
A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
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A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service

A140.1.1 General

- A. Frame Relay Service is a connection-oriented data transport service based on packet switching technology.
- B. Frame Relay Service provides flexible connectivity using Permanent Virtual Circuits (PVCs) implemented over digital facilities operating at transmission speeds of 56 Kbps, 64 Kbps, 128 Kbps, 1.536 Mbps or 44.210 Mbps.
- C. Network interface specifications for Frame Relay Service are contained in the following documents:
 - ANSI T1.617-1991, "Integrated Services Digital Network (ISDN) - Digital Subscriber Signaling System No. 1 (DSS1)
 - Signaling Specification for Frame Relay Service", American National Standards Institute, April 1991 and ANSI T1.618-1991, "Integrated Services Digital Network (ISDN) - Core Aspects of Frame Relay Protocol for use with Frame Relay Bearer Service", American National Standards Institute, April 1991. Both of these documents may be ordered from:
American National Standards Institute
Customer Service
11 West 42nd Street
New York, New York 10036
 - Document No. 001-208966, "Frame Relay Specification with Extension Based on Proposed T1S1 Standards", Revision 1.0, Digital Equipment Corporation, Northern Telecom, Inc., and StrataCom, Inc., September 1990. This document may be ordered from:
Frame Relay Forum
39355 California Street
Suite 307
Freemont, CA 94538-1447
 - TR-73587 Frame Relay Service Interface and Performance Specifications. This document may be ordered from:
BellSouth Telecommunications, Inc
Regional Documentation Coordinator
20th Floor
600 North 19th Street
Birmingham, AL 35203
- D. Frame Relay Service, as provided for in this section, is offered for intraLATA use only.
- E. The **terms, conditions** and rates specified herein are in addition to the applicable **terms, conditions** and rates specified in other sections of this and other Guidebooks of the Company. (T)
- F. The rates and charges set forth for Frame Relay Service provide for the furnishing of service where suitable facilities are available.
- G. Frame Relay Service is only available when provided in conjunction with Broadband Line Service. Specifications for Broadband Line Service are contained in A40.5.

A140.1.2 Terms and Conditions (T)

- A. Explanation of Terms
 - 1. Customer Connection to Frame Relay Service
The Customer Connection provides the customer with the standard interface to the Frame Relay Service network. This interface receives the data frame from the customer's network or device and verifies that the DLCI is valid before relaying the frame to the destination. Included in the Customer Connection are the customer's termination on the Frame Relay Service switching equipment, the transport from the Serving Area Point to the switching equipment, and the first DLCI. These interfaces connect the Frame Relay Service network with digital facilities operating at transmission speeds of 56 Kbps, 64 Kbps, 128 Kbps, 1.536 Mbps, or 44.210 Mbps.

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A140.1 Frame Relay Service (Cont'd)

A140.1.2 Terms and Conditions (Cont'd)

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A. Explanation of Terms (Cont'd)

2. Frame Relay Service Network Serving Area

Certain Company Central Offices are designated by the Company as Serving Area Points for the Frame Relay Service Network Serving Area. A customer accessing the Frame Relay Service network, whose Serving Wire Center is designated a Serving Area Point, requires a Broadband Line-Fast Packet Option (FPO) as described in A40.5.3. A Frame Relay Service customer, whose Serving Wire Center is not defined in A40.5.2 and designated a Serving Area Point, will use a Broadband Line-FPO to the Wire Center, as well as, the Broadband Line Extension-FPO (also defined in A40.5.2 and described in A40.5.3) to gain access to the closest designated Serving Area Point.

3. Permanent Virtual Circuit (PVC)

A PVC is a software defined data path transporting data within the Frame Relay Service network between two Customer Connections. This data path, once defined in the network software, does not have to be established again. PVCs are end-to-end, bi-directional channels that are established via the service provisioning process. A Standard PVC is created via the mapping of two Standard DLCIs; on an optional basis features are available to allow the creation of Priority Voice, Priority Data, Intelligent and MultiCast PVCs.

a. Priority PVC

Priority PVC capability allows a customer to differentiate specific PVCs with regard to the importance of the data within those PVCs as compared to other PVCs. In the case of contention or network congestion, the Frame Relay Service network will give precedence to the frames of a Priority PVC over frames of a Standard PVC. Frame Relay Service allows the creation of Priority Voice PVCs and Priority Data PVCs. Such a Priority PVC is formed by the mapping of Priority Voice or Priority Data DLCIs¹ (as set forth in A140.1.3.C.1.b or c) to Priority Voice and Priority Data DLCIs; these Priority DLCIs must have an associated CIR value of greater than zero.

b. Intelligent PVC

Intelligent PVC capability allows automatic rerouting on a per PVC basis within the Frame Relay Service network. The Intelligent PVC feature is associated with a customer-specified three DLCI PVC. With the Intelligent PVC feature, a PVC is established between an originating DLCI (referred to as the pivot endpoint) and a primary terminating DLCI (referred to as the primary endpoint). Frames from the originating DLCI (pivot endpoint) will automatically be rerouted to a secondary terminating DLCI (referred to as the secondary endpoint) if the Frame Relay switch detects trouble associated with the primary terminating DLCI (primary endpoint). After such rerouting, the Frame Relay switch will continue to monitor the signals from the primary endpoint and when the trouble is cleared, will automatically reroute the frames going to the secondary endpoint back to the primary endpoint. The BellSouth document TR-73587 provides more detailed technical information on how Intelligent PVC capability is provided.

c. MultiCast PVC

MultiCast PVC capability allows a customer to establish a one-to-many broadcasting PVC that distributes data simultaneously from a host site to a group of predetermined remote sites (called a MultiCast PVC Group). Transmission on a MultiCast PVC is unidirectional (from the host to the remotes in each MultiCast PVC Group). All sites in a MultiCast PVC Group will be able to simultaneously receive a single packet transmission transmitted from the host; upon transmission from the host, the Frame Relay network replicates and distributes the packets to the various remote sites identified as members of the MultiCast PVC Group. A MultiCast PVC may be established as a Standard MultiCast PVC or as a Priority MultiCast PVC (refer to description of Priority PVC capability discussed in A140.1.2.A.3.a preceding).

4. Data Link Connection Identifier

The Frame Relay standard specifies an address field called the Data Link Connection Identifier (DLCI). The DLCI specifies a connection. When any two DLCIs are mapped together, a PVC can be created. When three DLCIs are associated together, an Intelligent PVC can be formed. A DLCI which is not a Priority DLCI (as specified in A140.1.2.A.3.a preceding) is referred to as a Standard DLCI.

Note 1: PVCs are bi-directional unless specified otherwise (e.g., a MultiCast PVC is uni-directional).

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)****A140.1.2 Terms and Conditions (Cont'd)**

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A. Explanation of Terms (Cont'd)**5. Committed Information Rate (CIR)**

Committed Information Rate is a feature that enables the customer to select a sustained throughput under normal conditions. A CIR must be selected for each DLCI. A CIR selected with a value greater than zero has a separate charge from any DLCI charges. Frames submitted 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. However, in the absence of network congestion, DE marked frames will be transported with the same reliability as frames not marked DE within a single, Company Frame Relay Switch. The CIR value selected cannot exceed the minimum transmission speed of the link at either end of the PVC.

The CIR value of Priority Voice DLCIs and Priority Data DLCIs must be greater than zero.

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A140.1 Frame Relay Service (Cont'd)

A140.1.2 Terms and Conditions (Cont'd)

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A. Explanation of Terms (Cont'd)

6. Feature Change Charge

In addition to any specific optional feature charges, a Feature Change Charge applies whenever a change is made (at the customer's request) to a single optional feature for a single customer within a single network configuration on a single switch within a single jurisdiction. One Feature Change Charge will apply per service order required to perform the work.

A Feature Change Charge is applicable if the "first" DLCI, the one included with the Customer Connection, is modified.

7. Serving Area Point (SAP)

A Company Central Office that is designated as a member of the Frame Relay Service Network Serving Area. (See the definition of Frame Relay Service Network Serving Area preceding.)

