Title Page

ACCESS SERVICE

CBTS TECHNOLOGY SOLUTIONS LLC (T)

TARIFF IURC NO. 1

The Company name reflected in this Tariff was formerly Cincinnati Bell Any Distance. LLC. The Company name now shown in this tariff is CBTS Technology Solutions, LLC. This tariff replaces, in its entirety, the Cincinnati Bell (T) Any Distance, LLC IURC Tariff No. 1. Future tariff revisions will reflect (T) the Company name of CBTS Technology Solutions, LLC.

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EXPLANATION OF SYMBOLS

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

PRINCIPAL OFFICE

CBTS TECHNOLOGY SOLUTIONS LLC's principal office is located at 221 East Fourth Street, Cincinnati, Ohio 45202. This tariff is available for public inspection at the above address during regular business hours.

APPLICATION OF TARIFF

This tariff contains regulations, rates and charges applicable to the (T) 1. Provision of switched access, special access and Ethernet services (T) within the State Indiana. (T)

Issued: December 14, 2017

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2. General Regulations

(N)

- 2.1 Undertaking of the Company
 - 2.1.1 <u>Scope</u>
 - (A) The Company shall be responsible only for the installation, operation, and maintenance of the services it provides.
 - (B) The Company will, for maintenance purposes, test its services only to the extent necessary to detect and/or clear troubles.
 - (C) Services are provided 24 hours daily, seven days per week, where available, except as set forth in other applicable sections of this tariff.
 - (D) The Company does not warrant that its facilities and services meet standards other than those set forth in (N) this tariff.

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2. General Regulations (Cont'd)

- 2.1 Undertaking of the Company (Cont'd)
 - 2.1.2 Limitations
 - (A) The customer may not assign or transfer the use of services provided under this tariff except as provided herein. Where there is no interruption of use or relocation of the services, such assignment or transfer may be made to:
 - (1) another customer, whether an individual, partnership, association, or corporation, provided the assignee or transferee assumes all outstanding indebtedness for such services, and the unexpired portion of the minimum period and the termination liability applicable to such services, if any; or
 - (2) a court-appointed receiver, trustee, or other person acting pursuant to law in bankruptcy, receivership, reorganization, insolvency, liquidation, or other similar proceedings, provided the assignee or transferee assumes the unexpired portion of the minimum period and the termination liability applicable to such services, if any.

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

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

(N)

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Assistant Secretary, CBTS Technology Solutions LLC

2. General Regulations (Cont'd)

- 2.1 Undertaking of the Company (Cont'd)
 - 2.1.2 Limitations (Cont'd)
 - (B) 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 the Company on complete and accurate customer orders which allow the Company to initiate its ordering process. The customer shall not be penalized for any delay in the Company review process beyond 1 working day of receipt. To the extent the order does not allow the Company to initiate the ordering process, the Company will attempt to complete the ordering process verbally with the customer. Once having been advised of the errors and/or omissions, any delay in correction on the part of the customer shall be added to the received time.

2.1.3 Liability

- (A) The Company's liability, if any, for its willful misconduct is not limited by this tariff. With respect to any other claim or suit, by a customer or by any others, for damages associated with the installation, provision, preemption, termination, maintenance, repair, or restoration of service, and subject to the provisions of (B) through (H) following, the Company's liability, if any, shall not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. This liability for damages shall be in addition to any amounts that may otherwise be due the customer under this tariff as a Credit Allowance for a Service Interruption.
- (B) The Company shall not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor shall the for its own act or omission hold liable any other carrier or customer providing a portion of a service.

(N)

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- 2. <u>General Regulations</u> (Cont'd)
 - 2.1 Undertaking of the Company (Cont'd)
 - 2.1.3 Liability (Cont'd)
 - (C) The Company is not liable for damages to the customer premises resulting from the furnishing of a service, including the installation and removal of equipment and associated wiring, unless the damage is caused by the Company's negligence.
 - (D) The Company shall be indemnified, defended and held harmless by the end user against any claim, loss, or damage arising from the end user's use of services offered under this tariff, involving:
 - Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the end user's own communications;
 - (2) Claims for patent infringement arising from the end user's acts combining or using the service furnished by the Company in connection with facilities or equipment furnished by the end user or IC or;
 - (3) All other claims arising out of any act or omission of the end user in the course of using services provided pursuant to this tariff.
 - (E) The Company shall be indemnified, defended and held harmless by the IC against any claim, loss or damage arising from the IC's use of services offered under this tariff, involving:
 - Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the IC's own communications;

(N)

Effective:

Assistant Secretary, CBTS Technology Solutions LLC

- 2. General Regulations (Cont'd)
 - 2.1 Undertaking of the Company (Cont'd)
 - 2.1.3 Liability (Cont'd)
 - (E) (Cont'd)
 - (2) Claims for patent infringement arising from the IC's acts combining or using the service furnished by the Company in connection with facilities or equipment furnished by the end user or IC or;
 - (3) All other claims arising out of any act or omission of the IC in the course of using services provided pursuant to this tariff.
 - (F) The Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. The Company shall be indemnified, defended and held harmless by the customer from any and all claims by any person relating to such customer's use of services so provided.
 - (G) No license under patents (other than the limited license to use) is granted by the Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff. The Company will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.
 - (H) The Company's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against the Company, and other circumstances beyond the Company's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in 2.4.3 following.

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Assistant Secretary, CBTS Technology Solutions LLC

(N)

2. General Regulations (Cont'd)

- 2.1 Undertaking of the Company (Cont'd)
 - 2.1.4 Provision of Services

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

2.1.5 Maintenance of Services

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

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2. General Regulations (Cont'd)

- 2.1 Undertaking of the Company (Cont'd)
 - 2.1.6 Changes and Substitutions

Except as provided for equipment and systems subject to FCC Part 68 Regulations at 47 C.F.R. Section 68.110 (b), the Company 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, including but not limited to substitution of carrier or derived facilities for wire facilities used to provide services (B) change minimum protection criteria, (C) change operating or maintenance characteristics of facilities or (D) change operations or procedures of the Company.

The Company shall not be responsible if any such substitution, change or rearrangement renders any customer furnished services obsolete or requires modification or alteration thereof or otherwise affects their use or performance. If such substitution, change or rearrangement materially affects the operating characteristics of the facility, the Company will provide reasonable notification to the customer in writing. Reasonable time will be allowed for any redesign and implementation required by the change in operating characteristics. The Company will work cooperatively with the customer to determine reasonable notification requirements.

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Assistant Secretary, CBTS Technology Solutions LLC

2. General Regulations (Cont'd)

- 2.1 Undertaking of the Company (Cont'd)
 - 2.1.7 Refusal and Discontinuance of Service
 - (A) When the customer's account is thirty (30) days past due, and the customer fails to comply with the provisions of Section 2, the Company may send a written notice to the customer regarding such noncompliance. The Company will send this delinquency notice via overnight Certified U.S. Mail or other commercial courier to the person the customer has designated to receive such notices of noncompliance. If the customer has not designated a person to whom notices should be sent, the Company will send the notice to the address where it sends invoices to the customer. The Company will give the customer fifteen (15) days from the day the Company mails the notice to comply and bring its applicable account current. If the customer does not bring its applicable account current and into compliance by the end of that 15-day period (when the account is 45-days past due), the Company may refuse additional applications for service, or may refuse to complete pending orders for service, or both. The Company may process additional applications for service and/or complete orders during the fifteen (15) days. However, nothing contained herein shall preclude the Company's right to refuse additional applications for service and/or to refuse to complete pending orders for the non-complying customer after this 15-day period without further notice to the customer.
 - When the account is forty-five (45) days past due, and the (B) customer has not complied and its applicable account is not current, the Company may send a disconnect notice to the customer. This notice shall give the customer an additional fifteen (15) days from the day the Company mails the disconnect notice to bring its applicable account current and into compliance. If the customer does not bring its applicable account current and into compliance by the end of this second 15-day period (when the account is 60-days past due), the Company may discontinue existing services in addition to exercising its rights described above in Part (A). If the Company does not disconnect the existing services, nothing contained herein shall preclude the Company's right to disconnect existing services to the non-complying customer without further notice to the customer. (N)

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Assistant Secretary, CBTS Technology Solutions LLC

2. General Regulations (Cont'd)

- 2.1 Undertaking of the Company (Cont'd)
 - 2.1.7 Refusal and Discontinuance of Service (Cont'd)
 - When access service is provided by more than one (C) company, the Companies involved in providing the joint service may individually or collectively deny service to a customer for nonpayment. Where the Company (Companies) affected by the nonpayment is (are) incapable of effecting discontinuance of service without cooperation from the other joint provider(s) of Switched Access Service, such other Company (Companies) will, if technically feasible, assist in denying the joint service to the customer. Service denial for such joint service will only include calls which originate or terminate within, or transit, the operating territory of the Company (Companies) initiating the service denial for nonpayment. When more than one of the joint providers must deny service to effectuate termination for nonpayment, in cases where a conflict exists in the applicable tariff provisions, the tariff regulations of the end office Company shall apply for joint service discontinuance.

2.2 <u>Use</u>

2.2.1 Unlawful Use

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

2.3 Obligation of the Customer

2.3.1 Damages

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

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2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.2 Ownership of Facilities and Theft

Facilities utilized by the Company to provide service under the provisions of this tariff shall remain the property of the Company. Such facilities shall be returned to the Company by the customer, whenever requested, within a reasonable period following the request in as good condition as reasonable wear will permit.

2.3.3 Equipment Space and Power

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

2.3.4 Availability for Testing

The services provided under this tariff shall be available to the Company at times mutually agreed upon in order to permit the Company to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments shall be completed within a reasonable time. No credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.5 Design of Customer Services

The customer shall be solely responsible, at its own expense, for the overall design of its services and for any redesigning or rearrangement of its services which may be required because of changes in facilities, operations or procedures of the Company, minimum protection criteria or operating or maintenance characteristics of the facilities.

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2. General Regulations (Cont'd)

- 2.3 Obligations of the Customer (Cont'd)
 - 2.3.6 References to the Company

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

2.3.7 Claims and Demands for Damages

- (A) With respect to claims of patent infringement made by third persons, the customer shall defend, indemnify, protect and save harmless the Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the customer.
- (B) The customer shall defend, indemnify and save harmless the Company from and against any suits, claims, losses or damages, and court costs by third persons arising out of the construction, installation, operation, maintenance, or removal of the customer's circuits, facilities, or equipment connected to the Company'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,

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2. General Regulations (Cont'd)

- 2.3 Obligations of the Customer (Cont'd)
 - 2.3.7 Claims and Demands for Damages (Cont'd)
 - (B) (Cont'd)

licenses, or other authority to acquire or operate the services provided under this tariff; provided, however, the foregoing indemnification shall not apply to suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims, or demands are based on the tortuous conduct of the customer, its officers, agents or employees.

(C) The customer shall defend, indemnify and save harmless the Company from and against any suits, claims, losses or damages, including 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. (N)

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2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances

2.4.1 Payment of Rates, Charges and Deposits

(A) The Company will, in order to safeguard its interests, require a customer which has a proven history of late payments to the Company or does not have established credit, to make an advance payment, or make a deposit (prior to or at any time after the provision of a service to the customer) to be held by the Company as a guarantee of the payment of rates and charges. No such advance payment, or deposit will be required of a customer which is a successor of a company which has established credit and has no history of late payments to the Company. Such advance payment or 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 the Company's regulations as to the prompt payment of bills. At such time as the provision of the service to the customer is terminated, the remaining amount of the advance payment or deposit will be credited to the customer's account and any credit balance which may remain will be refunded.

A deposit may be refunded or credited the account when the customer has established credit or, in any event, after the customer has established a one-year prompt payment record at any time prior to the termination of the provision of the service to the customer. In case of a cash deposit, for the period the deposit is held by the Company, the customer will receive interest at the same percentage rate as that set forth in (B)(3)(b)(I) or in (B)(3)(b)(II), whichever is lower. The calculation will be based on the number of days from the date the customer deposit is received by the Company to and including the date such deposit is credited to the customer's account or the date the deposit is refunded by the Company. Should a deposit be credited to the customer's account, as indicated above, no interest will accrue on the deposit from the date such deposit is credited to the customer's account. Advance payments of a customer's account will not receive interest. (N)

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2. General Regulations (Cont'd)

- 2.4 Payment Arrangements and Credit Allowances (Cont'd)
 - 2.4.1 Payment of Rates, Charges and Deposits (Cont'd)
 - (B) The Company shall bill on a current basis all charges incurred by and credits due to the customer under this tariff attributable to services established or discontinued during the preceding billing period. In addition, the Company shall bill in advance charges for all services to be provided during the ensuing billing period. 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:
 - The Company will establish a bill day each month for each customer account.
 - (2) Amounts not paid within 31 days of invoice will be considered past due. Interest at a rate of 1.5% per month may be applied to any unpaid amount commencing 31 days after the statement date.
 - A check return charge will be assessed for checks with insufficient funds or non-existing accounts.

Check Return Charge \$20.00

(C) 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 30 day month. Company will, upon request and if available, furnish such detailed information as may reasonably be required for verification of any bill.

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Assistant Secretary, CBTS Technology Solutions LLC

(N)

ACCESS SERVICE

2. <u>General Regulations</u> (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.2 Minimum Periods

The minimum period for which services are provided and for which rates and charges are applicable is one month except as noted otherwise.

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

Issued: December 14, 2017

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.2 Minimum Periods

The minimum period for which services are provided and for which rates and charges are applicable is one month except as noted otherwise.

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

2.4.3 Credit Allowance for Service Interruptions

(M)

(A) General

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Company result in the complete loss of service by the customer. An interruption period starts when an inoperative service is reported to the Company, and ends when the service is operative. (M)

Regulations found on this page were formerly found on Page 24.

Issued: December 14, 2017

Effective:

2. General Regulations (Cont'd)

- 2.4 Payment Arrangements and Credit Allowances (Cont'd)
 - 2.4.3 Credit Allowance for Service Interruptions (Cont'd)

(M)

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(M)
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(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 DS1 service, no credit shall be allowed for an interruption of less than thirty (30) minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or major fraction thereof that the interruption continues.
- (2) For OC Point-to-Point Special Access Services with 1+1 Protection Route and Central Office Survivability a Credit Allowance will be made for any occurrence of a Service interruption. For OC Point-to-Point Special Access Services without 1+1 Protection Route and Central Office Survivability a Credit Allowance will be made for each occurrence of a Service interruption period of (1) one or more consecutive minutes. For MercNet 45 service a Credit Allowance will be made for each occurrence of a Service interruption period of (2) two or more consecutive hours. (N)

The monthly charges shall be the total of all the monthly rate element charges associated with the service.

- (3) Credit allowance for Ethernet service is found in 5.2 (N) following.
- (4) Credit allowance for Wavelength service is found in 6.1(B) following.
- (5) Credit allowance for Ethernet Point-to Point service is found in 7.1(B) following.

Regulations formerly found on this page are now found on page 23

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(N)

2. General Regulations (Cont'd)

- 2.4 Payment Arrangements and Credit Allowances (Cont'd)
 - 2.4.3 Credit Allowance for Service Interruptions
 - (A) General

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Company result in the complete loss of service by the customer. An interruption period starts when an inoperative service is reported to the Company, and ends when the service is operative.

(B) When a Credit Allowance Applies

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

(1) For DS1 and DS3 service, no credit shall minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or major fraction thereof that the interruption continues.

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

 (a) For DS1 and DS3 services, the monthly charge shall be the total of all the monthly rate element charges associated with the service.
 (N)

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2. General Regulations (Cont'd)

- 2.4 Payment Arrangements and Credit Allowances (Cont'd)
 - 2.4.3 Credit Allowance for Service Interruptions (Cont'd)
 - (C) When A Credit Allowance Does Not Apply

No credit allowance will be made for:

- Interruptions caused by the negligence of the customer.
- (2) Interruptions of a service due to the failure of equipment or systems provided by the customer or others.
- (3) Interruptions of a service during any period in which the Company is not afforded access to the premises where the service is terminated.
- (4) Interruptions of a service when the customer has released that service to the Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service. Thereafter, a credit allowance as set forth in (B) preceding applies.
- (5) Periods when the customer elects not to release the service for testing and/or repair and continues to use it on an impaired basis.
- (6) An interruption or a group of interruptions, resulting from a common cause, for amounts less than one dollar.

(D) Temporary Surrender of a Service

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

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(N)

2. General Regulations (Cont'd)

2.5 Definitions

Certain terms used herein are defined as follows:

Access Code

The term "Access Code" denotes a uniform five or seven digit code assigned by the Company to an individual customer. The five digit code has the form 10XXX, and the seven digit code has the form 101XXXX and 950-XXXX.

Access Minutes

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

Access Tandem

The term "Access Tandem" denotes a Company switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and a customer's premises.

Access Tandem Trunk Port

The Access Tandem Trunk Port is a port for each dedicated trunk on the serving Wire Center side of the access tandem.

Aggregator

The term "Aggregator" denotes any person that, in the ordinary course of operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services as defined under Part 64.708(b) of the FCC Rules and Regulations. Further included in this definition are universities, hospitals, hotels, and other entities which provide services to the general public for users of its premises for interstate calls.

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2. <u>General Regulations</u> (Cont'd)

2.5 Definitions (Cont'd)

Answer/Disconnect Supervision

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

Asynchronous Transfer Mode

Asynchronous Transfer Mode means a high-speed, cell-based, connectionoriented, packet transmission protocol for handling data with varying bursts and bit rates.

Attenuation Distortion

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

Automatic Number Identification (ANI)

The term "Automatic Number Identification (ANI)" denotes the provision of automatic transmission of a seven or ten digit number and information digits to the customer's premises for calls originating in the LATA, to identify the calling station. Also see "Flexible Automatic Number Identification".

Balance (100 Type) Test Line

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

Bit

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

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Cable Vault

A space designated by the Company which serves as the cable entrance to the Serving Wire Center.

Call

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

Call Gapping

The term "Call Gapping" denotes the routing of originating calls to all transmission paths in a trunk group at a prescribed rate of flow, e.g., one call every five seconds, in order to limit (choke) the completion of such traffic. Calls which are denied access, i.e., the choked calls, would be routed to a no-circuit announcement.

Carrier or Common Carrier

See Interexchange Carrier.

Carrier Identification Parameter

A feature allowing the CCS/SS7 call setup protocol to carry the Carrier Identification Code (CIC) through interconnected networks.

Central Office

The term "Central Office" denotes a local Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks.

Central Office Prefix

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

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Centralized Automatic Reporting on Trunks Testing

The term "Centralized Automatic Reporting on Trunks Testing" denotes a type of testing which includes the capacity for measuring operational and transmission parameters.

Channel(s)

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

Channel Service Unit

The term "Channel Service Unit" denotes equipment which performs one or more of the following functions: termination of a digital facility, regeneration of digital signals, detection and/or correction of signal format errors and remote loop back.

Channelize

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

C-Message Noise

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

C-Notched Noise

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

(N)

Effective:

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 <u>Definitions</u> (Cont'd)

Committed Information Rate (CIR)

The user's throughput that the network commits to support under normal network conditions. This is measured in bits per second.

Committed Burst Size (CBS)

The maximum amount of user data that the network agrees to transfer, under normal conditions, during one second. This is equal to the special access circuit interface speed.

Common Channel Signaling

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

Common Channel Signaling Access Capability

The term "Common Channel Signaling Access Capability" (CCSAC) denotes option which allows customers access to the CCS signaling network to transmit/receive signals for call set-up out of band. The Signaling links established between the signaling point of interconnection and the signaling transfer points and the Signaling Transfer Point Port Terminations are requirements of the capability.

Common Channel Signaling Access Capability Signaling Link

The "Common Channel Signaling Access Capability (CCSAC) Signaling Link" provides a 56 kbps Facility dedicated to a single customer which originates at the customer's signaling point of interface in a LATA and terminates at the Company's Signaling Transfer Point (STP). This facility connects the customer to the STP and is a requirement with the CCSAC option.

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Common Line

The term "Common Line" denotes a line, trunk, pay telephone line or other facility provided under the general and/or local exchange service tariffs of the Company, terminated on a central office switch. A common line-residence is a line or trunk provided under the regulations of the general and/or local exchange service tariffs for a residence Class of Service. A common line-business is a line provided under the regulations of the general and/or local exchange service tariffs for a nonresidence Class of Service. For purposes of this tariff, any reference to "business" is considered to reference "nonresidence".

Communications System

The term "Communications System" denotes channels and other facilities which are capable of communications between terminal equipment.

Conventional Signaling

The inter-machine signaling system which has been traditionally used in North America for the purpose of transmitting the called number's address digits from the originating end office to the switching machine which will terminate the call. In this system, all of the dialed digits are received by the originating switching machine, a path is selected, and the sequence of supervisory signals and outpulsed digits is initiated. No overlap outpulsing, ten-digit ANI, ANI information digits, or acknowledgement wink are included in this signaling sequence.

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Customer(s)

The term "Customer(s)" denotes any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the services offered under this tariff, including, but not limited to, Interexchange Carriers (ICs), End Users, and Enhanced Service Providers (ESPs).

Data Base Query

The term "Data Base Query" denotes a Signaling System 7 (SS7) message launched from a Service Switching Point (SSP) requesting processing instructions or service data contained in a centralized data base.

Data Transmission (107 Type) Test Line

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

Decibel

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

Decibel Reference Noise C-Message Referenced to 0

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

Decibel Reference Noise C-Message Weighting

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

(N)

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Demarcation Point

Demarcation Point means the point of physical separation of CBT's network, and associated responsibilities, from Customer's network and associated responsibilities. The location of the Demarcation Point shall be the physical interface for LAN Advantage service presented by CBT to Customer.

Design and Construction Work

All work by the Company, including but not limited to, space design and preparation, the rearrangement of existing facilities, design and placement of required support structure or any other activity required to accommodate the installation of an Interconnector's facilities in the Company's space(s) covered under this tariff. Similar work required or requested by Interconnector after initial installation solely because of the existence of the Interconnector's facilities shall be referred to as "Additional Design and Construction", and shall be at Interconnector's expense.

Detail Billing

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

Direct - Trunked Transport Facility

The term "Direct-Trunked Transport Facility" denotes a Switched Transport facility between a customer's premises serving wire center and an end office or between a customer's serving wire center and an access tandem that provides a customer with dedicated switched access transport.

Echo Control

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

(N)

Effective:

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ACCESS SERVICE

2. <u>General Regulations</u> (Cont'd)

2.5 Definitions (Cont'd)

Echo Path Loss

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

Echo Return Loss

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

Effective 2-Wire

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

Effective 4-Wire

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

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

800 Access Service

800 Access Service denotes a service which provides 10-digit screening as an originating switched access service. This 10-digit screening determines the Interexchange Carrier to which a call is routed.

End Office Switch

The term "End Office Switch" denotes a local 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" denotes any customer of an interstate or foreign telecommunications service that is not a carrier, except that a carrier other than a 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 services 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.

End User Port Charge

The End Use Port charge applies to ISDN lines only.

Entrance Facility

The term "Entrance Facility" denotes a Switched Transport dedicated facility between a customer premises and a customer's premises serving wire center that provides a customer with switched access transport between the customer's premises and its serving wire center.

Envelope Delay Distortion

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

(N)

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2. General Regulations (Cont'd)

2.5 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)]

Ethernet LAN

Ethernet LAN means a type of LAN whereby a workstation on the LAN, prior to sending a message to another workstation on the LAN, "listens" to determine if any other workstation is sending a message. If the first workstation "hears" no other messages being sent, it is permitted to send a message. If two or more workstations begin sending messages simultaneously, then each workstation ceases sending the message and a pre-set amount of time must elapse before either workstation may attempt to send again. Ethernet LAN meets IEEE standards 802.3 and 802.3u and operates at a variety of speeds.

Excess Burst Size (EBS)

The maximum amount of uncommitted data exceeding the CBS that the network will attempt to deliver during one second.

Exchange

The term "Exchange" denotes a unit generally smaller than a Local Access and Transport Area, established by the 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. One or more designated exchanges comprise a given Local Access and Transport Area.

Expected Measured Loss

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

Exit Message

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

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

First Point of Switching

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

Flexible Automatic Number Identification (Flex ANI)

The term "Flexible Automatic Number Identification" denotes the provision of additional values for the information indicator digits available with the Automatic Number Identification feature on originating calls. The additional information digits are used to identify the class or type of service from which the call originated.

Frame

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

Frequency Shift

The term "Frequency Shift" denotes the change in the frequency of a tone as it is transmitted over a channel.

Grandfathered

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

Host Computer

The term "Host Computer" denotes one or more processor(s) and its (their) associated software and peripheral equipment which together form an intelligent processor or device connected to a network that satisfies the needs of remote users connected to such processor or device.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

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.

Hundred Call Seconds

A standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of servers (e.g., trunks).

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 noise on a channel over a specified threshold level. 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 provision of this tariff are developed based on the circumstances in each case.

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Initial Address Message

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

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 Hz power difference (in dB) between the power at the originating end and the power reaching the terminating end through the inserted connection.

Interconnection Charge

The Interconnection Charge recovers the costs associated with Switched Transport that are not recovered by the Entrance Facilities, Direct-Trunked Transport, Tandem-Switched Transport, Multiplexing, or CCSAC rates. The Interconnection Charge applies to all access minutes of use (i.e., both Tandem-Switched and Direct Trunked).

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 or more exchanges.

Intermodulation Distortion

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

Interstate Communications

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

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

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.

Letter of Authorization (LOA)

The term "Letter of Authorization" (LOA) denotes the signed authorization form from a customer designating the primary IC (PIC) for interLATA access.

Line-Side Connection

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

Local Access and Transport Area

The term "Local Access and Transport Area" denotes a geographic area established for the purpose of defining the area within which the Company will offer its telecommunications services

Local Switching Dedicated Trunk Port

The Local Switching Dedicated Trunk Port provides for termination of a dedicated trunk in the end office port.

Local Switching Common Trunk Port

The Local Switching Shared Trunk Port provides for the use of the shared end office trunk ports for terminating of common transport trunks for tandem switched traffic.

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.

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Loop Around Test Line

The term "Loop Around Test Line" denotes an arrangement utilizing a Company central office to provide a means to make certain two-way transmission tests on a manual basis. This arrangement has two central office terminations, each reached by means of separate telephone numbers and does not require any specific customer premises 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 1/2 of the stated amount of time. As an example, in considering a period of 24 hours, a major fraction thereof would be any period of time in excess of 12 hours exactly. Therefore, if a given service is interrupted for a period of thirty six hours and fifteen minutes, the customer would be given a credit allowance for two twenty-four hour periods for a total of forty eight hours.

Manhole

An underground enclosure where the feeder route conduit system terminates and which provides ready access to the Conduit Space.

Metropolitan Area Network (MAN)

Metropolitan Area Network (MAN) means a network connecting computers and other peripheral equipment for data communications over a larger geographical area than a LAN, usually within a city or region.

Native Mode

"Native Mode" of a LAN means the operating speed of the communication on the originating or terminating LAN.

LAN Advantage

"LAN Advantage" means the engineering, configuration, installation, maintenance and repair services provided by CBT to Customer necessary to interconnect multiple LANs to form a MAN for data transmission.

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

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.

Network Management Control

The term "Network Management Control" denotes the type of control that the Company may need to implement when a substantial number of calls are expected during a short period of time.

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 state of a Switched Access or a Telephone Exchange Service line.

On-hook

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

Open Circuit Test Line

The term "Open Circuit Test Line" denotes an arrangement in an end Office which provides termination of a trunk or line by means of an inductor of several Henries. The impedance is so high as to be virtually an open circuit to alternating current at the frequencies used in voice communications.

Originating Direction

The term "Originating Direction" denotes the use of Access Service for the origination of calls from an end users premises to an IC premises. (N)

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ACCESS SERVICE

2. General Regulations (Cont'd)

(N)

2.5 <u>Definitions</u> (Cont'd)

Overlap Outpulsing

The feature of the equal access signaling system which permits initiation of pulsing to the customer's premises before the calling subscriber has completed dialing an originating call.

Peaked Service

The term "Peaked Service" denotes a service that will produce a substantial call volume during a short period of time, e.g., media stimulated events, that may cause excessive network congestion.

Periodic Inspection

Work activities performed by the Company at irregular intervals to determine that the Interconnector's Facilities are authorized and are installed and maintained in conformance with the Company's required standards. The Company will notify the Interconnector by phone, with confirmation in writing, five (5) business days in advance of such inspections and the Interconnector shall have the right to be present at the time of inspection.

Phase Jitter

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

Point of Termination

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

Power, D.C.

Nominal 48-volt power derived from the Company's rectifier and battery DC plant voltage with generator backup. D.C. Power can vary between 54.00 volts (high voltage shutdown) and 44.64 volts (5E shutdown). Normal plant float voltage is 52.08 volts.

Effective:

2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

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.

Primary IC (PIC)

The term "Primary IC" (PIC) denotes a customer designated Interexchange Carrier (IC). The PIC is designated by the customer on a signed Letter of Authorization (LOA) or verbally through the Business Service Center. The PIC allows a customer to access interLATA calls without dialing an access code.

Prime Service Vendor

The term "Prime Service Vendor" denotes the status of the Company when contracting directly with the user of TSP service.

Protected Ports

Protected Ports" provides customers with a primary and secondary port in both the central office and at the customer's location, which enables traffic to recover to a secondary route automatically in the event of a primary route failure, therefore protecting all of the customer's data.

Remote Switching Modules and/or Remote Switching Systems

The term "Remote Switching Modules and/or Remote Switching Systems" denotes remotely controlled electronic end office switches which obtain their call processing capability from an ESS-type Host Office. The Remote Switching Modules and/or Remote Switching Systems cannot accommodate direct trunks to a customer.

Return Loss

The term "Return Loss" denotes a measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the greater the similarity.

Registered Equipment

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

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Service Switching Point

The term "Service Switching Point" (SSP) denotes a switch in the Company's Common Channel Signaling (CCS) network equipped with the functionality to interact with a data base using Signaling System 7 (SS7) messages to obtain call routing information.

Serving Wire Center

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

Seven Digit Manual Test Line

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

Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement in an end office which provides termination of a trunk or line by means of a capacitor of at least four microfarads. The impedance is so low as to be virtually a short circuit to alternating current at the frequencies used in voice communications.

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, i.e., the level in dB by which the signal exceeds the noise.

Signaling Transfer Point

The term "Signaling Transfer Point" denotes a specialized switch which provides CCS network access and performs SS7 message screening, routing, and/or transferring of such signaling information through the common channel signaling network.

(N)

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2. <u>General Regulations</u> (Cont'd)

2.5 Definitions (Cont'd)

Signaling Transfer Point Port Termination

The "Signaling Transfer Point Port Termination" provides a customer dedicated point of interface at the Company's STP for each of the customer's CCSAC Signaling Links.

Signaling Point of Interconnection

The term "Signaling Point of Interconnection" denotes the customer designated location where SS7 signaling information is exchanged between the Company and the Customer.

Signaling System 7

The term "Signaling System 7" denotes common channel out of band signaling using the SS7 protocol developed by the Consultative Committee for International Telephone and Telegraph (CCITT) and the American National Standards Institute (ANSI).

Singing Return Loss

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

Subcontractor

The term "Subcontractor" denotes the status of the Company when contracting directly with a Prime Service Vendor to provide TSP to a service user.

Switching Systems

The term "Switching System" denotes the hardware and/or software utilized by the Company for the establishment and maintenance of a given central office.

