviewed by the IC or its authorized representative is to be considered confidential and is not to be distributed, provided or disclosed in any form to anyone not involved in the audit, nor is such information to be used for any other purpose.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.5 Payment Arrangements and Audit Provision (Cont'd)(B) Minimum Period and Minimum Monthly Charge

The minimum period for which Recording Service is provided and for which charges apply is one month. The minimum monthly charges are the charges for IC messages recorded, IC messages assembled and edited (except when Message Processing Service is ordered for the same monthly period) and when ordered by the IC, provision of IC message detail on magnetic tapes or data files. If the service is cancelled or discontinued prior to entering the IC message detail on magnetic tapes or data files, the minimum monthly charge will be the charge for all IC messages recorded, assembled and edited for a 30 day period. The Telephone Company will use the most recent 30 day period for which data is available to determine the minimum charge.

(C) Cancellation of a Special Order

An IC may cancel a Special Order for Recording Service on any date prior to the service date. The cancellation date is the date the Telephone Company received written or verbal notice from the IC that the Special Order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. The service date for Recording Service is the date the IC requests the recordings to start.

When an IC cancels a Special Order for Recording Service after the order date but prior to the start of service, the minimum monthly charges will apply.

(D) Changes to Special Orders

When an IC requests changes to a pending Special Order for Recording Service, the pending Special Order will be cancelled, and the requested changes will be undertaken if they can be accommodated by the Telephone Company under a new Special Order. All cancellation charges as set forth in (C) preceding will apply for the cancelled Special Order.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.6 Rate Regulations

- (A) For each IC message recorded, the recording and the assembling and editing charges apply except when the IC orders Message Processing Service. When Message Processing Service as set forth in 8.2.1 following is ordered for the same month that Recording Service is ordered, the assembling and editing charge does not apply per IC message.

The charges for recording and for assembly and editing apply per message recorded and per message assembled and edited whether or not the IC's schedule of rates specifies billing on a per message basis or any other basis.

- (B) The per Special Order charge applies for each Special Order accepted by the Telephone Company for Recording Service.
- (C) When message detail is entered on a data file or magnetic tape for provision of message detail to an IC, the per tape charge applies for each data file or magnetic tape prepared, and the per record charge applies for each record processed. A record is a logical grouping of information as described in the programs that process the information and load the magnetic tapes or data file. The Telephone Company will determine the charges based on the number of data files or magnetic tapes prepared and on its count of the records processed. The number of records processed will be determined using the number of records input to or the number of records output from the programs that process the information and load the magnetic tapes or data file, whichever number of records is higher.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.1 Recording Service (Cont'd)8.1.7 Rates and Charges

The rates and charges are:

	<u>Rates</u>
(A) Recording,	
- Per IC Message	\$0.0314
- Per Special Order	20.00
(B) Assembling and editing	
- Per IC message	ICB rates and charges apply
(C) Provision of IC Message	
- Per record processed	ICB rates and charges apply

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service

At the request of an IC, the Telephone Company with reasonable notice and reasonable effort may provide Billing Service.

The Telephone Company may provide Billing Service in its operating territory. The minimum territory for which the Telephone Company will provide Billing Service is its operating territory when the Telephone Company supplies the input records at the IC's request. When the IC supplies the input records, the Telephone Company will process the input records supplied by the IC as set forth in 8.2.1 and 8.2.2 following.

The Telephone Company will provide two types of Billing Service: 1) Message Billing Service as set forth in 8.2.1, and 2) Private Line Billing Service as set forth in 8.2.2 following.

The Telephone Company will provide Bill Processing Service and Private Line Billing Service only on the condition that (1) it purchases the accounts receivable, if any, from the IC as set forth in 8.2.3 following or (2) the Telephone Company agrees to act as billing agent for the IC.

The Telephone Company will not render bills under this tariff for the provision and/or delivery of telegrams, flowers, gifts, wine or other like services that an IC offers.

8.2.1 Message Billing Service

Message Billing Service consists of Message Processing Service and Bill Processing Service. An IC may order Message Processing Service or Bill Processing or both services.

(A) General Description(1) Message Processing Service Message Processing

Service is the transforming of the recorded IC call details into rated messages in preparation for billing. Message Processing Service includes initial data entry and rating of messages.

Initial data entry if the assembly of recorded IC call details into IC messages. This function includes editing and verification of recorded details to assure that the data required for rating are present.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(A) General Description (Cont'd)(1) Message Processing Service (Cont'd)

Rating of IC messages is the computing of applicable charges for each IC message based on the IC provided schedule of rates. Rating also includes the preparation of IC message detail for input to Bill Processing Service, the IC, or other entities.

Further, rating is always performed and editing may be performed coincident with the implementation of a change in the IC's schedule of rates.

(2) Bill Processing Service

Bill Processing Service is the preparation of bills for message-billed service and bulk-billed service, mailing of statements of the amounts due for service received from the IC and the collection of deposits and monies due from the end users. Bill Processing Service includes message-billed (when necessary) and bulk-billed account establishment, posting of rated messages and rate elements, rendering of bills, collection of deposits, receiving payments, maintenance of accounts, treatment of accounts, message investigation and inquiry (when ordered by the IC).

Bulk-billed service is a billing service for an end user account with a Dedicated Access Line (DAL) Service to the end user premises where individual IC messages are not posted to the account and are not listed on the bill rendered to the end user.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(A) General Description (Cont'd)(2) Bill Processing Service (Cont'd)

Message-billed service is a billing service for an end user account with an end user common line where individual IC messages are posted to the account and are listed on the bill rendered to the end user. Message-billed service is also a billing service for an IC credit card end user account without an end user common line or Dedicated Access Line (DAL) Service where individual messages or groups of messages are posted to the account and listed on the bill rendered to the end user.

Account establishment is the preparation of an IC end user record so that a bill can be sent to that end user.

Posting of rated messages is the processing for billing of rated messages. Posting also is the examination and identification of all the ratable elements specified by the IC to be billed to an end user. Application of appropriate IC rates and charges to all such rate elements is also included when requested by the IC. The rating may be performed by the Telephone Company, another entity or the IC. Editing and rating of rate elements is performed when IC services are established or changed. Rating is always performed, and editing may be performed coincident with the implementation of a change in the IC's schedule of rates.

Rendering of bills is the preparation and mailing of statements of the deposits and amounts due from the end user for IC message-billed and bulk-billed services. These statements may, at Telephone Company choice, be included as part of the regular monthly bill for local Telephone Exchange Service mailed to the end user.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(A) General Description (Cont'd)(2) Bill Processing Service (Cont'd)

Receiving payment and maintenance of accounts is the collecting of monies from end users for services furnished by the IC and maintenance of records of all transactions.

Treatment of accounts is the forwarding of notices of delinquent or unpaid end user accounts, posting of credits and adjustments, and when necessary as determined by the Telephone Company, denial of the IC's services and/or local telephone exchange services to an end user. Where local telephone exchange service access is denied, access to IC service will also be denied.

Message investigation is that activity undertaken by the Telephone Company to secure, or attempt to secure, proper billing information for IC messages.

Inquiry is the answering of end user questions about charges billed for IC services and application of credits and adjustments to end user accounts and review of IC messages removed from an end user's bill.

(B) Undertaking of the Telephone Company(1) Message Processing Service

- (a) When Message Processing is ordered by an IC, the Telephone Company will process all of the IC messages it possesses as set forth in (b) through (l) following at rates and charges set forth in (G) following.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(1) Message Processing Service (Cont'd)

- (b) The Telephone Company will provide Message Processing Service only for IC messages originating or recorded within the operating territory of the Telephone Company. The IC messages which the Telephone Company will process may be IC messages from Recording Service as set forth in 8.1 preceding or, at the direction of the IC, other IC messages which are chargeable in accordance with the rate schedule furnished by the IC.

Any sent-paid coin IC messages provided as input by the IC will be processed unless the IC specifies in writing that such IC messages are not to be processed. When such IC messages are processed message processing charges will apply. When such messages are not processed they may not be included in any IC message detail provided to the IC.

- (c) A record of IC call details is required to provide Message Processing Service. Where an IC subscribes to Recording Service as set forth in 8.1 preceding, those recorded details may be used as the input. Where the IC provides the call details, the records must be in the standard format established by the Telephone Company and delivered to the location specified by the Telephone Company. The charges as set forth in (G) (12) following will apply if the IC data-transmits its call details to the

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(1) Message Processing Service (Cont'd)

(c) (Cont'd)

Telephone Company. If the IC provided records must be converted by the Telephone Company to the standard format, and the Telephone Company agrees to make the conversion, the program development charges as set forth (G) (3) following apply for the hours required to design, develop, test and maintain the necessary programs. The assembling and editing charge, as set forth in 8.1.7(B) preceding, applies in addition to all other charges for all such details converted by the Telephone Company. The Telephone Company will provide to the IC the precise details of the required standard format. If, in the course of Telephone Company business, it is necessary to change the standard format, the Telephone Company will provide notification to the involved ICs six months prior to the change. If the IC requests the IC provided call details be reprocessed by the Telephone Company because of an IC error, the Telephone Company will reprocess the IC provided call details and the appropriate charges as set forth in (G) following will apply.

(d) The Telephone Company will develop the IC's schedule of rates into a rating program. Program development charges, as set forth in (G) (3) following, apply for the hours required to design, develop, test and maintain the necessary programs.

(e) Upon acceptance by the Telephone Company of a Special Order for Message Processing Service from an IC, the Telephone Company will determine the period of time to implement such service on an individual order basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(1) Message Processing Service (Cont'd)

- (f) Changes in the rate levels of IC charges to be billed will normally be implemented within 30 days after receipt of a Special Order from the IC requesting such changes. Such changes will require modifications of the rating program. Program development charges, as set forth in (G) (3) following, apply for the hours required to design, develop, test and maintain the necessary program changes. If any IC message detail must be reprocessed in order to apply the rate changes, the appropriate message processing charges as set forth in (G) (1) and (G) (2) following apply for all IC messages processed.
- (g) Changes in the rate structure for IC services to be billed also require a change in the rating program. When the Telephone Company determines that it can accommodate the changes, the conditions and the period of time required to make such changes will be determined on an individual order basis. Program development charges, as set forth in (G) (3) following, apply for the hours required to design, develop, test, and maintain the necessary program changes. If any IC message detail must be reprocessed in order to apply the rate structure changes, the appropriate message processing charges as set forth in (G) (1) and (G) (2) following apply for all IC messages reprocessed.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(1) Message Processing Service (Cont'd)

(h) Where the Telephone Company has rated IC messages which are to be billed to an end user by another Exchange Telephone Company, the Telephone Company will enter the IC messages on a magnetic tape or data file which can be used for data transmission of the details. When the IC has so arranged with an involved Exchange Telephone Company, the Telephone Company will transmit the rated IC message details to such other Exchange Telephone Company for billing to end users in its operating territories. When the IC does not have billing arrangements with an Exchange Telephone Company, rated IC messages for such an Exchange Telephone Company will be delivered to the IC. The charges as set forth in (G) (4) following apply to rated IC messages that are data-transmitted to the other Exchange Telephone Companies. The charges as set forth in (G) (5) following apply to rated IC messages that are delivered to the IC. When the IC message details are data-transmitted to the IC location, the data transmission charges will be determined on an individual case basis. Program development charges as set forth in (G) (3) following apply for the hours required to design, develop, test and maintain the necessary programs.

(i) Where the rates for IC services have been implemented under an accounting order pending final approval from a regulatory agency, the Telephone Company will, upon written request from the IC, keep such records as may be required to make any adjustments to the end users as may be ordered by the regulatory agency. The charges for such a service will be determined on an individual case basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(1) Message Processing Service (Cont'd)

- (j) The Telephone Company will, upon request, provide the IC the rated IC message detail.

The rated IC message detail will be provided on a request by request basis in a format similar to that used by the Telephone Company as input to Bill Processing Service. All rated IC message detail available to the Telephone Company will be provided to the IC. The rated IC message detail will not be sorted to furnish detail by specific end users, groups of end users, by office or by location. The Telephone Company will provide the IC detail on a magnetic tape. The magnetic tapes will, be provided without the return of previously supplied tapes. The Telephone Company will supply the magnetic tapes. Program development charges, as set forth in (G) (3) following, apply for the hours required to design, develop, test and maintain the necessary programs. When a magnetic tape is provided, the charges as set forth in (G) (5) following also apply.

Unless specified otherwise by the IC, the magnetic tapes will be sent to the IC using first class U.S. Mail service. However, the IC may pick up the magnetic tapes at a location designated by the Telephone Company or request the information on the magnetic tapes be data-transmitted to the IC. When the information is data-transmitted to an IC location, the data transmission charges will be determined on an individual case basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(1) Message Processing Service (Cont'd)

(k) If the IC makes a request within 30 days of the date the IC details were initially made available to the IC, the Telephone Company will make a reasonable effort to recover the IC detail and make it available again to the IC. The charges set forth in (G) (5) will apply for all such IC detail provided. When the IC details are data-transmitted to an IC location, the data transmission charges will be determined on an individual case basis.

(1) IC messages which the Telephone Company processes that cannot be rated in accordance with the IC rates schedule will be reviewed by Telephone Company message investigation groups. Upon completion of the review, rated IC messages will be delivered to the IC when the IC orders such service or to Bill Processing Service when the IC orders such service. Unrated messages will be handled in accordance with instructions that have been mutually determined by the Telephone Company and the IC. At the request of the IC, the unrated IC messages will be reviewed for unauthorized use of the IC service by Telephone Company message investigation groups for a period of up to 90 days after the IC message was processed. The appropriate charges, as set forth in (G) (5) following or (G) (7) and (G) (8) following, will apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service

- (a) When Bill Processing Service is ordered by an IC, the Telephone Company will establish and maintain end user accounts and prepare and render bills for all IC messages, bulk-billed messages and related rate elements it possesses as set forth in (b) through (n) following at rates and charges as set forth in (G) following. The Telephone Company will not establish an end user account with any IC balance due.

In addition, the Telephone Company will, in accordance with Telephone Company deposit regulations, determine and collect a deposit from the end user for the IC service. The Telephone Company will, when necessary in accordance with the Telephone Company deposit regulations, determine and collect the service deposit when an end user account is established or for established accounts when the first IC message is posted to the end user account.

The Telephone Company will, when necessary in accordance with the Telephone Company deposit regulations, maintain a service deposit balance for each end user account. Service deposits will not be maintained by individual IC accounts but will be maintained for the end user account in general. The Telephone Company will provide the IC a copy of its service deposit regulations upon request from the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

(b) The Telephone Company will provide Bill Processing Service for message-billed service, bulk-billed service and related rate elements which are posted to end user accounts located within the operating territory of the Telephone Company only. The Telephone Company will separate the rated IC messages into a message-billed group and a bulk billed group for application of rates as set forth in (G) following.

(c) At the request of the IC, the Telephone Company may prepare and distribute IC credit cards by first class U.S. Mail service. The Telephone Company will assign the credit card number and will mark its records and files to show that an end user has been issued an IC credit card.

The Telephone Company will specify the information it requires to issue a credit card and the format to be used by the IC in furnishing such information. The charges as set forth in (G) (13) following apply. Plastic coated paper cards will be distributed unless the IC requests another type of card be provided. Charges to prepare and distribute other such cards will be developed on an individual case basis. When it becomes necessary as determined by the Telephone Company, to change the credit card number or discontinue the billing of credit card calls to an end user account because of nonpayment of charges or unauthorized use of Telephone Company and IC service offerings, the Telephone Company will notify the IC. The Telephone Company will provide the IC the credit card number, associated

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

(c) (Cont'd)

end user account name and billing address for the credit card number change or billing discontinued. All charges for calls associated with such a discontinued credit card after the IC has been notified will become the responsibility of the IC. End user questions concerning the issuing of IC credit cards will not be handled by the Telephone Company.

- (d) Rated IC messages are required to provide Bill Processing Service. If the IC subscribes to Message Processing Service as set forth in (1) preceding, the rated IC messages may be used as the input. If the IC provides the rated IC messages, those IC messages must be in the standard format established by the Telephone Company and delivered to the location specified by the Telephone Company. The charges as set forth in (G)(12) following apply if the IC data- transmits its rated message data to the Telephone Company.

Such IC provided rated message data must identify the end user account to be billed. If the IC provided rates messages must be converted by the Telephone Company to the standard format and the Telephone Company agrees to make the conversion, program development charges as set forth in (G)(3) following apply for the hours required to design, develop, test and maintain the necessary programs. The assembling and editing charge, as set forth in 8.1.7(B) preceding, applies in addition to all other charges for all such rated IC messages converted by the Telephone Company.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

(d) (Cont'd)

The Telephone Company will provide to the IC the precise details of the required format. If, in the course of Telephone Company business, it is necessary to change the format, the Telephone Company will notify the involved ICs six months prior to the change. If the IC requests the IC provided rate IC messages be reprocessed by the Telephone Company because of an IC error, the Telephone Company will reprocess the IC provided rated IC messages and the appropriate charges as set forth in (G) following will apply.

(e) For end user accounts in its operating territory where the IC has ordered Bill Processing Service, the Telephone Company will bill all rated IC messages provided by the IC. The bill format will be determined by the Telephone Company.

