ACCESS SERVICE

11. Special Facilities Routing of Access Services

11.1 Description

The services provided under this tariff are provided over such routes and facilities as the Telephone Company may elect. Special Facilities Routing is involved when, in order to comply with requirements specified by the customer, the Telephone Company provides Switched Access Service, Special Access Service or Special Federal Government Access Service in a manner which includes one or more of the following conditions:

11.1.1 Diversity

Two or more circuits must be provided over not more than two different physical routes.

11.1.2 Avoidance

A circuit(s) must be provided on a route which avoids specified geographical locations.

11.1.3 Diversity and Avoidance Combined

11.1.4 Cable-Only Facilities

Certain Voice Grade services are provided on Cable-Only Facilities to meet the particular needs of a customer.

Service is provided subject to the availability of Cable- Only facilities. In the event of service failure, restoration will be made through the use of any available facilities as selected by the Telephone Company.

Avoidance and Diversity are available on Switched Access Service as set forth in Section 6 preceding; Metallic, Telegraph Grade and Voice Grade Special Access Services as set forth respectively in 7.4, 7.5 and 7.6 preceding and Special Federal Government Access Services as set forth in 10.5 preceding. Cable-Only Facilities are available for Switched Access Service as set forth in Section 6 preceding; Voice Grade Special Access Services as set forth in 7.6 preceding and Special Federal Government Access Services as set forth in 10.5 preceding.

ACCESS SERVICE

11. Special Facilities Routing of Access Services (Cont'd)

11.1 Description (Cont'd)

In order to avoid the compromise of special routing information, the Telephone Company will provide the required routing information for each specially routed service to only the ordering customer. If requested by the customer, this information will be provided when service is installed and prior to any subsequent changes in routing.

The rates and charges for Special Facilities Routing of Access Services are developed on an individual case basis. Such rates and charges for Special Facilities Routing of Access Services are as set forth in 17.4.6 following and are in addition to all other rates and charges that may be applicable for services provided under other sections of this tariff.

ACCESS SERVICE

12. Specialized Service or Arrangements (T)

12.1 General

Specialized Service or Arrangements may be provided by the Telephone Company, at the request of a customer, on an individual case basis if such service or arrangements meet the following criteria:

- The requested service or arrangements are not offered under other sections of this tariff.
- The facilities utilized to provide the requested service or arrangements are of a type normally used by the Telephone Company in furnishing its other services.
- The requested service or arrangements are provided within a LATA.
- The requested service or arrangements are compatible with other Telephone Company services, facilities, and its engineering and maintenance practices.
- This offering is subject to the availability of the necessary Telephone Company personnel and capital resources.

Rates and charges and additional regulations if applicable, for Specialized Service or Arrangements are provided on an individual case basis and are as set forth in 17.4.7 following.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services

13.1 addresses Additional Engineering. 13.2 addresses Additional Labor (which is comprised of Overtime Installation, Overtime Repair, Standby, Testing and Maintenance with Other Telephone Companies, and Other Labor). 13.3 addresses Miscellaneous Services (which are comprised of Testing Services, Maintenance of Service and Telecommunications Service Restoration Priority). 13.4 addresses Presubscription. (T)

In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 8:00 a.m. to 5:00 p.m.) for the application of rates based on working hours.

A Miscellaneous Service Order charge as described in 5.4.2 preceding may be applicable to services ordered from this section.

13.1 Additional Engineering

Additional Engineering, including engineering reviews as set forth in 5.4.3 preceding, will be undertaken only after the Telephone Company has notified the customer that additional engineering charges apply as set forth in 17.4.2 following, and the customer agrees to such charges.

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

(A) A customer requests additional technical information after the Telephone Company has already provided the technical information normally included on the Design Layout Report (DLR) as set forth in 6.1.5 and 7.1.6 preceding.

(B) Additional Engineering time is incurred by the Telephone Company to engineer a customer's request for a customized service as set forth in 7.1.2 preceding. (T)

(C) A customer requested Design Change requires the expenditure of Additional Engineering time. Such additional engineering time is incurred by the Telephone Company for the engineering review as set forth in 5.4.3 preceding. The charge for additional engineering time relating to the engineering review, which is undertaken to determine if a design change is indeed required, will apply whether or not the customer authorizes the Telephone Company to proceed with the Design Change. In this case the Design Change charge, as set forth in 17.4.1(B) following, does not apply unless the customer authorizes the Telephone Company to proceed with the Design Change. (T) (T)

ACCESS SERVICE

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

13.2 Additional Labor

Additional Labor is that labor requested by the customer on a given service and agreed to by the Telephone Company as set forth in 13.2.1 through 13.2.5 following. The Telephone Company will notify the customer that additional labor charges as set forth in 17.4.3 following will apply before any Additional Labor is undertaken. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. When provisioning or restoring Telecommunications Service Priority services, the Telephone Company will, when possible, notify the customer of the applicability of these Additional Labor charges. (T)

13.2.1 Overtime Installation

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

13.2.2 Overtime Repair

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

13.2.3 Standby (T)

(T)

Standby includes all time in excess of one-half (1/2) hour during which Telephone Company personnel standby to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service. (T)

13.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

13.2.5 Other Labor

Other labor is that additional labor not included in 13.2.1 through 13.2.4 preceding and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.

ACCESS SERVICE

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

13.3 Miscellaneous Services

13.3.1 Testing Services

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 17.4.4 following. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. Other testing services, as described in 6.2.4 and 7.1.7 preceding, are provided by the Telephone Company in association with Access Services and are furnished at no additional charge. (T)

Testing services are normally provided by Telephone Company personnel at Telephone Company locations; however, provisions are made in (B)(2) following for a customer to request Telephone Company personnel to perform Testing Services at the customer designated premises. (T) (T)

The offering of Testing Services under this section of the tariff is made subject to the availability of the necessary qualified personnel and test equipment at the various test locations mentioned in (A) and (B) following.

(A) Switched Access Service

Testing Services for Switched Access are comprised of (a) tests which are performed during the installation of a Switched Access Service, (i.e., Acceptance Tests), (b) tests which are performed after customer acceptance of such access services and which are without charge (i.e., routine testing) and (c) additional tests which are performed during or after customer acceptance of such access services and for which additional charges apply, (i.e., Additional Cooperative Acceptance Tests and in-service tests). (T) (T) (T) (T) (T)

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

Routine tests are those tests performed by the Telephone Company on a regular basis, as set forth in 6.2.4 preceding which are required to maintain Switched Access Service. Additional in-service tests may be done on an automatic basis (no Telephone Company or customer technicians involved), on a manual basis (Telephone Company technician(s) involved at Telephone Company office(s) and Telephone Company or customer technician(s) involved at the customer designated premises).

Testing services are ordered to the Dial Tone Office for FGA, to the access tandem or end office for FGB (wherever the FGB service is ordered) and to the end office for FGs C and D. Testing Services for Directory Assistance Service not routed through an access tandem is ordered to a Directory Assistance Location for each NPA.

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing of Switched Access Service involves the Telephone Company provision of a technician at its office(s) and the customer provision of a technician at its premises, with suitable test equipment to perform the required tests.

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

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

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Groups B, C and D), is a service where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent. The customer may order, at additional charges, gain-slope and C-notched noise testing and may order the routine tests (1004 Hz loss, C-Message Noise and Balance) on an as-needed or more than routine schedule. (T)

The Telephone Company will provide an AAT report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as- occurs basis.

The Additional Tests, (i.e., gain slope, C- notched noise, 1004 Hz loss, C-message noise and balance) may be ordered by the customer at additional charges, 60 days prior to the start of the customer prescribed schedule. The rates for Additional Automatic Tests are as set forth in 17.4.4(B) following.

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(3) Additional Manual Testing

Additional Manual Testing (AMT) of Switched Access Services (Feature Groups A, B, C, and D and Directory Access Service not routed through an access tandem), is a service where the Telephone Company provides a technician at its office(s) and the Telephone Company or customer provides a technician at the customer designated premises, with suitable test equipment to perform the required tests. Such additional tests will normally consist of gain-slope and C-notched noise testing. However, the Telephone Company will conduct any additional tests which the IC may request.

The Telephone Company will provide an AMT report listing the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on a per occurrence basis.

The Additional Manual Tests may be ordered by the customer at additional charges, 60 days prior to the start of the testing schedule as mutually agreed to by the customer and the Telephone Company.

The rates for Additional Manual Testing are as set forth in 17.4.4(C) following.

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(4) Obligations of the Customer

(A) The customer shall provide the Remote Office Test Line priming data to the Telephone Company, as appropriate, to support routine testing as set forth in 6.2.4(B) preceding or AAT as set forth in 13.3.1(A)(2) preceding.

(B) The customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(B) Special Access Service

The Telephone Company will provide assistance in performing specific tests requested by the customer.

(1) Additional Cooperative Acceptance Testing

When a customer provides a technician at its premises or at an end user's premises, with suitable test equipment to perform the requested tests, the Telephone Company will provide a technician at its office for the purpose of conducting Additional Cooperative Acceptance Testing on Voice Grade Services. At the customer's request, the Telephone Company will provide a technician at the customer's premises or at the end user premises. These tests may, for example, consist of the following:

- Attenuation Distortion (i.e., frequency response)
- Intermodulation Distortion (i.e., harmonic distortion)
- Phase Jitter
- Impulse Noise
- Envelope Delay Distortion
- Echo Control
- Frequency Shift

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(B) Special Access Service (Cont'd)

(2) Additional Manual Testing

The Telephone Company will provide a technician at its premises, and the Telephone Company or customer will provide a technician at the customer's designated premises with suitable test equipment to perform the requested tests.

(3) Obligation of the Customer

When the customer subscribes to Testing Service as set forth in this section, the customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon. (T)

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.2 Maintenance of Service

(A) When a customer reports a trouble to the Telephone Company for clearance and no trouble is found in the Telephone Company's facilities, the customer shall be responsible for payment of a Maintenance of Service charge as set forth in 17.4.4(F) following for the period of time from when Telephone Company personnel are dispatched, at the request of the customer, to the customer designated premises to when the work is completed. Failure of Telephone Company personnel to find trouble in Telephone Company facilities will result in no charge if the trouble is actually in those facilities, but not discovered at the time.

(B) The customer shall be responsible for payment of a Maintenance of Service charge when the Telephone Company dispatches personnel to the customer designated premises, and the trouble is in equipment or communications systems provided by other than the Telephone Company or in detariffed CPE provided by the Telephone Company.

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

13.3.3 Telecommunications Service Priority - TSP

(A) Priority installation and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services shall be provided in accordance with Part 64.401, Appendix A, of the Federal Communications Commission's (FCC's) Rules and Regulations. (x)

In addition, TSP System service shall be provided in accordance with the guidelines set forth in "Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook" (NCSH 3-1-2) dated July 9, 1990, and "Telecommunications Service Priority System for National Security Emergency Preparedness Service User Manual" (NCSM 3-1-1) . (x)

(x) Filed under authority of Special Permission No. 93-598 of the Federal Communications Commission.

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.3 Telecommunications Service Priority - TSP (Cont'd) (T)

The TSP System is a service, developed to meet the requirements of the Federal Government, as specified in the Service Vendor's Handbook and Service User's Manual which provides the regulatory, administrative and operational framework for the priority installation and/or restoration of NSEP telecommunications services. These include both Switched and Special Access Services. The TSP System applies only to NSEP telecommunications services, and requires and authorizes priority action by the Telephone Company providing such services. (x) (x)

For Switched Access Service, the TSP System's applicability is limited to those services which the Telephone Company can discreetly identify for priority provisioning and/or restoration.

(B) A Telecommunications Service Priority charge applies as set forth in 17.4.4 when a request to provide or change a Telecommunications Service Priority is received subsequent to the issuance of an Access Order to install the service.

Additionally, a Miscellaneous Service Order Charge as set forth in 17.4.1 will apply to Telecommunications Service Priority requests that are ordered subsequent to the initial installation of the associated access service.

A Telecommunications Service Priority charge does not apply when a Telecommunications Service Priority is discontinued or when ordered coincident with an Access Order to install or change service.

In addition, Additional Labor rates as set forth in 17.4.3 may be applicable when provisioning or restoring Switched or Special Access Services with Telecommunications Service Priority.

When the customer requests an audit or a reconciliation of the Telephone Company's Telecommunications Service Priority records, a Miscellaneous Service Order Charge as set forth in 17.4.1 (D) and Additional Labor rates as set forth in 17.4.3 are applicable.

(x) Filed under authority of Special Permission No. 93-598 of the Federal Communications Commission.

ACCESS SERVICE

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

13.3 Miscellaneous Services (Cont'd)

13.3.4 Miscellaneous Equipment

(A) Controller Arrangement

This arrangement enables the customer to control up to 48 transfer functions at a Telephone Company central office via a remote keyboard terminal capable of either 300 or 1200 bps operation. Included as part of the Controller Arrangement is a dial-up data station located at the Telephone Company Central Office to provide access to the Controller Arrangement. This dial-up data station consists of a 212A DATAPHONE data set and an appropriate Telephone Company provided channel.

The Controller Arrangement must be located in the same Telephone Company central office as the transfer functions which it controls.

Charges for the Controller Arrangement are set forth in 17.4.4(H) following.

ACCESS SERVICE

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

13.4 Presubscription

Pursuant to the Federal Communications Commission's Memorandum Opinion and Order, CC Docket No. 83-1145, Phase I, adopted May 31, 1985, and released June 12, 1985, the Allocation Plan , outlined in the Appendix B of this Order, will be available for inspection in the Public Reference Room of the Tariff Division at the Federal Communications Commission's Washington, D.C., location or may be obtained from the Commission's commercial contractor.

(A) Presubscription is the process by which end user customers may select and designate to the Telephone Company an IC to access, without an access code, for interLATA calls. This IC is referred to as the end user's predesignated IC. (C)

(B) On the effective date of this tariff, all existing end users have access to interstate MTS/WATS. No later than 85 days prior to conversion to Feature Group D in a serving end office, the Telephone Company will notify end users of the availability of equal access in their particular area. The notification will include the names of all ICs wishing to participate in the presubscription process. This notification will be sent via U.S. Mail to each end user of record served by the end office to be converted.

(C) End users may select one of the following options at no charge:

- indicate a primary IC for all of its lines,
- indicate a different IC for each of its lines.

Only one IC may be selected for each line or lines terminating in the same hunt group.

End users may designate that they do not want to presubscribe to any IC. The end user must arrange this designation by directly notifying the Telephone Company's business office. This choice will require the end user to dial an access code (10XXX or 101XXXX) for all interLATA calls. (C)

After the end user's initial selection of a predesignated IC or the designation that they do not want to presubscribe to any IC, for any change in selection after conversion to Equal Access in the serving end office, a nonrecurring charge, as set forth in 13.4(J) following applies. (T)

ACCESS SERVICE

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

13.4 Presubscription (Cont'd)

(D) End users not responding to the initial notification will be sent a second notification for the selection of a predesignated IC no earlier than 40 days prior to or no later than 90 days after the conversion to Equal Access in a serving end office. This second notification will indicate the primary IC that has been assigned to them if they fail to respond to the second notification.

After the allocation process has been completed, end users assigned to an IC via the allocation process may change their IC one time within 6 months after conversion to Equal Access in the serving end office at no charge.

Following the six month period after conversion to Equal Access for any change in selection, a nonrecurring charge as set forth in 13.4(J) following, applies. (T)

(E) When an end user indicates more than one IC selection on the return notification or returns an illegible return notification, the Telephone Company will contact the end user for clarification. If the end user indicates an IC selection on the return notification that does not match with information provided by an IC and both notifications indicate the same authorization date, the end user's notification takes precedence and the Telephone Company will process the end user's selection. In the event that two or more ICs provide to the Telephone Company notifications with the same authorization date and neither notification has been processed, the Telephone Company will contact the end user for clarification. A list of these end users in conflict must be sent to the affected IC by the Telephone Company.

In the event that two or more ICs have provided to the Telephone Company notifications with the same authorization date(s), and one IC notification has already been processed by the Telephone Company, those IC notifications not yet processed would be returned to the ICs.

ACCESS SERVICE

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

13.4 Presubscription (Cont'd)

(F) New end users who are served by end offices equipped with Feature Group D will be asked to presubscribe to an IC at the time they place an order with the Telephone Company for Telephone Exchange Service. They may select either of the following options. There will be no charge for this initial selection.

- designate a primary IC for all of its lines,
- designate a different IC for each of its lines.

Only one IC may be selected for each individual line, or lines terminating in the same hunt group. Subsequent to the installation of Telephone Exchange Service and after the end user's initial selection of a predesignated IC, for any change in selection, a nonrecurring charge, as set forth in 13.4(J) following, applies. (T)

(G) If the new end user fails to designate an IC as its predesignated IC prior to the date of installation of Telephone Exchange Service, the Telephone Company will (1) allocate the end user to an IC based upon current IC presubscription ratios, (2) require the end user to dial an access code (10XXX or 101XXXX) for all interLATA calls, or (3) block the end user from interLATA calling. The end user will be notified which option will be applied if they fail to presubscribe to an IC. (C) An allocated or blocked end user may designate another, or initial, IC as its predesignated IC one time at no charge, if it is requested within six months after the installation of Telephone Exchange Service.

For any change in selection after 6 months from the installation of Telephone Exchange Service, a nonrecurring charge, as set forth in 13.4(J) following applies. (T)

ACCESS SERVICE

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

13.4 Presubscription (Cont'd)

(H) If an IC elects to discontinue its Feature Group D Service offering prior to or within 2 years of the conversion, the IC will notify the Telephone Company of the cancellation. The IC will also notify all end users which selected them that they are cancelling their service and that they should contact the Telephone Company to select a new primary IC. The IC will also inform the end user that it will pay the presubscription change charge. The cancelling IC will then be billed by the Telephone Company the nonrecurring charge set forth in Section 13.4(J) following for each end user for a period of two years from the discontinuance of Feature Group D service. (C) (C)

(I) If an IC elects to change or discontinue use of a Carrier Identification Code (CIC) for any reasons other than those set forth in (H) above, the IC will identify to the Telephone Company any affected end users and advise the Telephone Company of the new CIC to be assigned to these end users. If the CIC change involves a change of carrier for any end users, the IC will notify the affected end users of the change. The telephone company will change the predesignated carrier code of each end user identified by the IC to the new CIC and bill the IC the nonrecurring charge set forth in 13.4(J) following for each end user line or trunk that is changed. (T)

(J) As specified above, a nonrecurring charge will apply for subsequent changes to the end user's selection of a predesignated IC (PIC), including the establishment or removal of a no PIC selection. The nonrecurring charge to process a PIC change request is bifurcated into four (4) separate nonrecurring charges and applies as follows: (N)

(1) A nonrecurring charge, as set forth in Section 17.4.4(I)(1), following, applies when the PIC change request is submitted to the Telephone Company through manual methods.

(2) A nonrecurring charge, as set forth in Section 17.4.4(I)(2), following, applies when the PIC change request is submitted to the Telephone Company through electronic methods.

(3) A nonrecurring charge, as set forth in Section 17.4.4(I)(3), following, applies to the PIC change when a request submitted to the Telephone Company through manual methods requests a simultaneous change to both the interLATA PIC and intraLATA PIC selections.

(4) A nonrecurring charge, as set forth in Section 17.4.4(I)(4), following, applies to the PIC change when a request submitted to the Telephone Company through electronic methods requests a simultaneous change to both the interLATA PIC and intraLATA PIC selections. (N)

ACCESS SERVICE

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

13.4 Presubscription (Cont'd) (T)

(J) (Cont'd) (N)

As used above, manual methods are (i) all personal interaction between an end user, or a person acting on behalf of the end user, and a Telephone Company employee and (ii) any facsimile or written submissions from an end user, or a person acting on behalf of the end user, to a Telephone Company service center. Electronic methods shall include all other methods. If a PIC change request utilizing an electronic method results in manual processing, the electronic nonrecurring charge shall apply upon completion of the request. (N)

ACCESS SERVICE

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

13.5

13.6 Unauthorized Predesignated Interexchange Carrier (PIC) Change (T)

For purposes of this section, a subscriber is defined as:

- the party identified in the account records of the Telephone Company as responsible for payment of the telephone bill, or
- any adult person authorized by such party to change telecommunications services or to charge services to the account, or
- any person contractually or otherwise lawfully authorized to represent such party.

If an IC requests a PIC change on behalf of a subscriber and the subscriber subsequently denies requesting the change; the Telephone Company will:

- Notify both carriers involved in the unauthorized change allegation made by the subscriber. This notification must include the identity of both carriers.
- Direct the subscriber to the appropriate state regulatory agency or the Federal Communications Commission to file a complaint.
- Inform the subscriber that if he or she has not already paid charges to the unauthorized carrier, he or she is not required to pay for any charges incurred for the first 30 days after the unauthorized change.

13.7

ACCESS SERVICE

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

13.7 (D)

(D)

13.8 Blocking Service

13.8.1 International Blocking Service

The Telephone Company will provide International Blocking Service to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs and to customers who obtain Feature Group A Switched Access service under this

ACCESS SERVICE

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

13.8 Blocking Service (Cont'd)

13.8.1 International Blocking Service (Cont'd)

tariff. This service is only provided at appropriately equipped Telephone Company end offices. Those offices providing International Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. (x) (x)

On each line or trunk for which International Blocking Service is ordered, the Telephone Company will block all direct dialed international calls that use the call sequence of 011+ or 10XXX-011+ or 101XXX-011+. When capable, the Telephone Company will route the blocked calls to a recorded message. (C)

An International Blocking Service charge as set forth in 17.4.4(K) following is applicable for each new or existing exchange line or trunk or Feature Group A Switched Access line to which International Blocking Service is added or removed. This charge does not apply when blocking is removed from an exchange line or trunk or Feature Group A Switched Access line at the same time that it is disconnected.

A Miscellaneous Service Order Charge as set forth in 17.4.1(D) will apply to orders adding or removing International Blocking Service that are placed subsequent to the initial installation of the associated exchange line(s) or trunk(s) or Feature Group A Switched Access line(s). This charge does not apply when blocking is removed from an exchange line or trunk or Feature Group A Switched Access line at the same time that it is disconnected.

(x) Filed under authority of Special Permission No. 93-598 of the Federal Communications Commission.

ACCESS SERVICE

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

13.8 Blocking Service (Cont'd)

13.8.2 900 Blocking Service

The Telephone Company will provide 900 Blocking Service to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs and to customers who obtain Feature Group A Switched Access service under this tariff. This service is only provided at appropriately equipped end offices. Those offices providing 900 Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. (N)

On each line or trunk for which 900 Blocking Service is ordered, the Telephone Company will block all direct dialed calls placed to a 900 number. When capable, the Telephone Company will route the blocked calls to a recorded message.

A Blocking Service charge as set forth in 17.4.4(K) following is applicable when ordered by the end user customer with the following exceptions:

- Blocking access to 900 Service is offered to all subscribers at no charge from November 1, 1993 through December 31, 1993.

- Blocking access to 900 Service is offered to all subscribers at no charge at the time telephone service is established at a new number and for 60 days thereafter.

The Blocking Service charge is applied for each line, trunk, or Feature Group A Switched Access service to which 900 Blocking Service is added or removed. Requests by subscribers to remove 900 Blocking Service must be in writing. This charge does not apply when blocking is removed from an exchange line or trunk or Feature Group A Switched Access line at the same time that it is disconnected . (N)

ACCESS SERVICE

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

13.9 Billing Name and Address Service

13.9.1 General Description

(A) Billing Name and Address (BNA) Service is the provision by the Telephone Company to an interstate service provider who is a customer of the Telephone Company of the complete billing name, street address, city or town, state and zip code for a telephone number assigned by the Telephone Company. An interstate telecommunications service provider is defined as an interexchange carrier, an operator service provider, an enhanced service provider or any other provider of interstate telecommunications services. (C)

(B) BNA Service is provided only for the purposes of allowing customers to bill their end users for telephone services provided by the customer, order entry and customer service information, fraud prevention, identification of end users who have moved to a new address, any purpose associated with equal access requirements, and information associated with Local Exchange Carrier (LEC) calling card calls, collect calls and third party calls. BNA information may not be resold or used for any other purpose including, but not limited to, marketing or merchandising activities.

(C) BNA information associated with listed/published telephone numbers will be provided. Requests for BNA information associated with non-published and unlisted telephone numbers will be provided, unless the subscriber to a non-published or unlisted telephone number has affirmatively requested that its BNA not be disclosed.

ACCESS SERVICE

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

13.9 Billing Name and Address Service (Cont'd)

13.9.2 Undertaking of the Telephone Company

(A) A standard format for the receipt of BNA requests and the provision of BNA information will be established by the Telephone Company.

(B) Standard response to BNA requests will be by First Class Mail. Standard format will be on paper. (C)

(C) Where facilities are available, BNA will be provided in digitally encoded formats on digital data storage devices. Telephone Companies providing BNA in digitally encoded formats will make available one or more of the following digital data storage devices for transmission of the BNA data: magnetic tapes, compact discs (CDs), 3.5 inch floppy discs and/or Internet transmitted file. Individual Telephone Company availability of optional digital formats and transmission media are indicated in the Telephone Company's respective Section 17.4.4 rate section for BNA. (N) (N)

(D) Where facilities are available, the customer may request an optional specialized output format required to meet a specific customer need. (T)

(E) The Telephone Company will make every effort to provide accurate and complete BNA data. The Telephone Company makes no warranties, expressed or implied, as to the accuracy or completeness of this information. (T)

(F) The Telephone Company will not disclose BNA information to parties other than interstate telecommunications service providers as defined in 13.9.1(A), preceding, and their authorized billing agents. An authorized billing agent means a third party hired by a telecommunications service provider to perform billing and collection services for the telecommunications service provider. BNA disclosure is limited to those purposes as defined in 13.9.1(B), preceding. (T) (C) (C)

(G) The Telephone Company reserves the right to request from an interstate service provider who has placed an order for BNA service, the source data upon which the interstate service provider has based the order. This request is made to ensure that the BNA information is to be used only for purposes as described in 13.9.1(B), preceding. The Telephone Company will not process the order until such time as the interstate service provider supplies the requested data . (T)

ACCESS SERVICE

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

13.9 Billing Name and Address Service (Cont'd)

13.9.3 Obligations of the Customer

(A) The customer shall order BNA Service on a separate BNA Order. The order must identify both the customer's authorized representative and the address to which the information is to be sent.

(B) The customer shall treat all BNA information as confidential. The customer shall insure that BNA information is used only for the purposes as described in 13.9.1(B), preceding. (C)

(C) The customer shall not publicize or represent to others that the Telephone Company jointly participates with the customer in the development of the customer's end user records it assembles through the use of BNA Service.

(D) Upon requests, the customer will provide to the Telephone Company the source data upon which the customer has based an order from BNA service. The Telephone Company will not process the order until such time as the customer provides the requested data.

13.9.4 Rate Regulations

(A) For each order for BNA information received by the Telephone Company, a BNA Order Charge applies. In addition, a charge applies for each customer specific record provided. The BNA Order Charge and the Per Record Charge are specified in 17.4.4 following.

(B) Where available, the customer may order the response in a digitally encoded format on a digital data storage device. For each type of digital data storage device that is available from a Telephone Company, an Optional Charge is specified in the respective Telephone Company's Section 17.4.4 BNA rate section. The Optional Charge for the digital data device is in addition to the BNA Order Charge and the BNA Record Charge. (C) (C)

(C) Where available, the customer may order an output format other than a standard paper format or digital data device listed in Section 17.4.4 in order to meet a customer's specific requirement. This option is subject to an hourly programming charge as specified in 17.4.4 following and is in addition to the BNA Order Charge and the BNA Record Charge. (C)

ACCESS SERVICE

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

13.10 Originating Line Screening (OLS) Service (S) (y)

The Telephone Company will provide OLS Service to aggregators and other customers who obtain local exchange service from the Telephone Company under its general or local exchange tariff. OLS service enables customers to determine whether there are billing restrictions on exchange service lines from which a call originates. OLS service delivers codes on operator assisted calls made from aggregator locations to identify, calls originating from privately owned payphones, inmate locations, and hotels/motels, etc.

OLS Service is provided at no charge when ordered with the installation of new local exchange service. However, when an OLS code is added to an existing exchange service line, a charge is applied as set forth in 17.4.4(M). This charge is applied for each exchange service line to which an OLS code is assigned. The customer must specify the number of exchange service lines and each individual telephone number equipped.

A Miscellaneous Service Order Charge as set forth in 17.4.1(D) will apply to orders adding OLS codes that are placed subsequent to the initial installation of the associated exchange service line. This charge does not apply when OLS codes are removed from an exchange service line at the same time that the exchange service line is disconnected.

OLS codes may be delivered using Line Information Database (LIDB) or Flexible Automatic Number Identification (Flex ANI) technology. Those telephone companies delivering OLS codes using LIDB are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, as are those companies delivering OLS codes using Flex ANI.

13.11 Nonchargeable Confirmation Services

13.11.1 Billed Number Screening (BNS)

At the request of the customer, the Telephone Company business office will confirm BNS codes associated with a line to which a call is to be billed.

13.11.2 Originating Line Screening (OLS)

At the request of the customer, the Telephone Company business office will confirm OLS codes associated with an exchange service line from which a call originates. (S) (y)

(y) All material coded with an “S” was originally filed under Transmittal No. 19 on January 8, 1997 to become effective on February 22, 1997.

ACCESS SERVICE

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

13.12 Coin Supervision Additive Service

The Telephone Company will provide Coin Supervision Additive Service to Payphone Service Providers (PSPs) who order local exchange service lines for the provision of pay telephone service and where the pay telephone equipment connected to the local exchange service lines requires central office coin supervision capability. The local exchange service lines used for the provision of pay telephone service are obtained from and subject to the terms and conditions under the Telephone Company's general and/or local tariffs.

Coin Supervision Additive Service provides the capability of central office line equipment to pass signals and/or tones from an exchange service line to a trunk terminating at the PSP's operator service provider. These signals enable an operator service provider to recognize coin deposits and return coins to the pay telephone user. Coin Supervision Additive Service also permits a suitably equipped operator service provider to automatically ring back the originating exchange service line upon completion of a call.

A Coin Supervision Additive Service charge as set forth in 17.4.4(N) following is assessed monthly to the PSP for each exchange service line for which Coin Supervision Additive Service is provided.

13.13 Central Office Blocking Service (N)

Central Office Blocking With Operator Screening - Central office blocking with operator screening is offered to provide a choice of restrictions at the subscriber's option. These options will be available where line controlled public telephone service is provided on a usage rate service basis. Options are as follows:

Option 1 - Two-Way Service. Provides that third number and collect calls to Line Controlled Public Telephone Service are not allowed.

Option 2 - Two-Way Service. Provides screening information to the operator to prevent operator assisted sent-paid calls from being billed to the line. Further, third number and collect calls to Line Controlled Public Telephones are not allowed.

Option 3 - Two-Way Service. Provides central office blocking of seven digit local and 976 calls. Provides screening information to the operator to prevent operator assisted sent-paid calls from being billed to the lines. Further, third number and collect calls to Line Controlled Public Telephones are not allowed.

Option 4 - Two-Way Service. Provides central office blocking of 976 calls. Provides screening information to the operator to prevent operator-assisted sent-paid calls from being billed to the line. Further, third number and collect calls to Line Controlled Public Telephones are not allowed.