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Synchronous Optical Network (SONET)

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

Synchronous Test Line

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

Synchronous Transport Signal (STS-1)

The Synchronous Transport Signal (STS-1) is a 51.84 Mbps signal within a SONET optical carrier signal. The STS-1 signal consists of overhead and synchronous payload envelope (SPE). The overhead part of the signal is used for controlling, framing and maintaining the signal. The SPE is used to transport the customer's data.

Tandem-Switched Transmission Charge

The Tandem-Switched Transmission charge is a mileage sensitive, per minute of use rate which applies to the transmission of the customer's traffic from the customer's serving wire center, through the Company's Access Tandem, to the customer designated Company end office(s), or from the Access Tandem to the end office(s).

Tandem-Switching Charge

The Tandem-Switching charge is a per minute of use rate element which applies to the switching used to move a customer's traffic through the Access Tandem to the Company's end office(s).

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.

(N)

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2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

Transmission Measuring (105 Type) Test Line/Responder

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

Transmission Path

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

Trunk

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

Trunk Access Limitation

The term "Trunk Access Limitation" denotes the routing of originating calls to a specified number of transmission paths in a trunk group in order to limit (choke) the completion of such traffic. Calls which could not be completed over the subset of transmission paths in the trunk group, i.e., the choked calls, would be routed to reorder tone.

Trunk Group

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

Trunk-Side Connection

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

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Definitions (Cont'd)

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-way entity (e.g., a central office switch).

Unauthorized PIC Change

The term "Unauthorized PIC Change" denotes a customer whose selected PIC was changed and the IC is unable to produce the signed Letter of Authorization (LOA) or other form of valid authorization to the Company for the resolution of the PIC dispute.

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.

Virtual LAN (VLAN)

The term Virtual LAN (VLAN) denotes a static logical connection used for point-to-multipoint, and multipoint-to-multipoint. VLANs support long-term ongoing connections between data terminal equipment. Permanent Logical paths are assigned exclusively to each VLAN in the network.

VLAN Tagging

The Term VLAN tagging denotes a way to label different traffic types so they may be differentiated from one another. VLAN Tagging can allow for different service levels for different traffic types. (1)

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3. Switched Access Service

(N)

3.1 General

Switched Access Service, which is available to customers for their use in furnishing their services to end users, provides a two-point electrical communications path between a customer's premises and an end user's premises. It provides for the use of common terminating, switching and trunking facilities and common subscriber plant of the Company. Switched Access Service provides for the ability to originate calls from an end user's premises to a customer's premises, and to terminate calls from a customer's premises to an end user's premises in the LATA where it is provided. Specific references to material describing the elements of Switched Access Service are provided in 3.1.1 and 3.1.2 following.

3.1.1 Switched Access Service Arrangements and Manner of Provision

Switched Access Services are differentiated by their technical characteristics, e.g., line side vs. trunk side connection at the Company entry switch, and the manner in which an end user accesses them in originating calling, e.g., with or without an access code. Following is a brief description of each type of service arrangement.

(A) Feature Group D (FGD)

FGD Access, which is available to all customers, provides Trunk side access to Company end office switches with an associated uniform 10XXX or 10XXXX access code for the customer's use in originating and terminating communications. (N)

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3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.1 Switched Access Service Arrangements and Manner of Provision(Cont'd)
 - (B) 800 Access Service

800 Access Service, which is available to all customers, is an originating offering utilizing FGD Switched Access Service. The service provides a customer identification function based on the dialed 800 Series number. The 800 Series includes 800, 888, 877, 866, 855, 844, 833, 822. This customer identification function could include additional call handling and destination features, such as; alternate carrier(s) and/or alternate destination(s), time-of-day, day-of-week, specific dates, originating NPA-NXX-XXXX, percent allocation, routing to a single carrier and destination from an area of service which is smaller than an area defined by an NPA-NXX.

When a 1 + 800 Series + NXX + XXXX call is originated by an end user, the Company will perform the customer identification function based on the dialed 1 + 800 Series + NXX + XXXX (ten digit screening) to determine the customer location to which the call is to be routed. Where 800 Series prefixes are not part of ten digit screening, the customer identification function will be performed based on the 800 Series + NXX digits only (e.g., Canada). If an 800 Series call originates from an end office not equipped to provide the SSP Data Base Query function, the call will be routed to an office at which the function is available. The SSP Data Base Query function will be available at the tandem and select end offices. Once customer identification has been established, the call will be routed to the customer.

Unless prohibited by technical limitations (e.g., different dialing plans), the customer's 800 Access Service traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-800 Access Service traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for 800 Access Service.

When 800 Access Service traffic is combined in the same trunk group arrangement with other traffic, usage for the 800 Access Service traffic may be aggregated with or shown separately from the other traffic for billing purposes When separate trunk groups are provided for 800 Access Service, usage will be billed separately. (N)

3. Switched Access Service (Cont'd)

3.1 General (Cont'd)

3.1.2 Rate Categories

The rate categories which apply to Switched Access Service are:

- Switched Transport (described in 3.1.2(A) following)
- Local Switching (described in 3.1.2(B) following)

(A) Switched Transport

The Switched Transport rate category establishes the charges related to the transmission and tandem facilities between the customer's premises and the end office switch(es) which may be a Remote Switching Module, where the customer's traffic is switched to originate or terminate the customer's communications. Mileage measurement rules are set forth in 3.5.7 following.

Switched Transport is a two-way voice frequency transmission path composed of facilities determined by the Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user's end office switch to the customer's premises) and in the terminating direction (from the customer's premises to the end office switch), but not simultaneously. The voice frequency transmission path may comprise any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The customer must specify when ordering (1) whether the service is to be directly routed to an end office switch or through the Company's access tandem switch or a TSP's access tandem switch, (2) the type of Direct-Trunked Transport and whether it will overflow to the Company's or a TSP's access tandem switch when service is directly routed to an end office, (3) the type of Entrance Facility, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided.

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(N)

- 3. Switched Access Service (Cont'd)
- 3. Switched Access Service (Cont'd)
 - 3.1 General (Cont'd)
 - 3.1.2 <u>Rate Categories</u> (Cont'd)
 - (B) <u>Switched Transport</u> (Cont'd)

Additionally, when service is to be routed through an access tandem switch, the customer must specify whether the facility between the serving wire center and the tandem is to be provided as Direct-Trunked Transport or Tandem-Switched Transport.

Switched Transport is provided at the rates and charges set forth in 3.7.1 following. The description of these rates with respect to the different types of service is as set forth in 3.1.2 following.

- (1) Switched Transport Facilities
- (a) Entrance Facility

An Entrance Facility provides the communication path between a customer's premises and the Company's serving wire center for that premises. The Entrance Facility is provided to a single customer and is Available for use with all line side and trunk side Switched Access services. An Entrance Facility is provided even if the customer's premises and the serving wire center are located in the same building

(b) Direct-Trunked Transport Facility

A Direct-Trunked Transport facility provides the communications path between the serving wire center of a customer's premises and an end office, between the serving wire center of a customer's premises and the Company's Access tandem. Direct-Trunked Transport facilities are provided to a single customer. Direct-Trunked Transport facilities are available for use with all line side and trunk side Switched Access services.

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3. <u>Switched Access Service</u> (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 Rate Categories (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (1) Switched Transport Facilities (Cont'd)
 - (c) Tandem-Switched Transport Facility

The Tandem-Switched Transport facility provides the communications path between the customer's serving wire center and the end office or between the tandem and the end office on circuits that are switched at an access tandem. Tandem-Switched Transport facilities are available for use with all trunk side Switched Access Services.

Tandem-Switched Transport charges consist of a Tandem-Switched Transmission charge (fixed and per mile minute of use charges) and a Tandem-Switching charge (per minute charge) where elements may apply independently of one another as described herein. For originating minutes, (C) these charges apply to non-8YY minutes only. | For originating 8YY minutes, the single Tandem | Transmission and Switching rate applies. (C)

(d) Access Tandem Trunk Port

The Access Tandem Trunk Port is a monthly per port rate that provides a port for each dedicated trunk on the Serving Wire Center side of the access tandem.

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3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 Rate Categories (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (2) Switched Transport Connections (Cont'd)

Switched Transport is comprised of specific connection types. These connections may be either analog or digital. Analog connections are differentiated by spectrum and bandwidth; digital connections are differentiated by bit rate. Depending on the spectrum, bandwidth or bit rate selected by the customer, multiplexing, as described in 3.7.1(D), may also be required to allow interconnection with other Switched Transport facilities or to a Company switch.

With one exception, the customer may choose the Switched Transport connection comprising the Switched Transport facility. For the tandem to end office portion of Tandem-Switched Transport, the Company will determine the type of connection used.

Each type of connection is composed of specific channels which are provided for use with a Switched Access service. Each channel in a Switched Transport following types of connections are available for all Switched Transport facilities.

(a) Mercury 1.544 (DS1)

A Mercury 1.544 (DS1) provides 24 channels for the transmission of nominal 64.0 kbps or 1.544 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer.

(N)

3. <u>Switched Access Service</u> (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 <u>Rate Categories</u> (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (b) Mercury 45 (DS3)

Mercury 45 (DS3) provides 28 Mercury 1.544s (DS1) or 672 DSO channels and provides for transmission of nominal 44.736 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer. With Mercury 45 (DS3), customers may request to have an electrical interface installed at their customer premises. For DS3 connections utilizing an electrical interface, the customer will receive an electrical signal with a transmission speed of 44.736 Mbps per channel

(3) Multiplexing

Multiplexing provides the capability of converting the capacity or bandwidth of a Switched Transport facility from a higher level to a lower level or from a lower level to a higher level. Multiplexing is required when the customer requests to interconnect Entrance facilities, or Direct - Trunked Transport facilities of different capacities or bandwidths, i.e., DS1 to Voice Grade or DS3 to DS1.

When customers request to interconnect DS3 facilities with Company switches, DS3 to DS1 multiplexing is required at appropriately equipped end offices. Locations where multiplexing is available are specified in the NECA Tariff F.C.C. No. 4.

Customers ordering Tandem Switched Transport will incur a multiplexing charge for multiplexing on the Serving Wire Center side of the Access Tandem and a multiplexing charge for multiplexing on the End Office side of the Access Tandem.

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(N)

3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 Rate Categories (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (3) Multiplexing

Rates and charges for multiplexing are set forth in 3.7.1. For each of the multiplexing options listed below, the multiplexer is associated with the Switched Transport facility with the higher capacity or bandwidth (e.g., a DS3 to DS1 multiplexer is associated with the facility DS3 connection).

(a) Mercury 45 (DS3) to Mercury 1.544 (DS1)

Available with all Switched Transport facilities using DS3 connections. Provides an arrangement that converts a DS3 signal to or from 28 DS1 channels. Conversion is accomplished using digital time division multiplexing.

(b) Mercury 1.544 (DS1) to Voice Grade

Available with all Switched Transport facilities using DS1 connections. Provides an arrangement that converts a DS1 connection to or from 24 voice grade channels. Conversion is accomplished using digital time division multiplexing.

(c) Common Multiplexing

Common Multiplexing is provided on a usage sensitive basis in conjunction with Tandem Switched Transport. Switched Access facilities are connected to the Tandem as DS1 circuits. Multiplexing is required to connect common switched facilities from DS3 to DS1. (N)

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3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 Rate Categories (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (4) Chargeable Optional Features
 - (a) Common Channel Signaling Access Capability (CCSAC)

This option allows the customer to receive signals for call setup out-of-band. This option is only available with Feature Group D.

The Company will provide the CCSAC option in accordance with the technical specifications set forth in Technical Reference TR-TSV-000905 from properly equipped signaling elements in the Company CCS network.

This option requires the establishment of the required number of CCSAC signaling links between the customer's signaling point of interconnection and each of the Company's designated Signaling Transfer Points (STPs) and STP Port Terminations. The STP locations are set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4. The customer will have the option of ordering a Signaling Link provisioned over a dedicated Mercury 1.544 (DS1) Facility or over a 56 Kbps DDS channel.

(b) Carrier Identification Parameter (CIP)

The CIP Optional Feature provides for the delivery of the Carrier Identification Code (CIC) within the Initial Address Message (IAM) SS7 call setup protocol. CIP is available with originating Feature Group D Switched Access Service from certain end offices and from the access tandem. Customers should contact the Company

(N)

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3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 <u>Rate Categories</u> (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (4) Chargeable Optional Features
 - (b) Carrier Identification Parameter (CIP) (Cont'd)

to determine where CIP is available. This feature requires the customer to purchase or use already established CCSAC signaling links between the customer's signaling point of interconnection and each of the Company's designated STPs and STP Port Terminations, as described in Section 3.7.1(G). The rates for the CIP Optional Feature are described in Section 3.7.1(I).

(c) Signaling for Tandem Switching

This option allows any interested third party, including competitive access providers (CAPS), interexchange carriers (IXCs), and end users, to receive signaling information necessary to provide tandem signaling. Signaling for tandem switching provides the carrier identification code (CIC) and the OZZ code (or the CKTD code for SS7) to the Tandem Switch Provider (TSP). The CIC identifies the IXC to receive the call, and the OZZ identifies the IXC trunk group to which traffic should be routed. This option is available only with Feature Group D (FGD).

The customer may choose to have this option provided with Multifrequency or Common Channel Signaling.

When tandem switching is provided by a TSP, the TSP will be required to order one-way

(N)

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3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 Rate Categories (Cont'd)
 - (B) Switched Transport (Cont'd)
 - (4) Chargeable Optional Features
 - (c) Signaling for Tandem Switching (Cont'd)

direct-trunks between the desired Company end offices and the TSP's access tandem switch. These one-way trunks will be billed as direct-trunks to the TSP.

Either the TSP or the IXC using the TSP as its access tandem provider, may be the customer for the remaining FGD usage charges i.e., carrier common line, local switching, information surcharge and the interconnection charge. The signaling nonrecurring charge, described in Section 3.7.1, will be assessed to the TSP. Any link between the TSP's access tandem switch and an IXC Point of Presence (POP) location may be purchased from the Company's special access section in this tariff.

If an IXC wishes to move their traffic to a TSP's access tandem switch, the TSP must provide the Company with a written letter of authorization (LOA). If a TSP contacts the Company on behalf of an IXC to move the IXC traffic from the Company access tandem switch to a TSP access tandem switch, the IXC must provide the Company an LOA.

If the IXC is the customer of record, for terminating usage, the IXC's TSP of choice is obligated to provide the Company with all billing detail needed to accurately count and bill usage. The requirements for providing this billing data are described in the following paragraphs.

(N)

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3. Switched Access Service (Cont'd)

- 3.1 General (Cont'd)
 - 3.1.2 Rate Categories (Cont'd)
 - (C) Local Switching

This rate category provides for (1) local end office switching, i.e., the common switching functions associated with the various Switched Access Service arrangements, (2) the termination of switched transport at end offices, and (3) 800 Data Base Queries. This category includes usage sensitive rates and both chargeable and nonchargeable optional features.

- (a) Local Switching applies on a per minute of use basis, providing local switching functions for FGD, and 800 Access Service. Where end offices are appropriately equipped, international dialing may also be provided a capability of Local Switching, i.e., the capability of switching international calls with service prefix and address codes having more digits than can be switched through a standard FGD end office.
- (b) 800 Access Service, Data Base Query Charge and Routing Options Capability apply on a per query basis and are originating offerings utilizing FGD. These services provide customer identification and additional call handling and destination features (i.e., time of day, day of week, etc.). These services provide for the use of the Tandem Switching, Tandem Termination, and Tandem Transport facilities of the Company. The Company will not charge Carrier Common Line, Local End Office Switching, or End Office Port charges.
- (1) <u>Usage Sensitive Rates (Cont'd)</u> The description of these rates is set forth in 3.7.2 following.

3.1.3 Design Layout Report

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

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(N)

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3. Switched Access Service (Cont'd)

3.1 General (Cont'd)

3.1.4 Acceptance Testing

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

At no additional charge, the Company will, at the time of installation of Feature Group D with the 64CCC Local Transport option trunks, perform the Digital Trunk Acceptance Tests described in TR-TSV-000905.

3.1.5 Ordering Options and Conditions

To order Switched Access, customers should contact the Company as described in Section 3.6 following. Rate elements for Switched Access Services are defined in 3.7.

3.1.6 CCSAC Testing Requirements

When Feature Group D with CCSAC option is ordered, network compatibility and other operational tests will be performed cooperatively by the Company and the customer. These tests are as specified in Technical Reference TR-TSV-000905.

(N)

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching
 - 3.2.1 Common Switching Optional features
 - (A) Call Denial on Line or Hunt Group

This option allows for the screening of terminating calls within the LATA, and for the completion only of calls to 611, 911, 800, 555-1212, and a Company specified set of NXXs within the Company local exchange calling area of the dial tone office in which the arrangement is provided. All other "toll" calls are routed to a reorder tone or Recorded announcement.

(B) Uniform Call Distribution Arrangement

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

(C) <u>Nonhunting Number for Use with Hunt Group or Uniform Call</u> Distribution Arrangement

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

(D) Automatic Number Identification (ANI)

This option provides the automatic transmission of a seven or ten digit number and information digits to the customer's premises for calls originating in the LATA, to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with (1) all individual transmission paths in a trunk group routed directly between an end office and a customer's premises or, where technically feasible, with (2) all individual transmission paths in a trunk group between an end office and an access tandem, and a trunk group between an access tandem and a customer's premises.

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(N)

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching (Cont'd)
 - 3.2.1 Common Switching Optional Features (Cont'd)
 - (E) Automatic Number Identification (ANI) (Cont'd)

The ten digit ANI telephone number is only available with Feature Group D with multifrequency address signaling When the CCSAC optional feature is specified, the customer may obtain an ANI equivalent by ordering the charge number (CN) optional feature as specified in 3.7.1 (G) following. The ten digit ANI telephone number consists of the Numbering Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as ANI failure, in which case only the NPA will be transmitted (in addition to the information digits described below).

Also, ANI Information Indicator (ANI II) digits or Flexible ANI information digits will be provided to the customer along with the ten digit ANI telephone number.

 The ANI Information Indicator (ANI II) digits identify: (1) telephone number is the station billing number - no special treatment required, (2) ANI failure has occurred in the end office switch which prevents identification of calling telephone number - must be obtained by operator or in some other manner, (3) hotel/motel originated call which requires room number identification, (4) coinless station, hospital, inmate, etc., call which requires special screening or handling by the customer, and (5) Local Exchange Company Coin.

ANI information digits are either 00, 01, 02, 06, 07, 20, or 27.

Customers who subscribe to ANI, may also elect to obtain expanded ANI digits, 52 for WATS, at no additional charge. Expanded ANI digits, 52 for WATS was previously provided in this tariff under the name Flexible ANI.

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching Optional Features (Cont'd)
 - 3.2.1 Common Switching Optional Features (Cont'd)
 - (E) Automatic Number Identification (ANI) (Cont'd)
 - (2) Flexible Automatic Number Identification (Flex-ANI) The Flex-ANI feature is an Optional Switching Feature and enhancement to ANI. The feature is available on inband signaling or in the Originating Line Information Parameter in the Basic Initial Address Message (IAM) Delivery optional feature for SS7 signaling. Flex-ANI provides additional values for the Information Indicator (ii) digits that are associated with various classes of service not available with the standard ANI digits. The customer must have ANI in order to have Flex-ANI or may order the features simultaneously.
 - The following Flex-ANI are currently available: 29 Confinement/Detention Facility
 - 70 Private Pay stations
 - All ii codes will be delivered to the customer when Flex ANI is ordered.

Flexible ANI information digits must be ordered per Carrier Identification Code (CIC), per End Office and must be provisioned in conjunction with the ANI optional feature.

(F) Cut-Through

This option allows end users of the customer to reach the customer's premises by using the end of dialing digit (#). This option provides for connection of the call to the premises of the customer indicated by the 10XXX or 10XXXX code upon receipt of the end of dialing digit (#). The Company will not record any other dialed digits for these calls. This option is available with Feature Group D.

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching Optional Features (Cont'd)
 - 3.2.1 Common Switching Optional Features (Cont'd)
 - (G) 900/976 Call Blocking

This option, where available, allows for the screening of terminating calls within the LATA for the purpose of blocking 900/976 or "dial-it" type calls only. 900/976 calls are routed to a reorder tone or to a recorded announcement. This option is available with Feature Group A. 900/976 Call Blocking, Call Denial and Service Code Denial are mutually exclusive.

(H) Calling Party Number (CPN)

This option provides for the automatic transmission of the calling party's ten digit telephone number to the customer's premises for calls originating in the LATA. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "Privacy Indicator" for delivery to the called end user. The specific protocol for CPN is contained in Technical Reference TR-TSV-000905. This feature is available with Feature Group D when the CCSAC option is specified.

(I) Charge Number (CN)

This option provides for the automatic transmission of the ten digit billing number of the calling station number and originating line information. The specific protocol for CN is contained in Technical Reference TR-TSV-000905. This feature is available with Feature Group D when CCSAC is specified.

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching Optional Features (Cont'd)
 - 3.2.1 Common Switching Optional Features (Cont'd)
 - (J) Carrier Selection Parameter (CSP)

This option provides for the automatic transmission of a signaling indicator which signifies to the customer whether the call being processed originated from a presubscribed end user of that customer. The specific protocol for CSP is contained in Technical Reference TR-TSV-000905. This feature is available with Feature Group D when CCSAC is specified.

(K) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a trunk group to a customer designated premises, based on the line class of service (e.g., coin or hotel/motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or service access code (e.g., 800). It is provided in suitably equipped end office or access tandem switches and is available with Feature Group D.

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching (Cont'd)
 - 3.2.1 <u>Common Switching Optional Features</u> (Cont'd)
 - (L) Alternate Traffic Routing
 - (1) Multiple Customer Premises Alternate Routing

This option provides the capability of directing originating traffic from an end office (or appropriately equipped access tandem) to a trunk group (the "high usage" group) to a customer designated premises until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or access tandem to a different trunk group (the "final" group) to a second customer designated premises. It is provided in suitably equipped end office or access tandem switches and is available with Feature Group D.

(2) End Office Alternate Routing

This option provides an alternate routing arrangement for customers who have access for a particular Feature Group to an end office via two routes: one route via an access tandem and one direct route. The feature allows the customers originating traffic from the end office to be offered first to the direct trunk group and then overflow to the access tandem group or to a TSP's access tandem group. It is provided in suitably equipped end offices and is available with Feature Group D.

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3. Switched Access Service (Cont'd)

- 3.2 Local Switching (Cont'd)
 - 3.2.1 Common Switching Optional Features (Cont'd)
 - (M) Originating Line Number Screening Service (OLNS)

OLNS Service provides information concerning the nature of the subscriber's line from which a call originates. OLNS service sends a two digit code with the Automatic Number Identification (ANI) at the beginning of a call to the Interexchange Carrier (IXC) and Operator Service Provider (OSP). When an IXC or OSP receives a call, it can use the information about the nature of the originating location (i.e., whether prison inmate or private payphone) to determine whether to allow the call to be billed to the originating line or require another form of payment, such as a calling card.

The two digits sent are either Automatic Number Identification Information Indicators (ANI II) or Flexible Automatic Number Identification (Flex-ANI). The charge for OLNS is recovered from the IXC and OSP through the Flex-ANI charge.

(N) International Carrier Option

This option allows for Feature Group D end offices or access tandem switches equipped for International Direct Distance Dialing to be arranged to forward the international calls of one or more international carriers to the customer (i.e., the Company is able to route originating international calls to a customer other than the one designated by the end user either through presubscription or 10XXX or 10XXXX dialing). This arrangement requires provision of written verification to the Company that the customer is authorized to forward such calls. The written verification must be in the form of a letter of agency authorizing the customer to order the option on behalf of the international carrier. This option is only provided at Company end offices or access tandems equipped for International Direct Distance Dialing. It is available with Feature Group D.

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3. Switched Access Service (Cont'd)

3.3 Obligations of the Company

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

3.3.1 Network Management

The Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Company's network services. Generally, service levels are considered acceptable only when both end users and customers are able to establish connections with little or no delay encountered within the Company network. The Company maintains the right to apply protective controls, i.e., those actions, such as call gapping, which selectively cancel the completion of traffic, over any traffic carried over its network, including that associated with a customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Company result in the complete loss of service by the customer, the customer will be granted a Credit Allowance for Service Interruption as set forth in 2.4.3 preceding. (N)

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3. Switched Access Service (Cont'd)

- 3.3 Obligations of the Company (Cont'd)
 - 3.3.2 Design and Traffic Routing of Switched Access Service

For Switched Access Service, ordered on a per line or per trunk basis, the customer desired line or trunk directionality and/or traffic routing of the Switched Access Service between the customer's premises and the entry switch are specified on the customer's order for service. Also, the customer must specify the Switched Transport facilities to be used (i.e., Entrance Facility, or Electronic Cross-Connect, Direct-Trunked Transport facility, and Tandem-Switched Transport facility). When specifying the Switched Transport facilities to be used, the customer must indicate if the facilities are existing or new.

The Company will be responsible for selection of facilities from the interface to any switching point and to the end offices where capacity is ordered.

3.3.3 Determination of Number of Transmission Paths

The following applies to switched access voice transmission paths, and does not apply to CCSAC signaling links and STP Port Terminations provided with the CCSAC option. For determination of the number of CCSAC signaling links and STP Port Terminations required to handle its signaling traffic, the customer shall work cooperatively with the Company.

For Switched Access Service which is ordered on a per line or per trunk basis, the customer specifies the number of transmission paths in the order for service. A transmission path is a communication path within the frequency bandwidth of approximately 300 to 3000 Hz or a derived communication path of a frequency bandwidth of approximately 300 Hz to 3000 Hz provided over a high frequency analog facility or a high speed digital facility between a customer's premises and a Company location.

3.3.4 Determination of Number of End Office Transport Terminations

For analog entry switches, a termination will be provided for each feature group line or trunk requested. For digital entry switches, an equivalent termination will be provided for each feature group line or trunk requested.

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3. Switched Access Service (Cont'd)

3.4 Obligations of the Customer

In addition to the obligations of the customer set forth in 2. preceding, the customer has certain specific obligations pertaining to the use of Switched Access Service. These obligations are as follows:

(A) Substantial Call Volume

When a customer offers services for which a substantial call volume is expected during a short period of time (e.g., media stimulated events), the customer must notify the Company of the anticipated demand for each peak period. For events scheduled during weekends or holidays, the Company must be notified no later than 5:00 p.m. local time the second prior business day. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the NPA NXX line number(s) to be used.

On the basis of the information provided, the Company may invoke network management controls if required to reduce the probability of excessive network congestion. The Company will work cooperatively with the customer to determine the appropriate level of such control.

Failure to provide prescribed notification may result in customer caused network congestion, which could result in discontinuation of service under section 2.2 and/or damages under paragraph 2.3.1.

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3. Switched Access Service (Cont'd)

- 3.4 Obligations of the Customer (Cont'd)
 - 3.4.1 Supervisory Signaling

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

3.4.2 Trunk Group Measurement Reports

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

3.4.3 Design of Switched Access Services

When a customer orders Switched Access Service on a per line or per trunk basis, it is the customer's responsibility to assure that sufficient access services have been ordered to handle its traffic.

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3. Switched Access Service (Cont'd)

3.5 Rate Regulation (cont'd)

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

3.5.1 Description of Rates and Charges

There are four types of rates and charges that apply to Switched Access Service. These are monthly recurring rates, Usage rates, nonrecurring charges, and payment plans for Mercury 1.544 (DS1) service. These rates and charges are applied differently to the various rate elements as set forth following.

(A) Monthly Rates

Monthly rates are flat recurring rates that apply each month or fraction thereof that a specific rate element is provided. For billing purposes, each month is considered to have 30 days.

(B) Usage Rates

Usage rates are rates that apply only when a specific rate element is used. These are applied on a per occurrence (e.g., query, access minute, access minute fixed and per mile basis. Usage rate charges are accumulated over a monthly period.

(C) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service, service rearrangements, and Signaling for Tandem Switching

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3. Switched Access Service (Cont'd)

3.5 Rate Regulation (cont'd)

- 3.5.1 Description of Rates and Charges (Cont'd)
- (C) Nonrecurring Charges (Cont'd)
 - (1) Installation of Service

Nonrecurring charges apply to each Switched Access Service installed as follows:

- Per Line or Per Trunk
- Per Entrance Facility (DS1 or DS3)
- Per Multiplexer ordered
- (D) Payment Plans for Mercury 1.544 (DS1) Service

The Optional Payment Plan (OPP) is a provision that allows a customer to pay a fixed rate for specific Mercury 1.544 (DS1) Service over a 36 or 60 month payment period. During the effective term, monthly rates for services installed under this arrangement will not be subject to Company initiated rate changes.

Mercury 1.544 (DS1) rates and charges for which the OPP is available are listed in 3.7.1 following.

During a customer's OPP term, the customer shall pay current rates provided they do not exceed the original rate contracted for by the customer, and conversion may be made to a new OPP term of the same or different length. If the expiration date for the new service or OPP term is beyond the end of the original OPP term, the remaining OPP charges for the original term will not apply.

At the expiration of the OPP term and if the customer wishes to continue Mercury 1.544 (DS1) Service the customer may elect:

Prevailing month-to-month tariff rates
A new OPP at the prevailing OPP rate, if available

The customer continues to receive the OPP rate on a month-tomonth basis for a period of up to six months following the completion of the term. After the six months, the rates will automatically revert to the month-to-month rates.

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3. Switched Access Service (Cont'd)

3.5 Rate Regulation (cont'd)

- 3.5.1 Description and Application of Rates and Charges (Cont'd)
 - (D) Payment Plan for Mercury 1.544 (DSls) Service (Cont'd)

During an OPP term, a customer may move one Entrance Facility service to another location while keeping the OPP in force, provided the customer and customer's end user remain the same and no lapse in service occurs.

The Minimum Period for service provided under an OPP is the same as the OPP term selected by the customer (i.e. 36 or 60 month payment period). The Minimum Period for service provided under the month-to-month payment arrangement is 1 month for Mercury 1.544 (DS1).

Customers requesting termination of service prior to the expiration date of the Minimum Period will be liable for payment of a Minimum Period Charge. The Minimum Period Charge for all OPP terms will be calculated as follows:

- The service that is in place less than 12 months the customer would pay the monthly rate for the service.
- The dollar difference between (a) the current OPP rate for the OPP term that could have been completed during the time the service was actually in service, and (b) the customer's current OPP rate for each month the service was provided.

For example, a customer subscribed to a 60 month OPP term and disconnected service during the 39th month. This customer's minimum period charge would be:

[36 month OPP rate - 60 month OPP rate] X 39 = Minimum Period Charge.

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

All minimum period charges will be based on the OPP rates in effect at the time of termination.

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3. Switched Access Service (Cont'd)

- 3.5 Rate Regulations (Cont'd)
 - 3.5.1 Description of Rates and Charges (Cont'd)
 - (E) Nonrecurring Charges (Cont'd)
 - (1) <u>Service Rearrangements</u>

Service rearrangements are changes to existing services installed which do not result in either a change in the minimum period requirements as set forth in 2.4.2 preceding or a change in the physical location of the point of termination at a customer's premises or a customer's end user's premises. Changes which result in the establishment of new minimum period obligations are treated as disconnects and starts. Changes in the physical location of the point of termination are treated as moves and are described and charged for as set forth in 3.5.4 following.

The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves an actual physical change to the service.

Administrative changes will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Access Service to the same entity (i.e., customer remains responsible for all outstanding indebtedness for the Access Service). Administrative changes are as follows:

- Change of customer name (i.e., the customer of record does not change but rather the customer of record changes its name.

