

CENTRALIZED EQUAL ACCESS SERVICE

Regulations, Rates and Charges applying to the provision of interstate Centralized Equal Access Service within the certificated operating territory of:

Iowa Network Access Division
in the State of
Iowa
as provided herein
Rate Center: Des Moines, Iowa

Service is provided by means of wire, radio, satellite, fiber optics or other suitable technology or combination thereof.
All material in this tariff is new.

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General Manager
1481 NW 109th Street
Des Moines, Iowa 50322

CENTRALIZED EQUAL ACCESS SERVICECHECK SHEET

Title Page 1 and Page 1 to 188 and Supplement No. 7, inclusive, of this tariff are effective as of the date shown. Original and revised pages as named below contain all changes from the original tariff that are in effect on the date hereof.

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1*	18th	28	1st	54	Original	78	1st
1.1*	5th	29	1st	55	Original	79	Original
2	1st	30	Original	56	1st	80	Original
3	Original	31	Original	57	Original	81	Original
4	1st	32	Original	58	1st	82	Original
5	3rd	33	1st	59	Original	83	2nd
6	3rd	34	Original	60	Original	84	1st
7	1st	35	Original	61	2nd	85	1st
8	1st	36	Original	61.1	Original	86	2nd
9	Original	37	2nd	62	1st	87	1st
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20	1st	46.1	Original	71	Original	94	1st
21	Original	47	Original	72	3rd	95	1st
22	Original	48	Original	72.1	1st	96	1st
23	Original	49	Original	73	1st	97	1st
24	Original	50	1st	74	Original	98	1st
25	Original	51	1st	75	Original		
26	Original	52	1st	76	1st		
27	Original	53	1st	77	Original		

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CENTRALIZED EQUAL ACCESS SERVICE

CONCURRING CARRIERS

NO CONCURRING CARRIERS

CONNECTING CARRIERS

NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS

ONVOY, INC.

(C)

PLYMOUTH, MINNESOTA

REGISTERED SERVICE MARKS

NONE

REGISTERED TRADEMARKS

NONE

CENTRALIZED EQUAL ACCESS SERVICEEXPLANATION OF SYMBOLS

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

EXPLANATION OF ABBREVIATIONS

- | | | | |
|--------|---|--|-----|
| ac | - | Alternating current | |
| ACM | - | Address Complete Message | (N) |
| AML | - | Actual Measured Loss | |
| ANI | - | Automatic Number Identification | |
| AP | - | Program Audio | |
| AT&T-C | - | AT&T Communications | |
| BD | - | Business Day | |
| BHMC | - | Busy Hour Minutes of Capacity | |
| CAROT | - | Centralized Automatic Reporting on Trunks | |
| CCS | - | Common Channel Signaling | (N) |
| CCSA | - | Common Channel Signaling Access | |
| CCSAN | - | Common Channel Signaling Access Network | |
| CEA | - | Centralized Equal Access | (N) |
| CI | - | Changes Interface | |
| CO | - | Central Office | |
| COCTX | - | Central Office Centrex | |
| Cont'd | - | Continued | |
| CPE | - | Customer Provided Equipment | |
| Ctx | - | Centrex | |
| DA | - | Directory Assistance | |
| dB | - | decibel | |
| dBrnC | - | Decibel Reference Noise C-Message Weighing | |
| dBrnCO | - | Decibel Reference Noise C-Message Weighted O | |
| dBv | - | Decibel(s) Relative to 1 Volt (reference) | |
| dBvl | - | Decibel(s) Relating to 1 Volt (reference) | |
| dc | - | direct current | |
| EDD | - | Envelope Delay Distortion | |
| ELEPL | - | Equal Level Echo Path Loss | |
| EML | - | Expected Measured Loss | |
| EPL | - | Echo Path Loss | |
| ERL | - | Echo Return Loss | |
| ESS | - | Electronic Switching System | |
| ESSX | - | Electronic Switching System Exchange | |
| EXM | - | Exit Message | (N) |

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CENTRALIZED EQUAL ACCESS SERVICEEXPLANATION OF ABBREVIATIONS (Cont'd)

F	-	frequency
FID	-	Field Identifier
F.C.C.	-	Federal Communications Commission
FX	-	Foreign Exchange
HC	-	High Capacity
Hz	-	Hertz
IC	-	Interexchange Carrier
ICB	-	Individual Case Basis
ICL	-	Inserted Connection Loss
kbps	-	kilobits per second
Khz	-	kilohertz
LATA	-	Local Access and Transport Area
LIDB	-	Line Information Data Base
Ma	-	Milliamperes
Mbps	-	Megabits per second
MHz	-	Megahertz
MMUC	-	Minimum Monthly Usage Charge
MRC	-	Monthly Recurring Charge
MT	-	Metallic
MTS	-	Message Telecommunications Service(s)
NPA	-	Numbering Plan Area
NRC	-	Nonrecurring Charge
NTS	-	Non-Traffic Sensitive
NXX	-	Three-Digit Central Office Code
OTPL	-	Zero Transmission Level Point
PBX	-	Private Branch Exchange
PCM	-	Pulse Code Modulation
PLR	-	Private Line Ringdown
POT	-	Point of Termination
REC	-	Routing Exchange Carrier
RMS	-	Root-Mean-Square
RSM	-	Remote Switching Modules
RSS	-	Remote Switching Systems
SAC	-	Service Access Code
SCP	-	Service Control Point
SNAC	-	Signaling Network Access Connection
SP	-	Signal Point
SPOI	-	Signaling Point of Interconnection
SS7	-	Signaling System 7
SSP	-	Service Switching Point
STP	-	Signal Transfer Point
SRL	-	Signaling Return Loss

(Z)
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CENTRALIZED EQUAL ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

SSN	-	Switched Service Network	
TES	-	Telephone Exchange Service(s)	
TG	-	Telegraph Grade	
TLP	-	Transmission Level Point	(M)
TSPS	-	Traffic Service Position System	(M)
TTP	-	Toll Transfer Point	(N)
TV	-	Television	(M)
USOC	-	Uniform Service Order Code	
VG	-	Voice Grade	
V & H	-	Vertical & Horizontal	
WATS	-	Wide Area Telecommunications Service(s)	(M)

Certain regulations on this page formerly appeared on 2nd Revised Page 13.

CENTRALIZED EQUAL ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS

The following technical publications are referenced in this tariff and may be obtained from Bell Communications Research, Inc., Distribution Storage Center, 60 New England Ave., Piscataway, NJ 08854.

Technical Reference:

Multiple Exchange Carrier Access Billing (MECAB) Guidelines Issued: December, 1991	Available: December, 1991	
Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines Issued: September 10, 1990	Available: September, 1990	(C) (X)
PUB 41451 High Capacity Terrestrial Digital Service Issued: January, 1983	Available: May 17, 1983	(C) (X)
PUB 41004 Data Communications Using Voiceband Private Line Channels Issued: October, 1973	Available: October, 1973	
PUB 62310 Digital Data System Channel Interface Specification Issued: September, 1983	Available: October, 1983	
PUB 62411 High Capacity Digital Service Channel Interface Specification Issued: September, 1983	Addendum: October, 1984	(C) (X)
TR-NWT-000334, Issue 2 Voice Grade Switched Access Service – Transmission Parameters Issued: September, 1990	Available: September, 1990	(C) (X)
TR-TSY-000335, Issue 2 Voice Grade Special Access - Transmission Parameter Limits and Interface Combinations Issued: May, 1990	Available: May, 1990	(C) (X)
TR-NPL-000336, Metallic and Telegraph Grade Special Access Services Issued: October, 1987		
TR-NPL-000338, Television Special Access and Local Channel Services Issued: December, 1986		

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TR-NPL-000337 Program Audio Special Access Service and Local Channel Services		(C) (X)
Issued: July, 1987	Available: September, 1987	(X) (X)
		(D)
TR-NPL-000341 Digital Data Special Access Service – Transmission Parameters and Interface Combinations		(C) (X)
Issued: March, 1989	Available: May, 1989	
TR-TSH-000342 High Capacity Digital Special Access Service		
Issued: February, 1991	Available: February, 1991	(C) (X)
TR-NWT-000394		
Issued: August, 1991	Available: August, 1991	(N) (X)
TR-TSV-000905		
Issued: July, 1989	Available: July, 1989	
TR-TSV-000954		
Issued: December, 1990	Available: December, 1990	(N) (X)

The following technical publication is referenced in this tariff and may be obtained from the Bell Communications Technical Education Center, Room B02, 6200 Route 53, Lisle, IL 60532

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

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

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

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CENTRALIZED EQUAL ACCESS SERVICE1. Application of Tariff

- 1.1 This tariff contains regulations, rates and charges applicable to the provision of Switched Access Services and other miscellaneous services, hereinafter referred to collectively as service(s), provided by Iowa Network Access Division, hereinafter referred to as Iowa Network, to customers.
- 1.2 The provision of such services by Iowa Network as set forth in this tariff does not constitute a joint undertaking with the customer or the Routing Exchange Carriers for the furnishing of any service.

Switched access services provided under this tariff cover only the use of Iowa Network's central access tandem, the switched transport between an Iowa Network premises and such central access tandem, and the use of the Iowa Network/ONVOY Common Channel Signaling Access Network. End office switches served by Iowa Network's central access tandem are operated by the appropriate Routing Exchange Carrier. Therefore, any switched access services ordered under this tariff must be used with a like switched access service ordered by a Routing Exchange Carrier or vice versa.

(C)

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations2.1 Undertaking of Iowa Network2.1.1 Scope

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

2.1.2 Limitations

- (A) The customer may not assign or transfer the use of services provided under this tariff; however, 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

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of Iowa Network (Cont'd)2.1.2 Limitations (Cont'd)(A) (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 acknowledgment of Iowa Network is required prior to such assignment or transfer which acknowledgment shall be made within fifteen (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) The use and restoration of services shall be in accordance with Part 64, Subpart D of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of Iowa Network (Cont'd)2.1.2 Limitations (Cont'd)

(C) 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. First-come, first-served shall be based upon the received time and date stamped by Iowa Network on customer orders which contain 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, Iowa Network will attempt to seek such missing information or clarification on a verbal basis.

2.1.3 Liability

(A) Iowa Network'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, subscribers to or users of any services provided to or resold by the customer or by any others, for damages associated with the installation, provision, termination, maintenance, repair or restoration of service, and subject to the provisions of (B) through (H) following, Iowa Network'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.

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CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of Iowa Network (Cont'd)

2.1.3 Liability (Cont'd)

(B) Iowa Network shall not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor shall Iowa Network for its own act or omission hold liable any other carrier or customer providing a portion of a service.

(C) Iowa Network shall be indemnified defended and held harmless by the customer, against any claim, loss or damage arising from the use of services offered under this tariff including but not limited to claims by subscribers to services provided to the customer, and users of any services provided by or resold by the customer.

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(D) Reserved for Future Use

(E) Iowa Network shall be indemnified, defended and held harmless by the customer against any claim, loss or damage arising from its use of services offered under this tariff, involving:

(1) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from any communications;

(2) Claims for patent infringement arising from combining or using the service furnished by Iowa Network in connection with facilities or equipment furnished by the customer; or

(3) All other claims arising out of any act or omission of the customer in the course of using services provided pursuant to this tariff.

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

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of Iowa Network (Cont'd)2.1.3 Liability (Cont'd)

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

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

2.1.4 Provision of Services

The services offered under the provisions of this tariff are subject to availability. Iowa Network, to the extent that such services are or can be made available with reasonable effort, will provide to the customer upon reasonable notice services offered in other applicable sections of this tariff at rates and charges specified therein.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Continued)2.1 Undertaking of Iowa Network (Cont'd)2.1.5 Installation and Termination of Services

The Centralized Equal Access Service provided under this tariff (A) includes Iowa Network's communication facilities up to the point of interconnection as defined in 2.6 following which denotes the demarcation point or network interface and (B) will be provided by Iowa Network to such point of interconnection. Any additional terminations at the customer's premises beyond such point of interconnection are the sole responsibility of the customer.

2.1.6 Maintenance of Services

The services provided under this tariff shall be maintained by Iowa Network. The customer or others may not rearrange, move, disconnect, remove or attempt to repair any facilities provided by Iowa Network, other than by connection or disconnection to any interface means used, except with the written consent of Iowa Network.

2.1.7 Changes and Substitutions

Except as provided for equipment and systems subject to F.C.C. Part 68 Regulations at 47 C.F.R. Section 68.110(b), Iowa Network may, where such action is reasonably required in the operation of its business, (A) substitute, change or rearrange any facilities used in providing service under this tariff, (B) change minimum protection criteria, (C) change operating or maintenance characteristics of facilities or (D) change operations or procedures of Iowa Network. In case of any such substitution, change or rearrangement, the transmission parameters will be within the range as set forth in Section 15 following.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of Iowa Network (Cont'd)

Iowa Network 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, Iowa Network 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. Iowa Network will work cooperatively with the customer to determine reasonable notification procedures.

2.1.8 Refusal and Discontinuance of Service

- (A) Unless the provisions of 2.2.2(B) or 2.5 following apply, if the customer fails to comply with 2.1.6 preceding or 2.2.3, 2.3.1, 2.3.6, 2.3.7 or 2.4 following, including any payments to be made by it on the dates and times herein specified, Iowa Network may, on thirty (30) days written notice by Certified U.S. Mail to the person designated by the customer to receive such notices of noncompliance, refuse additional applications for service and/or refuse to complete any pending orders for service at any time thereafter. If Iowa Network does not refuse additional applications for service on the date specified in the thirty (30) days notice, and the customer's noncompliance continues, nothing contained herein shall preclude Iowa Network's right to refuse additional applications for service without further notice to the noncomplying customer.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of Iowa Network (Cont'd)2.1.8 Refusal and Discontinuance of Service (Cont'd)

(B) Unless the provisions of 2.2.2(B) or 2.5 following apply, if the customer fails to comply with 2.1.6 preceding or 2.2.3, 2.3.1, 2.3.6, 2.3.7 or 2.4 following, including any payments to be made by it on the dates and times herein specified, Iowa Network may, on thirty (30) days written notice by Certified U.S. Mail to the person designated by the customer to receive such notices of noncompliance, discontinue the provision of the services involved at any time thereafter. In the case of such discontinuance, all applicable charges, including termination charges, shall become due. If Iowa Network does not discontinue the provision of the services involved on the date specified in the thirty (30) days notice, and the customer's noncompliance continues, nothing contained herein shall preclude Iowa Network's right to discontinue the provision of the services involved without further notice to the noncomplying customer.

2.1.9 Reserved for Future Use2.1.10 Notification of Service-Affecting Activities

Iowa Network will provide the customer timely notification of service-affecting activities that may occur during the normal operation of its business. Such activities may include, but are not limited to, 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; they affect many customer services. No specific advance notification period is applicable to all service activities.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of Iowa Network (Cont'd)2.1.10 Notification of Service-Affecting Activities (Cont'd)

Iowa Network will work cooperatively with the customer to determine the reasonable notification requirements. With some emergency or unplanned service-affecting conditions, such as an outage resulting from cable damage, notification to the customer may not be possible.

2.1.11 Coordination with Respect to Network Contingencies

Iowa Network 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, subject to the Restoration Priority requirements of Part 64 of the F.C.C.'s Rules.

2.1.12 Provision and Ownership of Telephone Numbers

Iowa Network reserves the reasonable right to assign, designate or change telephone numbers, any other call number designations associated with Centralized Equal Access Service, or the Exchange 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), Iowa Network 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). In the case of emergency conditions, however, e.g., a fire in a wire center, it may be necessary to change a telephone number without six- (6) months notice in order to provide service to the customer.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.2 Use2.2.1 Reserved for Future Use2.2.2 Interference or Impairment

- (A) The characteristics and methods of operation of any circuits, facilities or equipment provided by other than Iowa Network and associated with the facilities utilized to provide services under this tariff shall not interfere with or impair service over any facilities of Iowa Network, its affiliated companies, or the Routing Exchange 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.
- (B) Except as provided for equipment or systems subject to the F.C.C. Part 68 Rules in 47 C.F.R. Section 68.108, if such characteristics or methods of operation are not in accordance with (A) preceding, Iowa Network 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, nothing contained herein shall be deemed to preclude Iowa Network's right to temporarily discontinue forthwith the use of a service if such action is reasonable under the circumstances. In case of such temporary discontinuance, the customer will be promptly notified and afforded the opportunity to correct the condition, which gave rise to the temporary discontinuance. During such period of temporary discontinuance, credit allowance for service interruptions as set forth in 2.4.4 following is not applicable.

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.2 Use (Cont'd)

2.2.3 Unlawful Use

The service provided under this tariff shall not be used for an unlawful purpose.

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

The customer shall reimburse Iowa Network for damages to Iowa Network facilities utilized to provide services under this tariff caused by the negligence or willful act of the customer or resulting from improper use of Iowa Network facilities, or due to malfunction of any facilities or equipment provided for or by the customer. Iowa Network 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 Iowa Network for the damages to the extent of such payment. Nothing in the foregoing provision shall be interpreted to hold one customer liable for another customer's actions.

2.3.2 Ownership of Facilities and Theft

Facilities utilized by Iowa Network to provide service under the provisions of this tariff shall remain the property of Iowa Network. Such facilities shall be returned to Iowa Network by the customer in as good a condition as reasonable wear will permit.