Option 5 - Two-Way Service. Provides central office blocking of sent-paid international calling upon certification by the payphone provider that the incidence of fraud in such calling is high. This service may be offered individually or in addition to either of the four options preceding. (N)

ACCESS SERVICE

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

13.14 Flexible Automatic Number Identification (Flex ANI) (N)

The Telephone Company will provide Flex ANI Service to Payphone Service Providers (PSPs) who order tariffed local exchange service lines for the provision of pay telephone service. The local exchange service lines used for the provision of pay telephone service are obtained from and subject to the terms and conditions under the Telephone Company's general and/or local tariffs.

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.9.1 (F) preceding) by allowing FGD customers to receive additional information digits. Flex ANI provides additional information digits (described in 6.9.1 (AA) preceding). Flex ANI is available in suitably equipped end offices.

A monthly recurring charge, as set forth in 17.4.4(O) following, is associated with Flex ANI service. A Miscellaneous Service Order Charge as set forth in 17.4.1(D) will apply to orders for Flex ANI service placed subsequent to the initial installation of the associated exchange service line. (N)

ACCESS SERVICE

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

13.15 Local Number Portability (M) (T)

Where facilities permit, Local Number Portability (LNP) provides an end user of local exchange telecommunications service the ability to retain its existing local exchange service telephone number (TN) when changing from one telecommunications service provider to another, provided the end user remains at the same location. LNP also allows an end user the ability to complete calls to numbers that have been ported from one telecommunications service provider to another. LNP capability will be activated in Telephone Company end office or tandem switches based upon receipt of a request by another local exchange telecommunications carrier. The Telephone Company will identify its LNP capable serving wire centers in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4. The technical specifications for Local Number Portability are contained in Telcordia Technologies Technical Reference GR-2936-CORE. (C) (C)

13.15.1 LNP End User Service

(A) Description

The LNP End User Charge applies to local exchange service end users, resellers of the Telephone Company's local exchange service, line side access customers, and purchasers of unbundled switch ports that are served by either:

- an LNP capable serving wire center or
- a non-LNP capable serving wire center that provides local exchange service through an Extended Area Service arrangement with either:
  - one of the 100 largest metropolitan statistical areas, or
  - an adjacent LNP capable local exchange carrier.

The LNP End User Charge recovers the Telephone Company's costs directly related to implementing and providing LNP. (M) (T)

ACCESS SERVICE

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

13.15 Local Number Portability (Cont'd) (M) (T)

13.15.1 LNP End User Service (Cont'd)

(B) Rate Regulations

The Telephone Company will bill a monthly LNP End User Charge as set forth in 17.4.4, following with the following exceptions:

- Each PBX trunk shall be assessed the equivalent of nine monthly LNP End User Charges as specified in 17.4.4, following.
- Each ISDN PRI arrangement shall be assessed the equivalent of five monthly LNP End User Charges as specified in 17.4.4, following.
- Lifeline end user customers shall not be assessed the LNP End User Charge.

The Telephone Company will recover the LNP End User Charge for a 60 month period beginning with the effective date of the rate as specified therein. (M) (T)

ACCESS SERVICE

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

13.15 Local Number Portability (Cont'd)

13.15.2 LNP Query Service

(M) (T)

(A) Description

LNP Query Service uses Advanced Intelligent Network (AIN) technology and the Common Channel Signaling (CCS) network to query an LNP database to obtain network routing instructions before completion of a call. The LNP database contains all of the TNs within an NXX and the location routing number (LRN) of the switch serving each of those TNs when at least one of the TNs within the NXX has been transferred from one local exchange telecommunications service Provider to another. The LRN associates a unique NPA-NXX-XXXX routing number with each central office switch that has subscribers who have transferred their TNs.

Where more than one carrier is involved in completing the call, the carrier prior to the terminating carrier (i.e., the N-1 carrier) is responsible for querying an LNP database to obtain the LRN used in routing the call for a numer portable NXX code. When the N-1 carrier forwards a non-queried call to a Telephone Company end office or tandem switch and the NXX code has one or more transferred TNs, the Telephone Company's end office or tandem switch will suspend call processing and formulate and launch a query to an LNP database to secure the LRN of the transferred TN. When the LRN has been returned from an LNP database to the Telephone Company end office or tandem switch originating the query, call processing is resumed and the call is either processed in the Telephone Company's network or routed to the correct telecommunications service provider's network for completion to the called party. The Telephone Company will perform the query on behalf of the N-1 carrier (i.e., the LNP query service customer) that forwarded the call. The Telephone Company will bill the N-1 wireline or wireless telecommunications carrier a charge per query as specified in 17.4.4, following, regardless of whether the call is completed.

(M) (T)

ACCESS SERVICE

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

13.15 Local Number Portability (Cont'd)

13.15.2 LNP Query Service (M) (T)

(A) Description (Cont'd)

An LNP Order Charge will apply on a per order basis for those customers that have ordered LNP Query Service as specified in Section 17.4.4, following. N-1 carriers who terminate non-queried traffic into the Telephone Company's network and have not placed an order for LNP Query Service will be assessed on a per account basis an LNP Billing Charge as specified in Section 17.4.4, following.

(B) Limitations

LNP Query Service is to be used only on a call-by-call basis for routing calls to number portable NXX codes and cannot be used for purposes other than those functions described herein.

(C) Network Management

The Telephone Company will administer its network to ensure the provision of acceptable service levels to all customers of the LNP Query Service.

The Telephone Company reserves the right to block any LNP query traffic in a nondiscriminatory manner, where the processing of the LNP queries threatens to disrupt operation of its network and impair network reliability. (M) (T)

ACCESS SERVICE

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

13.15 Local Number Portability (Cont'd)

13.15.2 LNP Query Service

(D) Rate Regulations

The LNP charge per query recovers the cost to query an LNP database on behalf of the N-1 carrier. The rate associated with an LNP query will be billed monthly, per query as set forth in 17.4.4, following, based on the recorded number of queries. The Telephone Company will develop monthly charges based on an average number of queries per month if actual query recordings are not available. For billing purposes, each month is considered to have thirty (30) days.

The LNP Order Charge and LNP Billing Charge recover the cost to establish the customer's LNP query account. The LNP Order Charge will be billed per order as set forth in 17.4.4, following, to those customers that have ordered LNP Query Service. The LNP Billing Charge will be applied per account as set forth in 17.4.4, following, to the N-1 carrier who terminates non-queried traffic into the Telephone Company's network and has not placed an order for LNP Query Service.

(M) (T)

(M) (T)

ACCESS SERVICE

14. Reserved for Future Use

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications

15.1 contains Switched Access Service Options (which are comprised of Interface Groups, Supervisory Signaling, Entry Switch Receive Level and Local Transport Termination) and Transmission Specifications. 15.2 describes Special Access Service Network Channel (NC) codes and Network Channel Interface (NCI) codes. 15.3 contains Interface Group, Premises Interface Code and Standard Transmission Specifications applicable to Directory Access Service.

15.1 Switched Access Service

Ten Interface Groups are provided for terminating the Local Transport Entrance Facility at the customer's designated premises. Each Interface Group provides a specified premises interface (e.g., two-wire, four-wire, DS1, etc.). Where transmission facilities permit, and at the option of the customer, the Entrance Facility may be provided with optional features as set forth in 15.1.1 following. (C) (C)

As a result of the customer's access order and the type of Telephone Company transport facilities serving the customer designated premises, the need for signaling conversions or two-wire to four- wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Telephone Company equipment be placed at the customer designated premises. For example, if a voice frequency interface is ordered by the customer and the Telephone Company facilities serving the customer designated premises are digital, then Telephone Company channel bank equipment must be placed at the customer designated premises in order to provide the voice frequency interface ordered by the customer.

15.1.1 Local Transport Interface Groups

Interface Groups are combinations of technical parameters which describe the Telephone Company handoff at the point of termination at the customer designated premises. The technical specifications concerning the available interface groups are set forth in (A) through (D) following.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

Interface Group 1 is provided with Type C Transmission Specifications, as set forth in 15.1.2(C) following, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, as set forth respectively in 15.1.2(E) and (F) following, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters.

Only certain premises interfaces are available at the customer designated premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups.

(A) Interface Group 1

Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

Interface Group 1 is not provided in association with FGC and FGD when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGB, FGC or FGD when the first point of switching provides only four-wire terminations.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(A) Interface Group 1 (Cont'd)

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center point of (C)switching may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC or FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(B) Interface Group 2

Interface Group 2 provides four-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz. (C) (C)

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(B) Interface Group 2 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC or FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(C) Interface Groups 3 through 5

Interface Groups 3 through 5 provide analog transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the frequencies illustrated following, with the capability to channelize voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Groups are reserved for Telephone Company use, e.g., pilot and carrier group alarm tones. Before the first point of switching, the Telephone Company will provide multiplex equipment to derive the transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interfaces are provided with individual transmission path SF supervisory signaling.

Interface Group Identification No.	Transmission Frequency Bandwidth	Analog Hierarchy Level	Maximum No. Of Channelized Voice Freq. Trans. Paths
3	60-108kHz	Group	12
4	312-552 kHz	Supergroup	60
5	564-3084 kHz	Mastergroup	600

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(D) Interface Groups 6 through 10

Interface Groups 6 through 10 provide digital transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the nominal bit rates illustrated following, with the capability to channelize voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Telephone Company will provide multiplex and channel bank equipment to derive transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide a DS1 signal(s) in D3/D4 format . (C) (C)

The interfaces are provided with individual transmission path bit stream supervisory signaling.

Interface Group Identification No.	Nominal Bit Rate (Mbps)	Digital Hierarchy Level	Max. No. of Channnelized Voice Freq. Trans. Paths
6	1.544	DS1	24
7	3.152	DS1C	48
8	6.312	DS2	96
9	44.736	DS3	672
10	274.176	DS4	4032

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(E) Local Transport Optional Features

Where transmission facilities permit, the Telephone Company will, at the option of the customer, provide the following features in association with Local Transport. An Access Order Charge as specified in 17.4.1(A) following is applicable on a per order basis when nonchargeable optional features are added subsequent to the installation of service.

- Customer Specified Entry Switch Receive Level

  Customer Specified Entry Switch Receive Level allows the customer to specify the receive transmission level at the first point of switching. The range of transmission levels which may be specified is described in Technical Reference TR-NPL-000334. This feature is available with Interface Groups 2 through 10 for Feature Groups A and B. (x)

- Customer Specification of Local Transport Termination

  Customer Specification of Local Transport Termination allows the customer to specify, for Feature Group B routed directly to an end office or access tandem, a four-wire termination of the Local Transport at the first point of switching in lieu of a Telephone Company selected two-wire termination. This option is available only when the Feature Group B arrangement is provided with Type B Transmission Specifications.

- Supervisory Signaling

  Supervisory Signaling allows the customer to order an optional supervisory signaling arrangement for each transmission path provided where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability.

(x) Filed under authority of Special Permission No. 93-598 of the Federal Communications Commission.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(E) Local Transport Optional Features (Cont'd)

The Interface Groups, as described in (A) through (D) preceding, represent industry standard arrangements. Where transmission parameters permit, the customer may select the following optional signaling arrangements in place of the signaling arrangements standardly associated with the Interface Groups.

- For Interface Groups 1 and 2 associated with FGB, FGC or FGD

  DX Supervisory Signaling,
  E&M Type I Supervisory Signaling,
  E&M Type II Supervisory Signaling, or
  E&M Type III Supervisory Signaling

- For Interface Group 2 associated with FGB, FGC or FGD and in addition to the preceding

  SF Supervisory Signaling, or
  Tandem Supervisory Signaling

- For Interface Groups 3 through 5

  Optional Supervisory Signaling Not Available

- For Interface Groups 6 through 10

These Interface Groups may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Telephone Company central offices. Generally such signaling is available only where the first point of switching provides an analog (i.e., non-digital) interface to the transport termination. (T)

These optional Supervisory Signaling arrangements are not available in combination with the SS7 optional feature as described in 6.8.2 (C)(2) preceding. (T)

Additionally, in (F) following, there is a matrix of available Premises Interface Codes as a function of Interface Group, Telephone Company Switch Supervisory Signaling and Feature Group.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(F) Available Premises Interface Codes

Following is a matrix showing premises interface codes which are available for each Interface Group. Their availability is a function of the Telephone Company switch supervisory signaling and Feature Group. For explanations of these codes, see the Parameter Codes and Options as set forth in 15.2.2(A) following.

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	Feature A	Feature B	Group C	Group D	
1	LO	2LS2	X				
	LO	2LS3	X				
	GO	2GS2	X				
	GO	2GS3	X				
	LO, GO	2DX3	X				(T)
	LO, GO	4EA3-E	X				(T)
	LO, GO	4EA3-M	X				
	LO, GO	6EB3-E	X				
	LO, GO	6EB3-M	X				
	RV, EA, EB, EC	2DX3		X	X	X	
	RV, EA, EB, EC	4EA3-E		X	X	X	
	RV, EA, EB, EC	4EA3-M		X	X	X	
	RV, EA, EB, EC	6EB3-E		X	X	X	
	RV, EA, EB, EC	6EB3-M		X	X	X	
	EA, EB, EC	6EC3			X	X	
	RV	2RV3-0		X	X	X	
	RV	2RV3-T		X	X	X	
	SS7	2NO2			X	X	
2	LO, GO	4SF2	X				
	LO, GO	4SF3	X				
	LO	4LS2	X				
	LO	4LS3	X				
	LO	6LS2	X				

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(F) Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	Feature Group A	B	C	D
2 (Cont'd)	GO	4GS2	X			
	GO	4GS3	X			
	GO	6GS2	X			
	LO,GO	4DX2	X			
	LO,GO	4DX3	X			
	LO,GO	6EA2-E	X			
	LO,GO	6EA2-M	X			
	LO,GO	8EB2-E	X			
	LO,GO	8EB2-M	X			
	LO,GO	6EX2-B	X			
	RV,EA,EB,EC	4SF2		X	X	X
	RV,EA,EB,EC	4SF3		X		
	RV,EA,EB,EC	4DX2		X	X	X
	RV,EA,EB,EC	4DX3		X		
	RV,EA,EB,EC	6DX2			X	
	RV,EA,EB,EC	6EA2-E		X	X	X
	RV,EA,EB,EC	6EA2-M		X	X	X
	RV,EA,EB,EC	8EB2-E		X	X	X
	RV,EA,EB,EC	8EB2-M		X	X	X
	EA,EB,EC	8EC2-M			X	X
	RV	4RV2-O		X	X	X
	RV	4RV2-T		X	X	X
	RV	4RV3-O		X	X	
	RV	4RV3-T		X	X	
	SS7	4NO2			X	X
3	LO,GO	4AH5-B	X			
	RV,EA,EB,EC	4AH5-B		X	X	X
	SS7	4AH5-B			X	X
4	LO,GO	4AH6-C	X			
	RV,EA,EB,EC	4AH6-C		X	X	X
	SS7	4AH6-C			X	X
5	LO,GO	4AH6-D	X			
	RV,EA,EB,EC	4AH6-D		X	X	X
	SS7	4AH6-D			X	X

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(F) Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	Feature A	Feature B	Group C	Group D
6	LO, GO	4DS9-15	X			
	LO, GO	4DS9-15L	X			
	RV, EA, EB, EC	4DS9-15		X	X	X
	RV, EA, EB, EC	4DS9-15L		X	X	X
	SS7	4DS9-15			X	X
7	LO, GO	4DS9-31	X			
	LO, GO	4DS9-31L	X			
	RV, EA, EB, EC	4DS9-31		X	X	X
	RV, EA, EB, EC	4DS9-31L		X	X	X
	SS7	4DS9-31			X	X
8	LO, GO	4DS0-63	X			
	LO, GO	4DS0-63L	X			
	RV, EA, EB, EC	4DS0-63		X	X	X
	RV, EA, EB, EC	4DS0-63L		X	X	X
	SS7	4DS0-63			X	X
9	LO, GO	4DS6-44	X			
	LO, GO	4DS6-44L	X			
	RV, EA, EB, EC	4DS6-44		X	X	X
	RV, EA, EB, EC	4DS6-44L		X	X	X
	SS7	4DS6-44			X	X
10	LO, GO	4DS6-27	X			
	LO, GO	4DS6-27L	X			
	RV, EA, EB, EC	4DS6-27		X	X	X
	RV, EA, EB, EC	4DS6-27L		X	X	X
	SS7	4DS6-27			X	X

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications

Descriptions of the transmission specifications available with each Feature Group as a function of the Interface Group selected by the customer, are set forth in (A) through (D) following. Descriptions of each of the these Standard Transmission Specifications and the two Data Transmission Parameters mentioned are set forth respectively in (E) through (G) and 15.1.3(A) and (B) following:

(A) Feature Group A

FGA is provided with either Type B or Type C Transmission Specifications. The specifications for the associated parameters are guaranteed to the first point of switching. Type C Transmission Specifications are provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. Type DB Data Transmission Parameters are provided with FGA to the first point of switching.

(B) Feature Group B

FGB is provided with either Type B or Type C Transmission Specifications. The specifications for the associated parameters are guaranteed to the end office when routed directly or to the first point of switching when routed via an access tandem. Type C Transmission Specifications are provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. Type DB Data Transmission Parameters are provided with FGB to the first point of switching.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(C) Feature Group C

FGC is provided with either Type B or Type C Transmission Specifications as follows:

- When routed directly to the end office either Type B or Type C is provided.

- When routed to an access tandem only Type B is provided.

- Type B or Type C is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1 when routed directly to an end office. Type B is provided with Interface Groups 2 through 10, whether routed directly to an end office or to an access tandem.

Type DB Data Transmission Parameters are provided with FGC for the transmission path between the customer designated premises and the end office when directly routed to the end office, and between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(D) Feature Group D

FGD is provided with either Type A, Type B or Type C Transmission Specifications as follows:

- When routed to the end office either Type B or C is provided.
- When routed to an access tandem only Type A is provided.
- Type A is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1. Type A and Type B Transmission Specifications are provided with Interface Groups 2 through 10.

Type DB Data Transmission Parameters are provided with FGD for the transmission path between the customer designated premises and the end office when directly routed to the end office. Type DA Data Transmission Parameters are provided for the transmission path between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

(E) Type A Transmission Specifications

Type A Transmission Specifications is provided with the following parameters:

(1) Loss Deviation

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

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(E) Type A Transmission Specifications (Cont'd)

(2) Attenuation Distortion

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

(3) C-Message Noise

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

Route Miles	C-Message Noise
less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
401 to 1000	42 dBrnCO

(4) C-Notch Noise

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

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(E) Type A Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	Echo Return Loss	Singing Return Loss
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	N/A	N/A
- Via Access Tandem	16 dB	11 dB

(6) Standard Return Loss

Standard Return Loss expressed as Echo Return Loss and Singing Return Loss on two-wire ports of a four-wire point of termination shall be equal to or greater than:

Echo Return Loss	Singing Return Loss
5 dB	2.5 dB

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(F) Type B Transmission Specifications

Type B Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.5 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +4.0 dB.

(3) C-Message Noise

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

	C-Message Noise*	
Route Miles	Type B1	Type B2
less than 50	32 dBrnCO	35 dBrnCO
51 to 100	33 dBrnCO	37 dBrnCO
101 to 200	35 dBrnCO	40 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

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

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

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

(5) Echo Control

Echo Control, identified as Impedance Balance for FGA and FGB and Equal Level Echo Path Loss for FGC and FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. The ERL and SRL also differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

	Echo Return Loss	Singing Return Loss
POT to Access Tandem		
- Terminated in 4-Wire trunk	21 dB	14 dB
- Terminated in 2-Wire trunk	16 dB	11 dB
POT to End Office		
- Direct	16 dB	11 dB
- Via Access Tandem		
. For FGB access	8 dB	4 dB
. For FGC access (Effective 4-Wire transmission path at end office)	16 dB	11 dB
. For FGC access (Effective 2-Wire transmission path at end office)	13 dB	6 dB

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

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

(6) Standard Return Loss

Standard Return Loss, expressed as Echo Return Loss and Singing Return Loss, on two-wire ports of a four-wire point of termination shall be equal to or greater than:

Echo Return Loss	Singing Return Loss
5 dB	2.5 dB

(G) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 3.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +5.5 dB.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(G) Type C Transmission Specifications (Cont'd)

(3) C-Message Noise

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

	C-Message Noise*	
Route Miles	Type C1	Type C2
less than 50	32 dBrnCO	38 dBrnCO
51 to 100	33 dBrnCO	39 dBrnCO
101 to 200	35 dBrnCO	41 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

* For Feature Groups C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference TR-NPL-000334. (x) (x)

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(G) Type C Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Return Loss and expressed as Echo Return Loss and Singing Return Loss is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	Echo Return Loss	Singing Return Loss
POT to Access Tandem	13 dB	6 dB
POT to End Office		
- Direct	13 dB	6 dB
- Via Access Tandem	8 dB (for FGB only)	4 dB

15.1.3 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. Type DB is provided with Feature Groups A, B and C and also with Feature Group D when Feature Group D is directly routed to the end office. Type DA is only provided with Feature Group D and only when routed via an access tandem. Following are descriptions of each.

(A) Data Transmission Parameters Type DA

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

(A) Data Transmission Parameters Type DA (Cont'd)

(2) Envelope Delay Distortion

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

604 to 2804 Hz

less than 50 route miles	500 microseconds
equal to or greater than 50 route miles	900 microseconds

1004 to 2404 Hz

less than 50 route miles	200 microseconds
equal to or greater than 50 route miles	400 microseconds

(3) Impulse Noise Counts

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

(4) Intermodulation Distortion

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

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

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

(A) Data Transmission Parameters Type DA (Cont'd)

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 5 peak-to-peak.

(6) Frequency Shift

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

(B) Data Transmission Parameters Type DB

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 30 dB. (T)

(2) Envelope Delay Distortion

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

604 to 2804 Hz

less than 50 route miles	800 microseconds
equal to or greater than 50 route miles	1000 microseconds

1004 to 2404 Hz

less than 50 route miles	320 microseconds
equal to or greater than 50 route miles	500 microseconds

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

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

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBrnCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

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

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

(5) Phase Jitter

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

(6) Frequency Shift

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

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service

This section explains and lists the codes that the customer must specify when ordering Special Access Service. Switched Access, Entrance Facilities, and Voice Grade and High Capacity Direct Trunked Transport. These codes provide a standardized means to relate the services being ordered to Special Access Service offerings contained in Section 7 preceding. (C) (C)

When ordering, the type of Special Access Service or Switched Access Entrance Facility or Direct Trunked Transport is described by two code sets, the Network Channel (NC) code and the Network Channel Interface (NCI) codes. (C) (C)

The Network Channel (NC) code consists of two elements. Element one is a Channel Service Code (character positions 1 and 2) that describes the channel service type in an abbreviated form. Element two is an Optional Feature Code (character positions 3 and 4) that identifies option codes available for each channel service code, such as C-conditioning or Improved Return Loss.

The Network Channel Interface (NCI) is used to identify interface specifications associated with a particular channel. This code describes the total wires, protocol, impedance, protocol options and transmission level point(s) reflecting physical and electrical characteristics between the Telephone Company and the customer.

On the following 3 pages are examples which explain the specific characters of the codes and which reference matrices and charts used in developing the codes. Included in the matrices are Service Designator (SD) codes which are used to identify variations of service within service types (e.g., TG1 = Telegraph). The SD and NC codes are displayed as components of the matrices designated as Technical Specifications packages in (A) through (G) following. Through the use of these matrices, SD codes may be converted to NC codes for service ordering purposes.

A chart is also provided in 15.2.2(A) following which contains information necessary to develop NCI codes.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

Comprehensive lists of allowed Network Channel (NC) and Network Channel Interface (NCI) codes are contained in Special Report (x) SR-STS-000307. However, not all (C) (x) services contained in this Special (x) Report may be offered by the Telephone Company at this time.

Lastly, 15.2.2(C) following provides a list of compatible Network Channel Interfaces inasmuch as the Network Channel Interfaces associated with a given service need not always be the same, but all must be compatible.

Example No. 1: If the customer wishes to order a 4-wire voice grade circuit with 600 Ohms impedance, capable of data transmission, and with improved return loss, the customer might specify the following:

NC	NCI	SECNCI
LG-R	04DB2	04DA2-S

NC Code:
- LG = Voice Grade Channel Service, VG6
- -R = Improved Return Loss

NCI Code:
- 04 = Number of physical wires at CDP
- DB = Data stream in VF frequency band at the customer designated main terminal location
- 2 = 600 Ohms impedance

SECNCI (Secondary NCI Code):
- 04 = Number of physical wires at CDP
- DA = Data stream in VG frequency at the customer designated secondary terminal location
- 2 = 600 Ohms impedance
- S = Sealing current option for 4-wire transmission

In the above example the NCI (Network Channel Interface) code is the interface requested at the customer's POT (Point of Termination) and the SECNCI (Secondary Network Channel Interface) code represents the interface at the end office serving the End User.

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

Example No. 2: If the customer wishes to order a FX circuit to a station, with 600 Ohms impedance, loop start signaling, which is 4-wire at the CDP and 2-wire at the end-user, the customer might specify:

NC	NCI	SECNCI
LC--	04LO2	02LS2

NC Code:
- LC = Voice Grade Channel Service, VG2
- -- = No Optional Features

NCI Code:
- 04 = Number of physical wires at CDP
- LO = Loop start, loop signaling - open end
- 2 = 600 Ohms impedance

SECNCI (Secondary NCI Code):
- 02 = Number of physical wires at CDP
- LS = Loop start signaling - closed end
- 2 = 600 Ohms impedance

Example No. 3: If the customer wishes to order a 1.544 Mbps Hi-cap facility with no channel options such as CO multiplexing, the customer might specify the following:

NC	NCI	SECNCI
HC--	04DS9-15	04DS9-15

NC Code:
- HC = High Capacity Channel Service, HC1
- -- = No Optional Features

NCI, SECNCI Code:
- 04 = Number of physical wires at CDP
- DS = Digital hierarchy interface
- 9 = 100 Ohms impedance
- 15 = 1.544 Mbps (DS1) format

The preceding three examples use information contained in Special Report SR-STS-000307. (C) (x)

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15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes

In order to determine the NC code appropriate for the service to be ordered, the type of Special Access Service the customer wishes must be identified. This identification is accomplished by a Service Designator (SD) code. The broad categories of Service Designator codes (e.g., VG, MT, TG, etc.) are set forth in Section 7 preceding. Variations within service type (e.g., VG1, MTC, TG2, etc.) are described in the various Technical Publications cited in (A) through (G) following.

Having determined the specific service type to be ordered and its SD code, and having used the appropriate Technical Publication, the customer should match the SD code to the NC code using the following matrices. Once the NC code has been determined , the Network Channel Interface (NCI) code may be developed using the information set forth in 15.2.2 following and the guidelines concerning specific parameters available for each service type as set forth in the specified Technical Publication. (T)

(A) Technical Specifications Packages Metallic Service

	Package			
SD Code NC Code	MTC* MQ	MT1 NT	MT2 NU	MT3 NV
Parameter				
DC Resistance Between Conductors	X	X	X	
Loop Resistance	X			X
Shunt Capacitance	X			X
Optional Features and Functions				
Three Premises Bridging	X	X		X
Series Bridging	X		X	

The technical specifications are described in Technical Reference TR-NPL-000336. (x) (x)

* All parameters are available within ranges selected by the customer where technically feasible.

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15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(B) Technical Specifications Packages Telegraph Grade Service

	Package		
SD Code / NC Code	TGC* NO	TG1 NW	TG2 NY
Parameter			
Telegraph Distortion	X	X	X
Optional Features and Functions			
Telegraph Bridging	X	X	X

The technical specifications are described in Technical Reference TR-NPL-000336 . (x)

* All parameters are available within ranges selected by the customer where technically feasible.

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(C) Technical Specifications Packages Voice Grade Service

	Package VG-													
SD Code	C*	1	2	3	4	5	6	7	8	9	10	11	12	W
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE
Parameter														
Attenuation Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message Noise	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Echo Control	X	X	X	X		X		X	X			X	X	X
Envelope Delay Distortion	X						X	X	X	X	X	X	X	X
Frequency Shift	X						X	X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X	X
Intermodulation Distortion	X							X	X	X	X	X		X
Loss Deviation	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phase Hits, Gain Hits, and Dropouts	X													
Phase Jitter	X							X	X	X	X	X		X
Signal-to-C Message Noise						X								
Signal-to-C Notch Noise	X				X		X	X	X	X	X	X	X	X

The technical specifications for these parameters (except for dropouts, phase hits, and gain hits) are described in Technical References TR-NPL-000334 and TR-TSY-000335. The technical specifications for dropouts, phase hits, and gain hits are described in Technical Reference PUB 41004, Table 4 . (x) (x)

* The desired parameters are selected by the customer from the list of available parameters.

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15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(C) Technical Specifications Packages Voice Grade Service (Cont'd)

	Package VG-													
SD Code	C*	1	2	3	4	5	6	7	8	9	10	11	12	W
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE
Optional Features and Functions														
Central Office Bridging Capability	X		X			X	X				X	X	X	
Central Office Multiplexing	X						X							
Conditioning:														
. C-Type	X					X	X	X	X	X	X			
. Improved Attenuation Distortion	X					X	X	X	X	X	X			
. Improved Envelope Delay Distortion		X				X	X	X	X	X	X			
. Sealing Current	X						X							
. Data Capability	X					X	X	X						
. Telephoto Capability	X											X		
Customer Specified Premises Receive Level	X		X	X			X	X	X					
Improved Return Loss for Effective Four-Wire Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X	
For Effective Two-Wire Transmission	X		X	X				X						
Improved Two-Wire Voice Transmission														X
PPSN Interface Arrangement	X									X				
Selective Signaling Arrangement	X		X			X	X				X	X	X	
Signaling Capability	X	X	X	X	X			X	X	X				
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	X	

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(D) Technical Specifications Packages Program Audio Service

		Package			
SD Code	APC*	AP1	AP2	AP3	AP4
NC Code	PQ	PE	PF	PJ	PK
Parameter					
Actual Measured Loss	X	X	X	X	X
Amplitude Tracking	X				
Crosstalk	X	X	X	X	X
Distortion Tracking	X				
Gain/Frequency Distortion	X	X	X	X	X
Group Delay	X				
Noise	X	X	X	X	X
Phrase Tracking	X				
Short-Term Gain Stability	X				
Short-Term Loss	X				
Total Distortion	X	X	X	X	X
Optional Features and Functions					
Central Office Bridging Capability	X	X	X	X	X
Gain Conditioning	X	X	X	X	X
Stereo	X				X

The technical specifications are described in Technical Reference TR-NPL-000337 and associated Addendum . (x) (x)

* The desired parameters are selected by the customer from the list of available parameters.

