

ACCESS SERVICE

3. Broadband Fast Packet Access Services3.1 General

Broadband Fast Packet Access Services provide high speed connectivity over a wide geographic area. Fast Packet Services use digital transmission facilities and switching technology to provide high speed information transfers for users with large bandwidth requirements.

Broadband Fast Packet technology divides data into blocks (packets) with fixed maximum lengths. These packets are transported through the Telephone Company's network. Each packet contains the necessary information to ensure accurate data transfer to destination.

3.1.1 DefinitionsAccess Link

A dedicated non-multiplexed digital access line at 56 Kbps or 1.544 Mbps. This link can only be used for accessing Frame Relay Service.

Burst Rate

The upper bandwidth limit the permanent virtual connection is allowed to send data through the FRS network. The burst rate is limited by the actual physical port access speed.

Committed Information Rate (CIR)

The CIR represents the base-level bandwidth the permanent virtual connection is allowed to send data through the network. This rate will be lower than the speed of the physical access line.

Data Link Connection Identifier (DLCI)

The address information assigned to customer designated end points used to identify PVCs and route frames of data.

Frame

A group of data bits, in a specific format, with a flag at either end to indicate the beginning and end of the frame. The defined format enables network equipment to recognize the meaning and purpose of specific bits.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services3.1 General (Cont'd)3.1.1 Definitions (Cont'd)Permanent Virtual Connection (PVC)

A virtual circuit set up administratively, by a network operator, for a dedicated point-to-point connection between two customer designated end points.

Port

The physical entry point for the local loop access to the FRS network.

Traffic Detail

A monthly report of data traffic information that provides the customer with details on frame and byte counts, dropped and congested frames.

Virtual Connection (circuit)

A connection established through a frame relay or packet network. Frames or packets are routed through the connection as an order-preserving transfer of data. This connection functions like a dedicated circuit between the end points.

3.2 Frame Relay Service (FRS)3.2.1 Description

Frame Relay Service (FRS) provides a high speed statistically multiplexed data service that allows for the transfer of variable length frames across a wide geographical area. Frames travel at high speed from the source to the desired destination via virtual connections. Frame Relay allows end users to share network resources. Each individual access link and Frame Relay port can be shared by traffic to multiple destinations.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.1 Description (Cont'd)

This service, comprised of three components, allows customer compatible applications and/or equipment to connect to the SureWest Telephone FRS network. The three components are local loop access, FRS port options and the Data Link Connection Identifiers (DLCIs). The local loop access to the FRS network is through a dedicated, non-multiplexed digital access line at DS0 (56Kbps), and/or DS1 (1.544 Mbps). These port options allow access to the FRS network. The DLCIs identify the address in information and route the framed data. The rate for the dedicated, non-multiplexed digital access line is bundled with the frame port options. Rates and charges for FRS and DLCIs are in Section 17 following.

The Data Link Connection Identifiers are established at the time of service subscription at customer specified end points making a Permanent Virtual Connection (PVC). The FRS network will only transmit data between authorized DLCIs.

Each PVC has a pre-assigned Committed Information Rate (CIR) and a Burst Rate (R). This provides bandwidth sharing and bandwidth on demand capabilities.

3.2.2 Technical Specifications:

PUB L-780079-PB

Issue 2, October 1993

ANSI T1.617, Signaling Specifications for Frame Relay Bearer Service, 1991

Frame Relay Forum, Network to Network Interface, Phase I Implementation Agreement

ANSI T1.618, Core Aspects of Frame Protocol for use with Frame Relay Bearer Service

ITU (formerly CCITT) Q. 922 Recommendation "ISDN Data Link Layer Specification for Frame Mode Bearer Services"

ITU (formerly CCITT) Q.933, "DSS1 Signaling Specifications for Frame Mode Basic Call control." ITU, Geneva, 1992

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.3 Rate Regulations(A) Rate Elements Description(1) Frame Relay User to Network Interface (UNI) Port and Special Access Line

The User to Network Interface (UNI) Port provides a line side connection between the customer's channel termination and the Telephone Company's FRS. (See technical references in Section 3.2.2 preceding) The channel termination, 56 Kbps or DS1, is part of the UNI port. A non-recurring charge and monthly rate based on the speed of the port connection (i.e. 56/64 Kbps, 128 Kbps, 384 Kbps and 1.536 Mbps) apply per port for each physical connection to the network supporting FRS.

(2) FRS Network to Network Interface (NNI) Port

The Network to Network Interface (NNI) Port provides a trunk side connection between the customer's channel termination connecting to the customer's frame relay switch and the Telephone Company's FRS. (See technical references in 3.2.2 preceding) The channel termination is part of the NNI port. A non-recurring charge and monthly rate apply per port for each physical connection supporting FRS.

The NNI port is available at 1.536 Mbps.

(3) Data Link Connection Identifiers (DLCI)

The Data Link Connection Identifier is one of a minimum of two software-defined address points required to establish a permanent virtual connection (PVC). A PVC, with at least one DLCI at each end, is the dedicated communications path through the FRS.