8. Back-Up Capability

Back-Up Capability is available on an optional basis and provides the customer with the ability to have a back-up logical port configured to his service needs in the event that the customer's primary connection is disabled. A Back-Up Customer Connection utilizes a Broadband Line (with Broadband Line Extension Service, as appropriate). Both the Back-Up Customer Connection and its associated Broadband Line Service are specifically dedicated to providing back-up service and remain idle except when being utilized for back-up purposes.

The customer must prearrange with the Company which primary Customer Connection(s) may be directed to a specific Back-Up Customer Connection so that the necessary work is done by the Company which is required prior to back-up capability being possible. A Customer Connection so identified which may be redirected in the event of a failure is referred to as a back-up enabled primary Customer Connection, or referred to herein as simply the primary Customer Connection. A Frame Relay primary Customer Connection may only utilize a Frame Relay Back-Up Customer Connection and both must be the same type of interface (i.e., both configured as either NNI or UNI interfaces). A primary Customer Connection must be in the same Frame Relay Network Serving Area as its identified Back-Up Customer Connection. A primary Customer Connection may have only one Back-Up Customer Connection identified. A Back-Up Customer Connection may serve as the back-up for more than one primary Customer Connection; however, a Back-Up Customer Connection may only be actively in use with one primary Customer Connection at a given time.

The Back-Up Customer Connection is manually activated by the Company when the customer requests service from a primary Customer Connection to be redirected to its pre-identified Back-Up Customer Connection. All DLCIs associated with the primary Customer Connection are rerouted to the Back-Up Customer Connection¹. It is strongly recommended that the size of the Back-Up Customer Connection be the same size as the customer's largest primary Customer Connection.

In the event that the customer chooses to utilize a Back-Up Customer Connection which is of a lower speed than the primary Customer Connection, the Company cannot guarantee the sufficiency of the Back-Up Customer Connection to protect the customer's primary data. There exists the realistic possibility that due to the lower amount of physical bandwidth on the Back-Up Customer Connection in such cases, that not all of the customer's DLCIs will be provisioned to the Back-Up Customer Connection. Network congestion may be encountered which may result in packets of data being discarded or entire locations without access to Back-Up Capability.

A Back-Up Customer Connection is not eligible for Network Service Level Agreements (SLAs) specified in B.6. following.

Note 1: To appropriately provision new DLCIs ordered subsequent to a primary Customer Connection being enabled for Back-Up Capability, subsequent orders for DLCIs should specify that the DLCIs are being requested in association with a primary Customer Connection.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

A140.1.2 Terms and Conditions (Cont'd)

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A. Explanation of Terms (Cont'd)

9. Oversubscription

A customer may establish multiple PVCs on a Frame Relay Service Customer Connection with a total CIR greater than the Frame Relay Service Customer Connection speed. This is called oversubscription. This allows the customer to take advantage of the fact that not all of these PVCs will be active simultaneously. However, the network's apparent performance will be degraded if the customer attempts to make use of this overbooked commitment (or oversubscription) beyond the capacity of the Frame Relay Service Customer Connection. In the worst case, attempts to fully utilize such overbooked commitment may appear to the customer as network unavailability.

The amount of oversubscription (expressed as a percentage) will be determined by the following formula:

$$\frac{\text{Sum of the CIR/PVC on a single Frame Relay Customer Connection}}{\text{Frame Relay Service Customer Connection speed}} \text{ times } 100$$

In order to qualify for Network SLAs (as specified in B.6. following), a Frame Relay Service Customer Connection may only oversubscribe up to 200%. In the event the customer exceeds this oversubscription limit, Network SLA credits will not be issued. The customer then must either upgrade their Frame Relay Service Customer Connection speed or subscribe to an additional Customer Connection(s) to remain less than or equal to the 200% oversubscription limit to qualify for future Network SLA crediting.

B. Basis of Offering

1. Detailed monthly billing is not provided.

2. Suspension of service is not allowed.

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 (CPE) and to ensure that the operating characteristics of this equipment are compatible with and do not interfere with the service offered by the Company.
- c. The maximum number of DLCIs per Customer Connection is subject to the characteristics of the customer's data traffic. Thus, the number of DLCIs per Customer Connection must be negotiated between the customer and the Company at the establishment of the Customer Connection and subsequent to the establishment should the traffic characteristics change.
- d. The Company is authorized to provide Frame Relay Service for use in application testing subject to the **terms and conditions** set forth in A2.5.11. Typically, up to 4 Customer Connections, with not more than 3 Customer Connections operating at the same transmission speeds, may be utilized in a typical applications test configuration. The Company may deviate from this average in order to fully participate in an application test with a customer. Application testing is not available for 44.210 Mbps Customer Connections. Service Level Agreement credits as defined in 6. following do not apply for Frame Relay Service provided for an application test (i.e., no credits apply during the period of the application testing.)

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A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)**

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A140.1.2 Terms and Conditions (Cont'd)**B. Basis of Offering (Cont'd)**

4. In order to maintain the quality of Frame Relay Service, the Company reserves the right to perform preventive maintenance and software updates to the network. This could result in Frame Relay Service being unavailable during the time period between 2:00 A.M. and 4:00 A.M. Eastern Time on any given Tuesday or Sunday morning. However, the Company only expects to utilize this maintenance window for any given switch on the average of once a quarter. In addition, the Company will make every reasonable effort to provide advance notice to those customers likely to be severely affected by such maintenance work. This maintenance window may be adjusted by the Company upon written notice to the customer.
5. The minimum service period is one month.
6. Service Level Agreement

Frame Relay Service includes Service Level Agreements (SLAs) which specify the Company's provisioning, repair and performance commitments for Frame Relay Service in specific areas. Provisioning and repair commitments are measured on a per occurrence basis. Network service level commitments are monthly performance measurements. The following service measurements will outline the service levels that the Company will deliver to its Frame Relay customers.

Provisioning and Repair:

- Frame Relay Installation Interval
- Frame Relay Time-To-Repair

Network Service Levels:

- Frame Relay Network Availability
- Frame Relay Network Transit Delay
- Frame Relay Frame Delivery Rate

Service Level Commitments will define Frame Relay service measurements that the Company agrees to provide every customer. If the Company fails to meet a Service Level Commitment, the customer is eligible for a SLA credit. Credits for missed Network Service Level Commitments will only be available to customers subscribing to the Gold Package in Customer Network Management from A40.12. Billing credits which may apply if the Company does not meet the objectives associated with these stated SLAs (specifically covering rates for Frame Relay Service and associated Broadband Line Service from Section A40.) are provided as set forth in c. following. Credits only apply for portions of service supplied by the Company.

a. SLA Service Level Commitments

The Company's Service Level Commitments for Frame Relay Service are as follows:

- Frame Relay Installation Interval - Standard Interval
- Frame Relay Time-To-Repair on customer sites within the Frame Relay Network Serving Area - 4 hours
- Frame Relay Network Availability on a customer's network within the Frame Relay Network Serving Area – 99.9%
- Frame Relay Network Transit Delay/One Way – 60 milliseconds
- Frame Relay Frame Delivery Rate of all frames transmitted with CIR greater than 32 Kbps – 99.9%

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

A140.1.2 Terms and Conditions (Cont'd)

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B. Basis of Offering (Cont'd)

6. Service Level Agreements (Cont'd)

b. SLA Restrictions

The Company will implement SLA provisioning restrictions that will define customer network design requirements and limitations to BellSouth's commitment to meet Service Levels for Frame Relay Service. Customer network design requirements are intended to limit or negate BellSouth's obligation to provide SLA credits when the customer has under-engineered their BellSouth Frame Relay network. The customer network design requirements are as follows:

- The customer's network must have a minimum of 10 customer connections for the Company to provide SLA credits.
- The total CIR on all PVCs carried by any of the customer's Frame Relay Customer Connections may not be greater than 200% of the Customer Connection speed (oversubscription).
- A customer must be subscribing to the Gold Package in Customer Network Management (CNM) from A40.12 to receive credits for missed Network Service Level Commitments. Customer Connections at both ends of a PVC must have the CNM Gold Package or equivalent. In the event only one end of a PVC is ordered from this Guidebook, credits will only be issued for the rate elements ordered from this Guidebook.