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15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(E) Technical Specifications Packages Video Service

	Package		
SD Code	TVC*	TV1	TV2
NC Code	TQ	TV	TW
Video Parameters			
Insertion Gain	X	X	X
Field-Time Distortion	X	X	X
Line-Time Distortion	X	X	X
Short-Time Distortion	X	X	X
Chrominance-Luminance Gain Inequality	X	X	X
Chrominance-Luminance Delay Inequality	X	X	X
Amplitude/Frequency Characteristic	X	X	X
Luminance Non-Linear Distortion	X	X	X
Chrominance Non-Linear Gain Distortion	X	X	X
Chrominance Non-Linear Phase Distortion	X	X	X
Transient Synchronizing Signal Non-Linearty	X	X	X
Dynamic Gain Distortion			
- Picture Signal	X	X	X
- Synchronizing Signal	X	X	X
Differential Gain	X	X	X
Differential Phase	X	X	X
Chrominance-Luminance Intermodulation	X	X	X

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(E) Technical Specifications Packages Video Service (Cont'd)

	Package		
SD Code	TVC*	TV1	TV2
NC Code	TQ	TV	TW
Audio Channel Parameters Associated with Video Service			
Insertion Gain	X	X	X
Amplitude/Frequency Characteristic	X	X	X
Total Harmonic Distortion & Noise	X	X	X
Maximum Steady-State Test Levels	X	X	X
Gain Differential Between Channels	X	X	
Phase Differential Between Channels	X	X	
Crosstalk	X	X	X
Audio-To-Video Time Differential	X	X	X

The technical specifications are described in Technical Reference TR-NPL-000338 . (x)

* The desired parameters are selected by the customer from the list of available parameters.

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(F) Technical Specifications Packages Digital Data Service

	Package					
SD Code NC Code	D1 XA	D2 XB	D3 XG	D4 XH	D5 XE	D6 YN
Parameter/Hubbed						(C)
Error-Free Seconds	X	X	X	X	X	X
Optional Features and Functions/Hubbed						(C)
Central Office Bridging Capability	X	X	X	X	X	X
PPSN Interface Transfer Arrangement	X	X	X	X	X	X
Transfer Arrangement	X	X	X	X	X	X

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310. (x)

Optional Features and Functions/Non-Hubbed						(N)
Public Packet Data Arrangement				X	X	(N)

Voltages which are compatible with Digital Data Service are delineated in Technical Reference TR-NWT-000341. (T) (x)

(x) Filed under authority of Special Permission No. 93-598 of the Federal Communications Commission.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(G) Technical Specifications Packages High Capacity Service

	Package					
SD Code NC Code	HC0 HS	HC1 HC	HC1C HD	HC2 HE	HC3 HF	HC4 HG
Parameters						
Error-Free Seconds		X				
Optional Features and Functions						
Automatic Loop Transfer			X			
Central Office Multiplexing:						
DS4 to DS1						X
DS3 to DS1					X	
DS2 to DS1				X		
DS1C to DS1			X			
DS1 to Voice		X				
DS1 to DS0		X				
DS0 to Subrate*	X					
Transfer Arrangement		X				
Clear Channel Capability		X				

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62411 . (x)

* Available only on a channel of 1.544 Mbps facility to a Telephone Company Hub.

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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(H) Technical Specifications Packages Synchronous Optical Channel Service (N)

	Package	
SD Code [1] / NC Code [2]	OC3 / OB	OC12 / OD
Parameters		
Error-Free Seconds	X	X
Optional Features and Functions		
Customer Premises Multiplexing:		
OC12 to OC3		X
OC12 to OC3c		X
OC12 to DS3		X
OC12 to DS1		X
OC3 to STS-1	X	
OC3 to DS3	X	
OC3 to DS1	X	
Central Office Multiplexing:		
OC12 to OC3		X
OC12 to OC3c		X
OC3 to DS3	X	
OC3 to DS1	X	

Technical specifications are delineated in Technical Reference GR-253-CORE, GR-1374-CORE, ANSI T1.102-1993 and ANSI T1.105-1995.

[1]SD = Service Designation Code
[2]NC = Network Channel Code (N)

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes

The electrical interface with the Telephone Company for Special Access Services, is defined by an interface code. There are interface codes for both the customer designated premises and the point of termination. Three examples of NCI codes are found in 15.2 preceeding.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options

Parameter

Code	Option	Definition
AB-		accepts 20 Hz ringing signal at customer's point of termination
AC-		accepts 20 Hz ringing signal at customer's end user's point of termination
AH-		analog high capacity interface
	- B	60 kHz to 108 kHz (12 channels)
	- C	312 kHz to 552 kHz (60 channels)
	- D	564 kHz to 3084 kHz (600 channels)
CT -		Centrex Tie Trunk Termination
CS -		digital hierarchy interface at Digital Cross Connect System (DCS)
	- 15	1.544 Mbps (DS1) ANSI Extended Superframe (ESF) Format and B8ZS Clear Channel Capability
	- 15A	1.544 Mbps (DS1) Superframe (SF) format (T)
	- 15B	1.544 Mbps (DS1) Superframe (SF) format and B8ZS Clear Channel Capability
	- 15K	1.544 Mbps (DS1) Extended Superframe (ESF)
DA -		data stream in VF frequency band at customer's end user's point of termination
DB -		data stream in VF frequency band at customer's point of termination
	- 10	VF for TG1 and TG2
	- 43	VF for 43 Telegraph Carrier type signals, TG1 and TG2
DC -		direct current or voltage
	- 1	monitoring interface with series RC combination (McCulloh format)
	- 2	Telephone Company energized alarm channel
	- 3	Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud)
DD -		DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination
DE -		DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

Code	Option	Definition
DS -		digital hierarchy interface
	- 15	1.544 Mbps (DS1) format per PUB 62411 plus D4
	- 15E	8-bit PCM encoded in one 64 kbps of the DS1 signal
	- 15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
	- 15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
	- 15H	14/11-bit PCM encoded in six 64 kbps of the DS1 signal
	- 15J	1.544 Mbps format per PUB 62411
	- 15K	1.544 Mbps format per PUB 62411 plus extended framing format
	- 15L	1.544 Mbps (DS1) with SF signaling
	- 27	274.176 Mbps (DS4)
	- 27L	274.176 Mbps (DS4) with SF signaling
	- 31	3.152 Mbps (DS1C)
	- 31L	3.152 Mbps (DS1C) with SF signaling
	- 44	44.736 Mbps (DS3)
	- 44L	44.736 Mbps (DS3) with SF signaling
	- 63	6.312 Mbps (DS2)
	- 63L	6.312 Mbps (DS2) with SF signaling
DU -		digital access interface
	- 24	2.4 kbps
	- 48	4.8 kbps
	- 19	19.2 kbps
	- 56	56.0 kbps
	- 96	9.6 kbps
	- 64	64.0 kbps
	- A	1.544 Mbps format per PUB 62411
	- B	1.544 Mbps format per PUB 62411 plus D4
	- C	1.544 Mbps format per PUB 62411 plus extended framing format
	- 1KN	1.544 Mbps ANSI Extended Superframe (ESF) Format without line power
	- 1SN	1.544 Mbps ANSI Extended Superframe (ESF) Format with B8ZS Clear Channel Capability and without line power
	- AN	1.544 Mbps free-framing format without line power (only avail. to U.S. Govt. agencies)
	- BN	1.544 Mbps Superframe (SF) Format without line power
	- DN	1.544 Mbps Superframe (SF) Format with B8ZS Clear Channel Capability without line power (T)
DX -		duplex signaling interface at customer's point of termination
DY -		duplex signaling interface at customer's end user's point of termination

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

Code	Option	Definition
EA -	E	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EA -	M	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EB -	E	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EB -	M	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EC -		Type III E&M signaling at customer POT
EX -	A	tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions.
EX -	B	tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions.
GO -		ground start loop signaling - open end function by customer or customer's end user
GS -		ground start loop signaling - closed end function by customer or customer's end user
IA -		E.I.A. (25 pin RS-232)
LA -		end user loop start loop signaling - Type A OPS registered port open end
LB -		end user loop start loop signaling - Type B OPS registered port open end
LC -		end user loop start loop signaling - Type C OPS registered port open end
LO -		loop start loop signaling - open end function by customer or customer's end user
LR -		20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR
LS -		loop start loop signaling - closed end function by customer or customer's end user
NO -		no signaling interface, transmission only

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

Code	Option	Definition	
PG -		program transmission - no dc signaling	
	- 1	nominal frequency from 50 to 15000 Hz	
	- 3	nominal frequency from 200 to 3500 Hz	
	- 5	nominal frequency from 100 to 5000 Hz	
	- 8	nominal frequency from 50 to 8000 Hz	
PR	-	protective relaying*	(T)
RV	- 0	reverse battery signaling, one way operation, originate by customer	
	- T	reverse battery signaling, one way operation, terminate function by customer or customer's end user	
	SF -	single frequency signaling with VF band at either customer POT or customer's end user POT	
	TF -	telephotograph interface	
	TT -	telegraph/teletypewriter interface at either customer POT or customer's end user POT	
	- 2	20.0 milliamperes	
	- 3	3.0 milliamperes	
	- 6	62.5 milliamperes	
TV -		television interface	
	- 1	combined (diplexed) video and one audio signal	
	- 2	combined (diplexed) video and two audio signals	
	- 5	video plus one (or two) audio 5 kHz signal(s) or one (or two) two wire	
	- 15	video plus one (or two) audio 15 kHz signal(s)	

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(B) Impedance

The nominal reference impedance with which the channel will be terminated for the purpose of evaluating transmission performance:

Value (ohms)	Code(s)
110	0
150	1
600	2
900	3+
135	5
75	6
124	7
Variable	8
100	9

\+ For those interface codes with a 4-wire transmission path at the customer designated POT, rather than a standard 900 ohm impedance the code (3) denotes a customer provided transmission equipment termination. Such terminations were provided to customers in accordance with the F.C.C. Docket No. 20099 Settlement Agreement. (x) (x)

(x) Filed under authority of Special Permission No. 93-598 of the Federal Communications Commission.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces

The following tables show the Network Channel Interface codes (NCIs) which are compatible:

(1) Metallic

Compatible	CIs
2DC8-1	2DC8-2
2DC8-3	2DC8-3
4DS8-	2DC8-1
4DS8-	2DC8-2

(2) Telegraph Grade

Compatible	CIs	Compatible	CIs
2DB2-10	10IA8	4DB2-10	10IA8
	2TT2-2		2TT2-2
	4TT2-2		4TT2-2
2DB2-43*	10IA8	4DB2-43*	10IA8
	2TT2-2		2TT2-6
	2TT2-6		4TT2-2
	4TT2-2		
		4DS8-	10IA8
2TT2-2	2TT2-2		2TT2-2
			2TT2-6
2TT2-3	2TT2-2		4TT2-2
	4TT2-2		4TT2-6
2TT2-6	2TT2-6	4TT2-2	4TT2-2
	4TT2-6		
		4TT2-6	2TT2-6

* Supplemental Channel Assignment information required.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade

Compatible CIs		Compatible CIs		Compatible CIs	
2AB2	2AC2	2DB2	2DA2	2LR2	2LR2
2AB3	2AC2	2DB3	2DA2	2LR3	2LR2
2CT3	2DY2	2DX3	2LA2	2LS	2GS
	4DS8		2LB2		2LS
	4DX2		2LC2		4GS
	4DX3		2LO3		4LS
	4DY2		2LS2		
	4EA2-E		2LS3	2LS2	2LA2
	4EA2-M				2LB2
	4SF2	2GO2	2GS2		2LC2
	4SF3		2GS3		
	6DX2			2LS3	2LA2
	6DY2	2GO3	2GS2		2LB2
	6DY3		2GS3		2LC2
	6EA2-E				
	6EA2-M	2GS	2GS	2NO2	2DA2
	6EB2-E		2LS		2NO2
	6EB2-M		4GS		
	6EB3-E		4LS	2NO3	2NO2
	8EB2-E				2PR2
	8EB2-M	2L02	2LS2		
	8EC2		2LS3	2TF3	2TF2
	9DY2				
	9DY3	2L03	2LS2		
	9EA2		2LS3		
	9EA3				

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
4AB2	2AC2				
4AB2					
4AC2					
4SF2					
4AB3	2AC2				
4AC2					
4SF2					
4AC2	2AC2				
4AC2					
		4DS8-	2AC2	4DS8-	4DG2
			2DA2		4LR2
			2DY2		4LS2
			2GO2		4NO2
4DA2	4DA2		2GO3		4PR2
				2GS2	4RV2-T
4DB2	2DA2		2GS3		4SF2
	2NO2		2LA2		4SF3
	2PR2		2LB2		4TF2
	4DA2		2LC2		6DA2
	4DB2		2LO2		6DY2
	4NO2		2LO3		6DY3
	4PR2		2LR2		6EA2-E
	6DA2		2LS2		6EA2-M
			2LS3		6EB2-E
4DD3	2DE2		2NO2		6EB2-M
	4DE2		2PR2		6GS2
			2RV2-T		6LS2
			2TF2		8EB2-E
			4AC2		8EB2-M
			4DA2		9DY2
			4DE2		9DY3
			4DX2		9EA2
			4DX3		9EA3
			4DY2		
			4EA2-E		
			4EA2-M		

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd) (T)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
4DX2	2DY2	4DX2	8EB2-E	4DX3	6DY2
	2LA2		8EB2-M		6DY3
	2LB2		9DY2		6EA2-E
	2LC2		9DY3		6EA2-M
	2LO3		9EA2		6EB2-E
	2LS2		9EA3		6EB2-M
	2LS3				6LS2
	2RV2-T	4DX3	2DY2		8EB2-E
	4DX2		2LA2		8EB2-M
	4DY2		2LB2		9DY2
	4EA2-E		2LC2		9DY3
	4EA2-M		2LO3		9EA2
	4LS2		2LS2		9EA3
	4RV2-T		2LS3		
	4SF2		2RV2-T	4DY2	2DY2
	4SF3		4DX2		4DY2
	6DY2		4DX3		
	6DY3		4DY2		
	6EA2-E		4EA2-E		
	6EA2-M		4EA2-M		
	6EB2-E		4LS2		
	6EB2-M		4RV2-T		
	6LS2		4SF2		
			4SF3		

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
4EA2-E	2DY2	4EA3-E	2DY2	4GO2	2GO2
	4DY2		4DY2		2GO3
	4EA2-E		4EA2-E		2GS2
	4EA2-M		4EA2-M		2GS3
	4SF2		4SF2		4GS2
	6DY2		6DY2		4SF2
	6DY3		6DY3		6GS2
	6EB2-E		6EA2-E		
	6EB2-M		6EA2-M	4GO3	2GO2
	8EB2-E		6EB2-E		2GS2
	8EB2-M		6EB2-M		2GS3
	9DY2		8EB2-E		4GS2
	9DY3		8EB2-M		4SF2
			9DY2		6GS2
4EA2-M	2DY2		9DY3		
	4DY2		9EA2		
	4EA2-M		9EA3	4GS	2GS
	4SF2				2LS
	6DY2				4GS
	6DY3				4LS
	6EB2-E				
	6EB2-M				
	8EB2-E				
	8EB2-M				
	9DY2				
	9DY3				

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
4LO2	2LS2	4LS3	2LA2	4SF2	2LO3
	2LS3		2LB2		2LR2
	4LS2		2LC2		2LS2
	4SF2		2LO2		2LS3
	6LS2		2LO3		2RV2-T
			4SF2		4AC2
4LO3	2LS2				4DY2
	2LS3	4NO2	2DA2		4LS2
	4LS2		2DE2		4RV2-T
	4SF2		2NO2		4SF2
	6LS2		4DA2		6DY2
			4DE2		6DY3
4LR2	2LR2		4NO2		6GS2
	4LR2		6DA2		9DY2
	4SF2				9DY3
		4RV2-0	2RV2-T		
4LR3	2LR2		4RV2-T	4SF3	2DY2
	4LR2		4SF2		2GO3
	4SF2				2GS2
					2GS3
4LS	2GS	4SF2	2AC2		2LA2
	2LS		2DY2		2LB2
	4GS		2GS2		2LC2
	4LS		2GS3		2LO3
			2LA2		2LR2
4LS2	2LA2		2LB2		
	2LB2		2LC2		
	2LC2				
	2LO2				
	2LO3				

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
4SF3	2LS2	6DA	4DA2	6DY32	DY2
	2LS3		6DA2		4DY2
	2RV2-T				6DY2
	4DY2	6DX2	2DY2		6DY3
	4EA2-E		4DY2		
	4EA2-M		4EA2-E	6EA2-E	2AC2
	4GS2				
	4LR2		4EA2-M		2DY2
	4LS2		4SF2		2LA2
	4RV2-T		6DY2		2LB2
	4SF2		6DY3		2LC2
	4SF3		6EA2-E		2LO3
	6DY2		6EA2-M		2LS2
	6DY3		6EB2-E		2LS3
	6EB2-E		6EB2-M		2RV2-T
	6EB2-M		8EB2-E		4AC2
	6GS2		8EB2-M		4DY2
	6LS2		9DY2		4EA2-E
	9DY2		9DY3		4EA2-M
	9DY3		9EA2		4LS2
	9EA2		9EA3		4RV2-T
	9EA3				4SF2
		6DY2	2DY2		4SF3
4TF2	2TF2		4DY2		6DY2
	4TF2		6DY2		6DY3
					6EA2-E
					6EA2-M

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
6EA2-E	6EB2-E	6EA2-M	6DY2	6EB3-E	2DY2
	6EB2-M		6DY3		4DY2
	6LS2		6EA2-M		4EA2-E
	8EB2-E		6EB2-E		4EA2-M
	8EB2-M		6EB2-M		4SF2
	9DY2		6LS2		6DY2
	9DY38		EB2-E		6DY3
			8EB2-M		6EA2-E
6EA2-M	2AC2		9DY2		6EA2-M
	2DY2		9DY3		8EB2-E
	2LA2				8EB2-M
	2LB2	6EB2-E	2DY2		9DY2
	2LC2		4DY2		9DY3
	2LO3		4SF2		9EA2
	2LS2		6DY2		9EA3
	2LS3		6DY3		
	2RV2-T		6EB2-E	6EX2-A	2GS2
	4AC2		6EB2-M		2GS3
	4DY2		9DY2		2LS2
	4EA2-E		9DY3		2LS3
	4EA2-M				4GS2
	4LS2	6EB2-M	2DY2		4LS2
	4RV2-T		4DY2		4SF2
	4SF2		4SF2		6GS2
	4SF3		6DY2		6LS2
			6DY3		
			6EB2-M		
			9DY2		
			9DY3		

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
6EX2-B	2GO3	8EB2-E	2AC2	8EB2-M	2AC2
	2LA2		2DY2		2DY2
	2LB2		2LA2		2LA2
	2LC2		2LB2		2LB2
	2LO2		2LC2		2LC2
	2LO3		2LO3		2LO3
	2LR2		2LS2		2LS2
	4LR2		2LS3		2LS3
	4SF2		2RV2-T		2RV2-T
			4AC2		4AC2
6GO2	2GO2		4DY2		4DY2
	2GS2		4LS2		4LS2
	2GS3		4RV2-T		4RV2-T
	4GS2		4SF2		4SF2
	4SF2		4SF3		4SF3
	6GS2		6DY2		6DY2
			6DY3		6DY3
6LO2	2LS2		6EB2-E		6EB2-E
	2LS3		6EB2-M		6EB2-M
	4LS2		6LS2		6LS2
	4SF2		8EB2-E		8EB2-M
	6LS2		8EB2-M		9DY2
			9DY2		9DY3
6LS2	2LA2		9DY3		
	2LB2				
	2LC2				
	2LO2				
	2LO3				
	4SF2				

ACCESS SERVICE

15 .Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

Compatible	CIs	Compatible	CIs	Compatible	CIs
8EC2	2DY2	9DY2	2DY2	9EA3	2DY2
	4DY2		4DY2		4DY2
	4EA2-E		6DY2		4EA2-E
	4EA2-M		6DY3		4EA2-M
	4SF2		9DY2		6DY2
	6DY2				6DY3
	6DY3	9DY3	2DY2		6EA2-E
	6EA2-E		4DY2		6EA2-M
	6EA2-M		6DY2		6EB2-E
	6EB2-E		6DY3		6EB2-M
	6EB2-M		9DY2		8EB2-E
	8EB2-E		9DY3		8EB2-M
	8EB2-M				9DY2
	9DY2	9EA2	2DY2		9DY3
	9DY3		4DY2		9EA3
	9EA2		4EA2-E		
	9EA3		4EA2-M		
			6DY2		
			6DY3		
			6EA2-E		
			6EA2-M		
			6EB2-E		
			6EB2-M		
			8EB2-E		
			8EB2-M		
			9DY2		
			9DY3		
			9EA2		
			9EA3		

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(4) Program Audio

Compatible	CIs	Compatible	CIs
2PG2-1	2PG1-1 2PG2-1	4DS8-15E	2PG1-3 2PG2-3
2PG2-3	2PG1-3 2PG2-3	4DS8-15F	2PG1-5 2PG2-5
2PG2-5	2PG1-5 2PG2-5	4DS8-15G	2PG1-8 2PG2-8
2PG2-8	2PG1-8 2PG2-8	4DA8-15H	2PG1-1 2PG2-1

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(5) Video

Compatible	CIs	Compatible	CIs
2TV6-1	4TV6-15 4TV7-15	4TV7-5	4TV6-5 4TV7-5
2TV6-2	6TV6-15 6TV7-15	4TV7-15	4TV6-15 4TV7-15
2TV7-1	4TV6-15 4TV7-15	6TV6-5	6TV6-5 6TV7-5
2TV7-2	6TV6-15 6TV7-15	6TV6-15	6TV6-15 6TV7-15
4TV6-5	4TV6-5 4TV7-5	6TV7-5	6TV6-5 6TV7-5
4TV6-15	4TV6-15 4TV7-15	6TV7-15	6TV6-15 6TV7-15

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(6) Digital Data

Compatible CIs		Compatible CIs		Compatible CIs	
4DS8-15	4DS8-15+	4DU5-24	4DU5-24	6DU5-24	6DU5-24
4DU5-24	4DU5-48	4DU5-48	4DU5-48	6DU5-48	6DU5-48
4DU5-56	4DU5-96	4DU5-96	4DU5-96	6DU5-56	6DU5-56
6DU5-24	6DU5-48	4DU8-56	4DU5-56	6DU5-96	6DU5-96
6DU5-96					

\+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company hub.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(7) High Capacity

Compatible	CIs	Compatible	CIs
4DS0-63	4DS0-63 4DU8-A,B or C 6DU8-A,B or C	4DS8-15J	4DU8-A 6DU8-A
4DS6-27	4DS6-27 4DU8-A,B or C 6DU8-A,B or C	4DS8-15K	4DU8-B 4DU8-C 6DU8-B 6DU8-C
4DS6-44	4DS6-44 4DU8-A,B or C 6DU8-A,B or C	4DS8-31	4DS8-31 4DU8-A,B or C 6DU8-A,B or C
4DS8-15	4DS8-15+ 4DU8-B 6DU8-8	4DU8-A,B or C	4DU8-A,B or C

(8) Synchronous Optical Channel Service (N)

Compatible	CIs	Compatible	CIs	
4DS9-1S 4DS9-1K	4DU9-1S 4DU9-1K	02S0F-A 02S0F-B 02S0F-C 02S0F-D 02S0F-E 02S0F-F	02S0F-A 02S0F-B 02S0F-C 02S0F-D 02S0F-E 02S0F-F	(N)

\+ Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.

ACCESS SERVICE

16. Public Packet Data Network

Public Packet Data Networks utilize separate data networks, comprised of switching and transmission facilities. The networks provide for the transfer of data provided by a customer in a frame format. The data is separated into discrete segments for transmission through the public packet data network.

16.1 Frame Relay Access Service

Telephone Companies providing Frame Relay Access Service under this Section are indicated in the following table. (N)

Carrier	SAC	Stand-ard Ports	Chan-nelized End User Port	FRIC * FRAC	PVCs	DLCI	DSL Access Con-nection	Term Dis-counts
Atlantic Telephone Membership Corporation (NC)	230468	X	X	X	X		X	
Bluffton Telephone Company (SC)	240512	X		X	X			X
Fort Mill Telephone Co. d/b/a Comporium Communications (SC)	240521	X	X		X	X		
Hargray Telephone Co. (SC)	240523	X		X	X			X
Home Telephone Co. (SC)	240527	X	X		X	X		
Horry Telephone Coop. (SC)	240528	X	X	X	X			X
Lancaster Telephone Co. d/b/a Comporium Communications (SC)	240531	X	X		X	X		
Rock Hill Telephone Co. d/b/a Comporium Communications (SC)	240542	X	X		X	X		

(N)

Material formerly on this page currently appears on Original Page 16-1.2

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

Telephone Companies providing Frame Relay Access Service under this Section are indicated in the following table. (Cont'd) (N)

Carrier	SAC	Stand-ard Ports	Chan-nelized End User Port	FRIC * FRAC	PVCs	DLCI	DSL Access Con-nection	Term Dis-counts
#TDS Telecom Companies [1]		X	X	X	X		X	
#Camden Tel. and Telegraph Company, Inc. d/b/a TDS Telecom[1]	220351	X	X	X	X		X	
#Mt. Vernon Telephone Company d/b/a TDS Telecom[1]	330917	X	X	X	X		X	
#Oklahoma Communication Systems, Inc. d/b/a TDS Telecom[1]	431984	X	X	X	X		X	
#Tennessee Telephone Company d/b/a TDS Telecom[1]	290575	X	X	X	X		X	
#Chesnee Telephone Company, Inc.	240515	X	X	X	X		X	X
#Gearheart Communications Company, Inc. d/b/a Coalfields Telephone Company	260408	X	X	X	X		X	X
#Skyline Telephone Membership Corp.	230501	X	X	X	X		X	X
#Yadkin Valley Telephone Membership Corp.	230511	X	X	X	X		X	X

(1) TDS Telecom Companies rates for four issuing carriers are pooled and listed under "TDS Telecom Companies" in Section 17.

#Telephone Company will become an issuing carrier for JSI Tariff F.C.C. No. 1 under Transmittal No. 130 effective June 30, 2007. (N)

Transmittal No. 129

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (M)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General

(A) General

Frame Relay Access Service (FRAS) is a medium-speed, connection-oriented packet-switched data service that allows for the interconnection of Local Area Networks (LANs) or other compatible end user customer premises equipment for the purpose of connecting to an access customer's interstate network. The terminal equipment accumulates the customer data and puts it into a frame relay format suitable for transmission over the FRAS network. This terminal equipment must conform to American National Standards Institute and Committee Consultat de International Telegraphique et Telephonique (CCITT) standards.

FRAS permits customers to share network bandwidth for data transmissions.

Rates and charges for FRAS are set forth in 17.4 following. The application of rates for FRAS is described in 16.1.2 following. (T)

In addition to the regulations and charges specified in this section, the general regulations and charges specified in other sections of this tariff apply as appropriate.

(B) Service Description

FRAS is a transport service that facilitates the exchange of variable length information units (frames) between customer connections. Frames travel a fixed path through the network with an address that specifies the permanent virtual connection. Addresses are read by the network processor and the frames are relayed to the preassigned destination. (M)

Material currently on this page formerly appeared on 2nd Revised Page 16-1.

Transmittal No. 129

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(B) Service Description (Cont'd)

The service includes: the End User Port, either Standard or Channelized, (also referred to as the User Network Interface (UNI)) connection, the Access Customer Port (also referred to as the Network-to-Network interface (NNI)) connection, and Permanent Virtual Connections (PVC) which have associated Committed Information Rates (CIRs). A special access facility (ordered out of Section 7 preceding) is used to connect to the frame relay switch. In addition to the foregoing services, the Telephone Company may also provide Frame Relay Access Connection arrangements described at Section 16.1.1(E) following, and Frame Relay Inter-Network Connection arrangements described at Section 16.1.1(F) following. (N)

The Standard End User Port connection permits FRAS compatible end user customer premises equipment (CPE) to originate or terminate an interstate access service. Connections between end user customer premises equipment and the telephone company frame relay switch may be available at speeds of 56.0 kbps, 64.0 kbps, 1.544 Mbps, or 44.736 Mbps. The Channelized End User Port allows an end user to purchase FRAS at speeds of 56.0/64.0 kbps expandable, in addition to speeds greater than 64.0 kbps and up to 1.544 Mbps. Each End User Port connection requires the identification of a corresponding terminating port connection(s). (C) (C)

The Access Customer Port connection connects the telephone company frame relay switch and the access customer's network. The facility connecting an access customer network to the telephone company frame relay switch may be offered at 1.544 Mbps or 44.736 Mbps as indicated in the Telephone Company's FRAS rates at Section 17.4.8 following. (C) (N)

Connections are provided via Channel Terminations (see Section 7 Special Access Digital Data and High Capacity Services preceding). All regulations, rates and charges as specified in Section 7 will apply in addition to the rates and charges associated with FRAS.

All End User Port connections must be in conformance with American National Standards Institute (ANSI) standards T1.606-1990, T1.606 Addendum 1-1991, T1.606a-1992, T1.617, Annex D-1992. All Access Customer Port connections must be in conformance with ANSI standards T1.606b-1993 and Bellcore Technical Reference TR-TSV-001370, Issued: May 1993.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(B) Service Description (Cont'd)

PVCs are software defined, end-to-end, bi-directional communications paths that are established and dis-established via the access service order process. While no physical circuits are dedicated, the two network addresses (one from each port connection) are connected electronically to form a PVC.

There are two types of PVCs available. The standard PVC establishes a communications path between two ports on the same frame relay switch. The extended PVC establishes a communications path between two ports on two interconnected telephone company frame relay switches.

At the time service is ordered the number of PVCs will be identified along with their Committed Information Rates. CIR is the bit rate at which the FRAM network commits to transfer data. Committed Information Rates provide for frame relay switch throughput at designated speeds. (See 16.1.2 (A) (3) following.) This information is required for network routing purposes.

(C) Ordering Options and Conditions

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

A minimum of two FRAS port connections are required for data to be transported between customer designated premises. (N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(C) Ordering Options and Conditions (Cont'd)

When placing an order for FRAS the customer must specify:

- The number of Permanent Virtual Connections (PVCs) required;
- the location of the ports for each PVC;
- the Committed Information Rates (CIRs) that will be associated with each PVC;
- that the traffic consists of more than ten percent interstate traffic.

The port connecting the special access facility to the telephone company frame relay switch must be ordered and provided at the same speed as the special access facility.

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

When an extended PVC is ordered, the customer is responsible for placing the order with all telephone companies involved.

(D) Acceptance Testing

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test at the time of installation.

(E) Service Description for Frame Relay Access Connection (FRAC) (N)

As an alternative to providing a FRAS connection between the customer designated premises (CDP) and the frame relay switch through a combination of an End User Port and Special Access Digital Data or High Capacity transport, the Telephone Company may provide the FRAS connection by a Frame Relay Access Connection (FRAC). The FRAC combines a frame relay compatible 56.0 kbps, 64.0 kbps, 1.544 Mbps or 44.736 Mbps digital transport facility with an End User Port on a frame relay switch. The FRAC includes the Telephone (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(E) Service Description for Frame Relay Access Connection (FRAC) (N)

Company facility between the CDP and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a Telephone Company wire center equipped with a frame relay switch, and a Standard End User Port. The Standard End User Port is described at Section 16.1.1(B) preceding.

Telephone Companies offering FRAS under a FRAC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following.

(F) Service Description for Frame Relay Inter-Network Connection (FRIC)

As an alternative to providing a FRAS network to network connection between the Telephone Company's frame relay switch and the CDP through a combination of an Access Customer Port and Special Access High Capacity transport, the Telephone Company may provide the FRAS network to network connection by a Frame Relay Inter-network Connection (FRIC). The FRIC combines a frame relay compatible 1.544 Mbps or 44.736 Mbps digital transport facility with a port on a frame relay switch. The FRIC includes the Telephone Company facility between the customer designated premises (CDP) and the customer's serving wire center, the interoffice transport (if applicable) between the customer's Telephone Company serving wire center and a Telephone Company wire center equipped with a frame relay switch, and the Access Customer Port. The Access Customer Port is described at Section 16.1.1(B)preceding. The FRIC is offered at speeds of 1.544 Mbps or 44.736 Mbps.