(C) (X)

2.3.3 Reserved for Future Use2.3.4 Reserved for Future Use2.3.5 Reserved for Future Use

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.6 Availability for Testing

The services provided under this tariff shall be available to Iowa Network at times mutually agreed upon in order to permit Iowa Network 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. No credit will be allowed for any interruptions involved during such tests and adjustments. (C) (X)

2.3.7 Balance

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

2.3.8 Design of Customer Services

Subject to the provisions of 2.1.7 preceding, 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 Iowa Network, minimum protection criteria or operating or maintenance characteristics of the facilities.

2.3.9 References to Iowa Network

The customer may advise End Users that certain services are provided by Iowa Network in connection with the service the customer furnishes to End Users; however, the customer shall not represent that Iowa Network jointly participates in the customer's services.

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Reserved for Future Use2.3.11 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 Iowa Network 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 Iowa Network from and against suits, claims, losses or damages including punitive damages, attorneys' 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 Iowa Network's services provided under this tariff, including, without limitation, Workmen's Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the customer's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the customer to obtain or maintain in effect any necessary certificates, permits, licenses, or other authority to acquire or operate the services provided under this tariff; provided, however, the foregoing indemnification shall not apply to suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims or demands are based on the tortious conduct of the customer, its officers, agents or employees. (C)

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Claims and Demands for Damages (Cont'd)

(C) Reserved for Future Use

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

2.3.12 Reserved for Future Use2.3.13 Coordination with Respect to Network Contingencies

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

2.3.14 Jurisdictional Report Requirements(A) Jurisdictional Reports

(1)(a) When a customer orders Feature Group B Switched Access Service, the customer shall state in its order the projected interstate percentage for interstate usage for each Feature Group B Switched Access Service group ordered. If the customer discontinues some but not all of the Feature Group B Switched Access Services in a group, it shall provide the projected interstate percentage for such services, which are discontinued.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.14 Jurisdictional Report Requirements (Cont'd)(A) Jurisdictional Reports (Cont'd)

(b) Pursuant to Federal Communications Commission Order FCC 85-145 adopted April 16, 1985, Feature Group B 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 in a state other than that where the called station (as designated by the called station telephone number) is situated is an interstate communication.

(c) The projected interstate percentages will be used by Iowa Network to apportion the usage between interstate and intrastate until a revised report is received as set forth in (7) following.

(2) All single Feature Group B Switched Access Service usage and charges will be apportioned by Iowa Network between interstate and intrastate. The projected interstate percentage reported as set forth in 1(a) and 1(b) preceding will be used to make such apportionment.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.14 Jurisdictional Report Requirements (Cont'd)(A) Jurisdictional Reports (Cont'd)

- (3) For trunk group arrangements where either the interstate or the intrastate charges are based on measured usage, the interstate Feature Group B Switched Access Service(s) information reported as set forth in (1) preceding will be used to determine the charges as follows:

For all groups the number of access minutes for a group will be multiplied by the projected interstate percentage to develop the interstate access minutes. The number of access minutes for the group minus the developed interstate access minutes for the group will be the developed intrastate access minutes.

- (4) When a customer orders Feature Group D Switched Access Service, Iowa Network, where the jurisdiction can be determined from the call detail, will, unless the customer provides the projected interstate percentage for interstate usage for each end office group in its order, determine the projected interstate percentage as follows:

For originating access minutes, the projected interstate percentage will be developed on a monthly basis by end office when the Feature Group D Switched Access Service access minutes are measured by dividing the measured interstate originating access minutes (the access minutes where the calling

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.14 Jurisdictional Report Requirements (Cont'd)(A) Jurisdictional Reports (Cont'd)(4) (Cont'd)

number is in one state and the called number is in another state) by the total originating access minutes when the call detail is adequate to determine the appropriate jurisdiction. For terminating access minutes, the data used by Iowa Network to develop the projected interstate percentage for originating access minutes will be used to develop projected interstate percentage for such terminating access minutes. When originating call details are insufficient to determine the jurisdiction for the call, the customer shall supply the projected interstate percentage or authorize Iowa Network to use the Iowa Network developed percentage. This percentage shall be used by Iowa Network as the interstate percentage for such call detail. Iowa Network will designate the number obtained by subtracting the projected interstate percentage for originating and terminating access minutes calculated by Iowa Network from 100 (100 - calculated projected interstate percentage = intrastate percentage) as the projected intrastate percentage of use.

(5) Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.14 Jurisdictional Report Requirements (Cont'd)(A) Jurisdictional Reports (Cont'd)

- (6) Except where Iowa Network measured access minutes are used as set forth in (4) preceding, the customer reported interstate percentage of use, as set forth in (1) or (4) preceding, will be used until the customer reports a different projected interstate percentage for an in-service end office group. When the customer adds BHMC, lines or trunks to an existing end office group, the customer shall furnish a projected interstate percentage that applies to the added BHMC, lines or trunks. When a customer discontinues BHMC, lines or trunks from an existing group, the customer shall furnish a projected interstate percentage for the discontinued BHMC, lines or trunks in the end office group. The revised report will serve as the basis for future billing and will be effective on the next bill date. No prorating or back billing will be done based on the report.
- (7) Effective on the first of January, April, July, and October of each year, the customer shall update the intrastate and interstate jurisdictional report. The customer shall forward to Iowa Network, to be received no later than fifteen (15) calendar days after the first of each such month, a revised report showing the interstate and intrastate percentage of use for the past three (3) months ending the last day of December, March, June and September,

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.14 Jurisdictional Report Requirements (Cont'd)(A) Jurisdictional Reports (Cont'd)(7) (Cont'd)

respectively, for each service arranged for interstate use. Except as set forth in (4) preceding, where jurisdiction can be determined from the call detail, the revised report will serve as the basis for the next three (3) months billing and will be effective on the bill date in the following month (i.e., February, May, August and November) for that service. No prorating or backbilling will be done based on the report. If the customer does not supply the report, Iowa Network will assume the percentages to be the same as that provided in the last quarterly report. For those cases in which a quarterly report has never been received from the customer, Iowa Network will assume the percentages to be the same as that provided in the order for service as set forth in (1) preceding.

- (B) The customer shall keep sufficient detail from which the percentage of interstate use can be ascertained and upon request of Iowa Network make the records available for inspection. Such a request will be initiated by Iowa Network no more than once per year. The customer shall supply the data within thirty (30) calendar days of Iowa Network's request.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.15 Determination of Interstate Charges for Mixed Interstate and Intrastate Access Service

When mixed interstate and intrastate Access Service is provided, all charges will be prorated between interstate and intrastate. The percentages provided in the reports, as set forth in 2.3.14(A) preceding, will serve as the basis for calculating the charges. The percentages of an Access Service to be charged as interstate are 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.

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(C)(B) Usage-Sensitive Charges

For usage sensitive (i.e., access minutes and calls) chargeable rate elements, rates are calculated as follows:

- (1) multiply the percent interstate use times actual use (i.e., measured) times the stated tariff rate.

The interstate percentage will change as revised usage reports are submitted or a revised percentage is calculated as set forth in 2.3.14 preceding.

2.3.16 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances2.4.1 Payment of Rates, Charges and Deposits

(A) Iowa Network will, in order to safeguard its interests, only require a customer which has a proven history of late payments to Iowa Network, or does not have established credit, except for a customer which is a successor of a company which has established credit and has no history of late payments to Iowa Network, to make a deposit prior to or at any time after the provision of a service to the customer to be held by Iowa Network as a guarantee of the payment of rates and charges. Such deposit may not exceed the actual or estimated rates and charges for the service for a two-month period. The fact that a deposit has been made in no way relieves the customer from complying with Iowa Network'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. At the option of Iowa Network, such a deposit may be refunded or credited to the customer's account when the customer has established credit or 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 the case of a cash deposit, for the period the deposit is held by Iowa Network, the customer will receive interest at five percent (5%) calculated from the date that the customer makes the deposit

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CENTRALIZED EQUAL 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) Iowa Network shall bill on a current basis all rates and 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, Iowa Network shall bill in advance, charges for all services to be provided during the ensuing billing period except for charges associated with service usage 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) Iowa Network will establish a bill day semi-monthly for each customer account. The bill will cover non-usage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled non-usage 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 as set forth in

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CENTRALIZED EQUAL 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) (Cont'd)

(1) (Cont'd)

(2) following. If payment is not received by the payment date, as set forth in (2) following, in immediately available funds, a late payment penalty will apply as set forth in (2) following.

(2)(a)

All bills dated, as set forth in (1) preceding, for service provided to the customer by Iowa Network, are due thirty (30) 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 twenty (20) days prior to the thirty (30) day payment due date, then the bill shall be considered delayed, upon request of the customer the due date will be extended by the number of days the bill was delayed. Such a request of the customer must be accompanied with proof of late bill receipt.

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CENTRALIZED EQUAL 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) (Cont'd)

(2)(a) (Cont'd)

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 such bills will be due from the customer 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.

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(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Certain regulations found on this page formerly appeared on Original Page 40.

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

(2)(b) Further, if any portion of the payment is received by Iowa Network after the payment date as set forth in (a) preceding, or if any portion of the payment is received by Iowa Network in funds which are not immediately available to Iowa Network, then a late payment penalty shall be due to Iowa Network. The late payment penalty shall be the portion of the payment not received by the payment date times a late factor. The late 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 payment date to and including the date that the customer actually makes the payment to Iowa Network, or
- (II) 0.000590 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 Iowa Network.

CENTRALIZED EQUAL 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) (Cont'd)

(2)(c) In the event that a billing dispute concerning any rates or charges billed to the customer by Iowa Network is resolved in favor of Iowa Network, any payments withheld pending settlement of the dispute shall be subject to the late payment penalty set forth in (b) preceding. If the customer disputes the bill on or before the payment date, and pays the undisputed amount on or before the payment date, any late payment charge for the disputed amount will not start until ten (10) days after the payment date.

(3) Billing Disputes Resolved in Favor of the Customer

If the customer pays the total billed amount and disputes all or part of the amount, Iowa Network will refund any overpayment. In addition, Iowa Network will pay to the customer penalty interest on the overpayment. When a claim is filed within 90 days of the due date, the penalty interest period shall begin on the payment date. When a claim is filed more than 90 days after the due date, the penalty interest period shall begin from the date of the claim or the date of overpayment, whichever is later.

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(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Issued: February 12, 1989

Effective: February 20, 1989

2700 Westown Parkway, Suite 140
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CENTRALIZED EQUAL 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) 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 or major fraction of days based on a thirty (30)-day month. (M) (X)
- (E) Iowa Network will, upon request, furnish within thirty (30) days of a request at no charge to the customer such detailed information as may reasonably be required for verification of any bill. (C) (X)

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Certain regulations previously found on this page formerly appeared on Original Page 43.

Issued: February 13, 1989

Effective: February 20, 1989

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

(F) When a rate or charge 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).

(G) When more than one copy of a customer bill for services provided under the provisions of this tariff is furnished to the customer, an additional charge applies for each additional copy of the bill as set forth in 13.3.5 following.

2.4.2 Minimum Periods

The minimum periods for which services are provided and for which rates and charges are applicable is one (1) month, except as otherwise specified.

2.4.3 Cancellation of an Order for Service

Provisions for the cancellation of an order for service are set forth in 5.2.2(B) and 5.2.3 following.

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 Iowa Network result in the complete loss of service by the customer as set forth in 6.5.1 following. An interruption period starts when an inoperative service is

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(A) General (Cont'd)

reported to Iowa Network, or when Iowa Network becomes (C) (X)
aware of the service interruption, and ends when the service is (C) (X)
operative.

(B) When A Credit Allowance Applies

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

- (1) For Switched Access Service, no credit shall be allowed for an interruption of less than twenty-four (24) hours. The customer shall be credited for an interruption of twenty-four (24) hours or more at the rate of 1/30 of any applicable monthly rates for each period of twenty-four (24) hours or major fraction thereof that the interruption continues.
- (2) 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.
- (3) Reserved for Future Use

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

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Effective: February 20, 1989

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(C) When a Credit Allowance Does Not Apply

No credit allowance will be made for:

- (1) Interruptions caused by the negligence of the customer.
- (2) Interruptions of a service due to the failure of equipment or systems provided by the customer or others.
- (3) Interruptions of a service during any period in which Iowa Network is not afforded access to the location where the service is terminated.
- (4) Interruptions of a service 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. Thereafter, a credit allowance as set forth in (B) preceding applies.
- (5) Reserved for Future Use
- (6) Periods when the customer continues to use the service on an impaired basis.
- (7) Periods of temporary discontinuance as set forth in 2.2.2(B) preceding.
- (8) An interruption or a group of interruptions, resulting from a common cause, for amounts less than one dollar (\$1.00).

(X) Certain regulations previously found on this page can now be found on Original Page 46.1.

Issued: March 16, 1990

Effective: April 30, 1990

CENTRALIZED EQUAL 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)

(9) Periods of interruption as set forth in 13.3.1 following.

(10) Interruption of service caused by a customer's failure to provide notification to Iowa Network of media stimulated mass calling events as set forth in 6.6.5 following.

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(D) Reserved for Future Use

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Certain regulations found on this page formerly appeared on Original page 46.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(E) Temporary Surrender of a Service

In certain instances, the customer may be requested by Iowa Network 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 thirty (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 (1) monthly billing period.

2.4.5 Reserved for Future Use2.4.6 Reserved for Future Use2.4.7 Title or Ownership Rights

(A) 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 Iowa Network in the provision of such services.

2.4.8 Rating and Billing of Access Services Provided by Iowa Network and Routing Exchange Carriers

Iowa Network will handle rating and billing of Access Services under this tariff as follows.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.8 Rating and Billing of Access Services Provided by Iowa Network and Exchange Telephone Companies (Cont'd)

- (A) Iowa Network will provide the Switched Transport between Iowa Network's central access tandem and another Iowa Network premises set forth in Section 8 following and bill the charges in accordance with its Centralized Equal Access Tariff. Iowa Network's rate for the Switched Transport element is as set forth in 6.8.1 following. The Routing Exchange Carrier will provide the Switched Transport element between an Iowa Network premises listed in Section 8 following and the end office switch(s) served by Iowa Network's central access tandem and will bill the charges in accordance with its Access Service tariff. When applicable, the Routing Exchange Carrier will also provide the Switched Transport element between the customer's premises and Iowa Network premises listed in Section 8 following. All other appropriate charges in the Routing Exchange Carrier tariff are applicable.

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Connections

2.5.1 General

Equipment and systems (i.e., terminal equipment, multiline terminating systems and communications systems) may be connected with Switched Access Service furnished by Iowa Network where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

(X)

2.5.2 Reserved for Future Use

(X) Issued under authority of Special Permission Number 88-252 of the Federal Communications Commission.

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Effective: September 23, 1988

1481 NW 109th Street
Des Moines, Iowa 50322

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Attenuation Distortion

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

Balance (100 Type) Test Line

The term "Balance (100 Type) Test Line" denotes an arrangement 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 time of day that Iowa Network is open for business. Business day hours are from 9:00 to 5:00 with an hour for lunch Monday through Friday, resulting in a standard forty (40) hour workweek.

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(C) (X)
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(C) (X)

Busy Hour Minutes of Capacity (BHMC)

The term "Busy Hour Minutes of Capacity (BHMC)" denotes the customer specified maximum amount of Switched Access 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 ordered.

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Effective: February 20, 1989

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Call

The term "Call" denotes a customer attempt for which the complete address code (e.g., 0-, 911, or 7 digits) is provided to the serving dial tone office.

CCS

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

Central Office

See End Office Switch

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(C) (X)

Central Office Prefix

The term "Central Office Prefix" denotes the first three (3) digits (NXX) of the seven (7) 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 (2) or more points of termination.

Channelize

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

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Issued: February 13, 1989

Effective: February 20, 1989

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice channel. The frequency weighing, 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.

Common Channel Signaling Access Network (CCSAN)

The term "CCSAN" refers to the network that allows call control information to be transmitted separately, or out-of-band, from the voice communications path. SS7 is the most recent protocol used for common channel signaling.

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Communications System

The term "Communications System" denotes channels and other facilities, which are capable of communications between terminal equipment provided by other than Iowa Network.

Customer(s)

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

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.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)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 (2) signal powers.

Decibel Reference Noise C-Message Weighing

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 one (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 Weighing" referred to or measured at a zero transmission level point.

Detail Billing

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

Echo Control

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

Echo Path Loss

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

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Echo Return Loss

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

End Office Switch

The term "End Office Switch" denotes an Exchange Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to trunks. Included are Remote Switching Modules and Remote Switching Systems served by a host office in a different wire center.

End User

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

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.

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

Exchange

The term "Exchange" denotes a unit generally smaller than a Local Access and Transport Area, established by an Exchange 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 an Exchange Telephone company's exchange area to include nearby exchanges. One or more designated exchanges comprise a given Local Access and Transport area.

Exchange Telephone Company

The term "Exchange Telephone Company" denotes a carrier that provides service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange and which is covered by the exchange service charge.

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 (2) readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

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CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Field Identifier

The term "Field Identifier" denotes two (2) or four (4) characters that are used on service orders to convey specific instructions. Field Identifiers may or may not have associated data. Selected Field Identifiers are used in billing systems to generate nonrecurring charges.

First Come - First Served

The term "First Come - First Served" denotes a procedure followed when a shortage of facilities or equipment occurs, such that a service ordered cannot be provided. The orders delayed by the shortage of facilities will be prioritized according to the sequence in which they were received. That is, when facilities or equipment become available, the first order received will be the first order processed.

First Point of Switching

The term "First Point of Switching" denotes the first Iowa Network location at which switching occurs on the terminating path of a call proceeding from the customer's premises to the terminating end office and, at the same time, the last Iowa Network location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer's 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.