(f) Upon acceptance by the Telephone Company of a Special Order for Bill Processing Service from an IC, the Telephone Company will determine the conditions and the period of time to implement such service on an individual order basis. Program development charges, as set forth in (G) (3) following, apply for the hours required to design, develop, test and maintain the necessary programs including any programs to rate, change the rates of or change the rate structure of any rate elements associated with the IC services.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

- (g) The Telephone Company will provide Bill Processing Service only on the condition that (1) it purchases the accounts receivable from the IC as set forth in 8.2.3 following or (2) the Telephone Company agrees to act as billing agent for the IC.
- (h) The Telephone Company will not provide any information related to Bill Processing Service accounts under this section of the tariff. Bill Processing Services information may be obtained as set forth in 8.4 following.
- (i) The Telephone Company may, at the option of the IC, provide message-billed Bill Processing Service with or without inquiry and bulk-billed Bill Processing Service with or without inquiry. When the Telephone Company provides inquiry, the Telephone Company will be responsible for contacts and arrangements with the IC's end users concerning the billing, collecting, crediting and adjusting of the IC service charges, except prior IC balances due from end users, in accordance with written instructions furnished by the IC. At the request of the IC when the IC has ordered inquiry, the billed IC messages which are removed from an end user's bill in accordance with IC inquiry instructions will be reviewed for unauthorized use of IC service by Telephone Company message investigation groups for a period of up to 90 days after the billed IC message has been removed from an end user's

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

(i) (Cont'd)

bill. For any billed IC messages removed from an end user's bill in accordance with IC inquiry instructions, the Telephone Company will make appropriate adjustments to the IC's accounts receivable. When the Telephone Company provides Bill Processing Service without inquiry, all contacts from IC end users concerning the IC billed amounts will be referred to the IC, and the Telephone Company will only be responsible for contacts with IC's end users concerning the collection of IC service deposits and charges, except prior IC balances due from end users. Inquiry will only be provided when the IC is provided Bill Processing Service at the same time for the same operating area.

(j) The Telephone Company will accept the IC gift certificates for payment from end users if the IC agrees in writing to redeem all such gift certificates. The format of the gift certificate must be acceptable to the Telephone Company.

(k) Rated IC messages input to Bill Processing Service which the Telephone Company cannot bill for any reason will be reviewed by the Telephone Company's message investigation groups. Upon completion of the review, the billable messages will be posted and the appropriate charges, as set forth in (G) (7) and (G) (8) following, will apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

(k) (Cont'd)

Unbillable messages will be handled in accordance with instructions that have been mutually determined by the Telephone Company and the IC. At the request of the IC, the rated IC messages which cannot be billed to an end user will be reviewed for unauthorized use of IC service by Telephone Company message investigation groups for a period of up to 90 days after the rated IC message was processed.

- (1) The Telephone Company will post rated IC messages to the appropriate end user account when it identifies an IC message to be billed to an end user and will mark the appropriate end user account when an IC credit card is issued to an end user. The Telephone Company will bill to an end user other IC message-billed service charges, such as provision of a credit card, issuing of a credit card, blocking of third number billing, time and rate charges, and subscription charges when it receives an order for such services from an IC. Other IC message-related charges, such as directory assistance and DIAL-IT charges, will be billed to the end user based on IC message data received from Message Processing Service or from the IC. The Telephone Company will make adjustments to end user balances due to account for application of credits authorized by IC inquiry instructions and IC furnished statements.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(2) Bill Processing Service (Cont'd)

(m) The Telephone Company will establish an end user account for IC bulk-billed service when it receives an order from an IC to perform such activity for a specific end user and will bill IC bulk-billed charges to the end user. The Telephone Company will bill other IC bulk-billed rate elements, such as provision of a bulk-billed service access line, installation of an access line and provision of an access line extension, when it receives a Special Order for such services from when it receives a Special Order for such services from an IC. Other IC message- related charges for bulk-billed service, such as directory assistance and DIAL-IT charges, will be billed to the end user based on IC message data received from Message Processing Service or from the IC. The Telephone Company will make adjustments to end user balances due to account for application of credits authorized by IC inquiry instructions and IC furnished statements.

(n) Where the rates for IC services have been implemented under an accounting order pending final approval from a regulatory agency, the Telephone Company will, upon written request from the IC, keep such records as may be required to make any adjustments to the end users as may be ordered by the regulatory agency. The charges for such a service will be determined on an individual case basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)(3) Message Billing Service Ordering

- (a) The Telephone Company will provide Message Billing Services under a Special Order. For all Message Billing Service, other than establishment of or changes to end user account data (including credit card data), establishment of or changes to end user account rate elements and changes to end user balances due, the Message Billing Service Special Order charge as set forth in (G) (14) following will apply to orders accepted by the Telephone Company. The format of this Special Order will be specified by the Telephone Company.
- (b) The Telephone Company will arrange with the IC to accept under a Special Order end user account information to establish and change end user account data (including credit card data), establish and change end user account rate elements and change end user balances due. The methods, procedures and manner in which the end user account data and changes are forwarded to the Telephone Company must be agreeable to the Telephone Company. The charges to handle such Special Orders will be determined on an individual case basis.

(C) Liability of the Telephone Company

Notwithstanding 2.1.3 preceding, the Telephone Company liability for Message Billing Service is as follows:

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(C) Liability of the Telephone Company (Cont'd)

- (1) If Bill Processing Service detail is not available because the Telephone Company lost or damaged records or incurred processing system outages, the Telephone Company will attempt to recover the lost IC detail. If the lost IC detail cannot be recovered and the Telephone Company recorded the details, the IC detail and the extent of the Telephone Company's liability for damages will be as set forth in 8.1.3(A) preceding. If the lost IC detail cannot be recovered and the IC provided the detail, the IC will be requested to resupply the detail. If the IC cannot resupply the detail, the detail and the extent of the Telephone Company's liability for damages will be as set forth in 8.1.3(A) preceding. This recovered detail will be included in message detail provided to the IC when the IC orders such service and any recovered IC messages will be billed.
- (2) When the Telephone Company is notified that, due to its error or omission, incomplete IC detail has been provided, as set forth in 8.2.1(B)(1)(i) preceding and/or 8.4 following, to an IC, the Telephone Company will make a reasonable effort to recover and provide the IC detail to the IC at no additional charge. Such request to recover the IC detail must be made within 30 days from the date the IC detail was initially made available to the IC. If the detail cannot be recovered, the extent of the Telephone Company's liability for damages shall be limited as set forth in 8.1.3(A) preceding.
- (3) If the Telephone Company finds, or is notified of, an error in billing to an end user, it will make a reasonable effort to correct the error and bill the appropriate end user within the limits permitted by laws of the state in which it provides the service. If the error is caused by the Telephone Company and the Telephone Company cannot timely bill the proper end user, the extent of the Telephone Company's liability for damages will be the known amount misbilled or when the amount misbilled is unknown, limited as set forth in 8.1.3(A).

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(C) Liability of the Telephone Company (Cont'd)

- (4) In the absence of willful misconduct, no liability for damages to the IC or other person or entity other than as set forth in (1), (2) and (3) preceding shall attach to the Telephone Company for its action or the conduct of its employees in providing Message Billing Service.

(D) Obligations of the IC

- (1) The IC shall order Message Billing Services under a Special Order where service is desired. The IC shall be responsible for all balances due from end users that exist prior to ordering Bill Processing Service.

At the time Message Processing Service and/or Bill Processing Service is initially ordered, the IC shall order the service for 1, 3 or 5 years. Thereafter, upon six months' written notice, additional service may be ordered for 1, 3 or 5 years at the rates and charges as set forth in (G) following. The IC may order inquiry for a service period that is different from that for Bill Processing. However, the IC shall not order inquiry unless it also has ordered Bill Processing Service for the same period and the same operating area. Not later than six months prior to the end of an order period, the IC shall notify the Telephone Company in writing if any service is to be discontinued at the end of the period. If no notice is received from the IC, the Telephone Company will automatically extend the services for another year, using the most recent 12 months of capacity provided. The IC will be notified by the Telephone Company when such an extension is made. All appropriate charges, as set forth in (G) following, for another year will apply and the minimum charges will be based on the most recent 12 months of message capacity and/or bill capacity provided.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

- (2) When Message Processing Service is ordered, the IC shall furnish the Telephone Company, and for each year in the order, an estimate of the number of messages (message capacity), including those messages which will be bulk billed, to be processed.

In addition, when Bill Processing Service is ordered, the IC shall furnish the Telephone Company, for each year in the order, an estimate of the number of message-billed and/or bulk-billed messages (bill capacity) for which billing is to be provided. Separate estimates shall be furnished by the IC for message-billed messages and bulk-billed messages. The capacity estimate for inquiry for each year shall be the same as that for message-billed and/or bulk-billed messages.

- (3) The IC shall furnish all information necessary for the Telephone Company to provide the Message Billing Service, including any per month service charges applicable to an end user and an affidavit that states whether the IC service is subject to any Federal taxes and/or State taxes. When IC messages are to be billed by an entity other than the Telephone Company, the IC shall furnish written instructions as to how the rated IC messages are to be provided to that other entity. If the IC does not furnish complete instructions, all resulting unbillable messages will be delivered to the IC. The information shall be furnished by the IC in a timely manner.
- (4) The IC shall furnish to the Telephone Company a written schedule of its rates and charges in sufficient time to allow the Telephone Company to establish a rating program. The IC's rate structure must be consistent with established Telephone Company rating methodologies. The interval required to establish a rating program must be mutually agreeable to the Telephone Company and the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

- (5) When the IC orders Bill Processing Service, it shall authorize the Telephone Company in writing to deny service to end users for nonpayment. If that authorization is not received, Bill Processing Service will not be provided.
- (6) The IC shall be responsible for all contact and arrangements, including prior IC balances due from end users, with its end users concerning the provision and maintenance of the IC's service.
- (7) When the IC orders message-billed or bulk-billed Bill Processing Service with inquiry, the IC shall furnish to the Telephone Company written instructions, which are agreeable to the Telephone Company, for the handling of end user questions about bills.

When the IC orders message-billed or bulk-billed Bill Processing Service without inquiry, the IC shall furnish the Telephone Company with written instructions as to where inquiries are to be referred.

When the IC does not order inquiry service and desires credit adjustments be made to the end user balance due, the IC shall furnish a statement for each end user account where the credit is desired. These statements shall show the IC message, the date the IC message was billed and the amount of the credit. These statements shall be furnished to the Telephone Company under a Special Order as set forth in (B) (3) (b) preceding.

The IC shall notify its end users through its tariff or other appropriate means when the IC handles the bill inquiries. The IC shall furnish the Telephone Company in writing all end user bill adjustment statements.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

- (8) The IC will immediately redeem all IC gift certificates the Telephone Company receives in payment for any end user charges. The IC agrees to use a gift certificate format which is agreeable to the Telephone Company.
- (9) The IC agrees to permit the Telephone Company to, when necessary in accordance with Telephone Company deposit regulations, determine and collect IC service deposits from all end users of the IC's services for which the Telephone Company provides billing for the IC. The IC will notify its end users through its tariffs or other means that the Telephone Company will, when necessary in accordance with Telephone Company deposit regulations, determine and collect IC service deposits. The IC will also include in its tariff and service arrangements and obtain regulatory concurrence for the Telephone Company deposit regulations that the Telephone Company will use to determine and collect end user service deposits.
- (10) When the IC desires that a credit card be issued by the Telephone Company for an end user, the IC shall furnish the credit card information as specified by the Telephone Company. The information shall include a statement from the IC that the end user has requested the credit card. When the IC is notified by the Telephone Company that an IC credit card billing is discontinued, the IC shall notify the appropriate end user. The IC also agrees to be responsible for all charges to the discontinued credit card after receipt of notice of discontinuance and all charges to an IC credit card where the end user states in writing to the Telephone Company that the end user did not request the credit card.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

- (11) When the IC furnishes recorded IC detail for Message Processing Service and/or rated IC message detail for Bill Processing Service, it shall be responsible to deliver the detail to the location specified by the Telephone Company and it shall retain a copy of the detail furnished for at least 90 days.

(E) Payment Arrangements and Audit Provision(1) Audit Provision

Upon written notice by the IC to the Telephone Company, the IC shall have the right, through its authorized representative, to examine and audit, during normal business hours and at reasonable intervals determined by the Telephone Company, all such records and accounts as may under recognized accounting practices contain information bearing upon the amount payable to the IC. Adjustment shall be made by the proper party to compensate for any errors or omission disclosed by such examination or audit. Neither such right to examine and audit nor the right to receive such adjustment shall be affected by any statement to the contrary, appearing on checks or otherwise, unless such statement expressly waiving such right appears in a letter signed by the authorized representative of the party having such right and delivered to the other party.

Any information received or reviewed by the IC or its authorized representative during the audit is to be considered confidential and not to be distributed, provided or disclosed in any form to anyone not involved in the audit, nor is such information to be used for any other purpose.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(E) Payment Arrangements and Audit Provision (Cont'd)(2) Minimum Period

The minimum period for which Message Billing Service is provided and for which charges apply is one year. If the IC orders Message Processing Service and/or Bill Processing Service for 3 or 5 years, then the minimum period and the period for which charges apply is that period ordered by the IC. A minimum period of 1, 3 or 5 years, as ordered by the IC, applies for each additional period of service ordered.

If the service is discontinued prior to the end of the period ordered, monthly charges apply for each remaining month and fraction of a month. The monthly charge will be one-twelfth of the minimum yearly charge.

(3) Minimum Order Capacities and Minimum Yearly Charges

Message Billing Service is subject to minimum order capacities and minimum yearly charges. The minimum order capacities are the message capacity and bill capacity as specified in (a) following. The minimum yearly charge as specified in (b) or (c) following, whichever is higher, shall apply.

- (a) The message capacity ordered by the IC for any year in a 3 or 5 year order for Message Processing Service shall not be lower than 25 percent of the largest message capacity ordered for any year in a 3 or 5 year order. The bill capacity ordered by the IC for any year in a 3 or 5 year order for Bill Processing Service shall not be lower than 25 percent of

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(E) Payment Arrangements and Audit Provision (Cont'd)(3) Minimum Order Capacities and Minimum Yearly Charges (Cont'd)

(a) (Cont'd)

the largest bill capacity ordered for any year in a 3 or 5 year order. The minimum yearly bill capacity for message-billed messages and bulk-billed messages will be determined separately based on the estimates the IC furnishes as set forth in (D) (2) preceding. The minimum yearly capacity ordered for each year for inquiry shall be the same as that for message-billed and/or bulk-billed messages.

(b) For Message Processing Service, the minimum yearly charge is the product of the message capacity per year furnished by the IC as set forth in (D) (2) and (a) preceding and the appropriate Message Processing Service rate times 0.9. The appropriate Message Processing Service rate is the Message Processing Service rate as set forth in (G) (1) following for the specific year period ordered.

For Bill Processing Service, the minimum yearly charge is the product of the message-billed bill capacity and/or bulk-billed bill capacity per year furnished by the IC as set forth in (D) (2) and (a) preceding and the appropriate Bill Processing Service message-billed and/or bulk-billed rate times 0.9. The minimum yearly charge for message-billed messages and bulk-

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Message Billing Service (Cont'd)(E) Payment Arrangements and Audit Provision (Cont'd)(3) Minimum Order Capacities and Minimum Yearly Charges (Cont'd)

(b) (Cont'd)

billed messages will be determined separately based on the estimates the IC furnished as set forth in (D) (2) and (a) preceding. The appropriate Bill Processing Service message-billed rate is the average of the message-billed rates as set forth in (G) (7) following for the specific message-billed service year period ordered. The appropriate Bill Processing Service bulk-billed rate is the bulk-billed rate as set forth in (G) (7) following for the specific bulk-billed service year period ordered.

For inquiry, the minimum yearly charge for message-billed inquiry and bulk-billed inquiry will be determined separately. For message-billed inquiry, the minimum yearly charge is the product of the message-billed bill capacity for the year furnished by the IC as set forth in (D) (2) and (a) preceding and the appropriate message-billed inquiry rate times 0.9. For bulk-billed inquiry, the minimum yearly charge is the product of the bulk-billed bill capacity for the year furnished by the IC as set forth in (D) (2) and (a) preceding and the appropriate bulk-billed inquiry rate time 0.9. The appropriate message-billed inquiry rate is the average of the message-billed inquiry rates as set forth in (G) (7) following for the year period ordered. The appropriate bulk-billed inquiry rate is the bulk-billed inquiry rate as set forth in (G) (7) following for the year period ordered.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(E) Payment Arrangements and Audit Provision (Cont'd)(3) Minimum Order Capacities and Minimum Yearly Charges (Cont'd)

- (c) For Message Processing Service, the minimum yearly charge is the difference of the message capacity per year furnished by the IC as set forth in (D) (2) and (a) preceding and the year allowance times the appropriate message Processing Service rate. The year allowance will be determined by the Telephone Company and will be the total IC messages for the ICs processed by the Telephone Company in the calendar year prior to the year for the minimum yearly charge times 0.05. The appropriate Message Processing Service rate is the Message Processing Service rate as set forth in (G) (1) following for the specific year period ordered.