SLA credits do not apply when any stated objective is not met because the Company does not have control over the circumstances causing the objective to be missed. Situations over which the Company does not have control can be defined as, but not limited to, the following:

- any act, any omission or negligence on the part of the customer, any other customer or any third party, or of any other entity providing a portion of the service,
- labor difficulties, governmental orders, civil commotions, declared National Emergencies, criminal actions against the Company, acts of God, war, or other circumstances beyond the Company's control,
- the customer's premises equipment,
- unavailability of the customer's facilities and/or equipment, and
- customer oversubscription of Frame Relay Service Customer Connections.

SLA commitments only apply for service wholly within Company territory. SLA commitments will not apply for circuits which are part of a jointly provided service. SLA commitments do not apply for service provided by other telephone companies concurring in the rates, *terms and conditions* of the Company.

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The customer must request a credit within one calendar month of the Company missing a Frame Relay Service Level Commitment. The Company will investigate customer requests for any SLA credits to determine the cause of any performance failures reported by the customer. The Company will investigate the customer's request over a period of up to 45 calendar days. The 45-day period will begin when the customer makes the request for credit with their BellSouth Sales Representative. SLA credits will be provided to the customer if the Company determines that the Company had control over the circumstances causing the failure. If the Company determines that these failures are the result of oversubscription of Frame Relay Service Customer Connections, the Company will provide the customer with the reports documenting the oversubscription and Network SLA credits will not be issued. The customer will be required to upgrade their Frame Relay Service Customer Connections or no future SLA credits will be allowed on that Frame Relay Service Customer Connection(s).

When a customer requests a SLA credit for Frame Relay Network Availability, all requests for a calendar month must be submitted at the same time. For example, the customer receives a SLA report on May 1st providing a report on April performance. Any requests for Network Availability SLA credits on Customer Connections for the month of April must all be submitted together.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

A140.1.2 Terms and Conditions (Cont'd)

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B. Basis of Offering (Cont'd)

6. Service Level Agreements (Cont'd)

c. SLA Credits for Frame Relay Service Level Commitments

The following credits will apply when the Company misses a Service Level Commitment (each credit is described in (1) thru (5) following):

- Frame Relay Installation Interval – Credit non-recurring installation charge paid by the customer
- Frame Relay Time-To-Repair – Credit one day of Monthly Recurring Charge (MRC)

The SLA credit amount will be determined by applying the credits outlined above to the rate elements or total billed revenues specified following.

- (1) Frame Relay Installation Interval Credit - this credit will only apply to the installation or upgrade of a Frame Relay Customer Connection. The credit will be equal to the nonrecurring installation charge for the Customer Connection, Broadband Line and Broadband Line Extension. The credit will not apply to expedited installations or to installations where no facility and/or switch exist. If on the due date the customer is not ready or in a case where another of the customer's service providers (including the customer's provider of customer premises equipment, interexchange service, or other local service provider) is not ready, the Company is not liable for missing the due date and SLA credits do not apply.
- (2) Frame Relay Time-To-Repair Credit - this credit will require that the customer report the problem to the BellSouth Repair Center. The repair interval will start with the time entered on the trouble ticket. The Service Level Commitment measurement will be based on each individual trouble ticket for a Customer Connection. Multiple trouble tickets on the same day for the same Customer Connection will only be eligible for one time-to-repair credit. The credit will be one day of the MRC for the Customer Connection and Broadband Line. Credits on any individual Customer Connection for a calendar month cannot exceed the MRC for the Customer Connection and Broadband Line.
- (3) Frame Relay Network Availability – this credit will apply in the event that the measurement for the customer's network is missed. The credit will then be for each Frame Relay Customer Connection which does not meet the 99.9% availability commitment. The credit will be one day of the MRC of the Frame Relay Customer Connection and the Broadband Line. The unavailability of a Customer Connection will be calculated from the trouble tickets submitted for the Customer Connection. The unavailability of a customer's network will be calculated from the trouble tickets submitted for each Customer Connection within the customer's network. The Service Level Commitment will be calculated by first subtracting the unavailable time from the total available time for a particular calendar month and then dividing it by the total available time. Included in available time are scheduled maintenance windows and time the network was unavailable due to circumstances outside the Company's control.
- (4) Frame Relay Network Transit Delay – measurement will be on each Frame Relay PVC (network port to network port). The credit will be equal to the MRC for the DLCI pair making up the PVC.
- (5) Frame Relay Frame Delivery Rate – measurement will be on each Frame Relay PVC. The credit will be equal to the MRC for the DLCI pair and 15 days of the MRC for each CIR making up the PVC.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)**

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A140.1.2 Terms and Conditions (Cont'd)**C. Provision of Service****1. Rates and charges contained in this Section consist of the following elements:****a. Customer Connection to Frame Relay Service**

Frame Relay Service Customer Connections are available at the following transmission speeds: 56 Kbps, 64 Kbps, Fractional T1, Subrate T1, 1.536 Mbps, MultiLink, Subrate T3 and 44.210 Mbps.

- (1) Fractional T1 Customer Connections are provided at the following specific transmission speeds: 112 Kbps, 128 Kbps, 192 Kbps, 256 Kbps, 320 Kbps, 384 Kbps, 448 Kbps, 512 Kbps, 576 Kbps, 640 Kbps, 704 Kbps, 768 Kbps, 1024 Kbps and 1152 Kbps. A Fractional T1 Customer Connection is provisioned in association with a channelized 1.536 Mbps transport facility and requires the dedication of only a quantity of the DS0 channels equivalent to the Fractional T1 Customer Connection transmission speed.
- (2) Subrate T1 Customer Connections are provided at the following specific transmission speeds: 128 Kbps, 256 Kbps, 384 Kbps, 512 Kbps, 768 Kbps and 1152 Kbps. A Subrate T1 Customer Connection is also provisioned in association with a 1.536 Mbps transport facility but requires the dedication of the full 1.536 Mbps transport facility's bandwidth.
- (3) MultiLink Customer Connections are provided at the following specific transmission speeds: 3 Mbps, 6 Mbps, 9 Mbps and 12 Mbps. A MultiLink Customer Connection is provisioned in association with multiple 1.536 Mbps Broadband Line facilities whose combined bandwidth is equivalent to the transmission speed of the MultiLink Customer Connection. MultiLink Customer Connections will not be available to operate with Customer Network Management or Frame Relay Back-Up Capability until such time as technical limitations are resolved.
- (4) Subrate T3 Customer Connections are provided at the following specific transmission speeds: 3 Mbps, 6 Mbps, 9 Mbps, 12 Mbps, 15 Mbps, 18 Mbps, 21 Mbps, 24 Mbps, 27 Mbps, 30 Mbps and 33 Mbps. A Subrate T3 Customer Connection is provisioned in association with a 44.210 Mbps transport facility and requires the dedication of the full 44.210 Mbps transport facility's bandwidth.

b. Back-Up Capability**c. Frame Relay Service Features**

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)****A140.1.2 Terms and Conditions (Cont'd)**

(T)

C. Provision of Service (Cont'd)

2. Certain Company Central Offices are designated by the Company as Serving Area Points (SAPs) for the Frame Relay Service Network Serving Area. A customer accessing the Frame Relay Service network, whose Serving Wire Center is designated a SAP, will only require a Broadband Line-FPO as described in Section A40.5. A Frame Relay Service customer, whose Serving Wire Center is not designated a SAP, will require a Broadband Line-FPO to the Serving Wire Center, as well as, a Broadband Line Extension-FPO (also described in Section A40.5) to gain access to the closest designated SAP.
3. The Customer Connection rate element includes the customer's transport from a Serving Area Point to the Frame Relay Service switching equipment and the customer's termination on the Frame Relay Service switching equipment. One Initial DLCI is applicable when DLCIs are ordered at the same time as the installation of the Customer Connection. Only one "Initial" DLCI (either one Initial Standard DLCI or one Initial Priority DLCI) is allowed per Customer Connection. Additional DLCIs (beyond this initial DLCI) ordered with the installation of the Customer Connection and any DLCIs ordered subsequent to the installation of the Customer Connection are considered Additional DLCIs.
4. Service Charges for installing Frame Relay Service are included in the respective nonrecurring charges specified herein. Service Charges from Section A4. are not applicable for installing such services. Charges applicable for customer requested change of service installation due date and cancellation of service installation are as specified in Section A40.9 following.
5. Should a customer, having locations in more than one Frame Relay Network Serving Area within a LATA, desire to send data traffic between these locations, the customer can interconnect these locations through the following two options:
 - a. **Dedicated Connection:**