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

The term "Home" refers to the directing of calls to a specific toll center location or Class 4 office.

Host Office

The term "Host Office" denotes an electronic switching system, which provides call-processing capabilities for one or more Remote Switching Modules or Remote Switching Systems.

Immediately Available Funds

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

Impedance Balance

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

Impulse Noise

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

Individual Case Basis

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

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

Interexchange Carrier (IC) or Interexchange Common Carrier

The terms "Interexchange Carrier" (IC) or "Interexchange Common Carrier" denote any individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communications by wire or radio, between two (2) or more exchanges.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the nonlinearity of a channel. It is measured using four (4) tones, and evaluating the ratio (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.

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.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Local Access and Transport Area

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 Tandem Switch

The term "Local Tandem Switch" denotes a local Telephone Company switching unit by which local or access telephonic communications are switched to and from an End Office Switch.

Loop Around Test Line

The term "Loop Around Test Line" denotes an arrangement to provide a means to make certain two-way transmission tests on a manual basis. This arrangement has two terminations, each reached by means of separate telephone numbers and does not require any specific customer equipment. Equipment subject to this test arrangement is at the discretion of the customer.

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" is any period of time in excess of one half ($\frac{1}{2}$) of the stated amount of time. As an example, in considering a period of twenty-four (24) hours, a major fraction thereof would be any period of time in excess of twelve (12) hours exactly. Therefore, if a given service is interrupted for a period of thirty-six (36) hours and fifteen (15) minutes, the customer would be given a credit allowance for two (2) twenty-four (24) hour periods for a total of forty-eight (48) hours.

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Message

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

Milliwatt (102 Type) Test Line

The term "Milliwatt (102 Type) Test Line" denotes an arrangement which provides a 1004 Hz tone at 0 dBm0 for one-way transmission measurements towards the customer's point of interconnection from a Routing Exchange Carrier end office.

Onvoy, Inc. (ONVOY)

The term "ONVOY" denotes the SS7 provider who is cooperating with Iowa Network in the joint operation of the CCSAN. MEANS owns and operates an STP located in Plymouth, Minnesota, which is mated to the STP owned and operated by Iowa Network Services, Inc. in Des Moines, Iowa.

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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.

CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Nonsynchronous Test Line

The term "Nonsynchronous Test Line" denotes an arrangement 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 (Numbering Plan Area) code and a seven-digit telephone number made up of a three-digit Central Office code 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.

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Certain regulations on this page formerly appeared on Original Page 61.

CENTRALIZED EQUAL ACCESS SERVICE2. 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, which provides an ac open circuit termination of a trunk by means of an inductor.

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Originating Direction

The term "Originating Direction" denotes the use of Access Service for the origination of calls from an End User Premises to a Customer Premises.

Pay Telephone

The term "Pay Telephone" denotes Exchange Telephone Company provided instruments and related facilities that are available to the general public for public convenience and necessity, including public and semi-public telephones, and coinless telephones.

Phase Jitter

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

Point of Interconnection

The term "Point of Interconnection" denotes the demarcation point or network interface, on an Iowa Network premises at which Iowa Network's responsibility for the provision of Centralized Equal Access Service ends.

(C) (X)
(C) (X)Premises

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

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CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Service Control Point (SCP)

The term "Service Control Point" denotes the CCS/SS7 network node that acts as a host for various database applications and provides switching, routing, and call handling information.

Service Switching Point (SSP)

The term "Service Switching Point" denotes a switching office or node on the CCS/SS7 network, which has the ability to launch queries to a centralized on-line database such as the 800 Database and the Line Information Database (LIDB). The SSP also performs all of the functions of the SP.

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 (7) digit number of the associated access connection.

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CENTRALIZED EQUAL ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Shortage of Facilities or Equipment

The term "Shortage of Facilities or Equipment" denotes a condition which occurs when Iowa Network 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, which provides for an ac short circuit termination of a trunk by means of a capacitor of at least four (4) microfarads.

Signaling Network Access Connection (SNAC)

The term "Signaling Network Access Connection" denotes the link between the Signaling Point of Interconnection (SPOI) and the INS/MEANS STPs. The connection also includes the necessary ports on the INS/MEANS STPs.

Signaling Point of Interconnection (SPOI)

The term "Signaling Point of Interconnection" denotes the point of interconnection between Iowa Network and the customer for purposes of exchanging SS7 signaling messages. The SPOIs are located in the metropolitan areas of Des Moines, Iowa and Minneapolis/St. Paul, Minnesota.

Signal Point (SP)

The term "Signal Point" denotes a node on the CCS/SS7 network that converts non-SS7 signals to SS7 protocol, sends and receives messages from one node to another in order to establish and disconnect calls.

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Certain regulations previously found on this page can now be found on Original Page 64.1.

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Signal-to-C-Notched Noise Ratio

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

Signal Transfer Point (STP)

The term "Signal Transfer Point" denotes a packet switch that routes signaling messages between SPs, SSPs, and SCPs. Iowa Network in conjunction with ONVOY provides a geographically separated mated pair of STPs for connection to the customer's SS7 network. The STPs are located in Des Moines, Iowa and Plymouth, Minnesota. (C)

Signaling Return Loss (Z)

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 signaling (instability) problems are most likely to occur. (Z)

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.

Synchronous Test Line

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

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from a Customer Premises to an End User Premises. (C) (X)

Transmission Measuring (105 Type) Test Line/Responder

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

Transmission Path

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

Trunk

The term "Trunk" denotes a transmission path connecting two (2) 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.

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2700 Westown Parkway
West Des Moines, Iowa 50265

CENTRALIZED EQUAL ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Trunk-Side Connection

The term "Trunk-Side Connection" denotes the connection of a transmission path to the trunk side of a 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).

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.

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.

CENTRALIZED EQUAL ACCESS SERVICE

3.

RESERVED FOR FUTURE USE

Issued: August 10, 1988

Effective: September 23, 1988

1481 NW 109th Street
Des Moines, Iowa 50322

CENTRALIZED EQUAL ACCESS SERVICE

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RESERVED FOR FUTURE USE

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service

5.1 General

This section sets forth the regulations and other related charges for Access Orders for Switched Access Service. These charges are in addition to other applicable charges as set forth in other sections of this Tariff.

An Access Order is an order to provide the customer with Switched Access Service or to provide changes to existing services.

5.1.1 Ordering Conditions

Switched Access Service may be ordered from Iowa Network between the points of interconnection set forth in Section 8 following. A customer may order any number of services of the same type (e.g., Feature Group, Interface Group, etc.), between Iowa Network's central access tandem and a customer point of interconnection set forth in Section 8 following. Switched Access Service between a customer's premises and the points of interconnection set forth in Section 8 following is solely the responsibility of the customer or ordered from another carrier. Switched Access Service from the points of interconnection set forth in Section 8 following to an end office must be ordered from a Participating Telephone Company or other Exchange Telephone Company. Iowa Network will determine the Switched Transport facilities to be provided between an Iowa Network premises set forth in Section 8 following and Iowa Network's central access tandem on the basis of the capacity ordered.

(C) (X)
| |
(C) (X)

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Certain regulations previously found on this page can now be found on Original Page 69.1.

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CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.1 General (Cont'd)5.1.2 Provision of Other Services

- (A) Testing Service, Additional Labor, Restoration Priority, and other services offered under the provisions of this tariff shall be ordered with an Access Order or as set forth in (B) following. The rates and charges for these services, as set forth in other sections of this tariff, will apply in addition to the ordering charges set forth in this section and the rates and charges for the Access Service with which they are associated.
- (B) With the agreement of Iowa Network, the items listed in (A) preceding may subsequently be added to the order at any time, up to and including the service date for the Access Service. When added subsequently, charges for a design change as set forth in 5.2.2(C) following will apply when an engineering review is required.
- (C) Additional Engineering is not an ordering option, but will be applied to an Access Order when Iowa Network determines Additional Engineering is necessary to accommodate a customer request. When Additional Engineering 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 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%).

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.1 General (Cont'd)

5.1.2 Provision of Other Services (Cont'd)

(C) (Cont'd)

The regulations, rates and charges for Additional Engineering are as set forth in 13.1 following and are in addition to the regulations, rates and charges specified in this section.

5.1.3 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order

An Access order is used by Iowa Network to provide to a customer Access Service as follows:

- Switched Access Services as set forth in Section 6 following.
- Other Services as set forth in Section 5.1.2 preceding.

When placing an order for Access Service, the customer shall provide, at a minimum, the following information:

- For Feature Group B and Feature Group D Switched Access Service, the customer shall specify the number of busy hour minutes of capacity (BHMC) needed to carry traffic from the end office of a Routing Exchange Carrier set forth in Section 9 following to Iowa Network's central access tandem by type of BHMC and Local Transport options and Local Switching options desired. This information is used to determine the number of transmission paths as set forth in 6.5.5 following. The basic traffic type must also be specified using the same categories as described in 6.1.1 following, to enable efficient provisioning and billing functions. (C)

For Interim NXX Translation, the customer must place an order with the company who provides the Interim NXX Translation. If the order is placed

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.2 Access Order (Cont'd)

with Iowa Network, the customer must also provide a copy of the order to the Exchange Telephone Companies involved in providing the Interim NXX Translation. The minimum territory for which Iowa Network will provide Interim NXX Translation is all the appropriately equipped offices of the Routing Exchange Carriers set forth in Section 9 following for which the customer has ordered. (C)
(C)

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.2 Access Order (Cont'd)

Interim NXX Translation. Additionally when new NXX(s) are to be opened up, or when such existing NXX(s) are to be deleted, coincident with the provision of Interim NXX Translation, the customer shall provide such information when placing the order for Interim NXX Translation. For additions and/or deletions of NXX(s) at any other time, the customer shall place an order for such additions and /or deletions. 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 Bellcore NANP Coordinator. Iowa Network 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. (C)

The customer must supply a copy of the order to each carrier involved in providing the access service. (C)

The BHMC may be determined by the customer in the following manner. For each average business day (i.e., 8 A.M. to 11 P.M., Monday through Friday, excluding national holidays), the customer shall determine the highest number of minutes of use for a single hour (e.g., 55 minutes in the 10-11 A.M. hour). The customer shall, for the same hour period (i.e., busy hour) for each of twenty (20) consecutive business days, pick the twenty (20) consecutive business days in a calendar year which add up to the largest number of minutes of use. Both originating and terminating minutes shall be included. The customer shall then determine the average busy hour minutes of capacity (i.e., BHMC) by dividing the largest number of minutes of use figure for the same hour period for the consecutive twenty (20) business day period by twenty (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.

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.1 Access Order Service Date Intervals

Access Service is provided with one of the following Service Date Intervals:

- Standard Interval
- Negotiated Interval

Whether the customer's service is subject to standard or negotiated intervals, Iowa Network will provide service interval tables and any associated relevant information to all customers within a reasonable time after a request.

To the extent the Access Service can be made available with reasonable effort, Iowa Network will provide the Access Service in accordance with the customer's requested interval, subject to the following conditions:

(A) Standard Interval

The day upon which the customer has provided to Iowa Network a firm commitment for the service and sufficient information to allow for the processing of the Access Order is the Application Date. On the Application Date, Iowa Network will establish a Service Date. The Service Date is the date on which service is to be made available to the customer. The time required to provision the service (i.e., the interval between the Application Date and the Service Date) is known as the service interval. Standard interval tables and associated information will be provided to customers upon request within a reasonable period of time.

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.1 Access Order Service Date Intervals (Cont'd)(A) Standard Interval (Cont'd)

Access Services provided in a Standard Interval will be installed during normally scheduled work hours. If a customer requests that installation be done outside of scheduled work hours, and Iowa Network agrees to this request, the customer will be subject to applicable Additional Labor Charges as set forth in 13.2.6(A) following.

(B) Negotiated Interval

The customer may request a service date other than that established pursuant to the standard order service interval guidelines, and Iowa Network, where possible, will establish a negotiated order service date in accordance with such request.

Iowa Network will negotiate a service date interval with the customer when:

- (1) There is no Standard Interval for the service, or
- (2) The customer requests a service date before or beyond the applicable Standard Interval service date, or
- (3) The quantity of Access Services ordered exceeds the quantities specified in the Standard Intervals.

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.1 Access Order Service Date Intervals (Cont'd)(B) Negotiated Interval (Cont'd)(3) (Cont'd)

Iowa Network will offer a service date based on the type and quantity of Access Services the customer has requested. The Negotiated Interval may not exceed by more than six (6) months the Standard Interval Service date, or, when there is no Standard Interval, the Iowa Network offered service date. All services for which rates are applied on an individual case basis are provided with a Negotiated Interval.

5.2.2 Access Order Modifications

An Access Order may be modified by the customer prior to the service date as set forth following. One or more of the following charges will apply when such modifications are undertaken. When modifications are undertaken, the service date will be changed if necessary to complete the requested modifications with the normal work force assigned to complete such an order in normal work hours. All charges for Access Order modifications will apply on a per occurrence basis. (C) (X)
(C) (X)
(C) (X)

Any increase in the number of busy hours minutes of capacity will be treated as a new Access Order (for the increased amount only).

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CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.2 Access Order Modifications(A) Service Date Change Charge

Access Order service dates may be changed, but the new service date may not exceed the original service date by more than thirty (30) calendar days. When, for any reason, the customer indicates that service cannot be accepted for a period not to exceed thirty (30) calendar days, and Iowa Network accordingly delays the start of service, a Service Date Change Charge will apply. If the customer requested service date is more than thirty (30) calendar days after the original service date, the order will be cancelled by Iowa Network and reissued with the appropriate cancellation charges applied unless the customer indicates that billing for the service is to commence as set forth in 5.2.3(A) following. If Iowa Network determines it can accommodate the customer's request without delaying service dates for orders of other customers, a new service date may be established that is prior to the original standard or negotiated interval service date.

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

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.2 Access Order Modifications (Cont'd)(A) Service Date Change Charge (Cont'd)

A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The applicable charge is:

	<u>Charge</u>
Service Date Change Charge, per order	\$19.28

(B) Partial Cancellation Charge

Any decrease in the number of ordered busy hours minutes of capacity will be treated as a partial cancellation and the charges as set forth in 5.2.3.(B) following will apply.

(C) Design Change Charge

The customer may request a design change to the service ordered. A design change is any change to an Access Order, which requires engineering review. An engineering review is a review by Iowa Network 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 channel interface, type of Interface Group or technical specifications package. Design changes do not include a change of customer point of interconnection, end office switch, or Feature Group type.

(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.2 Access Order Modifications (Cont'd)(C) Design Change Charge (Cont'd)

Changes of this nature will require the issuance of a new order and the cancellation of the original order with appropriate cancellation charges applied.

Iowa Network will review the requested change, notify the customer whether the change is a design change, if it can be accommodated and if a new service date is required. If the customer authorizes Iowa Network to proceed with the design change, a Design Change Charge will apply in addition to the charge for Additional Engineering as set forth in 13.1 following. If a change of a service date is required, the Service Date Change Charge as set forth in (A) preceding will also apply. The Design Change Charge will apply on a per order per occurrence basis, for each order requiring a design change. The applicable charge is:

	<u>Rate</u>
Design Change Charge, per order	\$27.00

(D) Expedited Order Charge

When placing an Access Order, a customer may request a service date that is prior to the standard interval service date. A customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If Iowa Network determines that service can be provided on the requested date and that additional labor costs are required to meet the requested service date, the customer will be notified

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.2 Access Order Modifications (Cont'd)(D) Expedited Order Charge (Cont'd)

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 follows:

To calculate the additional labor charges, Iowa Network 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 13.2.6(A) following.

When the request for expediting occurs subsequent to the issuance of the Access Order, a Service Date Change Charge as set forth in (A) preceding also applies.

5.2.3 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 Iowa Network 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 ten (10) days. If a customer is unable to accept Access Service within thirty (30) calendar days of the original service date, the customer has the choice of the following options:

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.3 Cancellation of an Access Order (Cont'd)(A) (Cont'd)

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

If no cancellation request is received within the specified thirty (30) calendar days, 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 thirty-first (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 Service facilities is considered to have started when Iowa Network incurs any cost in connection therewith or in preparation thereof which would not otherwise have been incurred.
- (2) Where the customer cancels an Access Order prior to the start of installation of access facilities, no charges shall apply.
- (3) Where installation of access facilities has been started prior to the cancellation, the charges specified in (a) or (b) following, whichever is lower, shall apply.

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.2 Access Order (Cont'd)5.2.3 Cancellation of an Access Order (Cont'd)(B) (Cont'd)(3) (Cont'd)

- (a) A charge equal to the costs incurred in such installation, less estimated net salvage. Such charge is determined as detailed in (4) following.
 - (b) The charge for the minimum period of Switched Access Service ordered by the customer.
 - (4) Charges applicable as specified in (3)(a) preceding 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.
- (C) When a customer cancels an order for the discontinuance of service, no charges apply for the cancellation.
- (D) If Iowa Network misses a service date by more than thirty (30) days due to circumstances over which it has direct control (excluding, e.g., acts of God, governmental requirements, work stoppages and civil commotions), the customer may cancel the Access Order without incurring cancellation charges.

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.2 Access Order (Cont'd)

5.2.4 Selection of Facilities for Access Orders

(A) For all Access Orders, the option to request a specific transmission path is not provided.

5.2.5 Minimum Period

(A) The minimum period for which Access Service is provided and for which charges are applicable, is one (1) month.