For Bill Processing Service, the minimum yearly charge is the difference of the message-billed bill capacity plus the bulk-billed bill capacity for the year furnished by the IC as set forth in (D) (2) and (a) preceding and the year allowance times the appropriate Bill Processing Service message-billed or bulk-billed rate. The minimum yearly charge for message-billed messages and bulk-billed messages will be determined separately based on the estimates the IC furnishes as set forth in (D) (2) and (a) preceding and a prorate of the allowance. The allowance will be prorated using the ratio of the message-billed bill capacity furnished by the IC for the year for which the minimum yearly charge is determined.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(E) Payment Arrangements and Audit Provision (Cont'd)(3) Minimum Order Capacities and Minimum Yearly Charges (Cont'd)

(c) (Cont'd)

The year allowance will be determined by the Telephone Company and will be the total IC messages for all ICs billed by the Telephone Company in the calendar year prior to the year for the minimum yearly charge times 0.05. The appropriate Bill Processing Service message-billed rate is the average of the message-billed rate as set forth in (G) (7) following for the year period ordered. The appropriate Bill Processing Service bulk-billed rate is the bulk-billed rate as set forth in (G) (7) following for the year period ordered. For inquiry, the minimum yearly charge will be determined for the year by using the message-billed bill capacity or the bulk-billed bill capacity less a prorate of the year allowance times the appropriate inquiry message billed or bulk-billed inquiry rate. The minimum yearly charge for message-billed inquiry and bulk-billed inquiry will be determined separately. The prorate of the allowance will be the same as that set forth in the preceding paragraph.

When the Message Processing Service rates are not shown separately and are included in the Bill Processing Service rates, the Message Processing Service minimum yearly charges will not apply. When the inquiry rates are not shown separately and are included in the Bill Processing Service message-billed processing and bulk-billed processing rates, the inquiry minimum yearly charges will not apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(E) Payment Arrangements and Audit Provision (Cont'd)(4) Cancellation of a Special Order

An IC may cancel a Special Order for Message Billing 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 IC that the Special Order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. The service date for Message Billing Service is the date the IC and the Telephone Company mutually agree the service is to start.

When an IC cancels a Special Order for Message Billing Service after the order date, but prior to the start of service, a charge equal to the Special Order charges, program development costs and any nonrecoverable capital costs incurred by the Telephone Company will apply to the IC.

(5) Changes to Special Orders

When an IC requests changes to a pending Special Order for Message Billing Service, such changes will be undertaken if they can be accommodated by the Telephone Company. A charge equal to any costs incurred by the Telephone Company because of the change will apply.

(F) Rate Regulations

- (1) The Message Processing and Bill Processing Service message charges apply during the yearly periods by the IC. The Telephone Company will not initiate rate changes to the Message Processing Service charges as set forth in (G) (1) following or the Bill Processing Service charges as set forth in

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(1) (Cont'd)

(G) (7) following that apply to the IC order during the yearly periods for that specific order. For the purpose of determining the charges applicable to bulk-billed service for Bill Processing Service, a bulk-billed message is an IC message which is used by the Telephone Company to develop the IC bulk-billed charge.

- (2) During any yearly period in which the actual IC messages processed and/or billed exceeds the message capacity as stated in the following, additional charges apply. For Message Processing Service, for each IC messages processed that exceeds (a) 110 percent of the message capacity ordered for the year or (b) the message capacity ordered plus the year allowance, whichever of (a) or (b) is lower, the appropriate charges for the specific service ordered as set forth in (G) (1) and (G) (2) following apply. The year allowance is the quantity determined as set forth in (E) (3) (c) preceding. For Bill Processing Service, for each message-billed IC message processed that exceeds (a) 110 percent of the message-billed bill capacity ordered or (b) the message-billed bill capacity plus the prorated allowance, whichever of (a) or (b) is lower, the appropriate charges for the specific service ordered as set forth in (G) (7) and (G) (8) following apply. The prorated allowance is the quantity determined as set forth in (E) (3) (C) preceding.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(2) (Cont'd)

For Bill Processing Service, for each bulk-billed IC message processed that exceeds (a) 110 percent of the bulk-billed bill capacity ordered or (b) the bulk-billed bill capacity plus the prorated allowance, whichever of (a) or (b) is lower, the appropriate charges for the specific service ordered as set forth in (G) (7) and (G) (8) following apply. The prorated allowance is the prorated quantity determined as set forth in (E) (3) (c) preceding.

For each year for message-billed inquiry, the additional charges will apply for the same capacity that additional charges apply for message-billed messages. The appropriate charges for the specific inquiry ordered as set forth in (G) (7) and (G) (8) apply.

For each year for bulk-billed inquiry, the additional charges will apply for the same capacity that additional charges apply for bulk-billed messages. The appropriate charges for the specific inquiry ordered as set forth in (G) (7) and (G) (8) apply.

For each IC message processed and/or billed between the message capacity ordered and the allowance (i.e. 110 percent level or order plus allowance level, whichever applies) specified in the preceding paragraphs, the appropriate rate as set forth in (G) (1) or (G) (7) will apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(2) (Cont'd)

The IC, at its option, may order additional capacity for inquiry and capacity required to process and/or bill the additional messages at the rates as set forth in (G) following subject to the minimum period and minimum yearly charges as set forth in (E) (2) and (E) (3) preceding. When more than one order exists at the same time for an IC, the rates for inquiry, IC messages processed and/or billed that exceed the total inquiry, message and/or bill capacity, respectively, for all existing orders will be the appropriate rates for the most recent order, plus the appropriate additional inquiry, message and/or bill processing charge as set forth in (G) (2) and (G) (8) following for the most recent order.

(3) The Message-Billed Service charge applies each month that one or more messages or related rate elements are billed to an end user. When both interstate and state IC messages are billed by the Telephone Company to the end user on the same bill for the IC, the Message Billed Service Charge times 0.5 applies each month. When more than one copy of the end user bill is provided to the end user, the Message-Billed Service charge applies for each additional copy of the end user bill provided.

(4) A Bulk-Billed Service charge applies each month that one or more bulk-billed charges are billed to an end user. When both interstate and state IC bulk-billed charges are billed by the Telephone Company to the end user on the same bill for the IC, the Bulk-Billed Service Charge times 0.5 applies each month. When more than one copy of the end user bill is provided to the end user, the Bulk-Billed Service charge applies for each additional copy of the end user bill provided.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

- (5) When message detail is data-transmitted to or received from an Exchange Telephone Company location by the Telephone Company, a charge as set forth in (G)(4) following, on a per record basis will apply. A record is a logical grouping of information as described in the program that processes the information and loads the magnetic tape or data file used to supply the message detail which is data-transmitted. The Telephone Company will determine this charge based on its count of the records transmitted.
- (6) When message detail is data-transmitted to or received from an IC location by the Telephone Company, a charge, as set forth in (G)(6) and/or (G)(12) following, on a per record basis will apply. A record is a logical grouping of information as described in the program that processes the information and loads the magnetic tape or data file used to supply the message detail which is data-transmitted. The Telephone Company will determine this charge based on its count of the records transmitted and/or received.
- (7) The Message Billing Service Special Order charge applies for each Special Order for Message Processing Service and/or Bill Processing Service, other than establishment of or changes to end user account data (including credit card data), establishment of or changes to end user account rate elements and changes to end user balances due, accepted by the Telephone Company.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(7) (Cont'd)

The End User account activity charges apply whenever an IC Special Order requests end user account data be established or changed, nonrecurring or recurring IC rate element be added or changed in an end user account and/or an end user balance due be changed.

An end user account is a record for message-billed service or a bulk-billed service which has a unique name and address and billing identification number, assigned by the Telephone Company, to which a bill is rendered.

The end user account activity Special Order charge always applies and the end user account establishment and change charge, end user account rate element rate level change charge, or the end user account rate element rate structure change charge may apply depending on the activity ordered by the IC as set forth in (a), (b), (c) and (d) following.

- (a) The end user account activity Special Order charge applies whenever the IC furnishes to the Telephone Company end user account information that establishes or changes the information, rates or balance due associated with an end user account.
- (b) The end user account establishment and change charge applies whenever IC furnished information is used by the Telephone Company to establish or change end user account data or rate elements, or balances due, except for information to change end user account rate element rate levels or rate structure. End user account rate element rate level and rate structure change charges are applied as set forth in (c) and (d) following.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(7) (Cont'd)

(b) (Cont'd)

In addition, the end user account establishment and change charge does not apply when rated IC messages are posted to a message-billed account associated with an end user common line. The end user account establishment and change charge does not apply when an IC credit card is listed on a message-billed account associated with an end user common line and does not apply for any subsequent preparation or distribution of an IC credit card. The end user account establishment and change charge does apply when the Telephone Company, at the request of an IC, establishes or changes a message-billed account with a credit card but without an associated end user common line. The end user account establishment and change charge applies for each account established, rate element established, account changed (except for credit card changes), rate element changed and balance due changed.

(c) The end user account rate element rate level change charge applies whenever IC furnished information is used by the Telephone Company to change an end user account rate element rate level. The charge applies for each end user account rate element rate level changed.

(d) The end user account rate element rate structure change charge applies whenever IC furnished information is used by the Telephone Company to change an end user account rate element rate structure. The charges to make the end user account rate element rate structure changes will be determined on an individual case basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

- (8) When message detail is entered on a data file or magnetic tape to be provided to an IC, the per tape charge applies for each data file or tape prepared and the per record charge applies for each record processed. A record is a logical grouping of information as described in the programs that process the information and load the magnetic tapes or data file. The Telephone Company will determine the charges based on the number of data files or tapes prepared and on its count of the records processed. The number of records processed will be determined using the number of records input to or the number of records output from the programs that process the information and load the magnetic tapes or data file whichever number of records is higher.
- (9) The rates as set forth in (G) (7) apply for Bill Processing Service for an IC message-billed service depending on the total (i.e., sum of interstate and intrastate IC messages) number of messages billed for an end user account per month. The rate groups are 1 to 10 messages per month, 11 to 100 messages per month, 101 to 600 messages per month and over 600 messages per month. The rate for the largest number of IC messages billed for the end user account in a month will be used to determine the Bill Processing Service charges for that end user account for the month. The Telephone Company will determine the charges based on its count of IC messages billed each bill day to an end user account.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

- (10) When the Telephone Company receives an order from the IC to issue one or more IC credit card(s) to an end user, Special Order and Credit Card Issuance preparation and distribution charges apply. If the IC requests another card to be issued for any reason, the preparation and distribution charges apply. If for any reason the IC requests a change to be made in the credit card information maintained on an end user account by the Telephone Company, including the marking of the account to show issuance of a credit card by the IC or discontinuance of an existing card, and the IC does not request the distribution of a credit card, only the preparation charge applies. The Telephone Company will determine the charges based on its record of the Special Orders to prepare and distribute IC credit cards received from the IC.
- (11) The basic per hour rate and the premium per hour rate for program development is for the use of one hour of one Telephone Company programmer's time.
- (12) The Telephone Company will keep a count of the hours and fraction thereof used by Telephone Company personnel to provide program development and will bill the IC in accordance with these records. The hours for each service ordered will be summed and then rounded to the nearest hour, except that when the total is less than one hour, one hour will be used to determine the charges.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(G) Rates and Charges

The rates and charges are:

(1) Message Processing Service

Rates

- | | |
|------------------------------|---|
| - 1 year period, per message | * |
| - 3 year period, per message | * |
| - 5 year period, per message | * |

- (2) Additional Message Processing,
 - per message above the message
 - capacity ordered and allowance
 specified

#

- (3) Program Development,
 - Basic, per hour
 (applicable to work performed
 within the Telephone Company's
 normal work schedule and using the
 normal work force)

ICB rates
and charges
apply

- Premium, per hour
 - (applicable to work performed
 outside the Telephone Company's
 normal work schedule and/or which
 requires additions to the
 work force)

ICB rates
and charges
apply

* The Message Processing Service rate for each specific offering is included in the appropriate Bill Processing Service rate set forth in (7) following.

The Additional Message Processing rate is included in the Additional Bill Processing message-billed processing rate or bulk-billed processing rate, as appropriate, set forth in (7) following.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(G) Rates and Charges (Cont'd)

	<u>Rates</u>
(4) Data transmission of rated IC messages detail between other Exchange Telephone Company locations,	
- per record transmitted	ICB rates and charges apply
- per record received	ICB rates and charges apply
(5) Provision of rated IC message detail,	
- per record processed	ICB rates and charges apply
- per tape or data file	ICB rates and charges apply
(6) Data transmission to an IC location of rated IC message details,	
- per record transmitted	ICB rates and charges apply

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)

8.2 Billing Service (Cont'd)

8.2.1 Message Billing Service (Cont'd)

(G) Rates and Charges (Cont'd)

(7) Bill Processing Service

	<u>Rates</u>			
	Messages per End User			
	<u>Account Per Month</u>			
	1 to	11 to	101 to	Over
	<u>10</u>	<u>100</u>	<u>600</u>	<u>600</u>
- 1 year period, per message	\$0.1035	\$0.1035	\$0.1035	\$0.1035
- 3 year period, per message	ICB	ICB	ICB	ICB
- 5 year period, per message	ICB	ICB	ICB	ICB
message-billed inquiry,				
- 1 year period, per message	*	*	*	*
- 3 year period, per message	*	*	*	*
- 5 year period, per message	*	*	*	*

	<u>Rates</u>
bulk-billed processing,	
- 1 year period, per message	\$0.1035
- 3 year period, per message	ICB rates and
charges apply	
- 5 year period, per message	ICB rates and
charges apply	
bulk-billed inquiry,	
- 1 year period, per message	#
- 3 year period, per message	#
- 5 year period, per message	#

* The message-billed inquiry rate is included in the appropriate message-billed processing rate set forth preceding.

The bulk-billed inquiry rate is included in the appropriate bulk-billed processing rate set forth preceding.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(G) Rates and Charges (Cont'd)

	<u>Rates</u>
(8) Additional Bill Processing, per message above the bill capacity ordered and allowance specified,	
- message-billed processing, each	\$0.1035
- message-billed inquiry, each	*
- bulk-billed processing, each	0.1035
- bulk-billed inquiry, each	#
(9) Message-Billed Service, in which one or more messages or message service related rate elements are billed,	
- per bill rendered for an end user account	0.47
(10) Bulk-Billed Service, in which a charge associated with a bulk-billed service is billed,	
- per bill rendered for an end user account,	0.47

* The Additional Bill Processing message-billed inquiry rate is included in the Additional Bill Processing message-billed processing rate set forth preceding.

The Additional Bill Processing bulk-billed inquiry rate is included in the Additional Bill Processing bulk-billed processing rate set forth preceding.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Message Billing Service (Cont'd)(G) Rates and Charges (Cont'd)

	<u>Rates</u>
(11) End User Account Activity,	ICB rates
- Special Order Charge to receive end user account data	and charges apply
- End User Account Establishment and Change, except rate element rate level changes and rate structure, charge, per end user account established or changed, per recurring or nonrecurring rate element established or changed and end user balance due changed, each	*
- End User Account Rate Element Rate Level Change Charge, per rate element changed, each	*
- End User Account Rate Element Rate Structure Change Charge, per rate element changed,	ICB rates and charges apply each
(12) Data transmission from an IC location of Message Billing Service detail or information, - per record received	ICB rates and charges apply
(13) Credit Card Issuance,	
- preparation, per end user account	*
- distribution, per card	ICB rates and charges apply

* Rates for these offerings are included in the Bill Processing Service message-billed processing and bulk-billed processing rates, as appropriate, set forth in (7) preceding.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)

8.2 Billing Service (Cont'd)

8.2.1 Message Billing Service (Cont'd)

(G) Rates and Charges (Cont'd)

	<u>Rates</u>
(14) Message Billing Service Special Order Charge, - per Special Order	\$20.00
(15) Retention of Records Under Accounting Orders, - per order per month	ICB rates and charges apply

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.1 Private Line Billing Service

The Telephone Company may provide Private Line Billing Service only for those IC private line services for which the Telephone Company is providing Special Access Service. The Telephone Company will not render bills for IC private line services for which it does not provide Special Access Service that are connected at end user premises to IC private line services for which it does render bills.

The Telephone Company will not render bills for usage-based rate elements under this section of the tariff. Usage-based rate elements will be billed as set forth in 8.2.1 preceding.

(A) General Description

Private Line Billing Service includes editing and rating, account establishment, rendering of bills, receiving payments, maintenance of accounts, treatment of accounts and inquiry (when ordered by the IC).

Editing and rating is the examination and identification of all the ratable elements of an IC private line service and the application of the appropriate IC rates and charges to the service. These functions are performed when private line services for an IC's end user are established or changed. Rating is always performed, and editing may be performed, coincident with the implementation of a change in the IC's schedule of rates.

Account establishment is the preparation of an IC end user record so that a bill can be sent to that end user.

Rendering of bills is the preparation and mailing of statements of the amounts due from end users for service received from the IC. These statements may, at Telephone Company choice, be included as part of the regular monthly bill for local Telephone Exchange Service mailed to the end user.

Receiving payment and maintenance of accounts is the collecting of deposits and monies from end users for services furnished by the IC and maintenance of records of all transactions.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(A) General Description (Cont'd)

Treatment of accounts is the forwarding of notices of delinquent or unpaid end user accounts, posting credits and adjustments, and when necessary as determined by the Telephone Company, denial of the IC's Special Access Service.

Inquiry is the answering of end user questions about charges for IC services and negotiating of credits and adjustments to end user accounts and review of IC charges which are removed from an end user's bill.