(N)

3. Switched Access Service (Cont'd)

- 3.5 Rate Regulations (Cont'd)
 - 3.5.1 Description of Rates and Charges (Cont'd)
 - (E) Nonrecurring Charges (Cont'd)
 - (2) Service Rearrangements (Cont'd)
 - Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment,
 - Change in billing data (name, address, or contact name or telephone number),
 - Change of customer circuit identification,
 - Change of billing account number,
 - Change of customer test line number,
 - Change of customer or customer's end user contact name or telephone number, and
 - Change of jurisdiction.

All other service rearrangements will be charged for as follows:

- If, due to technical limitations of the Company, a customer could not combine its 800 Access Service traffic with its other trunk side Switched Access Service, no charge will apply to combine these trunk groups when it becomes technically possible.
- For all other changes, including the addition of, or modifications to, optional features a charge equal to the Switched Transport nonrecurring (i.e., installation) charge will apply. When an optional feature is not required on each transmission path, but rather for an entire transmission path group,

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3. Switched Access Service (Cont'd)

- 3.5 Rate Regulations (Cont'd)
 - 3.5.1 Description of Rates and Charges (Cont'd)
 - (E) Nonrecurring Charges (Cont'd)
 - (1) Service Rearrangements (Cont'd)

an end office or an access tandem switch, only one such charge will apply (i.e., it will not apply per transmission path). When the CCSAC option is elected, the customer may add Calling Party Number (CPN), Charge Number (CN), and Carrier Selection Parameter (CSP) at no additional charge if these features are specified at the time the CCSAC option is ordered for existing switched access trunks.

- In compliance with FCC Docket No. 91-213 Report and Order, Adopted September 17, 1992, no Switched Transport nonrecurring charges will apply for service connection when an interexchange carrier converts trunks from tandem-switched transport to direct-trunked transport or from direct-trunked transport to tandem-switched transport, or for movement between Voice Grade, DS1 or DS3 facilities. The customer, however, must maintain the same Point of Termination (POT) location to receive the waiver. This waiving of Switched Transport nonrecurring charges remains in effect until six months from the effective date of the Local Transport Restructure tariff.
- (2) Signaling for Tandem Switching

A nonrecurring charge as specified in 3.7.1 following applies when a TSP request signaling information for the provision of tandem switching. The nonrecurring signaling charge applies per CIC routed over a TSP's trunk group, by Company end office. (N)

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- 3. Switched Access Service (Cont'd)
 - 3.5 Rate Regulations (Cont'd)
 - 3.5.1 Description of Rates and Charges (Cont'd)
 - (F) Local Switching Ports
 - (1) Local Switching Common Port

The Local Switching Common Trunk Port minutesof-use rate provides for the use of the shared end office trunk ports for termination of common transport trunks for tandem routed traffic.

(2) Local Switching Dedicated Trunk Port

The Local Switching Dedicated Trunk Port monthly rate provides for termination of a dedicated trunk in the end office port. The rate is assessed per trunk for all trunk side services, per analog or digital end office.

3.5.2 Minimum Periods

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

3.5.3 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided. The minimum monthly charge consists of the following elements:

The minimum monthly charge for the Tandem-Switched Transmission and Tandem-Switching rate elements is the sum of the charges set forth in 3.7.1 following for the measured usage for the month.

The minimum monthly charge for Entrance Facilities and Direct-Trunked Transport rate elements is the sum of the charges set forth in 3.7.1 following.

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3. Switched Access Service (Cont'd)

3.5 Rate Regulations (Cont'd)

3.5.4 Moves

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

- The point of termination at the customer's premises
- The customer's premises

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

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

3.5.5 Measuring Access Minutes

Customer traffic to end offices will be measured by the Company at end office switches or access tandem switches. Originating and terminating calls will be measured by the Company to determine the basis for computing chargeable access minutes.

For terminating calls over FGD, where the off-hook supervisory signal is provided by the customer's equipment the measured minutes are the chargeable access minutes.

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3. Switched Access Service (Cont'd)

- 3.5 Rate Regulations (Cont'd)
 - 3.5.5 Measuring Access Minutes (Cont'd)
 - Step 1: Obtain recorded originating minutes and messages (measured as set forth in (A) following for FGA where the off-hook supervisory signal is forwarded by the customer's equipment when the called party answers) from the appropriate recording data.
 - Step 2: Obtain the total attempts by dividing the originating measured messages by the completion ratio. Completion ratios (CR) are obtained separately for the major call categories such as DDD, 800, directory assistance and international from a sample study which analyzes the ultimate completion status of the total attempts which receive acknowledgement from the customer. That is, Measured Messages divided by Completion Ratio equals Total Attempts.
 - Step 3: Obtain the total non-conversation time additive (NCTA) by multiplying the total attempts (obtained in Step 2) by the NCTA per attempt ratio. The NCTA per attempt ratio is obtained from the sample study identified in Step 2 by measuring the non-conversation time associated with both completed and uncompleted attempts. The total NCTA is the time on a completed attempt from customer acknowledgment of receipt of call to called party answer (set up and ringing) plus the time on an uncompleted attempt from customer acknowledgement of call until the access tandem or end office receives a disconnect signal (ring - no answer, busy or network blockage). That is, Total Attempts times Non-Conversation Time per Attempt Ratio equals Total NCTA.
 - Step 4: Obtain total chargeable originating access minutes by adding the total NCTA (obtained in Step 3) to the recorded originating measured minutes (obtained in Step 1). That is, Measured Minutes plus NCTA equals Chargeable Originating Access Minutes.

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3. Switched Access Service (Cont'd)

- 3.5 Rate Regulations (Cont'd)
 - 3.5.5 Measuring Access Minutes (Cont'd)

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

- Where: Measured Minutes (M. Min.) = 7,000 Measured Messages (M. Mes.) = 1,000 Completion Ratio (CR) = .75 NCTA per Attempt = .4
 - (1) Total Attempts = $\frac{1,000 \text{ (M. Mes)}}{.75 \text{ (CR)}}$ = 1,333.33
 - (2) Total NCTA = .4 (NCTA per Attempt) x 1,333.33 = 533.33
 - (3) Total Chargeable Originating Access Minutes = 7,000(M. Min) + 533.33(NCTA) = 7,533.33

FGD access minutes or fractions thereof are accumulated over the billing period. The exact value of the fraction is a function of the switch technology where the measurement is made. FGD access minutes are accumulated for each end office.

When determining chargeable access minutes the accumulated access minutes or fractions thereof are rounded up to the nearest access minute.

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3. Switched Access Service (Cont'd)

- 3.7 Rate Regulations (Cont'd)
 - 3.5.5 Measuring Access Minutes (Cont'd)
 - (A) Feature Group D Usage Measurement

For originating calls over FGD with multifrequency address signaling, usage measurement begins when the originating FGD entry switch receives the first wink supervisory signal forwarded from the customer's point of termination. For originating calls over FGD with CCSAC, usage measurement begins when the last point of switching sends the initial address message to the customer.

The measurement of originating call usage over FGD ends when the originating FGD entry switch receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the entry switch.

For terminating calls over FGD, the measurement of access minutes begins when the terminating FGD entry switch receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered.

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

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3. Switched Access Service (Cont'd)

3.5 <u>Rate Regulations</u> (Cont'd)

3.5.6 Network Blocking Charge for Feature Group D

The customer will be notified by the Company to increase its capacity (quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not bee received by the Company within 15 days of the notification, the Company will bill the customer, at the rate set forth in 3.7.1(F) following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

Trunks in Service	<u>1</u> %	1/2%
1-2	.070	.045
3-4	.050	.035
5-6	.040	.025
7 or greater	.030	.020

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.

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3. Switched Access Service (Cont'd)

3.5 Rate Regulations (Cont'd)

3.5.7 <u>Mileage Measurement</u>

The mileage to be used to determine monthly rates for Switched Transport rate elements is calculated on the airline distance between the end office switch where the call carried by Switched Transport originates or terminates and the customer's serving wire center, except as set forth in (A) through (H) following. The V&H coordinates method is used to determine mileage. This method is set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION TARIFF F.C.C. NO. 4 for Wire Center Information (V&H coordinates).

Exceptions to the mileage measurement rules are as follows:

- (A) When Switched Transport facilities of different capacities or bandwidths are interconnected by a multiplexer at a location other than the serving wire center, mileage is determined using the V&H coordinates method following:
- (1) When only one multiplexer is involved, mileage for Direct-Trunked Transport is measured separately from the serving wire center to the hub where multiplexing occurs and then measured from the hub to the end office where the call is switched to originate or terminate.
 - (2) When more than one multiplexer is used, mileage for Direct-Trunked Transport is measured successively from the serving wire center to the first hub, from the first hub to the second hub and then from the second hub to the end office where the call is switched to originate or terminate.

3. Switched Access Service (Cont'd)

- 3.5 <u>Rate Regulations</u> (Cont'd)
 - 3.5.7 Mileage Measurement (Cont'd)
 - (B) When Direct-Trunked Transport is provided to a Host/Remote arrangement, Direct-Trunked Transport rates apply and mileage is calculated using the V & H coordinate method between the customer's serving wire center and the Host office serving the Remote Office. When Tandem-Switched Transport is provided to a Host/Remote arrangement, Tandem-Switching Transmission rates and Tandem-Switched rates apply. Tandem-Switched Transport mileage is calculated using the V & H coordinate method between the customer's serving wire center and the Host office for both Direct-Trunked Transport and Tandem-Switched Transport to a Host/Remote arrangement, the Tandem-Switching Transmission rate will apply separately from the Host office to the Remote office. The Interconnection charge will apply to both Direct and Tandem access minutes of use. Remote end offices are set forth in the National Exchange Carrier Association Tariff F.C.C. No. 4.
 - (C) When Direct-Trunked Transport is provided for line side Switched Access Service both Direct-Trunked Transport and Tandem-Switched Transmission rates apply. Direct-Trunked Transport applies to both originating and terminating usage and mileage is calculated using the V&H Coordinates method between the customer's serving wire center and the end office switch where the dial tone for the line side Switched Access Service is provided. Tandem-Switched Transmission applies only to terminating usage and mileage is calculated using the V&H coordinate method between the dial tone office and the end office where the call is switched to terminate.

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(N)

- 3. Switched Access Service (Cont'd)
 - 3.5 Rate Regulations (Cont'd)
 - 3.5.7 Mileage Measurement (Cont'd)
 - (D) The Alternate Traffic Routing optional feature is provided with Feature Group D to provide service from an end office to different customer premises locations. For Feature Group D traffic routed via an access tandem, such apportionment be made using standard Company traffic engineering methodology and will be based on the last trunk hundred call seconds desired for the high usage group, as described in 3.5.6 preceding, and the relative capacity ordered to the end office, when the feature is provided at an end office switch, or to the subtending end offices when the feature is provided at an access tandem switch. This apportionment will serve as the basis for the Switched Transport Tandem-Switching Transmission mileage calculation. The customer will be billed accordingly.

(N)

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3. Switched Access Service (Cont'd)

3.5 <u>Rate Regulations</u> (Cont'd)

3.5.8 Shared Use

Shared use occurs when Switched Access Service and Special Access Service, including CCSAC signaling connections, are provided over the same analog or digital high capacity facility through a common interface.

Shared Use facilities are ordered, provided and rated either as Switched Access or Special Access. Ordering, provisioning and rating of Special Access Shared Use facilities is set forth in Section 4 following. Ordering, provisioning and rating of Switched Access Shared Use facilities is as follows.

- (A) Switched Access facilities are ordered, provided and rated as Switched Access only in cases where the facility is used for Switched Access only. In the event that a Special Access circuit is added to a switched facility, the facility will then be provisioned as a special access facility.
- (B) Then ordered as Switched Access, the nonrecurring charges that apply when the Switched Access Shared Use facility is installed will be the nonrecurring charges associated with the Switched Access Transport being ordered.
- (C) The customer must place an order for each individual Switched or Special Access service using the Shared Use facility and must also specify the channel assignment for each service.
- (D) Then shared Use occurs and the facility becomes a Special Access facility, the monthly recurring rates for Special and Switched Access will be based upon the percentage of channels associated with each.

(N)

3. Switched Access Service (Cont'd)

- 3.5 <u>Rate Regulations</u> (Cont'd)
 - 3.5.8 <u>Shared Use</u> (Cont'd)
 - (E) When shared use of a facility occurs in a Host/Remote situation, the facility must route to the Host end office. The Company will continue to provide shared use to any end office so long as capabilities exit.
 - (F) Channels being used in conjunction with CCSAC may be included as Shared Use. However, CCSAC signaling connections nonrecurring charges will not apply to the individual channels of the shared use facility.

3.5.9 Data Base Query

A Data Base Query charge as set forth in 3.7.2(A) (2) applies for each data base query that returns a valid carrier identification code that provides the appropriate routing information even if the call is not completed. The charge is assessed on a per query basis and may include an are of service which may range from a single NPA/NNX to an area consisting of all LATAs and NPAs in the state of Ohio. When additional routing options (i.e., alternate carrier(s) and/or alternate destination(s) identified based on criteria such as; time of day, day-of-week, specific dates, originating NPA-NXX, percent allocation, routing to a single carrier and destination from an area of service smaller than an area defined by an NPA-NXX) are performed, a Routing Options Capability charge as set forth in 3.7.2(A)(2) will also apply per query. The Database Query and Routing Capability Charge provides for the use of the Tandem Switching, Tandem Termination, and Tandem Transport facilities of the Company. The Company will not charge Carrier Common Line, Local End Office Switching, or End Office Port charges.

3.6 Ordering Service

3.6.1 Contact Information

To order DS1 Or DS3 service contact the following:

- Senior Director Telecom Professional Services 513-397-9386
- Director of Operations 513-397-6385

(N)

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3. <u>Switched Access Service</u> (Cont'd)

- 3.7 Rates and Charges
- 3.7.1 <u>Switched Transport</u> (A) Entrance Facilities

Recurring Charges-Optional Payment Plan

(1)	USOC Mercury 1.5 (DS1)	Monthly	\$ 135.79
(-)	EFYB1	36 Month	129.00
		60 Month	122.21
(2)	USOC Mercury 45 (DS3) EFYC1	Monthly <u>Rates</u>	\$ 1,500.00
		Nonrecurring Charges	NONE

(B) Switched Transport

(1) Mercury 1.5 (DS1)

Monthly, Option Payment Plan <u>Mileage Bands</u>		<u>h</u> Fixe	Monthly Rates ed Per M	ile
Mileage Bands 0 Over 0 to 4 Over 4 to 8 Over 8 to 25 Over 25	1YTX1 1YTX1 1YTX1 1YTX1 1YTX1	\$ 100.0 100.0 100.0	00	9.42 9.42 9.42 9.42
(2) Mercury 45 (E)S3) 1YTX1	\$ 703.4	48 \$	80.00
(3) Voice Grade - Two wire - Four Wire	1YTXS 1YTXS	\$ 61.0	00 \$	0.54

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3. <u>Switched Access Service</u> (Cont'd) 3.7 Rates and Charges

- 3.7.1 Switched Transport (Cont'd)
- (C) Tandem-Switched Transport

(C)	Tande	m-Swit	ched Transport					
						thly Ra		
				Origi	Inating		Term	inating
	(1)	Tande	em-Switched	<u>8yy</u>	Non-8	уу (Т)		
		Trans	smission					
			Per MOU	\$0.0000(R)	\$0.000	0 (R)	\$0.0	0000 (R)
			Per MOU, Per Mile	\$0.0000 (R)	\$0.000	0 (R)	\$0.0	0000 (R)
		(2)	Tandem-Switching	\$0.0000 (R)	\$0.000	0 (R)	\$0.0	0000 (R)
			8YY Tandem Transmi and Switching, per			<u>Origin</u> \$0.00		(N) (N)
		(3)	Access Tandem Tru Port Charge	nk , Per Trunk	<u>USOC</u> PT8UX	Monthly Note		
(D)	Multi	Multi	ng (Including Tander plexers-End Office as Tandem)		Monthly	7 Rates		
		(1)	MercNET 1.544 (DS Voice Grade	1) to				
			- Per Arrangement		MKW11 \$	\$ 285.45		
		(2)	Mercury 45 (DS3)	to Mercury 1	.5 (DS1)			
			- Per Arrangement		MKW31	\$ 678	. 02	
		(3)	Rate Per Access M Tandem Multiplexi (EO Side of Acces	ng		Note	1	
	(E)	Trat	11			Nonrecu		g
	(E)		allation C Line or Trunk			Cha Noi	rge ne	_
		1.61	OF IF unk			1.01		
					Rat	e Per C	all B	locked
	(F)	Netwo	ork Blocking Charge	2		Note	1	
innati	Bell A	nv Dis	tance intrastate swit	ched access ra	ates mirro	or the		

Note 1: Cincinnati Bell Any Distance intrastate switched access rates mirror the current interstate switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in Ameritech Operating Companies Access Tariff FCC No. 2, Cincinnati Bell Telephone Access Tariff FCC No. 35 and CenturyLink Access Tariff FCC No. 9.

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3. Switched Access Service (Cont'd)

- 3.7 Rates and Charges
 - 3.7.1 Switched Transport (Continued))
 - (G) CCSAC Signaling Link and STP Port Termination Charges

				USOC	Monthly Rates	Nonrecurring Charge
1)	a) -	Signaling Channel Te per DS1 li per 56 Kbps	rmination* nk		\$ 135.79	NONE
		link	TNTFX		70.00	NONE
	ь)	Channel Mi - per DS1 <u>Mileage Ba</u>	link			Nonrecurring Charge
		0	Fixed		NONE	NONE
			Per Mile		NONE	NONE
		Over 0	Fixed Per Mile		\$ 100.00 9.42	NONE NONE
		- per 56 K Mileage Ba	-			
		0	1J5FS Fixed Per Mile		NONE	NONE
		Over O	1J5FS Fixed Per Mile		\$ 60.72 1.04	NONE NONE

* One Channel Termination applies per CGSAC Signaling Link.

** Channel Mileage applies between Serving Wire Center and STP, but does not apply when mileage is zero.

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3. Switched Access Service (Cont'd)

- 3.7 Rates and Charges (Cont'd)
 - 3.7.1 Switched Transport (Cont'd)
 - (H) Signaling for Tandem Switching

		USOC	Nonrecurring Charge
	per end office, per trunk group, per CIC	CF3TZ	\$ 300.00
(I)	Carrier Identification Para	meter (CIP)	
		USOC	Monthly Rate
	per trunk group	U7CPG	\$ 105.00

3.7.2 Local Switching

(A)

Usage Sensitive Rates Rate Per Access Minute Non-8YY (T) 8YY (T) (1) Local Switching Note 1(N) Note 1 (A) Common Trunk Port, per trunk Note 1(N) Note 1 USOC Monthly Rate (B) Dedicated Trunk Port, per trunk PT8GX \$ Note 1 USOC Monthly Rates (C) STP Port Termination PT85X \$ 886.68 Non-recurring Charge NONE

Note 1: Cincinnati Bell Any Distance intrastate switched access rates mirror the current interstate switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in Ameritech Operating Companies Access Tariff FCC No. 2, Cincinnati Bell Telephone Access Tariff FCC No. 35 and CenturyLink Access Tariff FCC No. 9.

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3. Switched Access Service (Cont'd)

3.7 Rates and Charges (Cont'd)

3.7.1 Switched Transport (Cont'd)

(H) Signaling for Tandem Switching

	USOC	Nonrecurring Charge
per end office, p trunk group, per		\$ 300.00
(I) <u>Carrier Identification</u>	Parameter (CIP)	
	USOC	Monthly Rate
per trunk group	U7CPG	\$ 105.00

3.7.2 Local Switching

(A) Usage Sensitive Rates Rate Per Access Minute Note 1 (T) (1) Local Switching (A) Common Trunk Port, per trunk Note 1 (T) USOC Monthly Rate (B) Dedicated Trunk Port, per trunk PT8GX \$ Note 1 (T) USOC Monthly Rates \$ 886.68 (C) STP Port Termination PT85X NONE Non-recurring Charge

Note 1: Cincinnati Bell Any Distance intrastate switched access rates mirror the current switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in AT&T Access Tariff FCC No. 2, Cincinnati Bell Telephone Access Tariff FCC No. 35 and CenturyLink Access Tariff FCC No. 9.

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3. <u>Switched Access Service</u> (Cont'd)

- 3.7 Rates and Charges (Cont'd)
 - 3.7.2 Local Switching (Cont'd)
 - (A) Usage Sensitive Rates

	USOC	Rate Per Query
800 Access Service		
Data Base Query Charge per query	8QRY	Note 1 (T)
Routing Options Capability per query		Note 1 (T)

Note 1: Cincinnati Bell Any Distance intrastate switched access rates mirror the current switched access rates of the underlying Incumbent Local Exchange Company ("ILEC") which serves the territory in which traffic originates or terminates as set forth in AT&T Access Tariff FCC No. 2, Cincinnati Bell Telephone Access Tariff FCC No. 35 and CenturyLink Access Tariff FCC No. 9.

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4. Special Access Service*

4.1 <u>General</u>

Special Access provides a transmission path to connect customer designated premises.

4.1.1 Rate Categories

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

- Channel Terminations (described in 4.4.1(A) following)
- Channel Mileage (described in 4.4.1(B) following)
- Optional Features and Functions (described in 4.4.1(C) following)
 - (A) Channel Termination

The Channel Termination rate category provides for the communications path between a Customer-designated premises and the Serving Wire Center of that premises. Included as part of the Channel Termination is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability itself is provided as an optional feature as set forth in (C) following. One Channel Termination charge applies per is terminated. This charge will apply even if the Customerdesignated premises and the Serving Wire Center are located in the same Company building.

(B) Channel Mileage

The Channel Mileage rate category provides for the transmission facilities between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designed premises and a Company hub. There are two rates that apply for each band, i.e., a flat rate per band and a rate per mile.

* Where available.

(T)

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4. Special Access Service (Cont'd)

- 4.1 General (Cont'd)
 - 4.1.1 Rate Categories (Cont'd)
 - (C) Optional Features and Functions

The Optional Features and Functions rate category provides for optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charges for as a single rate element.

' (D)

4.2	Orderi	ng Service	(T)
	4.2.1	Contact Information	(T)
		To order Special Access services contact the following:	(C)
		- Senior Director - Telecom Professional Services 513-397-9386	
		- Director of Operations	

513-397-6385

(D)

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4. Special Access Service (Cont'd)

4.1 General (Cont'd)

4.1.1 Rate Categories (Cont'd)

(C) Optional Features and Functions

The Optional Features and Functions rate category provides for optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charges for as a single rate element.

- 4.2 Service Descriptions
 - 4.2.1 High Capacity Service*

A High Capacity channel is a channel for the transmission of nominal 1.544 or 474.736 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer.

- 4.3 Ordering Service
 - 4.3.1 Contact Information

To order DS1 Or DS3 service contact the following:

- Senior Director Telecom Professional Services 513-397-9386
- Director of Operations 513-397-6385
- * Where available.

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(N)

4. Special Access Service (Cont'd)

4.3 Service Descriptions

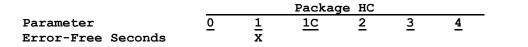
- 4.3.1 High Capacity Service
 - (A) Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 1.544, 3.152, 6.312, or 274.176 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer. High Capacity channels are provided between customer designated premises, between a customer designated premises and a Company hub, or Hub to Hub for Customer Network Reconfiguration at 1.544 Mbps transmission.

A MercNET 45 High Capacity channel is a channel for the transmission of nominal 44.736 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer. MercNET 45 High Capacity Service channels are provided between customer designated premises or between a customer designated premises and a Company Hub.

The customer is responsible for providing the Network Channel Terminating Equipment associated with the High Capacity channel at its premises. The interim program for interconnection of such equipment is set forth in Technical Reference PUB AS No. 1.

(B) Technical Specifications Packages



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(N)

4. Special Access Service (Cont'd)

- 4.3 <u>Service Descriptions</u> (Cont'd)
 - 4.3.1 High Capacity Service (Cont'd)
 - (B) Technical Specifications Packages (Cont'd)

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference TR-TSY-000342.

Extended superframe signaling format may be provisioned and transported on channels with technical specifications package HCI. Acceptance testing for such channels is included as well as any maintenance testing that is required to maintain the error free second performance specified herein. Additional testing requested by the customer is provided subject to the provisions set forth in 8.3.2 following.

(C) Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a High Capacity channel:

CI	Bit Rate
DS-15	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

Compatible channel interfaces are set forth in Technical References TR-NPL-000054 and TR-TSY-000342.

- (D) Optional Features and Functions
 - (1) <u>Alternate Central Office Channel</u> Provides a transmission path for services between the customer's premises and a wire center which is not the customer's serving wire

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4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.1 High Capacity Service (Cont'd)
 - (D) Optional Features and Functions (Cont'd)
 - (1) center, thus avoiding the office which would normally serve the customer. It is available only where facilities exist using 1.544 and 45 Mbps high capacity service.
 - (2) Service To Service Through Connect Arrangement

This provides for the interconnection of two 1.544 Mbps channels extended from multiplexed DS3 high capacity services. The ordering customer must provide channel assignments for both multiplexed services. This service can only be provided when both multiplexed DS3's are in the same wire center.

- (3) Central Office Multiplexing
 - (a) DS4 to DS1

An arrangement that converts a 274.176 Mbps channel to 168 DS1 channels using digital time division multiplexing.

(b) DS3 to DS1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.

(c) DS2 to DS1

An arrangement that converts a 6.312 Mbps channel to four DS1 channels using digital time division multiplexing.

(d) DS1C to DS1

An arrangement that converts a 3.152 Mbps channel to two DS1 channels using digital time division multiplexing (N)

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4. Special Access Service (Cont'd)

- 4.3 Service Descriptions
 - 4.3.1 High Capacity Service (Cont'd)
 - (D) Optional Features and Functions (Cont'd)
 - (4) Clear Channel Capability

Clear Channel Capability is an optional feature that provides the customer with an increase in useable bandwidth from 1.344 Mbps to 1.536 Mbps of an unconstrained data stream across the network. Clear Channel Capability is provided only on 1.544 Mbps High Capacity service and requires the customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (B8ZS) line code format as described in Technical Reference TR-TSY-000342. Customer equipment must be compatible with this method of providing the unconstrained signal.

The following table shows the technical specifications packages with which the optional features and functions are available.

	Available with Technical					al
	Spe	Specifications Package				HC-
	0	<u>1</u>	<u>1C</u>	2	<u>3</u>	4
Central Office Multiplexing:						
DS4 to DS1						х
DS3 to DS1					х	
DS2 to DS1				Х		
DS1C to DS1			х			

х

Clear Channel Capability

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(N)

4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.1 High Capacity Service (Cont'd)
 - (D) Optional Features and Functions (Cont'd)
 - (5) Enhanced Access Diversity (EAD)

EAD is an optional feature in which Special Access High Capacity Service (MercNET 1.5 and MercNET 45) is provided on a transmission facility alternately routed from the primary (Standard) transmission facility path.

This feature utilizes existing physically diverse interoffice facilities, excluding equipment and facilities located in a wire center, to provide diversity between serving wire centers only.

EAD may be provisioned on Company facilities where capability and capacity exist. Otherwise, the customer may order facilities under Special Construction.

When placing orders for EAD, the customer must identify the services that will be diverse, and any facilities placed under Special Construction that will be used. The customer must also supply all appropriate facility assignments and other information to permit the Company to provide and maintain EAD service.

When High Capacity MercNET 45 service is multiplexed, rates and charges for each EAD service connecting to the multiplexer will apply. Applicable rates and charges for the MercNET 45 service will also apply if identified as an EAD service. Customers leasing Company-provided multiplexers will provide and identify Connecting Facility Assignments of diverse services to the multiplexer.

(6) Cross-Connection to ILEC

This is an arrangement to cross-connect DS1 or DS3 Service from the Company to the Incumbent Local Exchange Carrier (ILEC) facilities at the same speed. One charge applies per service cross-connected. (N)

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	e Descriptions (Cont'd)	
4.3.2	OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service	(N)
	- Point-to-Point Service	I.
	(A) Basic Channel Description	
	(1) <u>General</u>	
	Point-to-Point OC-3, OC-12, OC-48 and OC-192	
	channels provide high speed synchronous optical fiber-based full duplex data transmission capabilities.	
	These services provide optical data transmission with	
	the following characteristics:	
	 OC-3 Service provides channels operating at the terminating bit rate of 155.52 Mbps; and, 	
	 OC-12 Service provides channels operating at the terminating bit rate of 622.08 Mbps. 	
	 OC-48 Service provides channels operating at the terminating bit rate of 2488.32 Mbps. 	
	 OC-192 Service provides channels operating at the terminating bit rate of 9953.28 Mbps. 	
	OC-3, OC-12, OC-48 and OC-192 channels may be used to connect:	
	 one customer-designated premise to another customer-designated premise, either with or without the add/drop multiplexing capability at the customer-designated premises. 	
	 a customer-designated premise either with or without add/drop multiplexing capability to a Telephone Company location where add/drop functions and/or cross-connections are performed. 	
	Optical Transmission paths for OC-3, OC-12, OC-48 and OC-192 Services are differentiated by bit rate and the quality of transmission as delineated by the Optical Interface specified in established standard and technical publications.	
	OC-3, OC-12, OC-48, and OC-192 Service may be connected by (1) using the appropriate OC-3, OC-12, OC-48 or OC-192 add/drop multiplexer (mux) at the two customer Premises or between a customer premise and a Telephone Company location, or (2), by using the full bandwidth premise to premise, or between a customer premise and a Telephone Company location.	
	Add/Drop Multiplexing only occurs at the customer premise. The customer may supply the equipment, or have the Telephone Company supply the equipment for them. Add/Drop Multiplexing does not occur at the Telephone Company Serving Wire Center.	(N)

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- 4. <u>Special Access Service</u> (Cont'd)
- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> (N) <u>- Point-to-Point Service</u> (Cont'd) (A) Basic Channel Description (Cont'd)
 - - (1) <u>General</u> (Cont'd)

Add/Drop Functions occur at the Customer Premises and at the Telephone Company Serving Wire Center in order to support the full bandwidth of the Service.

OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service based on customer requirements can be configured in any of the following ways:

- OC-3 three STS-1 (Synchronous Transport Signals) channels which each contain:
 - one DS3 that is STS-1 mapped;
 - up to 28 DS1s that are VT-mapped;
 - an STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the CBT network;
 - Any of the above arrangements may be used in combination with each other subject to utilization of the total OC-3 capacity
 - a single concatenated STS-3C channel.
- OC-12 twelve STS-1 channels which each contain:
 - one DS3 that is STS-1 mapped;
 - up to 28 DS1s that are VT-mapped;
 - an STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the CBT network;
 - four concatenated STS-3C channels;
 - Any of the above arrangements may be used in combination with each other subject to utilization of the total OC-12 capacity
 - a single concatenated STS-12C channel.

4. <u>Special Access Service</u> (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> <u>- Point-to-Point Service</u> (Cont'd)
 - (A) <u>Basic Channel Description</u> (Cont'd)
 - (1) <u>General</u> (Cont'd)

OC-48 - forty-eight STS-1 channels which each contain:

- one DS3 that is STS-1 mapped;
- up to 28 DS1s that are VT-mapped;
- an STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the CBT network;
- sixteen concatenated STS-3C channels;
- four concatenated STS-12C channels;
- any of the above arrangements may be used in combination with each other subject to utilization of the total OC-48 capacity;
- a single concatenated STS-48C channel. (N)

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4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> - Point-to-Point Service (Cont'd)
 - (A) Basic Channel Description (Cont'd)
 - (1) <u>General</u> (Cont'd)
 - OC-192 One hundred ninety two STS-1 channels which each contain:
 - 1 DS3 that is STS1 mapped
 - 64 concatenated STS-3C channels;
 - 16 concatenated STS-12C channels;
 - 4 concatenated STS-48c channels
 - A single concatenated STS-192C channel

Any of the above arrangements may be used with in Combination with each other subject to utilization of the total OC-192 bandwidth.