(B) Administrative Changes as set forth in 6.7.1(C) following for Switched Access Service may be made without a change in minimum period requirements.

(C) Changes other than those identified in 6.7.1(C) following will be treated as a discontinuance of the existing service and an installation of a new service. All associated nonrecurring charges will apply for the new service. A new minimum period will be established for the new service. The customer will also remain responsible for all outstanding minimum period obligations associated with the disconnected service.

The changes listed below are those which will be treated as a discontinuance and installation of service and for which a new minimum period will be established.

(1) A change in type of service (i.e., one type of Switched Access Feature Group to another except as set forth in 6.7.5 following),

(2) A change in the service to reconfigure FGD trunks to add or discontinue SS7 signaling capability.

(N)
|
(N)

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.2 Access Order (Cont'd)

5.2.6 Minimum Period Charges

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

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

- (A) For Switched Access Service, the charge for a month or fraction thereof is equal to the applicable recurring charges plus any nonrecurring charge(s) that may be due. (C)
(C)

5.2.7 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.3 Available Inventory

Available inventory is limited and does not include facilities used to provide working services or facilities previously ordered, reserved for pending orders or held as maintenance spare. Available inventory is the Iowa Network facilities (e.g., loop pairs, interoffice pairs, carrier channels, circuit equipment trunk equipment, and switching equipment) in place, when the customer places an order, or under construction to be ready to meet future customer orders. The available date for facilities under construction is the date such facility construction is completed, including line up and testing, and made available to meet customer needs. Iowa Network will make every reasonable effort to maintain sufficient available inventory to provide Centralized Equal Access Service in accordance with customers' requested service date intervals. To the extent that service can be provided, Access Orders will be satisfied from available inventory. (C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE5. Ordering Options for Switched Access Service (Cont'd)5.4 Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies

- (A) Access Services provided by Iowa Network and Exchange Telephone Companies are services where one end of the Transport element is in the operating territory of an Exchange Telephone Company and Iowa Network provides a portion of the Transport element between two or more of the points of interconnection listed in Section 8 following or where the Interim NXX Translation Service is provided by Iowa Network. Iowa Network will coordinate and arrange for the provision of the services ordered. In addition to the Switched Transport rate billed by Iowa Network as set forth in Section 6 following, each Exchange Telephone Company will provide the portion of the Transport element in its operating territory and will bill its charges in accordance with its tariff. (C)
(C)
- (1) When Switched Access Services are ordered to Iowa Network's central access tandem, the customer will place the order with Iowa Network. The customer must also supply a copy of the order to each Exchange Telephone Company involved in providing the service and subtending Iowa Network's central access tandem.
- (2) When Switched Access Services are ordered to a point of interconnection listed in Section 8 following other than Iowa Network's central access tandem, the customer will place the order as follows:
- (a) For Feature Group B Switched Access Service, the customer must place the order with Iowa Network. The customer must also supply a copy of the order to each Exchange Telephone Company involved in providing the service and subtending Iowa Network's central access tandem.

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.4 Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies (Cont'd)

(A) (Cont'd)

(2) (Cont'd)

(b)

For Feature Group D Switched Access Service, the customer must place the order with the Exchange Telephone Company in whose territory the end office is located. The customer must also supply a copy of the order to Iowa Network. (C)
(C)

(3) For the Switched Access Services ordered set forth in (1) and (2) preceding, the customer must also supply a copy of the order to the Exchange Telephone Company in whose operating territory a customer premises is located and any other Exchange Telephone Company involved in providing the service.

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

CENTRALIZED EQUAL ACCESS SERVICE

5. Ordering Options for Switched Access Service (Cont'd)

5.4 Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies (Cont'd)

(A) (Cont'd)

(4) (Cont'd)

When Feature Group D is ordered with the Interim NXX Translation optional feature, the customer shall specify the Service Access Code(s) (e.g., 800 or 900) and their associated NXX Code(s) to be translated. The initial and subsequent orders to add, change, or delete Interim NXX Translation codes shall be placed separately or in combination with orders to change Feature Group D Switched Access BHMC. 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, Iowa Network 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.

(N)

(N)

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service6.1 General

Switched Access Service, when combined with the services offered by Exchange Telephone Companies, is available to customers. Iowa Network provides a two-point electrical communications path between a point of interconnection with the transmission facilities of an Exchange Telephone Company at a location listed in Section 8 following and Iowa Network's central access tandem where the customer's traffic is switched to originate or terminate its communications. It also provides for the switching facilities at Iowa Network's central access tandem. Iowa Network's central access tandem is Iowa Network's switching system located in Des Moines, Iowa that provides a concentration and distribution function for originating and terminating traffic between the end offices of Routing Exchange Carriers listed in Section 9 following and a customer's point of interconnection set forth in Section 8 following. The customer's point of interconnection is the demarcation point or network interface between Iowa Network's communications facilities and customer provided facilities.

Rates and charges for Switched Access Service are set forth in 6.8 following. The application of rates for Switched Access Service is described in 6.7 following.

6.1.1 Feature Group Arrangements and Manner of Provision

Switched Access Service is provided in two service categories called Feature Groups. These are differentiated by their technical characteristics and the manner in which an end user accesses them in originating calling, e.g., with or without an access code. In addition, Common Channel Signaling Access and Interim NXX Translation is provided in conjunction with Feature D Switched Access Service. Following is a brief description of each Feature Group arrangement, and the CCSA and Interim NXX Translation optional features. (C)
(C)
(C)
(C)

(A) Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)(B) Feature Group B (FGB)

FGB Access, which is available to all customers, provides trunk side access at a customer's point of interconnection with an associated uniform 950-0XXX or 950-1XXX access code for the customer's use in originating and terminating communications. A more detailed description of FGB Access is provided in 6.2.2 following.

(C) Feature Group D (FGD)

FGD Access, which is available to all customers, provides trunk side access at a customer's point of interconnection with an associated uniform 10XXX access code for the customer's use in originating and terminating communications unless a Routing Exchange Carrier's end office is unable to provide a uniform 10XXX code. The end offices of Routing Exchange Carriers that are unable to provide a uniform 10XXX code are set forth in Section 6.2.4 following.

(D) Joint Provision of Common Channel Signaling Access (CCSA)

CCSA is a nonchargeable optional feature available with FGD access service. CCSA allows the customer to establish a connection with the Iowa Network/ONVOY jointly operated CCSAN at the Signaling Points of Interconnection (SPOIs) in the metropolitan areas of Des Moines, Iowa and Minneapolis/St. Paul, Minnesota for transporting call control information. Transmission specifications, diversity requirements, and testing parameters are set forth in Technical Reference TR-TSV-000905 and TR-TSV-000954. (C)

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)(D) Joint Provision of Common Channel Signaling Access (CCSA)
(Cont'd)

An STP in Des Moines, Iowa will be owned and operated by Iowa Network, for CCSA in Iowa while an STP in Plymouth, Minnesota will be owned and operated by ONVOY for CCSA in Minnesota. (C)
However, Iowa Network and ONVOY will cooperate to provide (C)
redundancy to their respective CCSA networks. Iowa Network and (C)
ONVOY will jointly provide the SNACs, which include the ports on (C)
Iowa Network and ONVOY STPs and the link facilities between the (C)
STPs.

The CCSAN consists of a mated pair of STPs which operate completely parallel to each other, a pair of diverse facilities connecting the STPs, and access links to each of the local telephone company SP/SSPs from each STP. This configuration ensures network reliability by providing geographic diversity and redundancy of signal switching and transport.

Iowa Network will provide the signaling facilities between the Iowa Network Routing Exchange Carrier end offices and the Des Moines, Iowa STP. ONVOY will provide the signaling facilities between the (C)
ONVOY Routing Exchange Carrier end offices and the Plymouth, (C)
Minnesota STP. The interstate facilities connecting the two STPs will be jointly provided by Iowa Network and ONVOY. (C)

The access link to the ONVOY STP from the Iowa Network Routing Exchange Carrier end offices is provided by Iowa Network to the centralized access tandem and then jointly by Iowa Network and ONVOY to the ONVOY STP. Likewise, the access link to the Iowa Network STP from the ONVOY Routing Exchange Carriers is provided over ONVOY facilities to the ONVOY centralized equal (C)
access tandem, and

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)(D) Joint Provision of Common Channel Signaling Access (CCSA)
(Cont'd)

then over jointly provided facilities to the Iowa Network STP.

The interexchange carrier is responsible for the signaling facilities from the interexchange carrier's STPs, which shall consist of a quad (4) of 56 Kbps links, to the SPOIs on the Iowa Network/ONVOY network. Iowa Network and ONVOY will each provide a pair of Signaling Network Access Connections (SNACs) which includes any facilities required between the Iowa Network/ONVOY STPs and the interexchange carrier SPOIs and the ports on the mated STPs. An interexchange carrier who wishes to connect a single SP or SSP to the CCSAN may do so by providing a pair of 56 Kbps links, one to a SPOI in Des Moines, and one to the SPOI in Minneapolis/St. Paul, and Iowa Network and ONVOY will provide the corresponding SNACs. (C)

The use of the SNAC and the STP Port will be bi-directional in that SS7 message sequences may be originated from either the interexchange carrier's network or from the INS network. The message sequences initiated from the INS network may include ISDN User Part (ISUP) messages, Transaction Capabilities Application Part (TCAP) messages, in support of functions such as 800 Database queries and Line Information Data Base (LIDB) queries, and other messages in support of services for which the networks of both the interexchange carrier and Iowa Network are used. (C)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)

(D) Joint Provision of Common Channel Signaling Access (CCSA)
(Cont'd)

The following diagram illustrates how the Iowa Network/ONVOY SS7 network will interconnect with the interexchange carrier's network, independent of the voice (CEA) communications path. (C)

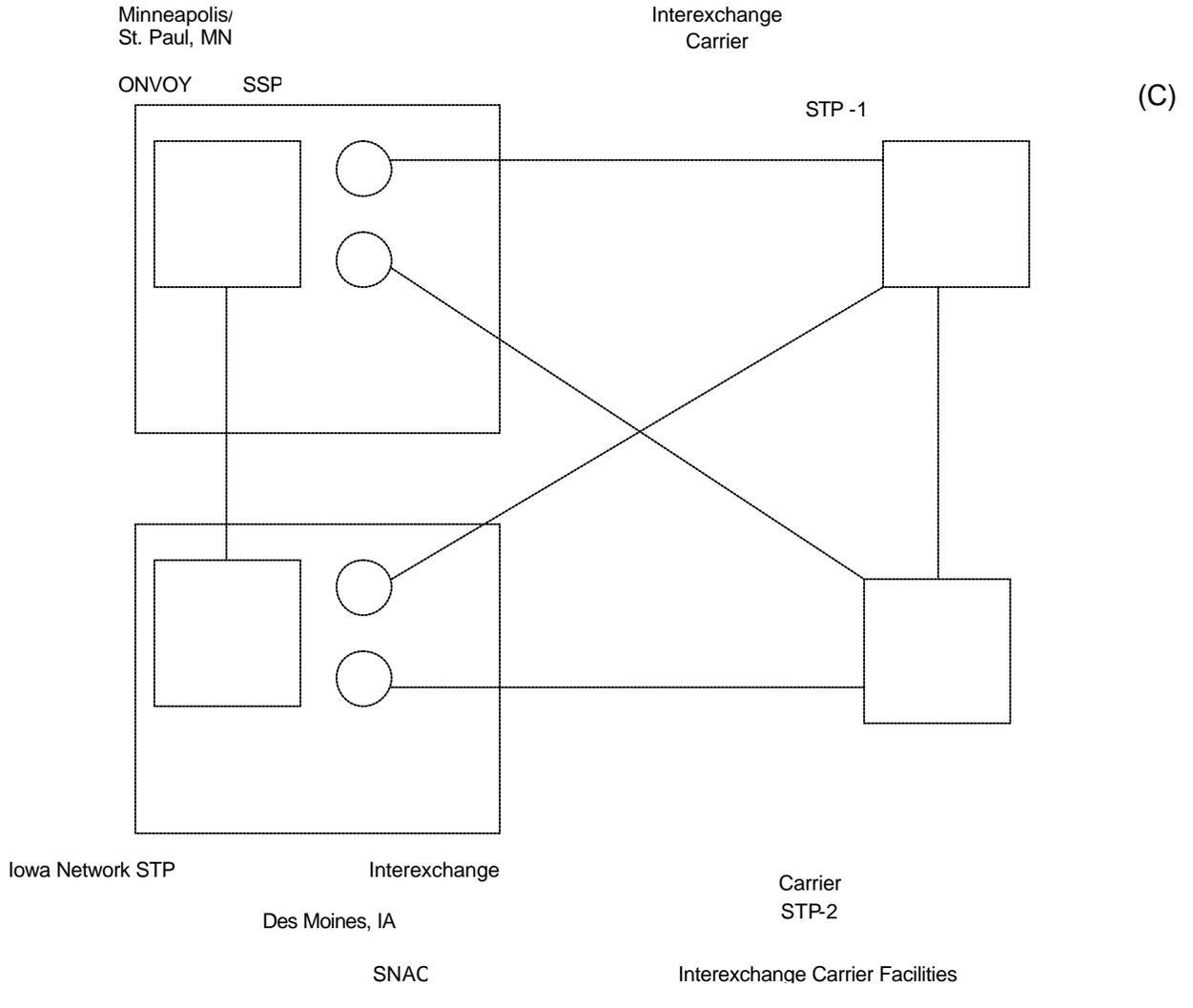
CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)

(D) Joint Provision of Common Channel Signaling Access (CCSA)
(Cont'd)



SNAC - Signaling Network Access Connection
 SPOI - Signaling Point of Interconnection
 STP - Signal Transfer Point

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)(E) Interim NXX Translation (C)

The Interim NXX Translation optional feature is an originating offering utilizing trunk side Switched Access Service and provides a customer identification function based on the dialed SAC and NXX code. (C)
(C)
|
(C)

For example, when an 1+800+NXX-XXXX or an 1+900+NXX-XXXX call is originated by an end user, Iowa Network or a Routing Exchange Carrier 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 Iowa Network's central access tandem. Once customer identification has been established, the call will be routed to the 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 from coin telephones, 0+, 0-, 10XXX, Inmate Service, Hotel/Motel Service and calling card calls will be blocked. (C)
(C)
|
(C)

The charge for Interim NXX Translation is as set forth in Section 6.8.1(C) following. (N)
(N)

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)(F) Manner of Provision

Switched Access is furnished in busy hour minutes of capacity (BHMCs). Iowa Network will determine the Switched Transport facilities to be provided on the basis of the busy hour minutes of capacity ordered as set forth in 5.2 preceding. Switched Access is furnished in trunks between the customer's premises and the points of interconnection set forth in Section 8 following.

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 Iowa Network 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 for carrying traffic from the end user to Iowa Network's central access tandem. Terminating BHMCs represent access capacity for carrying traffic from Iowa Network's central access tandem to the end user. When ordering capacity for Switched Access Service, the customer must at a minimum specify such access capacity in terms of Originating BHMCs and Terminating BHMCs.

Because some customers will wish to further segregate their originating traffic into separate trunk groups, Originating BHMCs are further categorized into Domestic, 800, 900,

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.1 Feature Group Arrangements and Manner of Provision (Cont'd)

(F) Manner of Provision (Cont'd)

and IDDD. Domestic BHMCs represent access capacity for carrying only domestic traffic other than 800 and 900 traffic; IDDD BHMCs represent access capacity for carrying only international traffic; and, 800 and 900 BHMCs represent access capacity for carrying, respectively, only 800 and 900 traffic. When ordering such types of access capacity, the customer must specify Domestic, 800, 900, or IDDD BHMCs.

6.1.2 Reserved for Future Use

(C)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories

There are three rate categories, which apply to the provision of Switched Access Service in conjunction with Centralized Equal Access Service: (C)

- Switched Transport (described in 6.1.3(A) following:
- Non-chargeable Optional Features (described in 6.1.3(B) following: (N)
- Chargeable Optional Features (described in 6.1.3(C) following: (N)

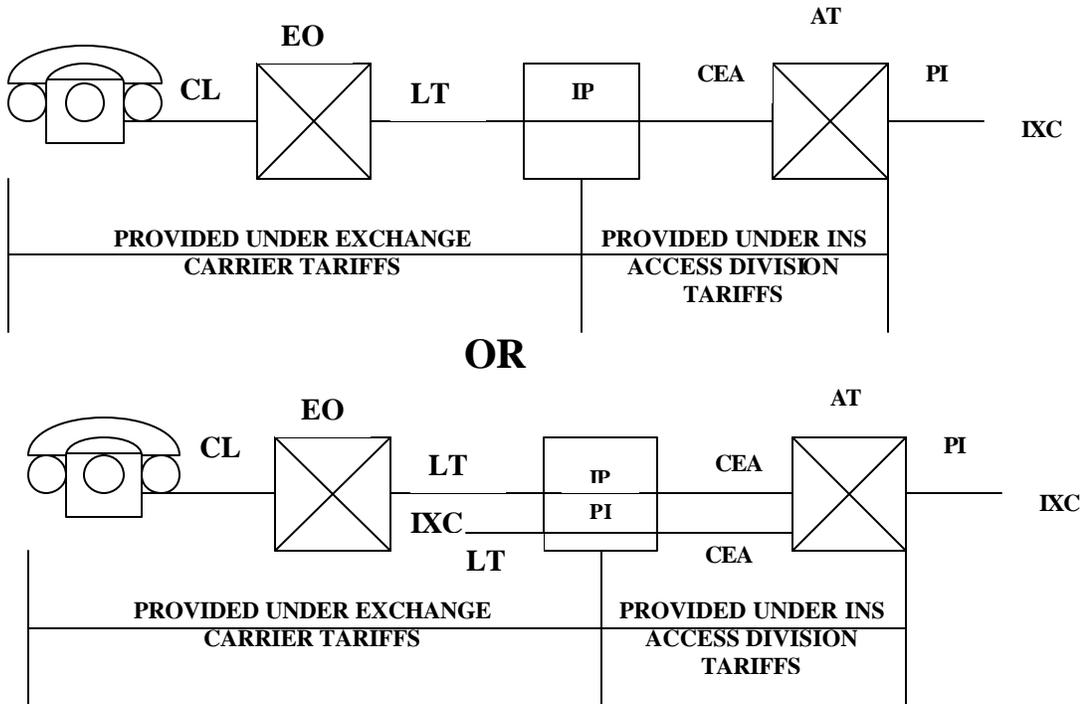
The following diagram depicts a generic view of how Centralized Equal Access Service is combined with the service of the Routing Exchange Carriers set forth in Section 9 following to provide a complete Switched Access Service.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)



- | | | |
|-----|--|---------|
| AT | - Iowa Network's Central Access Tandem | (M) (X) |
| CEA | - Centralized Equal Access Service (Non-distance sensitive rate) | |
| CL | - Carrier Common Line | |
| EO | - End Office | |
| IXC | - Interexchange Carrier | |
| LT | - Local Transport | |
| PI | - Customers Point of Interconnection | |
| IP | - Iowa Network Premises | (M) (X) |

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

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CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport

Switched Transport is a High Capacity (1.544 Mbps) frequency transmission path composed of facilities determined by Iowa Network. The two-way frequency transmission path permits the transport of calls from Iowa Network's central access tandem to an Iowa Network premises listed in Section 8 following and from such Iowa Network Premises to Iowa Network's central access tandem.