The customer subscribes to additional Customer Connections (in each Network Serving Area) which are enabled to support inter-serving area connectivity and Broadband Line Extension-FPOs to connect them. These additional rate elements will be used solely to transport this customer's data traffic between affected Frame Relay Network Serving Areas. In addition to the normal DLCI and CIR charges associated with each PVC, additional DLCI and CIR charges apply per PVC between the additional Customer Connection except when these connections have been specifically requested by the customer to be provisioned as customer specific trunks.
 - b. **Shared Connection:**

The Company may establish facilities between Frame Relay Service switching equipment in different Network Serving Areas in the same LATA and may allow customers to share bandwidth on these facilities; where these shared facilities are available to customers, a shared connection is an option. The customer must establish one or more Inter-Network Serving Area Links that extend between Frame Relay switches. Each of these links has an associated CIR. One PVC exists between both customer premises through each link. All CIRs on this PVC must have the same value. Charges for the Inter-Network Serving Area Link are applied as follows:

 - the Inter-Network Serving Area Link Establishment is charged at each end of the link,
 - the Inter-Network Serving Area Link CIR is charged at each end of the link, and
 - no additional DLCI charges apply for the link.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)****A140.1.2 Terms and Conditions (Cont'd)****C. Provision of Service (Cont'd)**

6. In some cases, the Company and another Incumbent Local Exchange Company that offers Frame Relay technology will jointly connect Frame Relay switching equipment within a LATA to provide customers the ability to interconnect their locations served by the different companies. In order to utilize the Company's portion of this jointly provided shared connection, the customer must subscribe to one end of an Inter-Network Serving Area Link and the associated CIR.

7. **(DELETED)**

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8. To have Back-Up Capability as an option, the customer is required to have a Back-Up Customer Connection and a separate Broadband Line (with Broadband Line Extension Service, as appropriate) which are designated specifically for back-up purposes. Monthly rates and nonrecurring charges applicable for a Back-Up Customer Connection are provided in A140.1.3.B.1. following. Monthly rates and nonrecurring charges for Broadband Line Service are found in A40.5.

The activation of a Back-Up Customer Connection via the rerouting of traffic from a primary Customer Connection to the Back-Up Customer Connection is a manual operation performed by the Company at the direction of the customer. At the direction of the customer, the Company will subsequently then redirect traffic from the Back-Up Customer Connection to the primary Customer Connection.

A Primary Customer Connection Back-Up Enablement/Change Charge provided in A140.1.3.B.2 is applicable per existing primary Customer Connection which is requested by the customer to be back-up enabled. A Primary Customer Connection Back-Up Enablement/Change Charge is also applicable for each existing back-up enabled primary Customer Connection when the customer requests a reassignment of that primary Customer Connection to a different Back-Up Customer Connection.

9. To create a Priority PVC, the customer requests the mapping of Priority Voice or Priority Data DLCIs.

Feature Change Charges apply for requests to convert existing Standard PVCs to Priority PVCs (or vice versa). A Feature Change Charge applies per service order required to perform the work.

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(DELETED)

(D)

10. To create a Frame Relay Service Intelligent PVC, the customer requests the mapping of three DLCIs. A Frame Relay Service Intelligent PVC may be comprised of three Standard DLCIs, three Priority Voice DLCIs or three Priority Data DLCIs. One Intelligent PVC Charge (a recurring rate) applies per customer-specified arrangement of 3 DLCIs and applies in addition to the appropriate nonrecurring and recurring charges for each of the three DLCIs. The Intelligent PVC Charge shall be billed to the Customer Connection associated with the DLCI which is the pivot endpoint (as explained in A140.1.2.A.3.b.) of this PVC.

A request to convert an existing two DLCI PVC into a three DLCI Intelligent PVC (or vice versa) shall be considered as a request to disconnect the existing PVC and as a request for the connection of new DLCIs to form the new PVC. At the customer's direction, the DLCI numbers associated with the PVC being disconnected may be reused for the DLCIs associated with the new PVC.

Note 1: Applicable for such requests on Standard PVCs, Intelligent PVCs or MultiCast PVCs.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)****A140.1.2 Terms and Conditions (Cont'd)****C. Provision of Service (Cont'd)****10. (Cont'd)**

The pivot endpoint of an Intelligent PVC must be provisioned out of a Company-provided Frame Relay Service switch. (The primary endpoint and secondary endpoint of an Intelligent PVC may be associated with premises located outside of Company territory. If only Company provided switches are utilized in the total service configuration, no service limitations should occur; however, when a non-Company switch is involved in an Intelligent PVC configuration, service limitations may be encountered. BellSouth document TR-73587, which contains technical information on Intelligent PVC rerouting, provides details relating to such limitations.)

Both the primary and secondary endpoints of an Intelligent PVC must be of the same service type.

(C)

11. To create a MultiCast PVC, the customer must have established individual PVCs between the Customer Connection of the host site and each Customer Connection of each remote site that is to be a member of that specific MultiCast PVC Group. Standard charges apply for the establishment of the DLCIs, CIR, etc. associated with these member PVCs. While these standard PVCs will be identified as members of a MultiCast PVC Group (and as such receive the unidirectional broadcast transmission from the host site), each individual PVC is still a bi-directional PVC capable of being used by the host site and remote site to communicate independently of the MultiCast PVC Group.

The customer shall provide a unique DLCI number to be used to identify each MultiCast PVC Group associated with a host site; this unique DLCI number will be used in establishing the MultiCast PVC and shall be utilized on an ongoing basis to refer to that specific MultiCast PVC when requesting any subsequent change activity to the associated MultiCast PVC Group. A host site can have more than one MultiCast PVC. A remote site can be a part of multiple MultiCast PVC Groups associated with the same or multiple other host site(s).

Each MultiCast PVC Group shall be established as a Standard MultiCast PVC Group or a Priority MultiCast PVC Group. A Standard MultiCast PVC Group shall be comprised of member PVCs established utilizing all Standard DLCIs; while not specifically required, it is strongly recommended that each member PVC in a Standard MultiCast PVC have DLCIs with an associated CIR value of greater than zero. A Priority MultiCast PVC Group shall be comprised of member PVCs established utilizing all Priority (Voice or Data) DLCIs; each member PVC in a Priority MultiCast PVC is required to have Priority (Voice or Data) DLCIs with an associated CIR value of greater than zero.

One MultiCast PVC Group Charge shall apply and be billed to the host site in association with each MultiCast PVC established. The appropriate MultiCast PVC Group Charge varies based 1) upon whether the MultiCast PVC is to be a Standard MultiCast PVC or a Priority MultiCast PVC and 2) upon the transmission speed of the host site Frame Relay Customer Connection (e.g., the Priority 1.536 Mbps MultiCast PVC Group Charge would be applicable for a Priority MultiCast PVC established on a 1.536 Mbps Frame Relay Customer Connection).

A MultiCast PVC Group Modification Charge applies per member PVC that is requested to be modified, added to or deleted from an existing MultiCast PVC Group, subsequent to the initial establishment of the MultiCast PVC. The MultiCast PVC Group Modification Charges are billed to the host Customer Connection.

If a Standard MultiCast PVC is requested to be changed to a Priority MultiCast PVC (or vice versa), Feature Change Charges apply as set forth in A140.1.2.C.9 to change each DLCI in each member PVC from Standard to Priority (or vice versa). In addition to the nonrecurring charge associated with the MultiCast PVC Group Charge billed to the host for this change request, a MultiCast PVC Group Modification Charge shall also apply per member PVC so modified in the MultiCast PVC Group.

The Frame Relay Customer Connection associated with the host site must be of a transmission speed equal to or greater than 1.536 Mbps and may not be a MultiLink Customer Connection.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)**

(T)

A140.1.2 Terms and Conditions (Cont'd)**C. Provision of Service (Cont'd)****11. (Cont'd)**

A service inquiry will be required in order to determine the availability of MultiCast PVC Capability to meet each customer request for a MultiCast PVC as a result of the following limitations. MultiCast PVC Capability is possible only where Frame Relay switch facilities are available (that serve the host site) that are currently technically capable of provisioning this feature. There is an additional limitation on the total number of MultiCast Groups which can be established per Frame Relay switch; consequently, capacity may not exist to fulfill a customer's request. Additionally, there is a per MultiCast PVC Group limit on the number of members possible which varies based upon the packet size transmitted by the host site; as the standard packet size increases, the number of members that may be in the MultiCast PVC Group decreases.