(B) Undertaking of the Telephone Company

- (1) When Private Line Billing Service is ordered by an IC, the Telephone Company will establish a Private Line Account, edit and rate the billing detail, bill the end user and maintain and treat the Private Line Account (based on the rate and end user data supplied by the IC) at the rates and charges as set forth in (G) following, as set forth in (2) through (14) following. The Telephone Company will not establish a Private Line end user account with an IC balance due. In addition, the Telephone Company will, in accordance with Telephone Company deposit regulations, determine and collect a deposit from the end user for the IC service. The Telephone Company will, when necessary in accordance with Telephone Company deposit regulations, determine and collect the service deposit when an end user account is established. The Telephone Company will, when necessary in accordance with Telephone Company deposit regulations, maintain a service deposit balance for each end user account. The Telephone Company will provide the IC a copy of its deposit regulations upon request from the IC.

The Telephone Company will make adjustments to end user balances due to account for application of credits authorized by IC furnished statements.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)

- (2) Private Line Billing Service records and end user accounts will be maintained by the Telephone Company in a standard format in order to identify the end user and bill the format in order to identify the end user and bill the ratable elements. The Telephone Company will establish this format and provide it to the IC. The Telephone Company will also establish the format it will use to bill private line services and provide it to the IC. If, in the course of Telephone Company business, it is necessary to change these formats, the Telephone Company will notify the involved ICs six months prior to the change.
- (3) The Telephone Company will develop the IC's schedule of rates and charges into a rating program. Program development charges, as set forth in (G)(3) following, apply for the hours required to design, develop, test and maintain the necessary programs.
- (4) Upon acceptance by the Telephone Company of a Special Order for Private Line Billing Service from an IC, the Telephone Company will determine the period of time to implement such service on an individual case basis.
- (5) Changes in the rate levels of IC services to be billed will normally be implemented within 60 days after receipt of a Special Order from the IC requesting such changes. Such changes will require modifications of the rating program. Program development charges, set forth in (G)(3) following, apply for the hours required to design, develop, test and maintain the necessary program changes.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)

- (6) Changes in the rate structure of the IC services to be billed also require a change in the rating programs. When the Telephone Company determines that it can accommodate the changes, the conditions and the period of time required to make such changes will be determined on an individual case basis. Program development charges, as set forth in (G)(3) following, apply for the hours required to design, develop, test and maintain the necessary program changes.
- (7) The Telephone Company will not provide any information related to Private Line Billing Service accounts under this section of the tariff. Private Line Billing Service information may be obtained as set forth in 8.4 following.
- (8) The Telephone Company may, at the option of the IC, provide Private Line Billing with or without inquiry. When the Telephone Company provides Private Line Billing with inquiry, the Telephone Company will be responsible for contacts and arrangements with the IC's end users concerning the billing, collecting, crediting and adjusting of the IC service charges, except prior IC balances due from end users, in accordance with written instructions furnished by the IC. At the request of the IC, the billed IC charges which are removed from the end user bill in accordance with the IC inquiry instructions will be reviewed for unauthorized use of the IC service by Telephone Company message investigation groups for a period of up to 90 days after the billed IC charges have been removed from the end user's bill. For any billed IC charges which are removed from an end user's balance due in accordance with the IC's instructions, the Telephone Company will make an appropriate adjustment to the IC's accounts receivable.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)

(8) (Cont'd)

When the Telephone Company provides Private Line Billing without inquiry, all contacts from IC end users concerning the IC's billed amounts will be referred to the IC and the Telephone Company will only be responsible for contacts with IC's end users concerning the collection of IC service charges, except prior IC balances due from end users. Inquiry will only be provided for those end user accounts for which the IC has ordered Private Line Billing.

(9) When the Telephone Company encounters bills which are to be rendered to end users or end user billing addresses not located in the Telephone Company's operating territory or in a state where Private Line Billing Service has not been ordered, such bills will be handled as follows:

(a) If the bill to the end user is for a service for which the Telephone Company provides a Special Access Service to the IC and the IC has ordered the appropriate Private Line Billing Service, the Telephone Company will bill the end user.

(b) In all other situations, the bill will be delivered to the IC and the IC shall be responsible to furnish an accounts receivable adjustment to the Telephone Company as set forth in 8.2.3 following.

(10) The Telephone Company will accept IC gift certificates for payment from end users if the IC agrees in writing to redeem all such gift certificates. The format of the gift certificates must be acceptable to Telephone Company.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(B) Undertaking of the Telephone Company (Cont'd)

- (11) Where the rates for IC services have been implemented under an accounting order pending final approval from a regulatory agency, the Telephone Company will, upon written request from the IC, keep such records as may be required to make any adjustments to the end users as may be ordered by the regulatory agency. The charges for such a service will be determined on an individual case basis.
- (12) The Telephone Company will provide Private Line Billing Services under a Special Order.
For all Private Line Billing Services other than establishment of or changes to end user account data, establishment of or changes to end user account rate elements and changes to end user balances due, the Private Line Billing Service Special Order charge as set forth in (G) (5) following will apply to orders accepted by the Telephone Company. The format of this Special Order will be specified by the Telephone Company.
- (13) The Telephone Company will arrange with the IC to accept under a Special Order end user account information to establish and change end user account data, establish and change end user account rate elements and change end user balances due. The methods, procedures and manner in which the end user account data and changes are forwarded to the Telephone Company must be agreeable to the Telephone Company. The charges to handle such Special Orders will be determined on an individual case basis.
- (14) If the IC requests the Private Line bills be reprocessed by the Telephone Company because of an IC error, the Telephone Company will treat the reprocessing as a rate level or rate structure change. Determination of whether the reprocessing is a rate level change or rate structure change will be made by the Telephone Company based on the Special Order the Telephone Company receives from the IC. All appropriate charges as set forth in (G) following will apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(C) Liability of the Telephone Company

Notwithstanding 2.1.3 preceding, the Telephone Company liability for Private Line Billing Service is as follows:

- (1) If Private Line Billing detail is not available because the Telephone Company lost or damaged records or incurred processing system outages, the Telephone Company will recover the lost detail based on previously received information. This recovered detail will be provided to the IC if the IC has ordered the appropriate Billing Information Service as set forth in 8.4 following. If the detail cannot be recovered, the extent of the Telephone Company's liability for damages will be the known amount not billed or when the amount not billed is unknown, no more than 3 months charges for the services not billed.
- (2) When the Telephone Company is notified that, due to its error or omission, incomplete detail has been provided to the IC when such detail has been ordered as set forth in 8.4 following, the Telephone Company will make a reasonable effort to recover the detail and provide such information to the IC at no additional charge to the IC. Such request to recover the detail must be made within 30 days from the date the details were initially made available to the IC. If the detail cannot be recovered, the extent of the Telephone Company's liability for damages will be the known amount not billed or when the amount not billed is unknown, no more than 3 months charges for the services not billed.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(C) Liability of the Telephone Company (Cont'd)

- (3) If the Telephone Company finds, or is notified of, an error in billing to an end user, it will make a reasonable effort to correct the error and bill the appropriate end user within the limits permitted by laws of the state in which it provides the service. If the error is caused by the Telephone Company and the Telephone Company cannot timely bill the proper end user, the extent of the Telephone Company's liability for damages will be the known amount misbilled is unknown, no more than 3 months charges for the services misbilled.
- (4) In the absence of willful misconduct, no liability for damages to the IC or other person or entity other than that as set forth in (1), (2) and (3) preceding shall attach to the Telephone Company for its action or the conduct of its employees in providing Private Line Billing Service.

(D) Obligations of the IC

- (1) The IC shall order Private Line Billing Service under a Special Order where service is desired.

When Private Line Billing Service is ordered initially, the IC shall order the service for at least one year. Thereafter, upon six months written notice, additional service may be ordered for a minimum of one year and the rates and charges as set forth in (G) following will apply. Not later than six months prior to the end of a order period, the IC shall notify the Telephone Company in writing if service is to be discontinued at the end of the period. If not notice is

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

(1) (Cont'd)

received from the IC, the Telephone Company will automatically extend the service for an additional year, using the most recent 12 months of bill capacity provided. All appropriate rates and charges as set forth in (G) following for another year will apply and the minimum monthly charges will be based on the most recent 12 months of bill capacity provided. The IC will be notified by the Telephone Company when such an extension is made.

(2) When Private Line Billing Service is ordered, the IC shall furnish the Telephone Company for each year in the order an estimate of the average number of bills (bill capacity) to be rendered each year.

(3) The IC shall furnish in the format specified by the Telephone Company all information necessary for the Telephone Company to provide the Private Line Billing Service including an affidavit that states whether the IC Private Line Service is subject to any Federal taxes and/or State taxes. When IC bills are to be rendered to locations not in the operating territory of the Telephone Company, the IC shall furnish an address where the bills are to be sent. If the IC does not furnish an address, all unaddressable bills will be delivered to the IC. The information shall be furnished by the IC in a timely manner.

(4) The IC shall furnish to the Telephone Company a written schedule of its service rates and charges in sufficient time to allow the Telephone Company to establish a rating program. The interval required to establish a rating program must be mutually agreed to by the Telephone Company and the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

- (5) When the IC orders Private Line Billing Service, it shall authorize the Telephone Company in writing to deny service to end users for nonpayment. If that authorization is not received, Private Line Billing Service will not be provided.
- (6) The IC shall be responsible for all contacts and arrangements, including prior IC balances due from end users, with its end users concerning the provision and maintenance of the IC's services.
- (7) When the IC orders Private Line Billing Service with inquiry, the IC shall furnish the Telephone Company written instructions which are agreeable to the Telephone Company, for the handling of end user questions about bills.

When the IC orders Private Line Billing Service without inquiry, the IC shall furnish the Telephone Company with written instructions as to where inquiries are to be referred. When the IC does not order Telephone Company Inquiry service and desires credit adjustments be made to the balances due from an end user, the IC shall furnish a statement for each end user account where the credit is desired. These statements shall show the rate element to be credited, the date the rate element was billed and the amount of the credit.

The IC shall notify its end users through its tariff or other appropriate means when the IC handles the bill inquiries. The IC shall furnish the Telephone Company in writing all bill adjustments as set forth in 8.2.3 following.

- (8) The IC will immediately redeem all IC gift certificates that the Telephone Company receives in payment for end user charges. The IC agrees to use a gift certificate format which is agreeable to the Telephone Company.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(D) Obligations of the IC (Cont'd)

- (9) The IC agrees to permit the Telephone Company to, when necessary in accordance with Telephone Company deposit regulations, determine and collect IC service deposits from all end users of the IC's services for which the Telephone Company provides billing for the IC. The IC will notify its end users through its tariffs or other means that the Telephone Company will, when necessary in accordance with Telephone Company deposit regulations, determine and collect IC service deposits. The IC will also include in its tariff and service arrangements and obtain regulatory concurrence for the Telephone Company deposit regulations that the Telephone Company will use to collect end user service deposits.

(E) Payment Arrangements and Audit Provisions(1) Audit Provisions

Upon reasonable written notice by the IC to the Telephone Company, the IC shall have the right through its authorized representative to examine and audit, during normal business hours and at reasonable intervals as determined by the Telephone Company, all such records and accounts as may under recognized accounting practices contain information bearing upon the amount payable to the IC. Adjustment shall be made by the proper party to compensate for any errors or omissions disclosed by such examination or audit. Neither such right to examine and audit nor the right to receive such adjustment shall be affected by any statement to the contrary, appearing on checks or otherwise, unless such statement expressly waiving such right appears in a letter signed by the authorized representative of the party having such right and delivered to the other party.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(E) Payment Arrangements and Audit Provisions(1) Audit Provisions (Cont'd)

All information received or reviewed by the IC or its authorized representative is to be considered confidential and not to be distributed, provided or disclosed in any form to anyone not involved in the audit, nor is such information to be used for any other purpose.

(2) Minimum Periods

The minimum period for which Private Line Billing Service is provided, and for which charges apply, is one year.

A minimum period of one year applies for each additional period of service ordered.

When service is discontinued prior to the expiration of a minimum period, the minimum monthly charge is applicable for each month and fraction of month remaining in the minimum period.

(3) Minimum Monthly Charges

- (a) During the initial year minimum period, there is a minimum monthly charge based on the IC's estimate of the number of bills to be rendered during that period. The minimum monthly charge is the charge for Bill Rendering, as set forth in (G)(2) following, for 75 percent of the monthly volume. The monthly volume is 1/12 of the bill capacity ordered during the initial year.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(E) Payment Arrangements and Audit Provisions (Cont'd)(3) Minimum Monthly Charges (Cont'd)

(a) (Cont'd)

If the actual monthly volume during any consecutive three month period exceeds 1/12 of the bill capacity ordered by 50 percent or more per month, a new minimum monthly charge will be established. The new charge is the charge for Bill Rendering, as set forth in (G) (2) following, for the monthly average of the actual volume used during those three months.

(b) During each additional yearly minimum period, the minimum monthly charge is the charge for Bill Rendering, as set forth in (G) (2) following, for the monthly average of the actual volume of bills rendered during the previous 12 months.

If the actual monthly volume during any consecutive three month period exceeds the monthly average by 50 percent or more per month, a new minimum monthly charge will be established. The new charge is the charge for Bill Rendering, as set forth in (G) (2) following for the monthly average of the actual volume used during those three months.

(4) Cancellation of a Special Order

An IC may cancel a Special Order for Private Line Billing 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 IC that the

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(E) Payment Arrangements and Audit Provisions (Cont'd)(4) Cancellation of a Special Order (Cont'd)

Special Order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. The service date for Private Line Billing Service is the date that the IC and the Telephone Company mutually agree service is to start.

When an IC cancels a Special Order for Private Line Billing Service after the order date but prior to the start of service, a charge equal to the Special Order charges, program development costs and any nonrecoverable capital costs incurred by the Telephone Company will apply to the IC.

(5) Changes to Special Orders

When an IC requests changes to a pending Special Order for Private Line Billing Service, such changes will be undertaken if they can be accommodated by the Telephone Company. A charge equal to any costs incurred by the Telephone Company because of the change will apply.

(F) Rate Regulations

(1) The Private Line Billing Service Special Order charge applies for each Special Order for Private Line Billing Service, other than establishment of or changes to end user account data, establishment of or changes to end user account rate elements or changes to end user balances due, accepted by the Telephone Company.

(2) The end user account activity charge applies whenever an end user account is established or changed pursuant to a Special Order from an IC and/or whenever a nonrecurring or recurring IC rate element or balance due is added to or changed in the account.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(2) (Cont'd)

An end user account is a record for a Private Line Billing Service which has a unique name and address and billing number identification, assigned by the Telephone Company, to which a bill is rendered.

The end user account activity Special Order charge always applies and the end user account establishment and change charge, end user account rate element rate level change charge or the end user account rate element rate structure change charge may apply depending on the activity ordered by the IC as set forth in (a), (b), and (d) following.

- (a) The end user account activity Special Order charge applies whenever the IC furnishes to the Telephone Company end user account information that establishes or changes the information or rates or balance due associated with an end user account.
- (b) The end user account establishment and change charge applies whenever IC furnished information is used by the Telephone Company to establish or change end user account data or rate elements or balance due, except for information to change end user account rate element rate levels or rate structure. End user account rate element rate level and rate structure changes charges are applied as set forth in (c) and (d) following. The end user account establishment and change charge applies for each account established, rate element established, account changed and rate element changed and balance due changed.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(F) Rate Regulations (Cont'd)

(2) (Cont'd)

- (c) The end user account rate element rate level change charge applies whenever IC furnished information is used by the Telephone Company to change an end user account rate element rate level. The charge applies for each end user account rate element rate level changed.
 - (d) The end user account rate element rate structure change charge applies whenever IC furnished information is used by the Telephone Company to change an end user account rate element rate structure. The charges to make the end user account rate element rate structure changes will be determined on an individual case basis.
- (3) The bill rendering charge applies each month that one or more charges is billed by the issuing of a statement to an end user account. When both interstate and state private line service charges are billed by the Telephone Company to the end user on the same bill for the IC, the Bill rendering charge times 0.5 applies each month.
 - (4) The basic per hour rate and the premium per hour rate for program development is for the use of one hour of one Telephone Company programmer's time.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)

8.2 Billing Service (Cont'd)

8.2.2 Private Line Billing Service (Cont'd)

(F) Rate Regulations (Cont'd)

- (5) The Telephone Company will keep a count of the hours and fraction thereof used by Telephone Company personnel to provide program development and will bill the IC in accordance with these records. The hours for each order will be summed and then rounded to the nearest hour, except that when the total is less than an hour, one hour will be used to determine the charges.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.2 Private Line Billing Service (Cont'd)(G) Rates and Charges (Cont'd)

	<u>Rates</u>
(3) Program Development Charge	
- Basic, per hour & (applicable to work performed within the Telephone Company's normal work schedule and using the normal work force)	ICB rates charges apply
- Premium, per hour & (applicable to work per- formed outside the Telephone Company's normal work schedule and/or which requires additions to the work force)	ICB rates charges apply
(4) Inquiry	
- per bill rendered for an end user account	*
(5) Private Line Billing Special Service Order Charge,	
- per Special Order	\$20.00
(6) Retention of Records Under Accounting Orders,	
- per order per month	ICB rates & charges apply

* Rate for this offering is included in the Bill rendering charge rate set forth in (2) preceding.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable

The Telephone Company will, unless the Telephone Company agrees to act as billing agent for the IC, purchase from the IC its accounts receivable that arise from bills rendered by the Telephone Company to that IC's end users. The purchase of accounts receivable will be limited to amounts due the IC when the Telephone Company provides Bill Processing Service and/or Private Line Billing Service for the IC. After an IC orders Bill Processing Service and/or Private Line Billing Service and the Telephone Company is purchasing the IC's accounts receivable, the IC is prohibited from assigning, transferring, selling, exchanging or giving these accounts receivable to any other entity or person. The IC will provide a written assurance to the Telephone Company as to such forbearance and any such assignment, transfer, sale, exchange or gift is null and void and will subject the IC to all liabilities, expenses, costs including attorney fees expended and incurred by the Telephone Company in pursuing ownership to the accounts receivable.