Switched Transport is provided by Iowa Network at customer's point of interconnection. A customer's point of interconnection may be located at Iowa Network's central access tandem or another Iowa Network premises as set forth in Section 8 following.

When a customer's point of interconnection is located at an Iowa Network's central access tandem, the Switched Transport rate applies per access minute for transporting a customer's call between a customer's point of interconnection at Iowa Network's central access tandem and another Iowa Network premises listed in Section 8 following.

(C) (X)
| |
(C) (X)
(C) (X)
(C) (X)

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

(C) (X)
| |
(C) (X)

Certain regulations previously found on this page can now be found on 1st Revised Page 94.

CENTRALIZED EQUAL ACCESS SERVICE

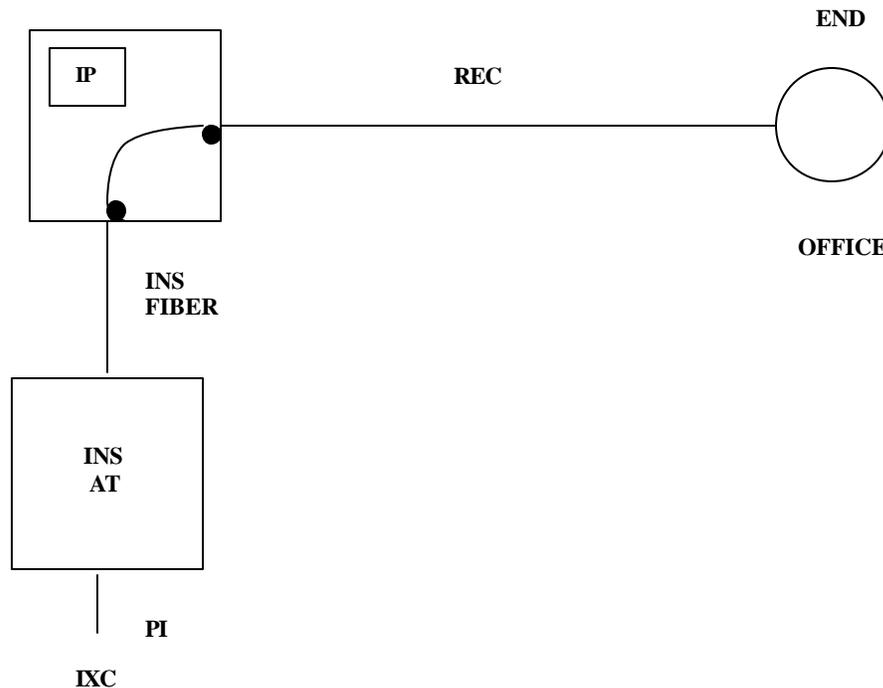
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport (Cont'd)

The application of the Switched Transport rate to such access minutes is illustrated in the following diagram:



- | | | | | |
|-----|---|--|-----|-----|
| AT | - | Iowa Network Central Access Tandem | (M) | (X) |
| INS | - | Iowa Network Services, Inc. | | |
| IXC | - | Interexchange Carrier | | |
| PI | - | Customer's Point of Interconnection | | |
| REC | - | A Routing Exchange Carrier's Transmission Facilities | | |
| IP | - | Iowa Network Premises | (M) | (X) |

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Certain regulations found on this page formerly appeared on Original Page 97.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport (Cont'd)

When a customer's point of interconnection is located at an Iowa Network premises listed in Section 8 following other than Des Moines, the Switched Transport rate only applies to the access minutes for transporting the customer's call in the terminating direction from Iowa Network's central access tandem back to the same or a different Iowa Network premises listed in Section 8 following. The application of the Switched Transport rate for such a call is illustrated in the following diagram:

(C) (X)
| |
(C) (X)
(C) (X)
| |
| |
(C) (X)

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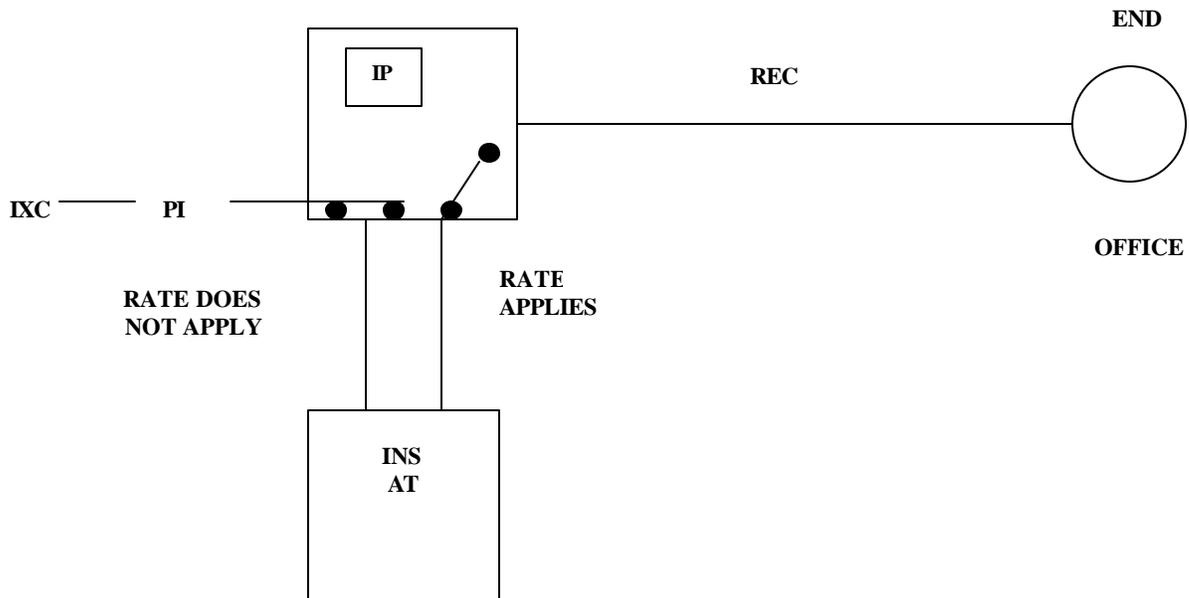
CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport (Cont'd)



- AT - Iowa Network's Central Access Tandem
- PI - Customer's Point of Interconnection
- INS - Iowa Network Services, Inc.
- IXC - Interexchange Carrier
- REC - A Routing Exchange Carrier's Transmission Facilities
- IP - Iowa Network Premises

(M) (X)
 | |
 | |
 | |
 | |
 (M) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport (Cont'd)

When a customer's point of interconnection is located at an Iowa Network premises listed in Section 8 following other than Des Moines, the Switched Transport rate only applies to the access minutes for transporting the customer's call in the originating direction from that Iowa Network premises to Iowa Network's central access tandem. The application of the Switched Transport rate for such a call is illustrated in the following diagram:

(C) (X)
| |
(C) (X)
(C) (X)
(C) (X)
(C) (X)

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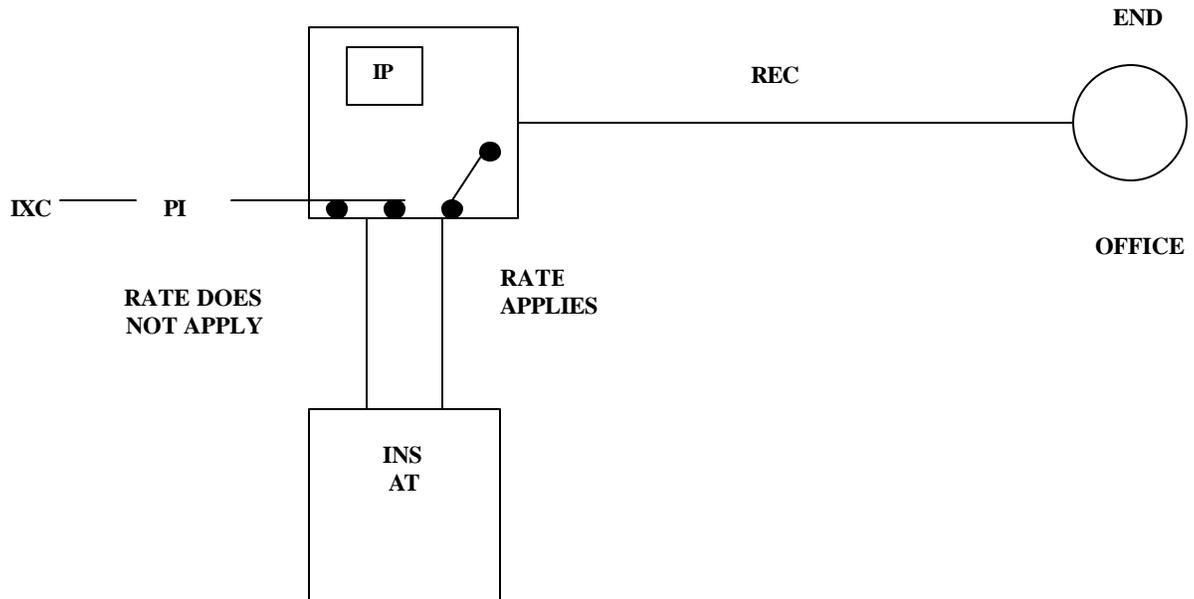
CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport (Cont'd)



- | | | |
|-----|---|---------|
| AT | - Iowa Network's Central Access Tandem | (M) (X) |
| INS | - Iowa Network Service, Inc. | ⋮ |
| IXC | - Interexchange Carrier | ⋮ |
| PI | - Customer's Point of Interconnection | ⋮ |
| REC | - A Routing Exchange Carriers Transmission Facilities | ⋮ |
| IP | - Iowa Network Premises | (M) (X) |

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

The Switched Transport rate element also provides the centralized switching functions necessary to complete the transmission of Switched Access communications to and from Iowa Network's central access tandem.

International dialing may be provided as a capability associated with Feature Group 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 standard FGD equipment.

Switched Transport is assessed on a per access minute basis at the rate set forth in 6.8.1 following.

(1) Interface Groups

One Interface Group is provided for terminating the Switched Transport at the customer's point of interconnection: Interface Group 6. Where transmission facilities permit, the individual transmission path between Iowa Network's central access tandem and another Iowa Network premises listed in Section 8 following may at the option of the customer be provided with optional features as set forth in (2)(a) and (b) following.

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CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Switched Transport (Cont'd)(1) Interface Groups (Cont'd)

Interface Group 6 is provided with Type A or B Transmission Specifications depending on the Feature Group. All Interface Groups are provided with Data Transmission Parameters.

Only certain interfaces are available at the customer's point of interconnection. The various interfaces which are available are set forth in (j) following and Section 15.1.11.

- (a) Reserved for Future Use
- (b) Reserved for Future Use
- (c) Reserved for Future Use
- (d) Reserved for Future Use
- (e) Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Switched Transport (Cont'd)(1) Interface Groups (Cont'd)(f) Interface Group 6

Interface Group 6 provides DS1 level digital transmission at the customer's point of interconnection. The interface is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to twenty-four (24) voice frequency transmission paths. When analog switching utilizing analog terminations is provided, Iowa Network will provide multiplex and channel bank equipment to derive twenty-four (24) transmission paths of a frequency bandwidth of approximately three hundred (300) to three thousand (3000) Hz. When digital switching or analog switching with digital carrier terminations is provided, Iowa Network will provide a DS1 signal in D3/D4 format.

The interface is provided with individual transmission path bit stream supervisory signaling.

(g) Reserved for Future Use

(h) Reserved for Future Use

(i) Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Switched Transport (Cont'd)

(1) Interface Groups (Cont'd)

(j) Available Interface Codes

Following is a matrix showing which interface codes are available as a function of the switch supervisory signaling and Feature Group. For explanations of these codes, see the Glossary of Channel Interface Codes in 15.3.1 following.

<u>Interface Group</u>	<u>Switch Supervisory Signaling</u>	<u>Interface Code</u>	<u>Feature Group</u>	
			<u>B</u>	<u>D</u>
6	RV, EA, EB, EC	4DS9-15	X	X
	RV, EA, EB, EC	4DS9-15L	X	X

(B) Nonchargeable Optional Features (T)

Where facilities permit, Iowa Network will, at the option of the customer, provide the following nonchargeable optional features in association with Switched Transport. (C)

(1) Supervisory Signaling (T)

Where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability, the customer may order an optional supervisory signaling arrangement for each transmission path provided as follows:

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) Nonchargeable Optional Features (Cont'd) (T)(1) Supervisory Signaling (Cont'd) (T)

Interface Group 6 may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Iowa Network's central access tandem. Generally, such signaling is available only where Iowa Network's central access tandem provides an analog, i.e., non-digital, interface and a portion of the facility provided by the customer between Iowa Network's central access tandem and the customer's premises is analog.

(2) Customer Specified Entry Switch Receive Level (T)

This feature allows the customer to specify the receive transmission level at Iowa Network's central access tandem. The range of transmission levels, which may be specified, is described in Technical Reference TR-NPL-000334. This feature is available for Feature Group B.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(B) Nonchargeable Optional Features (Cont'd)

(3) Joint Provision of Common Channel Signaling Access (CCSA)

There are no recurring charges for this feature. If the customer requests Iowa Network to reconfigure FGD trunks with inband signaling to provide FGD service with the CCSA option, the request will be treated as a discontinuance of existing service and the installation of a new service and the installation charges set forth in 6.8.1(C)(1) following will apply on a per SNAC basis.

(N)

(N)

Certain regulation previously found on this page can now be found on 1st Revised Page 105.2.

CENTRALIZED EQUAL 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, Iowa Network will, at the option of the customer, provide the following chargeable optional features.

(M)

(1) Interim NXX Translation

The Interim NXX Translation rate element provides for customer identification when calls are directed by end users in the 1+SAC+NXX+XXXX (e.g., 1-800-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 Bellcore NANP Coordinator. Iowa Network 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. A non-recurring charge, as set forth in 6.8.1 (C) following is associated with this optional feature.

(M)

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CENTRALIZED EQUAL 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)

The nonrecurring charge is assessed only by a company that provides the final translation function. A 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 is as set forth in 6.7.1(B) following.

(M)

(M)

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CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.4 Design Layout Report

At the request of the customer, Iowa Network will provide to the customer the makeup of the facilities and services provided. 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.

6.1.5 Acceptance Testing

At no additional charge, Iowa Network will, at the customer's request, cooperatively test, at the time service is initiated, the following parameters: loss, C-notched noise, C-message noise, 3tone slope, d.c. continuity and operational signaling.

6.1.6 Routine Testing

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

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.5 Routine Testing (Cont'd)

Additional tests may be ordered as set forth in 13.3.4 following. Charges for these additional tests are set forth in 13.3.4 (C) following.

6.1.7 Ordering Options and Conditions

Switched Access Service is ordered under the Access Order provisions set forth in Section 5 preceding. Also, included in that section are other charges, which may be associated with ordering Switched Access Service (e.g., Service Date Change Charges, Cancellation Charges, etc.).

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups

Switched Access Service is provided in two different Feature Group arrangements. The provision of each Feature Group requires Switched Transport facilities. Interim NXX Translation is provided in conjunction with Feature Group D. Common Channel Signaling Access is also available in conjunction with FGD. (N)
(N)

There are two (2) specific transmission performances (i.e., Types A and B) that have been identified for the provision of Feature Groups. The parameters for the transmission specifications are set forth in 6.4.1 following and Section 15.2.1.

Feature Groups are arranged with Centralized Equal Access Service for two-way calling. Originating calling permits the delivery of calls from Telephone Exchange Service locations to the customer premises. Terminating calling permits the delivery of calls from the customer premises to Telephone Exchange Service locations. Two-way calling permits the delivery of calls in both directions, but not simultaneously.