D. Contract Plans

1. Contract plans as specified in the Fast Packet Services Payment Plan in A40.10 with contract periods are described as follows:
 - a. Term Payment Plan A - payment periods may be selected from 12 to 36 months.¹
 - b. Term Payment Plan B - payment periods may be selected from 37 to 60 months.²
2. (DELETED)
3. (DELETED)
4. A Termination Liability Charge as specified in A40.10.2.B will not apply for Frame Relay Service terminated on or after the date Frame Relay Service became an obsolete service offering.

Note 1: As of January 20, 2011, Term Payment Plan A payment periods greater than 24 months are no longer available for new or renewing subscribers.

Note 2: As of January 20, 2011, Term Payment Plan B payment periods are no longer available for new or renewing subscribers.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

A140.1.3 Rates and Charges

A. Customer Connection to Frame Relay Service

1. A minimum of one Customer Connection is required per customer to subscribe to Frame Relay Service.

	Nonrecurring Charge	Month To Month	A ⁴ 12 to 36 Months	B ⁵ 37 to 60 Months	USOC
(a) at 56 Kbps ¹	\$425.00	\$177.00	\$153.00	\$ 74.00	FRH56
(b) at 64 Kbps ¹	425.00	177.00	153.00	74.00	FRH64
(c) at Fractional T1					
- 112 Kbps ²	475.00	249.00	216.00	102.00	FRH11
- 128 Kbps ²	475.00	249.00	216.00	102.00	FRH12
- 192 Kbps ²	475.00	394.50	342.00	173.00	FRH19
- 256 Kbps ²	475.00	496.50	429.00	203.00	FRH25
- 320 Kbps ²	475.00	621.00	537.00	254.00	FRH32
- 384 Kbps ²	550.00	900.00	837.00	475.00	FRH38
- 448 Kbps ²	550.00	900.00	837.00	475.00	FRH44
- 512 Kbps ²	550.00	900.00	837.00	475.00	FRH51
- 576 Kbps ²	550.00	900.00	837.00	475.00	FRH57
- 640 Kbps ²	550.00	900.00	837.00	475.00	FRH40
- 704 Kbps ²	550.00	900.00	837.00	475.00	FRH70
- 768 Kbps ²	550.00	900.00	837.00	475.00	FRH76
- 1024 Kbps ²	550.00	900.00	837.00	475.00	FRH24
- 1152 Kbps ²	550.00	900.00	837.00	475.00	FRH52
(d) at Subrate T1					
- 128 Kbps ³	550.00	352.50	321.00	166.00	FRHS1
- 256 Kbps ³	550.00	414.00	384.00	208.00	FRHS2
- 384 Kbps ³	550.00	538.50	505.50	282.00	FRHS3
- 512 Kbps ³	550.00	621.00	414.00	323.00	FRHS5
- 768 Kbps ³	550.00	693.00	651.00	365.00	FRHS7
- 1152 Kbps ³	550.00	840.00	786.00	448.00	FRHSE
(e) at 1.536 Mbps	550.00	900.00	835.50	475.00	FRH15

Note 1: The Customer Connections at 56 Kbps and 64 Kbps are primarily utilized respectively with 56 Kbps and 64 Kbps transport facilities. They may alternately be utilized with a 1.536 Mbps transport facility and provisioned as a Fractional T1 service (as discussed in Note 2).

Note 2: Fractional T1 Customer Connection: This Customer Connection is provisioned in association with channelized 1.536 Mbps transport facilities. If requested with a 1.536 Mbps Broadband Line Service, only other Fast Packet Transport Services may utilize the remaining bandwidth of the transport; if provided in association with spare capacity on a channelized Private Line Service (e.g., channelized MegaLink Service), any other services may utilize the remaining bandwidth as allowed by the *terms and conditions* governing the transport service.

Note 3: Subrate T1 Customer Connection: This Customer Connection is provisioned as Subrate T1 service and may be referred to for marketing purposes as Flexible T1 Frame Relay Service. Each such Customer Connection requires the dedication to it of a full 1.536 Mbps of transport bandwidth (e.g., a full 1.536 Mbps Broadband Line Service); no other service(s) may utilize the remaining bandwidth.

Note 4: As of January 20, 2011, Term Payment Plan A payment periods greater than 24 months are no longer available for new or renewing subscribers.

Note 5: As of January 20, 2011, Term Payment Plan B payment periods are no longer available for new or renewing subscribers.

(T)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)**

(N)

A140.1.3 Rates and Charges (Cont'd)

(T)(O)

A. Customer Connection to Frame Relay Service (Cont'd)

(O)

1. A minimum of one Customer Connection is required per customer to subscribe to Frame Relay Service. (Cont'd)

(O)

	Nonrecurring Charge	Month To Month	A ⁴ 12 to 36 Months	B ⁵ 37 to 60 Months	USOC	
(f) at MultiLink						(O)
- 3 Mbps ^{1,2}	\$ 500.00	\$ 897.00	\$ 828.00	\$ 690.00	FRHM3	(O)
- 6 Mbps ^{1,2}	600.00	1,121.00	1,035.00	863.00	FRHM6	(O)
- 9 Mbps ^{1,2}	800.00	1,346.00	1,242.00	1,035.00	FRHM9	(O)
- 12 Mbps ^{1,3}	1000.00	1,570.00	1,449.00	1,208.00	FRHM2	(O)
(g) at Subrate T3						(O)
- 3 Mbps ³	2000.00	1,127.00	1,035.00	857.00	FRHO3	(O)
- 6 Mbps ³	2000.00	1,213.00	1,104.00	972.00	FRHO6	(O)
- 9 Mbps ³	2000.00	1,443.00	1,313.00	1,156.00	FRHO9	(O)
- 12 Mbps ³	2000.00	1,673.00	1,523.00	1,340.00	FRH2M	(O)
- 15 Mbps ³	2000.00	1,903.00	1,732.00	1,524.00	FRH5M	(O)
- 18 Mbps ³	2000.00	2,133.00	1,941.00	1,708.00	FRH18	(O)
- 21 Mbps ³	2000.00	2,363.00	2,151.00	1,893.00	FRH21	(O)
- 24 Mbps ³	2000.00	2,593.00	2,360.00	2,077.00	FRH4M	(O)
- 27 Mbps ³	2000.00	2,823.00	2,569.00	2,261.00	FRH27	(O)
- 30 Mbps ³	2000.00	3,053.00	2,778.00	2,445.00	FRH30	(O)
- 33 Mbps ³	2000.00	3,283.00	2,988.00	2,629.00	FRH33	(O)
(h) at 44.210 Mbps	1225.00	4,025.00	3,738.00	3,450.00	FRH10	(O)

Note 1: A MultiLink Customer Connection is provisioned using multiple 1.536 Mbps Broadband Lines whose combined bandwidth is equivalent to the transmission speed of the MultiLink Customer Connection. (O)

Note 2: The MultiLink Customer Connection Speed Change Charge applies in lieu of the nonrecurring charge shown above when an existing MultiLink Customer Connection is requested to be changed to another speed MultiLink Customer Connection. Additional charges from A40.5 also apply for additional 1.536 Mbps Broadband Lines required when the request is for a change to a higher MultiLink speed. (O)

Note 3: A Subrate T3 Customer Connection (defined as a Customer Connection from 3 to 33 Mbps) is provisioned utilizing 44.210 Mbps of transport bandwidth (e.g., a 44.210 Mbps Broadband Line Service); no other service(s) may utilize the remaining bandwidth. (O)

Note 4: As of January 20, 2011, Term Payment Plan A payment periods greater than 24 months are no longer available for new or renewing subscribers. (O)

Note 5: As of January 20, 2011, Term Payment Plan B payment periods are no longer available for new or renewing subscribers. (O)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

(N)

A140.1.3 Rates and Charges (Cont'd)

(T)(O)

A. Customer Connection to Frame Relay Service (Cont'd)

(O)

2. Subrate T1 Speed Change Charge

(O)

This nonrecurring charge applies per Subrate T1 Customer Connection (defined as a Customer Connection provisioned as a Subrate T1 service with restricted bandwidth of 128 Kbps, 256 Kbps, 384 Kbps, 512 Kbps, 768 Kbps or 1152 Kbps) requested to be changed to either 1) another speed of Subrate T1 Customer Connection or 2) to a 1.536 Mbps Customer Connection. Accordingly, the Subrate T1 Speed Change Charge applies in lieu of the Nonrecurring Charge specified in **A140.1.3.A.1** for the new speed Customer Connection.