- (B) Channel Configuration
 - (1) OC-3, OC-12, OC-48 and OC-192 Channel Terminations

OC-3, OC-12, OC-48 and OC-192 Channels consist of Channel Terminations (CTs), interoffice mileage and optional features and functions.

OC-3, OC-12 OC-48 and OC-192 Channel Terminations provide optical interconnection between the Telephone Company Serving Wire Center (SWC) and the customer premise.

(N)

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4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)

The following types of CTs are available:

Terminating Bit Rate	Loop Format*	Transmission Format
155.52	2 fiber	Synchronous
622.08	2 fiber	Synchronous
2488.32	2 fiber	Synchronous
9953.28	2 fiber	Synchronous

When OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service is provided, the customer has the option of supplying the add/drop multiplexing at the customer premises. If the customer chooses to supply the equipment, the add/drop multiplexing must

be compatible with the add/drop multiplexing used by the Telephone Company in the Serving Wire Center. The Telephone Company will work with the customer to select compatible add/drop multiplexers which conform to the requirements set forth in established standard and technical publications.

(1) OC-3, OC-12, OC-48 and OC-192 Channel Terminations

All CTs comprising a channel must have the same terminating bit rate unless add/drop multiplexing is performed at the at the customer premise with the associated add/drop function and at the Telephone Company location with the appropriate add/drop functions.

(2) Channel Mileage

Channel Mileage facilities, comprised of Fixed and Per Mile as described in Section 4.1.4(B) preceding, provide the transmission paths between Serving Wire Centers associated with two customer-designated premises or between a Serving Wire Center associated with a customer premise and a Telephone Company Hub location. Four Channel Mileage types are available - OC-3 which supports bit rate of 155.52, OC-12 transport at the 622.08 bit rate, OC-48 transport at a bit rate of 2488.32 and OC-192 transport at a bit rate of 9953.28.

*Unidirectional Path Switched Rings

4. Special Access Service (Cont'd)

4.3 <u>Service Descriptions</u> (Cont'd)

(N)

(N)

- 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)
 - (2) Channel Mileage (Cont'd)

OC-3 CTs are interconnected to OC-3 transport. OC-12 CTs are interconnected to OC-12 transport. OC-48 CTs are interconnected to OC-48 transport. OC-192 CTs are interconnected to OC-192 transport.

In addition, Channel Mileage can be connected between wire centers at a lower OC-N speed than the CT, if the transport is between a lower speed Add/Drop Function and:

- another lower speed Add/Drop Function;
- another lower speed Channel Termination;
- a lower speed Dedicated Ring Port;
- a lower speed Cross-Connect.

All of the above terminations must be the same speed as the Channel Mileage.

(3) Optional Features and Functions

The following optional features and functions are available: Add/Drop Multiplexing, Add/Drop Function, OC-3, OC-12, OC-48 and OC-192 Cross-Connection, 1+1 Protection with Route Survivability, 1+1 Protection with Central Office Survivability, and OC-48 and OC-192 Regenerator.

(a) OC-3, OC-12, OC-48 and OC-192 Add/Drop Multiplexing

> An arrangement at the customer premise that allows an OC-3, OC-12, OC-48 or OC-192 channel operating at a terminating speed of 155.52 Mbps, 622.08 Mbps, 2488.32 Mbps, and 9953.28 Mbps, respectively, to add/drop a lower speed channel by using this feature along with the add/drop function as stated in (b) following.

4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)
 - (3) Optional Features and Functions (Cont'd)
 - (a) <u>OC-3, OC-12 and OC-48 Add/Drop Multiplexing</u> (Cont'd)

OC-3 add/drop multiplexing at a customer premise will provide the capability to support the full add/drop function capacity of OC-3 Service bandwidth with up to one OC-3 add/drop Function, three DS3 add/drop functions or equivalently up to three groups of 28 DS1 add/drop functions or equivalent combinations of DS3 and groups of 28 DS1 add/drop functions.

OC-12 add/drop multiplexing at a customer premise will provide the capability to support the full add/drop function capacity of OC-12 Service bandwidth with up to one OC-12 add/drop function, four OC-3 add/drop functions or up to 12 DS3 add/drop functions or equivalent combinations of OC-12, OC-3 and DS3 add/drop functions.

OC-48 add/drop multiplexing at a customer premise will provide the capability to support the full add/drop bandwidth, up to one OC-48 add/drop function, four OC-12 add/drop functions, sixteen OC-3 add/drop functions, 48 DS3 add/drop functions or equivalent combination of OC-12, OC-3 and DS3 add/drop functions.

OC-192 add/drop multiplexing at a customer premise will provide the capability to support the full add/drop function capacity of OC-192 Service bandwidth with up to one OC-192 add/drop function, four OC-48 add/drop functions, 16 OC-12 add/drop functions, 64 OC-3 add/drop functions or 192 DS3 add/drop functions or equivalent combination of DS3, OC-3, OC-12 and OC-48 add/drop functions.

4. Special Access Service (Cont'd)

4.3 Service Descriptions (Cont'd)

4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> - Point-to-Point Service (Cont'd)

- (B) Channel Configuration (Cont'd)
 - (3) Optional Features and Functions (Cont'd)
 - (b) Add/Drop Function

The OC-3, OC-12, OC-48 and OC-192 Service are able to add or drop lower level signals as shown in the matrix following. The add/drop function is offered at a circuit level. For example, if at the customer premise, a customer drops one DS3 signal from an OC-12 service, they would pay one add/drop Function charge for the DS3, plus the OC-12 add/drop multiplexing charge. If a DS3 needs to be dropped at a Telephone Company location, the customer would pay one DS3 add/drop Function Charge. No add/drop multiplexing charge applies at the Telephone Company location.

The OC-3, OC-12, OC-48 and OC-192 Service is only able to add/or drop the services that have been identified by payload content (mapping) within the bandwidth. DS1 mapped STS-1 signals are only able to connect to a DS1, and DS3 mapped STS-1 signals are only able to connect to a DS3. If a change is required, it may be accomplished by the customer's CPE or through the current asynchronous environment for multiplexing of DS3 and DS1 services stated in Section 4.3.1.

(N)

4. <u>Special Access Service</u> (Cont'd)

- 4.3 <u>Service Descriptions</u> (Cont'd)
 - 4.3.2 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)

(3)	Optional	Features	and	Functions	(Cont'd)
-----	----------	----------	-----	-----------	----------

ADD/DROP Function

	DS1	DS3	OC3	OC12	OC48	OC192	10mg	1000mg	GigE
OC-192	No*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OC-48	No*	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes
OC-12	No*	Yes	Yes	Yes	N/A	N/A	Yes	Yes	Yes
OC-3	Yes	Yes	Yes	N/A	N/A	N/A	Yes	Yes	Yes

* to add/drop a DS1 from an OC-12 OC-48 and/or

OC-192, an Optical to Electrical DS1 Add/Drop Capability must be purchases as well as an OC-3 Add/Drop Function and a DS1 Add/Drop Function.

(c) OC-3, OC-12, OC-48 and OC-192 Cross-Connection

This is an arrangement to cross-connect OC-3 Service, OC-12 Service OC-48 Service, or OC-192 Service to another service or to an add/drop function of the same speed at a wire center for the same or for a different customer on a per circuit basis. The customer must purchase service to the wire center from his designated premise. One charge applies per service cross-connected.

(d) Optical to Electrical DS1 Add/Drop Capability

This option allows an electrical DS1 to be derived From an OC-12 OC-48 or OC-192 by using this capability To add/drop the electrical DS1 from an OC-3 add/drop function. The OC-3 add/drop function must be purchased separately.

(N)

4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)
 - (3) Optional Features and Functions (Cont'd)
 - (d) 1+1 Protection with Route Survivability

This option will provide 1+1 protection and offer additional protection from fiber cable cuts by routing the working fiber pair via the primary route and the protect fiber pair via a physically diverse alternate route. The protect fiber will be charged on a distance-sensitive basis, based on quarter route miles, from the customer premise to the serving wire center.

This option will also provide 50 millisecond protection switching to assure 100 percent availability of the service. Any service interruption greater than one (1) minute will result in a credit equal to one month's bill for the circuit involved. If the interruption occurs on a Channel Termination without this option, normal terms and conditions for out-of-service credits as stated in 2.4.3 preceding will apply. An interruption period will start when an inoperative service is reported to the Telephone Company and end when the service is operative. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element. All other terms and conditions for Credit Allowances as stated in 2.4.3 preceding, will apply.

Installation of the 1+1 Protection with Route Survivability option will not begin until the customer has accepted the proposed routing by the Telephone Company.

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4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)
 - (3) Optional Features and Functions (Cont'd)
 - (e) 1+1 Protection with Central Office Survivability for OC-3, OC-12, OC-48 and OC-192
 - This option will provide 1+1 protection and (a) offer additional protection from Serving Wire Center (SWC) failure for services not terminating at the SWC. This will be accomplished by routing the working fiber pair via the primary route to the customer's SWC and the protect fiber pair to an alternate wire center chosen by the Telephone Company. The protect fiber will be charged on a distance-sensitive basis, based on quarter route miles, from the customer premise to the alternate wire center. Channel Mileage for the appropriate OC-3, OC-12, OC-48 or OC-192 Service ordered will be charged between the SWC and the alternate wire center using the V&H coordinates method as stated in National Exchange Carrier Association Tariff F.C.C. No. 4.

This option will also assure 100 percent availability of the service. Any service interruption greater than one (1) minute will (result in a credit equal to one month's bill for the circuit involved. If the interruption occurs on a Channel Termination without this option, normal terms and conditions for out of service credits as stated in 2.4.3 preceding will apply. An interruption period will start when an inoperative service is reported to the Telephone Company and end when the service is operative. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element. All other terms and conditions for Credit Allowances as stated in 2.4.3 preceding, will apply.

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(N)

4. Special Access Service (Cont'd)

- 4.3 <u>Service Descriptions</u> (Cont'd)
 - 4.3.2 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)
 - (3) Optional Features and Functions (Cont'd)
 - (e) <u>1+1 Protection with Central Office Survivability</u> for OC-3, OC-12, OC-48 and OC-192 (Cont'd)

Installation of the 1+1 Protection with Central Office Survivability option will not begin until the customer has accepted the proposed routing by the Telephone Company.

If the customer wants to use this optional feature as a ring extension with OC-12,

OC-48, or OC-192 Dedicated Ring Service, then both the customer's Serving Wire Center and alternate wire center must have Nodes located on the ring. The Telephone Company will work cooperatively with the customer to determine the appropriate alternate wire center to be used for the Dedicated Ring situation. Channel Mileage will not apply to this option when used with a ring extension.

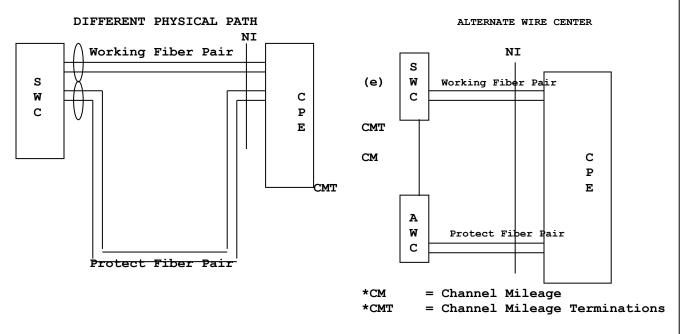
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4. Special Access Service (Cont'd)

- 4.3 <u>Service Descriptions</u> (Cont'd)
 - 4.3.2 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> (N) - Point-to-Point Service (Cont'd)
 - (B) Channel Configuration (Cont'd)
 - (1) Optional Features and Functions (Cont'd)



(f) OC-48 and OC-192 Regenerators

Regenerators provide essential detection and retransmission of SONET Optical signals between customer premises. Regenerators will be provided as required by the Telephone Company when actual fiber facility distances between customer designated premise and/or central office locations exceed design limits (typically 18 to 25 miles). Regenerators will be located exclusively in Telephone Company central offices.

The following diagrams provide an example of (d) and (e) above:

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4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.3 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> Dedicated Ring
 - (A) Basic Service Description
 - (1) <u>General</u>

OC-3, OC-12, OC-48 and OC-192 Dedicated Ring Service operates at the same speeds as Point-to-Point Services, however, the Dedicated Ring Service provides a customer a dedicated custom network. The network is in a ring architecture designed to provide increased reliability and functionality connecting multiple customerdesignated locations and specified Telephone Company Central Offices (COs) via self-healing network designs. Dedicated Ring Service will provide 50 millisecond protection switching to assure 100 percent availability of the services on the ring. Dedicated Ring Service is provided where appropriate SONET facilities are available. Where facilities are not available, Special Construction may apply.

Dedicated Ring Service is an alternative to OC-3, OC-12, OC-48 and OC-192 point-to-point service between multiple customer locations. Rate elements include nodes, ports, mileage between nodes, regenerators, Optical to Electrical DS1 add/drop capability and Optical OC-48 add/drop capability. Rates are specified in 4.5.2 following.

Existing customers with Point-to-Point OC-3, OC-12, OC-48 and OC-192 may upgrade to Dedicated Ring Service without termination liability.

A service interruption greater than one (1) minute will result in a credit equal to one month's bill for the individual port-to-port connection involved. An interruption of service will start when an inoperative service is reported to the Telephone Company and end when the service is operative. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element. (N)

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- 4. <u>Special Access Service</u> (Cont'd) 4.3 <u>Service Descriptions</u> (Cont'd)
 - 4.3.3 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> (N) Dedicated Ring (Cont'd)

(B) Dedicated Ring Configuration

(1) Nodes

The ring will provide connectivity to multiple customer-designated locations (nodes). However, a ring must have a minimum of three nodes. At least one node must be a Telephone Company CO and one must be a customer premise. A maximum of 16 nodes, including regenerators, will be allowed per ring.

The Telephone Company reserves the right to determine the order of the nodes on the ring.

When a customer premise node is located in the same building as a CO node, there will be no diversity between the two nodes.

The customer will be billed time and material for any additional charges incurred by the Telephone Company in locating Company equipment at the customer premise. (N) ı.

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4. Special Access Service (Cont'd)

4.3 Service Descriptions (Cont'd)

Service Descriptions (cont d)	
4.3.3 OC-3 Service, OC-12 Service, OC-4	8 Service and OC-192 Service (N
Dedicated Ring (Cont'd)	
(B) Dedicated Ring Configuratio	n (Cont'd)
(3) Ports	
The ring capacity wi	ll be either OC-3, OC-12, OC-48 or
OC-192. Lower speed	channels are accessible at nodes
via port termination	s.

Accepted interfaces are as follows: OC-n Ring Type

(Maximum number of ports supported by Ring Type)

PORTS	OC-3	OC-12	OC-48	OC-192
DS1	84	84/0C-3 Port**	84/0C-3 Port**	84/0C-3 Port**
DS3	3	12	48	192
OC-3	1	4	16	64
OC-12	N/A	1	4	16
OC-48	N/A	N/A	1	4
OC-192	N/A	N/A	N/A	1

OC-3 Point-to-Point service may connect to an OC-3 port of an OC-12, OC-48 ring, or OC-192 ring. OC-12 Point-to-Point service may connect to an OC-12 port of an OC-48 ring or OC-192 ring located in a Company CO. OC-48 Point-to-Point service may connect to an OC-48 port of an OC-192 ring.

As described in Section 4.3.2.A for OC-3 Service, an OC-3 port will permit the connection of STS-1 channels to other STS-1 channels across the OC-12, OC-48 or OC-192 Dedicated Ring Service subject to The overall ring capacity limits described in (6) following. Also, an STS-1 channel with DS1 payload mapping accessing an OC-12 Dedicated Ring using an OC-3 port may be connected to the Optical to Electrical DS1 add/drop capability for the purpose of connecting up to 28 DS1 ports. An STS-1 channel with DS3 payload mapping accessing the OC-12 or OC-48 Dedicated Ring using an OC-3 port may individually connect to a DS3 port.

- Optical to Electrical DS1 add/drop capability as shown in 4.3.3(B)(4) is needed along with an OC-3 Port.
- ** Number of interfaces on Nodes equipped for multiplexing may vary.

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- 4. <u>Special Access Service</u> (Cont'd) 4.3 Service Descriptions (Cont'd)
 - 4.3.3 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service Dedicated Ring (Cont'd)
 - (B) Dedicated Ring Configuration (Cont'd)
 - (3) <u>Ports</u> (Cont'd)

DS1 ports, DS3 ports and STS-1 channels within OC-3 ports may not connect to any other ports within the same node. All other port-to-port connections are allowable except for DS3 port to DS1 port connections. If a DS3 to DS1 connection is required, it may be accomplished by the customer's CPE or through the current multiplexing environment of DS3 and DS1 Services described in Section 4.3.9.

(4) Mileage

Mileage is the total airline distance between the serving wire center of each node involved on the ring. A one mile minimum will be billed between nodes.

In addition, interoffice transport may be connected between wire centers at a lower OC-N speed than the Dedicated Ring, if the transport is between a dedicated ring port and:

- a lower speed Add/Drop Function;
- a lower speed Channel Termination;
- another lower speed Dedicated Ring Port;
- a lower speed Cross-Connect;

All of the above terminations must be the same speed as the transport.

(5) Optical to Electrical DS1 Add/Drop Capability

This option allows an electrical DS1 to be derived from an optical OC-12 OC-48 or OC-192 ring by using this capability to add/drop the electrical DS1 from an OC-3 port.

(6) Dedicated Ring Regenerator

Regenerators provide essential detection and re-transmission of SONET Optical 155.52 Mbps, 622.08 Mbps, 2488.32 Mbps and 9953.28 Mbps signals between nodes. Regenerators will only be provided as required by the Telephone Company when actual fiber facility distances between customer-designated nodes exceed inter-nodal design limits (typically 18 to 25 miles). Regenerators will be located exclusively in Telephone Company COs and do not allow ports to access customer service connections.

4. Special Access Service (Cont'd)

- 4.3 Service Descriptions (Cont'd)
 - 4.3.3<u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> Dedicated Ring (Cont'd)

(N)

(N)

- (B) Dedicated Ring Configuration (Cont'd)
 - (7) Dedicated Ring Connection Capacity)

For OC-3 Dedicated Ring Service, the maximum ring capacity between nodes is not to exceed 3 STS-1 equivalents. OC-3 Dedicated Ring Services will provide capability for node-to-node connection of DS1, STS-1 or STS-3C, using DS1, DS3 and OC-3 ports on the OC-3 ring.

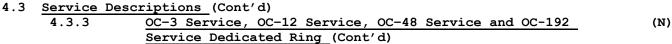
For OC-12 Dedicated Ring Service, the maximum ring capacity between nodes is not to exceed 12 STS-1 equivalents. OC-12 Dedicated Ring Services will provide capability for node-to-node connection of STS-1, STS-3C or STS-12C Channels using DS3, OC-3 or OC-12 ports on the OC-12 ring. DS1 Port Connections are available with OC-12 Dedicated Ring Service if an OC-3 Port and an Optical to Electrical DS1 add/drop capability is purchased.

For OC-48 Dedicated Ring Service, the maximum ring capacity between nodes is not to exceed 48 STS-1 equivalents. OC-48 Dedicated Ring Services will provide capability for node-to-node connection of DS3, STS-1, STS-3C, STS-12C or STS-48C Channels using DS3, OC-3, OC-12, or OC-48 ports on the OC-48 ring. DS1 Port Connections are available with OC-48 Dedicated Ring Service if an OC-3 Port and an Optical to Electrical DS1 add/drop capability is purchased.

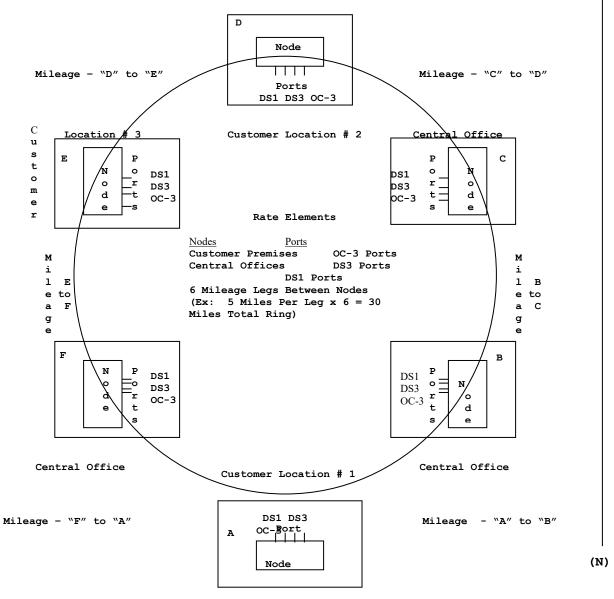
For OC-192 Dedicated Ring Service, the maximum ring capacity between nodes is not to exceed 192 STS-1 equivalents. OC-192 Dedicated Ring Services will provide capability for node-to-node connection of DS3, STS-1, STS-3C, STS-12C, STS-48C or STS-192C Channels using DS3, OC-3, OC-12, OC-48 or OC-192 ports on the OC-192 ring. DS1 Port Connections are available with OC-192 Dedicated Ring Service if an OC-3 Port and an Optical to Electrical DS1 add/drop capability is purchased.

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4. <u>Special Access Service</u> (Cont'd)



- (B) Dedicated Ring Configuration (Cont'd)
 - (8) Diagram OC-3, OC-12 OC-48, and OC-192 Ring

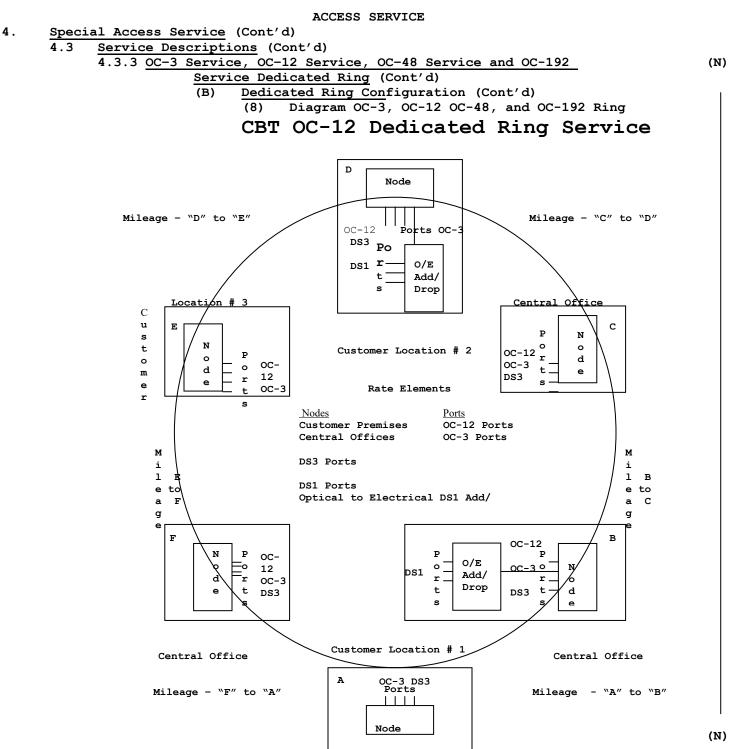


CBT OC-3 Dedicated Ring Service

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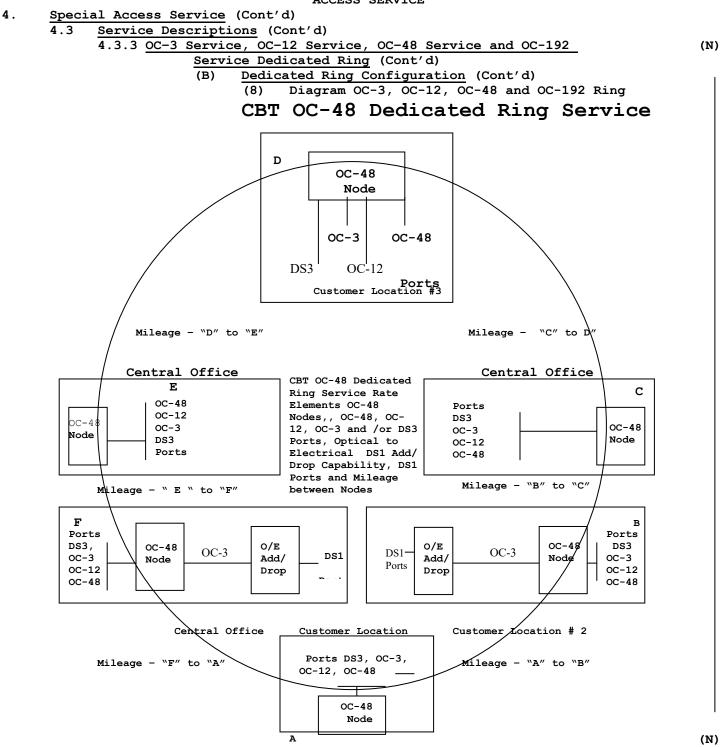
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4. Special Access Service (Cont'd)

4.4 Rate Regulations

4.4.1 Types of Rates and Charges

There are three types of rates and charges. These are monthly rates, daily rates and nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

Monthly rates are flat recurring rates that apply each month or fraction thereof that a Special Access Service is provided. For billing purposes, each month is considered to have 30 days.

For Channel Terminations associated with MercNET 45 High Capacity Service there are higher monthly rates for the first channel termination and lower monthly rates for the second, third and above channel terminations provided when the following conditions are met:

- The first, second, and third and above service(s) are billed to the same customer premises.
- The first, second, and third and above service(s) must be provided to the same customer premises.
- Each subsequent order for a channel termination is eligible for the appropriate lower monthly rate.

(N)

- 4. Special Access Service (Cont'd)
 - 4.4 Rate Regulations (Cont'd)

4.4.1 Types of Rates and Charges (Cont'd)

(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 Special Access Service are: installation of service, installation of optional features and functions, and service rearrangements.

(1) Installation of Service

Nonrecurring charges apply to some services installed. The nonrecurring charges for the installation of service are set forth as a nonrecurring charge for the Channel Termination rate element.

(N)

(N)

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4. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.1 Types of Rates and Charges (Cont'd)
 - (B) Nonrecurring Charges (Cont'd)
 - (2) Installation of Optional Features and Functions

Nonrecurring charges apply for the installation of some of the optional features and functions available with Special Access Service. The charge applies whether the feature or function is installed coincident with the initial installation of service or at any time subsequent to the installation of the service.

The optional features for which nonrecurring charges apply are:

- Service to Service through Connect Arrangement-1.544 Mbps
- High Capacity Clear Channel Capability
- (3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period or a change in the physical location of the point of the termination at a customer designated premises. Changes which result in the establishment of new minimum period obligations are treated as disconnects and starts.

Changes in the physical location of the point of the termination are treated as moves and are described and charged for as set forth in 4.4.3 following.

The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves actual physical change to the service Administrative changes will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Access Service to the same entity (i.e., customer remains responsible

(N)

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4. Special Access Service (Cont'd)

4.4 Rate Regulations (Cont'd)

- 4.4.1 Types of Rates and Charges (Cont'd)
 - (B) Nonrecurring Charges (Cont'd)

for all outstanding indebtedness for the Access Service). Administrative changes are as follows:

- Change of customer name, (i.e., the customer of record does not change but rather the customer of record changes its name.
- Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction

All other service rearrangements will be charged for as follows:

- If the change involves the addition of other customer designated premises to an existing multipoint service, the nonrecurring charge for the channel termination rate element will apply. The charge(s) will apply only for the location(s) that is being added.
- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that nonrecurring charge will apply.
- For all other changes, including the addition of an optional feature or function without a separate nonrecurring charge, a charge equal to a channel termination rate element nonrecurring charge will apply. Only one such charge will apply per channel termination, for all changes of this type made at one time.

(N)

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4. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.2 Minimum Periods

The minimum service period for all services is one month except as follows:

- (A) The minimum period for individual case basis (ICB) high capacity services is one month unless otherwise specified in the ICB filing.
- (B) For Optional Payment Plans (OPP) for Digital Data Service MercNET 45 and 1.544 High Capacity Services the minimum period is specified in paragraph 4.4.7 following.
- (C) The minimum service period for DS1, DS3, Point-to-Point OC-3, OC-12 or OC-48 Services is 12 months. After the minimum period is satisfied, see specified regulations in paragraph 4.4.7 following.
- (D) The minimum service period for OC-3 Dedicated Ring, OC-12 Dedicated Ring or OC-48 Dedicated Ring Service is 36 months. After the minimum period is satisfied, see specified regulations in paragraph 4.4.7 following.
- (E) The minimum service period for Ethernet Service is 36 months. After the minimum period is satisfied, see specified regulations in paragraph 4.4.7 following

4.4.3 Moves

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

- The Point of Termination at the customer's premises - The customer's premises

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

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

4. Special Access Service (Cont'd)

4.4 Rate Regulations (Cont'd)

4.4.4 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage is calculated on the airline distance between the locations involved, i.e., the serving wire centers associated with two customer designated premises, a serving wire center associated with a customer designated premises and a Company hub, or two Company hubs. The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally obtain dial tone.

Mileage is shown in 4.5 following in terms of mileage bands. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC No. 4, then find the band into which the computed mileage falls and apply the rate shown for that band. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage band and applying the rates.

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e., customer designated premises serving wire center to hub, hub to hub and/or hub to customer designated premises serving wire center. However, when any service is routed through a hub for purposes other than customer specified bridging, multiplexing or Customer Network Reconfiguration Service (e.g., the Company chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

(N)

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4. Special Access Service (Cont'd)

4.4 Rate Regulations (Cont'd)

4.4.5 Facility Hubs

A customer has the option of digital high capacity facilities (i.e., DS1, or DS3) to a facility hub for channelizing to individual services requiring lower capacity facilities.

Different locations may be designated as hubs for different facility capacities, e.g., multiplexing from digital to digital may occur at one location while multiplexing from digital to analog may occur at a different location. When placing an Access Order the customer will specify the desired hub. The National Exchange Carrier Association Tariff FCC No. 4 identifies serving wire centers, hub locations and the type of multiplexing functions available.

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from digital to voice frequency channels

End to end services may be provided on channels of these facilities to a hub. The transmission performance for the end to end service provided between customer designated premises will be that of the lower capacity or bit rate. (N)

4. Special Access Service (Cont'd)

4.4 Rate Regulations (Cont'd)

4.4.5 Facility Hubs (Cont'd)

The Company will commence billing the monthly rate for the facility to the hub on the date specified by the customer on the Access Order. Individual services utilizing these facilities may be installed coincident with the installation of the facility to the hub or may be ordered and/or installed at a later date, at the option of the customer. The customer will be billed for a High Capacity digital Channel Termination, Channel Mileage (when applicable) and the multiplexer at the time the facility is installed. Individual service rates (by service type) will apply for a Channel Termination and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

Cascading multiplexing occurs when a high capacity digital channel is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed.

When cascading multiplexing is performed, whether in the same or a different hub, a charge for the additional multiplexing unit also applies. When cascading multiplexing is performed at different hubbing locations, Channel Mileage charges also apply between the hubs.

Although not requiring multiplexing, certain services must be routed to Company designated hubs when connection is desired with other broadcast facilities. A customer can order service(s) between customer designated premises and a hub and will be billed accordingly at the rates set forth in 4.5.following as appropriate. The customer will be charged for each such connection made at the rates for Other Labor as set forth in 8.2.6(C) following. The rates that apply for the service between each customer designated premises and the hub are a Channel Termination and Channel Mileage, if applicable.