The Telephone Company's purchase of an IC's accounts receivable shall be with recourse adjustments as set forth in (B) following to account for amounts due the IC that the Telephone Company is unable to collect from the end users which use the IC's services. The amounts due the IC for the purchase of its accounts receivable will be determined as follows:

(A) Total Current Amount Billed

The Telephone Company for each end user bill day (i.e., the billing date on a bill for an end user of an IC's service) will determine from its records the total current amount lawfully billed to the IC's end users for IC services, including all taxes applicable to such services. A Total Current Amount Billed will be determined for each IC for each end user bill day.

(B) Recourse Adjustments

For each bill day, the Telephone Company will make recourse adjustments to the Total Current Amount Billed as follows:

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(B) Resource Adjustments (Cont'd)(1) End User Adjustments

For each bill day, the Telephone Company will subtract from the Total Current Amount Billed the lawfully billed amounts which the Telephone company removes from end users balances due in accordance with IC inquiry instructions. In addition, for each bill day, the Telephone Company will subtract from the Total Current Amount Billed, an amount that equals the face value of any IC gift certificates (or its predecessor company's gift certificate) the Telephone Company has in its possession. The IC gift certificates the Telephone Company possesses will be returned to the IC.

(2) Telephone Company and IC Adjustments

For each bill day, the Telephone Company will subtract from the Total Current Amount Billed amounts for end user bills which the Telephone Company delivers to the IC and amounts for gross receipts taxes, if any, the Telephone Company is legally obligated to pay in connection with accounts purchased by and amounts billed and collected by the Telephone Company pursuant to 8.2.1 and 8.2.2 preceding. In addition, for each bill, the Telephone Company may make adjustments to the Total Current Amount Billed to account for amounts on statements received from the IC for additions or subtractions to an end user balance due for services billed in prior periods. Also, each bill day, the Telephone Company may make adjustments to the Total Current Amount Billed to account for additions and subtractions for IC or Telephone Company prior billing period errors.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(B) Resource Adjustments (Cont'd)(3) Uncollectible Adjustments

For each bill day, the Telephone Company will subtract from the Total Current Amount Billed an amount for uncollectibles. Uncollectibles are amounts billed by the Telephone Company to end users on Final Customer Bills that are added to the Uncollectible (realized) Accounts of the Telephone Company. The Telephone Company will determine the IC amount for uncollectibles for each bill day by multiplying the Total Current Amount Billed by the IC uncollectible factor rounded up to the nearest 1/1000th as determined in (a) or (a) following.

- (a) To determine the IC uncollectible factor, except for the initial three months that bill Processing Services and/or Private Line Billing Service is provided to the IC, the Telephone Company will determine from its records the dollar amount lawfully billed on Final Customer Bills which, after standard collection efforts are completed, is added to its uncollectible (realized) accounts (uncollectible amount) for bills rendered to end users in the most recent 3 month period. This uncollectible amount will include adjustments to account for any payments received by the Telephone Company for outstanding Final Customer Bill amounts that pre-date the most recent 3 month period and any deposits held by the Telephone Company for services provided to the end users where Final Customer Bills have been rendered. The uncollectible amount (including where necessary the IC's or its predecessor company's history of uncollectible to develop a full recent 3 month period) will be used by the Telephone Company in

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(B) Resource Adjustments (Cont'd)(3) Uncollectible Adjustments (Cont'd)

(a) (Cont'd)

an uncollectible apportionment study to determine the realized uncollectible amount for each IC which is provided Bill Processing Service and/or Private Line Billing Service by the Telephone Company for the most recent 3 month period. This realized uncollectible amount for an IC will, after the adjustment to account for IC amounts for uncollectibles for the previous 3 month period which were greater or lesser than the realized uncollectible amount for the same 3 month period, be divided by the Total Current Amount Billed for the IC for the same most recent 3 month period to develop an IC uncollectible factor. This factor will be used by the Telephone Company for the next 3 months to determine the IC amount for uncollectibles. Just prior to the end of the 3 month period, the Telephone Company will determine a new IC uncollectible factor in the same manner as above for the ensuing 3 month period.

- (b) When an IC orders Bill Processing Service and/or Private Line Billing Service, the IC at the time such services are ordered shall provide to the Telephone Company a history of its or its predecessor company's uncollectibles. This history or uncollectibles shall indicate by month its total amounts billed and its uncollectible amounts. The Telephone Company will use these data to develop the IC uncollectible factor for the first three months. To the extent that such IC or its predecessor company data do not exist, then the IC uncollectible factor for the first three month period will be determined on an individual case basis. The IC uncollectible factor developed either from IC history or on an individual case basis will be used to determine the IC amount for uncollectibles for the first three month period.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(C) Payments of Net Purchase Amount to the IC

- (1) The Telephone Company will purchase accounts receivable from the IC on each end user bill day for an amount (purchase amount) which equals the Total Current Amount Billed as set forth in (A) preceding after known adjustments as set forth in (B) preceding have been made. On the date (payment date) determined by adding 31 days to the end user bill day or on 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, the Telephone Company will remit payment to the IC for the purchase amount less additional adjustments as set forth in (B) (1) and (B) (2) preceding (net purchase amount) received by the Telephone Company prior to the payment date. Payment will be made in immediately available funds. If such payment date would cause payment to be due on a Saturday, Sunday or Holiday (i.e., New Year's Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, the Second Tuesday in November and a day when Washington's Birthday, Memorial Day or Columbus Day is legally observed), payment for the net purchase amount will be due to the IC as follows:

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

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(C) Payments of Net Purchase Amount to the IC (Cont'd)

(2) Further, if any portion of the net purchase amount is not received by the IC by the payment date as set forth in (1) preceding, or if any portion of the net purchase amount is received by the IC in funds which are not immediately available to the IC, then a late payment penalty shall be due the IC. The late payment penalty shall be the portion of the net purchase amount 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 in the state in which the Telephone Company provides Bill Processing Service and/or Private Line Billing Service to the IC, compounded daily for the number of days from the payment date to and including the date that the Telephone Company actually makes the payment to the IC, or

(b) 0.000657 per day, compounded daily for the number of days from the payment date to and including the date that the Telephone Company actually makes the payment to the IC.

Any late payment penalty will be included with the next Telephone Company payment to the IC.

(3) Also, if any adjustment that reduces an end user balance due is received by the Telephone Company from the IC after the date the Telephone Company billed the charges to be adjusted to the end user plus 45 days (billed plus date), then a late payment penalty shall be due the Telephone Company. The late payment penalty shall be the adjustment amount times a late factor. The late factor shall be the lesser of:

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(C) Payments of Net Purchase Amount to the IC (Cont'd)

(3) (Cont'd)

- (a) the highest interest rate (in decimal value) which may be levied by the law for commercial transactions in the state in which the Telephone Company provides Bill Processing Service and/or Private Line Billing Service to the IC, compounded daily for the number of days from the billed plus date to and including the date that the Telephone Company posts the end user account, or
- (b) 0.0000657 per day, compounded daily for the number of days from the billed plus date to and including the date that the Telephone Company posts the end user account.

Any late payment penalty will be included with the adjustment made by the Telephone Company to the IC's Total Current Amount Billed.

(D) Netting of IC Access Service Charges and Net Purchase Amounts

When a payment for IC Access Service Charges under this tariff is due to the Telephone Company from the IC on the same payment date that a net purchase amount is due to the IC from the Telephone Company, the Telephone Company may, with at least a 31 day notice to the IC, net the payment for IC Access Service Charges with the net purchase amount. The Telephone Company will pay the net amount to the IC or require the IC to pay the Telephone Company the net amount when such net amount is due the Telephone Company. If either party does not make the payment on the payment date, a late payment penalty as set forth in (C) preceding or 2.4.1 (B) (3) preceding, whichever is appropriate, applies.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.2 Billing Service (Cont'd)8.2.3 Purchase of Accounts Receivable (Cont'd)(D) Netting of IC Access Service Charges and Net Purchase Amounts (Cont'd)

Upon request from the IC, the Telephone Company will provide a copy of its methods and procedures used to determine the amounts named in this section (i.e., 8.2.3 Purchase of Accounts Receivable) to the authorized representative of the IC who is responsible for auditing these amounts.

8.2.3 Billing Arrangements when the Telephone Company Acts as Billing Agent for the IC

When the Telephone Company agrees to act as billing agent for the IC, the billing service, payment arrangements and ownership of the accounts receivable will be as follows:

- (A) The billing services, including the collection from end users of monies for the IC accounts receivable that arise from bills rendered by the Telephone Company to that IC's end users, provided by the Telephone Company will be as set forth in 8.2.1 and 8.2.2 preceding.
- (B) For the IC accounts receivable that arise from bills rendered by the Telephone Company to that IC's end users, the Total Current Amount Billed and the Recourse Adjustments will be determined as set forth in 8.2.3 preceding. The payment of the net monies due the IC will be handled as set forth in 8.2.3 (C) preceding.
- (C) The ownership of the IC accounts receivable will not be transferred by the IC to the Telephone Company. When the IC discontinues Billing Service provided under this tariff where the Telephone Company is acting as billing agent for the IC, the Telephone Company will determine and make a final payment to the IC as set forth in (B) preceding. This final payment shall be considered to be all of the remaining monies due the IC for the bills rendered to the IC's end users by the Telephone Company. When the Telephone Company discontinues billing the IC's end users for IC Services, any deposits for IC services will be returned to the appropriate end user in accordance with Telephone Company final billing procedures.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service

At the request of an IC which is a common carrier, the Telephone Company upon reasonable notice and with reasonable effort may provide Billing Analysis Service for detection, investigation and deterrence of billing evasion activities.

The term "billing evasion activities" used herein denotes Message Billing Abuse and/or Network Abuse. Such abuse is the use of an access line (e.g., end user line or trunk, Pay Telephone line or other access line or trunk provided by the Telephone Company) where there is intent to circumvent or evade the proper charges in whole or in part for use of telecommunications services over the access line, or to conceal the points of origin or termination of telecommunications services.

Such activities include bypass or circumvention of Telephone Company billing equipment, unauthorized use of Telephone Company and IC service offerings, and unauthorized use of Telephone Company facilities.

8.3.1 General Description

Billing Analysis Service is the provision of detection, investigation and deterrence of billing evasion activities.

Detection is the provision of equipment by the Telephone Company to identify and collect information on Network Abuse. Such equipment may be located in Telephone Company premises or offices or may be attached to access lines.

Investigation is the provision of investigative services to collect evidence to document that billing evasion activities are occurring, prepare reports, preserve evidence and supply expert witness analysis and testimony. Investigation also includes provision of services to coordinate the investigative activities between Exchange Telephone Companies and/or law enforcement agencies.

Deterrence is the contacting and interviewing of parties identified in billing evasion activities, the recovery of devices or materials used in billing evasion activities (where legally permitted), the service review for possible suspension of service over access lines identified in billing evasion activities and publicity assistance in publicizing billing evasion deterrence.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

- (A) When Billing Analysis Service is ordered under a Special Order by an unauthorized Security representative of the IC, the Telephone Company will provide any one or all of the services as set forth in (B) through (D) following at rates and charges as set forth in 8.3.7 following.
- (B) Detection Service will be provided for Network Abuse at any central office switch equipped to recognize and record irregular key pulse and multi-frequency signals upon receipt of a Special Order from an IC specifying the central office(s) where detection service is requested. Subject to the agreement of the Telephone Company, special construction for the provision of central office equipment to recognize and record irregular key pulse and multifrequency signals may be undertaken at the request of the authorized Security representative of the IC to meet the needs of the IC. Such special construction will be provided as set forth in Telephone Company Local Exchange Tariffs.
- (1) Reports of detection service results will be provided on an office-by-office or line-by-line basis at the request of the authorized Security representative of the IC. On an office-by-office basis, a detection service report of any signal irregularities will be provided for the previous 60 days for all trunks equipped in the office (i.e. ESS control group). Alternatively, for an office requested by the IC, a line-by-line continuous scan for current signal irregularities will be provided. When the continuous line-by-line scan is provided, a weekly report of signal irregularities for the office involved will be furnished.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

(B) (Cont'd)

(2) The detection service reports as set forth in preceding will include, for a signaling irregularity observed, the following: (a) the calling NPA and telephone number (i.e., NXX-XXXX), (b) the called number (i.e., NPA and Telephone number recorded by Telephone Company billing equipment) if available, (c) signaling irregularity data, (d) the holding time of the call, if available, and (e) the date of the call, if available. The report will be provided as a paper printout or microfiche at the discretion of the Telephone Company and sent to the authorized Security representative of the IC by registered first class U.S. Mail service. However, an authorized Security representative of the IC may pick up the report at a location designated by the Telephone Company. The 60- day report will be available for mailing or pickup 2 weeks after the end of the 60-day period. Results of the continuous scan will be provided to the authorized Security representative of the IC by a written report and/or a telephonic report within six working days after the end of a weekly scan.

(C) Investigative Service will be provided by authorized Telephone Company Security personnel upon receipt of a Special Order from an authorized Security representative of the IC specifying the line or lines or billing evasion activity (i.e., Message Billing Abuse and/or Network Abuse) to be investigated. The services provided include the provision of an identification report, collection of evidence, provision of a detection and documentation scan, preparation of an affidavit and prosecutive summary, preservation of evidence collected, assistance to law enforcement agencies, provision of expert witness analysis and/or testimony, the coordination of billing evasion investigative services and the review of an IC's billing evasion control programs.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

(C) (Cont'd)

- (1) Provision of an identification report is the collection by Telephone Company personnel of billing information, party name, party address, service configuration, if any, and the preparation and submission of information pertinent to the IC's service in a report to the authorized Security representative of the IC for each line or billing evasion activity specified by the IC.
- (2) Collection of evidence is the gathering of information pertinent to the line, message, or party associated with the billing evasion activity specified by the authorized Security representative of the IC. Collection of evidence includes a written notification to the authorized Security representative of the IC of the results of such gathering efforts. The Telephone Company will determine the information provided in the written notification.
- (3) Subject to the agreement of the Telephone Company, a detection and documentation scan on an individual line will be provided when an authorized Security representative of the IC provides a written request for such a scan. Provision of a detection and documentation scan on an individual line is the continuous scan of a line for irregular signals and when an irregular signal is recognized, the collection by Telephone Company equipment of information to show an irregular signal and use of the line occurred. Any information collected during the continuous scan of a line will be considered the property of the Telephone Company. The Telephone Company will notify the IC of the results of the scan and will permit authorized Security representatives of the IC to review the results. The scan and any associated information will not be provided to any person or entity until the Telephone Company is requested to do so by subpoena or lawful demand. Any out of pocket payments for travel and/or other expenses of Telephone Company personnel will be billed to the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

(C) (Cont'd)

- (4) Preparation of an affidavit and prospective summary is the written documentation of the evidence collected by the Telephone Company personnel who performed such activities.
- (5) Preservation of evidence is the placement of the collected evidence in a secure location under the control of Telephone Company Security personnel for a period of up to two years. Such preservation of evidence will be continued beyond two years by the Telephone Company when requested by appropriate law enforcement agencies or the authorized Security representative of the IC. The charges for Preservation of Evidence as set forth in 8.3.7 (B) following will apply.
- (6) Assistance to law enforcement is the accompanying of duly authorized law enforcement personnel to a location where billing evasion activities have been determined to exist in order to identify billing evasion activity devices or materials. The Telephone Company personnel will provide such assistance to law enforcement personnel only after law enforcement involvement has been arranged by the IC, or under services as set forth in (10) following. If such assistance is required at locations outside the operating territory of the Telephone Company involved, any out of pocket payments for travel and/or other expenses of Telephone Company personnel will be billed to the IC, except to the extent that such expenses are paid by the judicial system.
- (7) Provision of expert witness analysis is the review, study and other technical support activities provided by Telephone Company experts to analyze and/or document whether devices and materials associated with an investigation furnished by the authorized Security representative of the IC or under services as set forth in (10) following operate, perform or contain billing evasion activities. A written analysis report will be provided to the authorized Security representative of the IC. The expert will be selected by the Telephone Company.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

(C) (Cont'd)

- (8) Provision of expert witness testimony is the preparation of testimony and the submission of such testimony in association with an investigation. A copy of the written testimony, if any, will be provided to the authorized Security representative of the IC. The expert witness will be selected by the Telephone Company. Any out of pocket payments for travel and/or other expenses of Telephone Company personnel will be billed to the IC.
- (9) Coordination of billing evasion investigative services between Telephone Companies is the referral of investigative information to other Telephone Company Security personnel, provision of billing evasion information to other Telephone Company Security personnel, the collection of information from other Telephone Company Security personnel, and the tracking, collecting and reporting of the results of such investigations to the authorized Security representative of the IC.
- (10) Coordination of billing evasion investigative activities of participating law enforcement agencies is the provision of billing evasion information to the law enforcement agencies, the collection of billing evasion information from the law enforcement agencies and the tracking, collecting and reporting of the results of such participation to the authorized Security representative of IC. This coordination will be provided only upon receipt of written authorization from the authorized Security representative of the IC.
- (11) Review of IC billing evasion deterrence control programs and related activities is advice to and/or training of IC personnel on billing evasion deterrence and preventive controls and the development of billing evasion deterrence and preventive control programs for the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

(C) (Cont'd)

The Telephone Company may, at the request of the IC, provide investigation service on a premium time basis. When investigation service is provided on such a basis, premium time charges as set forth in 8.3.7 (B) following apply.