(T)(O)

	Nonrecurring Charge	USOC	
(a) Per Subrate T1 Customer Connection Speed Change Request	\$90.00	FRHT1	(O)

3. Fractional T1 to Subrate T1 Change Charge

(O)

This nonrecurring charge applies per Fractional T1 Customer Connection requested to be changed to a Subrate T1 Customer Connection. Accordingly, the Fractional T1 to Subrate T1 Change Charge applies in lieu of the Nonrecurring Charge specified in **A140.1.3.A.1** for the new Subrate T1 Customer Connection.

(T)(O)

	Nonrecurring Charge	USOC	
(a) Per Fractional T1 to Subrate T1 Customer Connection Change Request	\$180.00	FRHFS	(O)

4. MultiLink Speed Change Charge

(O)

This nonrecurring charge applies per MultiLink Customer Connection requested to be changed to another speed MultiLink Customer Connection. Accordingly, the MultiLink Speed Change Charge applies in lieu of the Nonrecurring Charge specified in **A140.1.3.A.1** for the new speed MultiLink Customer Connection. Additional charges from A40.5 also apply for additional 1.536 Mbps Broadband Lines required when the request is for a change to a higher MultiLink speed.

(T)(O)

	Nonrecurring Charge	USOC	
(a) Per MultiLink Customer Connection Speed Change Request	\$300.00	FRHMC	(O)

5. Subrate T3 Speed Change Charge

(O)

This nonrecurring charge applies per Subrate T3 Customer Connection (defined as a Customer Connection from 3 Mbps to 33 Mbps) requested to be changed to either 1) another speed Subrate T3 Customer Connection or 2) to a 44.210 Mbps Customer Connection. Accordingly, the Subrate T3 Speed Change Charge applies in lieu of the Nonrecurring Charge specified in **A140.1.3.A.1** for the new speed Customer Connection.

(T)(O)

	Nonrecurring Charge	USOC	
(a) Per Subrate T3 Customer Connection Speed Change Request	\$500.00	FRHT3	(O)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.1 Frame Relay Service (Cont'd)**

(N)

A140.1.3 Rates and Charges (Cont'd)

(T)(O)

B. Back-Up Capability

(O)

On an optional basis a customer may choose to have Back-up Capability for their Frame Relay Service.

(O)

1. Frame Relay Back-up Customer Connection

(O)

A minimum of one Back-up Frame Relay Customer Connection is required in order to have Back-up Capability.
(Provisioning Basic Class of Service: FPLBN)

(O)

	Nonrecurring Charge	Month To Month	A³ 12 to 36 Months	B⁴ 37 to 60 Months	USOC	
(a) at 56 Kbps	\$400.00	\$46.00	\$40.00	\$29.00	FRH56	(O)
(b) at 64 Kbps	400.00	46.00	40.00	29.00	FRH64	(O)
(c) at 1.536 Mbps	525.00	377.00	339.00	293.00	FRH15	(O)
(d) at 44.210 Mbps	1225.00	3,220.00	2,990.00	2,760.00	FRH10	(O)

2. Primary Customer Connection Back-Up Enablement/Change Charge

(O)

(a) Per Existing Primary Customer Connection

Nonrecurring Charge	USOC	
\$125.00	FRHBE	(O)

C. Frame Relay Service Feature Charges

(O)

1. DLCI

(O)

a. Standard DLCI

(O)

(1) Per Customer Connection

(O)

	Nonrecurring Charge	Monthly Rate	USOC	
(a) Initial Standard DLCI ¹	\$ -	\$ -	XAFD1	(O)
(b) Each Additional Standard DLCI	25.00	2.00	FRVDX	(O)
b. Priority Voice DLCI				(O)
(1) Per Customer Connection				(O)
(a) Initial Priority Voice DLCI ^{1,2}	-	5.00	FRVPV	(O)
(b) Each Additional Priority Voice DLCI ²	40.00	5.00	FRVPV	(O)
c. Priority Data DLCI				(O)
(1) Per Customer Connection				(O)
(a) Initial Priority Data DLCI ^{1,2}	-	5.00	FRVPC	(O)
(b) Each Additional Priority Data DLCI ²	40.00	5.00	FRVPD	(O)

Note 1: One "Initial" DLCI is applicable when DLCIs are ordered at the same time as the installation of the Customer Connection. Only one Initial DLCI (either one Initial Standard DLCI or one Initial Priority DLCI) is allowed per Customer Connection. All other DLCIs are considered Additional DLCIs.

(O)

Note 2: A Priority DLCI must have CIR with a value greater than 0.

(O)

Note 3: As of January 20, 2011, Term Payment Plan A payment periods greater than 24 months are no longer available for new or renewing subscribers.

(O)

Note 4: As of January 20, 2011, Term Payment Plan B payment periods are no longer available for new or renewing subscribers.

(O)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

(N)

A140.1.3 Rates and Charges (Cont'd)

(T)(O)

C. Frame Relay Service Feature Charges (Cont'd)

(O)

2. Committed Information Rate (CIR)

(O)

- a. The chosen CIR cannot exceed the minimum transmission speed of the link at either end of the PVC.

(O)

(1) Per DLCI

(O)

		Nonrecurring Charge	Monthly Rate	USOC	
(a)	0 Kbps	-	-	FRVRO	(O)
(b)	1 thru 32 Kbps	-	\$ 9.00	FRVR3	(O)
(c)	33 thru 56 Kbps	-	15.00	FRVR5	(O)
(d)	57 thru 64 Kbps	-	16.00	FRVR6	(O)
(e)	65 thru 128 Kbps	-	22.00	FRVR1	(O)
(f)	129 thru 256 Kbps	-	33.00	FRVR2	(O)
(g)	257 thru 384 Kbps	-	47.00	FRVR4	(O)
(h)	385 thru 512 Kbps	-	59.00	FRVR8	(O)
(i)	513 thru 768 Kbps	-	107.00	FRVR7	(O)
(j)	769 Kbps thru 1.536 Mbps	-	161.00	FRVR9	(O)
(k)	1.537 thru 4 Mbps	-	230.00	FRVRJ	(O)
(l)	4.1 thru 10 Mbps	-	426.00	FRVRK	(O)
(m)	10.1 thru 16 Mbps	-	748.00	FRVRL	(O)
(n)	16.1 thru 34 Mbps	-	1955.00	FRVRM	(O)
(o)	34.1 thru 44.210 Mbps	-	2530.00	FRVRN	(O)
3.	Intelligent PVC Charge				(O)
a.	One Intelligent PVC Charge applies per customer-specified arrangement of 3 DLCIs and is in addition to the charges for the DLCIs.				(O)
(1)	Per Intelligent PVC				(O)
(a)	Each	-	2.00	FRV1P	(O)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

(N)

A140.1.3 Rates and Charges (Cont'd)

(T)(O)

C. Frame Relay Service Feature Charges (Cont'd)

(O)

4. MultiCast PVC Charges

(O)

- a. MultiCast PVC Group Charge - One MultiCast PVC Group Charge applies per MultiCast PVC on a host site Frame Relay Customer Connection. This charge is in addition to the appropriate charges (DLCI, CIR, etc.) for the individual host to remote PVCs which are members of the MultiCast PVC Group.