(N)

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4. Special Access Service (Cont'd)

4.4 Rate Regulations (Cont'd)

4.4.6 Shared Use High Capacity Services

Shared use occurs when Special Access Service and Switched Access Service including CCSAC signaling connections are provided over the same High Capacity facilities through a common interface. The facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, as appropriate, and Multiplexer). The nonrecurring charge that applies when the shared use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity Channel Termination. Individual service including Switched Access CCSAC signaling connections (i.e. Switched or Special Access) non-recurring charges will not apply to the individual channels of the shared used facility. Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for providing Switched Access Service including CCSAC signaling connections. As each individual channel is activated for Switched Access Service including CCSAC signaling connections, the Special Access Channel Termination Channel Mileage and Multiplexer rates, as appropriate, will be reduced accordingly (e.g., 1/24th for a DS1 service, etc.) The customer must place an order for each individual Switched or Special Access Service including CCSAC signaling connections utilizing the Shared Use Facilities and specify the channel assignment for each such service including CCSAC signaling connections.

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7. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.6 <u>Shared Use High Capacity Services and OC-3, OC-12, and</u> OC-48 Services (Cont'd)

(N)

Switched Access Service rates and charges as set forth in 3.6 preceding will apply for each channel of the shared use facility that is used to provide a Switched Access Service including CCSAC signaling connections. The ordering, provisioning and rating of Switched Access Shared Use facilities is set forth in 3.5.8 preceding. Where Special Access Service is provided utilizing a channel of the shared use facility to a Hub, High Capacity and OC Service rates and charges will apply for the facility to the Hub as set forth preceding and individual service rates and charges will apply from the Hub to the customer designated premises. The rates and charges that will apply to the portion from the Hub to the customer designated premises will be dependent on the specific type of Special Access Service that is provided. The applicable rates and charges will include a Channel Termination and Channel Mileage, if applicable. Rates and charges for optional features and functions associated with the service, if any, will apply as set forth in 4.5 following.

4.4.7 Payment Plans for, MercNET 45, 1.544 High Capacity Services and OC-3, OC-12, OC-48 Services, LAN Advantage Service and Wavelength Service.

The Optional Payment Plan (OPP) is a provision that allows a customer to pay a fixed rate for specific, MercNET 45, 1.544 High Capacity Service, OC-3/STM-1, OC-12/STM-4, OC-48/STM-16, OC-192/STM-64 Services, Ethernet Services and Wavelength Service Over a specified month payment period. OPP options are 12, 24, 36, 48, 60, and 84 months for DS1, DS3, OCN Point-to-Point OCN Dedicated Ring Services, Wavelength Service and Ethernet Service. During the effective term, monthly rates for services installed under this arrangement will not be subject to Company initiated rate changes. (N)

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4. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.7 Payment Plans for MercNET 45, 1.544 High Capacity Service and OC-3, OC-12, and OC-48 Services, Shared SONET Service Ethernet Services and Wavelength Service. (Cont'd)

Customers subscribing to the OPP will be subject to nonrecurring charges for installation and rearrangements of services covered by the plan. The nonrecurring charges will not be spread over the OPP term.

During a customer's OPP/DCP term, the customer shall pay current rates provided they do not exceed the original rate contracted for by the customer. Conversion of service may be made to a new OPP/DCP term of the same or different length or to a higher speed service or to the same or higher speed Shared SONET service. If the expiration date for the new service or OPP/DCP term is beyond the end of the original OPP/DCP term, the remaining OPP/DCP charges for the original term will not apply.

At the expiration of the OPP term and if the customer wishes to continue MercNET 45, 1.544 High Capacity Service, and OC-3, OC-12, OC-48 Services, Ethernet Services and Wavelength Service, the customer may elect:

- Prevailing month-to-month tariff rates
- A new OPP at the prevailing OPP rate, if available

The customer continues to receive the OPP rate on a month-tomonth basis for a period of up to six months following the completion of the term. After the six months, the rates will automatically revert to the month-to-month rates.

During an OPP term, a customer may move one Channel Termination service to another location while keeping the OPP in force, provided the customer and customer's end user remain the same and no lapse in service occurs.

The Minimum Period for service provided under an OPP is the same as the OPP term selected by the customer (i.e. 36 or 60 month payment period). The Minimum Period for service provided under the month-to-month payment arrangement is 36 months for OC-3, OC-12, and OC-48 Dedicated Ring Services, 12 months for 1.544 High Capacity Service, MercNET 45 Service, OC-3, OC-12, and OC-48 Point-to-Point Services, Ethernet Services and Wavelength Service.

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4. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.7 Payment Plans for MercNET 45, 1.544 High Capacity Service and OC-3, OC-12, OC-48 Services, Ethernet Services And Wavelength Service (Cont'd)

Customers requesting termination of service prior to the expiration date of the Minimum Period will be liable for payment of a Minimum Period Charge. The Minimum Period Charge applies to all features associated with a service. The Minimum Period Charge for all OPP terms will be calculated as follows:

- Customers with a 12 month OPP would pay a charge equal to the total of the remaining months of the OPP contract. The Termination rate calculation is:

[12 months - months in service] X 12 month OPP monthly rate.

- Customers with a 36 month OPP would pay a charge equal to the total of the remaining months of the OPP contract. The Termination rate calculation is:

[36 months - months in service] X 36 month OPP monthly rate.

- Customers with a 60 month OPP would pay a charge equal to the total of the remaining months of the OPP contract. The Termination rate calculation is:

[60 months - months in service] X 60 month OPP monthly rate. (N)

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4. Special Access Service (Cont'd)

4.4 <u>Rate Regulations</u> (Cont'd)

4.4.8 Discount Commitment Program (DCP)

(A) General Description

The Discount Commitment Program (DCP) provides the customer with rate stabilization and discounted rates for 1.544 High Capacity Service, MercNET 45 Service, OCn Services, Wavelength Service and Ethernet Services. The customer agrees to a minimum service commitment per service when establishing a DCP. The rate elements by service are:

1.544 High Capacity Service, MercNET 45 Service; Channel Termination Channel Mileage, Multiplexing OCn Point-to-Point Service; Channel Termination Channel Mileage, Add drop Multiplexing OCn Dedicated Ring Service; Ports, Nodes, Channel Mileage, Add/Drop Multiplexing, Regenerators

Wavelength Service, Ethernet Service; Ports

Customers may disconnect or move Channel Terminations, Multiplexing, Nodes or Ports and not be subject to Maximum Termination Liability charges as long as commitment Levels are maintained.

DCPs may be established by service and be of either 12, 24 36, 48, 60, and 84 months duration for 1.544 High Capacity, OCN Point-to-Point, OCN Dedicated Ring. Wavelength and Ethernet Services. A customer may have only one DCP per service in effect at one time. For example, a customer that has a 36-month DCP for DS1 Service may not establish a second DS1 Service until the current DCP expires.

Monthly rates for services installed under a DCP will change as Telephone Company-initiated rate changes become effective but during the DCP term will not exceed the original monthly rate in effect at the beginning of customer's DCP term.

(N)

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4. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.8 Discount Commitment Program (DCP) (Cont'd)
 - (A) General Description (Cont'd)

During the term of the selected DCP, Telephone Companyinitiated rate changes (increases or decreases) will automatically be applied to the monthly rates for the remaining months of the current DCP term. But in no case will any rate change cause the monthly rate during the DCP term to exceed that in effect at the beginning of the customer's DCP term.

(B) Commitment Level

A customer establishes a DCP term by committing 90 percent of their in-service Circuits (CKTS) by service during the term.

The customer will not receive the DCP rates for in-service levels above the 90 percent commitment level established. For example, a customer with 100 CKTSs in-service and commits to 90 CKTS (i.e. 90 percent) will receive the DCP rates for up to 90 CKTS.

If a customer's actual in-service level falls below the commitment level, the customer will be billed for the commitment level of CKTS at DCP rates. For example, a customer that commits 90 CKTS but has only 70 CKTS in service will be billed the DCP rates for 90 CKTS.

(C) 90-Day Review Period

No adjustments, for being below commitment level (as described in (B) above), in monthly billing for a DCP will be made until 90 days after Company notification to the customer that the commitment level has been exceeded or not been met. This will insure that customers will not be penalized for aberrations in Channel Termination, Network Access Connection or Off-Network Access Connection counts caused by timing differentials in disconnection and installation.

(N)

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4. Special Access Service (Cont'd)

- 4.4 Rate Regulations (Cont'd)
 - 4.4.8 Discount Commitment Program (DCP) (Cont'd)
 - (C) 90-Day Review Period (Cont'd)

Customers' bills will not be adjusted for being outside the parameters described in 4.4.8(B), preceding during the 90 day review period. Additionally, customers will continue to be billed the adjustments (following the 90 day review period) for being outside the described parameters until the commitment level is met or increased. A new 90-day review period will be initiated if the customer's actual in-service level subsequently falls outside the described parameters.

(D) Increasing the DCP Commitment Level

Customers may increase their commitment level at any time by notifying the Company in writing. An increase in the commitment level will not change the expiration date of the DCP.

When a commitment level is increased, the actual in-service CKT level at the time of the increase will be used to calculate billing adjustments as described in Section 4.4.8(B), preceding.

(E) <u>Decreasing the DCP Commitment Level and Termination</u> Liabilities

Customers may decrease their commitment level only by paying termination liability charges on the number of Channel Terminations, by which the commitment level is decreased. Termination Liabilities will apply to 1.544 High Capacity, MercNET 45 and. For example, a customer has a commitment level of 90 CKTS. The customer then decreases this commitment level to 70 CKTS. The customer must pay termination liabilities on 20 CKTS.

The Termination Liability for DCP is calculated to be the dollar difference between the current DCP rate for the DCP term that could have been completed during the time the service was actually in service, or the monthly rate for services in service, or the monthly rate for services in place less than 36 months, and the customer's current DCP rate for each month the service was provided.

Effective:

(N)

4. Special Access Service (Cont'd)

4.4 Rate Regulations (Cont'd)

- 4.4.8 Discount Commitment Program (DCP) (Cont'd)
 - (E) <u>Decreasing the DCP Commitment Level and Termination</u> Liabilities (Cont'd)

For example, a customer subscribing to a 60-month DCP term reduced their CKTS commitment by 20 CKTS during the 37th month. This customer's termination charge would be:

20 CKTS x (36 month DCP rate - 60 month DCP rate) x 37 months = Termination Charge

A decrease in the commitment level will not change the expiration date of the DCP.

(F) Upgrading a DCP Service

When a customer upgrades a Ds1 service being billed DCP rates to a DS3 High Capacity, the DS1 DCP commitment level will be reduced at the customer's request (up to a maximum of 24) and no termination liabilities will apply. If the customer has a DCP for a 1.544 High Capacity, the 1.544 High Capacity DCP commitment level will be increased if the customer requests that it be increased. When a customer upgrades a 1.544 High Capacity service being billed DCP rates to a MercNET 45 service the customer's 1.544 High Capacity DCP commitment level will be reduced at the customer's request (up to a maximum of 28) and no termination liabilities will apply.

(G) Conversion to an Optional Payment Plan (OPP)

Customers may convert services from a DCP term to an OPP as described in 4.4.7, preceding. No termination liabilities will apply to services converted to an OPP term of the same or longer length than the DCP term. Additionally, the customer's DCP commitment level will be reduced by the number of CKTS associated with the service, converted to an OPP term.

(N)

4. Special Access Service (Cont'd)

- 4.5 Rate and Charges (Cont'd)
 - 4.5.1 High Capacity Service*

				USOC	Month Rates	-	Nonrecurri Charges	2
(A)	Channel	Terminatio	n					
	USOC	MONTHLY	<u>12 MOS.</u>	24 Mos.	36 MOS.	48 MOS.	60 MOS.	84 MOS.
- 1.544 Mbps (MercNet 1.5)	TZGA1	\$ 145.00	145.00 (N)	137.00 (N)	129.00 (N)	125.60 (N)	122.21 (N)	110.00 (N)
- MercNET 45 Chan. Term.	TZGB1	750.00	750.00 (N)	725.00 (N)	700.00 (N)	677.00 (N)	654.00 (N)	600.00 (N)

(B) Mileage

<u>Monthly</u> <u>12 Mos.</u> <u>24 Mos.</u> <u>36 Mos.</u> <u>48 Mos.</u> <u>60 Mos.</u> <u>84 Mos.</u>

Fixed

1YBA1 \$110.00 \$110.00 (N) \$ 97.75 (N) \$ 85.50 (N) \$ 83.25 (N) \$ 81.00 (N) \$ 73.00 (N)

Per Mile

\$ 6.72 6.72 (N) 5.61 (N) 4.58 (N) 4.47 (N) 4.35 (N) 3.92 (N)

			Pe	r Mile		
Monthly	<u>12 Mos.</u>	24 Mos.	36 Mos.	48 Mos.	<u>60 Mos.</u>	<u>84 Mos.</u>

Long Haul ZZYDE \$ 6.72(N)\$ 6.72(N)\$ 5.61(N)\$ 4.58(N)\$ 4.47(N)\$ 4.35(N) \$ 3.92(N) Over 40 Miles

* One Year Minimum on all features and functions

* Where available.

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4. Special Access Service (Cont'd)

4.5 Rate and Charges (Cont'd)

4.5.1 High Capacity Service*

				USOC	Mont Rate	-	Nonrecur: Charge	2
(A)	Channel	Terminati	.on					
	USOC	MONTHLY	12 MOS.	<u>24 Mos.</u>	<u>36 MOS.</u>	48 MOS.	60 MOS.	84 MOS.
- 1.544 Mbps (MercNet 1.5)	TZGA1	\$ 145.00	145.00	137.00	129.00	125.60	122.21	110.00
- MercNET 45 Chan. Term.	TZGB1	750.00	750.00	725.00	700.00	677.00	654.00	600.00

(B) Mileage

	Monthly	<u>12 Mos.</u>	24 Mos.	36 Mos.	48 Mos.	60 Mos.	84 Mos.
				Ē	lixed		
1YBA1	\$110.00	\$110.00	\$ 97.75	\$ 85.50	\$ 83.25	\$ 81.00	\$ 73.00(N)
1YBB1	\$490.00	\$490.00(N)	\$390.00(N)	\$290.00(N) \$	\$265.00(N)	\$240.00(N)	\$216.00(N)
				Pe	er Mile		
1YBA1	\$ 6.72	6.72	5.61	4.58	4.47	4.35	3.92
1YBB1	\$ 9.99	9.99(N)	9.00(N)	8.00(N)	7.00(N)	6.00(N)	5.50(N)
				Per	r Mile		
	Mon	thly 12 Ma	os. <u>24 Mos</u> .	<u>36 Mos.</u>	<u>48 Mos.</u>	60 Mos.	<u>84 Mos.</u>
Long Haul ZZY Over 40 Miles ZZY		72 \$ 6.7 00(N) \$25.0		\$ 4.58 (N) \$20.00(N)	\$ 4.47 (N)	\$ 4.35 \$18.00(N)	\$ 3.92 \$17.10(N)

* One Year Minimum on all features and functions

* Where available.

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4. Special Access Service (Cont'd)

4.5 Rate and Charges (Cont'd)

- 4.5.1 <u>High Capacity Service</u>* (N)
 - (C) Optional Features and Functions
 - (1) Multiplexing

	DS3 to DS1 - Per arrangement	QM3X1	\$ 615.36		NONE
(2)	Cross-Connection	to			
	ILEC Facilities				
	- DS1	CX1CX	10.00		NONE
	- DS3	CX3CX	12.00		NONE
(3)	Digital Facility				
	Cross-Connection				
	Per DS1	DXZ01	10.57	None	1
	Per DS3	DXZ03	60.78	None	(N)

* Where available.

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4. Special Access Service (Cont'd)

4.5 <u>Rates and Charges</u> (Cont'd)

4.5.2<u>OC-3 Service, OC-12 Service, OC-48 and OC-192 Service Point-to-Point Services</u> (N)

(A) OC-3 Service*

Recurring Charges Optional Payment Plan

(1) Channel Termination - Per Point of Termination Terminating Bit Rate 155.52 Mbps (DS1, DS3 Drops)

	USOC	Monthly	<u>12 Mo.</u>	<u>24 Mo.</u>	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	<u>84 Mo.</u>
	TMECS	\$1,430.00	\$1,430.00	\$1,365.00	\$1,300.00	\$1,240.00	\$1,180.00	\$1,065.00
(2) Channel Milea	age							
- Fixed - Per mile at	115XX	400.00	400.00	390.00	380.00	370.00	\$360.00	340.00
155.52 Mbps	115XX	150.00	150.00	138.00	125.00	113.00	100.00	90.00
- Long Haul Pe 40+ at 155.5	2 Mbps							
	ZZYDG	78.00	78.00	76.05	74.10	72.15	70.20	66.69
(3) Optional Feat and Functions								
(a) OC-3/STM-Add Multiplexing	-							
Per Arrangem		1,050.00	1,050.00	1,023.00	995.00	988.00	980.00	960.00
(b) Add/Drop Fund	ction							
Per GigE Per 100mg Per 10mg	MXJJX MXJKX MXJLX	1,100.00 250.00 80.00	1,100.00 250.00 80.00	1,050.00 238.00 78.00	1,000.00 225.00 75.00	950.00 213.00 73.00	900.00 200.00 70.00	830.00 180.00 65.00
Per OC-3/STM-1 Per DS3 Per DS1	MXJCX MXJBX MXJAX	200.00 80.00 50.00	200.00 80.00 50.00	175.00 78.00 48.00	150.00 75.00 45.00	143.00 73.00 43.00	135.00 70.00 40.00	125.00 65.00 45.00

* One Year Minimum on all features and functions

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4. Special Access Service (Cont'd)	4.	Special	Access	Service	(Cont'd)
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4.5 Rates and Charges (Cont'd)

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4.5.2 OC-3 Service, OC-12 Service, OC-48, and OC-192 Service

<u>- Point-to-Point Services</u> (Cont'd)
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(A) OC-3 Service (Cont'd)*

	USOC	Monthly	<u>12 Mo.</u>	<u>24 Mo.</u>	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	<u>84 Mo.</u>
(c) ISP Connection	LVP	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(d) Private Virtua Circuit/VLAN	l PVCAX	40.00	40.00	40.00	40.00	40.00	40.00	40.00
(e) OC-3 to DS1 Multiplexing	MLX11	1,800.00						
(f)Cross-Connectio of Services OC-3/STM-1 to OC-3/STM-1 Cross-Connect Per Circuit	n occcx	\$100.00	100.00	100.00	100.00	100.00	100.00	100.00
(g) 1+1 Protection Route Survival	-							
- Per Quarter Route Mile	S2DXY	20.00	20.00	20.00	20.00	20.00	20.00	20.00
(e) 1+1 Protection Central (Survivab	Office							
- Per Quarter Route Mile	S2VXY	20.00	20.00	20.00	20.00	20.00	20.00	20.00
- Channel Mile Fixed and Pe	-				tes and Ch (A) Prece	-		

* One Year Minimum on all features and functions

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(N)

4. <u>Special Access Service</u> (Cont'd)

4.5 Rates and Charges (Cont'd)

4.5.2 OC-3 Service, OC-12 Service, OC-48, and OC-192 Service <u>Point-to-Point Services</u> (Cont'd)

(B) OC-12 Service*

Recurring Charges Optional Payment Plan

(1) Channel Termination - Per Point of Termination Terminating Bit Rate 622.08 Mbps (DS1, DS3, OC-3/STM-1 Drops)

USOC M	onthly	L2 Mo.	<u>24 Mo.</u>	36 1	<u>Mo. 48</u>	<u>Mo.</u>	50 Mo. 8	34 Mo.
TMECS \$2,9	00.00 \$2,90	0.00 \$2	,750.00	\$2,600).00 \$2,52	3.00 \$2	,445.00 \$2,	250.00
	USOC M	onthly 1	2 Mo.	<u>24 Mo.</u>	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	<u>84 Mo.</u>
(2) Channel Milea	ige							
- Fixed	1L5XX \$6	00.00 \$60	0.00	\$575.00	\$550.00	\$525.00	\$500.00	\$475.00
 Per mile at 622.08 Mbps 	1L5XX 1	50.00 15	0.00	138.00	125.00	113.00	100.00	90.00
(3) Optional Feat	ures							
and Functions								
USOC		<u>12 Mo.</u>	24	Mo.	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	<u>84 Mo.</u>
(a) OC-12/STM-Ad	d/Drop							
Multiplexing								
Per Arrangem MX		.00 2,460.	00 2,3	275.00	2,092.00	1,906.00	1,720.00 1	,590.00
	,	,	,		,	,	,	,
(b) Add/Drop Fund	tion							
Per GigE MX	XJJX 1,100	.00 1,100.	00 1,	050.00	1,000.00	950.00	900.00	830.00
Per 100mg MX	JKX 250	.00 250.	00 :	238.00	225.00	213.00	200.00	185.00
Per 10mg MX	KJLX 80	.00 80.	00	78.00	75.00	73.00	70.00	65.00
Per OC-12/ST	M-4							
	JEX 500	.00 500.	00	475.00	450.00	428.00	405.00	375.00
Per OC-3/STM								
	JCX 200			175.00	150.00	143.00	135.00	125.00
Per DS3 MX	KJBX 80	.00 80.	00	78.00	75.00	73.00	70.00	65.00
- Long Haul Per	Mile							
40+ Miles at	622.08 Mbps							
	YDH 138	.00 138.0	00 1	L34.55	131.10	127.65	124.20	117.99

* One Year Minimum on all features and functions

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(N)

4.	Special Access Servio	<u>ce</u> (Cont'd	.)						
	4.5 Rates and Charge	es (Cont'd	.)						
	4.5.2. <u>OC-3 Serv</u> - Point		2 Service, Services		0C-192 Serv	<u>vice</u>			(N)
	(B) <u>OC</u>	-12 Servic	ce (Cont'd)) *					
	(3) Optional Features	and Funct	ions (Cont	d)					
(c)	ISP Connection LVP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
(d)	Private Virtual Circuit/VLAN PVCAX	40.00	40.00	40.00	40.00	40.00	40.00	40.00	
	(e) Cross-C	onnection	of Servic	es					
	OC-12/STM-4 to OC-	12/STM-4							
(f)	Cross-Connect Per Cir 100.00 1+1 Protection with Route Survivability	cuit OC	CCDX \$100.	00 100.00	100.00	100.0	00 100.0	00 100.	00
	- Per Quarter Route Mile S2DXY	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
(g)	1+1 Protection with Central Office Survivability								
	- Per Quarter Route Mile S2VXY	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
	- Channel Mileac Fixed and Per Mile	-			es and Char (B) Precedi				
(4)	Optical to Electrical DS1 Add/Drop Capabili								
	Per OC-3/STM-1 to DS1 Add/Drop <u>USOC M</u> d	onthly	<u>12 Mo.</u>	<u>24 Mo.</u>	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	<u>84 Mo.</u>	
	MXJDX 1,2	200.00 1,	200.00	1,175.00	1,150.00 1	,125.00	1,100.00	1.010.00	Ι
	DS-1 Port at OC-12/STM-4 Node MXJAX	∋ 50.00	50.00	48.00	45.00	43.00	40.00	35.00	(N)

* One Year Minimum on all features and functions

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Issued: December 14, 2017
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Effective:

4. Special Access Service (Cont'd)

4.5 Rates and Charges (Cont'd)

4.5.2 OC-3 Service, OC-12 Service, OC-48, and OC-192 Service - Point-to-Point Services (Cont'd)

(C) OC-48 Service*

Recurring Charges Optional Payment Plan

USOC	Monthly	<u>12 Mo.</u>	24 Mo.	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	84 Mo.
TMECZ	\$6,500.00	\$6,500.00	\$6,000.00	\$5,500.00	\$5,000.00	\$4,500.00	\$4,150.00
(2) Channel Mileage							
- Fixed							
1L5XX - Per mile	\$1,200.00	\$1,200.00	\$1,150.00	\$1,100.00	\$1,050.00	\$1,000.00	\$920.00
2488.32 M							
1L5XX	150.00	150.00	138.00	125.00	113.00	100.00	90.00
-	1 Per Mile at 2488.32	Mong					
40+ MILES ZZYDJ	255.10	255.10	248.73	242.35	235.97	229.59	218.11
(3) Optional	Features and	d Functions					
(a)OC-48 A	dd/Drop Mult	iplexing					
- Per 2	Arrangement						
•	to exceed 12 valent)	DS3s or					
-4							
USOC	Monthly	<u>12 Mo.</u>	24 Mo.	<u>36 Mo.</u>	<u>48 Mo.</u>	<u>60 Mo.</u>	84 Mo.
MXCZX	\$3,900.00	\$3,900.00	\$3,650.00	\$3,400.00	\$3,160.00	\$2,920.00	\$2,700.00
	USOC	Monthly	12 Mo.	24 Mo. 3	86 Мо. 48	Mo. 60 Mo	. 84 Mo.
(b) Add/Drop							
Per GigE		x 1,100.00	'	,	,	0.00 900.0	
Per 100mg Per 10mg	J MXJKX MXJLX		250.00 80.00	238.00 78.00		3.00 200.0 3.00 70.0	
	B/STM16 MXJf		1,000.00	975.00		5.00 900.0	
	2/STM-4 MXJE	,	500.00	475.00	450.00 42	8.00 405.0	0 375.00
Per OC-3,			200.00	175.00		3.00 135.0	
Per DS3	MXJB	¢ 80.00	80.00	78.00	75.00 7	/3.00 70.0	00 65.00

* One Year Minimum on all features and functions

Issued: December 14, 2017

Effective:

Assistant Secretary, CBTS Technology Solutions LLC

(N)

4.	<u>Spec</u> 4.5			<u>ce</u> (Cont'd) s (Cont'd))	CCESS SERVIO	5E				
					Service, rvices (Con	0C-48 and 00 nt'd)	C-192 Serv	vice			(N)
			(C) <u>OC-</u>	48 Service	(Cont'd) *						
	(3)	Optional 1	Features	and Funct	tions (Cont	'd)					
			USOC	Monthly	<u>12 Mo.</u>	<u>24 Mo.</u>	36 Mo.	<u>48 Mo.</u>	60 Mo.	<u>84 Mo.</u>	
(c)	ISP C	Connection	LVP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
(d)		ate Virtua iit/VLAN	1 PVCAX	40.00	40.00	40.00	40.00	40.00	40.00	40.00	
(e)	oc	s-Connecti -48/STM-10 coss-Connec	6 to OC-	ervices - 48/STM-16							
	Pe	er Circuit	occ	FX \$100.00	100.00	100.00	100.0	00 100.00	100.00	0 100.00	
(f)		Protection e Survival	-								
		er Quarter Dute Mile		20.00	20.00	20.00	20.00	20.00	20.00	20.00	
	Ce	1+1 Prote entral Off vivability		vith							
		- Per Qua Mile	arter Ro S2VXY	ute 20.00	20.00	20.00	20.00	20.00	20.00	20.00	
	Fi	- Channe: ixed and P	-	•			es and Ch (C) Prece	-			
	(f)	Point-to OC-48/ST - Each (a	M-16 Reg	•							
		USC	OC Mor	thly 12			6 Mo.	<u>48 Mo.</u>	<u>60 Mo.</u>	<u>84 Mo.</u>	
	(4)	RGY Optical f DS1 Add/I	to Elect		0.00 2,9	900.00 2,	900.00	2,900.00	2,900.00	2,900.00	
		Per OC-3, DS1 Add/	/STM-1 t	_							
			-	0.00 1,200	0.00 1,1	1,175.00	150.00	1,125.00	1,100.00	1,010.00	
				USOC	Monthly	<u>12 Mo. 2</u>	<u>4 Mo. 36</u>	<u>Mo. 48 M</u>	ю. <u>60 М</u> о	o. <u>84 Mo.</u>	
		DS-1 Port OC-12/ST		MXJAX	50.00	50.00 4	8.00 4	5.00 43.0	0 40.00	35.00	(N)
* 01	ne Yea	ar Minimum	on all	features	and functi	ons					

* One Year Minimum on all features and functions

Issued: December 14, 2017

Effective:

4. <u>Special Access Service</u> (Cont'd)

4.5 Rates and Charges (Cont'd)

4.5.2 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service - Point-to-Point Services (Cont'd)

(D) OC-192 Service

Recurring Charges Optional Payment Plan

(1) Chann	el Terminati		Point of T rminating B	ermination it Rate 995	3.28 Mbps			
USOC	Monthly	<u>12 M</u>	<u>. 24</u>	Mo.	36 Mo.	<u>48 Mo.</u>	60 Mo.	84 Mo.
TMECS	\$13,000.00	\$13,000.	00 \$12,0	00.00 \$11	,000.00	\$10,000.00	\$9,000.00	3,300.00
(2) Char	nnel Mileage							
	USOC	Monthly	<u>12 Mo.</u>	<u>24 Mo.</u>	<u>36 Mo</u>	. <u>48 Mo</u> .	<u>60 Mo.</u>	<u>84 Mo.</u>
	mile at	2,400.00	\$2,400.00	\$2,300.00	\$2,200.0	00 \$2,100.0	0 \$2,000.00	\$1,950.00
	3.28.32 Mbps 1L5XX	150.00	150.00	138.00	125.0	00 113.0	0 100.00	90.00
2	Haul Per Mi Miles at 99		5					
	ZZYDJ	500.00	500.00	475.00	450.0	425.0	400.00	380.00

- (3) Optional Features and Functions
- (a) Multiplexing

MXRGX \$7,800.00 \$	7,800.00	\$7,300.00	\$6,800.00	\$6,320.00	\$5,840.00	\$5,380.00
---------------------	----------	------------	------------	------------	------------	------------

	USC	DC Mon	thly 12	2 Mo. 24 Mo	. <u>36 Mo.</u>	48 Mo.	60 Mo.	84 Mo.
(b) A	Add/Drop Function	on						
Per G	GigE MXJ	JX 1,100	.00 1,100	1,050.00	1,000.00	950.00	900.00	830.00
Per 1	LOOmg MXJ	кх 250	.00 250	.00 238.00	225.00	213.00	200.00	185.00
Per 1	.0mg MXJ	LX 80	.00 80	.00 78.00	75.00	73.00	70.00	65.00
Per C	C192/STM64 MXJ	9x 2,000	.00 2,000	1,950.00	1,900.00	1,850.00	1,800.00	1,675.00
Per C	C-48/STM16 MXJ	fX 1,000	.00 1,000	.00 975.00	950.00	925.00	900.00	830.00
Per C	C-12/STM-4 MXJ	EX 500	.00 500	.00 475.00	450.00	428.00	405.00	375.00
Per C	C-3/STM-1 MXJ	CX 200	.00 200	.00 175.00	150.00	143.00	135.00	125.00
Per D	DS3 MXJ	BX 80	.00 80).00 78.00) 75.00	73.00	70.00	65.00

(N)

Effective:

(N)

ACCESS SERVICE

4. Special Access Service (Cont'd)

4.5 Rates and Charges (Cont'd)

- Point-to-Point Services (Cont'd)	4.5.2 OC-3 Service, OC-12 Servi	ce, OC-48	Service	and	OC-192	Service
	- Point-to-Point Services	(Cont'd)				

- (C) OC-192 Service (Cont'd)
- (3) Optional Features and Functions (Cont'd)