A FRIC is not available for connection to customer frame relay networks that are not located within the Telephone Company's service area. Customers with frame relay networks located outside the Telephone Company's service area must separately order a FRAS Access Customer Port and Special Access High Capacity Channel transport in addition to any required PVC or FRAC services.

Telephone Companies offering FRAS under a FRIC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

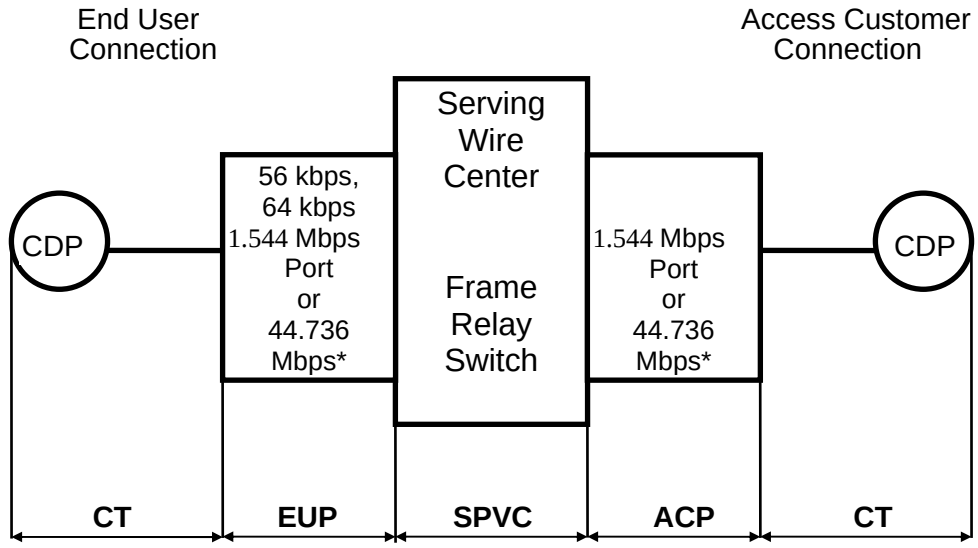
16.1.2 Rate Regulations

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

(A) Rate Categories

The following diagrams depict a generic view of the components of FRAS and the manner in which the components are combined to provide Frame Relay Access Service and Interconnected Frame Relay Access Service.

Frame Relay Access Service



(C)
(C)
(C)
(C)

CDP - Customer Designated Premises
CT - Channel Termination
EUP - End User Port
SPVC- Standard Permanent Virtual Connection
ACP - Access Customer Port

* 44.736 Data speed availability is subject to individual Telephone Company offerings as indicated in Section 17.4.8 following. (N) (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

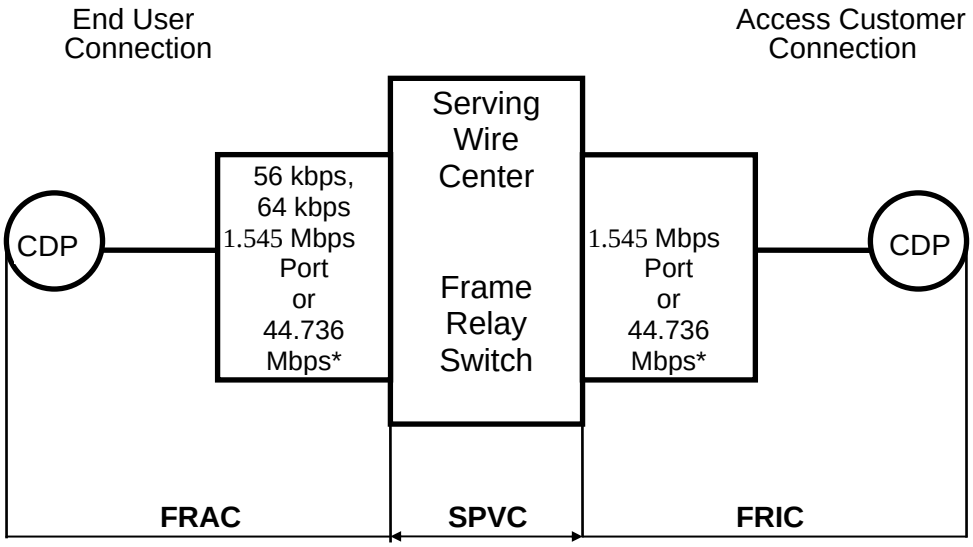
16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations

(N)

Frame Relay Access Service

For Telephone Companies with Frame Relay Access Connection (FRAC) and Frame Relay Inter-network Connection (FRIC) rate elements (access customer located in Telephone Company service area)



CDP - Customer Designated Premises
FRAC – Frame Relay Access Connection
SPVC - Standard Permanent Virtual Connection
FRIC - Frame Relay Inter-Network Connection

* 44.736 Data speed availability is subject to individual Telephone Company offerings as indicated in Section 17.4.8 following.

(N)

ACCESS SERVICE

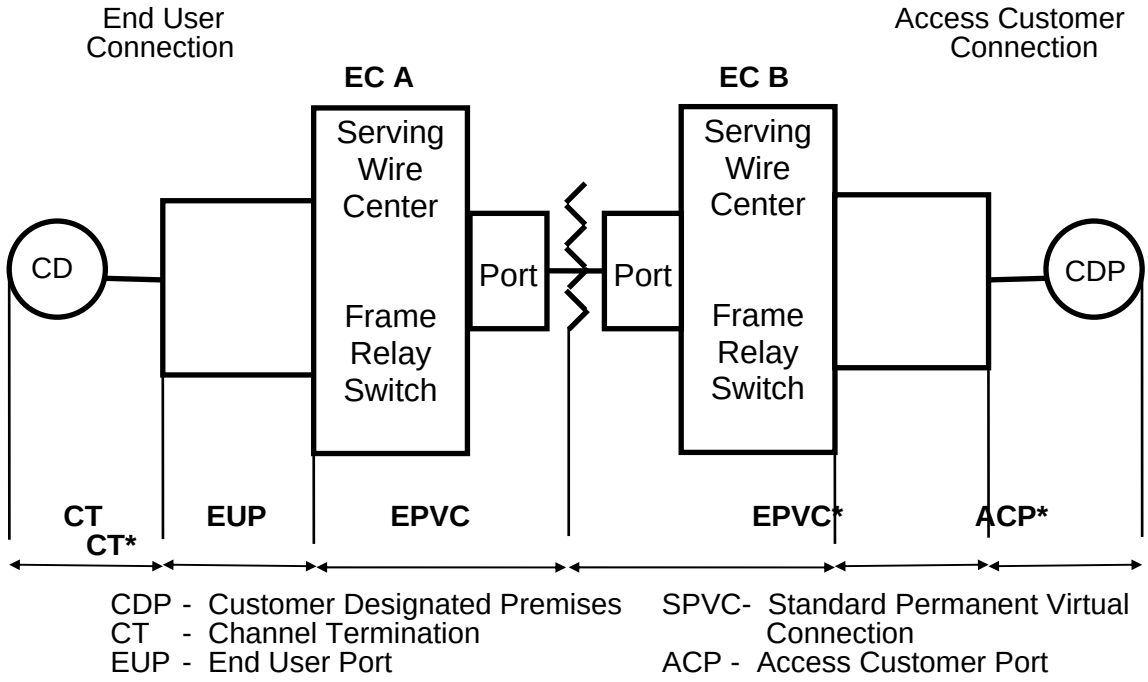
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

Interconnected
Frame Relay Access Service



(C)

CDP - Customer Designated Premises
CT - Channel Termination
EUP - End User Port
SPVC- Standard Permanent Virtual Connection
ACP - Access Customer Port

* The application of these charges by EC B is dependent upon EC B's access tariff.

Frame Relay Access Service is available at designated wire center locations only.

(1) End User Port - Standard

The Standard End User Port is the physical location in the telephone switching office where the special access facility of the customer connects to the FRAS Network. It receives the data frame from the end user customer's Local Area Network or other compatible CPE device and verifies that the end user connection and the corresponding access customer connection are valid before relaying the frame to the destination end point.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(1) End User Port - Standard (Cont'd)

The Standard End User Port consists of either a 56.0 kbps, 64.0 kbps, or a 1.544 Mbps port interface connection. The port connecting the special access facility to the telephone company frame relay switch must be ordered and provided at the same speed as the special access facility. (See 7.9 and 7.10 preceding.) When a term discount is applied to a special access DS1 facility connecting to a 1.544 port on a frame relay switch, the discount on the port will be equivalent to the discount on the special access DS1 facility. Section 7.2.8(A) preceding specifies the conditions under which a term discount is applicable.

(2) End User Port – Channelized

The Channelized End User Port allows an end user to purchase Frame Relay Access Service at speeds of 56/64 expandable, in addition to speeds greater than 64 kbps and up to 1.544 Mbps. Full DS1 connectivity between the customer designated premises (CDP) and the frame relay switch is required. End users must purchase a dedicated DS1 special access facility from their CDP to a Digital Access Cross-Connect System (DACS) at their serving wire center to access the channelized connection. The Channelized End User Port configuration connects the DACS located at the end user's serving wire center with a DS1 port on the Frame Relay Switch. The channelized DS1 facility from the end user's serving wire center to the frame relay switch is a direct connection between the frame relay switch and the serving wire center DACS and is available only for the provisioning of frame relay service. (T) (T)

End user customers can purchase a non-expandable Channelized End User Port available at speeds of 56 and 64 kbps. The end user must purchase a dedicated 56/64 kbps loop to a DS1 to a voice multiplexor at the serving wire center for each 56/64 kbps channelized port connection.

The Channelized End User Port element is available only for use with Frame Relay Access Service and where sufficient facilities exist to provide the service. In addition, pricing and provisioning of frame relay services provided jointly with other companies will be dependent upon other company's DS1 prices and their agreement to provide channelized transport in their or other companies operating areas.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(3) Access Customer Port (C) (M)

The Access Customer Port is the physical location in the telephone company switching offices where the access customer's special access facility connects to the telephone company's FRAS network. It specifies how a frame relay switch sends and receives data from a frame relay access customer's network. The Access Customer Port is offered at a speed of 1.544 Mbps. The port connecting the special access facility to the telephone company frame relay switch must be ordered and provided at the same speed as the special access facility. (See 7.9 and 7.10 preceding.) Section 7.2.8(A) preceding specifies the conditions under which a term discount is applicable. (M)

(4) Permanent Virtual Connection (PVC) (C)

A PVC is a software defined communications path between two port connections within the FRAS network.

Each PVC is provisioned with a customer selected Committed Information Rate. The CIR is a transmission speed specified by the customer. CIRs range from 8 kbps to 768 kbps. The telephone company will provide switch capacity to permit the customer to transmit information with guaranteed delivery at the specified CIR. Transmissions at a rate above the subscribed CIR will be marked "Discard Eligible" (DE), and, should network congestion occur, are subject to being dropped by the network. If CIR is set equal to zero, then all frames will be marked DE. The CIR value selected cannot exceed the maximum transportation speed of the port at either end of the PVC. (C) (C)

Customers will be permitted to order multiple PVCs on a given port subject to switch limitations. Customers anticipating non-simultaneous transmission may order CIRs assigned to these multiple PVCs, the sum of which may theoretically exceed the actual throughput of the port. However, when simultaneous transmission of multiple PVCs occurs, the total of the transmission rate (CIRs) may not exceed the actual throughput of the port.

There are two types of PVCs available. The standard PVC establishes a communications path between the End User Port and the Access Customer Port on the same frame relay switch. The extended PVC establishes a communications path between the End User Port on a telephone company's frame relay switch and an Access Customer Port on another interconnected telephone company's frame relay switch.

Certain material currently found on this page formerly appeared on Original Page 16-7

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Frame Relay Access Connection (FRAC) (N)

The Frame Relay Access Connection (FRAC) rate element recovers the costs associated with the communication path between the end user's premises and the Telephone Company wire center equipped with a frame relay switch. The FRAC includes the physical transmission facility between the customer designated premises (CDP) and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a wire center equipped with a frame relay switch, and the end user port on the Telephone Company's frame relay switch.

One FRAC charge applies per CDP at which the FRAS connection is terminated. This applies even if the CDP and the frame relay switch are collocated in a Telephone Company building.

Telephone Companies offering FRAS under a FRAC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following. Telephone Companies offering FRAS under a FRAC arrangement will assess a single monthly FRAC charge in lieu of separate charges for a Standard End User Port charge under Section 16.1.2(A)(1) preceding and Special Access Digital Data or High Capacity Service under, respectively, Sections 7.9 and 7.10 preceding. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(6) Frame Relay Inter-network Connection (FRIC) (N)

The Frame Relay Inter-network Connection (FRIC) rate element recovers the costs associated with the communication path for a network-to-network connection between the customer designated premises (CDP) and the Telephone Company wire center equipped with a frame relay switch. The FRIC includes the physical transmission facility between the CDP and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a wire center equipped with a frame relay switch, and the Access Customer Port on the CDP at which the FRAS connection is terminated. This applies even if the CDP and the frame relay switch are collocated in a Telephone Company building.

A FRIC is not available for connection to customer frame relay networks that are not located within the Telephone Company's service area. Customers with frame relay networks located outside the Telephone Company's service area must separately order a FRAS Access Customer Port and Special Access High Capacity Channel transport in addition to any required PVC or FRAC services.

Telephone Companies offering FRAS under a FRIC arrangement are indicated by inclusion of a FRAC rate in Section 17.4.8 following. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(B) Types of Rates and Charges

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described as follows:

(1) Monthly Rates

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

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for FRAS are: installation of service and service rearrangements. These charges are in addition to the Access Order Charges as specified in 17.4.1 following:

(a) Installation of Service

Nonrecurring charges apply for the installation of PVCs. (N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(b) Service Rearrangements

(N)

Service Rearrangements are changes to existing (installed) service.

A PVC Rearrangement Charge will be applied whenever a change is made to the CIR of an existing PVC after initial port installation and/or a change is made to the termination port destination of the PVC.

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(C) Minimum Period

The minimum period for FRAS is one month and the full monthly rate will apply to the first month. Adjustments for quantities of services established or discontinued in any billing period beyond the minimum period are as set forth in 2.4.1(F). The minimum period for the Frame Relay Service 1.544 Mbps port are as set forth in 2.4.2 and 5.5.1.

(D) Optional Features

The Optional Features rate category provides for optional features which may be added to FRAS in order to improve its quality or utility to meet specific communications requirements.

(1) Data Link Channel Identifiers (DLCI)

This Feature provides for the assignment of DLCIs per end user or access customer port connection. One DLCI is required per end user or access customer port. When any two DLCIs are mapped together, a PVC can be created. An initial DLCI is included with each end user or access customer port. An additional charge applies for every DLCI after the first one for each type of port. (N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (N)

A Term Discount plan is available for Frame Relay Access Service (FRAS). The Term Discount applies to the Frame Relay Access Connection (FRAC) and Frame Relay Inter-network Connection (FRIC) charges. The End User Port, Inter-network Customer Port charges, and Permanent Virtual Connections (PVCs) are not eligible for a Term Discount. Under the Term Discount plan, the current monthly rates for eligible services are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the service commitment period selected by the customer. The Term Discount percentages for FRAS are as set forth in 17.4.8 following.

The Term Discount Optional Rate Plan is only available for those Telephone Companies indicating the Term Discounts within their FRAS rate section in Section 17.4.8 following.

The minimum service period on a month-to-month basis is one month. Under an Optional Rate Plan, the minimum service period is twelve months.

(A) Term Discounts

FRAS may be ordered at the customer's option on a month-to-month basis or for Term Discount periods of 36 months (3 years) or 60 months (5 years).

The minimum service period for all Term Discount plans is twelve months. The customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 36 or 60 months, the Term Discount percentage as set forth in 17.4.8 following will be frozen from Company initiated decreases for the entire discount period at the percent in effect at the beginning of the Term Discount period. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (N)

(A) Term Discounts (Cont'd)

If a Term Discount Percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not make a choice by the end of the discount period, the rates will automatically convert to month-to-month service rates.

To be included in a Term Discount plan, all eligible FRAS rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

As long as the number of FRAS connections included in a Term Discount plan remains constant, customer requests to install and disconnect FRAS connections, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period, and Discontinuance of Service charges as set forth in (3) following will not apply.

(1) Upgrades in Term Discounts

Services provided under month-to-month rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring FRAS nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all FRAS that is upgraded. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (N)

(A) Term Discounts (Cont'd)

(2) Upgrades in Capacity

If the customer chooses to upgrade a service under the Term Discount plan to a higher capacity (e.g., from 56.0 kbps to 64.0 kbps or from 56.0 kbps or 64.0 kbps to 1.544 Mbps), discontinuance charges will not apply, provided all the following conditions are met:

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

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

- the new service has a total capacity greater than the total capacity of the service being discontinued and,

- the new Term Discount period meets or exceeds the Term Discount period being discontinued.

A new minimum service period applies to all upgrades. A Frame Relay Access Connection nonrecurring charge for an equivalent capacity of the existing services being upgraded to the higher speed service will not be assessed. FRAC nonrecurring charges will not apply to the upgraded lower speed services placed on the higher speed service if requested at the same time as the upgrade request. Nonrecurring charges will apply for capacity that exceeds the existing equivalent capacity. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (N)

(A) Term Discounts (Cont'd)

(2) Upgrades in Capacity (Cont'd)

Discontinuance charges will not apply should the customer choose to upgrade either a portion of or the entire FRAS under the Term Discount plan and move the service to a new customer location(s) where service is provided by the Telephone Company.

(3) Discontinuance of Service

If the customer chooses to disconnect all or a portion of the service prior to the expiration of the Term Discount period, discontinuance charges will apply to the portion of the service being discontinued.

Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent of the total undiscounted monthly charges will apply to the remaining portion of the discount service term.

Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent of the total undiscounted monthly charges will apply to the remaining portion of the discount period. For example, a customer has a 1.544 Mbps Frame Relay Access Connection which it chooses to discontinue after 33 months into a 60-month service term. The discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service

The Telephone Companies listed below offer Asymmetric Digital Subscriber Line (ADSL) Access Services under the provisions specified in this section as indicated on one or more of the following pricing arrangements: 1) non-discounted month-to-month rates (non-Discount Pricing Arrangement or non-DPA), 2) Term and Volume Plan (TVP) Pricing under Section 16.2.2(E), or 3) Discount Pricing Arrangement (DPA) pricing under Section 16.2.3.

Telephone Company	Non-DPA	Section 16.2.2(E) TVP	Section 16.2.3 DPA
Atlantic Telephone Membership Corporation	X		
Millington Telephone Company, Inc.	X		
Mt. Horeb Telephone Company	X		
Star Telephone Membership Corporation	X	X	

(D)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service

16.2.1 General Description

(A) Basic Service Description

(1) Asymmetrical Digital Subscriber Line (ADSL) Service is an access data technology service offered at various downstream (Down) and upstream (Up) speeds. The "Up" speed represents transmission speed in kilobits per second (Kbps), from the point of demarcation at the customer's designated premises to the Telephone Company's ADSL connection point; while the "Down" speed represents transmission speed in Kbps or Mbps from the Telephone Company's ADSL connection point to the point of demarcation at the customer's designated premises. Actual speed may be affected by loop distance and other factors. (C) (x) (C) (x)

(2) The ADSL Service may require a splitter at both the customer's designated premises and the Telephone Company's serving wire center to split the traffic between data and voice. The customer is responsible for providing and maintaining the splitter at the customer designated premises.

(3) ADSL Access Service is available as two service options, i.e., ADSL Voice-Data and ADSL Data-Only.

(a) The ADSL Voice-Data option provides transmission of data signals at peak data transmission speeds of 512 kbps upstream and 1.544 Mbps downstream using the Telephone Company's existing local exchange service line. This option may be used for simultaneous voice and data communications.

(b) The ADSL Data-Only option provides transmission of data signals at peak transmission speeds of 512 kbps upstream and 1.544 Mbps downstream using the Telephone Company's existing local exchange copper facilities. This option does not provide the ability to transmit voice communications.

(B) Service Provisioning

ADSL Service is provisioned over existing Telephone Company copper facilities and transported to the Telephone Company's backbone network. ADSL Service provides a connection from the customer's designated location (CDL) to the ADSL Connection Point. (C) (x)

(C) (x)

(x) Filed under authority of Special Permission No. 06-002 of the Federal Communications Commission to reinstate currently effective material and to withdraw revisions filed under Transmittal 112 without becoming effective.

ACCESS SERVICE

(C) (x)

(C) (x)

(x) Filed under authority of Special Permission No. 06-002 of the Federal Communications Commission to reinstate currently effective material and to withdraw revisions filed under Transmittal 112 without becoming effective.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.1 General Description (Cont'd)

(B) Service Provisioning (Cont'd)

Access from the Telephone Company's ADSL Connection Point will be provided via High Capacity Special Access Service and/or Frame Relay Access Service, where facilities permit. High Capacity Special Access Service is available in Section 7.10 preceding. Frame Relay Access Service is available in Section 16.1 preceding. If a customer utilizes Special Access Service or Frame Relay Access Service pursuant to sections 7.10 or 16.1 preceding, the associated rates and charges for such facilities shall apply in addition to the rates and charges associated with the ADSL rate element. (C) (x)

The Telephone Company will qualify the local exchange service loop between the customer's designated premises and the serving wire center. The purpose of qualification is to determine the availability and suitability of existing Telephone Company facilities to provide the service, and to determine if Loop Conditioning is required to support ADSL Service. The Telephone Company will not provision this service on facilities which are not suitable for ADSL.

The Telephone Company does not undertake to originate data, but offers the use of its ADSL service, where available, to customers for the purpose of transporting data originated by the customer or a third party.

All customers will be served from the nearest suitably equipped end office. Information pertaining to end offices equipped to provide ADSL Service is set forth in the National Exchange Carrier Association, Inc. (NECA) Tariff F.C.C. No. 4. ADSL Service will be provided subject to the availability and limitations of the Telephone Company wire centers and outside plant facilities. ADSL service is only available where technical capabilities permit such facility distance and type of physical plant.

(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain ADSL Service for the customer up to and including the Network Interface Device (NID) or the protector. The Telephone Company will advise the customer of the customer premises equipment (CPE) necessary to support ADSL Service that the customer will need to purchase.

(x) Filed under authority of Special Permission No. 06-002 of the Federal Communications Commission to reinstate currently effective material and to withdraw revisions filed under Transmittal 112 without becoming effective.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.1 General Description (Cont'd)

(D) Rights of The Telephone Company

ADSL Access Service will be provided over existing Telephone Company local exchange service lines. Rates and regulations for ADSL Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company's general and/or local exchange service tariffs. The Telephone Company will automatically disconnect ADSL Access Service when the associated local exchange service line is disconnected for any reason.

The Telephone Company will not provision ADSL service if the Telephone Company has reasonably determined that (a) it is not technically feasible over existing facilities or (b) it will cause interference problems within the Telephone Company's network or other facilities.

During the Telephone Company's network maintenance and software update period, it may be necessary to temporarily place the ADSL central office equipment out of service. The Telephone Company reserves the right to temporarily interrupt ADSL Service at other times in emergency situations. (C) (x)

(E) Responsibility of the Customer

The customer is responsible for providing the Telephone Company with the necessary information to provision ADSL Access Service (e.g., customer name, telephone number and premises address; billing name and address when different from the customer name and premise address; its Internet Protocol (IP) address; and the contact name and telephone number of the telecommunications service provider with which the customer's ADSL Access Service will interconnect).

The customer is responsible for providing compatible customer premises equipment (CPE) that is used for connection to ADSL Service.

The ISP/NSP customer is responsible for providing the Telephone Company with the necessary information (e.g., Data Link Connection Identifier(s), and/or Internet Protocol) to provision the ADSL Service.

The ISP/NSP customer will obtain the appropriate authorization to allow the Telephone Company to provision ADSL Service over the customer's end user's existing telephone exchange service line. (C) (x)

Where required, the ISP/NSP customer will be responsible for obtaining permission from its subscriber(s) for the Telephone Company's agents or employees to enter the customer's Designated premises at a mutually agreed upon time for the purpose of installing, inspecting, repairing, or upon termination of the service, removing the service components of the Telephone Company.

The ISP/NSP customer will deal directly with its end user customers with respect to all matters pertaining to the service provided, including marketing, sales, ordering, installation, maintenance, trouble reporting, repair, billing and collections.

(x) Filed under authority of Special Permission No. 06-002 of the Federal Communications Commission to reinstate currently effective material and to withdraw revisions filed under Transmittal 112 without becoming effective.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.2 Rate Regulations

(A) Rate Elements

There are three types of rates and charges applicable to ADSL Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge. (C) (N) (N)

The monthly rate applies each month or fraction thereof for each local exchange service line equipped with ADSL Service.

A nonrecurring charge applies per local exchange service line for the installation of ADSL Service.

A DSL Network Reconfiguration Charge applies when the ADSL Access Service customer's telecommunications service provider requests the Telephone Company to modify the Telephone Company's network to: 1) accommodate a change in the ADSL Access Service customer's existing IP address or 2) limit the data speed delivered over the customer's existing ADSL Access Service line. A nonrecurring charge applies for each request per ADSL Access Service line. The Telephone Company will bill the DSL Network Reconfiguration Charge to the ADSL Access Service customer's telecommunications service provider. (N)

All changes to existing ADSL Access Service (including but not limited to change of telecommunications service provider), other than changes involving DSL network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per ADSL Access Service line for this work activity. (N)

Rates and charges for ADSL Service are set forth in 17.4.8 following.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

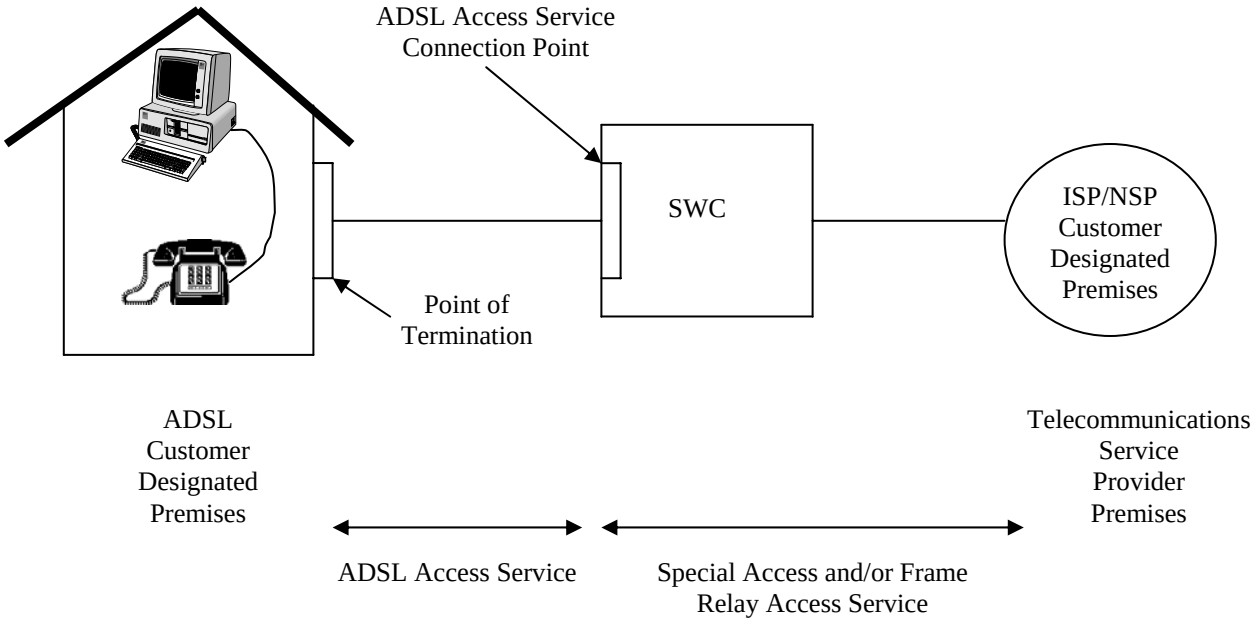
16.2.2 Rate Regulations (Cont'd)

(B) Rate Application

ADSL Service is based on differing volume levels of ADSL connections per Section 17.4.8, following. (C) (C)

The rates applicable to ADSL Service provided under an ADSL Term and Volume Plan (ADSL-TVP) arrangement are specified in 17.4.8, following. (C)

The following diagram depicts a typical ADSL Service configuration:



(C) Minimum Period

The minimum period for which ADSL Access Service is provided to a customer and for which charges are applicable is one month.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.2 Rate Regulations (Cont'd)

(D) Moves

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

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

The provisions for moves of ADSL Access Service are the same as those described in Section 7.2.3, preceding, except that an Access Order Charge will not apply.

(E) Term and Volume Plan (TVP)

(1) Description

The terms and conditions specified herein are applicable to ADSL Service and are in addition to other regulations as specified in this tariff.

The ADSL Term and Volume Plan (TVP) will allow customers discounted access rates based upon the volume and term commitment. Rates will be based upon the TVP selected by the customer.

Term plans of one (1), two (2) and three (3) years may be available to all customers at applicable rates set forth in the tariff regardless of when the subscription is made for a ADSL Service TVP arrangement. The customer must designate on the order the type of payment plan selected. (C)

The minimum volume commitment of the TVP selected must be met within twelve (12) months after the TVP is initiated.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd) (N)

16.2.2 Rate Regulations (Cont'd)

(E) Term and Volume Plan (TVP) (Cont'd)

(2) Rate Application

Upon expiration of a TVP period, the customer may choose a new TVP period, convert to month-to-month or terminate service. The month-to-month rates will be those rates that are in effect at the time of conversion. If the customer fails to make a choice by the end of the TVP period, the ADSL Service will continue billing at the existing term and volume commitment level rates and a new TVP period will begin based on previously effective term and volume commitment. All terms and conditions, including Termination Liabilities will apply to the new TVP period.

Conversion to a month-to-month or different TVP period will require the customer to submit a change order. Conversion of existing TVP service to a different TVP period will be allowed without application of any nonrecurring charges.

(3) Changes in Length of TVP Period

The customer may elect to convert to a new TVP period subject to the following conditions:

(a) Credit will not be given toward the new payment period for payments made under the original TVP arrangement.

(b) Nonrecurring charges will not be reapplied for existing service(s).

(c) If the new TVP period is shorter in length than the time remaining under the existing TVP, the change to the new TVP period constitutes a discontinuance of the existing TVP service and termination liability charges apply. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.2 Rate Regulations (Cont'd)

(E) Term and Volume Plan (TVP) (Cont'd)

(4) Rate Changes

The customer may terminate the TVP without penalty or liability should the rates increase during the term of the existing TVP, with the exception of rate changes that may occur as a result of FCC presubscription for rate increases.

(5) Annual Review

Each customer's TVP will be reviewed annually. The customer will be notified as to the status of the TVP if the in-service quantity of ADSL Services falls below the minimum volume commitment. An allowance of up to 3% will be considered as still having met the volume commitment. Where the customer has less than the volume commitment quantity for a specified discount, charges will be assessed.