Following are detailed descriptions of each of the available Feature Groups. Each Feature Group is described in terms of its specific physical characteristics and calling patterns, the transmission specifications with which it is provided, and the standard testing capabilities.

6.2.1 Reserved for Future Use6.2.2 Feature Group B (FGB)(A) Description

- (1) FGB is provided as trunk side switching through the use of access tandem switch trunk equipment at Iowa Network's central access tandem. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling. (Z)

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)6.2.6 Feature Group B (FGB) (Cont'd)(A) Description (Cont'd)

- (2) FGB switching is provided with multi-frequency address signaling in both the originating and terminating directions. 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 Iowa Network and will be subject to the ordinary transmission capabilities of the Switched Transport provided.
- (3) The access code for FGB switching is a uniform access code. The form of the uniform access code is 950-0XXX or 950-1XXX for customers. These uniform access codes will be the assigned access numbers of all FGB Switched Access Service provided to the customer by Iowa Network.
- (4) FGB switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of a Routing Exchange Carrier set forth in Section 9 following community information services of an information service provider and other customers' services (by dialing the appropriate digits). Only those valid NXX codes serviced by end office switches subtending Iowa Network's access tandem may be accessed.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)6.2.2 Feature Group B (FGB) (Cont'd)(A) Description (Cont'd)(4) (Cont'd)

The customer will also be billed additional non-access charges for calls to certain community information services for which rates are applicable, 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 rate when Iowa Network performs the billing function for that customer.

Calls in the terminating direction will not be completed to 950-0XXX or 950-1XXX access codes, local operator assistance (0- and 0+), Directory Assistance (411) or 10XXX access codes. FGB may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C and D.

The customer will also be billed access charges by Routing Exchange Carriers and other Exchange Telephone Companies for the provision of access service in their operating territories between an Iowa Network premises listed in Section 8 following and the end offices served by Iowa Network's central access tandem. In addition, the customer may also be billed access charges by the Routing Exchange Carriers or other

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)6.2.2 Feature Group B (FGB) (Cont'd)(A) Description (Cont'd)(4) (Cont'd)

Exchange Telephone Companies for the provision of access services between the customer's premises and an Iowa Network premises set forth in Section 8 following.

(B) Transmission Specifications

FGB is provided with Type B 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 DB Data Transmission parameters are provided with FGB to Iowa Network's central access tandem.

(C) 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, loop around test line, short circuit test line and open circuit test line. In addition to the test described in 6.1.5 preceding which are included with the installation of service, Additional Cooperative Acceptance Testing and Additional Automatic Testing will be provided as set forth in 13.3.4 following.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.3 Reserved for Future Use

(C)

(D)

(D)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.3 Reserved for Future Use (Cont'd)

(C)

(D)

(D)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.3 Reserved for Future Use (Cont'd)

(C)

(D)

(D)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.3 Reserved for Future Use (Cont'd)

(C)

(D)

(D)

6.2.4 Feature Group D (FGD)

(A) Description

- (1) FGD is provided at Iowa Network's central access tandem.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)6.2.4 Feature Group D (FGD) (Cont'd)(A) Description (Cont'd)

- (2) FGD is provided as trunk side switching through the use of access tandem switch trunk equipment at Iowa Network's central access tandem. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling. SS7 signaling is provided instead of multifrequency address signaling when the CCSA optional feature is ordered. (N)
|
(N)
- (3) FGD switching is provided with multi-frequency address or SS7 signaling. Up to twelve (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 Iowa Network equipment to the customer's point of interconnection. Such address signals will be subject to the ordinary transmission capabilities of the Switched Transport provided. (C)
- (4) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of a Routing Exchange Carrier, 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. Only those valid NXX codes served by end office switches subtending Iowa Network's central access tandem may be accessed.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)6.2.4 Feature Group D (FGD) (Cont'd)(A) Description (Cont'd)(4) (Cont'd)

The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable, e.g., 976 (DIAL-IT) Network Services. 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 Iowa Network performs the billing function for that customer.

Calls in the terminating direction will not be completed to 950-0XXX or 950-1XXX access codes, local operator assistance (0- and 0+), and 10XXX access codes. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.

The customer will also be billed access charges by Routing Exchange Carriers and other Exchange Telephone Companies for the provision of access service in their operating territories between an Iowa Network premises listed in Section 8 following and the end offices served by Iowa Network's central access tandem. In addition, the customer may also be billed access charges by the Routing Exchange Carriers or other Exchange Telephone Companies for the provision of access services between the customer's premises and an Iowa

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.4 Feature Group D (FGD) (Cont'd)

(A) Description (Cont'd)

(4) (Cont'd)

Network premises set forth in Section 8 following.

- (5) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 10XXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 10XXX code its calls will be directed to for interLATA and intraLATA service. The access code for FGD switching is a uniform access code of the form 10XXX unless a Routing Exchange Carrier's end office switch is unable to provide a uniform 10XXX code. A single access code will be the assigned number of all FGD access provided to the customer by Iowa Network. 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.

(N)	(X)
(N)	(X)

Where no access code is required, the number dialed by the end user shall be a seven (7) to ten (10) digit number, where appropriate, for calls in the North American Numbering Plan (NANP).

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Certain regulations previously found on this page can now be found on Original Page 118.1.

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CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.4 Feature Group D (FGD) (Cont'd)

(A) Description (Cont'd)

(5) (Cont'd)

The form of the numbers dialed by the end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA+NXX-XXXX, 0 or 1+ NPA + NXX+ XXXX, and for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

(M) (X)

(M)

The end offices of the Routing Exchange Carriers that are listed below are unable to provide a uniform 10XXX code.

(C)

<u>Company</u>	<u>Exchange</u>
Grand Mound Telephone Association	Grand Mound, IA
Minerva Valley Telephone Company, Inc.	Clemens, IA Zearing, IA
*Farmers Mutual Telephone Company	Urbana, IA
Cascade Telephone Company	Cascade, IA

(C) (X)

* This end office will be capable of providing a uniform 10XXX code on or before May 1, 1989.

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Certain regulations found on this page formerly appeared on Original Page 118.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)

6.2.4 Feature Group D (FGD) (Cont'd)

(A) Description (Cont'd)

(7) Unless prohibited by technical limitations, the customer's Interim NXX Translation traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-Interim NXX Translation traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX translation traffic.

(N)

(N)

(B) Transmission Performance

FGD is provided with Type A Transmission Specifications:

Type DA Data Transmission Parameters are provided for the transmission path between the customer's premises and the access tandem and between the access tandem and the end office.

Certain regulations previously found on this page can now be found on Original Page 120.1.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)6.2.4 Feature Group D (FGD) (Cont'd)(C) Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven (7) 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, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.1.5 preceding which are included with the installation of service, Additional Cooperative Acceptance Testing and Additional Automatic Testing will be provided for FGD as set forth in 13.3.4 following.

When FGD is ordered with the CCSA option, network compatibility and other operational tests will be performed cooperatively with Iowa Network, ONVOY, and the interexchange carrier at locations, dates, and times as specified by Iowa Network in consultation with the interexchange carrier. These tests as specified in TR-TSV-000905 must be successfully completed in order to receive the CCSA option.

(C)

6.3 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications

Each Switched Access Service transmission path is provided with standard transmission specifications. There are two different standard specifications (Types A and B). The standard for the transmission path is dependent on the Feature Group. The available transmission specifications are set forth in 6.4.1 and 15.2.1 following. Data Transmission Parameters are also provided with the Switched Access Service transmission path. Iowa Network will, upon notification by the customer that the data parameters set forth in 6.4.2(A), or 6.4.2(B) or 15.2.2 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.

All service configurations operated by Iowa Network after the effective date of this tariff will conform to the transmission specifications contained in this tariff.

The transmission specifications contained in this Section are immediate action limits. Acceptance limits are set forth in Technical Reference TR-NPL-000334. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

6.4.1 Standard Transmission Specifications

Following are descriptions of the two Standard Transmission Specifications available with Switched Access Service Feature Groups. The specific applications in terms of the Feature Groups and Interface Group with which the Feature Group Standard Transmission Performances are provided are set forth in 6.2.2(B) and 6.2.4(B) preceding. (C)

(A) Type A Transmission Specifications

Type A Transmission Specifications are provided with the following parameters:

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications (Cont'd)6.4.1 Standard Transmission Specifications (Cont'd)(A) Type A Transmission Specifications (Cont'd)(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -1.0 dB to +3.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<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-Notched Noise

The maximum C-Notched Noise, utilizing a -16 dBm0 holding tone is less than or equal to 45 dBrnCO.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications (Cont'd)6.4.1 Standard Transmission Specifications (Cont'd)(A) 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 equal to or greater than the following:

Echo Return Loss	Singing Return Loss
<u>16 dB</u>	<u>11 dB</u>

(B) 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:

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications (Cont'd)6.4.1 Standard Transmission Specifications (Cont'd)(B) Type B Transmission Specifications (Cont'd)(3) C-Message Noise (Cont'd)

<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-Notched Noise

The maximum C-Notched Noise, utilizing a -16 dBmO holding tone is less than or equal to 47 dBrnCO.

(5) Echo Control

Echo Control is identified as Impedance Balance for FGB and Equal Level Echo Path Loss for FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL). The ERL and SRL also differ by Feature Group. They are greater than or equal to the following: (C)

* For Feature Group D only, Type B2 will be provided. For Feature Group B, Type B1 and B2 will be provided as set forth in Technical Reference TR-NPL-000334. (C)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Transmission Specifications (Cont'd)

6.4.1 Standard Transmission Specifications (Cont'd)

(B) Type B Transmission Specifications (Cont'd)

(5) Echo Control (Cont'd)

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
o For FGB access	8 dB	4 dB

(D)
|
- - -
|
(D)

(C) Reserved for Future Use

6.4.2 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. The specific applications in terms of the Feature Groups with which they are provided are set forth in 6.2.2(B) and 6.2.4(B) preceding. (C)
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.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications (Cont'd)6.4.2 Data Transmission Parameters (Cont'd)(A) Data Transmission Parameters Type DA (Cont'd)(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	500 microseconds
-----------------------------	------------------

equal to or greater than 50 route miles	900 microseconds
--	------------------

1004 to 2404 Hz

less than 50 route miles	200 microseconds
-----------------------------	------------------

equal to or greater than 50 route miles	400 microseconds
--	------------------

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBrnCO threshold in fifteen (15) minutes is no more than fifteen (15) counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	33 dB
Third Order (R3)	37 dB

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications (Cont'd)6.4.2 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 degrees 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
--	------------------

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Transmission Specifications (Cont'd)6.4.2 Data Transmission Parameters (Cont'd)(B) Data Transmission Parameters Type DB (Cont'd)(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBmCO threshold in fifteen (15) minutes is no more than fifteen (15) counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	31 dB
Third Order (R3)	34 dB

(5) Phase Jitter

The Phase Jitter over the 4 - 300 Hz frequency band is less than or equal to 7 degrees peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.5 Obligations of Iowa Network

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

6.5.1 Network Management

Iowa Network will administer its network to ensure the provision of acceptable service levels to all telecommunications users of Iowa Network's services. Iowa Network 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 Iowa Network or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by Iowa Network 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)(1) preceding.

6.5.2 Design and Traffic Routing of Switched Access Service

When a customer's point of interconnection is located at Iowa Network's central access tandem, Iowa Network shall design and determine the routing of Switched Access Service and the selection of facilities from Iowa Network's central access tandem to the end offices of the Routing Exchange Carriers serving the customer. When a customer's point of interconnection is located at an Iowa network premises listed in Section 8 following other than Des Moines, Iowa Network shall design and determine the routing of Switched Access Service and the selection of	(C) (X)
	(C) (X)
	(C) (X)
	(C) (X)

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

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CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.5 Obligations of Iowa Network (Cont'd)

6.5.2 Design and Traffic Routing of Switched Access Service (Cont'd)

facilities from that Iowa Network premises to Iowa Network's central access tandem and the end offices of the Routing Exchange Carriers serving the customer. For Feature Groups B and D, Iowa Network's central access tandem will always be the first point switching.

(C)

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Obligations of Iowa Network (Cont'd)6.5.2 Design and Traffic Routing of Switched Access Service (Cont'd)

Iowa Network shall also decide if capacity is to be provided by (C) (X) originating only, terminating only, or two-way trunk groups.

Finally, Iowa Network 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 the Iowa Network traffic routing plans.

If the customer desires routing or directionality different from that determined by Iowa Network, Iowa Network will work cooperatively with the customer in determining the directionality of the service.

6.5.3 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to Iowa Network 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 noncompletion 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.

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CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Obligations of Iowa Network (Cont'd)6.5.4 Trunk Group Measurement Reports

Subject to availability, Iowa Network will make available trunk group data in the form of usage in CCS, peg count and overflow, to the customer based on previously agreed to intervals.

6.5.5 Determination of Number of Transmission Paths

Iowa Network will determine the number of Switched Access Service transmission paths to be provided for the Switched Access Feature Groups ordered. A transmission path is a derived communication path of a frequency bandwidth of approximately 300 Hz to 3000 Hz provided over a high speed digital facility between a customer's point of interconnection listed in Section 8 following and Iowa Network's central access tandem. The number of transmission paths will be developed using the total busy hour minutes of capacity by type (as described in 6.1.1(F) preceding) for each Feature Group ordered to Iowa Network's central access tandem. The total busy hour minutes of capacity by type for the Feature Group will be converted to transmission paths using standard traffic engineering methods. For Feature Group B between the customer's premises and the customer's point of interconnection set forth in Section 8 following ordered from an Exchange Telephone Company on a per trunk basis, the customer specifies the number of transmission paths in the order for service to the Exchange Telephone Company.

6.5.6 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Obligations of Iowa Network (Cont'd)6.5.7 Design Blocking Probability

Iowa Network will design the facilities used in the provision of Switched Access Service to meet the blocking probability criteria as set forth in (A) through (C) following.

- (A) For Feature Group B, no design blocking criteria apply.
- (B) For Feature Group D, the design blocking objective will be no greater than one percent (1%) between the customer's point of interconnection set forth in Section 8 following and Iowa Network's central 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 Iowa Network to determine the number of transmission paths required to achieve this level of blocking.
- (C)

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.5 Obligations of Iowa Network (Cont'd)6.5.7 Design Blocking Probability (Cont'd)

- (C) Iowa Network will perform routine measurement functions to assure that an adequate number of transmission paths are in service. Iowa Network will recommend that additional busy hour minutes of capacity be ordered by the customer when additional paths are required to reduce the measured blocking to the design 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 table.

<u>Number of Transmission Paths Per Trunk Group</u>	<u>Measured Blocking Thresholds in the Time Consistent Busy for the Number of Average Business Day Measurements Per Trunk Group</u>			
	<u>Measurements</u>			
	<u>15-20</u>	<u>11-14</u>	<u>7-10</u>	<u>3-6</u>
2	.045	.055	.060	.095
3	.035	.040	.045	.060
4	.035	.040	.045	.055
5-6	.025	.035	.040	.045
7 or more	.020	.025	.030	.040

Issued: August 10, 1988

Effective: September 23, 1988

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.6 Obligations of the Customer (Cont'd)6.6.3 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 Iowa Network. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

6.6.4 Design of Switched Access Services

When a customer orders Switched Access Service, the customer shall take reasonable steps to assure that sufficient access services have been ordered to handle its traffic.

6.6.5 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 Iowa Network and the affected Routing Exchange Carriers listed in Section 9 following 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, Iowa Network may invoke network management controls, (e.g., call gapping and code blocking) to reduce the probability of excessive network congestion. Iowa Network will work cooperatively with the customer to determine the appropriate level of such control.

(N)

(N)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations

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

6.7.1 Description and Application of Rates and Charges

There are two types of rates and charges that apply to Switched Access Service. These are usage rates and nonrecurring charges.

(A) Usage Rates

Usage rates are rates that apply only when a specific rate element is used. These rates are applied on a per access minute basis. Usage rates are accumulated over a monthly period.

(B) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e. installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are installation of service, Interim NXX Translation optional feature, and service rearrangements. (C)

(1) Installation of Service (N)

Nonrecurring charges apply to each Switched Access Service installed. For FGB and FGD, which are ordered on a busy hour minutes of capacity basis, the charge is applied on a per trunk basis but the charge applies only when the capacity ordered requires the installation or activation of an additional trunk(s) which is uniquely identified for the sole use of the ordering customer. (N)

Certain regulations previously found on this page can now be found on 1st Revised Page 136.1.

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CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.1 Description and Application of Rates and Charges (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(1) Installation of Service (Cont'd)

The nonrecurring charges associated with the initial conversion of FGD trunks from multi-frequency (MF) to common channel signaling are the installation charges at 6.8.1(C) following applied on a per SNAC basis. No additional nonrecurring charges are applied to FGD trunk conversions from MF to SS7 signaling subsequent to the installation of the SNACs.

(N)

(N)

(2) Interim NXX Translation Optional Feature

This nonrecurring charge applies to the initial order for the installation of the Interim NXX Translation optional feature with Feature Group D Switched Access Service and for each subsequent order received to add or change NXX translation codes. This charge, if applicable, applies whether this optional feature is installed coincident with or at any time subsequent to the commencement of Switched Access Service. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the 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.

Certain regulations previously found on this page can now be found on Original Page 136.1.1.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.1 Description and Application of Rates and Charges (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements

<p>All changes to existing services, other than changes involving administrative activities listed in (C) following, 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. No additional nonrecurring charges apply to FGD trunk conversions from MF to SS7 signaling subsequent to the installation of the SNACs.</p>	<p>(M) (M) (N) (N)</p>
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Certain regulations found on this page formerly appeared on 1st Revised Page 136.1.