	<u>t</u>	USOC	Monthly	<u>12 Mo.</u>	24 Mo.	36 Mo.	48 Mo.	60 Mo.	84 Mo.
(c) ISP Con	nection I	LVP	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(d) Private Circuit/		PVCAX	40.00	40.00	40.00	40.00	40.00	40.00	40.00
(e) 1+1 Prote	ection with Rou	ute Surviva	ability						
- Per Quarter Rout	e Mile S	S2DXY	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Centra	otection w 1 Office ability	rith							
- Per (Route 1	Quarter Mile S	S2VXY	20.00	20.00	20.00	20.00	20.00	20.00	20.00
- Chan	nel Mileag	le	Ap	ply Rates a	nd Charges				

Apply Rates and Charges Fixed and Per Mile As 4.5.2(D) Preceding

(g) Point-to-Point OC-48/STM-16 Regenerator - Each (as required)

	USOC	Monthly	12 Mo.	<u>24 Mo.</u>	<u>36 Mo.</u>	48 Mo.	60 Mo.	84 Mo.	
	RGY92	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	
		ss-Connect							
	OC-192/STM-64	4 - OC-192	/STM-64						
	OCCGX	\$100.00	100.00	100.00	100.00	100.00	100.00	100.00	
(4)	Optical to E DS1 Add/Drop		у						
	Per OC-3/STM DS1 Add/Droj								
	MXJDX	1,200.00	1,200.00	1,175.00	1,150.00	1,125.00	1,100.00	1,001.00	
	DS-1 Port at								
	OC-48/STM-16	Node							
	MXJAX	50.00	50.00	48.00	45.00	43.00	40.00	35.00	(N

4. <u>Special Access Service</u> (Cont'd)

4.5 Rates and Charges (Cont'd)

Rates and	d Charges (Co	nt'd)					
	C-3 Service, Dedicated Ri		.ce, OC-48 Serv	vice, and OC	-192 Servic	<u>e</u>	(N)
	(A) Node – Pe	er Node Typ	e				
usc	OC Monthly	<u>12 Mo.</u>	24 Mo.	<u>36Mo.</u>	48 Mo.	60 Mo.	<u>84 Mo.</u>
Per Node	e type						
OC-3/STI	M-1						
	mer Premises \$ 1,820.00\$	1,820.00	\$ 1,610.00	\$1,400.00	\$ 1,300.00	\$ 1,200.00	1,100.00
Centra FC5CX	al Office 1,300.00	1,300.00	1,200.00	1,000.00	950.00	900.00	830.00
OC-12/5	гм-4						
Custor FP5DX	mer Premises 2,990.00	2,990.00	2,645.00	2,300.00	2,150.00	2,000.00	1,850.00
Centra	al Office		·	,	·	·	,
FC5DX		2,340.00	2,070.00	1,800.00	1,650.00	1,500.00	1,380.00
OC-48/S	IM-16						
Custo	omer Premises						
FP5	6,825.00	6,825.00	6,040.00	5,250.00	4,875.00	4,500.00	4,150.00
Cent: FC5	ral Office 5,200.00	5,200.00	4,600.00	4,000.00	3,625.00	3,250.00	3,000.00
OC-192/	STM-64						
	omer Premises K 13,650.00	13,650.00	12,075.00	10,500.00	9,750.00	9,000.00	8,280.00
	l Office x 10,400.00	10,400.00	9,200.00	8,000.00	7,250.00	6,500.00	י 5,980.00 (א)

* One Year Minimum on all features and functions

Issued: December 14, 2017

Effective:

4. <u>Special Access Service</u> (Cont'd)

4.5. Rates and Charges (Cont'd)

4.5.3	OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service	
	- Dedicated Ring (Cont'd)*	

(C) Ports (cont'd) USOC Monthly 12 Mo.	24 Mo.	36 Mo.	48 Mo.	60 Mo.	84 Mo. (N)
Per Node	<u>24 HO.</u>	<u>30 MO.</u>	<u>40 HO.</u>	<u>00 HO.</u>	<u>04 MO.</u> (N)
DS1 at OC-3/STM-1 Node					
SPRAX \$ 59.00 \$ 59.00	\$ 52.00	\$ 45.00 \$	\$ 43.00	\$ 40.00 \$	35.00
DS3 at OC-3/STM-1 Node	¥ 52.00	ų 10.00 i		φ <u>1</u> 0.00 φ	33.00
SPRBX 98.00 98.00	87.00	75.00	73.00	70.00	65.00
OC-3/STM-1 at OC-3/STM-1 Node					
SPRDX 195.00 195.00	173.00	150.00	143.00	135.00	125.00
10mg at OC-3/STM-1 Node					
SPRNX 98.00 98.00	87.00	75.00	73.00	70.00	65.00
100mg at OC-3/STM-1 Node					
SPROX 293.00 293.00	259.00	225.00	213.00	200.00	180.00
GigE at OC-3/STM-1 Node					
SPRPX 1,300.00 1,300.00	1,150.00	1,000.00	950.00	900.00	830.00
DS3 at OC-12/STM-4 Node					
SPRCX 98.00 98.00	87.00	75.00	73.00	70.00	65.00
OC-3/STM-1 at OC-12/STM-4 Node					
SPREX 195.00 195.00	173.00	150.00	143.00	135.00	125.00
DS1 at OC-12/STM-4 Node**					
SPRGX 59.00 59.00	52.00	45.00	43.00	40.00	35.00
OC-12/STM-4 at OC-12/STM-4 Nd					
SPRFX 585.00 585.00	518.00	450.00	428.00	405.00	375.00
10mg at OC-12/STM-4 Node					
SPRRX 98.00 98.00	87.00	75.00	73.00	70.00	65.00
100mg at OC-12/STM-4 Node					
SPRSX 293.00 293.00	259.00	225.00	213.00	200.00	180.00
GigE at OC-12/STM-4 Node					
SPRPX 1,300.00 1,300.00	1.150.00	1,000.00	950.00	900.00	830.00
OC-12/STM-4 at OC-48/STM-16 Nd					
SPRHX 585.00 585.00	518.00	450.00	428.00	405.00	375.00
OC-3/STM-1 at OC-48/STM-16 Nd					
SPRJX 195.00 195.00	173.00	150.00	150.00	135.00	125.00
DS3 at OC-48/STM-16 Node					
SPRKX 98.00 98.00	87.00	75.00	73.00	70.00	65.00
DS1 at OC-48/STM-16 Node**					
SPRLX 59.00 59.00	52.00	45.00	43.00	40.00	35.00
OC-48/STM-16 at OC-48/STM-16					
SPRMX 1,235.00 1,235.00	1,092.00	950.00	925.00	900.00	830.00
10mg at OC-48/STM-16 Node					
SPRVX 98.00 98.00	87.00	75.00	73.00	70.00	65.00
100mg at OC-48/STM-16 Node					I
SPRWX 293.00 293.00	259.00	225.00	213.00	200.00	180.00
GigE at OC-48/STM-16 Node					
SPRPX 1,300.00 1,300.00	1,50.00	1,000.00	950.00	900.00	830.00

* One Year Minimum on all features and functions

(N)

Issued: December 14, 2017

Effective:

4. Special Access Service (Cont'd)

4.5. Rates and Charges (Cont'd)

4.5.3 <u>OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service</u> <u>Dedicated Ring</u> (Cont'd)* (C) Ports (cont'd)

	USOC	Monthly	12 Mo.	24 Mo.	36 Mo.	48 Mo.	60 Mo.	84 Mo.
	Per Nod	.e						
•		C-192/STM						
	S9NEX	195.00	195.00	173.00	150.00	143.00	135.00	125.00
•		OC-192/ST						
	S9NGX	585.00	585.00	518.00	450.00	428.00	405.00	375.00
•		OC-192/S						
		,	1,235.00	1,092.00	950.00	925.00	900.00	830.00
•		OC-192/ST						
		,	2,470.00	2,185.00	1,900.00	1,850.00	1,800.00	1,660.00
	•	TM-64 Nod						
	SPRXX	98.00	98.00	87.00	75.00	73.00	70.00	65.00
	•	TM-64 Nod						
	SPR1X	59.00	59.00	52.00	45.00	43.00	40.00	35.00
-		/STM-64 N						
-	SPRVX	98.00	98.00	87.00	75.00	73.00	70.00	65.00
100mg a	t OC-192	/STM-64 N						
:	SPRWX	293.00	293.00	259.00	225.00	213.00	200.00	180.00
			92/STM-64					
S	SPRPX :	1,300.00	1,300.00	1,150.00	1,000.00	950.00	900.00	830.00
ISP Con								
L	VP	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Devices to	17 2 L		/					
		l Circuit, 52.00		46.00	40.00	40.00	40.00	40.00
PV	/CAX	52.00	52.00	46.00	40.00	40.00	40.00	40.00
	Mileage							
(D)	mileage							
Per mile	hetwee	n nodes b	y ring type	_				
IGI MIIG		i noueb b	1 Trug cype	-				
OC-3/STM	1-1							
•	 \5BS	260.00	260.00	230.00	150.00	175.00	150.00	140.00
OC-12/S1								
•	A5BS	260.00	260.00	230.00	200.00	175.00	150.00	140.00
OC-48/S1								
•	A5BS	260.00	260.00	230.00	200.00	175.00	150.00	140.00
OC-192/S	STM-64	-	-					
· · · ·	DO.	260 00	0 6 0 0 0	220 00	200 00	175 00	150 00	140 00

260.00 260.00 230.00 200.00 175.00 150.00

* One Year Minimum on all features and functions.

1A5BS

** Optical to Electrical DS1 add/drop capability as shown in 4.5.2 is needed along with an OC-3 port. (Not available with OC-192 Dedicated Ring Service)

Effective:

Assistant Secretary, CBTS Technology Solutions LLC

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ACCESS SERVICE

4. Special Access Service (Cont'd)

4.5 Rates and Charges (Cont'd)

4.5.3 OC-3 Service, OC-12 Service, OC-48 Service and OC-192 Service - Dedicated Ring (Cont'd)* USOC Monthly 12 Mo. 36 Mo. 84 Mo. 24Mo. 48 Mo. 60. Mo. (E) Optical to Electrical DS1 Add/Drop Capability Per OC-3/STM-1 to DS1 Add/Drop 1,323.00 1,150.00 1,125.00 1,100.00 1,015.00 MXJDX 1,495.00 1,495.00 (F) Dedicated Ring Regenerator OC-3/STM-1 Each (as required) \$1,300.00 1,300.00 RGY 1,200.00 1,000.00 950.00 900.00 830.00 OC-12/STM-4 Each (as required) RGY 2,080.00 2,080.00 1,840.00 1,600.00 1,550.00 1,500.00 1,380.00 OC-48/STM-16 Each (as required) RGY 3,640.00 3,640.00 3,220.00 2,800.00 2,750.00 2,700.00 2,485.00 OC-192/STM-64 Each (as required) RGY 7,280.00 7,280.00 6,440.00 5,600.00 5,500.00 5,400.00 4,970.00

* One Year Minimum on all features and functions.

(N)

(N)

Effective:

5. Cincinnati Bell Ethernet Service

5.1 <u>Service Description</u>

Cincinnati Bell Ethernet Service is an end-to-end high-speed data transport service which customers use for LAN interconnection and/or high-speed Internet access.

5.2 Service Provisioning

CBT will provide Cincinnati Bell Ethernet Service for one or more of the following types of Ethernet LANs operating at speeds of:

> CIR 1.544 Mbps with 1.5 Mbps Access CIR 3 Mbps with 3 Mbps Access CIR 4.5 Mbps with 4.5 Mbps Access CIR 6 Mbps with 6 Mbps Access CIR 10 Mbps with 100 Mbps Access CIR 20 Mbps with 100 Mbps Access CIR 50 Mbps with 100 Mbps Access CIR 100 Mbps with 1 Gbps Access CIR 200 Mbps with 1 Gbps Access CIR 300 Mbps with 1 Gbps Access CIR 400 Mbps with 1 Gbps Access CIR 500 Mbps with 1 Gbps Access CIR 600 Mbps with 1 Gbps Access CIR 700 Mbps with 1 Gbps Access CIR 800 Mbps with 1 Gbps Access CIR 900 Mbps with 1 Gbps Access CIR 1 Gbps with 1 Gbps Access CIR 10 Gbps with 10 Gbps Access

Committed Information Rate (CIR) is the guaranteed bandwidth amount across the circuit.

The Quality of Service (QoS) optional feature enables the Customer to specify the level of delay, delay variation (jitter), bandwidth packet loss and availability.

Cincinnati Bell Ethernet Service will be available 24 hours per day, 7 days per week, except as required to update, enhance, maintain and/or repair Cincinnati Bell Ethernet Service. CBT reserves the right to perform these tasks, as needed, during off-peak hours, normally on Sundays from 12:00 a.m. to 6:00 a.m. (N)

Issued: December 14, 2017

Effective:

Assistant Secretary, CBTS Technology Solutions LLC

5. Cincinnati Bell Ethernet Service

5.2 Service Provisioning (Con't.)

At the request of Customer CBT will interconnect one or more additional LANs owned by Customer to the LANs interconnected pursuant to this Tariff so long as such additional LANs are of the same type as the LANs interconnected hereunder. (e.g., An Ethernet LAN may only be extended to another Ethernet LAN but may be at a different speed.)

The electrical signals of Cincinnati Bell Ethernet Service operate in compliance with the American National Standard Institute ("ANSI") or IEEE standards 802.3 and 802.3u (Carrier Sense Multiple Access with Collision Detection (SMA/CD) Access Method and Physical Layer Specifications).

Cincinnati Bell Ethernet Service supports the following interfaces: (i) for Ethernet LANs operating at speeds of 1.544 Mbps and Base T; and (ii) for Ethernet LAN's operating at a Native Mode of 1 Gbps or 10 Gbps, SX or LX Gigabit Interface Connectors.

(N)

(N)

Effective:

5. Cincinnati Bell Ethernet Service

5.2 Service Provisioning (Cont)

CBT will use its best efforts to repair any inoperable Cincinnati Bell Ethernet Service port within 4 hours after Customer has notified CBT that such port is inoperable. If such port remains inoperable for more than 8 hours after Customer has notified CBT that such port is inoperable, CBT will credit Customer's account for an amount equal to one-thirtieth (1/30) of the applicable monthly charge for such port. The same credit will apply for each additional 8-hour period that the port remains inoperable. The total amount of all credits for any one inoperable port will not exceed the monthly port charge for such inoperable port. The credit referred to herein shall be CBT's entire liability and Customer's exclusive remedy for any damages resulting from such inoperable port.

Without the prior written consent of CBT, Customer will not access, or attempt to access, any equipment or facilities furnished by CBT in connection with this Tariff. Customer will indemnify and hold harmless CBT, its officers, directors, employees and agents, from and against any loss or expense, of whatever nature, arising out of any unauthorized access to any equipment or facilities furnished by CBT in connection with this Tariff.

All equipment and facilities used by CBT in providing Cincinnati Bell Ethernet Service hereunder will remain the sole property of CBT, whether or not attached to or embedded in reality, unless otherwise agreed to in writing by the parties with respect to specific equipment.

Customer agrees that any technical, financial or business information of CBT furnished to Customer in connection with this Agreement is confidential and proprietary to CBT, shall remain the property of CBT at all times and shall be returned to CBT upon request.

(N)

Effective:

5. Cincinnati Bell Ethernet Service

5.3 Obligations of the Customer

CBT will not be responsible for damages, malfunctions or failures caused by (a) Customer's failure to follow any operation or maintenance instructions provided by CBT to Customer; (b) Customer's repair, modification to or relocation of equipment used to provide service hereunder, or attachment of equipment not approved by CBT; and (c) abuse, misuse or negligent acts of Customer. Customer may request CBT to perform repair service for Customer in such instances on a time-and-materials basis.

Customer will furnish, at its expense, such space, electrical power and environmental conditioning at Customer's premises as CBT may reasonably require in connection with performing its obligations hereunder. Customer will permit CBT reasonable access to Customer's premises, in accordance with Customer's normal security procedures, in connection with providing service hereunder.

Customer will provide, install and maintain, at its expense, all equipment and facilities necessary for LAN interconnection on the Customer's side of the Demarcation Point. Customer shall be responsible for insuring that the operating characteristics of such equipment and facilities are compatible with Cincinnati Bell Ethernet Service and conform to the Technical Reference Specifications furnished by CBT to Customer in connection with this Tariff.

Customer will cause its electrical signals at the Demarcation Point to conform to the applicable ANSI or IEEE standards set forth in Section 5, above. Any additional equipment or facilities necessary to comply with such standards shall be furnished by Customer at its expense.

Prior to requesting repair service from CBT, Customer will use its best efforts, including but not limited to performing reasonable diagnostic tests, to verify whether any trouble with The LAN Advantage service is a result of the Customer's equipment or facilities. Customer shall be responsible for any such trouble resulting from the Customer's equipment or facilities. Customer will cooperate with any joint testing of Cincinnati Bell Ethernet Service reasonably requested by CBT.

(N)

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5. Cincinnati Bell Ethernet Service

5.4 <u>Rate Regulations</u>

The rates and charges set forth for Cincinnati Bell Ethernet Service provide for the furnishing of service where suitable facilities are available. Where special construction of facilities is necessary, special construction charges may apply.

At locations where Customer provides power to CBT, CBT is not responsible for out of service conditions caused by power outages.

Customer shall pay CBT for Cincinnati Bell Ethernet Service at the applicable monthly rate for the type of Cincinnati Bell Ethernet Service, selected by the Customer, as indicated in Section 5.6. In addition, Customer shall pay to CBT the applicable per port nonrecurring charge set forth in Section 5.6.

If Customer cancels, in whole or in part, any requested addition, rearrangement, relocation or other modification to Cincinnati Bell Ethernet Service prior to completion thereof, Customer will reimburse CBT for the actual expenses incurred by CBT in connection with such modification prior to CBT's receipt of notice of cancellation; provided, however, the amount of such reimbursement will not exceed the service, construction, installation, termination and other charges for which Customer would have otherwise been responsible.

Cincinnati Bell Ethernet Service is available for a minimum term of 12 months or under a term payment plan of 24, 36, 48, 60 or 84 months. If a Customer terminates a service, without cause, prior to the Expiration of the term, the Customer will pay to CBT a termination charge equal to all remaining amounts due or to become due, including but not limited to all monthly charges for which Customer would have been responsible if the Customer had not terminated prior to the end of the applicable 12, 24, 36, 48, 60 or 84 month term payment plan.

If Customer removes one or more ports from service prior to the expiration of the term hereof, Customer will pay to CBT a termination charge equal to all monthly charges for such port(s) for which Customer would have been responsible had Customer not removed such port(s).

Customer has available option of purchasing Redundant Premise Power from the Company. Rates are shown in Section 5.6 following.

5.5 Ethernet Expedite Charge

When placing an Access Order for service(s) for which standard intervals exist, a customer may request a service date that is prior to the standard interval service date.

The customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If the Telephone Company agrees to provide service on an expedited basis, subject to limitations of personnel and material, an Expedited Order Charge will apply.



(N)

ACCESS SERVICE

5. <u>Cincinnati Bell Ethernet Service</u> 5.6 <u>Rates and Charges</u>

Electrical Port Type (Per Port)

Type of Service	Nonrec <u>Charge</u>	Monthly	24 Mo.	м <u>36 Мо</u> .	onthly Ra <u>48 Mo.</u>	60 Mo.	84 Mo.	USC
Unprotected Ports								
CIR 1.544 Mbps with 1.5 Mpps Access (Per port)	250.00	375.00	363.75	348.75	337.50	330.00	300.00	LVZZ
CIR 3 Mbps with 3 Mbps Access (Per port)	1000.00	525.00	509.25	488.25	472.50	462.00	425.00	LVZZ
CIR 4.5 Mbps with 4.5 Mbps Access (Per port)	1000.00	637.50	618.38	592.88	573.75	561.00	525.00	LVZZ
CIR 6 Mbps with 6 Mbps Access (Per Port)	1000.00	900.00	873.00	837.00	810.00	792.00	600.00	LVZ
CIR 10 Mbps with 100 Mbps Access (Per port)	1000.00	675.00	654.75	627.75	607.50	594.00	400.00	LVZZ
CIR 20 Mbps with 100 Mbps Access (Per port)	1000.00	750.00	725.00	700.00	675.00	650.00	425.00	LVZI
CIR 50 Mbps with 100 Mbps Access (Per port)	1000.00	950.00	925.00	900.00	875.00	851.00	550.00	LVZI
CIR 100 Mbps with 1 Gbps Access (Per port)	1000.00	1350.00	1309.50	1255.50	1215.00	1188.00	750.00	LVZZ
CIR 200 Mbps with 1 Gbps Access (Per port)	1100.00	1500.00	1447.50	1387.50	1342.50	1312.50	855.00	LVZZ
CIR 300 Mbps with 1 Gbps Access (Per port)	1150.00	1650.00	1586.25	1518.75	1470.00	1436.25	945.00	LVZ
1: Nonrecurring char								

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(N)

ACCESS SERVICE

5. Cincinnati Bell Ethernet Service

5.6 Rates and Charges

	Nonrec		M	onthly Rat	tes		
Type of Service	Charge Month	<u>y</u> <u>24 Mo.</u>	<u>36 Mo</u> .	48 Mo.	60 Mo.	84 Mo.	USOC
Unprotected Ports							
CIR 400 Mbps with 1 Gbps Access (Per port)	1200.00 1800	.00 1725.00	1650.00	1597.50	1560.00	1025.00	LVZA4
CIR 500 Mbps with 1 Gbps Access (Per port)	1250.00 1950	.00 1863.75	1781.25	1725.00	1683.75	1095.00	LVZA5
CIR 600 Mbps with 1 Gbps Access (Per port)	1300.00 2100	.00 2002.50	1912.50	1852.50	1807.50	1175.00	LVZA6
CIR 700 Mbps with 1 Gbps Access (Per port)	1350.00 2250	.00 2141.25	2043.75	1980.00	1931.25	1255.00	LVZA7
CIR 800 Mbps with 1 Gbps Access (Per port)	1400.00 2400	.00 2280.00	2175.00	2107.50	2055.00) 1350.00	LVZA8
CIR 900 Mbps with 1 Gbps Access (Per port)	1450.00 2550	.00 2418.75	2306.25	2235.00	2178.78	3 1425.00	LVZA9
CIR 1 Gbps with 1 Gbps Access (Per port)	1500.00 2625	.00 2546.25	2441.25	2362.50	2310.00) 1450.00	LVZAO
CIR 10 Gbps with 10 Gbps Access (Per port)	1500.00 5625.0	0 5437.50	5250.00	5062.50	4875.00	3500.00	 LVZAP (N)

Note 1: Nonrecurring charge applies when VLAN is installed subsequent to a port installation.

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5. Cincinnati Bell Ethernet Service

5.6 Rates and Charges (Cont.)

Optional Featu	res							
	Nonrec			thly Rate				
Type of Service	Charge	Rate	24 Mo	<u>. 36 Mo</u>	. <u>48 Mo</u> .	60 Mo.	84 Mo.	USOC
PVC/LAN								
Connection	100.00	40.00	40.00	40.00	40.00	40.00	40.00	LVZMX
ISP Connection	100.00	100.00	100.00	100.00	100.00	100.00	100.00	LVP
Diverse Route								
Same Central								
Office	NA	500.00	485.00	465.00	452.00	440.00	418.00	DCOXX
Diverse Central								
Office/Shared CC) NA	1000.00	970.00	930.00	905.00	880.00	836.00	DCOSC
011100, Diarca 00		2000.00	570100	220.00	500.00	000.00	000100	20020
Diverse Central								
Office	NA	1250.00	1213.00	1163.00	1131.00	1100.00	1045.00	DCOVL
Redundant LAN								
Equipment	NA	500.00	500.00	500.00	500.00	500.00	500.00	RPE11
Customer Premise Redundant Power	NA	50.00	50.00	50.00	50.00	50.00	50.00	RSP12
Reduidant Power	NA	50.00	50.00	50.00	50.00	50.00	50.00	RSPIZ
Quality of Servi	.ce							
- 1.544 Mbps	NA	50.00	48.25	46.50	45.25	44.00	30.00	QOST1
- 3 Mbps	NA	70.00	67.55	65.10	63.35	61.60	42.50	QOST3
- 4.5 Mbps	NA	85.00	82.00	79.05	76.90	74.80	52.50	QOST4
- 6 Mbps	NA	120.00	115.80	111.60	108.60	105.60	60.00	QOST6
- 10 Mbps	NA	90.00	86.85	83.70	81.45	79.20	40.00	4106V
- 20 Mbps	NA NA	100.00	96.60	93.00 120.90	90.50 117.65	88.00	42.50 55.00	QOST2
- 50 Mbps - 100 Mpps	NA	130.00 180.00	125.85 174.60	120.90	162.90	114.40 158.40	75.00	QOST5 4107V
- 200 Mpps	NA	200.00	193.60	185.40	179.90	174.40	85.50	QOS20
- 300 Mpps	NA	220.00	212.60	203.40	196.90	190.40	94.50	QOS30
- 400 Mpps	NA	240.00	231.60	221.40	213.90	206.40	102.50	QOS40
- 500 Mpps	NA	260.00	250.60	239.40	230.90	222.40	109.00	QOS50
- 600 Mpps	NA	280.00	269.60	257.40	247.90	238.40	117.50	QOS60
- 700 Mpps	NA	300.00	288.60	275.40	264.90	254.40	122.50	QOS70
- 800 Mpps	NA	320.00	307.60	293.40	281.90	270.40	135.00	QOS80
- 900 Mpps	NA	340.00	326.60	311.40	298.90	286.40	142.50	QOS90
- 1 Gbps	NA	350.00	339.50	325.50	316.75	308.00	145.00	4108V
- 10 Gbps	NA	750.00	715.00	700.00	675.00	650.00	350.00	QOS10

Note 1: Nonrecurring charge applies when PVC is installed subsequent to a port installation. (N)

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6. <u>Wavelength Point-to-Po</u>	oint Service	Page	(N)
Wavelength Point	t-to-Point Service		
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6. Wavelength Point-to-Point Service (Cont'd)

6.1 General Description

(A) Basic Service Description

Wavelength Service is a Special Access Service that provides high volume optical transport utilizing multiplexing technology in a point-to-point circuit configuration. Multiple data signals are transmitted over the same fiber-optic cable at the time, using different wavelengths of light, in order to increase the amount of information that can be transferred. Each wavelength represents a transmission channel in the Wavelength system and is protocol independent of every other channel in the system. Rates and charges for Special Access Service are set forth in Section 4.5. Wavelength Service allows customers to combine their multiple data signals so they may be amplified and transported over one network. Wavelength Service provides dedicated capacity over a single pair of fiber in two directions that increases capacity without limiting customer-required data interfaces.

The following regulations will apply to Wavelength Service:

- (1) Wavelength Point-to-Point Service is available with a one-year minimum period, under 12-month, 24-month, 36-month, 48-month, 60-month and 84-month OPP as described in Section 4.4.8. When a service is discontinued prior to the expiration of the minimum period, termination charges are applicable for the remaining portion of the minimum period.
- (2) Installation will not begin until the customer has accepted the proposal by the Telephone Company.

(N)

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6. Wavelength Point-to-Point Service (Cont'd)

- 6.1 General Description (Cont'd)
 - (B) Service Provisioning
 - (2) Manner of Provisioning

Point-to-Point Service provides a customer a dedicated custom network. The network is in a architecture designed to provide increased reliability and functionality connecting multiple customer-designated locations and specified Telephone Company central Offices.

Customer provided equipment (CPE) must deliver the data signals for the Wavelength Service transport within the technical specifications for the subscribed data service. Technical specifications can be found in the Telcordia Technical Reference Publications and the following:

ANSI X379.3, Fibre Channel (also includes $FICON^{Tm}$ and ISC^{T} ANSI/IEEE 802.3, Fast Ethernet IEEE 802.3x and z, Gigabit Ethernet

(N)

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6. Wavelength Point-to-Point Service (Cont'd)

- 6.1 General Description (Cont'd)
 - (B) Service Provisioning (Cont'd)
 - (3) Limitations
 - (a) Optical amplifiers and/or regenerators may have to be added to a Wavelength Service subsequent to the initial installation.
 - (b) When any additional services are added, such installations may cause a service interruption to existing unprotected channels, or a protection switch on protected channels.
 - (c) Services with time-delay sensitive protocols have facility length limitations and may affect the design/availability of Wavelength Service. The Telephone Company will work cooperatively with the customer to determine if the desired services can operate between the customers designated premises. These services will not be available on Wavelengths nor between nodes where facility length limitations exceed the service specifications.
 - (d) Neither electrical interfaces nor optical multiplexing are available with Wavelength Service.
 - (e) Channel protection may not be available for all interface types.
 - (f) A protective channel provides protection for a single channel toward the network. It does not protect the channel against failure towards the customer interface. Protection reduces the maximum individual channel capacity of the system.

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(N)

6. Wavelength Point-to-Point Service (Cont'd)

- 6.1 General Description (Cont'd)
 - (B) Service Provisioning (Cont'd)
 - (4) Allowance for Service Interruptions

An interruption of service will start when an inoperative service is reported to the Telephone Company and end when the service is operative. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element as described in Section 2.4.3.

Any protected service interruptions greater than 2 consecutive seconds as a result of a failure on the protected portion of the circuit will result in a credit equal to one month's bill for the individual portto-port connection involved. If the interruption occurs on an unprotected portion of the circuit, no credit shall be allowed for an interruption of less than thirty (30) minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or major fraction thereof that the interruption continues.

The minimum configuration would be two ports either at a serving wire center or at a customer premises site. If the ports are not in a serving wire center, a central office management site for monitoring is required. An optical amplifier located at a serving wire center can be used as a monitoring site.

A combination of these configurations may be used in a network design depending on the customer's traffic pattern. Wavelength Point-to-Point Service configuration would be a port or ports at a customer premise site connecting through a Company central office to another customer premise site.

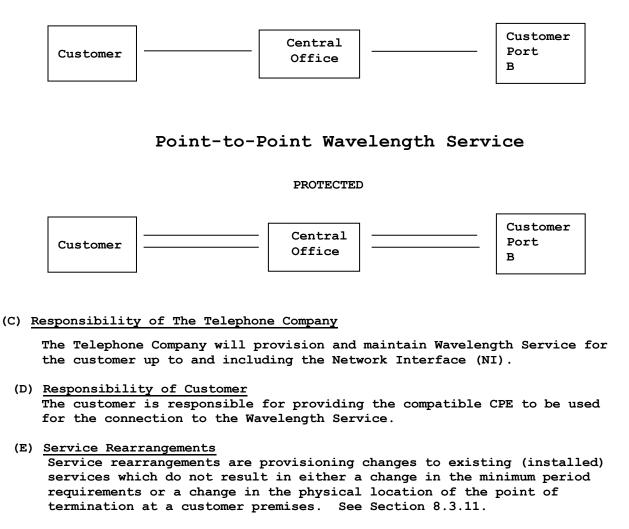
(N)

6. Wavelength Point-to-Point Service (Cont'd)

- 6.1 <u>General Description</u> (Cont'd)
 - (B) Service Provisioning (Cont'd)

Point-to-Point Wavelength Service

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(N)

6. Wavelength Point-to-Point Service (Cont'd)

6.2 Route Diversity

Wavelength Service is configured with diversely routed fiber whenever possible. Unprotected channels will be lost in the event of a fiber path failure on which the circuit is assigned. Equipment interfaces towards the customer are not protected.