If the total number of ADSL Services in service qualifies the customer for a different TVP rate, the customer will have the option of increasing the commitment quantity for the remainder of the plan.

(6) TVP Conditions

After enrolling in the plan, the customer may delete or add ADSL Services rated at the specified term period/threshold level rate at any time during the plan. (D)

(D)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.2 Rate Regulations (Cont'd)

(E) Term and Volume Plan (TVP) (Cont'd)

(7) Shortfall Charges for Failing To Meet Commitment

At the annual review, if the total volume in service does not meet the volume commitment, a payment equal to the difference between the TVP rate and the highest rate that would have been charged for services not under the TVP plan plus 10% will be assessed. The payment will be calculated using the prorated ADSL Service aggregation quantity at the time of the review. The customer may choose to increase the volume commitment within 30 days after enrollment to the TVP and continue the TVP arrangement or choose to be billed on a going forward basis under either a different TVP or under the month-to-month rates. If after 30 days, the TVP volume levels are not met, the TVP will be automatically changed to the standard month-to-month rates.

(8) Termination Liability

When a TVP service is discontinued prior to the end of the commitment period, termination liability charges will apply, as set forth below, based on the remainder of the TVP period in effect at the time of disconnect.

One Year TVP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first year's recurring charges.

Two Year TVP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first and second year's recurring charges. (N)

(N)

Three Year TVP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first, second and third year's recurring charges.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.3 ADSL Service Discount Pricing Arrangement (N)

(A) General

The telecommunications services offered under an ADSL Access Services Discount Pricing Arrangement (DPA) are provided at wholesale rates to the customer under the conditions listed below.

(1) The customer purchases ADSL Service as described in Section 16.2.1, preceding, for the purpose of combining these telecommunications services with its own information service(s) to create a new retail service for sale to its end user customer(s).

(2) In addition to the obligations specified in Section 16.2.1(E), preceding, the customer assumes the following obligations:

(a) The customer will deal directly with its end user customers with respect to all matters pertaining to the service provided, including marketing, sales, ordering, installation, maintenance, trouble reporting, repair, billing and collections. The customer will not direct its end users to contact the Telephone Company for any aspect of the service the customer provides.

(b) The customer will submit orders for ADSL Access Service to the Telephone Company in a format and manner designated by the Telephone Company.

(c) The customer will obtain the appropriate authorization to allow the Telephone Company to provision ADSL Access Service over the customer's end user's existing telephone exchange service line. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd) (N)

(A) General (Cont'd)

When the customer purchases ADSL Service under the ADSL Service DPA, the rates and charges specified for a Telephone Company for the ADSL Service DPA will apply. The ADSL Service DPA is only available from those Telephone Companies with rates indicated for ADSL Service DPA in Section 17.4.8 following.

Services provided under the ADSL Service DPA are available under a Monthly Plan at the rates and charges specified in Section 17.4.8, following, or under an ADSL Service DPA Term Plan described in Section 16.2.3(B) following, at the rates and charges specified in Section 17.4.8, following.)

A monthly charge applies for each ADSL Service line covered under the DPA. A nonrecurring charge applies for the installation of each ADSL Service line under the DPA. A DSL Network Reconfiguration Charge as described at Section 16.2.2(a) preceding would apply for each requested reconfiguration for each ADSL Service line covered under the DPA.

The Telephone Company will bill the customer an Access Order Charge, per order, to convert an in-service ADSL Service line originally purchased under the provisions specified in Section 16.2.2, preceding, to the DSL Access Services DPA, provided the customer obtains written authorization from its end user authorizing such conversion, where necessary. Per-line nonrecurring charges specified in Section 17.4.8, following, do not apply to conversion of in-service ADSL lines to a DPA.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd)

(B) ADSL Service DPA Term Plan

(1) Description

The ADSL Service DPA Term Plan provides the customer with reduced rates based on the length of the customer's term commitment and its selected pricing option. The ADSL Service DPA Term Plan is available for the terms and pricing options specified in Section 17.4.8. The Telephone Company will establish an ADSL Service DPA Term Plan for each Serving Wire Center (SWC) based on the customer's order notifying the Telephone Company which ADSL-equipped SWC(s) the customer wants included in the plan(s) and its selected term commitment and pricing option for each SWC. An Access Order Charge applies for each order to establish the initial ADSL Service DPA Term Plan(s). (C) (C)

When the customer subscribes to an ADSL Service DPA Term Plan, all in-service ADSL Access Service lines provided out of and subsequently installed at the included SWC will be billed the rates and charges specified in Section 17.4.8, following, for the length of the term commitment. In addition to the applicable ADSL Line Charges, the customer will be billed a recurring monthly ADSL Service DPA Term Plan Charge for each SWC included in an ADSL Service DPA Term Plan, as specified in Section 17.4.8, following, based on its selected pricing option.

If the Telephone Company decreases the rates specified in Section 17.4.8, following, during the term of a commitment period, the decreased rates will automatically be applied for the remainder of the current commitment period.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd) (N)

(B) ADSL Service DPA Term Plan (Cont'd)

(1) Description (Cont'd)

At the end of the ADSL Service DPA Term Plan, the customer may elect to establish a new ADSL Service DPA Term Plan commitment, convert to the rates available under the Monthly Plan, or discontinue service. If the customer does not make an election by the end of the ADSL Service DPA Term Plan, the rates for all ADSL Service lines will automatically be converted to the rates available under the Monthly Plan specified in Section 17.4.8, following. An Access Order Charge will not apply to any election made by the customer at the end of the ADSL Service DPA Term Plan.

An ADSL Service DPA Term Plan is subject to payment for early termination as described in Section 16.2.3(B)(4), following.

(2) Upgrades in ADSL Service DPA Term Plan

A customer may terminate an ADSL Service DPA Term Plan without the application of a termination liability charge when the customer replaces its original ADSL Service DPA Term Plan commitment with a new ADSL Service DPA Term Plan commitment provided the length and pricing option of the new ADSL Service DPA Term Plan commitment is equal to or greater than the length and pricing option of the original ADSL Service DPA Term Plan commitment. An Access Order Charge will not apply when the customer replaces an existing ADSL Service DPA Term Plan with a new ADSL Service DPA Term Plan commitment under this provision. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asymmetrical Digital Subscriber Line (ADSL) Service (Cont'd)

16.2.3 ADSL Service Discount Pricing Arrangement (Cont'd) (N)

(B) ADSL Service DPA Term Plan (Cont'd)

3) Termination without Liability

A customer may terminate an ADSL Service DPA Term Plan without the application of a termination liability charge if the Telephone Company increases the ADSL Service DPA Term Plan monthly rates described in Section 17.4.8, following, during the term of the existing commitment. The customer has 90 days following such rate increase to notify the Telephone Company in writing of its intent to terminate its ADSL Service DPA Term Plan under this section; otherwise, the increased rates will apply for the remainder of the commitment period.

(4) Termination with Liability

If the customer elects to terminate its ADSL Service DPA Term Plan(s) prior to the end of the commitment period for any reason other than specified in (2) or (3), preceding, a termination liability charge will apply. For each ADSL Service DPA Term Plan terminated prior to the end of the commitment period, the Telephone Company will bill the customer a charge equal to the monthly ADSL Service DPA Term Plan Charge for its selected pricing option as specified in Section 17.4.8, following, multiplied by the number of months remaining in the commitment period.

ADSL Service DPA Monthly Plan rates as described in Section 17.4.8, following, will apply to all in-service ADSL Lines following the early termination of an ADSL Service DPA Term Plan. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.3 Symmetrical Digital Subscriber Line Access Service

Telephone Companies providing SDSL Service under this Section are indicated in the following table. (N)

Telephone Company
Atlantic Telephone Membership Corporation
Coastal Utilities, Inc.

(N)

16.3.1 General

Symmetrical Digital Subscriber Line (SDSL) Access Service provides the customer the ability to transmit data to (upstream rate) and receive data from (downstream rate) a DSL Access Service Connection Point at the same speed using the Telephone Company's existing local exchange copper facilities. A DSL Access Service Connection Point is an interconnection point designated by the Telephone Company that aggregates data traffic from and to Telephone Company SDSL-equipped Serving Wire Centers (SWCs). The DSL Access Service Connection Point may be located within the operating territory of the Telephone Company or in the operating territory of another telephone company, provided both telephone companies agree to such an arrangement.

At the DSL Access Service Connection Point, the customer's SDSL Access Service must be connected to a telecommunications service provider's customer designated premise using the Telephone Company's Special Access Services when the Connection Point is located within the Telephone Company's operating territory. When the Connection Point is located in the operating territory of another telephone company, the customer's SDSL Access Service must be connected to a telecommunications service provider's customer designated premises using equivalent access services provided by that telephone company.

SDSL Access Service is available as two service options, i.e., SDSL Voice-Data and SDSL Data-Only.

(A) The SDSL Voice-Data option provides transmission of data signals at a peak data transmission speed of up to 1.544 Mbps using the Telephone Company's existing local exchange service line. This option may be used for simultaneous voice and data communications.

(B) The SDSL Data-Only option provides transmission of data signals at a peak transmission speed of up to 1.544 Mbps using the Telephone Company's existing local exchange copper facilities. This option does not provide the ability to transmit voice communications.

ACCESS SERVICE

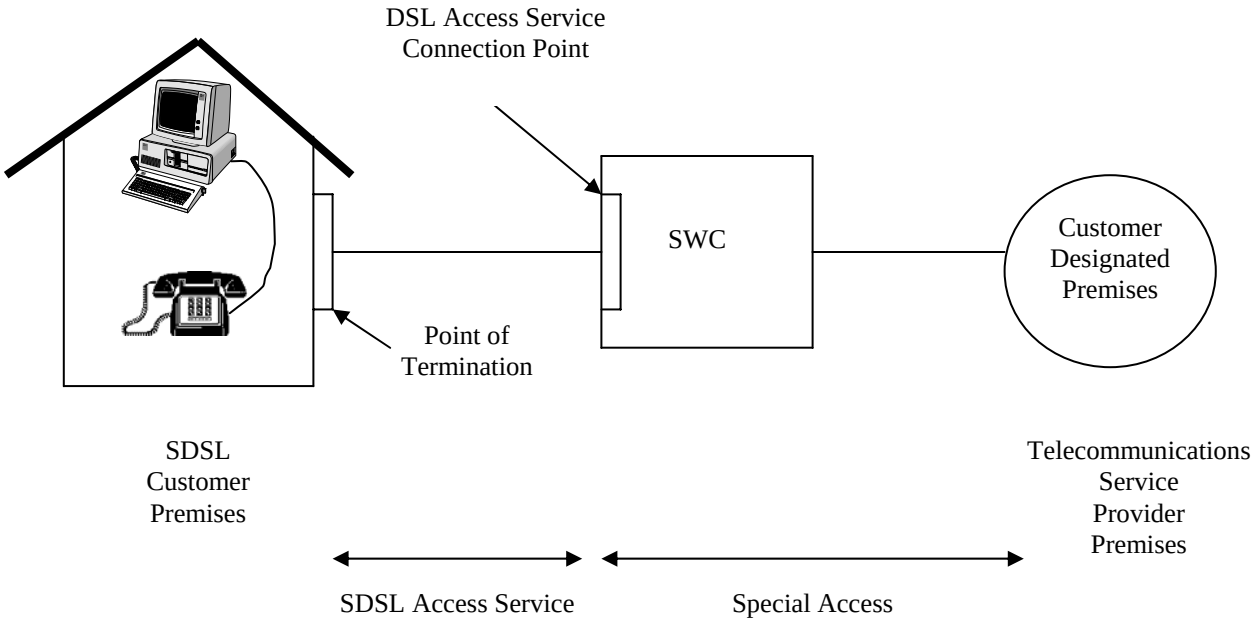
16. Public Packet Data Network (Cont'd)

16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd) (N)

16.3.1 General (Cont'd)

A generic view of how SDSL Access Service would be interconnected with a telecommunications service provider's network is depicted in the figure following. In this example, the customer's SDSL-equipped serving wire center is designated as a DSL Access Service Connection Point. The customer orders SDSL Access Service pursuant to the provisions specified in this section. The SDSL Access Service customer's telecommunications service provider orders Special Access Service pursuant to the provisions specified in Section 7.10 preceding to connect its customer designated premises to the DSL Access Service Connection Point.

SDSL ACCESS SERVICE



(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd) (N)

16.3.2 Limitations

SDSL Access Service is available as two service options as described above. Peak speeds are not guaranteed by the Telephone Company due to factors that may affect the actual speeds delivered, including the SDSL Access Service customer's distance from the Telephone Company Serving Wire Center, condition of the existing copper facilities, and limitations in the telecommunications service provider's network design.

The Telephone Company does not provide customer premises equipment (CPE) in conjunction with the SDSL Access Service offering.

SDSL Access Service may not be used in conjunction with multi-point Special Access Service configurations as described in 7.1.3, preceding.

SDSL Access Service will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its SDSL-equipped Serving Wire Centers and DSL Access Service Connection Points in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

SDSL Access Service will be provided over existing Telephone Company local exchange service facilities. When the customer orders the SDSL Voice-Data option, the rates and regulations for SDSL Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company's general and/or local exchange service tariffs. The Telephone Company will automatically disconnect the SDSL Access Service Voice-Data option when the associated local exchange service line is disconnected for any reason.

Rates and regulations for Special Access Service will apply for the access service(s) provided between the telecommunications service provider's customer designated premises and the DSL Access Service Connection Point, as described in Section 7.10 preceding. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)

16.3.3 Undertaking of the Telephone Company

The Telephone Company will provide SDSL Access Service at the rates and charges set forth in 17.4 as follows:

(A) The Telephone Company will determine if the associated local exchange service line or copper facilities are suitable for use with the SDSL Access Service option ordered by the customer. Service will not be provided on facilities that the Telephone Company determines are not suitable for SDSL Access Service or on facilities that produce interference with other services provided by the Telephone Company.

(B) The Telephone Company, after determining if the facilities are suitable for SDSL Access Service, will notify the customer if the customer's CPE is compatible with the equipment deployed in the Telephone Company's Serving Wire Center and if any additional CPE is necessary to support SDSL Access Service.

(C) The Telephone Company will provision and maintain SDSL Access Service from the DSL Connection Point to the Point of Termination at the SDSL Access Service customer's premises.

16.3.4 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to SDSL Access Service:

(A) The customer is responsible for providing the Telephone Company with the necessary information to provision SDSL Access Service (e.g., customer name, telephone number and premises address; billing name and address when different from the customer name and premises address; customer contact name and telephone number and the contact name and telephone number of the telecommunications service provider with which the customer's SDSL Access Service will interconnect).

(B) The customer is responsible for providing and maintaining all required customer provided equipment (CPE), which is compatible with SDSL Access Service.

(C) The ISP/NSP customer will obtain the appropriate authorization to allow the Telephone Company to provision SDSL Voice-Data Access Service over the customer's end user's existing telephone exchange service line. (N)

(D) The ISP/NSP customer will deal directly with its end user customers with respect to all matters pertaining to the service provided, including marketing, sales, ordering, installation, maintenance, trouble reporting, repair, billing and collections. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd) (N)

16.3.5 Rate Regulations

This section contains the regulations governing the rates and charges that apply for SDSL Access Service. Regulations governing the rates and charges for the Special Access Services provided under tariff used in conjunction with SDSL Access Service are as specified in Section 7.10 preceding.

(A) Minimum Period

The minimum period for which SDSL Access Service is provided to a customer and for which charges are applicable is one month.

(B) Moves

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

- The Point of Termination at the SDSL Access Service customer designated premises

- The SDSL Access Service customer designated premises

The provisions for moves of SDSL Access Service are the same as those described in 7.2.3, preceding, except that an Access Order Charge will not apply to move orders for the SDSL Access Service Voice-Data option.

(C) Temporary Suspension of Service

When the associated local exchange service line over which the SDSL Voice-Data option is provided is temporarily suspended, the SDSL Access Service and one-half of the SDSL Line Charge monthly rate will be temporarily suspended for the time period that the associated local exchange service is suspended. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.3 Symmetrical Digital Subscriber Line Access Service (Cont'd)

16.3.5 Rate Regulations (Cont'd)

(D) Rate Categories

There are three types of rates and charges applicable to SDSL Access Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge. (C) (N) (N)

The monthly rate applies each month or fraction thereof for each SDSL Voice-Data option and SDSL Data-Only option ordered by the customer.

A nonrecurring charge applies for each SDSL Voice-Data and SDSL Data-Only option ordered by the customer for the installation of SDSL Access Service.

A DSL Network Reconfiguration Charge applies when the SDSL Access Service customer's telecommunications service provider requests the Telephone Company to modify the Telephone Company's network to: 1) accommodate a change in the SDSL Access Service customer's existing IP address or 2) limit the data speed delivered over the customer's existing SDSL Access Service line. A nonrecurring charge applies for each request per SDSL Access Service line. The Telephone Company will bill the DSL Network Reconfiguration Charge to the SDSL Access Service customer's telecommunications service provider. (N)

All changes to existing SDSL Access Service (including but not limited to change of service option, change of service level speed and/or change of telecommunications service provider), other than changes involving DSL network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per SDSL Access Service line for this work activity. (N)

Rates and charges for SDSL Access Service are as set forth in 17.4.8 following.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

(N)

16.4 Ethernet Transport Service

Telephone Companies providing Ethernet Transport Service (ETS) under this Section are indicated in the following table.

Telephone Company	Study Area Code	Provides ETS
#TDS Telecom Companies [(1)]		X
#Camden Tel. and Telegraph Company, Inc. d/b/a TDS Telecom[(1)]	220351	X
#Mt. Vernon Telephone Company d/b/a TDS Telecom[(1)]	330917	X
#Oklahoma Communication Systems, Inc. d/b/a TDS Telecom[(1)]	431984	X
#Tennessee Telephone Company d/b/a TDS Telecom[(1)]	290575	X
#Chesnee Telephone Company, Inc.	240515	X
#Gearheart Communications Company, Inc. d/b/a Coalfields Telephone Company	260408	X
#Yadkin Valley Telephone Membership Corporation	230511	X

(1) TDS Telecom Companies rates for four issuing carriers are pooled and listed under "TDS Telecom Companies" in Section 17.

#Telephone Company will become an issuing carrier for JSI Tariff F.C.C. No. 1 under Transmittal No. 130 effective June 30, 2007.

(N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.1 General

Ethernet Transport Service (ETS) is a high speed data transport service that provides end-to-end transmission using Ethernet packet technology at transport speeds ranging from 5 Mbps to 1 Gbps, where available. ETS is ideal for transport of broadband multimedia traffic (i.e., voice, data and video) using variable length Ethernet packets with the ability to interconnect multiple locations using the Telephone Company's ETS network. Ethernet packets generated by Ethernet-compatible customer premises equipment (CPE)are transmitted using available capacity on shared transmission paths through the Telephone Company's ETS network to a pre-specified destination. The ETS customer may use ETS to: (1) interconnect customer designated premises (CDPs) served by the Telephone Company's ETS network, (2) interconnect with its local area network (LAN) to the Telephone Company's ETS network and/or (3) interconnect its CDPs to an Ethernet network located outside of the Telephone Company's serving territory.

16.4.2 Service Description

ETS is provided using a combination of ETS Channel Terminations (ETS CTs), ETS Ports, ETS Ethernet Virtual Connections (ETS EVCs), and ETS Extended Ethernet Virtual Connections (ETS E-EVCs). As described below, ETS may be used in conjunction with Special Access High Capacity DS3 and Synchronous Optical Channel Service OC3 and OC12 Services as specified in Section 7, preceding, and with DSL Access Services as specified in Section 8, preceding. An ETS Port is required to provide the interface in to the Telephone Company's ETS network. ETS EVCs establish a shared transmission path between any two ETS Ports on the Telephone Company's ETS network. ETS E-EVCs may be ordered to connect the Telephone Company's ETS network to an adjacent telephone company's Ethernet network. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.2 Service Description (Cont'd)

The transmission quality of ETS is not guaranteed and is offered to ETS customers at a best effort level. The Telephone Company will attempt to deliver all Ethernet packets received; however, network congestion may result in a loss of Ethernet packets. Transmission speeds using copper facilities may be affected by distance from the Telephone Company central office and other technical limitations in the Telephone Company's copper network and are also not guaranteed.

Service is provided, where available, between CDPs and designated Telephone Company Serving Wire Centers (SWCs). ETS will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ETS-equipped Serving Wire Centers (SWCs) in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.Tariff F.C.C. No. 4.

Rates and charges for ETS are specified in Section 17, following. The application of rates and charges for ETS is described later in this section.

16.4.3 Obligation of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to ETS:

(A) The ETS customer is responsible for providing the Telephone Company with the necessary information to provision ETS as specified in Section 5.2 Ordering Requirements, preceding.

(B) The ETS customer is responsible for providing and maintaining all required customer premises equipment (CPE), which is compatible with ETS and complies with the standards specified in Technical Reference IEEE Standard 802.3, Part 3. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

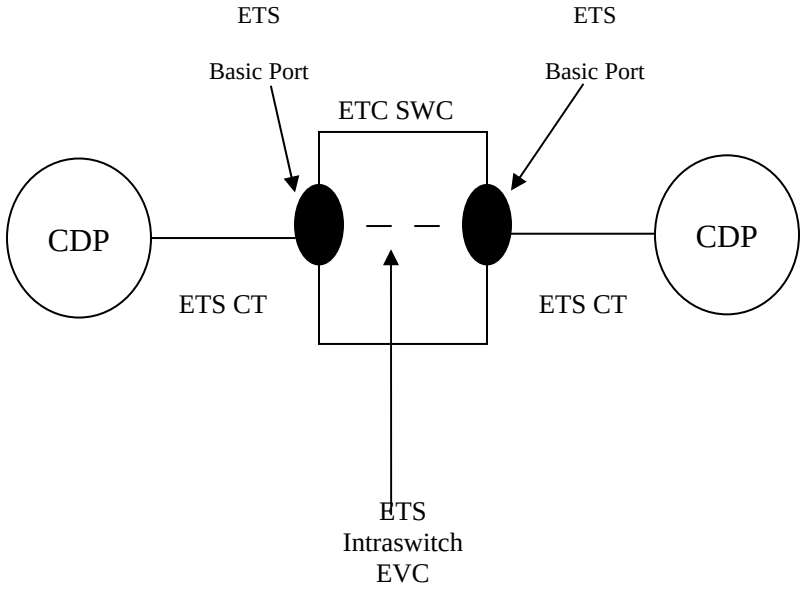
16.4 Ethernet Transport Service (Cont'd)

(N)

16.4.4 Rate Regulations

This section contains the regulations governing the rate sand charges that apply for ETS. Regulations govern in the rates and charges for Special Access and DSL Access Services provided under this tariff used in conjunction with ETS are as specified in Sections 7 and 8, preceding. The following diagrams depict generic views of the elements of ETS. In the first figure, the ETS customer's CDPs are served by a single ETS SWC.ETS EVCs ordered between two ETS Ports in the same SWC are classified as ETS Intraswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

Figure 1



(N)

ACCESS SERVICE

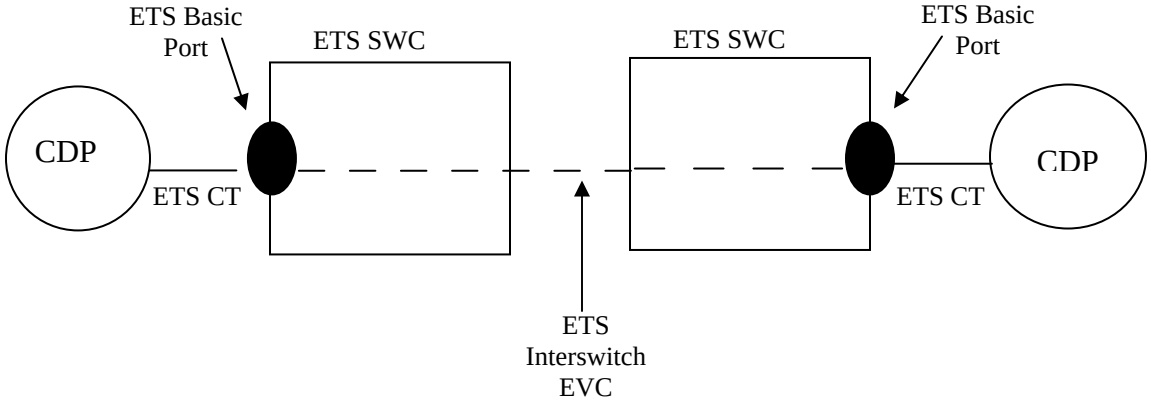
16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

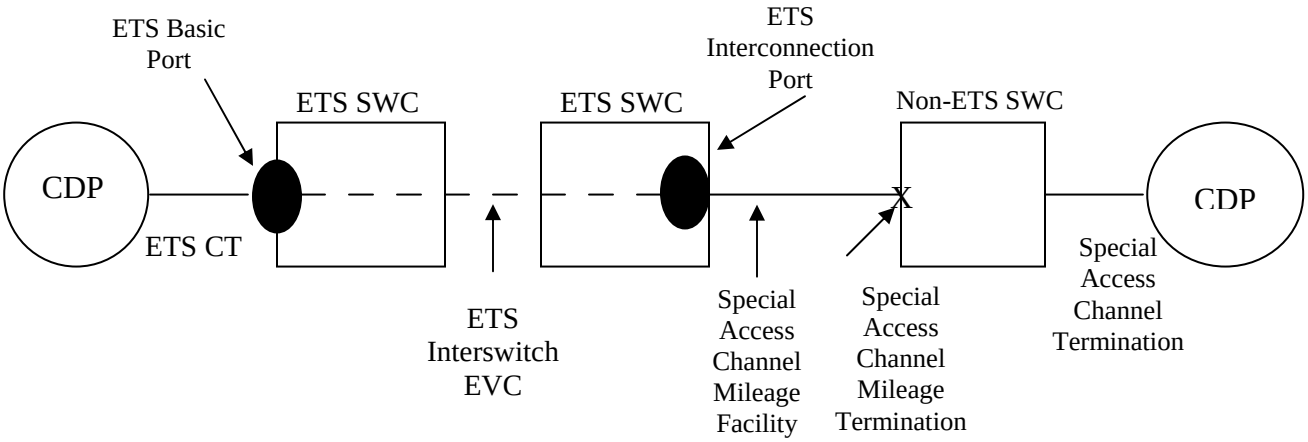
In the second figure, the ETS customer's CDPs are served by different ETS SWCs. ETS EVCs ordered between two ETS Ports in different SWCs are classified as ETS Interswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

Figure 2



In the third figure, one of the ETS customer's CDPs is served by a non-ETS SWC. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding.

Figure 3



(N)

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ACCESS SERVICE

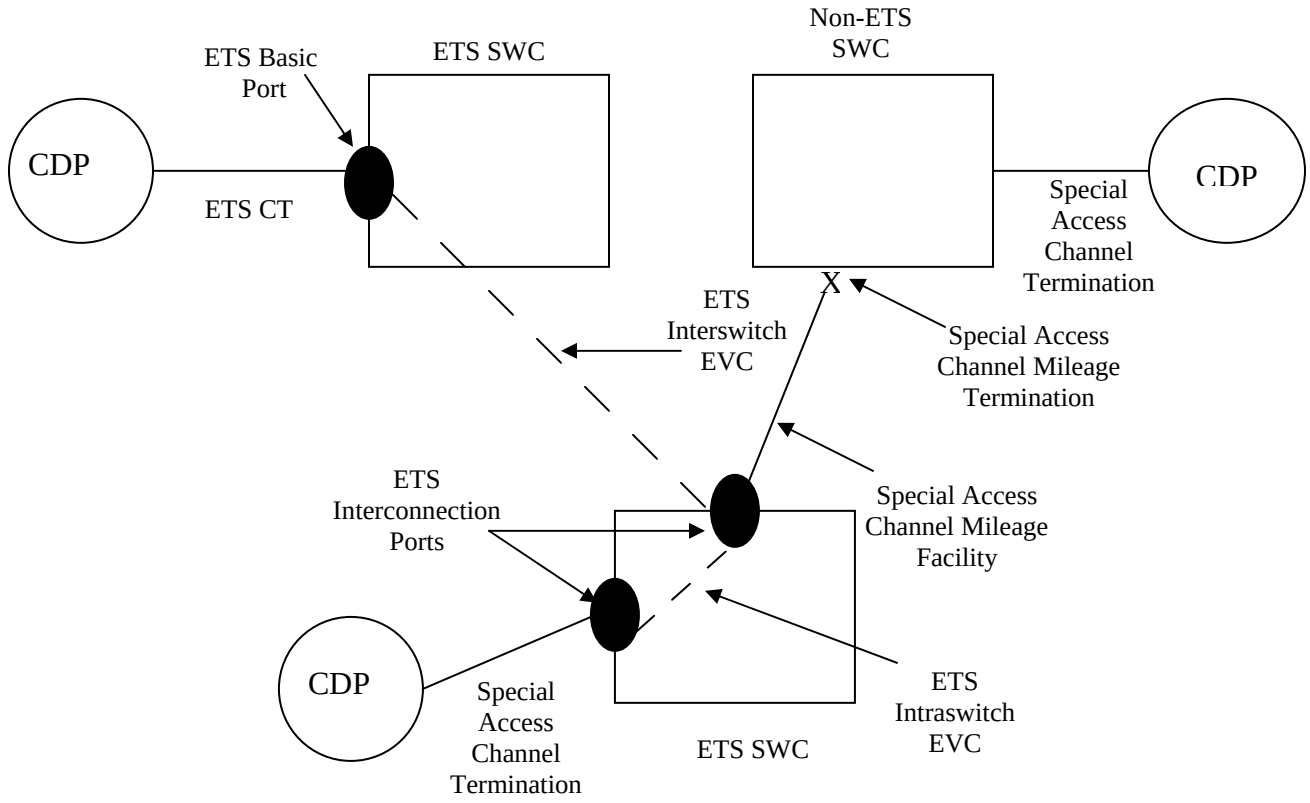
16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

In the fourth figure, a multipoint configuration is depicted where the customer chose to order Special Access Service to an ETS SWC. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding.