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.1 Description and Application of Rates and Charges (Cont'd)

(D) Reserved for Future Use

(E) Reserved for Future Use

(F) Application of the Switched Transport Rate

The Switched Transport rate applies per access minute.

6.7.2 Minimum Period

Switched Access Service is provided for a minimum period of one (1) month.

6.7.3 Reserved for Future Use

6.7.4 Reserved for Future Use

6.7.5 Change of Feature Group Type

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. When a customer upgrades a Feature Group B service to Feature Group D service, minimum period obligations will not change, i.e., the time elapsed in the existing minimum period obligations will be credited to the minimum period obligations for Feature Group D service. For all other changes from one type of Feature Group to another, new minimum period obligations will be established. (C)

6.7.6 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Measuring Access Minutes

Customer traffic to and from end offices of the Routing Exchange Carriers set forth in Section 9 following will be measured (i.e., recorded) by Iowa Network at its central access tandem. Originating and terminating calls will be measured (i.e., recorded) by Iowa Network to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because Iowa Network lost or damaged tapes or incurred recording system outages, Iowa Network will estimate the volume of lost customer access minutes of use based on previously known values. For terminating and originating calls over FGB and FGD, the measured minutes are the chargeable access minutes. (C)

(D)

(D)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Measuring Access Minutes (Cont'd)

(D)

(D)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Measuring Access Minutes (Cont'd)

(D)
|
|
|
(D)

FGB and 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.

(C)

(A) Reserved for Future Use

(B) Feature Group B Usage Measurement

For originating calls over FGB, usage measurement begins when Iowa Network's central access tandem receives trunk seizure acknowledgement from the customer's switch indicating the customer is ready to receive the call.

The measurement of originating call usage over FGB ends when Iowa Network's central access tandem receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

For terminating calls over FGB, the measurement of access minutes begins when the terminating FGB first point of switching

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Measuring Access Minutes (Cont'd)

(B) Feature Group B Usage Measurement (Cont'd)

receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered.

(C) (X)
| |
(C) (X)

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6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Measuring Access Minutes (Cont'd)

(B) Feature Group B Usage Measurement (Cont'd)

The measurement of terminating call usage over FGB ends when Iowa Network's central access tandem receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

(C) Reserved for Future Use

(C)

(D)

(D)

CENTRALIZED EQUAL ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Rate Regulations (Cont'd)

6.7.7 Measuring Access Minutes (Cont'd)

(D) Feature Group D Usage Measurement

For originating calls over FGD with multi-frequency address signaling, usage measurement begins when Iowa Network's central access tandem receives the first wink supervisory signal forwarded from the customer's switch. For originating calls over FGD with CCSA, usage measurement begins when either the Exit Message (EXM) or Address Complete Message (ACM) is received. The measurement of originating call usage over FGD ends when Iowa Network's central access tandem receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

(C)
(C)
(N)
|
|
(N)

For terminating calls over FGD, the measurement of 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.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Rate Regulations (Cont'd)6.7.7 Measuring Access Minutes (Cont'd)(D) Feature Group D Usage Measurement (Cont'd)

The measurement of terminating call usage over FGD ends when Iowa Network's central access tandem receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

6.7.8 Network Blocking Rate for Feature Group D

The customer will be notified by Iowa Network to increase its busy hour minutes of capacity when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed that purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a thirty (30) day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by Iowa Network within fifteen (15) days of the notification, Iowa Network will bill the customer, at the rate set forth in 6.8.1 (B) following, for each over-flow 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.

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.7 Rate Regulations (Cont'd)6.7.8 Network Blocking Rate for Feature Group D (Cont'd)Blocking Thresholds

<u>Trunks in Service</u>	<u>1/2%</u>
1-2	.045
3-4	.035
5-6	.025
7 or greater	.020

6.7.9 Reserved for Future Use6.7.10 Reserved for Future Use6.7.11 Reserved for Future Use6.7.12 Reserved for Future Use6.7.13 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Rates and Charges6.8.1 Switched Transport

(A) Rate

Rate
Per Access Minute

\$ 0.01031 (R)

Rate
Per Call Blocked(B) Network Blocking Charge + \$ 0.0070(C) Nonrecurring Charges(1) InstallationRate
Per TrunkActivation of the first
trunk or SNAC contained
in the order \$ 514.68Activation of each
additional trunk or SNAC
contained in an order \$ 12.55(2) Interim NXX TranslationRate
Per OrderActivation or deactivation
of the first NXX code
contained in an order \$ 213.70Activation or deactivation
of each additional NXX code
contained in an order \$ 23.81

+Applies to FGD

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CENTRALIZED EQUAL ACCESS SERVICE

7.

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1481 NW 109th Street
Des Moines, Iowa 50322

CENTRALIZED EQUAL ACCESS SERVICE

8. Customer's Point of Interconnection Information

8.1 General Information

Centralized Equal Access Service is available to customers that interconnect with Iowa Network's facilities at either Iowa Network's central access tandem or another Iowa Network premises listed in this section on which the central offices of the Routing Exchange Carriers home their traffic. The V&H coordinates for the points of interconnection listed in Section 8.2 following are set forth in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

(N) (X)
 | |
 (N) (X)

8.2 Customer's Point of Interconnection

Central Access Tandem

Iowa Network Premises

(C) (X)

Des Moines	Cedar Rapids
Des Moines	Clarinda
Des Moines	Creston
Des Moines	Davenport
Des Moines	Des Moines
Des Moines	Fort Dodge
Des Moines	Grinnell
Des Moines	Knoxville
Des Moines	Mason City
Des Moines	Mount Ayr
Des Moines	Mount Pleasant
Des Moines	Newton

(C) (X)

(X) Issued under authority of Special Permission Number 89-150 of the Federal Communications Commission.

Certain regulations previously found on this page can now be found on Original Page 147.1.

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CENTRALIZED EQUAL ACCESS SERVICE

8. Customer's Point of Interconnection Information (Cont'd)

8.2 Customer's Point of Interconnection (Cont'd)

<u>Central Access Tandem</u>	<u>Iowa Network Premises</u>	
Des Moines	Osceola	(C) (X)
Des Moines	Omaha	
Des Moines	Sioux City	
Des Moines	Spencer	(C) (X)

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Certain regulations found on this page formerly appeared on Original Page 147.

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers

(D) (X)
| |
(D) (X)

9.1 Exchanges and Localities

The names of the Routing Exchange Carriers (RECs) are as follows:

(C) (X)

RECs

(D) (X)
(C) |

Ace Telephone Association

(C) |

Amana Society Service Company

Andrew Telephone Company, Inc.

Arcadia Telephone Cooperative

Atkins Telephone Company, Inc.

Ayrshire Farmers Mutual Telephone Co.

Baldwin-Nashville Telephone Co., Inc.

Bernard Telephone Company, Inc.

(C) |

(D) |

Brooklyn Mutual Telephone Co.

(C) |

Butler-Bremer Mutual Telephone Company

Cascade Telephone Company

Casey Mutual Telephone Co.

(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers (Cont'd)

9.1 Exchanges and Localities (Cont'd)

RECs (Cont'd)

Center Junction Telephone Co.	(C)	(D) (X)
Central Scott Telephone Company	(C)	
Citizens Mutual Telephone Company	(C)	
Clarence Telephone Company, Inc.	(C)	
Clear Lake Independent Telephone Company	(Z)	
C-M-L Telephone Cooperative Association of Meriden, Iowa	(C)	
Coon Creek Telephone Company	(C)	
Coon Valley Cooperative Telephone Association, Inc.	(Z)	
Cooperative Telephone Company	(C)	
Cooperative Telephone Exchange	(C)	
Corn Belt Telephone Company	(C)	
Cumberland Telephone Company	(C)	
Danville Mutual Telephone Company	(C)	
Deep River Mutual Telephone Co.	(C)	
Defiance Telephone Company, Inc.	(D)	
Dumont Telephone Company	(C)	
East Buchanan Telephone Cooperative	(C)	(X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers (Cont'd)

9.1 Exchanges and Localities (Cont'd)

<u>RECs (Cont'd)</u>	(D) (X)
Ellsworth Cooperative Telephone Association	(C)
Farmer's and Businessmen's Telephone Company	(C)
Farmers Cooperative Telephone Co.	(C)
Farmers Mutual Cooperative Telephone Co. (Harlan)	(D)
Farmers Mutual Cooperative Telephone Co. (Moulton)	(C)
Farmers Mutual Telephone Co. (Nora Springs)	(C)
Farmers Mutual Telephone Co. (Shellsburg)	(D)
Farmers Mutual Telephone Co. (Stanton)	(C)
Farmers Telephone Company (Batavia)	(C)
Farmers Telephone Company (Essex)	(C)
Farmers Telephone Company (Nora Springs)	(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers (Cont'd)

9.1 Exchanges and Localities (Cont'd)

RECs (Cont'd)

Fenton Cooperative Telephone Company	(D) (X) (C)
Goldfield Telephone Company	(C)
Grand Mound Cooperative Telephone Association	
Grand River Mutual Telephone Corp.	
Griswold Cooperative Telephone Company	
Hawkeye Telephone Company	
Heart of Iowa Telephone Cooperative	
Hills Telephone Company	
Hospers Telephone Exchange, Inc.	
Hubbard Cooperative Telephone Association	
Huxley Cooperative Telephone Co.	
Iamo Telephone Company	
Interstate 35 Telephone Company	
Jefferson Telephone Company	(C)
Jordan-Soldier Valley Cooperative Telephone Company	(Z)
Kalona Cooperative Telephone Company	(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers (Cont'd)

9.1 Exchanges and Localities (Cont'd)

RECs (Cont'd)

Keystone Farmers Cooperative Telephone Company	(D) (X)
La Porte City Telephone Company	(C)
Lehigh Valley Cooperative Telephone Association	(C)
Lone Rock Cooperative Telephone Company	
Lost Nation-Elwood Telephone Co.	
Lynnvile Community Telephone Co., Inc.	
Manilla Telephone Company	
Marne & Elk Horn Telephone Co.	
Martelle Cooperative Telephone Association	
Massena Telephone Company	
Mechanicsville Telephone Company	
Mediapolis Telephone Company	
Miles Cooperative Telephone Association	
Minburn Telephone Company	
Minerva Valley Telephone Co., Inc.	
Modern Cooperative Telephone Co.	
Montezuma Mutual Telephone Co.	(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers (Cont'd)

9.1 Exchanges and Localities (Cont'd)

RECs (Cont'd)

Mutual Telephone Company	(D) (X)
Mutual Telephone Company of Morning Sun	(C)
North English Cooperative Telephone Company	(C)
Northeast Iowa Telephone Co.	(N)
Northern Iowa Telephone Company	(C)
Northwest Telephone Cooperative Association	
Norway Rural Telephone Company	
Ogden Telephone Company	
Olin Telephone Company, Inc.	
Onslow Cooperative Telephone Association	
Oran Mutual Telephone Company	
Palmer Mutual Telephone Company	
Palo Cooperative Telephone Association	
Panora Cooperative Telephone Association, Inc.	
Peoples Telephone Company	
Postville Telephone Company	
Prairie Telephone Co., Inc.	
Prairieburg Telephone Co., Inc.	(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers(Cont'd)

9.1 Exchanges and Localities (Cont'd)

	(D) (X)
<u>RECs (Cont'd)</u>	(C)
Preston Telephone Company	(C)
Radcliffe Telephone Co., Inc.	
Readlyn Telephone Company	
Ringsted Telephone Company	
River Valley Telephone Co-op	
Rockwell Cooperative Telephone Association	
Ruthven Telephone Exchange Co.	
Sac County Mutual Telephone Co.	
Schaller Telephone Company	
Schuyler Telephone Company	(C)
	(D)
	(D)
Sharon Telephone Company	(C)
Shell Rock Telephone Company	
South Slope Cooperative Telephone Company, Inc.	
Southwest Telephone Exchange, Inc.	
Springville Cooperative Telephone Association, Inc.	
Stratford Mutual Telephone Co.	(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

9. Routing Exchange Carriers(Cont'd)

9.1 Exchanges and Localities(Cont'd)

RECs (Cont'd)

	(D) (X)
	(C)
Sully Telephone Association	(C)
Swisher Telephone Company	
Templeton Telephone Company	
Terrill Telephone Company	
The Burt Telephone Company	
Titonka Telephone Company	
United Farmers Telephone Co.	
Van Buren Telephone Co., Inc.	
Van Horne Cooperative Telephone Co.	
Ventura Telephone Company, Inc.	(C)
	(D)
Walnut Telephone Company	(C)
Webb-Dickens Telephone Corp.	(C)
	(D)
Wellman Cooperative Telephone Association	(C)
West Iowa Telephone Company	
West Liberty Telephone Company and West Branch Telephone Co.	(C) (X)

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CENTRALIZED EQUAL ACCESS SERVICE

10.

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CENTRALIZED EQUAL ACCESS SERVICE

11.

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1481 NW 109th Street
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CENTRALIZED EQUAL ACCESS SERVICE

12.

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Des Moines, Iowa 50322

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services

In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 7:00 a.m. to 4:00 p.m.) for the application of rates based on working hours. A Miscellaneous Service Order Charge, applies to any service, or combination of services ordered simultaneously from this section of the Tariff for which a service order is not already pending 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), Stand by Repair (13.2.3), Testing and Maintenance with Other Telephone Companies other than when in conjunction with Acceptance Testing (13.2.4), Other Labor (13.2.5) and Maintenance of Service (13.3.1).

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), Stand by Acceptance Testing (13.2.3), Testing and Maintenance with Exchange Telephone Companies when in conjunction with Acceptance Testing (13.2.4), and Additional Cooperative Acceptance Testing [13.3.4(A)(1) and 13.3.4(B)(1)]. This charge is as follows:

- Miscellaneous Service Order Charge,
per occurrence \$19.28

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.1 Additional Engineering

Additional Engineering will be provided by Iowa Network at the request of the customer only when:

- (A) A customer requests additional technical information after Iowa Network has already provided the technical information normally included on the Design Layout Report (DLR) as set forth in 6.1.4 preceding.
- (B) Reserved for Future Use
- (C) A customer requests a Design Change, additional engineering time is incurred by Iowa Network for the engineering review as set forth in 5.2.2(C). The charge for additional engineering will apply whether or not Iowa Network proceeds with the design change.

Iowa Network will notify the customer that additional engineering charges, as set forth in 13.1.1 following, will apply before any additional engineering is undertaken.

13.1.1 Rates For Additional Engineering

The charges for additional engineering are as follows:

CENTRALIZED EQUAL ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.1 Additional Engineering (Cont'd)

13.1.1 Rates for Additional Engineering (Cont'd)

<u>Additional Engineering Periods</u>	<u>Each Half Hour or Fraction Thereof</u>
-	
(A) Basic Time, normally scheduled working hours, per engineer	\$36.00
-	
<u>Additional Engineering Periods</u>	<u>Each Half Hour or Fraction Thereof</u>
-	
(B) Overtime, outside of regularly scheduled working hours, per engineer	\$54.00

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.2 Additional Labor

Additional labor is that labor requested by the customer on a given service and agreed to by Iowa Network as set forth in 13.2.1 through 13.2.5 following. Iowa Network will notify the customer that additional labor charges as set forth in 13.2.6 following will apply before any additional labor is undertaken.

13.2.1 Overtime Installation

Overtime installation is that Iowa Network installation effort outside of regularly scheduled working hours.

13.2.2 Overtime Repair

Overtime repair is that Iowa Network maintenance effort performed outside of regularly scheduled working hours.

13.2.3 Stand By

Stand by includes all time in excess of one-half ($\frac{1}{2}$) hour during which Iowa Network personnel stand by 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 Exchange Telephone Companies

Additional testing, maintenance or repair of facilities which connect to facilities of Exchange Telephone Companies which is in addition to normal effort required to test, maintain or repair facilities provided solely by Iowa Network.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.2 Additional Labor (Cont'd)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.

13.2.6 Charges for Additional Labor

The charges for additional labor are as follows:

(A) Installation or Repair

<u>Additional Labor Periods</u>	<u>Each Half Hour or Fraction Thereof</u>
- Overtime, outside of regularly scheduled working hours, on a scheduled work day, per technician	\$16.11*
- Premium Time, outside of scheduled work day, per technician	\$20.99*

*A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.2 Additional Labor (Cont'd)13.2.6 Rates for Additional Labor (Cont'd)

(B) Stand by

<u>Additional Labor Periods</u>	<u>Each Half Hour or Fraction Thereof</u>
- Basic time, regularly scheduled working hours, per technician	\$11.24
- Overtime, outside of regularly scheduled working hours, on a scheduled work day, per technician	\$16.11*
- Premium Time, outside of scheduled work day, per technician	\$20.99*

*A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.2 Additional Labor (Cont'd)13.2.6 Rates for Additional Labor (Cont'd)

The charges for additional labor are as follows:

<u>Additional Labor Periods</u>	<u>Installation and Repair Technician</u>	<u>Each Half Hour or Fraction Thereof</u> <u>Central Access Tandem Maintenance Technician</u>
(C) Testing and Maintenance with Exchange Telephone Companies, or Other Labor		
- Basic Time, regularly scheduled working hours, per technician	\$11.24	\$11.24
- Overtime, outside of regularly scheduled working hours on a scheduled work day, per technician	\$16.11*	\$16.11*
- Premium Time, outside of scheduled work day, per technician	\$20.99*	\$20.99*

*A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

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CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services13.3.1 Maintenance of Service

- (A) When a customer reports a trouble to Iowa Network for clearance and no trouble is found in Iowa Network's facilities, the customer shall be responsible for payment of a Maintenance of Service charge for the period of time from when Iowa Network personnel are dispatched to the customer point of interconnection to when the work is completed. Failure of Iowa Network personnel to find trouble in Iowa Network 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 Iowa Network dispatches personnel to the customer point of interconnection and the trouble is in equipment or communications systems provided by other than Iowa Network.