Routing of fiber may be diversified from the customer premises to their serving wire center or alternate serving wire center as determined by the Telephone Company, and where facilities are available, to ensure that loop fibers follow separate paths to the serving wire center or alternate serving wire center. Special construction costs may be incurred to ensure diverse routing of the fiber. In addition, IOF (interoffice facility) fiber paths may be diversified to ensure that at any serving wire center drop node, the fibers do not egress and ingress at the same location. In cases where the serving wire center does not have multiple entrance fiber facilities, the section of the fiber from the manhole closest to the serving wire center will be routed within the same duct structure.

At the customer's request, additional protection to the customer premises nodes can be provided via dual entrance facilities. This special request will cause the customer to incur special construction cost. Without this special request, diverse fiber is provided to the manhole closest to the customer premises. The customer or building owner is responsible for providing the conduit.

In the case where dual entrance facilities are not established at the customer premises, collapsed facilities from the customer premises to the building equipment location are not diverse.

(N)

Effective:

6. Wavelength Point-to-Point Service (Cont'd)

6.3 Rate Regulations

(A) Rate Elements

There are two basic rate elements which apply to Wavelength Service. The Port/per circuit termination can be located at either a customer premises or the Telephone Company Central Office.

(1) Customer Premises Port/Per circuit termination

Provides for the termination of service at the customer's premises and presents the various selected ports to the customer. Applies per customer designated premises.

(2) Central Office Port/Per circuit termination

Provides for the termination of service at a Telephone Company Serving Wire Center. Applies per Node at the Telephone Company Serving Wire Center.

(N)

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ACCESS SERVICE

6. Wavelength Point-to-Point Service (Cont'd)

6.3 Rate Regulations (Cont'd)

(B) Wavelength Connection Capacity

Wavelength Service offers the following port interfaces:

(1) IBM Protocols:

FICON™"'(1.0625 and 2.125 Gbps) - A higher-speed evolution of ESCON™, enabling 1 Gbps connectivity among mainframes, storage devices and peripherals. FICON™ is limited to a maximum distance of 100 km and actual data throughput is distance sensitive.

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

(2) Other Protocols:

Fibre Channel (1.0625 and 2.125 Gbps) - an industry standard protocol used to interconnect Storage Area Networks (SANs). Fibre Channel is limited to a maximum distance of 100 km and actual throughput is distance sensitive.

Gigabit Ethernet - a version of Ethernet that allows data transmission rates of 1 Gbps.

10 Gigabit Ethernet - a version of Ethernet that allows data transmission rates of 10 Gbps.

10 Gigabit Ethernet (WAN-PHY) - a version of Ethernet that allows data transmission rates of 9.953 Gbps with a WAN-PHY only interface.

10 Gigabit Ethernet (LAN-PHY) - a version of Ethernet that allows data transmission rates of 10.3125 Gbps with a LAN-PHY only interface.

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

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6. Wavelength Point-to-Point Service (Cont'd)

6.3 Rate Regulations (Cont'd)

(C) Term Pricing Plan

The rates and charges set forth for Wavelength Service provide for the furnishing of service where suitable facilities are available. Where special construction of facilities is necessary, special construction charges may apply.

If Customer cancels, in whole or in part, any requested addition, rearrangement, relocation or other modification to Wavelength service prior to completion thereof, Customer will reimburse CBET for the actual expenses incurred by CBET in connection with such modification prior to CBET's receipt of notice of cancellation; provided, however, the amount of such reimbursement will not exceed the service, construction, installation, termination and other charges for which Customer would have otherwise been responsible.

Wavelength Service is available for a minimum term of 12 months or under a term payment plan of 12, 24, 36, 48, 60, or 84 months. If a Customer terminates a service, without cause, prior to the expiration of the term, the Customer will pay to CBET a termination charge equal to all remaining amounts due or to become due, including but not limited to all monthly charges for which Customer would have been responsible if the Customer had not terminated prior to the end of the applicable 12, 24, 36, 48, or 60-month term payment plan as shown in Section 4.4.8.

If Customer removes one or more ports from service prior to the expiration of the term hereof, Customer will pay to CBET a termination charge equal to all monthly charges for such element(s) for which Customer would have been responsible had Customer not removed such port(s).

(N)

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6. Wavelength Point-to-Point Service (Cont'd)

- 6.3 Rate Regulations (Cont'd)
 - (C) Term Pricing Plan (Cont'd)

Upon completion of the term payment plan contract the customer may renew their contract at the current, tariffed rates. If customer does not renew their contract prior to the expiration date and does not select to discontinue Wavelength Service, CBET will furnish Wavelength Service to the Customer as specified in the contract on a month-to-month basis at the current, monthly tariffed rates (which will be subject to company initiated rate changes).

If customer elects a new term payment plan, prior to the expiration of their current contract, the monthly charges will be adjusted to the current tariffed rates in effect at the time of renewal. There will be no credits or refunds made to the Customer for payments made under the previous contract term, but nonrecurring charges will not be reapplied. If Customer reduces the number of ports in service, then termination charges will be applied for the removed service. Customer may not elect a term payment plan that is shorter than the remainder of the current term payment plan.

(D) Wavelength Service Expedite Charge

When placing an Access Order for service(s) for which standard intervals exist, a customer may request a service date that is prior to the standard interval service date.

The customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If the Telephone Company agrees to provide service on an expedited basis, subject to limitations of personnel and material, an Expedited Order Charge will apply.

	USOC	Rate	
Expedite, per Order	CX4WX	\$ 2,100.00	(N)

Assistant Secretary, CBTS Technology Solutions LLC

6 <u>Wavelength Point-to-Point Service</u> (Cont'd)

6.4 Rates and Charges Cont'd)

(A) Ports Point-to Point Service

Per Port/Per circuit termination location

USOC	12 Month	24 Month	36 Month	48 Month	60 Month	84 Month
FICON ^{TM/1/} ISC Tm "		.0625 Gbps))			
- protected						
PROAD	5,250.00	5,092.50	4,882.50	4,725.00	4,620.00	2,900.00
- unprotecte						
UNPAD	2,625.00	2,546.25	2,441.25	2,362.50	2,310.00	1,450.00
FICON ^{TM/1/} ESCON	™ (2.125 Gł	ops)				
- protected	channel	-				
PROBD	5,916.66	5,735.00	5,506.66	5,325.00	5,190.00	3,650.00
- unprotecte	ed channel					
UNPBD	2,958.33	2,867.50	2,753.33	2,662.50	2,595.00	1,825.00
Fibre Channel		ps)				
 protected 						
PROCD	5,250.00	5,092.50	4,882.50	4,725.00	4,620.00	2,900.00
- unprotecte						
UNPCD	2,625.00	2,546.25	2,441.25	2,362.50	2,310.00	1,450.00
Fibre Channel (2.125 Gbps)						
- protected	• •	•				
PRODD	5,916.66	5,735.00	5,506.66	5,325.00	5,190.00	3,650.00
- unprotecte	ed channel					
UNPDD	2,958.33	2,867.50	2,753.33	2,662.50	2,595.00	1,825.00
SONET OC-192/0	DC-192c					
 protected 	channel					
PROED	11,250.00	10,875.00	10,500.00	10,125.00	9,750.00	7,000.00
- unprotecte						
UNPED	5,625.00	5,437.50	5,250.00	5,062.50	4,875.00	3,500.00 (N

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ACCESS SERVICE	
6 <u>Wavelength Point-to-Point Service</u> (Cont'd)	(N)
6.4 <u>Rates and Charges</u> Cont'd)	I
(A) Ports Point-to Point Service (Cont'd)	
Per Port/Per circuit termination location	
USOC 12 Month 24 Month 36 Month 48 Month 60 Month 84 Month	
1 Gbps Ethernet - protected channel	
PROFD 5,250.00 5,092.50 4,882.50 4,725.00 4,620.00 2,900.00 - unprotected channel	
UNPFD 2,625.00 2,546.25 2,441.25 2,362.50 2,310.00 1,450.00	
<pre>10 Gbps Ethernet - protected channel PROGD 11,250.00 10,875.00 10,500.00 10,125.00 9,750.00 7,000.00 - unprotected channel UNPGD 5,625.00 5,437.50 5,250.00 5,062.50 4,875.00 3,500.00</pre>	
40 Gbps OC768 & OTU3/STM 256 - protected channel PROHD 45,000.00 35,000.00 26,250.00 25,326.00 24,350.00 17,500.00 - unprotected channel UNPHD 22,500.00 17,500.00 13,125.00 12,663.00 12,175.00 8,750.00	
100 Gbps Ethernet - protected channel PROJD 99,500.00 55,000.00 39,400.00 38,000.00 36,500.00 26,250.00 - unprotected channel UNPJD 49,750.00 27,500.00 19,700.00 19,000.00 18,250.00 13,125.00	(N)

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7. <u>Point-to-Point Ethernet Service</u>

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ACCESS SERVICE

7. Ethernet Point-to-Point Service (Cont'd)

7.1 General Description

(A) Basic Service Description

Ethernet Point-to-Point Service is a SONET-based Special Access Service that provides high volume optical transport in a point-to-point circuit configuration betweenone customer-designated premises to another customerdesignated premises, or between a customer-designated premises, and a Telephone Company location.

The following regulations will apply to Ethernet Point-to-Point Service:

(1) Ethernet Point-to-Point Service is available with a one-year minimum period, under 12-month, 24-month, 36-month, 48-month, 60-month and 84-month OPP as described in Section 4.4.8. When a service is discontinued prior to the expiration of the minimum period, termination charges are applicable for the remaining portion of the minimum period.

(2) Installation will not begin until the customer has accepted the proposal by the Telephone Company.

(B) Service Provisioning

(1) Manner of Provisioning

Point-to-Point Ethernet Service provides a customer a dedicated custom network. The network is in a architecture designed to provide increased reliability and functionality connecting multiple customer-designated locations and specified Telephone Company central Offices.

- (2) Limitations
 - (a) When any additional services are added, such installations may cause a service interruption to existing channels.
 - (b) Services with time-delay sensitive protocols have facility length limitations and may affect the design/availability of Ethernet Point-to-Point Service. The Telephone Company will work cooperatively with the customer to determine if the desired services can operate between the customers designated premises. (N)

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7. Ethernet Point-to-Point Service (Cont'd)

7.1 General Description (Cont'd)

- (B) Service Provisioning (Cont'd)
 - (3) Allowance for Service Interruptions

An interruption of service will start when an inoperative service is reported to the Telephone Company and end when the service is operative. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element as described in Section 2.4.3.

Any service interruptions greater than 30 minutes will result in a credit equal to 1/1440 of the monthly charges for the facility for each period of 30 minutes or major fraction thereof that the interruption continues.

The minimum configuration would be two ports either at a serving wire center or at a customer premises site. If the ports are not in a serving wire center, a central office management site for monitoring is required. An optical amplifier located at a serving wire center can be used as a monitoring site.

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

(C) Responsibility of The Telephone Company

The Telephone Company will provision and maintain Ethernet Point-to-Point Service for the customer up to and including the Network Interface (NI).

(D) Responsibility of Customer

The customer is responsible for providing the compatible CPE to be used for the connection to the Ethernet Point-to-Point Service.

(E) Service Rearrangements

Service rearrangements are provisioning changes to existing (installed) services which do not result in either a change in the minimum period requirements or a change in the physical location of the point of termination at a customer premises. See Section 8.3.8. (N)

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7. Ethernet point-to-Point Service (Cont'd)

7.2 Route Diversity

Ethernet Point-to-Point Service is configured with diversely routed fiber whenever possible. Routing of fiber may be diversified from the customer premises to their serving wire center or alternate serving wire center as determined by the Telephone Company, and where facilities are available, to ensure that loop fibers follow separate paths to the serving wire center or alternate serving wire center. Special construction costs may be incurred to ensure diverse routing of the fiber. In addition, IOF (interoffice facility) fiber paths may be diversified to ensure that at any serving wire center drop node, the fibers do not egress and ingress at the same location. In cases where the serving wire center does not have multiple entrance fiber facilities, the section of the fiber from the manhole closest to the serving wire center will be routed within the same duct structure.

At the customer's request, additional protection to the customer premises nodes can be provided via dual entrance facilities. This special request will cause the customer to incur special construction cost. Without this special request, diverse fiber is provided to the manhole closest to the customer premises. The customer or building owner is responsible for providing the conduit.

In the case where dual entrance facilities are not established at the customer premises, collapsed facilities from the customer premises to the building equipment location are not diverse.

(N)

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7. Ethernet point-to-Point Service (Cont'd)

(N)

- 7.3 <u>Rate Regulations</u> (Cont'd)
 - (A) Rate Elements

There are two basic rate elements which apply to Ethernet Point-to-Point Service. The Port/per circuit termination can be located at either a customer premises or the Telephone Company Central Office. Each circuit will have 2 ports.

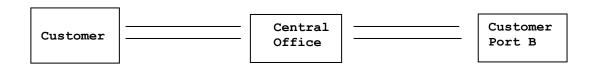
(1) Customer Premises Port/Per circuit termination

Provides for the termination of service at the customer's premises and presents the various selected ports to the customer. Applies per customer designated premises.

(2) Central Office Port/Per circuit termination

Provides for the termination of service at a Telephone Company Serving Wire Center. Applies per Node at the Telephone Company Serving Wire Center.

Ethernet Point-to-Point Service



(N)

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7. Ethernet Point-to-Point Service (Cont'd)

7.3 Rate Regulations (Cont'd)

(B) Term Pricing Plan

The rates and charges set forth for Ethernet Point-to-Point Service provide for the furnishing of service where suitable facilities are available. Where special construction of facilities is necessary, special construction charges may apply.

If Customer cancels, in whole or in part, any requested addition, rearrangement, relocation or other modification to Ethernet Point-to-Point service prior to completion thereof, Customer will reimburse CBT for the actual expenses incurred by CBT in connection with such modification prior to CBT's receipt of notice of cancellation; provided, however, the amount of such reimbursement will not exceed the service, construction, installation, termination and other charges for which Customer would have otherwise been responsible.

Ethernet Point-to-Point Service is available for a minimum term of 12 months or under a term payment plan of 12, 24, 36, 48, 60, or 84 months. If a Customer terminates a service, without cause, prior to the expiration of the term, the Customer will pay to CBT a termination charge equal to all remaining amounts due or to become due, including but not limited to all monthly charges for which Customer would have been responsible if the Customer had not terminated prior to the end of the applicable 12, 24, 36, 48, or 60-month term payment plan as shown in Section 4.4.8.

If Customer removes one or more ports from service prior to the expiration of the term hereof, Customer will pay to CBT a termination charge equal to all monthly charges for such element(s) for which Customer would have been responsible had Customer not removed such port(s).

(N)

(N)

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7. Ethernet point-to-Point Service (Cont'd)

7.3 Rate Regulations (Cont'd)

(B) Term Pricing Plan (Cont'd)

Upon completion of the term payment plan contract the customer may renew their contract at the current, tariffed rates. If customer does not renew their contract prior to the expiration date and does not select to discontinue Ethernet Point-to-Point Service, CBT will furnish Ethernet Point-to-Point Service to the Customer as specified in the contract on a month-to-month basis at the current 12 month tariffed rates (which will be subject to company initiated rate changes).

If customer elects a new term payment plan, prior to the expiration of their current contract, the monthly charges will be adjusted to the current tariffed rates in effect at the time of renewal. There will be no credits or refunds made to the Customer for payments made under the previous contract term, but nonrecurring charges will not be reapplied. If Customer reduces the number of ports in service, then termination charges will be applied for the removed service. Customer may not elect a term payment plan that is shorter than the remainder of the current term payment plan.

(C) Ethernet Point-to-Point Service Expedite Charge

When placing an Access Order for service(s) for which standard intervals exist, a customer may request a service date that is prior to the standard interval service date.

The customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If the Telephone Company agrees to provide service on an expedited basis, subject to limitations of personnel and material, an Expedited Order Charge will apply.

	USOC	Rate
Expedite, per Order	CX4GX	\$ 2 <u>,100</u> .00

(N)

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7 Ethernet Point-to-Point Service (Cont'd)

7.4 Rates and Charges Cont'd)

(A) Ports Point-to Point Service

Per Port/Per circuit termination location

Monthly Rates							
Type of Service	12 Mo.	24 Mo.	36 Mo.	48 Mo.	60 Mo.	84 Mo.	USOC
50 Mbps Ethernet	2000.00	1250.00	1175.00	1138.00	1108.00	715.00	LVZFA
et impo nonernet							
100 Mbps Ethernet	2400.00	1635.00	1493.00	1478.00	1445.00	915.00	LVZFB
150 Mbps Ethernet	2475.00	1705.00	1559.00	1541.00	1508.00	970.00	LVZFC
200 Mbps Ethernet	2550.00	1775.00	1625.00	1605.00	1570.00	1025.00	LVZFD
250 Mbps Ethernet	2625.00	1844.00	1691.00	1669.00	1632.00	1070.00	LVZFE
300 Mbps Ethernet	2700.00	1914.00	1756.00	1733.00	1694.00	1115.00	LVZFF
350 Mbps Ethernet	2775.00	1983.00	1822.00	1796.00	1756.00	1155.00	LVZFG
400 Mbps Ethernet	2850.00	2053.00	1888.00	1860.00	1818.00	1195.00	LVZFH
450 Mbps Ethernet	2925.00	2122.00	1953.00	1924.00	1879.00	1230.00	LVZFJ
500 Mbps Ethernet	3000.00	2191.00	2019.00	1988.00	1941.00	1265.00	LVZFK
550 Mbps Ethernet	3075.00	2261.00	2084.00	2051.00	2003.00	1305.00	LVZFL
600 Mbps Ethernet	3150.00	2330.00	2150.00	2115.00	2065.00	1345.00	LVZFM
650 Mbps Ethernet	3225.00	2399.00	2216.00	2179.00	2127.00	1385.00	LVZFN
700 Mbps Ethernet	3300.00	2469.00	2281.00	2243.00	2189.00	1425.00	LVZFO
750 Mbps Ethernet	3375.00	2538.00	2347.00	2306.00	2251.00	1473.00	LVZFP
800 Mbps Ethernet	3450.00	2608.00	2413.00	2370.00	2313.00	1520.00	LVZFQ
850 Mbps Ethernet	3525.00	2677.00	2478.00	2434.00	2374.00	1558.00	LVZFR
900 Mbps Ethernet	3600.00	2746.00	2544.00	2498.00	2436.00	1595.00	LVZFS
950 Mbps Ethernet	3638.00	2810.00	2611.00	2561.00	2502.00	1608.00	LVZFT
1 Gbps Ethernet	3675.00	2874.00	2679.00	2625.00	2568.00	1620.00	LVZFU

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8. 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.

8.1 Additional Engineering

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

(A) A customer requests additional technical information after the Company has already provided the technical information normally included on the Design Layout Report (DLR)

The Company will notify the customer that additional engineering Charges will apply before any additional engineering is undertaken.

8.1.1 Charges For Additional Engineering

The charges for additional Engineering are as follows:

		First Half	Each Additional
		Hour or	Half Hour or
Additional Engineering	g	Fraction	Fraction
Periods	USOC	Thereof	Thereof
<pre>(A) Basic Time, normally scheduled working hours#</pre>	AEH	\$ 100.00	\$ 75.00

If more than one engineer is involved with the same additional engineering project, the total amount of time for all engineers involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.

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(N)

ACCESS SERVICE

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

8.1 Additional Engineering (Cont'd)

8.1.1 Charges for Additional Engineering (Cont'd)

	First Half	Each Additional
	Hour or	Half Hour or
Additional Engineering	Fraction	Fraction
Periods USOC	Thereof	Thereof

B)	Overtime, outside			
	of normally scheduled	d		
	working hours#	AEH	\$ 100.00	\$ 75.00

8.2 Additional Labor

Additional labor is that labor requested by the customer on a given service and agreed to by the Company as set forth in 8.2.1 through 8.2.5 following. The Company will notify the customer that additional labor charges as set forth in 8.2.6 following will apply before any additional labor is undertaken.

8.2.1 Overtime Installation

Overtime installation is that Company installation effort outside of normally scheduled working hours.

8.2.2 Overtime Repair

Overtime repair is that Company maintenance effort performed outside of normally scheduled working hours.

8.2.3 Stand by

Stand by includes all time in excess of one-half (1/2) hour during which Company personnel stand by to make cooperative tests with a customer to verify facility repair on a given service.

(N)

If more than one engineer is involved with the same additional engineering project, the total amount of time for all engineers involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.

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ACCESS SERVICE

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

8.2 <u>Additional Labor</u> (Cont'd)

8.2.4 Testing and Maintenance with Other Telephone Companies

Testing and Maintenance with Other Telephone Companies is that additional testing, maintenance or repair of facilities which connect to facilities of other telephone companies, which is in addition to normal effort required to test, maintain or repair facilities provided solely by the Company.

8.2.5 Other Labor

Other labor is that additional labor not included in 8.2.1 through 8.2.4 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.

8.2.6 Charges For Additional Labor

The charges for additional labor are as follows:

	First Half	Each Additional
	Hour or	Half Hour or
	Fraction	Fraction
USOC	Thereof	Thereof
	USOC	Hour or Fraction

(A) Installation or Repair

work day#

 Overtime, outside of normally scheduled working how 	ırs		
on a scheduled work day#	ALH \$	60.00*	\$60.00*
- Premium Time, outside of scheduled			

74.00*

If more than one technician is involved with the same additional labor project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.

ALH

* A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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74.00*

(N)

ACCESS SERVICE

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

8.2 Additional Labor (Cont'd)

8.2.6 Charges For Additional Labor (Cont'd)

Additional Labor Periods USOC	Hour or Fraction	First Billable Half Hour or Fraction Thereof	Each Additional Half Hour or Fraction Thereof
(B) Stand by			
- Basic time, normally scheduled working hours# ALT	None	\$ 50.00*	\$ 50.00*
 Overtime, outside of normally scheduled working hours on a scheduled work day# ALT 	-	60.00*	60.00*
- Premium Time,			
outside of scheduled work day# ALT	-	74.00*	74.00*

- # If more than one technician is involved with the same additional labor project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Billable Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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(N)

ACCESS SERVICE

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

8.2 Additional Labor (Cont'd)

8.2.6 Charges For Additional Labor (Cont'd)

The charges for additional labor are as follows:

Ado	ditional Labor Periods	USOC	First Half Hour or Fraction Thereof	Each Additional Half Hour or Fraction Thereof
(C)	Testing and Maintenance with othe telephone companies, or Other Labor	r		
	 Basic time, normally scheduled working hours# 	ALK	\$ 50.00*	\$ 50.00*
	 Overtime, outside of normall scheduled working on a scheduled work day# 	-	60.00*	60.00*
	 Premium Time, outside of schedul work day# 	ed ALK	74.00*	74.00*

If more than one technician is involved with the same additional labor project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.

* A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE

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

8.3 Miscellaneous Services

- 8.3.1 Maintenance of Service
 - (A) When a customer reports a trouble to the Company for clearance and no trouble is found in the Company's facilities, the customer shall be responsible for payment of a Maintenance of Service charge for the period of time from when Company personnel are dispatched to when the work is completed. Failure of Company personnel to find trouble in Company facilities will result in no charge if the trouble is actually in those facilities, but not discovered at the time.
 - (B) The customer shall be responsible for payment of a Maintenance of Service charge when the Company dispatches personnel and the trouble is in equipment or communications systems provided by other than the Company.

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 Mainte	nance of		as follows: Each Additional Half Hour or
	Maintenance of Service		Fraction	Fraction
	Periods	USOC	Thereof	Thereof
	 Basic time, normally scheduled working hours# 	MVV	\$50.00	\$50.00

If more than one technician is involved with the same trouble report, the total amount of time for all technicians dispatched involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.

First Walf Fach Additional

ACCESS SERVICE

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

8.3 Miscellaneous Services (Cont'd)

- 8.3.1 <u>Maintenance of Service</u> (Cont'd)
 - (C) (Cont'd)

Maintenance of Service Periods	USOC	First Half Hour or Fraction Thereof	Each Additional Half Hour or Fraction Thereof
 Overtime, outside of normally scheduled working hou on a scheduled work day# 	ırs MVV	\$ 60.00*	\$ 60.00*
 Premium Time outside of scheduled work day# 	MVV	74.00*	74.00*

- # If more than one technician is involved with the same trouble report, the total amount of time for all technicians dispatched involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. (N)

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

8.3 Miscellaneous Services (Cont'd)

8.3.2 <u>Testing Services</u>

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 8.3.2(C) following. Other testing services provided by the Company in association with Access Services are furnished at no additional charge. These other testing services are described in 3.1.4 and 4.1.4 preceding.

Testing services are normally provided by Company personnel at Company locations. However, provisions are made in (A)(5) and (B)(1) and (2) following for a customer to request Company personnel to perform testing services at the customer's premises.

The offering of Testing Services under this section of the tariff is made subject to the availability of the necessary qualified personnel and test equipment at the various test locations mentioned in (A), (B) and (C) following:

(A) Switched Access Service

Testing Services for Switched Access are comprised of (a) tests which are performed during the installation of a Switched Access Service, 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 the Company on a regular basis, e.g., monthly which result in the measurement of Switched Access Service. Scheduled tests may be done on an automatic basis (no Company or customer technicians

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (A) Switched Access Service (Cont'd)

involved), on a cooperative basis (Company technician(s) involved at Company office(s) and customer technician(s) involved at customer's premises), or a manual basis (Company technician(s) involved at Company office(s) and at customer's premises).

Nonscheduled tests are performed by the Company "on demand", which result in the measurement of Switched Access Services. Nonscheduled tests may involve Company technicians at Company offices and at the customer's premises.

(1) Additional Cooperative Acceptance Testing

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

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

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

ACCESS SERVICE

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

8.3 Miscellaneous Services (Cont'd)

8.3.2 Testing Services (Cont'd)

- (A) <u>Switched Access Service</u> (Cont'd)
 - (2) Automatic Scheduled Testing

Automatic Schedules Testing (AST) of Switched Access Services 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 Cmessage noise tests and annual balance test. However, the customer may specify a more frequent schedule of tests. In addition to the loss/noise/ balance tests, the IC may also order, at additional charges, gain-slope and C-notched noise testing.

The Company will provide a monthly AST 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.

(N)

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (A) Switched Access Service (Cont'd)
 - (3) Cooperative Scheduled Testing

Cooperative Scheduled Testing (CST) of Switched Access Services (Features Groups B, and D and Directory Access Service not routed through an access tandem), where the Company provides a technician at its office(s) and the customer provides a technician at its premises, with suitable test equipment to perform the required tests, will consist of quarterly loss and C-message noise tests, and annual balance tests. However, the customer may specify a more frequent schedule of tests. In addition to the loss/noise/balance measurements, the customer may also order, at additional charges, gain-slope and C-notched noise testing.

The Company will provide, on a quarterly basis, a CST 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.

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

- 8.3 Miscellaneous Services (Cont'd)
- 8.3.2 Testing Services (Cont'd)
 - (A) Switched Access Service (Cont'd)
 - (4) Manual Scheduled Testing

Manual Scheduled Testing (MST) of Switched Access Services (Feature Groups D and Directory Access Service not routed through an access tandem), where the Company provides a technician at its office(s) and at the customer's premises, will consist of quarterly loss and C-message noise tests, and annual balance tests. 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.

The Company will provide, on a quarterly basis, an MST 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.

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

- 8.3 Miscellaneous Services (Cont'd)
- 8.3.2 Testing Services (Cont'd)
 - (A) Switched Access Service (Cont'd)
 - (5) Nonscheduled Testing

Nonscheduled Testing (NST) of Switched Access Services is where:

- the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent ("automatic testing"), or
- the Company provides a technician at its office(s) and the customer provides a technician at its premises, with suitable test equipment to perform the required test ("cooperative testing"), or
- the Company provides a technician at its office(s), and/or at the customer's premises with suitable test equipment to perform the required tests ("manual testing")

Nonscheduled Tests may consist of any tests, e.g., loss, noise, slope, envelope delay, which the customer require.

- (6) Obligations of the Customer
 - (A) The customer shall provide the Remote Office Test Line priming data to the Company, as appropriate, to support AST as set forth in 8.2.5(a) (2) preceding or NST as set forth in 8.2.5(A) (5) preceding.
 - (B) The customer shall make the facilities to be tested available to the Company at times mutually agreed upon.

(N)

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (B) Special Access Service

The Company will, at the request of a customer, provide assistance in performing specific tests requested by the customer.

(1) Nonscheduled Testing (NST)

When a customer provides a technician at its premises, with suitable test equipment to perform the required tests, the Company will provide a technician at its office for the purpose of conducting Nonscheduled Testing. At the customer's request, the Company will provide a technician at the customer's premises. Nonscheduled tests may consist of any tests, e.g., loss, noise, slope, envelope delay, which the customer may require.

(2) Obligations of the Customer

When the customer subscribes to Testing Services as set forth in this section, the customer shall make the facilities to be tested available to the Company at times mutually agreed upon.

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges
 - (1) Switched Access
 - (a) Additional Cooperative Acceptance Testing

Testing Periods USO	First Half Hour or Fraction C Thereof	Each Additional Half Hour or Fraction <u>Thereof</u>
Basic Time, normally scheduled working hours# UBC	X+ \$ 50.00*	\$ 50.00*
Overtime, outside of normally scheduled working hour on a scheduled		CO 00+
work day# UBC	X+ 60.00*	60.00*
Premium Time, outside of scheduled	VI 74.00+	74 00+
work day# UBC	X+ 74.00*	74.00*

- # If more than one technician is involved with the same testing project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. (N)

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Ser</u>vices (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) Switched Access (Cont'd)
 - (b) Automatic Scheduled Testing (AST)

The three tests as set forth in (I) following represent the minimum offering, i.e., an order for testing must, at a minimum, consist of twelve 1004 Hz Tests per transmission path, twelve C-Message Noise Tests per transmission path and one Return Loss (Balance) Test per transmission path, per year. The Additional Tests as set forth in (II) following may be ordered by the customer, at additional charges, 60 days prior to the start of the customer prescribed schedule. The customer also may specify a more frequent schedule of tests 60 days prior to the start of the customer prescribed schedule.

TO F	irst Point		Monthly	
of	Switching	USOC	Rates	
(I)	Basic Tests #			
	1004 Hz Loss Tes performed within one year period, per test ordered per transmission	a ,		
	path	UBGX+	\$0.10	,

Subject to a one year minimum contract period, and annually thereafter.

ACCESS SERVICE

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

- 8.3 Miscellaneous Services (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) <u>Switched Access</u> (Cont'd)
 - (b) Automatic Scheduled Testing (AST) (Cont'd)

To F	irst Point		Monthly	
of	Switching	USOC	Rates	
(I)	Basic Tests # (Co	ont'd)		
	C-Message Noise T performed within one year period, per test ordered, per transmission	a		
	path	UBGX+	\$0.10	
	Return Loss (Balance) Tests performed within one year period, per test ordered, per transmission path		0.10	
	Additional Tests			
	Gain-Slope Tests performed within one year period, per test ordered, per transmission			
	path	UBGX+	0.10	(N)

Subject to a one year minimum contract period, and annually thereafter.