Figure 4



(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

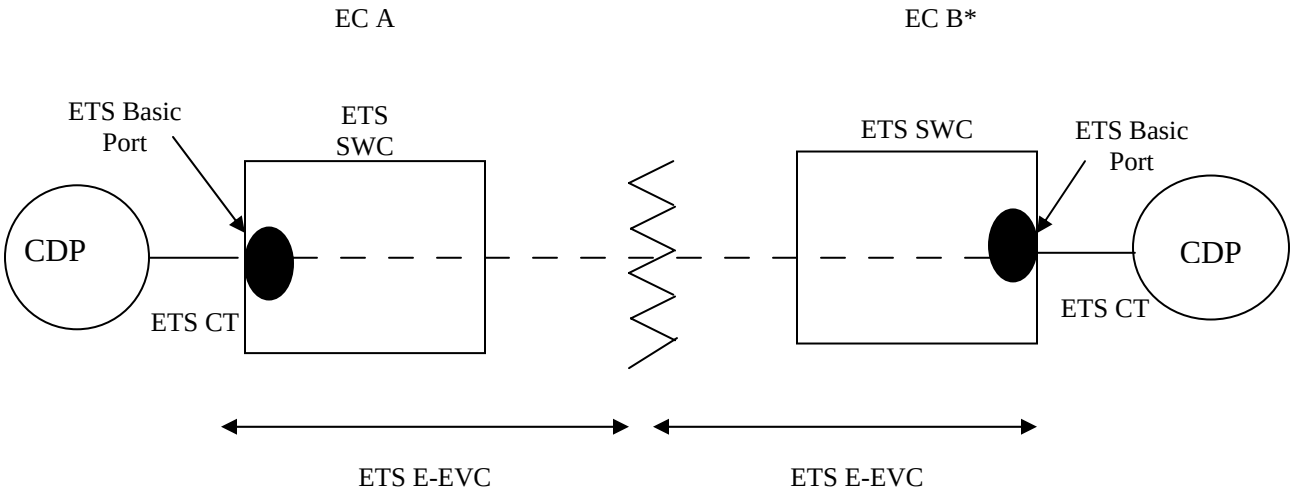
16.4 Ethernet Transport Service (Cont'd)

(N)

16.4.4 Rate Regulations (Cont'd)

In the fifth figure, one of the ETS customer's CDPs is served by an adjacent telephone company's Ethernet network. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section. In addition the ETS customer will order the applicable Ethernet service elements from the adjacent telephone company. The application of rates by the adjacent telephone company will be based on the access tariff of the adjacent company.

Figure 5



* The application of charges for EC B will depend on its access tariff.

(N)

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ACCESS SERVICE

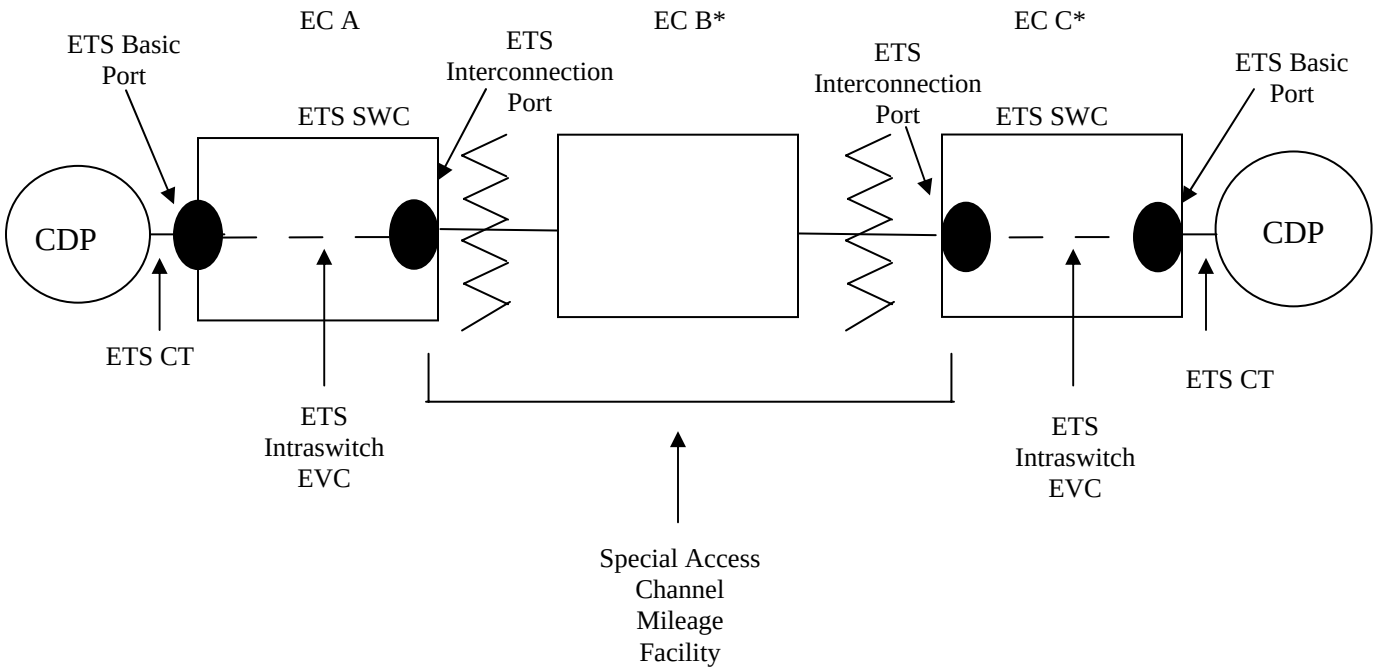
16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

In the sixth figure, one of the ETS customer's CDPs is served by a non-adjacent telephone company's Ethernet network. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding. In addition, the ETS customer will order the applicable special access service and Ethernet service elements from the interconnecting telephone companies.

Figure 6



* The application of charges for EC B and C will depend on their respective access tariffs.

(N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories

The various ETS Service Elements are described below:

(1) ETS Channel Terminations (CTs)

An ETS CT provides the transport facility between the customer's designated premises and an ETS Basic Port at the Telephone Company's ETS SWC.

ETS CTs are available at bandwidth speeds of 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 500 Mbps, and 1 Gbps. The ETS customer orders the type of ETS CT it needs based on its bandwidth requirements. Bandwidth speeds of 50 Mbps and above require use of a fiber loop facility, where such fiber facilities exist. ETS CTs are available only from suitably equipped ETS SWCs for connection to ETS Basic Ports.

A Special Access High Capacity DS3 or Synchronous Optical Channel Service OC3 orOC12 Channel Termination may also be used to connect a CDP to the Telephone Company's ETS SWC for connection to an ETS Interconnection Port. The provisions for Special Access Channel Terminations are specified in Section 7, preceding.

Monthly and nonrecurring charges apply for each ETS CT ordered. The monthly rate is based upon the bandwidth capacity ordered and whether the CDP is located within 300 feet of the ETS SWC or more than 300 feet from the ETS SWC. Rates and charges are specified in Section 17, following. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) ETS Ports

ETS Ports provide the interface at the Telephone Company's ETS SWC for data traffic to and from the customer premises equipment as well as for connecting the Telephone Company's ETS network with the Ethernet network of another telephone company. An ETS Port receives Ethernet packets from the ETS customer's Ethernet-compatible CPE, validates the addressing parameters contained in the packet headers, and transmits the packets into the ETS network. The ETS Port also receives Ethernet packets from the Telephone Company's ETS network or from an Ethernet network located outside of the Telephone Company's serving territory, validates the addressing parameters contained in the packet headers, and transmits the packets to the pre-designated CDP.

There are two types of ETS Ports available, i.e., ETS Basic Ports and ETS Interconnection Ports. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) ETS Ports (Cont'd)

(a) ETS Basic Ports provide the interface to the Telephone Company's ETS network and do not include the required transport facility between the CDP and the Telephone Company's ETS SWC.

ETS Basic Ports are available with bandwidth speeds of 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 500 Mbps, and 1 Gbps. Required transport to the ETS Basic Port is provided using an ETS CT as described above. Each ETS Basic Port must be associated with a minimum of one ETS EVC, one ETS E-EVC or one optional DSL Access Service Connection function. An ETS Basic Port may be associated with more than one ETS EVC or ETS E-EVC. The bandwidth speed of an ETS Basic Port must be equal to or greater than the bandwidth speed of the associated ETS CT. The bandwidth speed of an optional DSL Access Service Connection function must be equal to the band width speed of the associated ETS Basic Port.

(b) ETS Interconnection Ports also provide the interface to the Telephone Company's ETS network and do not include the required transport facility between the CDP and the Telephone Company's ETS SWC. Used in conjunction with Special Access DS3, OC3and/or OC12 Services, ETS Interconnection Ports permit the ETS customer to: 1) connect a CDP served by an ETS or non-ETS SWC to the Telephone Company's ETS network or 2) interconnect the Telephone Company's ETS network to an Ethernet network located in the serving territory of a non-adjacent telephone company.

(N)

(N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) ETS Ports (Cont'd)

ETS Interconnection Ports are available at bandwidth speeds of 44.736 Mbps (DS3), 155.52 Mbps (OC3) and 622.08 Mbps (OC12).

Required transport to the ETS Interconnection Port is provided using Special Access DS3, OC3 and/or OC12 Service facilities as described in Section 7, preceding. Each ETS Interconnection Port must be associated with a minimum of one ETS EVC, one ETS E-EVC or one optional DSL Access Service Connection function. An ETS Interconnection Port may be associated with more than one ETS EVC or ETS E-EVC. The bandwidth speed of an ETS Interconnection Port must be equal to the bandwidth speed of the associated Special Access Service Channel Termination. The bandwidth speed of an optional DSL Access Service Connection function must be equal to the bandwidth speed of the associated ETS Interconnection Port.

Monthly and nonrecurring charges apply for each ETS Port ordered. The monthly recurring charge is determined by the capacity and type of ETS Port ordered. Rates and charges are specified in Section 17, following. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(3) ETS Ethernet Virtual Connections (ETS EVCs)

ETS EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets between any two ETS Ports located on the Telephone Company's ETS network. ETS EVCs are available in fixed bandwidth amounts of 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 500 Mbps, and 1 Gbps. The Telephone Company will establish ETS EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order. When ETS EVCs are ordered between two ETS Ports in the same SWC, the ETS customer will be charged the ETS Intraswitch EVC rate. When ETS EVCs are ordered between ETS Ports that are in different SWCs within the Telephone Company's serving territory, the ETS customer will be billed the ETS Interswitch EVC rate.

Monthly and nonrecurring charges apply for each ETS EVC ordered. The monthly recurring charge is based upon the bandwidth capacity ordered and whether the associated ETS Ports are located within one SWC (Intraswitch) or between different SWCs (Interswitch). Rates and charges are specified in Section 17, following. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) ETS Extended Ethernet Virtual Connections (ETS EVCs)

ETS E-EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets to and receive packets from an ETS Port located in the Telephone Company's ETS network to another telephone company's Ethernet network located in an adjacent serving territory. ETS E-EVCs can be established between two ETS Basic Ports, between two ETS Interconnection Ports or between an ETS Basic Port and an ETS Interconnection Port. ETS E-EVCs are available in fixed bandwidth amounts of 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 500 Mbps, and 1 Gbps. The Telephone Company will establish ETS E-EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order.

Monthly and nonrecurring charges apply for each ETS E-EVC ordered. The ETS E-EVC monthly recurring charge is based upon the bandwidth capacity of the ETS E-EVC ordered. Rates and charges are specified in Section 17, following. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions

(a) DSL Access Service Connections

Where available, ETS Basic or Interconnection Ports may be equipped with the DSL Access Service Connection function. The function provides for the interconnection of ETS with ADSL Access Service as described in Section 8.1, preceding, provided by the Telephone Company under this tariff. The function also provides for the interconnection of ETS with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis. This optional function allows the ETS customer to receive ADSL and/or wireline broadband Internet transmission service data traffic from and transmit ADSL and/or wireline broadband Internet transmission service data traffic to its end user customers.

The speed of the DSL Access Service Connection function ordered by the ETS customer must equal the speed of the associated ETS Port.

As described in Section 8.1, preceding, the DSL Access Service Connection Point may be located within the serving territory of the Telephone Company, or in the serving territory of an adjacent telephone company when used in conjunction with ETS. (N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connections (Cont'd)

The availability of the DSL Access Service Connection function is designated by the Telephone Company in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

A nonrecurring charge applies per port to equip the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17, following. (N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connections (Cont'd)

(i) Where suitable facilities exist, an ETS customer that requires the ability to send high speed multimedia transmissions may also order an ETS Multi-Media Virtual Circuit Channel (ETS MM-VCC) between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL Access Service provided by the Telephone Company under this tariff as described in Section 8.1, preceding. ETS MM-VCCs are only available when the ETS customer's CDP, the ETS customer's end user premises and the Telephone Company's DSL Access Service Connection Point SWC are all located within the serving territory of the Telephone Company. ETS M-VCCs do not increase the bandwidth capacity of ETS CTs, ETS Ports, ETS EVCs and/or Special Access Service Channel Terminations used by the ETS customer to connect its CDP to the DSL Access Service Connection Point SWC. (N)

(N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connections (Cont'd)

(N)

Transmission speed across the ETS MM-VCC is not guaranteed and maybe affected by factors that affect the actual speeds delivered, including the ADSL Access Service customer's distance from the Telephone Company SWC, condition of the facilities, and any capacity limitations in the ETS customer's network design.

At each premises to which the ETS customer wants to transmit multimedia content using an ETS MM-VCC, the ETS customer must specify on its Access Order its end user customer's premises location and the total number of 10 Mbps bandwidth capacity increments required to that location. For example, an ETS customer requires an additional 40 Mbps of bandwidth capacity to one of its end user customers. On its Access Order to the Telephone Company, the ETS customer would specify the end user customer premises address and order one ETS MM-VCC made up of four 10 Mbps increments.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connections (Cont'd)

(N)

In the above example, the Telephone Company would bill the ETS customer for one ETS MM-VCC nonrecurring charge specified in Section 17, following, and one Access Order Charge specified in Section 17.4.1(A), following. The monthly recurring rate for this ETS MM-VCC would be calculated at four times the 10 Mbps increment rate specified in Section 17, following.

Monthly and nonrecurring charges apply to each ETS MM-VCC established by the Telephone Company in addition to any applicable Access Order Charges specified in Section 5.4.1, preceding. The ETS customer may order multiple ETS MM-VCCs to multiple end users' locations on a single Access Order, in which case only one Access Order Charge would apply for that order in addition to the applicable nonrecurring charge for each ETS MM-VCC established. The ETS MM-VCC charges apply in addition to the nonrecurring charge for equipping the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17 following.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connections (Cont'd)

The Telephone Company will waive the ETS MM-VCC monthly rate specified in Section 17, following, when the local exchange telephone service, ADSL Access Service and ETS MM-VCC are provided from the same serving wire center where the Telephone Company has located its DSL Access Service Connection Point. The ETS MM-VCC nonrecurring charge specified will apply.

When an ETS customer elects to change the bandwidth capacity of an existing ETS MM-VCC or to remove an existing ETS MM-VCC from its associated ADSL Access Service line, the ETS MM-VCC nonrecurring charge specified in Section 17, following, will not apply. In lieu of such charge, the ETS Design Change Charge will apply, as specified in Section 17, following.

When an ETS customer disconnects an ETS MM-VCC and the associated ADSL Access Service line at the same time, neither the ETS MM-VCC non recurring charge nor the ETS Design Change Charge will apply. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described below:

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof when an ETS service element is provided. For billing purposes, each month is considered to have 30days.

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for ETS are installation of service, service rearrangements, moves and design changes.

Except as specified below, these charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) Installation of Service

Nonrecurring charges apply for installation of ETS CTs, ETS Ports, ETS EVCs, ETS E-EVCs, and ETS Optional Features and Functions ordered by the ETS customer.

(b) Service Rearrangements

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(b) Service Rearrangements (Cont'd)

When the ETS customer elects to decrease the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and associated ETS CTs, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new ETS elements. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued ETS elements.

When the ETS customer elects to increase the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and associated ETS CTs, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new ETS elements. Any outstanding minimum period charges associated with the discontinued ETS elements that would otherwise be applicable for the bandwidth capacity upgrades described in this paragraph will be waived. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(b) Service Rearrangements (Cont'd)

When the ETS customer elects to change the bandwidth capacity on existing ETS EVCs, ETS E-EVCs and/or ETS MM-VCCs (i.e., the customer requests an increase or decrease incapacity), the ETS Design Change Charge described in (d), below, will apply per ETS element changed.

When the ETS customer elects to remove existing ETS EVCs or ETS E-EVCs, the ETS Design Change Charge described in (d), below, will apply per ETS EVC or ETS E-EVC removed.

When the ETS customer elects to remove an existing ETS MM-VCC from its associated ADSL Access Service line, the ETS Design Change Charge described in (d), below, will apply per ETS MM-VCC removed.

(N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(b) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the ETS customer. Administrative changes are as follows:

- Change of customer name.
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(c) Moves

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

- The point of Termination at the customer's premises
- The Customer's premises

The charges for moving ETS elements are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC. The charges specified below apply in addition to any applicable charges for moving any applicable Special Access Services as specified in Section 7.2.3, preceding.

(i) Moves Within the Same Building

ETS Basic and Interconnection Ports, ETS EVCs and ETS E-EVCs are not impacted when an ETS customer moves its Point of Termination to a different building. The charge for moving an ETS CT within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the ETS CT. There will be no change in the minimum period requirements. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(c) Moves (Cont'd)

(ii) Moves to a Different Building Within The same SWC

ETS Basic and Interconnection Ports, ETS EVCs and ETS E-EVCs are not impacted when an ETS customer moves its Point of Termination to a different building within the same SWC. The move of an ETS CT will be treated as a discontinuance and start of service. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(iii) Moves to a Different Building in a Different SWC

A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated ETS elements. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.4 Ethernet Transport Service (Cont'd) (N)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(d) ETS Design Changes

As described in (b), above, the ETS Design Change Charge specified in Section 17, following, will apply when the ETS customer elects to: (1) change the bandwidth capacity of existing ETS EVCs, ETS E-EVCs and/or ETS MM-VCCs (2) remove existing ETS EVCs or ETS E-EVCs or (3) remove an existing ETS MM-VCC from its associated ADSL Access Service Line.

When applicable, the ETS Design Change Charge applies in lieu of the ETS EVC, ETS E-EVC and/or ETS MM-VCC nonrecurring charge. The Access Order Charge will not apply when the ETS Design Change Charge is applicable.

(C) Minimum Periods

The minimum period for ETS service elements provided to an ETS customer and for which charges are applicable is:

- Twelve months for ETS Basic Ports and ETS Interconnection Ports, and

- One month for all other ETS elements. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS)

16.5.1 General Description

(A) Basic Service Description

Multi-Megabit Ethernet Transmission Service (METS) is a high-speed (10 or 100 Mbps) packet based service for the transmission of data between a customer designated location (CDL), the customer's Serving Wire Center, and either an Internet Service Provider (ISP) or another carrier over facilities provided jointly by the Company and another carrier. If joint-provisioning by the Company and another carrier is required, it is the responsibility of the Customer to make order and pay for services provided by the other carrier. Where joint-provision applies, the Company will provide its portion of jointly-provided services on a Multiple Bill basis as described at Section 2.4.7(B)(2) preceding. (C)

METS provides dedicated bandwidth at a rate of 10 or 100 Mbps.

METS is suitable for data transmission only.

(B) Service Provisioning

METS is provisioned over existing Telephone Company facilities. METS will be provided subject to the availability and limitations of the Telephone Company wire centers and outside plant facilities. New construction may be undertaken at the option of the Telephone Company at additional cost.

The subscriber is provided with an Ethernet electrical interface.

METS is available 24 hours per day, 7 days per week, except for preventative maintenance.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.1 General Description (Cont'd)

(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain METS for the customer.

The Telephone Company is not responsible for the installation, operation, or maintenance of any equipment provided by the customer.

Company provided shared network equipment, for use in METS is not accessible for the customer.

(D) Responsibility of the Customer

The customer is responsible for the provision and maintenance of all customer provided equipment and to insure that the operating characteristics of this equipment are comparable with and does not interfere with the service offered by the Telephone Company.

16.5.2 Typical Arrangements

Typical arrangements are shown on the following page. The acronyms used in the diagrams are as follows:

CDP – Customer Designated Premises
CDPI – Customer Designated Premises Interface
ISPI - Internet Service Provider Interface
MPI – Meet Point Interface
MRC – Monthly Recurring Charge
SWC –Serving Wire Center

(N)

ACCESS SERVICE

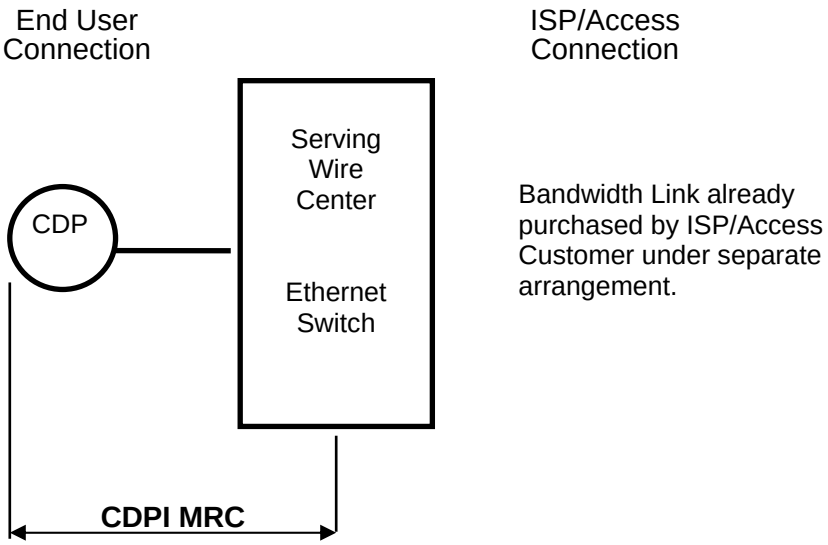
16. Public Packet Data Network (Cont'd) (N)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

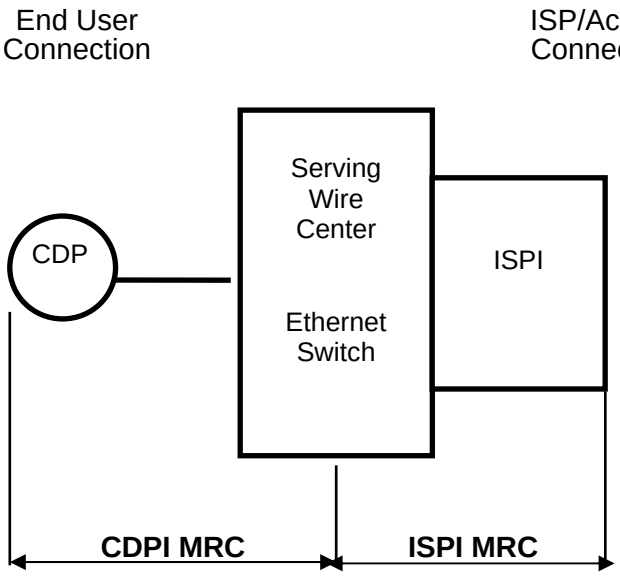
16.5.2 Typical Arrangements

The following diagrams depict generic views of the components of Megabit Ethernet Transmission Service (METS) and the manner in which the components are combined to provide METS.

METS Connection to Existing Access Connection



METS Connection to ISP Interface (ISPI) at Ethernet Serving Wire Center



(N)

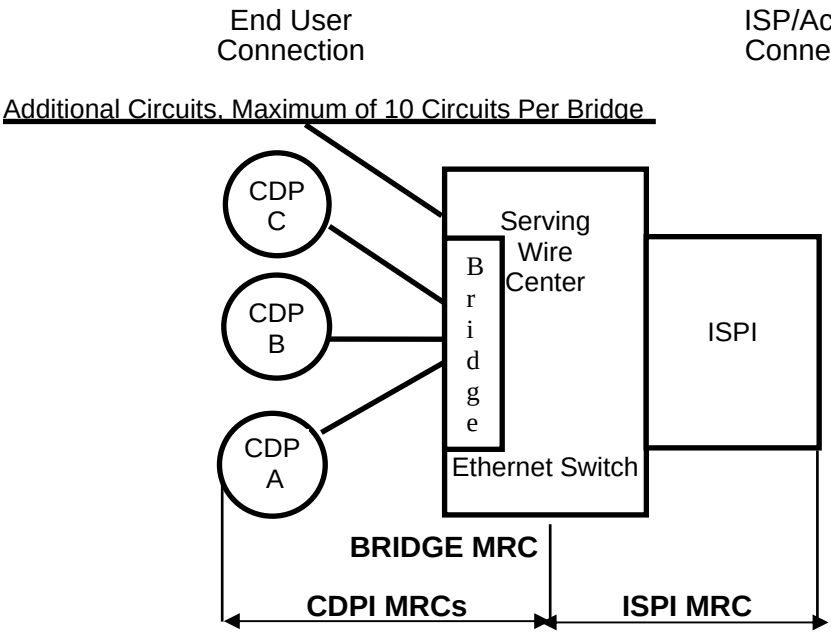
ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

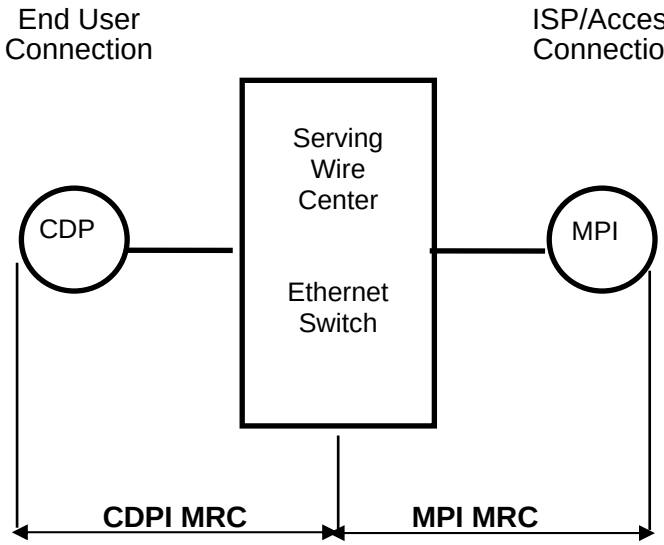
16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.2 Typical Arrangements (Cont'd)

METS Connection to ISP Interface (ISPI) at Ethernet Serving Wire Center With Bridging



METS Connection to Meet Point Interface (MPI)



(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations

This section contains the regulations governing the rates and charges that apply for METS.

(A) Minimum Period

The minimum period for which METS is provided to a customer and for which charges are applicable is twelve months.

(B) (Reserved) (C)

(D)

(D)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations

(D)

(D)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(C) Rate Elements

There are five types of rates and charges applicable to METS. These are a nonrecurring charge and four types of monthly recurring charges.

(1) METS Nonrecurring Charge

A single METS Nonrecurring charge applies to each METS circuit installed by the Telephone Company, whether the circuit is provisioned only between the Customer Designated Premises (CDP) and the SWC Ethernet switch for which an existing link to another carrier or Internet Service Provider (ISP) already exists or is provisioned beyond the SWC Ethernet switch to an Internet Service Provider Interface (ISPI) or to a Meet Point Interface (MPI) with another carrier.

(2) METS Customer Designated Premises Interface (CDPI)

The METS Customer Designated Premises Interface (CDPI) rate element is for a standard Ethernet defined interface between the CDP and the Telephone Company serving wire center (SWC) at which the Ethernet switch or router is located. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The CDPI rate element includes termination at both the CDP and the SWC, the facility from the CDP to the SWC, port access to the Ethernet switch and the Ethernet switch.

A CDPI charge applies to each METS connection between a CDP and the SWC at which the Ethernet switch designated by the Telephone Company is located. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(C) Rate Elements (Cont'd)

(3) METS Internet Service Provider Interface (ISPI)

The Internet Service Provider Interface (ISPI) rate element is for a standard Ethernet defined interface between the SWC Ethernet switch and an ISP with a presence in the SWC. ISP presence in the SWC may be either through local facilities for an ISP physically located in the Telephone Company's local exchange service area or through an interexchange carrier with an existing connection for an ISP not located in the Telephone Company's local exchange service area. Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The ISPI rate element includes termination at both the network side of the Telephone Company Ethernet switch and the connection to the ISP's existing connection.

An ISPI charge applies to each connection for a METS circuit originating at a CDP and terminating at the Telephone Company Ethernet switch which is, in turn, connected to the ISP's existing connection at the Ethernet switch SWC.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(C) Rate Elements (Cont'd)

(4) METS Bridge Interface

The METS Bridge Interface provides for the bridging of up to ten (10) CDPI links to one ISPI link or one CDPI link at the serving wire center. A METS Bridge Interface monthly recurring charge applies to each METS Bridge Interface in addition to the METS CDPI monthly recurring charges for each of the circuits connected to the METS Bridge Interface and, if applicable, METS ISPI or MPI monthly recurring charges. In the event a METS Bridge Interface is installed for existing METS CDPIs, without installation of additional CDPIs at the same time, a METS Nonrecurring charge shall apply in addition to the METS Bridge Interface monthly recurring charges.

(5) METS Meet Point Interface (MPI)

The METS Meet Point Interface (MPI) rate element is for a standard Ethernet defined interface between the SWC Ethernet switch and either a CDL outside the Telephone Company's serving area or an ISP, through a circuit jointly provided by the Telephone Company and another carrier. (C)
Standard Ethernet signaling protocols provided by the Telephone Company shall apply to the interface. The MPI rate element includes termination at the network side of the Telephone Company Ethernet switch and the Telephone Company's portion of the facilities up to the meet point. (C)

An MPI charge applies to each METS circuit connection between the Telephone Company and another carrier. (C) (C)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(D) Mileage Bands

The monthly recurring charges described in Section 16.5.1.(B) above are applied on the basis of mileage bands. Mileage bands are determined on the basis of end-to-end airline miles (ALM) from the CDP to the other end of the circuit provided by the Telephone Company. For METS circuits connected to an existing ISP interface located at the Ethernet switch SWC, the end-to-end ALM are the miles from the CDP to the Ethernet switch SWC.

The airline mileage to be used in determining the Mileage Band for METS monthly recurring charges will be calculated under the mileage measurement procedures described at Section 7.2.5 of this Tariff.

The METS mileage bands are as follows:

Band	End-to-End Airline Miles
A	0 to 3
B	Over 3 to 6
C	Over 6

(E) Service Suspension

Suspension of service by the Customer during the service period is not allowed. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(F) Term Discounts (N)

10 Mbps and 100 Mbps METS may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 36 months (3 years) or a customer specified term of 60 months (5 years) or greater up to 84 months.

The minimum service period for service ordered on a monthly rate basis or under a Term Discount plan is twelve months. The customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 36 months (3 years) or 60 months (5 years) or greater up to 84 months, the Term Discount percentage as set forth in 17.4.8 following will be frozen from Company initiated decreases, for the entire discount period at the percent in effect at the beginning of the Term Discount period.

If a Term Discount Percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not submit an access service request or other written notice of election for a new Term Discount plan fifteen business days prior to the end of the discount period, the rates will automatically convert to month-to-month service rates.

To be included in a Term Discount plan all eligible METS rate elements must be ordered for the same commitment term (i.e., all 36 months, all 60 months, or all at the specified months ordered greater than 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

METS ordered for a minimum service period of 12 months or for Term Discount periods of 36 months or 60 months or greater, up to 84 months, will be exempt from Telephone Company initiated rate increases throughout the selected service period established at the beginning of that service commitment period. (N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(F) Term Discounts (Cont'd) (N)

Eligible 10 Mbps or 100 Mbps METS rate elements are all monthly recurring charges for services provided by the Telephone Company. As long as the number of METS services included in a Term Discount plan remains constant, customer requests to install and disconnect METS services, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period and Discontinuance of Service charges as set forth in (3) following will not apply.

(1) Upgrades in Term Discounts

Services provided under monthly rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month, 60 month service period or a customer specified period greater than 60 months up to 84 months. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all METS that is upgraded.