(D) Deterrence services will be provided at any location in the operating territory of the Telephone Company that Telephone Company Security personnel can safely and legally enter. Deterrence services will be provided, at the request of the authorized Security representative of the IC, by written or telephonic notice. A telephone notice received from the authorized Security representative of the IC, must be followed by written confirmation within one day. Deterrence services will be provided only after an investigation service has been provided by the Telephone Company and billing evasion activity is found to warrant such actions. Deterrence service includes the contacting and interviewing of parties identified by the Telephone Company as being involved in billing evasion activities, the recovery of devices and/or materials associated with billing evasion activities, service review for possible suspension of Telephone Company service, and publicity assistance for publicizing billing evasion activity deterrence.

(1) Contacting and interviewing of parties is the written or verbal notification to, or a face-to-face discussion with, a party or parties by Telephone Company Security personnel in order to deter further billing evasion activities. Contacting and interviewing is provided at locations identified by law enforcement agencies, the IC or the Telephone Company.

(2) Recovery of devices or materials is the attempt by Telephone Company Security personnel to recover devices or materials which are used in association with Telephone Company facilities in billing evasion activities. Such recovery is provided at locations identified by the Telephone Company, law enforcement agencies or the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.2 Undertaking of the Telephone Company

(D) (Cont'd)

- (3) Service Review for possible suspension of Telephone Company service is the request for authority to suspend service from appropriate Telephone Company officers, notification to the end user that service will be suspended and, after review of the end user response, or lack thereof, suspension of service, if warranted, in the Telephone Company's judgment.
- (4) Publicity assistance for publicizing billing evasion activity deterrence is the provision of information and personnel to aid in publicizing billing evasion activity deterrence. The Telephone Company will determine what information it will provide, if any, and will select the personnel and media, if any, to provide this service.

8.3.3 Liability of the Telephone Company

Notwithstanding 2.1.3 preceding, in the absence of willful misconduct, no liability for damages to the IC or other person or entity shall attach to the Telephone Company for its action or the conduct of its employees in providing Billing Analysis Service.

8.3.4 Obligations of the IC

- (A) The authorized Security representative of the IC shall order all Billing Analysis Service. The authorized Security representative of the IC shall order those Billing Analysis Services it wishes to receive.
- (B) With each order, the IC shall designate and identify its authorized Security representative who will be responsible to protect the information and to whom the Billing Analysis Service information will be provided. The IC shall assure and take every effort to make sure the Billing Analysis Service information is provided to and used only by authorized personnel involved in billing evasion activity matters.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.4 Obligations of the IC (Cont'd)

- (C) When Billing Analysis Service Investigation is ordered, the authorized Security representative of the IC shall furnish all known details of the billing evasion activities, including the access lines, parties or messages to be investigated, and shall furnish all necessary end user information it possesses to the Telephone Company Security personnel. The specification of the access line, party or message to be investigated shall be in writing by the authorized Security representative of the IC.
- (D) When law enforcement agencies are to be brought into the investigation, the authorized Security representative of the IC shall secure their participation or authorize the Telephone Company in writing to obtain and coordinate such law enforcement agency participation.
- (E) When evidence collected by the Telephone Company is to be produced in connection with a judicial proceeding, the IC shall notify the Telephone Company of such a requirement in a timely manner.
- (F) When the IC requests that service be suspended for unauthorized use, the IC shall furnish a written request authorized by an officer of the IC. The request shall state the reason for the request and tariff, contract or legal provision permitting such suspension and shall correctly identify the end user, telephone number and the location of the end user service to be suspended.
- (G) All inquiries from the IC's end users concerning services provided under this tariff are to be handled by the IC. Any questions to the Telephone Company shall be made by the authorized Security representative of the IC.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.4 Obligations of the IC (Cont'd)

- (H) Except as set forth in 8.3.2(D) (4) preceding, publicizing of actions resulting from services provided under this tariff shall be the responsibility of the IC. The IC shall not publicize that the Telephone Company assisted the IC unless the IC has written permission to do so from the Telephone Company.
- (I) When the authorized Security representative of the IC orders detection service or a detection and documentation scan of an individual line, it shall specify in writing the offices, lines or parties to be included in the scanning and reports the Telephone Company will provide.
- (J) When provision of expert witness analysis is ordered by the IC, the IC shall be responsible for furnishing the evidence to be analyzed unless the services as set forth in 8.3.2(C) (10) preceding are ordered by the IC.
- (K) When provision of expert witness testimony is ordered by the IC, the IC shall include the name, if any, of the Telephone Company expert it desires and when and where the testimony is needed.
- (L) When the IC wants a quotation of the total charges for the service ordered, the IC shall request such at the time of the order. Quotation regulations and charges as set forth in 2.1.9 preceding apply.

8.3.5 Payment Arrangements(A) Minimum Periods

The minimum period for which Billing Analysis detection service continuous scanning is provided and for which charges apply is one week.

(B) Cancellation of a Special Order

An IC may cancel a Special Order for Billing Analysis Service on any date prior to the service date. The cancellation date is the date the Telephone Company receives written or verbal

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.5 Payment Arrangements (Cont'd)(B) Cancellation of a Special Order (Cont'd)

notice from the authorized security representative of the IC that the Special Order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. The service date for Billing Analysis Service is the date the Telephone Company Security organization receives the Special Order.

When an IC cancels a Special Order for Billing Analysis Service after the order date but prior to the start of service, a charge as listed following shall apply.

- (1) For detection service, the per report charge for each 60-day report ordered and the per week charge for each office where a continuous scan is ordered.
- (2) For investigative service, two times the appropriate hourly charge for the service ordered and the per occurrence charge for each documentation scan ordered.
- (3) For deterrence service, two times the contact and interview of parties hourly charge for the service ordered.

(C) Changes to Special Orders

IC requested changes to a pending Special Order for Billing Analysis Service will be undertaken if they can be accommodated by the Telephone Company. However, all changes to pending Special Orders for detection service will be considered as a discontinuance of the pending order and the placement of a new order and appropriate charges will apply. Any additional time required on the part of the Telephone Company personnel will be billed to the IC at the appropriate hourly charges.

8.3.6 Rate Regulations

- (A) The charge per report for the 60 day report, as set forth in 8.3.7(A) following, applies for each report provided to an IC even though no signaling irregularities are found.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.6 Rate Regulations (Cont'd)

- (B) The charge per office per week for continuous scan as set forth in 8.3.7(A) following applies for each week of service when though no signaling irregularities are found.
- (C) The per hour rate for investigative service and/or deterrence service is for the use of one hour of one Telephone Company Security person's time.
- (D) The Telephone Company will keep a count of the hours and fraction thereof used by Telephone Company personnel to provide the service the IC ordered and will bill the IC in accordance with these records. The hours for each service ordered will be summed and then rounded to the nearest hour, except that when the total is less than one hour, one hour will be used to determine the charges.
- (E) Premium time is all hours for work performed outside the Telephone Company's normal work schedule and/or which requires additions to the work force.
- (F) The Provision of Billing Analysis Service per Special Order charge applies for each Special Order accepted by the Telephone Company for any Billing Analysis Service.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.3 Billing Analysis Service (Cont'd)8.3.7 Rates and Charges

The rates are:

	<u>RATES</u>
(A) Detection Service,	
- 60 Day Report per office, per report	ICB
- Continuous Scan per office, per week	ICB
(B) Investigative Service,	
- Identification Report, per hour*	ICB
- Collection of Evidence, per hour*	ICB
- Documentation Scan per line, per occurrence	ICB
- Preparation of Affidavit and Prospective Summary, per hour*	ICB
- Preservation of Evidence, per week	ICB
- Assist Law Enforcement, per hour*	ICB
- Provision of Expert Witness Analysis, per hour*	ICB
- Provision of Expert Witness Testimony, per hour*	ICB
- Coordination services, per hour*	ICB
- Review services, per hour*	ICB
(C) Deterrence Service,	
- Recovery of devices, per hour	ICB
- Contact and Interview of Parties, per hour	ICB
- Service Review, per hour	ICB
- Publicity Assistance, per hour	ICB
(D) Provision of Billing Analysis Service,	
- per Special Order	ICB

* Premium time per hour rates are two times the per hour rates and will, when necessary, be included in the ICB rates and charges.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service

At the request of the IC, the Telephone Company may provide information to the IC from its end user records, billing files and account data base.

8.4.1 General Description

Billing Information Service is the provision of information to the IC from Telephone Company record systems labeled as Customer Records Information System (CRIS), Non-Sent-Paid Indicator Data Base (DBAS) and Customer Name and Address Bureau (CNA). Such Billing Information will be limited to the provision of information to an IC relating exclusively to end user services provided by that IC. Information relating to services provided by any other entity will not be provided.

Information is defined as any entry in the records, data base or bureau listings which is not listed as proprietary to the Telephone Company. Any entry listed as proprietary to the Telephone Company will not be provided.

8.4.2 Undertaking of the Telephone Company

(A) When Billing Information Service is ordered by the IC, the Telephone Company will provide information on a request by request basis as follows in (B) through (M) following at the rates and charges as set forth in 8.4.7 following.

(B) Upon request from an IC and when the IC has ordered Message Billing Service Bill Processing Service, the Telephone Company will provide information from its CRIS records as follows:

- (1) message detail for a message end user
- (2) account detail for a message end user
- (3) service and equipment detail for a message end user.

Message detail is message-billed records in exchange message record (EMR) format in the CRIS file.

Account detail is data that furnishes the end user name, billing address and billing parameters other than message detail and/or service and equipment detail.

Service and equipment detail is data associated with the IC's rate elements.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

(B) (Cont'd)

A message end user is an account with IC message or bulk-billed detail (for a bill period) or an account which is marked, as set forth in (F) following, or established as an end user of the IC's message or bulk-billed services.

Message detail, account detail and/or service and equipment detail which is confidential due to legal, national security, end user or other appropriate due to legal, national security, end user or other appropriate requirements will not be provided. If the IC requires this information in order to bill its services, it shall secure written permission from the end user to obtain the information from the Telephone Company. The IC shall furnish the Telephone Company the end user's written permission for the information to be released.

(C) Upon request from an IC and when the IC has ordered Private Line Billing Service, the Telephone Company will provide information from its CRIS records as follows:

- (1) account detail for a private line end user
- (2) service and equipment detail for a private line end user.

Account detail is data that furnishes the end user name, billing address and billing parameters other than message detail and/or service and equipment detail.

Service and equipment detail is data associated with the IC's rate elements.

A private line end user is an account with rate element detail (for a bill period) or an account which is established, at IC request, as an end user of the IC's private line (non-message) services.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

(C) (Cont'd)

Account detail and/or service and equipment detail which is confidential due to legal, national security, end user or other appropriate requirements will not be provided. If the IC requires this information in order to bill its services, it shall secure written permission from the end user to obtain the information from the Telephone Company. The IC shall furnish the Telephone Company the end user's written permission for the information to be released.

- (D) Upon request from an authorized supervisor of the IC for end user information when automatic number identification (ANI) service is provided to the IC by the Telephone Company or when the IC offers a telecommunications service for which the billing is based on authorized calling or called parties, the Telephone Company will provide information from its DBAS records. Only current information which resides in the data base will be provided.

- (E) Where Telephone Company facilities are available and subject to the agreement of the Telephone Company, CRIS and/or DBAS information may be provided on an interrogation basis at the request of the IC.

The interrogation basis will permit the IC to access a data file which contains the data base information from a data processing terminal at the IC location, furnish an end user telephone number and, after verification that the information is authorized for the IC's use, receive the end user information. The interrogation file will be provided during normal Telephone Company business hours. The DBAS interrogation file will be updated each business day to reflect current end user information. The CRIS interrogation file will be updated each bill day (day bills are prepared and dated for an end user for an IC's service) and will be updated daily when information is available and when the Telephone Company updates the file on a daily basis to reflect current end user information.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

(E) (Cont'd)

The Telephone Company will develop the IC's CRIS and DBAS information order into a retrieval and interrogation program. Program development charges, as set forth in 8.4.7 following, apply for the hours required to design, develop, test and maintain the necessary programs.

(F) CRIS and/or DBAS information will be provided on a total file and/or file update basis as follows:

- (1) The total file basis will permit the IC to receive, at the IC's option, all the end user information that is authorized for the IC's use on paper printout, magnetic tape or fiche. The total file output will contain end user information for the current billing period. The billing period will be set by the Telephone Company. The magnetic tapes will be provided without the return of previously supplied tapes. The Telephone Company will supply the magnetic tapes. After the information system ordered by the IC is in service, the paper printout, magnetic tape or fiche will be available from the Telephone Company within 10 working days of the IC request.

Program development charges as set forth in 8.4.7 following, apply for the hours required to design, develop, test and maintain the necessary programs that are used to provide the paper output, magnetic tape or fiche.

Once available, the paper output, magnetic tape or fiche will be sent to the IC via first class U.S. Mail service. At the option of the IC, the IC may pick up the paper output, magnetic tape or fiche at a location designated by the Telephone Company or request the information be data-transmitted to the IC. When the information is data-transmitted to the IC, the data transmission charges will be determined on an individual case basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

(F) (Cont'd)

- (2) The file update basis will permit the IC to receive, at the IC option, all the end user information that is authorized for the IC's use on paper printout, fiche or magnetic tape. The file update output will contain end user information for the current billing period only. The current billing period is the period associated with the most recent bill rendered to an end user. The magnetic tapes will be provided without the return of previously supplied tapes. The Telephone Company will supply magnetic tapes. The file updates will include those records added and those records deleted, if any (deleted records may not be retained by the Telephone Company). For CRIS information, the file updates will be provided on a monthly interval. For DBAS information, the file updates will be provided for each business day.

Program development charges as set forth in 8.4.7 following, apply for the hours required to design, develop, test and maintain the necessary programs that are used to provide the paper output, fiche or magnetic tape.

Once available, the file update paper output, fiche or magnetic tape will be sent to the IC via first class U.S. Mail Service. At the option of the IC, the IC may pick up the paper output, fiche or magnetic tape at a location designated by the Telephone Company or request the information be data-transmitted to the IC. When the information is data-transmitted to the IC, the data transmission charges will be determined on an individual case basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

(F) (Cont'd)

(3) The total file output and the file update output will, at the option of the IC, be provided on a quick turnaround basis. Such quick turnaround output will be provided one working day after the information that the IC ordered is available. Once available, the output will be provided on paper output, fiche, or magnetic tape and will be sent to the IC via first class U.S. Mail service. At the option of the IC, the IC may pick up the paper output, fiche or magnetic tape at a location designated by the Telephone Company or request the information be data-transmitted to the IC. When the information is data-transmitted to the IC, the data transmission charges will be determined on an individual case basis.

(G) The Telephone Company will, at the request of the IC, mark any message-billed message end user account, other than end user accounts with IC credit cards or rate elements, as a user of the IC's message services. After marking is ordered, the end user account will be marked as an IC end user account at the time the first message is posted to the end user account. If not marked at the request of the IC, such an end user account will not be identified as an IC account unless there are IC message details associated with the account for the bill period for which message detail is ordered by the IC. The mark will be removed at the request of the IC. Charges to mark the account and maintain the mark in future months as set forth in 8.4.7(G) following apply. IC bulk-billed end user accounts and message end user accounts with IC credit cards or the IC rate elements are counted as IC accounts.

(H) Upon acceptance by the Telephone Company of a Special Order for Billing Information Service from an IC, the Telephone Company will determine the period of time to implement such service on an individual order basis.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

- (I) The Telephone Company will provide the format for interrogation of its data files and the format of any printed, magnetic tape or fiche output from its CRIS and DBAS files.
- (J) Upon request from an authorized supervisor of the IC who furnishes the account code assigned by the Telephone Company, the Telephone Company will provide name and town information from its CNA bureau. The CNA name and town data, but not street address, will be provided only when the IC needs the information to authorize a call, to bill a call, or to handle an emergency situation. The information will be provided on a request by basis by voice telecommunications. Name, town and state will be provided for a telephone number. A request includes the handling of one call and providing the data for one telephone number.

The Telephone Company will specify the location where requests are to be received and the format in which the request is to be made.

If the name and address associated with the telephone number is restricted due to the request of the end user, legal authority or law enforcement agency, no name or town location will be provided.