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) <u>Rates and Charges</u> (Cont'd)
 - (1) <u>Switched Access</u> (Cont'd)
 - (b) Automatic Scheduled Testing (AST) (Cont'd)

To First Point		Monthly	
of Switching	USOC	Rates	
(II) Additional Tests	(Cont'd)		
C-Notched Noise I performed within one year period, per test ordered, per transmission	a		
path	UBGX+	\$0.10	
(III) Example			
A customer schedu Tests, 13 C-Messa 2 Return Loss Tes a year. The char as follows:	age Noise Te sts on one t	sts and runk for	
$13 \times .10 = 1.3 +13 x .10 = 1.3 + 2 x .10 =2	30		
\$2.8	80 per month	, per trunk	(N)

Effective:

ACCESS SERVICE

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

- 8.3 Miscellaneous Services (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) Switched Access (Cont'd)
 - (c) Cooperative Scheduled Testing (CST)

The three tests as set forth in (I) following represent the minimum offering, i.e., an order for testing must, at a minimum, consist of four 1004 Hz Loss Tests per transmission path, four C-Message Noise Tests per transmission path and one Return Loss (Balance) Test per transmission path, per year. The Additional Tests as set forth in (II) following may be ordered by the customer, at additional charges, 60 days prior to the start of the customer prescribed scheduled. The customer also may specify a more frequent schedule of tests 60 days prior to the start of the customer prescribed schedule.

	irst Point Switching	USOC	Monthly <u>Rates</u>	
(I)	Basic Tests #			
	1004 Hz Loss Tests performed within a one year period, per test ordered, per transmission path		\$1.00	(N)

Subject to a one year minimum contract period, and annually thereafter.

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) Switched Access (Cont'd)
 - (c) Cooperative Scheduled Testing (CST) (Cont'd)

-	rst Point Switching	USOC	Monthly Rates	
(I)	Basic Tests # ((Cont'd)		
	C-Message Noise performed withi one year period per test ordere per transmissio	.n a l, ed,		
	path	UBSX+	\$0.85	
	Return Loss (Balance) Tests performed withi one year period per test ordere per transmission path	na l, ed,	1.70	
(II)	Additional Test	s		
	Gain-Slope Test performed withi one year period per test ordere	.n a l, ed,		
	per transmissic	UBSX+	1.30	(N)

Subject to a one year minimum contract period, and annually thereafter.

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ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) <u>Rates and Charges</u> (Cont'd)
 - (1) <u>Switched Access</u> (Cont'd)
 - (c) <u>Cooperative Scheduled Testing (CST)</u> (Cont'd)

	st Point Monthly witching <u>USOC</u> <u>Rates</u>	
(II)	Additional Tests (Cont'd)	
	C-Notched Noise Tests performed within a one year period, per test ordered, per transmission path UBSX+ \$0.85	
(III)	Example A customer schedules 6 1004 Hz Loss Tests, 6 C-Message Noise Tests and 4 Return Loss Tests on one trunk for a year. The charges will be computed as follows:	
	$6 \times 1.00 = \$ 6.00$ +6 x .85 = 5.10 +4 x 1.70 = <u>6.80</u> \$17.90 per month, per trunk	

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ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) Switched Access (Cont'd)
 - (d) Manual Scheduled Testing (MST)

The three tests as set forth in (I) following represent the minimum offering, i.e., an order for testing must, at a minimum, consist of four 1004 Hz Loss Tests per transmission path, four C-Message Noise Tests per transmission path and one Return Loss (Balance) Test per transmission path, per year. The Additional Tests as set forth in (II) following may be ordered by the customer, at additional charges, 60 days prior to the start of the customer prescribed schedule. The customer also may specify a more frequent schedule of tests 60 days prior to the start of the customer prescribed schedule.

To First Point			Monthly
of	Switching	USOC	Rates
(I)	Basic Tests #		
	1004 Hz Loss Test performed within one year period, per test ordered, per transmission	a	
	path	UBMX+	\$1.43

Subject to a one year minimum contract period, and annually thereafter.

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(N)

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(N)

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) Switched Access (Cont'd)
 - (d) Manual Scheduled Testing (MST) (Cont'd)

	rst Point Switching	USOC	Monthly Rates
(I)	Basic Tests # ((Cont'd)	
	C-Message Noise performed within one year period per test ordered per transmission path	n a , 1,	\$1.27
	Return Loss (Balance) Tests performed within one year period per test ordered per transmission path	n a , 1,	2.76
(II)	Additional Tests Gain-Slope Tests performed within one year period per test ordered per transmission	s n a , 1,	
	path	UBMX+	2.09

Subject to a one year minimum contract, and annually thereafter.

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(N)

ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (1) Switched Access (Cont'd)
 - (d) <u>Manual Scheduled Testing (MST)</u> (Cont'd)

	est Point Witching	USOC	Monthly Rates
(II)	Additional Tests	(Cont'd)	
	C-Notched Noise ? performed within one year period, per test ordered per transmission path	a	\$1.27
(III)	Example		
	See (c)(III) pred	ceding.	

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ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) <u>Rates and Charges</u> (Cont'd)
 - (1) <u>Switched Access</u> (Cont'd)
 - (e) Nonscheduled Testing (NST)

Automatic Testing:

To First Point of Switching	USOC	Nonrecurring Charges	
1004 Hz Loss, per test performed	USCX+	\$ 27.52	
C-Message Noise, per test performed	USCX+	27.52	
Return Loss (Balance) per test performed	USCX+	27.52	
Gain-Slope per test performed	USCX+	27.52	
C-Notched Noise, per test performed	USCX+	27.52	 (N)

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Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) 8. (N) 8.3 Miscellaneous Services (Cont'd) 8.3.2 Testing Services (Cont'd) (C) Rates and Charges (Cont'd) (1) Switched Access (Cont'd) (e) Nonscheduled Testing (NST) (Cont'd) Cooperative Testing: Each First Half Additional Half Hour Hour or Fraction or Fraction Thereof Testing Periods USOC Thereof Basic Time, normally scheduled \$ 50.00* working hours# USSX+ \$ 50.00* Overtime, outside of normally scheduled working hours on a scheduled work day# USSX+ 60.00* 60.00* Premium Time, outside of scheduled USSX+ 74.00* 74.00* (N) work day#

- # If more than one technician is involved with the same testing project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE

Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) 8. (N) 8.3 Miscellaneous Services (Cont'd) 8.3.2 Testing Services (Cont'd) (C) Rates and Charges (Cont'd) (1) Switched Access (Cont'd) (e) Nonscheduled Testing (NST) (Cont'd) Manual Testing: First Half Each Additional Hour or Fraction Half Hour or Thereof Fraction Thereof Testing Periods USOC Basic Time, normally scheduled working hours# USMX+ \$ 50.00* \$ 50.00* Overtime, outside of normally scheduled working hours on a scheduled work day# USMX+ 60.00* 60.00* Premium Time, outside of scheduled USMX+ 74.00* 74.00* work day# (N)

- # If more than one technician is involved with the same additional testing project the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) Rates and Charges (Cont'd)
 - (2) Special Access
 - (a) Additional Cooperative Acceptance Testing (ACAT)

Testing Periods USOC	First Half Hour or Fraction Thereof	Each Additional Half Hour or Fraction Thereof	
Basic Time, normally scheduled working hours# SNTX+	\$ 50.00*	\$ 50.00*	
Overtime, outside of normally scheduled working hours on a scheduled work day# SNTX+	60.00*	60.00*	
Premium Time, outside of scheduled work day# SNTX+	74.00*	74.00*	(N)

- # If more than one technician is involved with the same testing project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE

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

- 8.3 <u>Miscellaneous Services</u> (Cont'd)
 - 8.3.2 <u>Testing Services</u> (Cont'd)
 - (C) <u>Rates and Charges</u> (Cont'd)
 - (2) <u>Special Access</u> (Cont'd)
 - (b) Nonscheduled Testing (NST)

Testing Periods USOC	Fraction	Each Additional	<u>e</u>
Basic Time, normally scheduled working hours# SNOX+	\$ 50.00*	\$ 50.00*	
Overtime, outside of normally scheduled working hours on a scheduled work day# SNOX+	60.00*	60.00*	
Premium Time, outside of scheduled work day# SNOX+	74.00*	74.00*	(N)

- # If more than one technician is involved with the same testing project, the total amount of time for all technicians involved will be aggregated prior to the distribution of time between the "First Half Hour or Fraction Thereof" and "Each Additional Half Hour or Fraction Thereof" rate categories.
- * A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

10. Cincinnati Bell Ethernet Service Silver

(N)

10.1 <u>Service Description</u>

Cincinnati Bell Ethernet Service Silver (CBES Silver)is a port based, point-to-point Ethernet service that allows customers to either aggregate multiple Operator Virtual Connections (OVCs) or Ethernet Virtual Connections (EVCs) onto a single ENNI, or to transparently connect two sites with a single OVC/EVC. These services are more completely described in MEF Technical Specifications 33 (Access EPL) and 6.2 (EPL).

10.2 Service Provisioning

CBT will provide CBES Silver with the following Committed Information Rates (CIRs): 1.5 Mbps, 3 Mbps, 4.5 Mbps, 5 Mbps, 6 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 200 Mbps, 300 Mbps, 400 Mbps, 500 Mbps, 600 Mbps, 700 Mbps, 800 Mbps, 900 Mbps, and 1 Gbps.

UNI interfaces are available IEEE Ethernet Specifications of 10 Mbps, 100 Mbps and 1 Gbps. Any available increment of CIR can be ordered to any capacity UNI, as long as the CIR is less than or equal to the capacity of the UNI.

ENNI interfaces as described in MEF 33 are available at 1Gbps and 10Gbps IEEE specifications.

CBES Silver will be available 24 hours per day, 7 days per week except as required to update, enhance, maintain and/or repair CBES Silver service. CBT reserves the right to perform these tasks, as needed, during off-peak hours, normally on Sundays from 12:00 a.m. to 6:00 a.m.

At the request of Customer CBAD will provision a CBES Silver with the specified CIR between a single UNI and a specified ENNI. The aggregated volume of CIR originating from individual UNIs may not exceed the VC specification of the ENNI. The ENNI may not be oversubscribed.

(N)

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Effective:

10. Cincinnati Bell Ethernet Service Silver

10.2 <u>Service Provisioning (Cont)</u>

The Company will use its best efforts to repair any inoperable CBES Silver VC within 4 hours after Customer has notified CBT that such VC is inoperable. If such VC remains inoperable for more than 8 hours after Customer has notified the Company that such VC is inoperable, the Company will credit Customer's account for an amount equal to one-thirtieth (1/30) of the applicable monthly charge for such VC. The same credit will apply for each additional 8-hour period that the VC remains inoperable. The total amount of all credits for any one inoperable VC will not exceed the monthly VC charge for such inoperable VC. The credit referred to herein shall be the Company's entire liability and Customer's exclusive remedy for any damages resulting from such inoperable VC.

Without the prior written consent of the Company, Customer will not access, or attempt to access, any equipment or facilities furnished by the Company in connection with this Tariff. Customer will indemnify and hold harmless the Company, its officers, directors, employees and agents, from and against any loss or expense, of whatever nature, arising out of any unauthorized access to any equipment or facilities furnished by the Company in connection with this Tariff.

All equipment and facilities used by the Company in providing CBES Silver hereunder will remain the sole property of the Company, whether or not attached to or embedded in reality, unless otherwise agreed to in writing by the parties with respect to specific equipment.

Customer agrees that any technical, financial or business information of the Company furnished to Customer in connection with this Agreement is confidential and proprietary to CBT, shall remain the property of the Company at all times and shall be returned to the Company upon request.

10.3 Service Measurements

The following	service	measurements apply to CBES Silver:
Latency Round	Trip	Less than 20 ms RTT
Jitter		Less than 10 ms RTT
Data Delivery	Ratio	Greater than 99.99%
Availability		Greater than 99.99%

(N)

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10. Cincinnati Bell Ethernet Service Silver

10.4 Obligations of the Customer

The Company will not be responsible for damages, malfunctions or failures caused by (a) Customer's failure to follow any operation or maintenance instructions provided by the Company to Customer; (b) Customer's repair, modification to or relocation of equipment used to provide service hereunder, or attachment of equipment not approved by the Company; and (c) abuse, misuse or negligent acts of Customer. Customer may request the Company to perform repair service for Customer in such instances on a time-and-materials basis.

Customer will furnish, at its expense, such space, electrical power and environmental conditioning at Customer's premises as the Company may reasonably require in connection with performing its obligations hereunder. Customer will permit the Company reasonable access to Customer's premises, in accordance with Customer's normal security procedures, in connection with providing service hereunder.

Customer shall be responsible for insuring that the operating characteristics of such equipment and facilities are compatible with CBES Silver and conform to the Technical Reference Specifications furnished by the Company to Customer in connection with this Tariff.

Customer will cause its electrical signals at the Demarcation Point to conform to the applicable. Any additional equipment or facilities necessary to comply with such standards shall be furnished by Customer at its expense.

Prior to requesting repair service from the Company, Customer will use Its best efforts, including but not limited to performing reasonable diagnostic tests, to verify whether any trouble with CBES Silver is a result of the Customer's equipment or facilities. Customer shall be responsible for any such trouble resulting from the Customer's equipment or facilities. Customer will cooperate with any joint testing of CBES Silver reasonably requested by the Company.

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Effective:

Assistant Secretary, CBTS Technology Solutions LLC

(N)

10. Cincinnati Bell Ethernet Service Silver

(N)

10.5 Rate Regulations

The rates and charges set forth for CBES Silver provide for the furnishing of service where suitable facilities are available. Where special construction of facilities is necessary, special construction charges may apply.

At locations where Customer provides power to the Company, the Company is not responsible for out of service conditions caused by power outages.

Customer shall pay the Company for CBES Silver at the applicable monthly rate for the type of CBES Silver, selected by the Customer, as indicated in Section 10.7. In addition, Customer shall pay to the Company the applicable per VC nonrecurring charge set forth in Section 10.7.

If Customer cancels, in whole or in part, any requested addition, rearrangement, relocation or other modification to CBES Silver prior to completion thereof, Customer will reimburse the Company for the actual expenses incurred by the Company in connection with such modification prior to the Company's receipt of notice of cancellation; provided, however, the amount of such reimbursement will not exceed the service, construction, installation, termination and other charges for which Customer would have otherwise been responsible.

CBES Silver is available for a minimum term of 12 months or under a term payment plan of 24, 36, 48 or 60 months. If a Customer terminates a service, without cause, prior to the expiration of the term, the Customer will pay to the Company a termination charge equal to all remaining amounts due or to become due, including but not limited to all monthly charges for which Customer would have been responsible if the Customer had not terminated prior to the end of the applicable 12, 24, 36, 48 or 60-month term payment plan.

If Customer removes one or more physical interfaces from service prior to the expiration of the term hereof, Customer will pay to the Company a termination charge equal to all monthly charges for such VC(s) for which Customer would have been responsible had Customer not removed such physical interfaces.

(N)

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CBTS TECHNOLOGY SOLUTIONS LLC

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ACCESS SERVICE

10. Cincinnati Bell Ethernet Service Silver

10.5 <u>Rate Regulations</u> (Con't)

Upon completion of the term payment plan contract the customer may renew their contract at the current, tariffed rates. If customer does not renew their contract prior to the expiration date and does not elect to discontinue CBES Silver, the Company will furnish CBES Silver to the Customer as specified in the contract on a month-to-month basis at the current, monthly tariffed rates (which will be subject to company initiated rate changes).

If customer elects a new term payment plan, prior to the expiration of their current contract, the monthly charges will be adjusted to the current tariffed rates in effect at the time of renewal. There will be no credits or refunds made to the Customer for payments made under the previous contract term, but nonrecurring charges will not be reapplied. If Customer reduces the number of VCs in service, then termination charges will be applied for the removed service. Customer may not elect a term payment plan that is shorter than the remainder of the current term payment plan.

Within like service types, customer may upgrade to a higher speed service or downgrade to a lower speed service on a VC for VC basis without incurring termination charges.

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(N)

10. Cincinnati Bell Ethernet Service Silver

10.5 <u>Rate Regulations</u> (Con't)

Customer may move the location of its CBES Silver to a location where sufficient central office capacity and outside plant facilities are available and retain the current monthly rates, but initial nonrecurring charges will be reapplied. The termination charges specified in Section 4.4.8 are applicable if the Customer terminates because of a move to a location where sufficient central office capacity or outside plant facilities are not available.

Customer has the option of purchasing route Diversity. There are 4 types:

- Diverse Route Same Central Office. Single entrance to the Customer premise.
- Diverse Entrances Same Central Office. Separate entrances to the Customer premise.
- Diverse Central Office Single entrance to the Customer premise.
- Diverse Central Office Separate entrances to the Customer premise.

Special Construction charges may apply.

By default, CBES Silver is an unprotected service, particularly as it relates to the last mile of access.

10.6 Expedite Charge

When placing an Access Order for service(s) for which standard intervals exist, a customer may request a service date that is prior to the standard interval service date.

The customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If the Company agrees to provide service on an expedited basis, subject to limitations of personnel and material, an Expedited Order Charge will apply.

	USOC	Rate	
Expedite, per Order	CX4JX	\$ 1,270.00	(N)

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Assistant Secretary, CBTS Technology Solutions LLC

10. Cincinnati Bell Ethernet Service Silver

10.7 Rates and Charges

Type of Service	<u>Nonrec</u> Charge	Monthly	<u>12 Mo.</u>	Month	ly Rates <u>36 Mo</u> .	<u>48 Mo.</u>	<u>60 Mo.</u>	USOC
Physical Interfac /Circuit	e							
10 Mbps 100 Mbps	N/A N/A	50.00 100.00	50.00 100.00	50.00 100.00	50.00 100.00	50.00 100.00	50.00 100.00	LVZGM LVZGN
1 Gbps	N/A N/A	200.00	200.00	200.00	200.00	200.00	200.00	LVZGR
10 Gbps	N/A	400.00	400.00	400.00	400.00	400.00	400.00	LVZGQ
To oblo								
	Nonrec	<u>.</u>		Mon	thly Rates	<u>.</u>		
Type of Service	Charge	Monthly	<u>12 Mo.</u>	24 Mo.	<u>36 Mo</u> .	<u>48 Mo.</u>	<u>60 Mo.</u>	USOC
Committed Informa	tion Rate							
1.5 Mbps Per VC	1000.00	225.00	200.00	175.00	150.00	135.00	125.00	LVZG1
3 Mbps Per VC	1000.00	275.00	250.00	225.00	200.00	185.00	175.00	LVZG3
4.5 Mbps Per VC	1000.00	325.00	300.00	275.00	250.00	240.00	200.00	LVZG4
5 Mbps Per VC	1000.00	350.00	330.00	305.00	280.00	265.00	250.00	LVZG5
6 Mbps Per VC	1000.00	370.00	345.00	320.00	295.00	280.00	265.00	LVZG6
10 Mbps Per VC	1000.00	460.00	435.00	410.00	385.00	370.00	353.00	LVZGA
20 Mbps Per VC	1000.00	500.00	475.00	450.00	425.00	410.00	390.00	LVZGB
50 Mbps Per VC	1000.00	595.00	570.00	545.00	520.00	495.00	475.00	LVZGC
100 Mbps Per VC	1000.00	715.00	690.00	665.00	640.00	615.00	590.00	LVZGD
200 Mbps Per OVC	1100.00	725.00	700.00	675.00	650.00	630.00	605.00	LVZGE
300 Mbps Per VC	1150.00	835.00	815.00	790.00	765.00	745.00	725.00	LVZGF (N)

Note 1: Nonrecurring charge applies when a VC is installed subsequent to a physical interface installation.

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Assistant Secretary, CBTS Technology Solutions LLC

10. Cincinnati Bell Ethernet Service Silver

10.7 Rates and Charges

	Nonrec			Mo	onthly Rat	tes		
Type of Service	Charge	Monthly	12 Mo.	24 Mo.	36 Mo.	48 Mo.	60 Mo.	USOC
400 Mbps Per VC	1200.00	1000.00	950.00	925.00	900.00	875.00	850.00	LVZGG
500 Mbps Per VC	1250.00	1075.00	1050.00	1025.00	1000.00	975.00	950.00	LVZGH
600 Mbps Per VC	1300.00	1130.00	1105.00	1080.00	1055.00	1030.00	1005.00	LVZGJ
700 Mbps Per VC	1350.00	1185.00	1160.00	1135.00	1110.00	1085.00	1060.00	LVZG7
800 Mbps Per VC	1400.00	1235.00	1215.00	1190.00	1165.00	1140.00	1115.00	LVZG8
900 Mbps Per VC	1450.00	1255.00	1230.00	1205.00	1180.00	1155.00	1140.00	LVZG9
1 Gbps Per VC	1500.00	1300.00	1275.00	1250.00	1225.00	1205.00	1180.00	LVZGK

Optional Features

Diverse Route Same Central Office *	NA	50.00	50.00	50.00	50.00	50.00	50.00	DIVSE	
Diverse Entrances Same Central Offices	NA	75.00	75.00	75.00	75.00	75.00	75.00	DIVSA	
Diverse Central Office Single Entrance*	NA	100.00	100.00	100.00	100.00	100.00	100.00	DCOSE	
Diverse Central Office Separate Entrances*	NA	125.00	125.00	125.00	125.00	125.00	125.00	DCOSA	

* Special construction charges may apply

(N)

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11. Dedicated Optical Ethernet Service. (Cont'd)

(N)

11.1 General Description

(A) Basic Service Description

Dedicated Optical Ethernet Service is a service providing high bandwidth point to point connections utilizing an optical switch equipped network. Ethernet services are routed through a Dense Wave Division Multiplexing (DWDM) network using reconfigurable optical switches (ROADM) at core nodes within the network. Each service is routed transparently from point-to-point using individual DWDM wave lengths or a virtual optical transport network (OTN) facility.

The following regulations will apply to Dedicated Optical Ethernet Service:

(1) Dedicated Optical Ethernet Service is available with a one-year minimum period, under 12-month, 24-month, 36-month, 48-month, 60-month and 84-month OPP as described in Section 7.4.9. When a service is discontinued prior to the expiration of the minimum period, termination charges are applicable for the remaining portion of the minimum period.

(2) Installation will not begin until the customer has accepted the proposal by the Telephone Company.

(N)

Effective:

11. Dedicated Optical Ethernet Service (Cont'd)

11.1 General Description (Cont'd)

- (B) Service Provisioning
 - (2) Manner of Provisioning

Point-to-Point Service provides an optically switched network with customer dedicated services. The network architecture is designed to provide increased reliability and functionality connecting multiple customer-designated locations and specified Telephone Company central Offices.

Customer provided equipment (CPE) must deliver the data signals for the Dedicated Optical Ethernet Service transport within the technical specifications for the subscribed data service. Technical specifications can be found in the Telcordia Technical Reference Publications and the following:

IEEE 802.3x ITU-TG.872/G.709

- (3) Limitations
 - (a) When any additional services are added, such installations may cause a service interruption to existing unprotected services, or a protection switch on protected channels.
 - (b) Service protection will be available for all interface types. (N)

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11. Dedicated Optical Ethernet Service (Cont'd)

- 11.1 General Description (Cont'd)
 - (B) Service Provisioning (Cont'd)
 - (4) Allowance for Service Interruptions

An interruption of service will start when an inoperative service is reported to the Telephone Company and end when the service is operative. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element as described in Section 2.4.4.

Any protected service interruptions greater than 2 consecutive seconds as a result of a failure on the protected circuit will result in a credit equal to one month's bill for the individual portto-port connection involved. If the interruption occurs on an unprotected circuit, no credit shall be allowed for an interruption of less than thirty (30) minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or major fraction thereof that the interruption continues.

The minimum configuration would be two ports either at a serving wire center or at a customer premises site.

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

Dedicated Optical Ethernet Service configuration would be a port or ports at a customer premise site connecting through a Company central office to another customer premise site.

(N)

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(N)

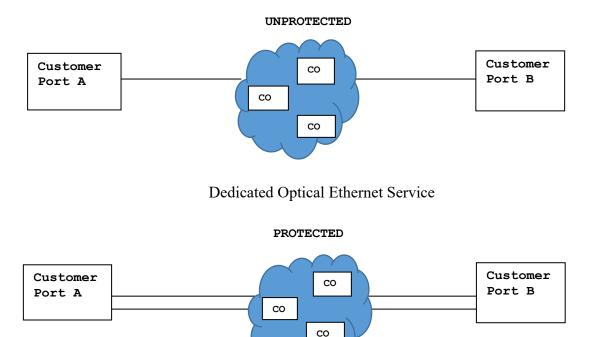
(N)

11. Dedicated Optical Ethernet Service (Cont'd)

11.1 <u>General Description</u> (Cont'd)

(B) <u>Service Provisioning</u> (Cont'd)

Dedicated Optical Ethernet Service



(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain Dedicated Optical Ethernet Service for the customer up to and including the Network Interface (NI).

(D) Responsibility of Customer

The customer is responsible for providing the compatible CPE to be used for the connection to the Dedicated Optical Ethernet Service.

(E) Service Rearrangements

Service rearrangements are provisioning changes to existing (installed) services which do not result in either a change in the minimum period requirements or a change in the physical location of the point of termination at a customer premises. See Section 13.3.11.

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11. Dedicated Optical Ethernet Service (Cont'd)

11.2 Route Diversity

Customer has the option of purchasing route Diversity. There are 4 types:

- (A) Diverse Route Same Central Office. Single entrance to the Customer premise.
- (B) Diverse Entrances Same Central Office. Separate entrances to the Customer premise.
- (C) Diverse Central Office Single entrance to the Customer premise.
- (D) Diverse Central Office Separate entrances to the Customer premise.

11.3 Rate Regulations

(A) <u>Rate Elements</u>

There are two basic rate elements which apply to Dedicated Optical Ethernet Service. The Port/per circuit termination can be located at either a customer premises or the Telephone Company Central Office.

(1) Customer Premises Port/per circuit termination

Provides for the termination of service at the customer's premises and presents the various selected ports to the customer. Applies per customer designated premises.

(2) Central Office Port/per circuit termination

Provides for the termination of service at a Telephone Company Serving Wire Center. Applies per Node at the Telephone Company Serving Wire Center.

(N)

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11. Dedicated Optical Ethernet Service (Cont'd)

11.3 <u>Rate Regulations</u> (Cont'd)

(B) Dedicated Optical Ethernet Connection Capacity

Dedicated Optical Ethernet Service offers the following port interfaces:

- Gigabit Ethernet a version of Ethernet that allows data transmission rates of 1 Gbps.
- 10 Gigabit Ethernet- a version of Ethernet that allows data transmission rates of 10.7092 Gbps
- 10 Gigabit Ethernet (WAN-PHY) a version of Ethernet that allows data transmission rates of 10.3125 Gbps with a WAN-PHY only interface.
- 10 Gigabit Ethernet (LAN-PHY) a version of Ethernet that allows data transmission rates of 10.3125 Gbps with a LAN-PHY only interface.
- 40 Gigabit Ethernet a version of Ethernet that allows data transmission rates of 40.12 Gbps.
- 100 Gigabit Ethernet a version of Ethernet that allows data transmission rates of 103.125 Gbps.

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11. Dedicated Optical Ethernet Service (Cont'd)

11.3 <u>Rate Regulations</u> (Cont'd)

(C) Term Pricing Plan

The rates and charges set forth for Dedicated Optical Ethernet Service provide for the furnishing of service where suitable facilities are available. Where special construction of facilities is necessary, special construction charges may apply.

If Customer cancels, in whole or in part, any requested addition, rearrangement, relocation or other modification to Dedicated Optical Ethernet service prior to completion thereof, Customer will reimburse CBT for the actual expenses incurred by CBT in connection with such modification prior to CBT's receipt of notice of cancellation; provided, however, the amount of such reimbursement will not exceed the service, construction, installation, termination and other charges for which Customer would have otherwise been responsible.

Dedicated Optical Ethernet Service is available for a minimum term of 12 months or under a term payment plan of 12, 24, 36, 48, 60, or 84 months. If a Customer terminates a service, without cause, prior to the expiration of the term, the Customer will pay to CBT a termination charge equal to all remaining amounts due or to become due, including but not limited to all monthly charges for which Customer would have been responsible if the Customer had not terminated prior to the end of the applicable 12, 24, 36, 48, or 60-month term payment plan as shown in Section 7.4.9.

If Customer removes one or more ports from service prior to the expiration of the term hereof, Customer will pay to CBT a termination charge equal to all monthly charges for such element(s) for which Customer would have been responsible had Customer not removed such port(s).

(N)

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11. Dedicated Optical Ethernet Service (Cont'd)

(N)

(N)

11.3 <u>Rate Regulations</u> (Cont'd)

(C) Term Pricing Plan (Cont'd)

Upon completion of the term payment plan contract the customer may renew their contract at the current, tariffed rates. If customer does not renew their contract prior to the expiration date and does not select to discontinue Dedicated Optical Ethernet Service, CBT will furnish Dedicated Optical Ethernet Service to the Customer as specified in the contract on a month-to-month basis at the current, monthly tariffed rates (which will be subject to company initiated rate changes).

If customer elects a new term payment plan, prior to the expiration of their current contract, the monthly charges will be adjusted to the current tariffed rates in effect at the time of renewal. There will be no credits or refunds made to the Customer for payments made under the previous contract term, but nonrecurring charges will not be reapplied. If Customer reduces the number of ports in service, then termination charges will be applied for the removed service. Customer may not elect a term payment plan that is shorter than the remainder of the current term payment plan.

(D) Dedicated Optical Ethernet Service Expedite Charge

When placing an Access Order for service(s) for which standard intervals exist, a customer may request a service date that is prior to the standard interval service date.

The customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If the Telephone Company agrees to provide service on an expedited basis, subject to limitations of personnel and material, an Expedited Order Charge will apply.

	USOC	Rate	
Expedite, per Order	CX4KX	\$ 2,500.00	(

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11 Dedicated Optical Ethernet Service (Cont'd)

11.4 Rates and Charges Cont'd)

- (A) Ports Point-to Point Service (Cont'd)
- Per Port/per circuit termination location

USOC	12 Month	24 Month	36 Month	48 Month	60 Month	84 Month
1 Gbps Eth	ernet					
- protec	ted channel					
LVZHA	1,675.00	1,650.00	1,625.00	1,605.00	1,580.00	1,500.00
- unprot	ected channel					
LVZHB	837.50	825.00	812.50	802.50	790.00	750.00
10 Gbps Et	hernet LAN/WA	N-PHY				
- protec	ted channel					
LVZHC		3,800.00	3,500.00	3,300.00	3,000.00	2,500.00
					·	
- unprot	tected channe	1				
LVZHD	2,000.00	1,900.00	1,750.00	1,650.00	1,500.00	1,250.00
40 Gbps OC	768 & OTU3/ST	м 256				
- protec	ted channel					
LVZHE	28,000.00	14,000.00	10,000.00	8,000.00	7,000.00	6,000.00
	tected channe	•				
-			F 000 00	4 000 00	2 500 00	2 000 00
LVZHF	14,000.00	7,000.00	5,000.00	4,000.00	3,500.00	3,000.00
100 Gbps E	thernet					
-	ted channel					
LVZHG		16,000.00	12,000.00	10,000.00	9,000.00	8,000.00
		-,	,	-,	- ,	-,
- unpro	tected channe	1				
LVZHH	15,000.00	8,000.00	6,000.00	5,000.00	4,500.00	4,000.00

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11 Dedicated Optical Ethernet Service (Cont'd)

11.4 Rates and Charges Cont'd)

(A) Ports Point-to Point Service (Cont'd)

(B) Optional Features and Functions

12 Month 24 Month 36 Month 48 Month 60 Month 84 Month USOC

Diverse Route Same Central Office *	50.00	50.00	50.00	50.00	50.00	50.00	DIVSB	
Diverse Entranc	es							
Same Central								
Offices	75.00	75.00	75.00	75.00	75.00	75.00	DIVSC	
Diverse Central								
Office Single								
Entrance*	100.00	100.00	100.00	100.00	100.00	100.00	DCOSB	
Diverse Central								
Office Separate	•							'
Entrances*	125.00	125.00	125.00	125.00	125.00	125.00	DCOSD	(N)

* Special Construction charges may apply.

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