(2) Upgrades in Capacity (10 Mbps to 100 Mbps)

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity (i.e., 10 Mbps to 100 Mbps), discontinuance charges will not apply, provided all the following conditions are met:

- the customer's order for the disconnect of the existing 10 Mbps METS service and the installation of the new 100 Mbps METS service are received at the same time and specifically reference the application of upgrade in capacity;

- the customer's disconnect order for the existing 10 Mbps METS service must reference the 100 Mbps METS Service installation order; (N)

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16. Public Packet Data Network (Cont'd)

16.5 Multi-Megabit Ethernet Transmission Service (METS) (Cont'd)

16.5.3 Rate Regulations (Cont'd)

(F) Term Discounts (Cont'd) (N)

(2) Upgrades in Capacity (10 Mbps to 100 Mbps) (Cont'd)

- the new Term Discount period meets or exceeds the Term Discount period being discontinued.

A new minimum service period applies to all upgrades. Nonrecurring charges for an equivalent capacity of the existing services being upgraded to the higher speed service will not be assessed.

(3) Discontinuance of Service

If the customer chooses to disconnect all or a portion of the service prior to the expiration of the Term Discount period, discontinuance charges will apply to the portion of the service being discontinued.

Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of twenty-five percent for 10 Mbps service, and twenty-five percent for 100 Mbps service, of the total undiscounted monthly charges will apply to the remaining portion of the discount service term.

Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of twenty-five percent for 10 Mbps Service, and twenty-five percent for 100 Mbps Service, of the total undiscounted monthly charges will apply to the remaining portion of the discount period. For example, a customer has a 10 Mbps Service which it chooses to discontinue after 33 months into an 84-month service term. The discontinuance charge would be 0.25 times 51 months times the undiscounted monthly rates for that service. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service

Issuing Carriers Offering HSI

(C)

Voice-Data	Mt. Horeb Telephone Company
Monthly Rates for HSI Access Service – Voice-Data	X
Monthly Rates for HSI Access Service - Data-Only	X
HSI Term and Volume Discount (HSITVP) Rates – Voice-Data	
HSI Term and Volume Discount (HSITVP) Rates – Data-Only.	
HSI Term Pricing Arrangement (HSITPA) - Voice-Data	X
HSI Term Pricing Arrangement (HSITPA) - Data-Only	X

(C)

"X" denotes that issuing carrier offers the indicated service.

See Section 16.6.2(A) for description of rate options.

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service

16.6.1 General Description (M)

(A) Basic Service Description

High Speed Internet (HSI) Access Service is a high-speed packet based service for the transmission of data between local exchange customer designated premises and Internet Service Providers (ISPs) by the Telephone Company designated data technology and equipment. HSI Access Service is offered at various downstream (Down) and upstream (Up) speeds. The "Up" speed represents transmission speed in kilobits per second (Kbps) or megabits per second (Mbps), from the point of demarcation at the customer's designated premises to the Telephone Company's HSI Access Service Connection Point; while the "Down" speed represents transmission speed in Kbps or Mbps from the Telephone Company's HSI Access Service Connection Point to the point of demarcation at the customer's designated premises. Actual speed may be affected by loop distance and other factors.

The HSI Access Service may require a splitter at both the customer's designated premises and the Telephone Company's serving wire center to split the traffic between data and voice. The customer is responsible for providing and maintaining the splitter at the customer designated premises. (M)

Certain material currently found on this page formerly appeared on Original Page 16-51.

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service

16.6.1 General Description (Cont'd)

(B) Service Provisioning

HSI Access Service is provisioned over existing Telephone Company copper facilities and transported to the Telephone Company's backbone network. HSI Access Service provides a connection from the customer's designated location (CDL) to the HSI Access Service Connection Point.

Access from the Telephone Company's HSI Access Service Connection Point will be provided via Special Access Metallic Service, Special Access High Capacity Special Access Service, Special Access Synchronous Optical Channel Service and/or Frame Relay Access Service, where facilities permit. Special Access Metallic Service is available in Section 7.4 preceding. Special Access High Capacity Special Access Service is available in Section 7.10 preceding. Special Access Synchronous Optical Channel Service is available in Section 7.11 preceding. Frame Relay Access Service is available in Section 16.1 preceding. If a customer utilizes Special Access Service or Frame Relay Access Service pursuant to sections 7 or 16.1 preceding, the associated rates and charges for such facilities shall apply in addition to the rates and charges associated with the HSI Access Service rate element. (M) (C) (T) (C) (T) (T) (M)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.1 General Description (Cont'd)

(B) Service Provisioning (Cont'd)

Following are the types of HSI Access Connections that can be ordered for the indicated Telephone Companies offering HSI Access Service. For all types of HSI Access Connections other than Frame Relay Access Service, both a Channel Termination charge and a DSL Access Connection charge will apply. For DSL Access Connections provisioned over Frame Relay Access Service, a Frame Relay Inter-Network Port is required together with Permanent Virtual Circuits (PVCs) for each HSI Access Line served. Charges required under the following referenced tariff sections are in addition to the charges indicated in this section for HSI Access Service.

(C)

	HSI Access Service Connection Tariff Section	Mt. Horeb Telephone Company
Metallic Ethernet Connection – 10Base-T	7.10.3(B)	
Metallic Ethernet Connection – 100Base-T	7.10.3(B)	X
Special Access High Capacity 1.544 Mbps (DS1)	7.10.3(F)	X
Special Access High Capacity 44.736 Mbps (DS3)	7.10.3(F)	X
Synchronous Optical Channel Service OC3/OC3c 155.52 Mbps	7.11.3(F)	
Synchronous Optical Channel Service OC12 622.08 Mbps	7.11.3(F)	X
Frame Relay Access Service	16.1	

(C)

"X" denotes that the type of HSI Access Service Connection is offered by the indicated issuing carrier.

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.1 General Description (Cont'd)

(M)

(B) Service Provisioning (Cont'd)

The Telephone Company will qualify the local exchange service loop between the customer's designated premises and the serving wire center. The purpose of qualification is to determine the availability and suitability of existing Telephone Company facilities to provide the service, and to determine if Loop Conditioning is required to support HSI Access Service. The Telephone Company will not provision this service on facilities which are not suitable for HSI Access Service.

The Telephone Company does not undertake to originate data, but offers the use of its HSI Access Service, where available, to customers for the purpose of transporting data originated by the customer or a third party.

HSI Access Service is limited to use for transmission of data between the designated premises of a local exchange customer of the Telephone Company and the local exchange customer's ISP. The high speed data transmission path installed by the Telephone Company under an HSI Access Service offering for use for transmission of data between the designated premises of a local exchange customer and the local exchange customer's ISP may also be used by the local exchange customer for transmission of data for purposes of receiving one-way video services. Use of the HSI Access Service for one-way video transmission is subject to the availability and technical capability of the Telephone Company. The video service provider must connect to the Telephone Company HSI Access Service Connection Point. This connection is subject to the technical capability of the Telephone Company's interconnecting facilities. The connection must be provisioned under applicable rates, terms and conditions for appropriate jurisdiction.

(M)

Certain material currently found on this page formerly appeared on Original Page 16-52.

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.1 General Description (Cont'd)

(B) Service Provisioning (Cont'd)

All customers will be served from the nearest suitably equipped end office designated by the Telephone Company. HSI Access Service will be provided subject to the availability and limitations of the Telephone Company wire centers and outside plant facilities. HSI Access Service is only available where permitted by technical capabilities of the Telephone Company, including but not limited to facility distance and type of physical plant.

(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain HSI Access Service for the customer up to and including the Network Interface Device (NID) or the protector. The Telephone Company will advise the customer of the customer premises equipment (CPE) necessary to support HSI Access Service that the customer will need to purchase. The Telephone Company will provide to the ISP technical specifications for connection to the Telephone Company's HSI Access Service applicable to the technology deployed by the Telephone Company.

(D) Rights of the Telephone Company

HSI Access Service will be provided over existing Telephone Company local exchange service lines. Rates and regulations for HSI Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company's general and/or local exchange service tariffs. The Telephone Company will automatically disconnect HSI Access Service when the associated local exchange service line is disconnected for any reason.

The Telephone Company will not provision HSI Access Service if the Telephone Company has reasonably determined that (a) it is not technically feasible over existing facilities or (b) it will cause interference problems within the Telephone Company's network or other facilities.

During the Telephone Company's network maintenance and software update period, it may be necessary to temporarily place the HSI Access Service central office equipment out of service. The Telephone Company reserves the right to temporarily interrupt HSI Access Service at other times in emergency situations. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.1 General Description (Cont'd)

(E) Responsibility of the Customer

The customer is responsible for providing the Telephone Company with the necessary information to provision HSI Access Service (e.g., customer name, telephone number and premises address; billing name and address when different from the customer name and premise address; its Internet Protocol (IP) address; and the contact name and telephone number of the ISP with which the customer's HSI Access Service will interconnect).

The customer is responsible for providing compatible customer premises equipment (CPE) that is used for connection to HSI Access Service.

When HSI Access Service is ordered by the ISP, the ISP customer is responsible for providing the Telephone Company with the necessary information (e.g., Data Link Connection Identifier(s), and/or Internet Protocol) to provision the HSI Access Service.

The ISP customer will obtain the appropriate authorization to allow the Telephone Company to provision HSI Access Service over the customer's end user's existing telephone exchange service line.

Where required, the ISP customer will be responsible for obtaining permission from its subscriber(s) for the Telephone Company's agents or employees to enter the customer's designated premises at a mutually agreed upon time for the purpose of installing, inspecting, repairing, or upon termination of the service, removing the service components of the Telephone Company.

The ISP customer will deal directly with its end user customers with respect to all matters pertaining to the service provided, including marketing, sales, ordering, installation, maintenance, trouble reporting, repair, billing and collections. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations

(A) Rate Elements

There are three types of rates and charges applicable to HSI Access Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge. (C)

(1) Monthly Rates for HSI Access Service (T)

The monthly rate applies each month or fraction thereof for each local exchange service line equipped with HSI Access Service.

For purposes of application of the monthly rate, HSI may be ordered under any of the following options that are offered by the Telephone Company as indicated in the table at Section 16.6. (N)

Monthly Rates Without Discount (N)

Customers may order HSI Access Service at a monthly rate without discount. Monthly rates apply without any volume or term commitment. There is no minimum period for HSI Access Service.

HSI Term and Volume Plan (HSITVP) Rates

For Telephone Companies offering HSI Term and Volume Plant (HSITVP) rates, Customers may order HSI Access Service under Section 16.6.2(E), HSI Term and Volume Plan (HSITVP) Rates.

HSI Term Pricing Arrangement (HSITPA) Rates

For Telephone Companies offering HSI Term Pricing Arrangement rates, Customers may order HSI Access Service under Section 16.6.2(F), HSI Term Pricing Arrangement (HSITPA) rates. (N)

Certain material formerly found on this page now appears on Original Pages 16-55.2 and 16-55.3.

Transmittal No. 110

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations (Cont'd)

(A) Rate Elements (Cont'd)

(1) Monthly Rates for HSI Access Service (Cont'd) (N)

Service Classes

HSI is provided under two classes of service, Voice-Data and Data-Only.

Voice-Data

HSI Access Service provided on the basis of voice-data is designed to support affordable high speed Internet access for residential and business end users. The actual throughput achieved by voice-data is not guaranteed and may be affected by many factors, such as Internet congestion. Voice-Data HSI Access Service is provisioned over the end user's existing Telephone Company local exchange telephone service line utilized for voice communications. When provisioned over the end user's existing local exchange telephone service line, HSI utilizes a centrally placed splitter or in-line filters to isolate the voice band service and equipment from the HSI Access Service and equipment.

Data-Only

HSI Access Service provided on a data-only basis is provisioned over a separate, dedicated data-only Telephone Company local exchange line facility. (N)

Transmittal No. 110

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations (Cont'd)

(A) Rate Elements (Cont'd)

(2) Nonrecurring Charge

A nonrecurring charge applies per local exchange service line for the installation of HSI Access Service.

The Telephone Company will waive the Nonrecurring Charge for each new HSI Access Line ordered when the customer commits to retain the HSI Access Line for a minimum period of 12 months following installation of service. If the HSI Access Line is disconnected for any reason prior to the end of the 12-month minimum commitment period, the Telephone Company will bill the customer an amount equal to the waived Nonrecurring Charge.(1)

(1) Waiver of Nonrecurring Charge previously provided under provision in rate sections for Mt. Horeb Telephone Company at Section 17.4.8.1(D) at page 17-321.2. (C) (C)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations (Cont'd)

(A) Rate Elements (Cont'd)

(3) HSI Access Service Network Reconfiguration Charge (T)

An HSI Access Service Network Reconfiguration Charge applies when the HSI Access Service customer's ISP requests the Telephone Company to modify the Telephone Company's network to accommodate a change in the HSI Access Service customer's existing HSI Access Service line. A nonrecurring charge applies for each request per HSI Access Service line. The Telephone Company will bill the HSI Access Service Network Reconfiguration Charge to the HSI Access Service customer's ISP. No HSI Access Service Network Reconfiguration Charge shall apply where the change requested by the HSI Access Service customer is for a change in HSI Access Service transmission speed. (M)

All changes to existing HSI Access Service (including but not limited to change of ISP), other than changes involving HSI Access network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per HSI Access Service line for this work activity.

Rates and charges for HSI Access Service are set forth in 17.4.8 following. (M)

Certain material currently found on this page formerly appeared on Original Page 16-55.

ACCESS SERVICE

(N)

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

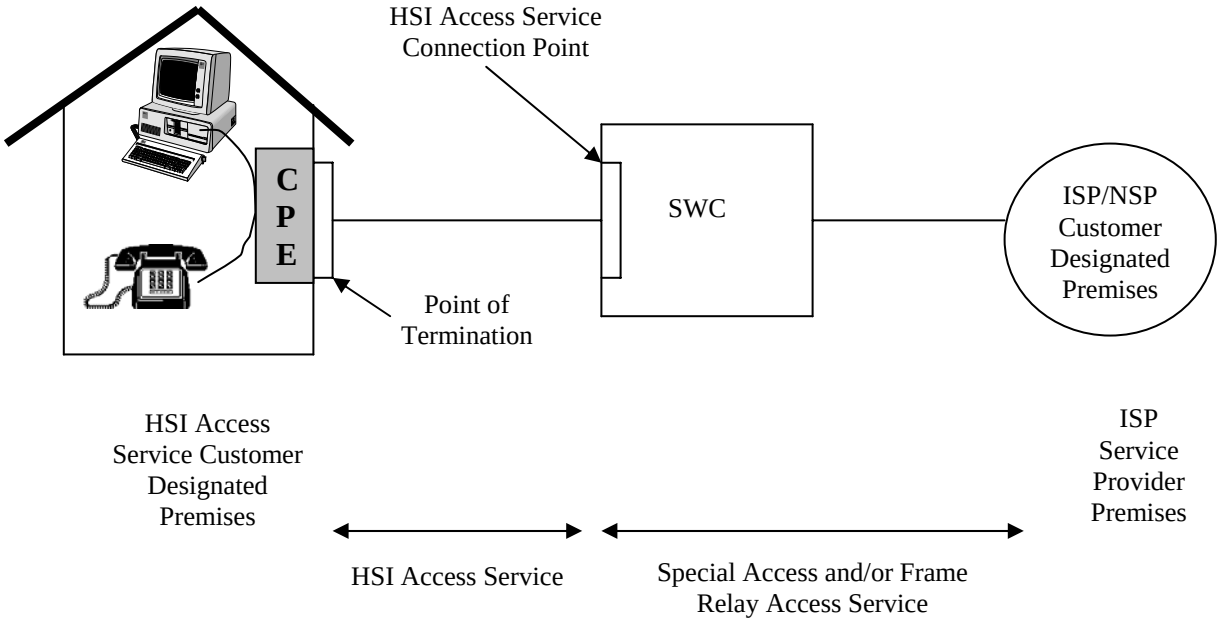
16.6.2 Rate Regulations (Cont'd)

(B) Rate Application

HSI Access Service is based on differing volume levels of HSI Access Service connections per Section 17.4.8, following.

The rates applicable to HSI Access Service provided under an HSI Access Service Term and Volume Plan (HSI Access Service-TVP) arrangement are specified in 17.4.8, following.

The following diagram depicts a typical HSI Access Service configuration:



(C) Minimum Period

The minimum period for which HSI Access Service is provided to a customer and for which charges are applicable is one month.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations (Cont'd)

(D) Moves

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

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

The provisions for moves of HSI Access Service are the same as those described in Section 7.2.3, preceding, except that an Access Order Charge will not apply.

(E) HSI Term and Volume Plan (HSITVP) Rates (T)

(1) Description

The terms and conditions specified herein are applicable to HSI Access Service where the Telephone Company offers an HSI Access Service Term and Volume Plan (HSITVP) and are in addition to other regulations as specified in this tariff. (T)
Telephone Companies offering HSITVP are indicated at Section 16.6 preceding. (C)
(C)

The HSI Access Service Term and Volume Plan (TVP) will allow customers discounted access rates based upon the volume and/or term commitment. Rates will be based upon the TVP selected by the customer. TVP plans for an HSI Access Service offered by a Telephone Company, if any, will be indicated in the Telephone Company's respective rate section for HSI Access Service in Section 17.4.8 following.

Term plans of one (1), two (2) and three (3) years may be available to all customers at applicable rates set forth in the tariff regardless of when the subscription is made for an HSI Access Service TVP arrangement. The customer must designate on the order the type of payment plan selected.

The minimum volume commitment of the TVP selected must be met within twelve (12) months after the TVP is initiated.

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations (Cont'd)

(E) HSI Term and Volume Plan (HSITVP) Rates (Cont'd) (T)

(2) Rate Application

Upon expiration of a TVP period, the customer may choose a new TVP period, convert to month-to-month or terminate service. The month-to-month rates will be those rates that are in effect at the time of conversion. If the customer fails to make a choice by the end of the TVP period, the HSI Access Service will continue billing at the existing term and volume commitment level rates and a new TVP period will begin based on previously effective term and volume commitment. All terms and conditions, including Termination Liabilities will apply to the new TVP period. (T)

Conversion to a month-to-month or different TVP period will require the customer to submit a change order. Conversion of existing TVP service to a different TVP period will be allowed without application of any nonrecurring charges.

(3) Changes in Length of TVP Period

The customer may elect to convert to a new TVP period subject to the following conditions:

(a) Credit will not be given toward the new payment period for payments made under the original TVP arrangement.

(b) Nonrecurring charges will not be reapplied for existing service(s).

(c) If the new TVP period is shorter in length than the time remaining under the existing TVP, the change to the new TVP period constitutes a discontinuance of the existing TVP service and termination liability charges apply.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6.2 Rate Regulations (Cont'd)

(E) HSI Term and Volume Plan (HSITVP) Rates (Cont'd) (T)

(4) Rate Changes

The customer may terminate the HSITVP without penalty or liability should the rates increase during the term of the existing TVP, with the exception of rate changes that may occur as a result of FCC presubscription for rate increases. (T)

(5) Annual Review

Each customer's HSITVP will be reviewed annually. The customer will be notified as to the status of the TVP if the in-service quantity of HSI Access Services falls below the minimum volume commitment. An allowance of up to 3% will be considered as still having met the volume commitment. Where the customer has less than the volume commitment quantity for a specified discount, charges will be assessed. (T)

If the total number of HSI Access Services in service qualifies the customer for a different TVP rate, the customer will have the option of increasing the commitment quantity for the remainder of the plan.

(6) HSITVP Conditions (T)

After enrolling in the plan, the customer may delete or add HSI Access Services rated at the specified term period/threshold level rate at any time during the plan.

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6. Rate Regulations (Cont'd)

(E) HSI Term and Volume Plan (HSITVP) Rates (Cont'd) (T)

(7) Shortfall Charges for Failing To Meet Commitment

At the annual review, if the total volume in service does not meet the volume commitment, a payment equal to the difference between the HSITVP rate and the highest rate that would have been charged for services not under the TVP plan plus 10% will be assessed. The payment will be calculated using the prorated HSI Access Service aggregation quantity at the time of the review. The customer may choose to increase the volume commitment within 30 days after enrollment to the TVP and continue the TVP arrangement or choose to be billed on a going forward basis under either a different TVP or under the month-to-month rates. If after 30 days, the TVP volume levels are not met, the TVP will be automatically changed to the standard month-to-month rates. (T)

(8) Termination Liability

When a HSITVP service is discontinued prior to the end of the commitment period, termination liability charges will apply, as set forth below, based on the remainder of the TVP period in effect at the time of disconnect. (T)

One Year TVP – Prorated payment based on the HSI Access Service Level Package mix times the number of remaining months of the first year's recurring charges.

Two Year TVP – Prorated payment based on the HSI Access Service Level Package mix times the number of remaining months of the first and second year's recurring charges.

Three Year TVP – Prorated payment based on the HSI Access Service Level Package mix times the number of remaining months of the first, second and third year's recurring charges.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6. Rate Regulations (Cont'd)

(F) HSI Term Pricing Arrangement (HSITPA) Rates (N)

(1) Description

The HSI Term Pricing Arrangement (HSITPA) provides the customer with reduced rates based on a term commitment of one year and payment of a single HSITPA Monthly Charge in addition to the charges for each individual HSI Access Service line. An Access Order Charge applies for each order to establish the initial HSITPA.

When the customer subscribes to a HSITPA, all HSI Access Service arrangement lines currently provided by the Telephone Company will be billed at the rates and charges specified in Section 17.4, following, for the length of the term commitment. In addition to the charge for each HSI arrangement connected to an end user customer, the customer will be billed the single HSITPA Monthly Charge specified in Section 17.4, following.

If the Telephone Company decreases the rates specified in Section 17.4, following, during the term of a commitment period, the decreased rates will automatically be applied for the remainder of the current commitment period.

At the end of the HSITPA term,, the customer may elect to establish a new HSITPA term commitment, convert to Monthly Rates Without Discount or HSI Term and Volume Plan (HSITVP) rates or discontinue service. If the customer does not make an election by the end of the HSITPA term, the rates for all HSI arrangement lines will automatically be converted to Monthly Rates Without Discount. An Access Order Charge will not apply to any election made by the customer at the end of the HSITP term. An HSITP is subject to payment for early termination as described in (4), following.

(N)

Transmittal No. 110

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6. Rate Regulations (Cont'd)

(F) (F) HSI Term Pricing Arrangement (HSITPA) Rates (Cont'd) (N)

(2) Upgrades in HSITPA

A customer may terminate a HSITPA without the application of a termination liability charge when the customer replaces its original HSITPA commitment with a new HSITPA commitment provided the pricing option of the new HSITPA commitment is equal to or greater than the pricing option of the original HSITPA commitment. An Access Order Charge will not apply when the customer replaces an existing HSITPA commitment with a new HSITPA commitment under this provision.

(3) Termination Without Liability

A customer may terminate a HSITPA commitment without the application of a termination liability charge if the Telephone Company increases the HSITPA monthly rates described in Section 17.4. following, during the term of the existing commitment. The customer has 90 days following such rate increase to notify the Telephone Company in writing of its intent to terminate its HSITPA under this section; otherwise, the increased rates will apply for the remainder of the commitment period. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.6 High Speed Internet (HSI) Access Service (Cont'd)

16.6. Rate Regulations (Cont'd)

(F) HSI Term Pricing Arrangement (HSITPA) Rates (N)

(4) Termination with Liability

If the customer elects to terminate its HSITPA commitment prior to the end of the commitment period for any reason other than specified in (2) or (3), preceding, a termination liability charge will apply. For each HSITPA commitment terminated prior to the end of the commitment period, the Telephone Company will bill the customer a charge equal to the HSITPA Monthly Charge for its selected pricing option as specified in Section 17.4, following, multiplied by the number of months remaining in the commitment period.

HSI Monthly Rates Without Discount as described in Section 17.4, following, will apply to all in-service HSI Access Service arrangement lines following the early termination of a HSITPA term commitment. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (N)

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

Telephone Companies providing Asynchronous Transfer Mode Cell Relay Access Service under this Section are indicated in the following table.

Carrier	SAC	Ports	DSL Access Service Connection	VPs	VCC	Inverse Multi-plexing
Atlantic Telephone Membership Corporation (NC)	230468	X	X	X	X	X
Home Telephone Co. (SC)	240527					
Horry Telephone Coop. (SC)	240528	X		X		
Mt. Horeb Telephone Co. (WI)	330916					
Pineland Tel. Coop. (GA)	220377	X				
TDS Telecom Companies (1)		X	X	X	X	
Camden Tel. and Telegraph Company, Inc. d/b/a TDS Telecom(1)	220351	X	X	X	X	
Mt. Vernon Telephone Company d/b/a TDS Telecom(1)	330917	X	X	X	X	
Oklahoma Communication Systems, Inc. d/b/a TDS Telecom(1)	431984	X	X	X	X	
Tennessee Telephone Company d/b/a TDS Telecom(1)	290575	X	X	X	X	
Chesnee Telephone Company, Inc.	240515	X	X	X	X	
Gearheart Communications Company, Inc. d/b/a Coalfields Telephone Company	260408	X	X	X	X	
Skyline Telephone Membership Corp.	230501	X	X	X	X	
Yadkin Valley Telephone Membership Corporation	230511	X	X	X	X	

(1) TDS Telecom Companies rates for four issuing carriers are pooled and listed under "TDS Telecom Companies" in Section 17.

#Telephone Company will become an issuing carrier for JSI Tariff F.C.C. No. 1 under Transmittal No. 130 effective June 30, 2007.

(N)

Material formerly on this page currently appears on Original Page 16-61.1.

Transmittal No. 129

ACCESS SERVICE

(M)

16. Public Packet Data Network (Cont'd)

16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont'd)

16.7.1 General

Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) is a connection-oriented transport service that is based on Asynchronous Transfer Mode (ATM) technology using fixed length, 53-byte cells. ATM cells generated by ATM-compatible customer premises equipment (CPE) are transmitted through the Telephone Company's ATM-CRS network to a pre-specified destination.

ATM-CRS provides customers requiring high-speed data transport for bandwidth intensive data, voice or video applications with the ability to interconnect multiple locations using the Telephone Company's ATM-CRS network. The customer may use ATM-CRS to interconnect its customer designated premises (CDPs) served by the Telephone Company's ATM-CRS network, to interconnect its local area network (LAN) to the Telephone Company's ATM-CRS network and/or to interconnect its CDPs to an ATM network located outside of the Telephone Company's serving territory.

(D)

(D)

16.7.2 Service Description

ATM-CRS is provided using a combination of Ports, Virtual Paths and Virtual Circuit Channels. An ATM-CRS Port is required to provide the interface into the Telephone Company's ATM-CRS network. A Virtual Path (VP) is required to establish a transmission path between any two ATM-CRS Ports. Virtual Circuit Channels (VCCs) may be ordered from the Telephone Company to establish a communications path between any two CDPs or established by the customer using its own equipment.

Service is provided, where available, between CDPs and designated Telephone Company Serving Wire Centers (SWCs). ATM-CRS will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ATM-CRS equipped Serving Wire Centers in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

(M)

Material currently on this formerly appeared on Original Page 16-61.

Transmittal No. 129

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.2 Service Description (Cont'd)

For the Telephone Companies under this section, as indicated on Page 16-61, rates and charges for ATM-CRS are specified in the respective Telephone Company Section 17.4, following. The application of rates and charges for ATM-CRS is described later in this section. (C) (C)

16.7.3 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to ATM-CRS:

(A) The customer is responsible for providing the Telephone Company with the necessary information to provision ATM-CRS as specified in Section 5.2 Ordering Requirements, preceding.

(B) The customer is responsible for providing and maintaining all required customer premises equipment (CPE), which is compatible with ATM-CRS and complies with the standards specified in the following publications: The ATM Forum Technical Committee ATM User-Network Interface (UNI) Signaling Specification (Version 4.0), Private Network-Network Interface Specification (Version 1.0) and BISDN Inter Carrier Interface (B-ICI) Specification (Version 2.0). A customer ordering Ethernet-based ATM-CRS Ports is also responsible for ensuring that its CPE complies with the standards specified in Technical Reference IEEE Std. 802.3, Part 3, Clause 15 for 10BASE-F, Clause 26 for 100BASE-F and Clauses 34 through 38 for 1000BASE-X connections. A customer ordering the ATM-CRS Port Internet Protocol (IP) Function is also responsible for ensuring that its CPE hands off IP packets to the Telephone Company's ATM-CRS network in a format that complies with the standards specified in the Internet Engineering Task Force Request For Comments (RFC) 791 entitled "INTERNET PROTOCOL, DARPA Internet Program Protocol Specification" (September 1981) and RFC 1483 entitled "Multiprotocol Encapsulation over ATM Adaptation Layer 5" (July 1993).

16.7.4 Rate Regulations

This section contains the regulations governing the rates and charges that apply for ATM-CRS. Regulations governing the rates and charges for Special Access Service or other Public Packet Data Network Service provided under this tariff used in conjunction with ATM-CRS are as specified in the respective service's section of this tariff.

ACCESS SERVICE

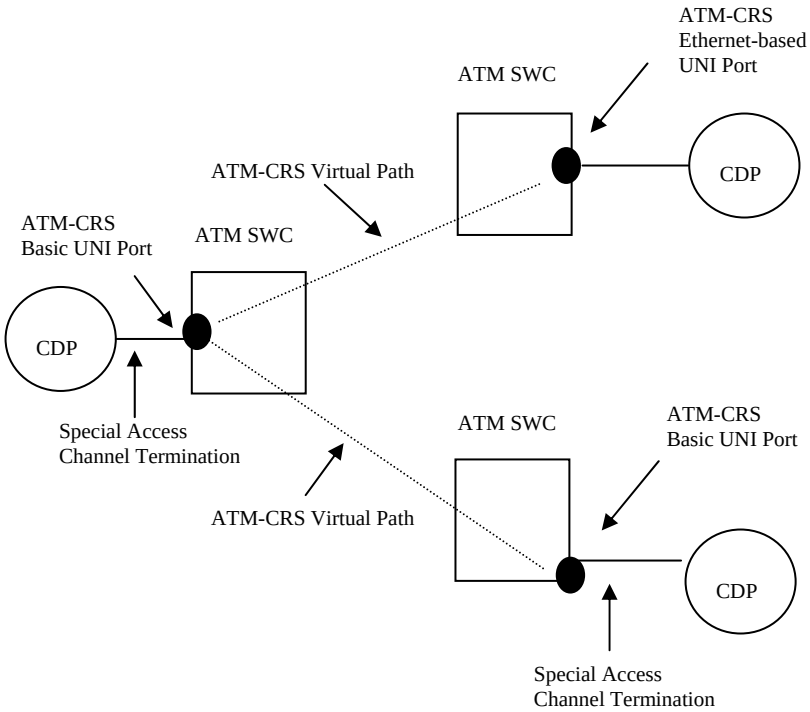
16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

The following diagrams depict generic views of the components of ATM-CRS. In the first figure, all of the customer's CDPs are served by ATM-CRS equipped SWCs. The ATM-CRS customer orders the applicable ATM-CRS components pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding.