In either (A) or (B) preceding, no credit allowance will be applicable for the interruption involved if the Maintenance of Service charge applies.

- (C) The charges for Maintenance of Service are as follows:

<u>Maintenance of Service Periods</u>	<u>Each Half Hour or Fraction Thereof</u>
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor set forth in 13.2.6(C) preceding.

*A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.2 Reserved for Future Use13.3.3 Reserved for Future Use13.3.4 Testing Services

Iowa Network will, in addition to any customer requested acceptance testing, perform such tests as it believes necessary to ensure that the access services ordered by a customer are functioning properly prior to furnishing such access services to the customer. In addition, Iowa Network, as part of the ongoing work to maintain the continued satisfactory performance of the access services ordered by the customer, may perform periodic tests.

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 13.3.4(C) following. Other testing services, as described in 6.1.5 and 6.1.6 preceding, are provided by Iowa Network in association with Access Services and are furnished at no additional charge. Testing Services are normally provided by Iowa Network personnel at Iowa Network locations. In addition, Iowa Network will, at the request of the customer, perform Acceptance Testing with the customer in accordance with the provisions set forth in Section 6 preceding.

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), (B) and (C) following.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.4 Testing Services (Cont'd)(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, and (b) tests which are performed after acceptance of such access services by a customer, i.e., in-service tests. These in-service tests may be further divided into two broad categories of tests: scheduled and nonscheduled.

Scheduled tests are those tests performed by Iowa Network on a regular basis, as set forth in Section 6.1.6 preceding which are required to maintain Switched Access Service. Scheduled tests may be done on an automatic basis (no Iowa Network or customer technicians involved) or on a cooperative basis (Iowa Network technician(s) involved at Iowa Network office(s) and customer technicians involved at customer terminal location(s)).

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing (ACAT) of Switched Access Service involves Iowa Network provision of a technician at its office(s) and the customer provides a technician at its terminal location(s), with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.4 Testing Services (Cont'd)(A) Switched Access Service (Cont'd)(1) Additional Cooperative Acceptance Testing (Cont'd)

- * C-Notched Noise
- * Impulse Noise
- * Phase Jitter
- * Signal to C-Notched Noise Ratio
- * Intermodulation (Nonlinear)
Distortion
- * Frequency Shift (Offset)
- * Envelope Delay Distortion
- * Dial Pulse Percent Break

(2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Groups B, C and D), where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent, will consist of monthly loss and C-message noise tests and an annual balance test. However, the customer may specify a more frequent schedule of tests. In addition to the loss/noise/balance tests, the customer may also order, at additional charges, gain-slope and C-notched noise testing.

Iowa Network 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.

CENTRALIZED EQUAL ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.4 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(3) Reserved for Future Use

(4) Obligations of the Customer

(a) The customer shall provide the Remote Office Test Line priming data to Iowa Network as appropriate, to support AAT as set forth in 13.3.4(A)(2) preceding.

(b) Reserved for Future Use

(B) Reserved for Future Use

(C) Rates and Charges

(1) Switched Access

(a) Additional Cooperative Acceptance Testing

<u>Testing Period</u>	<u>Each Half Hour or Fraction Thereof</u>
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 13.2.6(C) preceding.

*A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.4 Testing Services (Cont'd)(C) Rates and Charges (Cont'd)(1) Switched Access (Cont'd)(b) Additional Automatic Testing (AAT)

The Additional Tests as set forth following may be ordered by the customer, at additional charges, 60 days prior to the start of the customer prescribed schedule.

<u>To First Point of Switching</u>	—
Additional Tests	
	<u>Per Test Per Transmission Path</u>
Gain-Slope Tests	\$3.58
C-Notched Noise Tests	\$3.58
1004 Hz Loss*	\$3.58
C-Message Noise *	\$3.58
Balance (return loss)*	\$3.58

*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.

CENTRALIZED EQUAL ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.5 Provision of Access Service Billing Information

- (A) The customer will receive its monthly bills in a standard paper format.
- (B) At the option of the customer, and for an additional charge:
- (1) Customer monthly usage detail in support of the monthly bill may be provided on magnetic tape.
 - (2) Billing detail and/or information may be transmitted to the customer terminal location by data transmission.
 - (3) Additional copies of the customer monthly bill or service and features record may be provided in standard paper or microfiche format.
- (C) Upon acceptance by Iowa Network of an order for data transmission, Iowa Network will determine the period of time to implement the transmission of such material on an individual order basis.
- (D) The rates and charges for the provision of Access Service Billing Information are as follows:

	<u>FID</u>	<u>Rates</u>
(1) Provision of Standard Bill Detail and/or Information in magnetic tape format, per record	DMT	ICB rates and charges apply

CENTRALIZED EQUAL ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.5 Provision of Access Service Billing Information (Cont'd)

(D) (Cont'd)

	<u>FID</u>	<u>Rates</u>	
(2) Data Transmission to a customer Terminal Location of Bill Detail and/ or Information, per record transmitted	TRMD B	ICB rates and charges apply	
(3) Additional Copies of customer monthly bill or billing detail in standard paper format, or 5 1/4 inch or 3 1/2 inch floppy diskette per page	BOD NEL		(C) --- (C)
per diskette	BOD FH	ICB rates and charges apply	(C)

13.3.6 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE

14.

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CENTRALIZED EQUAL ACCESS SERVICE15. Interface Groups, Transmission Specifications and Channel Interfaces15.1 Switched Transport Interface Groups

Interface Group 6 is provided with Type A or B Transmission Specifications, depending on the Feature Group. This Interface Group is provided with Data Transmission Parameters.

Only certain interfaces are available at the customer's points of interconnection set forth in Section 8 preceding. The interfaces associated with the Interface Group may vary among Feature Groups. The various interfaces, which are available with the Interface Group, and the Feature Groups with which it may be used, are set forth in 15.1.11 following.

15.1.1 Reserved for Future Use15.1.2 Reserved for Future Use15.1.3 Reserved for Future Use15.1.4 Reserved for Future Use15.1.5 Reserved for Future Use15.1.6 Interface Group 6

Interface Group 6 provides DS1 level digital transmission at the points of interconnection set forth in Section 8 preceding. The interface is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to twenty-four (24) voice frequency transmission paths. When analog switching utilizing analog terminations is provided, Iowa Network will provide multiplex and channel bank equipment to derive twenty-four (24) transmission paths of a frequency bandwidth of approximately three hundred (300) to three thousand (3000) Hz. When digital switching or analog switching with digital carrier terminations is provided, Iowa Network will provide, at the first point of switching, a DS1 signal in D3/D4 format.

CENTRALIZED EQUAL ACCESS SERVICE

15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

15.1 Switched Transport Interface Groups (Cont'd)

15.1.6 Interface Group 6 (Cont'd)

The Interface is provided with individual transmission path bit stream supervisory signaling.

15.1.7 Reserved for Future Use

15.1.8 Reserved for Future Use

15.1.9 Reserved for Future Use

15.1.10 Reserved for Future Use

15.1.11 Available Interface Codes

Following is a matrix showing, for the Interface Group, which interface codes are available as a function of Iowa Network switch supervisory signaling and Feature Group. For explanations of these codes, see the Glossary of Channel Interface Codes in 15.3 following.

<u>Interface Group</u>	Telephone Company <u>Switch Supervisory Signaling</u>	<u>Interface Code</u>	<u>Feature Group</u>		(C) (C)
			<u>B</u>	<u>D</u>	
6	RV, EA, EB, EC	4DS9-15	X	X	 (C)
	RV, EA, EB, EC	4DS9-15L	X	X	

15.1.12 Supervisory Signaling

This Interface Group may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Iowa Network's central access tandem. Generally, such signaling is available only where Iowa Network's central access tandem provides an analog, i.e. non-digital, interface and a portion of the facility provided by the customer between Iowa Network's central access tandem and the customer's premises is analog.

CENTRALIZED EQUAL ACCESS SERVICE15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)15.2 Transmission Specification Switched Access Service15.2.1 Standard Transmission Specifications

Following are descriptions of the two Standard Transmission Specifications available with Switched Access Service Feature Groups. The specific applications in terms of the Feature Groups are set forth in 6.2.2(B) and 6.2.4(B) preceding. (C)

(A) Transmission Specifications

Type A Transmission Specifications is provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -1.0 dB to +3.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>
less than 50	32 dB _{rnCO}
51 to 100	34 dB _{rnCO}
101 to 200	37 dB _{rnCO}
201 to 400	40 dB _{rnCO}
401 to 1000	42 dB _{rnCO}

CENTRALIZED EQUAL ACCESS SERVICE15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)15.2 Transmission Specification Switched Access Service (Cont'd)15.2.1 Standard Transmission Specifications (Cont'd)(A) Type A Transmission Specifications (Cont'd)(4) C-Notched Noise

The maximum C-Notched Noise, utilizing a -16 dBm0 holding tone is less than or equal to 45 dBmCO.

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss is equal to or greater than the following:

Echo Return	Singing Return
<u>Loss</u>	<u>Loss</u>
16 dB	11 dB

(6) Reserved for Future Use

(B) 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.

CENTRALIZED EQUAL ACCESS SERVICE

15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

15.2 Transmission Specification Switched Access Service (Cont'd)

15.2.1 Standard Transmission Specifications (Cont'd)

(B) Type B Transmission Specifications (Cont'd)

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type 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-Notched Noise

The maximum C-Notched Noise, utilizing a -16 dBmO holding tone is less than or equal to 47 dBrnCO.

(5) Echo Control

Echo Control is identified as Impedance Balance for FGB and Equal Level Echo Path Loss for FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL) also differ by Feature Group. They are greater than or equal to the following: (C)

* For Feature Group D only, Type B2 will be provided. For Feature Group B, Type B1 and B2 will be provided as set forth in Technical Reference TR-NPL-000334. (C)

CENTRALIZED EQUAL ACCESS SERVICE

15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

15.2 Transmission Specification Switched Access Service (Cont'd)

15.2.1 Standard Transmission Specifications (Cont'd)

(B) Type B Transmission Specifications (Cont'd)

(5) Echo Control

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
For FGB access	8 dB	4 dB

(D)

(D)

(6) Reserved for Future Use

(C) Reserved for Future Use

15.2.2 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. The specific applications in terms of the Feature Groups with which they are provided are set forth in 6.2.2(B) and 6.2.4(B) preceding. Following are descriptions of each.

(C)

CENTRALIZED EQUAL ACCESS SERVICE15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)15.2 Transmission Specification Switched Access Service (Cont'd)15.2.2 Data Transmission Parameters (Cont'd)(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.

(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
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equal to or greater than 50 route miles	900 microseconds
--	------------------

1004 to 2404 Hz

less than 50 route miles	200 microseconds
-----------------------------	------------------

equal to or greater than 50 route miles	400 microseconds
--	------------------

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBnCO threshold in fifteen (15) minutes is no more than fifteen (15) counts.

CENTRALIZED EQUAL ACCESS SERVICE15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)15.2 Transmission Specification Switched Access Service (Cont'd)15.2.2 Data Transmission Parameters (Cont'd)(A) Data Transmission Parameters Type DA(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	33 dB
Third Order (R3)	37 dB

(5) Phase Jitter

The Phase Jitter over the 4300 Hz frequency band is less than or equal to 5 degrees 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 thirty (30) dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

CENTRALIZED EQUAL ACCESS SERVICE15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)15.2 Transmission Specification Switched Access Service (Cont'd)15.2.2 Data Transmission Parameters (Cont'd)(B) Data Transmission Parameters Type DB (Cont'd)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

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBmCO threshold in fifteen (15) minutes is no more than fifteen (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

CENTRALIZED EQUAL ACCESS SERVICE

15. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

15.2 Transmission Specification Switched Access Service (Cont'd)

15.2.2 Data Transmission Parameters (Cont'd)

(B) Data Transmission Parameters Type DB (Cont'd)

(5) Phase Jitter

The Phase Jitter over the 4300 Hz frequency band is less than or equal to 7 degrees peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

15.3 Reserved for Future Use

15.4 Reserved for Future Use

CENTRALIZED EQUAL ACCESS SERVICE16. Commercial Mobile Radio Service Transport

(N)

16.1 General

This section establishes terms and conditions governing the intrastate and interstate use of Iowa Network's facilities in the transport of calls from a subscriber of a Commercial Mobile Radio Service (CMRS) provider to a subscriber of a Routing Exchange Carrier and from a subscriber of a Routing Exchange Carrier to a subscriber of a CMRS provider. This tariff is being filed pursuant to 47 U.S.C. §303 and 332 establishing the FCC's primary jurisdiction over the service territory and rates charged for the routing of CMRS traffic. In the event that CMRS Transport is not considered an access service, compliance with this tariff satisfies a CMRS provider's obligation under 47 U.S.C. '251(b)(5) to pay Iowa Network for the transport of CMRS calls.

16.2 Definitions

The following definitions apply to this Section 16:

Commercial Mobile Radio Service (CMRS): As defined in the Communications Act of 1934, as amended by the Telecommunications Act of 1996.

Intermediary Carrier: Qwest Communications and other telecommunications carriers, other than Iowa Network, that carry Transiting Traffic.

Originating Traffic: Calls placed by subscribers of a Routing Exchange Carrier to subscribers of a CMRS Provider (wireline to wireless).

Terminating Traffic: Calls placed by subscribers of a CMRS Provider to subscribers of a Routing Exchange Carrier (wireless to wireline).

Transiting Traffic: CMRS traffic that originates from one telecommunications carrier's network, transits another telecommunications carrier's network, and terminates to yet another telecommunications carrier's network. Transiting traffic provides the ability for the Intermediary Carrier to use its connection to an Iowa Network local or access tandem for delivery of calls that originate with a CMRS provider, utilize the network of Iowa Network and terminate to a Routing Exchange Carrier.

(N)

CENTRALIZED EQUAL ACCESS SERVICE16. Commercial Mobile Radio Service Transport (Cont'd)16.3 Types of Service

Terminating Traffic. A per minute charge shall be assessed to the CMRS provider for use of Iowa Network's CEA facilities for the transport of intrastate and interstate Terminating Traffic.

Originating Traffic. A per minute charge shall be assessed to the Interexchange Carrier selected by the Routing Exchange Carriers subscriber (either through presubscription or by dialing a carrier access code (e.g., 101XXXX)) for the intrastate and interstate use of Iowa Networks CEA facilities.

16.4 Obligations of CMRS Provider

In addition to the general obligations of Customers under this tariff and to other obligations stated in this Section 16, CMRS providers must place an order with Iowa Network according to MECOD guidelines, prior to receiving service. Notwithstanding the foregoing, the use of the service described in this Tariff by a CMRS provider shall be treated as an order for service and the CMRS provider shall pay Iowa Networks for that service.

16.5 Obligations of Intermediary Carriers(a) Provision of Usage Information

When an Intermediary Carrier delivers Transiting Traffic between a CMRS provider and Iowa Network, the Intermediary Carrier shall promptly provide Iowa Network with usage information for that CMRS provider. The usage information shall be in a form acceptable to Iowa Network and, at minimum, be consistent with MECAB and MECOD guidelines and in EMI format and otherwise sufficient to facilitate the billing of the CMRS provider pursuant to this tariff. If the Intermediary Carrier does not provide information requested by Iowa Network to accurately bill the CMRS provider, the Intermediary Carrier shall be the customer for purposes of this intrastate and interstate traffic. Iowa Network shall assess tariff charges to the Intermediary Carrier as described in this Section 16, and the Intermediary Carrier shall promptly pay such charges to Iowa Network pursuant to the terms of this tariff.

CENTRALIZED EQUAL ACCESS SERVICE16. Commercial Mobile Radio Service Transport (Cont'd)

(N)

16.5 Obligations of Intermediary Carriers (Cont'd)(b) Blocking Capability

Not with standing Subsection (a), if the Intermediary Carrier provides information sufficient to block CMRS traffic originating with a CMRS provider that has failed to compensate Iowa Network for the provision of service described herein, and Iowa Network has the technical capability to block such CMRS traffic, Iowa Network may, at its sole discretion, elect to block the use of its network by the delinquent CMRS providers rather than treat the Intermediary Carrier as the customer with respect to such traffic.

(c) Intermediary Carrier Liability

Notwithstanding the forgoing Subsections (a) and (b), Intermediary Carriers are solely liable to Iowa Network for the termination of Transiting Traffic that was terminated by Iowa Network prior to the effective date of this tariff. Such liability was established and governed by applicable state tariffs filed and approved by the Iowa Utilities Board. Following the effective date of this tariff, this tariff rather than the Iowa Network state tariff shall govern the charges for the transport of intrastate and interstate CMRS traffic pursuant to the FCC's jurisdiction over such CMRS traffic.

16.6 Usage Charge

The charge applicable to intrastate and interstate Commercial Mobile Radio Service Transport, is the same charge applicable to other uses of Iowa Network's CEA facilities, and is found in Section 6.8.1(A).

(N)