At the request of the IC, written confirmation of the name and town location will be sent to the authorized supervisor making the request by first class U.S. Mail service.

- (K) If the IC requests the information ordered by the IC be resupplied by the Telephone Company because of incorrect IC specifications or errors, the Telephone Company will resupply the information in accordance with a new IC order and all appropriate charges as set forth in 8.4.7 following will apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.2 Undertaking of the Telephone Company (Cont'd)

(L) Where facilities are available and subject to the agreement of the Telephone Company, updating of IC data bases or files from Telephone Company data processing terminals or equipment in Telephone Company locations may be undertaken at the request of the IC. The charges for such a service will be determined on an individual case basis.

(M) The Telephone Company will provide Billing Information Service under a Special Order. For all Billing Information Services, the Billing Information Service Special Order charge as set forth in 8.4.7(I) following applies.

8.4.3 Liability of the Telephone Company

Notwithstanding 2.1.3 preceding, in the absence of willful misconduct, no liability for damages to the IC or other person or entity shall attach to the Telephone Company for its action or the conduct of its employees in providing Billing Information Service.

8.4.4 Obligations of the IC

(A) The IC shall order Billing Information Service under a Special Order. The IC shall order those Billing Information Services where it wishes to receive the services and shall specify how often it wishes the service to be provided.

(B) With each order, the IC shall identify the authorized individual and address to receive the Billing Information Service output. When interrogation is ordered, the IC shall identify the data processing terminals authorized to receive the information and the authorized individual who will be responsible for all terminal activities. When CNA service is ordered, the IC will identify in writing and include the account codes assigned by the Telephone Company of all authorized individuals who will contact the CNA bureau.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.4 Obligations of the IC (Cont'd)

- (C) The IC shall take every effort to make sure that Billing Information Service output and interrogation capability is provided only to authorized personnel. The IC shall agree, in writing to the Telephone Company, that the IC will not provide the Billing Information Service outputs to third parties for any use by such third parties except for work for the IC and which is under complete control of the IC.
- (D) The IC shall furnish, to the Telephone Company, when interrogation service is ordered all information necessary to allow the Telephone Company to establish an interrogation program. In addition, the IC shall furnish the Telephone Company, for each data base and file where the interrogation is ordered, an estimate of the number of requests per business day that the Telephone Company data bases and file will be asked to handle. The IC's terminals used to interrogate the Telephone Company data bases and files must be capable of working with Telephone Company equipment and software.
- (E) The IC shall be responsible for all contacts and inquiries from its end users concerning Billing Information Service.
- (F) The IC shall not publicize or represent to others that the Telephone Company jointly participates with the IC in the development of the ICs end user records, accounts, data bases or market data, records, files and data bases or other systems it assembles through the use of Billing Information Service.
- (G) When the IC wants a question of the charges for the service ordered, the IC shall request such at the time of the order. Quotation regulations as set forth in 2.1.9 preceding apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.4 Obligations of the IC (Cont'd)

- (H) When the IC orders marking of non IC credit card message-billed message end user accounts, all accounts containing that IC's messages will be marked starting with the next bill period and marking will continue until the IC orders marking discontinued. The IC shall, when it orders marking removed, furnish the telephone number of each end user account for which the mark is to be removed. The mark will be removed prior to the next bill period.

8.4.5 Payment Arrangements(A) Minimum Periods and Minimum Monthly Charges

The minimum period for which Billing Information Service CRIS and/or DBAS file interrogation is provided and for which charges apply is one year.

The minimum monthly charges for CRIS and/or DBAS file interrogation are the charges for the total number of requests per business day furnished by the IC as set forth in 8.4.4(D) preceding times 18 (i.e., 20 business days per month times 0.9).

When the IC discontinues the service prior to the end of the one-year minimum period, the minimum monthly charge for the data base interrogation will apply for each remaining month and fraction of month.

(B) Cancellation of a Special Order

An IC may cancel a Special Order for Billing Information 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 IC that the Special Order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. The service date for a Billing Information Service is the date the Telephone Company notifies the IC that the Telephone Company is ready to provide Billing Information Service reports or receive interrogation requests.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.5 Payment Arrangements (Cont'd)(B) Cancellation of a Special Order (Cont'd)

When an IC cancels a Special Order for Billing Information Service after the order date but prior to the start of service, charges as listed following shall apply:

- (1) For any service, the appropriate per hour rate for all hours expended by the Telephone Company to provide the service.
- (2) For any service, any expense for equipment obtained for the service where such equipment cannot be reused within six months.

(C) Changes to Special Orders

When an IC requests changes for a pending Special Order for Billing Information Service, they will be undertaken if they can be accommodated by the Telephone Company. Any additional time required on the part of Telephone Company personnel will be billed to the IC at the appropriate hourly charges.

8.4.6 Rate Regulations

- (A) The number and type of records for which charges apply as set forth in 8.4.7 following will be accumulated by the Telephone Company and the Telephone Company will bill the IC in accordance with these accumulations. A record is a logical grouping of information as described in the programs that process the information, print the paper output, and load the magnetic tape or data file used to supply the detail which is data-transmitted or put on fiche. For each service and type of output ordered, the number of records processed by the Telephone Company to prepare the output will be used to determine the charges. The number of records processed will be determined using the number of records input to or the number of records output from the programs that process the information, print the paper output and load the magnetic tape or data file, whichever number of records is higher.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.6 Rate Regulations (Cont'd)

- (B) The number of hours and fraction thereof for which charges apply as set forth in 8.4.7 following will be accumulated by the Telephone Company. The per hour rate is for the use of one hour of one Telephone Company programmer. The Telephone Company will bill the IC for hourly charges in accordance with these accumulations. The accumulated hours for each order will be summed and rounded to the nearest hour, except that when the total is less than one hour, one hour will be used to determine the charges.
- (C) When a CNA request is received, the Telephone Company will keep a count of the requests. The Telephone Company will bill the IC in accordance with these records even though the Telephone Company was not able to provide a name and town location for all requests.
- (D) When records are entered on a data file or magnetic tape in order to provide information to an IC, the per tape charge applies for each data file or tape prepared. In addition, the per record charge applies for each record entered on the data file or tape. The Telephone Company will determine the charges based on the number of data files or tapes prepared and on its count of the records entered on the data file or tape.
- (E) When marking of message end user accounts is ordered, the marking charge applies for each end user account marked. Once an account is marked, the maintenance of mark charge applies for each month following the month the account is marked until the IC requests the mark be removed. No charges apply to remove the mark.
- (F) The Provision of Billing Information Service per Special Order Charge applies for each Special Order accepted by the Telephone Company for any Billing Information Service.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.7 Rates and Charges

The rates and charges are:

(A) CRIS 10 Working Day Information

	<u>Rates*</u>			Service and
	Detail	Account	Equipment	on
	<u>Detail</u>	<u>Detail</u>	<u>Detail</u>	<u>Tape</u>
Service,				
- Paper output, per record				
Processed	ICB	ICB	ICB	
- Magnetic tape,				
Per record processed	ICB	ICB	ICB	
- Fiche output,	ICB	ICB	ICB	ICB
Per record processed				

* The Quick Turnaround per record charge and the per tape charge is three times the 10 working day per record charge and per tape charge.

	<u>Rates</u>
(B) DBAS Information Service,	
- Paper output, per record processed	#
- Magnetic tape, per record processed	#
per tape or data file	#
- Fiche output, per record processed	#
(C) CRIS File or DBAS File interrogation,	
- per request received	#

These offerings are only provided where facilities are available. However, other Exchange Telephone Companies not under this tariff provide such offerings. When facilities can be made available with the agreement of the Telephone Company, ICB rates and charges apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.7 Rates and Charges (Cont'd)

	<u>Rates</u>
(A) Program Development charge,	
- Basic, per hour (applicable to work performed within the Telephone Company's normal work schedule and using the normal work force)	ICB rates and charges apply
- Premium, per hour (applicable to work performed outside the Telephone Company's normal work schedule and/or which requires additions to the work force)	ICB rates and chares apply
(B) CNA Information Service,	
- CNA interrogation, per request received	*
CNA interrogation confirmation, per request confirmed	*
(C) Data transmission to an IC location of Billing Information Service details, - per record transmitted	ICB rates and charges apply
(D) Marking of Message End User Accounts, - marking, per end user account	ICB rates and charges apply
- maintenance of mark, Per end user account per month	ICB rates apply

* These offerings are only provided where facilities are available. However, other Exchange Telephone Companies not under this tariff may provide such offerings. When facilities can be made available with the agreement of the Telephone Company, ICB rates and charges apply.

ACCESS SERVICE

8. Billing and Collection Services (Cont'd)8.4 Billing Information Service (Cont'd)8.4.7 Rates and Charges (Cont'd)

	<u>Rates</u>
(H) Updating of IC data bases or files - per record transmitted	ICB rates and charges apply
(I) Provision of Bill Information service - per Special Order	ICB rates and charges apply

ACCESS SERVICE

RESERVED FOR FUTURE USE

ACCESS SERVICE

10. 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 SERVICE

10. 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 SERVICE

10. 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 SERVICE

10. 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:

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-2 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 SERVICE

10. 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 7.4.6 preceding.

ACCESS SERVICE

10. 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 Services11.1 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 Combined11.1.4 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 Section 7 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 Section 7 preceding and Special Federal Government Access Services as set forth in 10.5 preceding.

ACCESS SERVICE

11. Special Facilities Routing of Access Services (Cont'd)11.1 Description (Cont'd)

In order to avoid the compromise of special routing information, the Telephone Company will provide the required routing information for each specially routed service to only the ordering customer. If requested by the customer, this information will be provided when service is installed and prior to any subsequent changes in routing.

The rates and charges for Special Facilities Routing of Access Services are developed on an individual case basis. Such rates and charges for Special Facilities Routing of Access Services are as set forth in 17.4.6 following and are in addition to all other rates and charges that may be applicable for services provided under other sections of this tariff.

ACCESS SERVICE

12. 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 within a LATA.
- The requested service or arrangements are compatible with other Telephone Company services, facilities, and its engineering and maintenance practices.
- This offering is subject to the availability of the necessary Telephone Company personnel and capital resources.

Rates and charges and additional regulations if applicable, for Specialized Service or Arrangements are provided on an Individual Case Basis and are as set forth in 17.4.7 following.

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 and Maintenance of Service). 13.4 addresses IntraLATA Toll 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 Section 7 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.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.1 Additional Engineering (Cont'd)

- (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(C) following, does not apply unless the customer authorizes the Telephone Company to proceed with the Design Change.

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.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.2 Additional Labor (Cont'd)13.2.2 Overtime Repair

Overtime repair is that Telephone Company effort performed outside of normally scheduled working hours.

13.2.3 Standby

Standby includes all time in excess of one-half (1/2) hour during which Telephone Company personnel standby to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

13.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

13.2.5 Other Labor

Other labor is that additional labor not included in 13.2.1 through 13.2.4 preceding and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.

13.3 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 Section 7 preceding, are provided by the Telephone Company in association with Access Services and are furnished at no additional charge.

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)

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).

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].

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)

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.

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing of Switched Access Service involves the Telephone Company provision of a technician at its office(s) and the customer provision of a technician at its premises, with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

- Impulse Noise
- Phase Jitter
- Signal to C-Notched Noise Ratio
- Intermodulation (Nonlinear) Distortion
- Frequency Shift (Offset)
- Envelope Delay Distortion
- Dial Pulse Percent Break

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)(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 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)(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 SERVICE

13. 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:

- (A) Attenuation Distortion (i.e., frequency response)
- (B) Intermodulation Distortion (i.e., harmonic distortion)
- (C) Phase Jitter
- (D) Impulse Noise
- (E) Envelope Delay Distortion
- (F) Echo Control
- (G) Frequency Shift

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)(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 SERVICE

13. 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.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.4 IntraLATA Toll Presubscription

- (A) IntraLATA Presubscription is a procedure whereby a customer designates to the Telephone Company the IntraLATA Toll Provider (ITP) which the customer wishes to be the carrier of choice for intraLATA toll calls. Such calls are automatically directed to the designated carrier without the need to use carrier access codes of additional dialing to direct the calls to the designated carrier. IntraLATA presubscription does not prevent a customer, who has presubscribed to an IntraLATA toll carrier, from using carrier access codes or additional dialing to direct calls to an alternative intraLATA toll carrier on a per call basis.

Each carrier will have one or more access codes assigned to it for various types of service. When an end user selects a carrier as its preferred intraLATA toll provider, only one access code of that carrier may be incorporated into the switching system of the Telephone Company permitting access to that carrier by the end user without dialing an access code. Should the same end user wish to use other services of the same carrier, it will be necessary for the end user to dial the necessary access code(s) to reach that carrier=s other service(s).

An ITP must use Feature Group D (FGD) Switched Access Service to qualify as an intraLATA toll provider unless prior arrangements have been made with or by the Telephone Company. IntraLATA toll providers must submit an Access Service Request (ASR) prior to the intraLATA toll presubscription conversion date or prior to the date on which the carrier proposes to begin participating intraLATA toll presubscription, unless prior arrangements have been made with the Telephone Company.

Selection of an intraLATA toll provider by an end user is subject to the terms and conditions following.

- (B) At the option of the ITP, the nonrecurring charge for a change in intraLATA toll presubscription, as provided here in, may be billed to the ITP, instead of the end user. This may involve charges resulting from end-user initial free choice PIC changes, as specified in C.1 following.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.4 IntraLATA Toll Presubscription (Cont'd)

(B) (Cont'd)

This option for the ITP to be billed for the PIC change charge instead of the end user is not available for orders placed directly via the Telephone Company's Business Offices.

(C) Presubscription Charge Application

(1) Existing end users may exercise an initial free presubscription choice, either by contacting the Telephone Company or by contacting the ITP directly. The initial free choice must be made within 90 days following implementation of intraLATA toll presubscription. The charge for the initial free choice change will be billed to the new ITP at the discretion of the Telephone Company. End users' choices which constitute exercising the free initial choice are:

- Designating an ITP as their primary carrier thereby requiring no access code to access that ITP's service. Other carriers are accessed by dialing 101XXXX or other required codes.
- Choosing no carrier as a primary carrier thus requiring 101XXXX code dialing to access all ITPs. This choice can be made by directly contacting the Telephone Company.

Following an existing end user's initial free selection, any subsequent selection made during the first 90 days after presubscription or any change made more than 90 days after presubscription is implemented is subject to a nonrecurring charge as set forth herein.

(2) New end users who subscribe to service after the presubscription implementation date (including an existing customer who orders an additional line) will be asked to select a primary ITP when they place an order for Telephone Company Exchange Service. If a customer cannot decide upon an intraLATA toll carrier at the time, the Telephone Company may extend a 30-day period following completion of the service request to make an intraLATA PIC choice without charge. In the interim, the customer will be assigned a >No-PIC= and will have to dial an access code to make intraLATA toll calls.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.4 IntraLATA Toll Presubscription (Cont'd)(C) Presubscription Charge Application (Cont'd)

(2) (Cont'd)

Initial free selections available to new end users are:

- Designate an ITP as their primary carrier thereby requiring no access code to access that ITP=s service. Other carriers are accessed by dialing 101XXXX or other required codes.
- Choose no carrier as a primary carrier thus requiring 101XXXX code dialing to access all ITPs. This choice can be made by directly contacting the Telephone Company. In addition, new end users that do not select a preferred carrier will be assigned a >No-PIC=.

Following a new end user=s initial free selection, any subsequent selection made following implementation of intraLATA toll presubscription is subject to a nonrecurring charge as set forth herein.

- (3) If an ITP elects to discontinue Feature Group D service after implementation of the intraLATA toll presubscription option, the ITP is obligated to contact, in writing, all end users who have selected the canceling ITP as their preferred intraLATA toll provider. The ITP must inform the end users that it is canceling its Feature Group D service, request that the end user select a new ITP, and state that the canceling ITP will pay the PIC change charge as provided herein. The ITP must provide written notification to the Telephone Company that this activity has taken place.

Following the ITP=s discontinuance of service, the Telephone Company will bill the canceling ITP the change charge for each end user that is currently designated to the ITP at the time of discontinuance.

- (4) An unauthorized PIC change is a change in the presubscribed intraLATA toll provider that the end user denies authorizing. PIC disputes for end users are resolved through an investigative process.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.4 IntraLATA Toll Presubscription (Cont'd)(C) Presubscription Charge Application (Cont'd)

(4) (Cont'd)

If an unauthorized change in intraLATA presubscription occurs, the ITP making the unauthorized change will be assessed a charge for unauthorized change in presubscription as provided in G.2 following.

In addition, the ITP will be assessed the applicable charge for returning the end user to their preferred intraLATA toll provider.

If an unauthorized change in intraLATA toll presubscription and interLATA presubscription occurs at the same time, on the same Business/Residence line, and the presubscribed ITP is the same carrier for intraLATA and interLATA, presubscription change charges as provided herein and the Telephone Company's corresponding F.C.C. Access Tariff apply. In addition, the ITP will be assessed the applicable charges for returning the end user to their preferred intraLATA toll provider as herein and in the Telephone Company's corresponding F.C.C. Tariff.

(D) Equal Access Recovery Charge

The Equal Access Recovery Charge is a charge to recover the costs that the Company has directly incurred in connection with the implementation of intraLATA toll presubscription. The Equal Access Recovery Charge is billed to intraLATA toll providers.