Figure 1



(N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

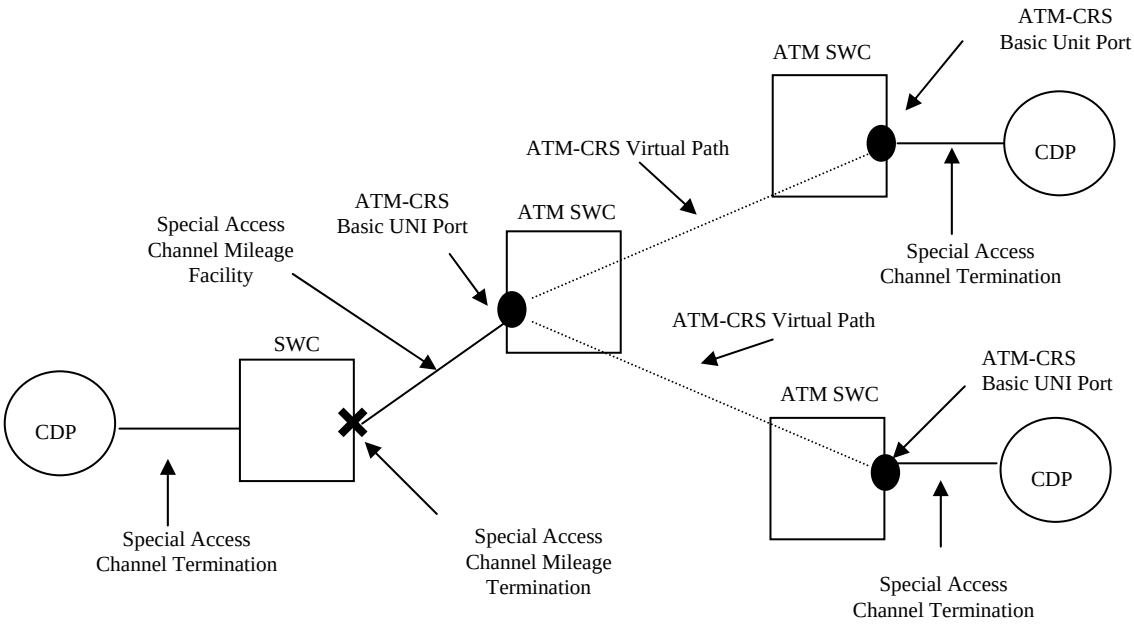
16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)

(N)

16.7.4 Rate Regulations (Cont'd)

In the second figure, one of the customer's CDPs is not served by an ATM-CRS equipped SWC. The ATM-CRS customer orders the applicable ATM-CRS components pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding.

Figure 2



(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

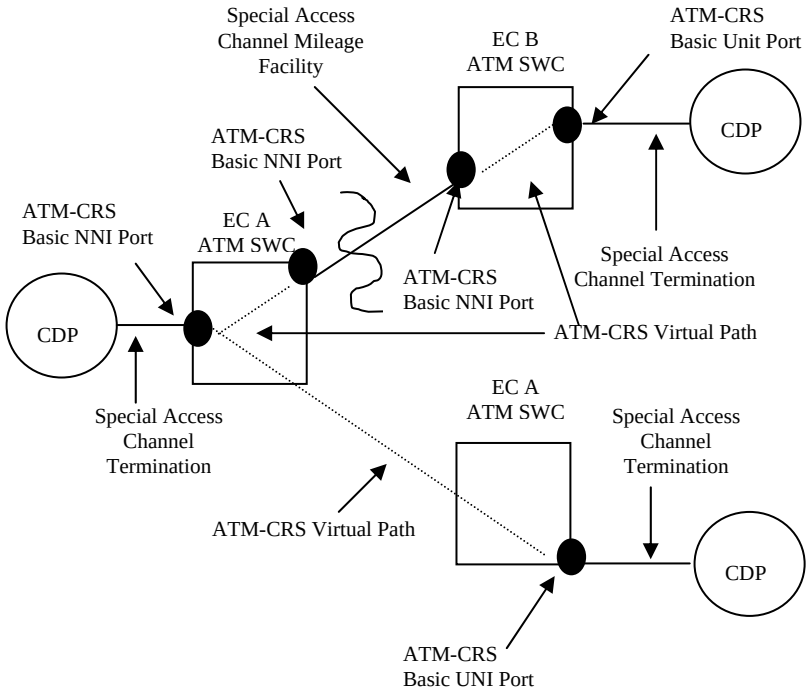
16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)

(N)

16.7.4 Rate Regulations (Cont'd)

In the third figure, one of the customer's CDPs is served by another telephone company's ATM network. The ATM-CRS customer orders the applicable ATM-CRS components from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding. In addition, the customer will order the applicable ATM and special access services components from the distant telephone company.

Figure 3



(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories

Provision of ATM-CRS Access Service by the Telephone Company is indicated by inclusion of ATM-CRS Access Service rates in the Telephone Company's respective Section 17. In the event the Telephone Company offers some but not all elements of ATM-CRS Access Service, the elements offered by the Telephone Company will be indicated by the inclusion of rates for each element offered in the Telephone Company's respective rate section.

The various ATM-CRS Access Service components are described below.

(1) ATM-CRS Ports

An ATM-CRS Port receives ATM cells from the customer's ATM-compatible CPE, validates the addressing parameters contained in the cell headers, and transmits the cells into the ATM-CRS network. The ATM-CRS Port also receives ATM cells from the Telephone Company's ATM-CRS network or from an ATM network located outside of the Telephone Company's serving territory, validates the addressing parameters contained in the cell headers, and transmits the cells to the pre-designated CDP.

ATM-CRS Ports are available with a User Network Interface (UNI) or a Network to Network Interface (NNI) as described below. Each ATM-CRS Port must be associated with a minimum of one ATM-CRS Virtual Path or DSL Access Service Connection optional function.

Interconnection of the Telephone Company's ATM-CRS network to another ATM network located outside of the Telephone Company's serving territory is provided using ATM-CRS Basic NNI ports and Telephone Company provided Special Access Services. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(1) ATM-CRS Ports

(a) Basic User Network Interface (UNI) Port

Basic UNI Ports provide a port only interface to the Telephone Company's ATM-CRS network and do not include the required transport facility between the CDP and the Telephone Company's SWC at which the basic UNI Port is located. Transport to connect the CDP with the basic UNI Port is provided using Telephone Company provided DS1 or DS3 High Capacity and/or, where available, OC3 or OC12 Synchronous Optical Channel Services as described in Sections 7.10 and 7.11, preceding. Basic UNI Ports are available at bandwidth speeds of 1.544 Mbps, 44.736 Mbps, and, where the Telephone Company offers Synchronous Optical Channel Service, 155.52 Mbps and 622.08 Mbps.

(b) Ethernet-based User Network Interface (UNI) Port

Ethernet-based UNI Ports are used to interconnect the customer's Ethernet compatible CPE with the Telephone Company's ATM-CRS network and include the transport facility between the CDP and the Telephone Company's SWC, provided that the CDP is served by the SWC in which the Ethernet-based UNI Port is located. Where offered, Ethernet-based UNI Ports are available at bandwidth speeds of up to 10 Mbps (i.e., 10BASE-F), up to 100 Mbps (i.e., 100BASE-F) and up to 1 Gbps (i.e., 1000BASE-X). (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(1) ATM-CRS Ports (Cont'd)

(c) Basic Network to Network Interface (NNI) Port

Basic NNI Ports provide a port only interface to the Telephone Company's ATM-CRS network and do not include the required transport facility between the CDP and the Telephone Company's SWC at which the basic NNI Port is located. Transport to connect the CDP with the basic NNI Port is provided using Telephone Company provided DS1 or DS3 High Capacity and/or OC3 or OC12 Synchronous Optical Channel Services described in Sections 7.10 and 7.11, preceding. Basic NNI Ports are available at bandwidth speeds of 1.544 Mbps, 44.736 Mbps, 155.52 Mbps and 622.08 Mbps.

(d) Ethernet-based Network to Network Interface (NNI) Port

Ethernet-based NNI Ports are used to interconnect the customer's Ethernet compatible CPE with the Telephone Company's ATM-CRS network and include a fiber only connection between the CDP and the Telephone Company's SWC, provided that the CDP is served by the SWC in which the Ethernet-based NNI Port is located. Ethernet-based NNI Ports are available at bandwidth speeds of up to 10 Mbps (i.e., 10BASE-F), up to 100 Mbps (i.e., 100BASE-F) and up to 1 Gbps (i.e., 1000BASE-X)

Monthly and nonrecurring charges apply for each ATM-CRS Port ordered. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) ATM-CRS Virtual Paths

An ATM-CRS Virtual Path (VP) is a predefined, logical circuit established by the Telephone Company that is required to route ATM cells between any two ATM-CRS Ports located within the Telephone Company's ATM-CRS network. VPs may be established between two ATM-CRS UNI Ports, between an ATM-CRS UNI Port and an ATM-CRS NNI Port, or between two ATM–CRS NNI Ports. VPs are available in increments of 1 Mbps. The bandwidth capacity on a VP may not exceed the maximum bandwidth of the associated ATM-CRS Ports. In addition to specifying the bandwidth capacity required on its order, the customer must specify one of the following traffic routing prioritization parameters for each VP ordered.

(a) Constant Bit Rate (CBR)

CBR supports applications that require special network timing and minimal delay to ensure steady data flow of user information through the ATM-CRS network. Examples of applications requiring CBR include voice, some types of video and circuit emulation for higher speed special access services. CBR is the highest priority traffic on the network.

(b) Variable Bit Rate – real time (VBR-rt)

VBR-rt supports applications for which the data flow is bursty and requires low delay variance in ATM cell transmissions. Examples of applications requiring VBR-rt include voice and video.

(N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) ATM-CRS Virtual Paths (Cont'd)

(c) Variable Bit Rate – non real time (VBR-nrt)

VBR-nrt supports applications for which the data flow is bursty and variable delays in ATM cell transmissions can be tolerated. Examples of applications requiring VBR-nrt include file transfer, multimedia and computer aided design/computer aided manufacturing (CAD/CAM).

(d) Unspecified Bit Rate (UBR) UBR supports applications for which the data flow is bursty and delay tolerant using "best effort" engineering. The Telephone Company will attempt to deliver all ATM cells received on a UBR VP, however, network congestion may result in a loss of ATM cells. Examples of applications requiring UBR include interactive data sessions, file transfers, monitoring and signaling.

Monthly and nonrecurring charges apply for each VP ordered. The monthly recurring charge is comprised of a fixed path charge and a variable bandwidth capacity charge, which is calculated based on the total bandwidth of the VP. For example, where the fixed path rate is $5.00 and the variable bandwidth rate is $17.50 per Megabit, the monthly charges for a 145 Mbps VBR-rt path would be $2,542.50.

(N)

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(3) ATM-CRS Virtual Circuit Channels (VCCs)

An ATM-CRS Virtual Circuit Channel (VCC) is a pre-defined logical circuit used to route ATM cells between any two CDPs served by the Telephone Company's ATM-CRS network. VCCs may be established by the customer using its CPE or by the Telephone Company in its ATM-CRS network via the service order process. Monthly and nonrecurring charges apply for each VCC ordered by the customer. Rates and charges specified in Section 17.4.8(B)(3), following, do not apply to VCCs established by the customer.

(4) Optional Features and Functions

(a) DSL Access Service Connection

Where available, ATM-CRS UNI and/or NNI Ports may be equipped with the DSL Access Service Connection function. This function provides for the interconnection of ATM-CRS with ADSL Access Service described in either Section 8.1 or Section 16 preceding and Technical Reference ANSI T1.413-1998, and with SDSL Access Service as described in Section 16.3, preceding, provided by the Telephone Company under this tariff. The function also provides for the interconnection of ATM-CRS with a wireline broadband Internet transmission service provided on a non-tariffed common carrier basis. This optional function allows the ATM-CRS customer to receive ADSL, SDSL and/or wireline broadband Internet transmission service data traffic from and transmit ADSL, SDSL and/or wireline broadband Internet transmission service data traffic to its end user customers using a UBR traffic routing prioritization parameter. It is available only at Telephone Company designated DSL Access Service Connection Point SWCs located within the Telephone Company's serving territory. The speed of the DSL Access Service Connection function ordered by the customer may not exceed the speed of the associated ATM-CRS Port. (C) (C)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connection (Cont'd)

A nonrecurring charge applies per port to equip the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.

(i) A customer that requires a VBR-nrt traffic routing prioritization parameter may also order a DSL VCC between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL and/or SDSL Access Service provided by the Telephone Company under this tariff as described in Section 8.1, Section 16.2, and 16.3 preceding. Each DSL VCC is available with a maximum bandwidth capacity of 1 Mbps, however, the maximum speed to or from the ADSL and/or SDSL Access Service customer will not exceed the maximum peak speeds for the services as specified in the applicable DSL regulations of this tariff under which the Telephone Company provides DSL Access Service to the customer. The customer is responsible for specifying in its order the premises locations and number of DSL VCCs it wants established to each of its end user customers. Monthly and nonrecurring charges apply to each DSL VCC established by the Telephone Company. The DSL VCC charges apply in addition to the nonrecurring charge for equipping the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function. (C) (C)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connection (Cont'd)

(ii) Where suitable facilities exist, a customer that requires the ability to send high speed multimedia transmissions may also order a MultiMedia VCC (MM-VCC) between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL Access Service as described in Section 16.2, preceding. The MM-VCC is available in increments of 1 Mbps, or 4 Mbps. The customer is responsible for specifying in its order the premises locations and the capacity of each MM-VCC. Transmission speed across the MM-VCC is not guaranteed and may be affected by factors that affect the actual speeds delivered, including the ADSL Access Service customer's distance from the Telephone Company Serving Wire Center, condition of the facilities, and any capacity limitations in the ATM-CRS customer's network design. Monthly and nonrecurring charges apply to each MM-VCC established by the Telephone Company. The MM-VCC charges apply in addition to the nonrecurring charge for equipping the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function. (C)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont'd)

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connection (Cont'd)

(ii) (Cont'd) (N)

When a customer elects to change the bandwidth capacity of an existing MM-VCC or to remove an existing MM-VCC from an associated ADSL Access Service line, the MM-VCC nonrecurring charge specified in Section 17.4 will not apply. In lieu of such charge, the MM-VCC Design Change Charge will apply, as specified in Section 16.7.4, following.

When a customer disconnects a MM-VCC and the associated ADSL Access Service line at the same time, neither the MM-VCC nonrecurring charge or MM-VCC Design Change Charge will apply. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd) (M)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(b) ATM-CRS Port Internet Protocol (IP) Function

Where available, ATM-CRS UNI and/or NNI Ports may be equipped with the ATM-CRS Port Internet Protocol (IP) Function. This non-chargeable optional function allows the customer to transmit IP packets, which were formatted by the customer's CPE in conformance with the standards specified in the Internet Engineering Task Force Request For Comments (RFC) 791 entitled "INTERNET PROTOCOL, DARPA Internet Program Protocol Specification" (September 1981) and RFC 1483 entitled "Multiprotocol Encapsulation over ATM Adaptation Layer 5" (July 1993), through the Telephone Company's ATM-CRS network. Monthly and nonrecurring charges do not apply to the ATM-CRS Port IP Function. When this function is installed subsequent to the installation of the ATM-CRS Port or removed from an existing ATM-CRS Port, an as specified in Section 17.4.1, following, will apply per order.

(c) Inverse Multiplexing Over ATM (IMA)

Inverse Multiplexing over ATM (IMA) allows a bandwidth option between DS1 (1.544 Mbps) and DS3 (45 Mbps) levels. IMA utilizes 2 to 8 DS1s and bundles them together to create a solid bandwidth increment of 3 Mbps, 4.6 Mbps, 6.1 Mbps, 7.7 Mbps, 9.2 Mbps, 10.7 Mbps or 12.3 Mbps. IMA is available over the following Service Classes Constant Bit Rate (CBR), Variable Bit Rate – non-real time (VBR-nrt) and Unspecified Bit Rate (UBR) as set forth in Section 16.7.4.(2) preceding. (M)

Material currently found on this page formerly appeared on 1st Revised Page 16-72.1

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(c) Inverse Multiplexing Over ATM (IMA) (Cont'd)

Where facilities allow, Customers may order IMA at the capacities indicated below. The customer will order and pay for the number of Special Access High Capacity 1.544 Mbps (DS1) Channel Terminations or Channel Mileage Terminations/ Facilities indicated in the table and the IMA Port Charge as specified in Section 17.4.1 following. The ATM Port charges as described above in Section 16.7.4(A)(1) do not apply. (C) (x)

Capacity	Number of Channel Terminations (or Channel Mileage Circuits) Required
3 Mbps	2
4.6 Mbps	3
6.1 Mbps	4
7.7 Mbps	5
9.2 Mbps	6
10.7 Mbps	7
12.3 Mbps	8

(C) (x)

(B) Types of Rates and Charges

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described below:

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof that an ATM-CRS service component is provided. For billing purposes, each month is considered to have 30 days.

(x) Filed under authority of Special Permission No. 04-084 of the Federal Communications Commission.

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

(N)

16.7.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for ATM-CRS are installation of service and service rearrangements. These charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) Installation of Service

Nonrecurring charges apply for installation of Ports, VPs, VCCs, and Optional Features and Functions ordered by the customer.

(b) Service Rearrangements

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.

The VP nonrecurring charge will apply per VP to change the bandwidth capacity and/or to change the traffic routing prioritization parameter on an existing VP.

(N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(b) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction
-

(c) Moves

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

- The Point of Termination at the customer's premises
- The customer's premises (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(c) Moves

The charges for moving ATM-CRS service components are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC. The charges specified below apply in addition to any applicable charges for moving the associated Special Access Services as specified in Section 7.2.3, preceding.

(i) Moves Within the Same Building

Port only interfaces (i.e., Basic UNI/NNI Ports), VPs and VCCs are not impacted when a customer moves its Point of Termination to a different location within the same building. The charge for moving an Ethernet-based UNI or Ethernet-based NNI Port within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the port. There will be no change in the minimum period requirements. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(c) Moves

(ii) Moves To a Different Building Within the Same SWC Port only interfaces (i.e., Basic UNI/NNI Ports), VPs and VCCs are not impacted when a customer moves its Point of Termination to a different building within the same SWC. The move of an Ethernet-based UNI or Ethernet-based NNI Port will be treated as discontinuance and start of service. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(iii) Moves to a Different Building in a Different SWC A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated ATM-CRS service components. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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

16.7.4 Rate Regulations (Cont'd)

(C) Minimum Periods

The minimum period for ATM-CRS service components provided to a customer and for which charges are applicable are:

- Twelve months for ATM-CRS Ports
- One month for ATM-CRS Virtual Paths and Virtual Circuit Channels

When a customer replaces its existing ATM-CRS service with a new Ethernet Transport Service provided pursuant to Section 16.4, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable. (N) (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (N)

Issuing Carriers Providing Stand-Alone Broadband Network Transport Under This Tariff Section:

Horry Telephone Cooperative, Inc.

16.8.1 General

(A) Stand-Alone Broadband Network Transport (SABNT) Service is a high-speed packet-based advanced data service that provides connectivity between Customer Locations, using packet-switching technology and Internet Protocol (IP). In connection with SABNT, the Company offers Virtual Local Area Network (VLAN) service through use of Virtual Private Network (VPN) functions.

(B) SABNT Service provides transport services with capabilities for various service arrangements that may be used to meet individual customer needs. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.1 General (Cont'd)

(C) The SABNT customer is responsible for providing and maintaining all required customer premises equipment (CPE), which is compatible with SABNT and complies with the standards for either Ethernet or IP, whichever is utilized by the customer for the SABNT service, specified in
one or more of the following technical publications.

Ethernet	IEEE Std. 802.3 - 2000, Part 3, Clauses 14, 15, 21, 26, 29, and 34 through 38 - Information Technology – Telecommunications and Information Exchange Between Systems – Local and Metropolitan Area Networks – Specific Requirements
IP	Request For Comments (RFC) 791, Internet Protocol, DARPA Internet Program Protocol Specification, September 1981.
VPN	Request For Comments (RFC) 2547, Border Gateway Protocol/Muliprotocol Label Switching/Virtual Private Networks (BGP/MPLS/VPNs), March 1999.

(D) SABNT Service, as provided under the provisions of this tariff section, is offered for Customer premises located within the Telephone Company's local exchange service areas.

(E) The regulations and rates specified herein are in addition to the applicable regulations and rates specified in other sections of this and other tariffs of the Company.

(F) For SABNT Service, the Service Date Change Charge, Expedited Orders Charge and Cancellation Charge, as defined in Section 5 preceding, are applicable. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations

(A) Explanation of Terms

(1) Stand-Alone Broadband Network Transport Service

Stand-Alone Broadband Network Transport Service is a data transport service which emulates the properties of a circuit-switched network allowing Local Area Networks (LANs) to send bi-directional traffic to other LANs.

(2) Local Area Network (LAN)

A Local Area Network (LAN) is a communications network spanning a limited geographical area. A LAN connects computers and other peripheral equipment for data communications purposes typically within a building or campus environment.

(3) Virtual Local Area Network (VLAN)

A Virtual Local Area Network (VLAN) is a logical grouping of SABNT connections that allows data transmission between such connections to occur as if all connections are on the same physical LAN. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(A) Explanation of Terms (Cont'd)

(4) Class of Service (CoS)

Class of Service (CoS) is a way of managing traffic in a network by grouping similar types of traffic together and treating each type as a class with its own level of service priority.

(5) Stand-Alone Broadband Network Transport (SABNT) Connection

A SABNT Connection provides high-speed data connections that are a part of a packet-based IP network within Company local service areas. SABNT Service provides the ability to order Ethernet Service or other supported packet-based services where a single customer connection can support multiple applications with varying Classes of Service (CoS).

SABNT Service provides customer capabilities to support different Classes of Service (CoS), i.e., Real-Time, Business Critical, Interactive, and Best Effort, as described in Section 16.8.2.A.9 following, over the same SABNT Connection allowing increased flexibility to provision bandwidth requirements for voice, data, and video applications. The customer specifies the required Class of Service (CoS) Package Profile for each SABNT Connection.

For each SABNT Connection, the customer's bandwidth will be limited to the bandwidth associated with each CoS specified in the CoS Package Profile selected by the customer.

A SABNT Connection is capable of interconnecting with other packet-based connections that are operating within the Company's local service area. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(A) Explanation of Terms (Cont'd)

(5) Stand-Alone Broadband Network Transport (SABNT) Connection (Cont'd)

A SABNT Connection provides data channel transport that connects a customer's premise to the SABNT wire center associated with the SABNT Connection. Customer locations greater than 10 miles from the SABNT wire center will have an associated additional mileage charge.

(6) Stand-Alone Broadband Network Transport Additional Mileage Charge

Additional mileage charges associated with a SABNT Connection apply when the total distance from the customer premises to the SABNT wire center serving the customer's premises is greater than the distance in miles covered by the SABNT Connection charge. The distance covered by the SABNT Connection charge for each issuing carrier offering SABNT under this tariff section is indicated below. The additional mileage is measured in airline miles from the customer premises to the SABNT wire center associated with the SABNT Connection. Fractions of miles will be considered as a whole mile.

Issuing Carriers Providing Stand-Alone Broadband Network Transport Under This Tariff Section:	Miles Covered by SABNT Connection
Horry Telephone Cooperative, Inc.	10

(N)

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16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(A) Explanation of Terms (Cont'd)

(7) VLAN Aggregation

Customers subscribing to a SABNT Arrangement are provided with the VLAN Aggregation feature. VLAN Aggregation provides multiple LAN connectivity across a common physical connection. This feature supports customer aggregation of traffic from multiple remote customer locations. This aggregated traffic can be transported back to a central location and across a common SABNT Service interface. VLAN Aggregation utilizes IEEE 802.1Q VLAN Tagging procedures.

The VLAN Aggregation Service Establishment Charge is a charge to provision a SABNT Connection with the VLAN Aggregation feature and identifies the host connection or the "aggregator" connection.

The VLAN Aggregation Network Assignment Charge is a charge to provision any remote connection to the VLAN Aggregation host "aggregator" connection. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(A) Explanation of Terms (Cont'd)

(8) Class of Service (CoS) Package Profile

For each SABNT Connection the customer must decide the mix of packet-based applications to be supported on that Connection, the Class of Service (CoS) Package Profile, and the amount of bandwidth to be assigned for each CoS. The customer's bandwidth will be limited to the fixed speed associated with each CoS. Therefore, total bandwidth available to support transmission of a specific CoS will depend upon the size of the customer's SABNT Connection and the specific CoS percentages the customer selects for the SABNT Connection.

A customer may select different CoS Package Profiles for different connections that share the same network VLAN, or SABNT network arrangement. However, technical limitations may limit the total number of different CoS Package Profiles that can be utilized in a single SABNT network arrangement. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(A) Explanation of Terms (Cont'd)

(8) Class of Service (CoS) Profile (Cont'd)

SABNT Connections support the following CoS:

(a) Real-Time. This CoS supports Voice over Internet Protocol (VoIP) applications. The Real-Time CoS is supported by a low latency queue.

(b) Business Critical. This CoS supports mission-critical business data applications. These applications tend to be data specific and may include medical imaging, electronic funds transfer, medical records transfer, etc.

(c) Interactive Video. This CoS supports interactive video applications.

(d) Best-Effort. This CoS is the default CoS for all other traffic that is not defined as Business Critical, Interactive Video, or Real-Time and is included, at no additional charge, with the SABNT Connection charge. Customer traffic that is not marked with a particular CoS will be treated as Best Effort. Traffic with the Best Effort CoS will have the lowest priority on the network and will support lower priority data applications, such as email and file transfer protocol (FTP). (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(A) Explanation of Terms (Cont'd)

(9) Reconfiguration Changes

A customer request to modify a SABNT Connection subsequent to the establishment of the connection is considered a reconfiguration change. Nonrecurring charges provided for processing certain reconfiguration changes are the Service Reconfiguration Charge and System Reconfiguration Charge. The appropriate reconfiguration charge is dependent upon the physical work required to fulfill the reconfiguration change request and applies as specifically set forth herein in lieu of other SABNT nonrecurring charges. Such changes are not treated as disconnects and do not change minimum period requirements.

A Service Reconfiguration Charge is applicable for requests where the work required is a minor change that does not involve changing the physical service type. The Service Reconfiguration Charge is applicable as set forth in 16.8.2.C.4.b following for a request to change an existing connection to a different connection that is the same physical service type but is considered to be a lower order of service.

A System Reconfiguration Charge is applicable for requests where the work required involves changing to a different physical service type or involves major support system changes. The System Reconfiguration Charge is applicable as set forth in 16.8.2.C.4.a following for requests to change an existing connection to a different connection that is a different physical service type. The System Reconfiguration Charge is also applicable to changes with the Network Channel Terminating Equipment (NCTE) interface option from optical to electrical, or vice-versa, and to changes to the premises powering options from AC power to DC power (or vice-versa). (N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(B) Basis of Offering

(1) Suspension of service is not allowed.

(2) SABNT Service is available 24 hours per day, 7 days per week, except for preventive maintenance.

(3) Obligations of Customer and Company

(a) The Company is not responsible for the installation, operation, or maintenance of any equipment provided by the customer.

(b) The customer is responsible for the provision and maintenance of all customer provided equipment and for insuring that the operating characteristics of the customer equipment is compatible with, and does not interfere with, the services offered by the Company.

(c) At the Service Connection point, the customer's signaling must conform to the standards identified to the customer by the Company in response to the Access Service Request.

(4) The minimum service period for all SABNT tariff components is twelve months. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(B) Basis of Offering (Cont'd)

(5) Due to the nature of the SABNT Service, it will be necessary to perform preventive maintenance and software updates. Therefore, SABNT Service will be unavailable during the period of time when preventive maintenance is being performed. This could result in SABNT Service being unavailable during the period of time between 12:00 AM and 6:00 AM Eastern Time on any given morning. The Company, upon written notice to the customer, may adjust the maintenance window.

(C) Provision of Service

(1) Rates and charges contained in this Tariff consist of the following elements:

(a) Stand-Alone Broadband Network Transport Connection
(b) Stand-Alone Broadband Network Transport Additional Mileage Charge
(c) Class of Service (CoS) Package Profile
(d) Service Reconfiguration
(e) System Reconfiguration

(2) All service connection charges for SABNT Service are included in the respective nonrecurring charges specified herein.

(3) SABNT Connections are provided utilizing various equipment configurations referred to herein as "physical service types". (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(C) Provision of Service (Cont'd)

(4) Requests by a customer to change from one SABNT arrangement to another SABNT arrangement will be considered a Reconfiguration Change.

(a) System Reconfiguration

A customer request to change an existing SABNT arrangement to a new arrangement that is a different physical service type is considered a System Reconfiguration request. As an example, a request to modify the transport medium from copper to fiber would constitute a System Reconfiguration.

(b) Service Reconfiguration

A customer request to change an existing SABNT arrangement to a new arrangement that is the same physical service type is considered a Service Reconfiguration. As an example, a request to modify the bandwidth allocation(s) would constitute a Service Reconfiguration. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(D) Moves

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

(a) The point of interface at the customer premises.

(b) The customer's premises.

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

(a) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one-half the nonrecurring, i.e., installation, charge for the affected service termination at the customer's premises. There will be no change in the minimum period requirements.

(b) Moves to a Different Building

Moves to a different building will be treated as a disconnect at the existing location, and all associated nonrecurring charges will apply at the new location. The customer will remain responsible for satisfying the remainder of the existing contract. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(E) Term Discounts

SABNT Service may be ordered at the customer's option on a monthly rate basis, subject to a minimum service period of twelve months, or for a Term Discount period of 36 months (3 years).

The minimum service period for SABNT Service is twelve months.

For customers that subscribe to the Term Discount plan for 36 months (3 years), discount percentages and monthly recurring charge rates set forth in Section 17.4.8 following will be frozen against, respectively, decreases in discount percentages and increases in monthly recurring charge rates filed in this tariff for the duration of the committed term Discount term. Any increases in discount percentages or decreases in monthly recurring charges filed in the tariff during the committed Term Discount term will be passed through to customers subscribing to the Term Discount plan on a going-forward basis from the effective date of the revised percentage and/or rates.

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not submit an access service request or other written notice of election for a new Term Discount plan fifteen business days prior to the end of the discount period, the rates will automatically convert to month-to-month service rates.

To be included in a Term Discount plan all eligible SABNT rate elements must be ordered for the same commitment term (i.e., all 36 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded. (N)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(E) Term Discounts (Cont'd)

Eligible SABNT service rate elements are all monthly recurring charges for services provided by the Telephone Company. As long as the number of SABNT services included in a Term Discount plan remains constant, customer requests to install and disconnect SABNT services, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period and Discontinuance of Service charges as set forth in (3) following will not apply.

(1) Upgrades in Term Discounts

Services provided under monthly rates may be upgraded to a Term Discount plan at any time without incurring nonrecurring charges or discontinuance charges for existing services. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all SABNT service that is upgraded.

(2) Upgrades in Capacity

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity, discontinuance charges will not apply, provided all the following conditions are met:

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

- the customer's disconnect order for the existing SABNT service must reference the new SABNT service installation order; (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.8 Stand-Alone Broadband Network Transport (SABNT) (Cont'd) (N)

16.8.2 Regulations (Cont'd)

(E) Term Discounts (Cont'd)

(2) Upgrades in Capacity (Cont'd)

- the new Term Discount period meets or exceeds the Term Discount period being discontinued.

A new minimum service period applies to all upgrades. Nonrecurring charges for an equivalent capacity of the existing services being upgraded to the higher speed service will not be assessed.

(3) Discontinuance of Service

If the customer chooses to disconnect all or a portion of the service prior to the expiration of the Term Discount period, discontinuance charges will apply to the portion of the service being discontinued.

Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period.

Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. (N)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

(D)

(D)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

(D)

(D)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

(D)

(D)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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(D)

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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16. Public Packet Data Network (Cont'd)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

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ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

(D)

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