(O)

- (1) Per Standard MultiCast PVC Group (established from multiple host to remote PVCs which utilize all Standard DLCIs) on a host Frame Relay Customer Connection of the following transmission speed:

(O)

	Nonrecurring Charge	Month To Month	A ¹ 12 to 36 Months	B ² 37 to 60 Months	USOC	
(a) 1.536 Mbps	\$ 100.00	\$ 242.00	\$ 225.00	\$ 216.00	FRVW1	(O)
(b) 3 Mbps	100.00	334.00	316.00	310.00	FRVW3	(O)
(c) 6 Mbps	100.00	391.00	362.00	340.00	FRVW6	(O)
(d) 9 Mbps	100.00	443.00	411.00	386.00	FRVW9	(O)
(e) 12 Mbps	100.00	495.00	459.00	432.00	FRVW2	(O)
(f) 15 Mbps	100.00	546.00	507.00	478.00	FRVW5	(O)
(g) 18 Mbps	100.00	598.00	555.00	524.00	FRVW8	(O)
(h) 21 Mbps	100.00	650.00	604.00	570.00	FRVWT	(O)
(i) 24 Mbps	100.00	702.00	652.00	616.00	FRVW4	(O)
(j) 27 Mbps	100.00	753.00	700.00	662.00	FRVW7	(O)
(k) 30 Mbps	100.00	805.00	749.00	708.00	FRVWO	(O)
(l) 33 Mbps	100.00	857.00	797.00	754.00	FRVWM	(O)
(m) 44.210 Mbps	100.00	966.00	941.00	917.00	FRVWN	(O)

- (2) Per Priority MultiCast PVC Group (established from multiple host to remote PVCs which utilize all Priority DLCIs) on a host Frame Relay Customer Connection of the following transmission speed:

(O)

(a) 1.536 Mbps	\$ 100.00	\$ 259.00	\$ 243.00	\$ 233.00	FRVN1	(O)
(b) 3 Mbps	100.00	352.00	334.00	327.00	FRVN3	(O)
(c) 6 Mbps	100.00	408.00	380.00	357.00	FRVN6	(O)
(d) 9 Mbps	100.00	460.00	428.00	403.00	FRVN9	(O)
(e) 12 Mbps	100.00	512.00	476.00	449.00	FRVN2	(O)
(f) 15 Mbps	100.00	564.00	524.00	495.00	FRVN5	(O)
(g) 18 Mbps	100.00	615.00	573.00	541.00	FRVN8	(O)
(h) 21 Mbps	100.00	667.00	621.00	587.00	FRVNT	(O)
(i) 24 Mbps	100.00	719.00	669.00	633.00	FRVN4	(O)
(j) 27 Mbps	100.00	771.00	718.00	679.00	FRVN7	(O)
(k) 30 Mbps	100.00	822.00	766.00	725.00	FRVNO	(O)
(l) 33 Mbps	100.00	874.00	814.00	771.00	FRVNM	(O)
(m) 44.210 Mbps	100.00	983.00	959.00	934.00	FRVNN	(O)

- b. MultiCast PVC Group Modification Charge - The MultiCast PVC Group Modification Charge is a nonrecurring charge which applies per member PVC requested to be modified, added to or deleted from an existing MultiCast PVC Group.

(O)

- (1) Per Customer Request

(O)

	Nonrecurring Charge	USOC	
(a) Per Host to Remote PVC	\$ 40.00	FRVMC	(O)

Note 1: As of January 20, 2011, Term Payment Plan A payment periods greater than 24 months are no longer available for new or renewing subscribers.

(O)

Note 2: As of January 20, 2011, Term Payment Plan B payment periods are no longer available for new or renewing subscribers.

(O)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.1 Frame Relay Service (Cont'd)

(N)

A140.1.3 Rates and Charges (Cont'd)

(T)(O)

C. Frame Relay Service Feature Charges (Cont'd)

(O)

5. Inter-Network Serving Area Link

(O)

a. Per End of Link

(O)

(1) Link

(O)

		Nonrecurring Charge	Monthly Rate	USOC	
		\$10.00	-	FRVLE	(O)
(a)	Per establishment				(O)
(2)	CIR				(O)
(a)	0 thru 32 Kbps	-	\$10.00	FRVL3	(O)
(b)	33 thru 56 Kbps	-	15.00	FRVL5	(O)
(c)	57 thru 64 Kbps	-	16.00	FRVL6	(O)
(d)	65 thru 128 Kbps	-	20.00	FRVL1	(O)
(e)	129 thru 256 Kbps	-	35.00	FRVL2	(O)
(f)	257 thru 384 Kbps	-	55.00	FRVL4	(O)
(g)	385 thru 512 Kbps	-	70.00	FRVL8	(O)
(h)	513 thru 768 Kbps	-	150.00	FRVL7	(O)
(i)	769 Kbps thru 1.536 Mbps	-	225.00	FRVL9	(O)
(j)	1.537 thru 4 Mbps	-	500.00	FRVLJ	(O)
(k)	4.1 thru 10 Mbps	-	650.00	FRVLK	(O)
(l)	10.1 thru 16 Mbps	-	800.00	FRVLL	(O)
(m)	16.1 thru 34 Mbps	-	2100.00	FRVLM	(O)
(n)	34.1 thru 44.210 Mbps	-	2500.00	FRVLN	(O)
6.	Feature Change Charge				(O)
(a)	Per occurrence, per feature	25.00	-	FRVFX	(O)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES

A140.2 Reserved for Future Use

A140.3 (DELETED)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES

A140.3 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES

A140.3 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES

A140.3 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES

A140.3 (DELETED) (Cont'd)

(D)

A140.4 Reserved for Future Use

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES
A140.5 Broadband Line Service

A140.5.1 General

Except as specified in A140.5.2 and A140.5.3 following, terms and conditions located in A40.5 are applicable.

A140.5.2 Terms and Conditions

(Obsoleted 11/4/2002, Type D) Not available for new installations, moves or changes. Upon expiration of an existing contract, a 128 Kbps (2B1Q) Broadband Line Service can only be retained on a month-to-month payment plan basis.

An existing customer with a 128 Kbps (2B1Q) Broadband Line from A140.5 may request to convert to a 1.536 Mbps Broadband Line from A40.5 for use with their 128 Kbps Fractional T1 Frame Relay Service Customer Connection; the nonrecurring charges specified in A40.5 shall not apply for such conversions. Customers requesting to concurrently convert their 128 Kbps Fractional T1 Customer Connection to a 128 Kbps Subrate T1 Customer Connection shall not incur the Fractional T1 to Subrate T1 Change Charge from A140.1.3.A.3.

A140.5.3 Rates and Charges

- A. Rates and Charges for the Fast Packet Option
 - 1. Broadband Line-FPO

(a) 128 Kbps (2B1Q)

Nonrecurring Charge	Month To Month	A		USOC
		12 to 36 Months	37 to 60 Months	
\$ 465.00	\$ 105.00	\$ 92.00	\$ 77.00	FP112

A140.6 Reserved For Future Use
A140.7 Reserved For Future Use

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.8 (DELETED)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.8 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.8 (DELETED) (Cont'd)

(D)

A140.9 Reserved For Future Use

A140.10 Reserved For Future Use

A140.11 (DELETED)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES
A140.11 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES
A140.11 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES
A140.11 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES
A140.11 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS-FAST PACKET TRANSPORT SERVICES
A140.11 (DELETED) (Cont'd)

(D)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES**A140.12 Customer Network Management****A140.12.1 General**

- A.** Customer Network Management (CNM) is available on an optional basis as a feature of Frame Relay Service. (C)
- B.** The CNM option provides customers a view into their BellSouth Fast Packet network for monitoring and trouble shooting purposes.
- C.** The CNM platform supports hierarchical customer names. For example, a customer defines an overall network name (usually the customer name) and then may choose to establish multiple sub-network names. A maximum of five hierarchical tiers are available (the overall network plus four sub-network tiers).
- D.** Access to CNM is via a Web interface. A dial or dedicated method available in Section A32., Integration Plus Management Services, may also be used to access CNM. Switched service and private line service used as a means of accessing FlexServ service has been obsoleted (see Section A132). For security reasons, customers are required to identify themselves via a username and password. The username and password are assigned at the time the account is established. Following is a description and requirements for each type of access:
 - 1. Web Interface - This interface allows customers to access CNM via the Web using a standard Web browser. This type of access requires a Security Card.
 - a. (Obsoleted, See Section A132)
 - 2. (Obsoleted, See Section A132)
 - 3. (Obsoleted, See Section A132)
- E.** CNM is offered in packages which provide the following CNM options: Fault Management, On Demand Statistics and Performance Reporting.
 - 1. Fault Management

The Fault Management option provides the ability to monitor fault and alarm information as network events occur. If a BellSouth network event results in automatic rerouting of customer owned PVCs on a Customer Connection within the BellSouth Fast Packet network, such that those PVCs are not service impacted, then BellSouth will not send PVC events to the customer. The following Fault Management features are available on a customer and sub-network basis:

 - BellSouth will provide to the customer, in near real time, all events, faults, and network alarms on any Customer Connection or PVC.
 - The customer can determine the severity level of alarms displayed and suppress the alarms they do not wish to view.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.12 Customer Network Management (Cont'd)

A140.12.1 General (Cont'd)

E. (Cont'd)

2. On Demand Statistics

CNM provides customers statistics for each Customer Connection and PVC on a customer and sub-network basis.