(E) End User Charge Discrepancy

(1) When a discrepancy is determined regarding an end user's designation of a preferred intraLATA toll carrier, the following applies depending upon the situation described:

- A signed letter of authorization takes precedence over any order other than subsequent, direct customer contact with the Telephone Company.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.4 IntraLATA Toll Presubscription (Cont'd)(E) End User Charge Discrepancy (Cont'd)

(1) (Cont'd)

- When two or more orders are received for an end user line generated by telemarketing, the date field on the mechanized record used to transmit PIC change information will be used as the PIC authorization date. The order with the latest application date/time determines customer choice.
- If an end user denies requesting a change in intraLATA toll presubscription as submitted by an ITP, and the ITP is unable to produce a letter of authorization, signed by the end user, the ITP will be assessed all applicable change charges. The nonrecurring change charges are provided herein. The ITP will also be assessed the intraLATA toll presubscription change charge as specified herein, which was previously billed to the end user.

(2) Verification of Orders for Telemarketing

Neither the ITP or the Telephone Company shall submit a PIC change order generated by outbound telemarketing unless and until the order has first been confirmed in accordance with the F.C.C.'s current anti-slamming practices and procedures.

(F) PIC Switchback Option-Business/Residence

PIC Switchback is an option under which no investigation activities are performed by the Telephone Company when an end user denies requesting a change in primary carrier submitted by the ITP. The ITP participating in PIC Switchback will be billed the PIC Switchback Charge, and the presubscription change charge, as specified herein, to switch the end user to the end user's previous carrier.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services
(Cont'd)13.4 IntraLATA Toll Presubscription (Cont'd)(F) PIC Switchback Option-Business/Residence (Cont'd)

When the Telephone Company is contacted by an end user who denies requesting a change in ITP primary carrier, the end user will be credited the charge assessed for the disputed change in carrier and will be switched back to the previous ITP at no charge. If this service is made available by the Telephone Company, ITPs may subscribe to or cancel PIC Switchback Service on 30 day's notice to the Telephone Company by submitting a written request. A letter of authorization from the ITP will not be requested or accepted at a later date in the event of dispute of the charges assessed under the PIC Switchback option.

This option in no way relieves the ITP of the F.C.C. requirements for:

- Verifying all PIC orders obtained by outbound telemarketing prior to submitting those orders, or
- Instituting steps to obtain verification of orders submitted to the Telephone Company.

In addition, the end user has the option of initiating a complaint to the F.C.C. or the Public Utility Commission concerning unauthorized changes in carrier.

<u>(G) Rates and Charges</u>	<u>Rate</u>	
(1) The charge for a change in intraLATA Toll Presubscription, per line	\$5.00	
(2) The charge for an unauthorized Business or Residence service change in intraLATA Toll Presubscription, per line	\$35.65	
(3) The charge for a Business/Residence PIC Switchback change in intraLATA Toll Presubscription. Per line	\$5.00	
(4) Equal Access Recovery Charge (Additive to the End Office Switching per minute Charge until March 9, 2004)	\$0.000333	(C)

(c) Indicates Change

ACCESS SERVICE

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.

15.1 Switched Access Service

Ten Interface Groups are provided for terminating the Local Transport Entrance Facility at the customer's designated premises. Each Interface Group provides a specified premises interface (e.g., two-wire, four-wire, DS1, etc.). Where transmission facilities permit, and at the option of the customer, the Entrance Facility may be provided with optional features as set forth in 15.1.1 following.

As a result of the customer's access order and the type of Telephone Company transport facilities serving the customer designated premises, the need for signaling conversions or two-wire to four-wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Telephone Company equipment be placed at the customer designated premises. For example, if a voice frequency interface is ordered by the customer and the Telephone Company facilities serving the customer designated premises are digital, then Telephone Company channel bank equipment must be placed at the customer designated premises in order to provide the voice frequency interface ordered by the customer.

15.1.1 Local Transport Interface Groups

Interface Groups are combinations of technical parameters which describe the Telephone Company handoff at the point of termination at the customer designated premises. The technical specifications concerning the available interface groups are set forth in (A) through (D) following.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)

Interface Group 1 is provided with Type C Transmission Specifications, as set forth in 15.1.2(C) following, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, as set forth respectively in 15.1.2(E) and (F) following, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters.

Only certain premises interfaces are available at the customer designated premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups.

(A) Interface Group 1

Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

Interface Group 1 is not provided in association with 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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(A) Interface Group 1 (Cont'd)

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

The interface is provided with loop supervisory signaling. When the interface is associated with 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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(B) Interface Group 2 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with 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</u> <u>Identification No.</u>	<u>Transmission</u> <u>Frequency Bandwidth</u>	<u>Analog</u> <u>Hierarchy Level</u>	<u>Maximum No. of</u> <u>Channelized Voice</u> <u>Freq. Trans. Paths</u>
3	60 - 108 kHz	Group	12
4	312 - 552 kHz	Supergroup	60
5	564 - 3084 kHz	Mastergroup	600

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd) (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</u> <u>Identification No.</u>	<u>Nominal Bit</u> <u>Rate (Mbps)</u>	<u>Digital</u> <u>Hierarchy Level</u>	<u>Max. No. of Channelized</u> <u>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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features

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.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features (Cont'd)- 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.

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

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features (Cont'd)

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 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.

(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.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(F) Available Premises Interface Codes (Cont'd)

<u>Interface Group</u>	<u>Telephone Company Supervisory Signaling</u>	<u>Switch</u>	<u>Premises Interface Code</u>	<u>Feature Group</u>				
				<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	
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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(F) Available Premises Interface Codes (Cont'd)

<u>Interface Group</u>	<u>Telephone Company Switch Supervisory Signaling</u>	<u>Premises Interface Code</u>	<u>Feature Group</u>				
			<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	
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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(F) Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company		Premises Interface Code	Feature Group			
	Switch	Supervisory Signaling		A	B	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	4DS9-151		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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications

Descriptions of the transmission specifications available with 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 the 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 SERVICE

15. 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 SERVICE

15. 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 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 2.0 dB.

ACCESS SERVICE

15. 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 dBm0 holding tone, is less than or equal to 45 dBrnCO.

ACCESS SERVICE

15. 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 SERVICE

15. 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 SERVICE

15. 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 SERVICE

15. 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:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
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 SERVICE

15. 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>Miles</u>	<u>C-Message Noise* Route</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 SERVICE

15. 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 (for FGB only)	8 dB	4 dB

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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.3 Data Transmission Parameters (Cont'd)(A) Data Transmission Parameters Type DA (Cont'd)(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	500 microseconds
equal to or greater than 50 route miles	900 microseconds

1004 to 2404 Hz

less than 50 route miles	200 microseconds
equal to or greater than 50 route miles	400 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBrnC0 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

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

(A) Data Transmission Parameters Type DA (Cont'd)

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 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 SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.3 Data Transmission Parameters (Cont'd)(B) Data Transmission Parameters Type DB (Cont'd)(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBrnC0 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 7E peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

ACCESS SERVICE

RESERVED FOR FUTURE USE

ACCESS SERVICE

17. Rates and Charges

This section contains rates for all access services except Special Access and Billing and Collection Services. See Sections 7 and 8 for Special Access and Billing and Collection Services and Rates.

17.1 Common Line Access Service17.1.1 Carrier Common Line Access Service

Regulations concerning Carrier Common Line Access Service are set forth in Section 3. preceding.

	<u>Rate</u>	
Originating Carrier Charge - Non 800 Per access line, per month	\$2.88	(C)
Terminating Carrier charge - Non 800 Per access line, per month	\$0	
Originating Carrier Charge - 800 Per access line, per month	\$0	(C)

ACCESS SERVICE

17. Rates and Charges (Cont'd)
17.2 Switched Access Service

17.2.1 <u>Nonrecurring Charges</u>	<u>Rate</u>	<u>Tariff Section Reference</u>	
(A) <u>Local Transport - Installation Per Entrance Facility</u>		6.4.1(B) (1)	
- Voice Grade Tow-Wire	\$450.00		(C)
- Voice Grade Four-Wire	\$450.00		
- High Capacity DS1	\$330.00		
- High Capacity DS3	\$445.00		(C)
(B) <u>Interim NXX Translation Per Order</u>			
Per LATA or Market Area	\$81.00	6.4.1(B) (2)	
(C) <u>FGC and FGD Conversion of Multifrequency Address Signaling to SS7 Signaling or SS7 Signaling to Multifrequency Address Signaling</u>			
- Per 24 Trunks Converted or Fraction thereof on a Per Order Basis	\$260.00	6.4.1(B) (3)	
(D) <u>Trunk Activation</u>		<u>Per Order</u>	
- Per 24 Trunks Activated 6.4.1(B) (1) Or Fraction thereof, on A Per Order Basis		\$249.00	
(E) <u>Flexible Automatic Number Identification (Flex ANI)</u>			
- Per End Office, Per CIC None		6.10.1 (AA)	

ACCESS SERVICE

17. Rates and Charges (Cont'd)17.2 Switched Access Service (Cont'd)

17.2.2 Local Transport	<u>Rate</u>	<u>Tariff Section Reference</u>
Premium Access		
- <u>Entrance Facility</u> , Per Termination		6.1.3 (A) (1)
- Voice Grade Two-Wire	\$39.20	
- Voice Grade Four-Wire	\$62.72	
- High Capacity DS1	\$134.86	
- High Capacity DS3	\$1,744.81	
- <u>Direct Trunked Transport</u>		6.1.3 (A) (2)
- Direct Trunked Facility		
Per Mile		
- Voice Grade	\$2.79	
- High Capacity DS1	\$9.43	
- High Capacity DS3	\$81.86	
- <u>Direct Trunked Termination</u> , Per Termination		
- Voice Grade	\$28.06	
- High Capacity DS1	\$48.54	
- High Capacity DS3	\$309.41	
- <u>Multiplexing</u>		6.1.3 (A) (5)
Per Arrangement		
- DS3 to DS1	\$282.40	
- DS1 to Voice	\$108.43	
- <u>Tandem Switched Transport</u> - Non 800		6.1.3 (A) (3)
- <u>Tandem Switched Facility</u>		
Per Access Minute Per		
Originating	\$.000267	
Terminating-End Office	\$.00000000	
Terminating-3 rd Party	\$.00032200	
- <u>Tandem Switched Termination</u> - Non 800		
Per Access Minute Per		
Termination		
Originating	\$.001316	
Terminating-End Office	\$0.00000000	
Terminating-3 rd Party	\$0.00142300	
- <u>Tandem Switching</u> - Non 800		
Per Access Minute Per Tandem		
Originating	\$.002763	
Terminating-End Office	\$0.00000000	
Terminating-3 rd party	\$0.00346400	
- <u>Joint Tandem Switched Transport Access Service</u>		
800 Originating, per		
Access Minute	\$0.00000000	

(D)

ACCESS SERVICE

17. 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)

- <u>Transport Interconnection Charge - Non 800</u>		6.1.3(A) (4)
Per Access Minute		
Originating	\$.001096	
Terminating	\$.000000	
- <u>Transport Interconnection Charge - 800</u>		6.1.3(A) (4)
Per Access Minute		
Originating	\$.000000	

Network Blocking Per Blocked Call

Applies to FGD Only \$.0155 6.8.6

(A) Common Channel Signaling Network Connection(1) Signaling Network Access Link

- Signaling Mileage Facility per mile	\$ 3.96	6.9.3(A)
- Signaling Mileage Termination per Termination	\$ 39.79	

- Signaling Entrance Facility per Facility	\$ 64.75	Nonrecurring Charge \$ 177.00
--	----------	----------------------------------

(2) STP Port

- Per port	\$ 455.00	
------------	-----------	--

(B) 800 Data Base Access Service Queries 6.10.3

Per Query

- Basic	.000200	
- Vertical Feature	.000000	

(D)

ACCESS SERVICE

17. Rates and Charges (Cont'd)17.2 Switched Access Service (Cont'd)17.2.3 End Office(A) Local Switching

<u>Premium</u>	<u>Originating</u>	<u>Terminating</u>	
Per Access Minute - Non 800	\$.025719	\$.00000000	
Non Premium	\$0	\$.00000000	
Per Access Minute - 800	\$.000000	\$.00000000	(D)

(B) Information Surcharge

Premium Per 100			
- Access Minutes - Non 800	\$0.0173	\$0	
- Non Premium	\$0	\$0	
- Access Minutes - 800	\$0.0000	\$0	(D)

* Local Switching 1 when applied to Feature Group B with an ADA is multiplied by the ADA rate factor listed in 17.2.4 following.

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2	<u>Switched Access Service</u> (Cont'd)	Assumed Minutes	
17.2.4	<u>Assumed Minutes of Use</u>	Per Month	Tariff Section or Trunk Reference
	(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
		<u>Rate</u>	
17.2.5	<u>Operator Transfer Service</u>		
	Per Call Transferred	\$0.4588	6.9.3(B)
17.3	<u>Special Access Service</u>		
17.3.1	<u>Surcharge for Special Access Service</u>		
		Monthly <u>Rate</u>	Tariff Section <u>Reference</u>
	- Per Voice Grade Equivalent	\$25.00	7.4.2

ACCESS SERVICE

17. Rates and Charges (Cont'd)17.4 Other Services17.4.1 Access Ordering

		<u>Tariff Charge</u>	<u>Section Reference</u>
(A)	<u>Access Order Charge</u>		
	Per order	\$81.00	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	\$34.00	5.4.3(A)
(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	\$34.00	5.4.3(B)
(D)	<u>Miscellaneous Service Order Charge</u>		
	Per Occurrence	\$34.00	5.4.2

ACCESS SERVICE

17. 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>
13.1			
(A)	Basic Time per engineer normally scheduled working hours	\$19.91	
(B)	Overtime per engineer outside of normally scheduled working hours	\$29.86	13.1
(C)	Premium Time outside of scheduled work day, per engineer		\$39.82

ACCESS SERVICE

17. Rates and Charges (Cont'd)17.4 Other Services (Cont'd)17.4.3 Additional Labor

Each Half Hour or	Tariff	<u>Additional Labor Periods</u>	<u>Fraction Thereof</u>	<u>Section Reference</u>
	(A)	Installation or Repair		
		- Overtime, Outside of normally scheduled working hours on a scheduled work day, per technician	\$28.12*	13.2.1 & 13.2.2
		- Premium Time, Outside of schedule work day, per technician	\$37.49*	13.2.1 & 13.2.2
	(B)	Stand by		
		- Basic time, normally scheduled working hours, per technician	\$18.93	13.2.3
		- Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$28.39*	13.2.3
		- Premium Time, outside of scheduled work day, per technician	\$37.85*	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 SERVICE

17. Rates and Charges (Cont'd)17.4 Other Services (Cont'd)17.4.3 Additional Labor (Cont'd)

	<u>Additional Labor Periods</u>		
	<u>Each Half Hour or Fraction Thereof</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 normally scheduled working hours	\$18.75	\$19.67	13.2.4 & 13.2.5
- Overtime per technician outside of normally scheduled working hours on a scheduled work day,	\$28.12*	\$29.50*	13.2.4 & 13.2.5
- Premium Time per technician outside of scheduled work day	\$37.49*	\$39.33*	13.2.4 & 13.2.5

* 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 SERVICE

17. 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 Access

To First Point
of Switching

Additional Tests

	<u>Per Test Per Transmission Path</u>	
Gain-Slope Tests	\$2.89	13.3.1 (A) (2)
C-Notched Noise Tests	\$2.89	13.3.1 (A) (2)
1004 Hz Loss**	\$2.89	13.3.1 (A) (2)
C-Message Noise**	\$2.89	13.3.1 (A) (2)
C-NBalance (return loss)**	\$2.89	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 SERVICE

17. 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 Thereof	Tariff Section <u>Reference</u>
---	---------------------------------------

Gain-Slope,

C-Notched Noise and Any other agreed to Tests, per technician	See the rates for Additional Labor as set Forth in 17.4.3 (C) preceding	13.3.1(A) (3)
---	---	---------------

(D) Additional Cooperative Acceptance Testing - Special
Access

Each Half Hour or Fraction Thereof	Tariff Section <u>Reference</u>
---	---------------------------------------

Testing PeriodsBasic 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 SERVICE

17. Rates and Charges (Cont'd)17.4 Other Services (Cont'd)17.4.4 Miscellaneous Services (Cont'd)(E) Additional Manual Testing - Special Access

<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(B) (2)

(F) Maintenance of Service

<u>Maintenance of Service 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)	13.3.2

* 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.

ACCESS SERVICE

17. Rates and Charges (Cont'd)17.4 Other Services (Cont'd)17.4.5 Special Federal Government Access Services

(A)	Voice Grade Secure Communications	Monthly Rates	Nonrecurring Charges	Termination Charges
-----	--------------------------------------	------------------	-------------------------	------------------------

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

<u>Wideband Secure Communications</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>Termination 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 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for future use.)

(B) Avoidance

For each service provided in accordance with 11.1.2 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for future use.)

(C) Diversity and Avoidance Combined

For each service provided in accordance with 11.1.1 and 11.1.2 preceding, combined, the rates and charges will be developed on an individual case basis.

(Reserved for future use.)

(D) Cable-Only Facilities

For each service provided in accordance with 11.1.4 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for future use.)

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.