3. Performance Reporting (PR)

CNM-PR provides BellSouth Frame Relay customers network performance reports on their BellSouth Fast Packet network. Customers have the capability of requesting performance reports for interfaces. (Interfaces are defined as customer connections and PVCs). CNM-PR provides a measure of the level of network performance of a customer's network and individual interfaces that is called the Network Performance Level. The Network Performance Level components include Incoming Utilization, Outgoing Utilization, Discarded Frames/Cells and Congestion. The Network Performance Level is used in several reports to provide a weighted performance measure taking into account all the performance parameters mentioned above.

Historical Performance reports will baseline historic network performance, trend future performance and highlight network performance problems. The following selection of reports is available:

- a. Network Summary Report - Provides an overview of the customer's network performance in terms of Total Frames/Cells Transmitted and Received, Percent Total Utilization, Total Frames/Cells Discarded, and Percent Frames/Cells Discarded of Total Frames/Cells Transmitted and Received.
- b. Forecast Report - Provides the network interfaces that are projected to exceed customer specific thresholds of Utilization and Congestion.
- c. Network Interface Performance Report - Provides the Network Performance Level on a customer selectable interface (customer connection or PVC).
- d. Capacity Planning Report - Provides the top ten over-utilized and top ten under-utilized interfaces.
- e. Threshold Exceptions Report - Provides a daily report on the top ten interfaces that exceed a customer selectable threshold parameter. These parameters are Input Utilization, Output Utilization, Incoming Congestion, Outgoing Congestion, In Discards, and Out Discards.
- f. Top Ten Report - Provides a daily report of the top ten interfaces with the highest volumes and the worst Network Performance Level. It also specifies the top ten interfaces with the greatest change in both volume and Network Performance Level.

F. The terms, conditions and rates specified herein are in addition to the applicable terms, conditions and rates specified in other sections of this and other service publications of the Company.

G. The rates and charges set forth for CNM provide for the furnishing of service where suitable facilities are available.

H. CNM is only available for use with Frame Relay Service described in A140.1 preceding.

(C)

(C)

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.12 Customer Network Management (Cont'd)

A140.12.2 Terms and Conditions

A. Basis of Offering

1. Suspension of service is not allowed.
2. CNM is not available on Back-Up Customer Connections nor Intelligent PVCs.
3. A customer may subscribe to CNM on a monthly basis. An account is established which will include the Customer Connections designated by the customer to have CNM capability. Customers may choose to subscribe to CNM for all Customer Connections in their BellSouth Fast Packet network or choose CNM for only a portion.
4. 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 (CPE) and to ensure that the operating characteristics of this equipment are compatible with and do not interfere with the service offered by the Company.
 - c. Application testing described in A2.5.11 is not available for CNM.
5. In order to maintain the quality of CNM, the Company reserves the right to perform preventive maintenance and software updates. This could result in CNM being unavailable during the time period between midnight and 3:00 A.M. Eastern Time on any given Sunday morning. In addition, preventive maintenance may be performed on the Frame Relay network being monitored by CNM on any given Tuesday or Sunday between 2:00 A.M. and 4:00 A.M. Eastern Time. CNM will be unable to view these circuits while preventive maintenance is being performed. However, the Company only expects to utilize this maintenance window for any given switch on the average of once a quarter. In addition, the Company will make every reasonable effort to provide advance notice to those customers likely to be severely affected by such maintenance work. (C)
6. The minimum service period is one month.

B. Provision of Service

1. CNM is available in three packages – Gold, Silver or Bronze. All Customer Connections within a customer's account must be under the same package. If a customer desires to have multiple packages, a separate account must be established for each package type. Following is a description of what is available in each package:
 - The Gold Package includes all CNM options; Fault Management, On Demand Statistics and Performance Reporting.
 - The Silver Package includes Fault Management and On Demand Statistics.
 - The Bronze Package includes only Fault Management.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES

A140.12 Customer Network Management (Cont'd)

A140.12.2 Terms and Conditions (Cont'd)

B. Provision of Service (Cont'd)

2. Customers who subscribe to CNM may choose to monitor their entire BellSouth Fast Packet network or selected Customer Connections. The following rates and charges are applicable for customers who subscribe to CNM:
 - a. Service Establishment Charge

The Service Establishment Charge is a nonrecurring charge which applies per Frame Relay customer account. This charge covers the initial establishment and set-up of the CNM account for the customer. A username(s) and password(s) will be assigned for use by the customer in accessing their account. At the time the account is established, a customer may also choose to establish sub accounts. (C)
 - b. Reporting Packages – Gold, Silver, Bronze

A monthly charge applies for each Customer Connection the customer has chosen to monitor. A nonrecurring charge is applicable per Customer Connection at the time of installation.
 - c. Subsequent Modification Charge

The Subsequent Modification Charge is a nonrecurring charge which applies per Customer Connection when a CNM customer requests that existing CNM Customer Connections, or PVC's on the Customer Connection, be modified. Examples of this charge include change of customer name and movement between packages. This charge is not applicable:

 - when a new PVC is added to an existing CNM Customer Connection and CNM is requested for the new PVC, or
 - for a request to change a password.
 - d. Management Access Interface

All customers must have a Management Access Interface. This connection allows the customer to monitor their network. A monthly charge applies for each Web Interface. A nonrecurring charge is applicable per web access at the time of installation. A Security Card described below is required for each web access. See A32.1.2 for a dial or dedicated access option.

 - Security Card – The Security Card charge specified in A140.12.3.B following will apply for the initial card or for the issuance of additional cards for additional users or to replace a lost, damaged or expired card.

C. Contract Plans

1. Contract plans are available under conditions specified in the Fast Packet Services Payment Plan in A40.10 with contract periods described as follows:
 - a. Term Payment Plan A - payment periods may be selected from 12 to 36 months.
 - b. Term Payment Plan B - payment periods may be selected from 37 to 60 months.

A140. FAST PACKET TRANSPORT SERVICES

A140.12 Customer Network Management (Cont'd)

A140.12.3 Rates and Charges

A. CNM - Performance Reporting

1. CNM Service Establishment Charge

(a) Per Customer	Nonrecurring Charge				USOC
	\$250.00				CNMSE

2. Gold Reporting¹

(a) Per Frame Relay Service Customer Connection	Nonrecurring Charge	Month To Month	A 12 to 36 Months	B 37 to 60 Months	USOC
	\$95.00	\$0.00	\$0.00	\$0.00	CNMGF

(DELETED)

3. Silver Reporting²

(a) Per Frame Relay Service Customer Connection	90.00	0.00	0.00	0.00	CNMSF
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(DELETED)

4. Bronze Reporting³

(a) Per Frame Relay Service Customer Connection	85.00	0.00	0.00	0.00	CNMBF
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(DELETED)

5. Subsequent Modification Charge

(a) Per Customer Connection	Nonrecurring Charge				USOC
	\$75.00				CNMSM

B. Management Access Interface⁴

1. Web Interface

(a) Each	Nonrecurring Charge	Month To Month	A 12 to 36 Months	B 37 to 60 Months	USOC
	\$125.00	\$25.00	\$18.75	\$15.00	CNMWE

2. Security Card

(a) Each	Nonrecurring Charge				USOC
	\$100.00				CNMSC

Note 1: Includes Fault Management, On Demand Statistics and Performance Reports.

Note 2: Includes Fault Management and On Demand Statistics.

Note 3: Includes only Fault Management.

Note 4: See A32.1.2 for a dial or dedicated access option.

A140. OBSOLETE SERVICE OFFERINGS - FAST PACKET TRANSPORT SERVICES
A140.13 (DELETED)

(D)