(4) Optional Features(a) Traffic detail, per port:

The charge per port for customers to obtain information on FRS traffic, such as counts of data packets sent and received on each of the customer's channel terminations.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)

3.2 Frame Relay Service (FRS) (Cont'd)

3.2.3 Rate Regulations (Cont'd)

(A) Rate Elements Description (Cont'd)

(4) Optional Features (Cont'd)

(b) Network Adds or Changes:

The non-recurring charge for the Frame Relay Service will apply when increasing or rearranging the FRS UNI port bandwidth. (Options are: 56/64 Kbps, 128 Kbps, 384 Kbps or 1.536 Mbps). Also, the non recurring FRS charge applies when a customer adds, rearranges, or changes DLCIs.

(B) Minimum Period

The minimum period for Frame Relay Service is one month, except when provided under a Rate Stability Plan arrangement. The minimum period for Frame Relay Service under the Rate Stability Plan is one year.

(C) Rate Stability Plan

Rates and Charges for Frame Relay UNI Port and Special Access Line and Frame Relay NNI Port and Special Access Line are offered with a 1, 3, or 5 year Rate Stability Payment Plan.

For customers that subscribe to a 1, 3, or 5 year Rate Stability Payment Plan, the monthly rates in effect at the time the service is installed will not increase during the payment plan period.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.3 Rate Regulations (Cont'd)(C) Rate Stability Plan (Cont'd)(1) Termination Liability Charges for Rate Stability Payment Plan

For Rate Stability Payment Plans discontinued prior to the end of their Payment Plan period, the Termination Liability Charges will apply as follows:

If Frame Relay Service is discontinued prior to the end of the first year, the customer will be liable for 75% of the total monthly charges for the unexpired portion of the first year of service. In addition, the customer will be liable for 70% of the second year, 60% of the third year, 50% of the fourth year and 40% of the fifth year, of the total monthly charges for the remaining portion of the Rate Stability Payment Plan.

If Frame Relay Service is discontinued beyond the first year of the Rate Stability Payment Plan Period, the customer will be liable as follows:

- 70% of the total monthly charges for the next 12 month period of the Rate Stability Payment Plan;
- 60% of the total monthly charges for the 13th through 24th month of the Rate Stability Payment Plan period;
- 50% of the total monthly charges for the 25th through 36th month of the Rate Stability Payment Plan period;
- 40% of the total monthly charges for the 37th through 48th month as applicable, for the remaining portion of the Rate Stability Plan period.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.3 Rate Regulations (Cont'd)(C) Rate Stability Plan (Cont'd)(2) Renewal Plan for Rate Stability Payment Plan

At the end of the Rate Stability Payment Plan, the customer may renew, for any Rate Stability Payment Plan in effect, without a new non-recurring charge being applied as long as the physical serving arrangement is not changed. The customer may continue service at the original rate, on a month-to-month basis, up to one full year after the original Rate Stability Payment Plan ends.

(3) Change of Rate Stability Payment Plan

A customer has the option, at any time, to change their current payment plan to an equivalent or longer payment plan (i.e. 1 year to 3 years) without any Termination Liability Charges applicable to the current Rate Stability Payment Plan and without new non-recurring charges applicable to the new equivalent or longer payment plan, as long as all other aspects of the service and facilities remain unchanged. In addition, the new equivalent or longer Rate Stability Payment Plan chosen by the customer begins on the service order completion date and is treated as a new Rate Stability Payment Plan period.

Customers may change to a shorter Rate Stability Payment Plan by paying the associated Termination Liability Charges with the original Rate Stability Payment Plan. The rates that will apply will be the current rates in effect for the Rate Payment Plan ordered. However, no new non-recurring charges will apply.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.3 Rate Regulations (Cont'd)(C) Rate Stability Plan (Cont'd)(4) Upgrades from DS0 Frame Relay UNI Port and Special Access Line

Customers may, at any time, upgrade any 56/64 Kbps Frame Relay UNI Port and Special Access Line to a 128 Kbps, 384 Kbps or 1.536 Mbps Frame Relay UNI Port and Special Access Line at the same premises without incurring a Termination Liability Charge providing that an equivalent or longer period than the original Rate Stability Payment Plan period is selected. All appropriate upgrade rates and charges will apply. (i.e. Recurring and Non-recurring Charges)

3.2.4 SureWest Telephone Tech Ed Program(A) Credit for Service

A credit of \$3,000 may be applied towards any charges incurred for Frame Relay Service as defined above for public schools (K-12), public libraries and private schools (K-12) serving 100 or more students and which are registered with the Department of Education participating in the SureWest Telephone Tech ED Program. (T)

(B) Special Conditions

(1) The Services provided under this program are to be used for video and data applications.

(2) The credit of \$3,000 must be used within one year of the installation of the selected service.

(3) All SureWest area public schools (K-12), public libraries and private schools (K-12) serving 100 or more students and which are registered with the Department of Education that would like to participate must submit a written request and a copy of their plan for the introduction of technology into the curriculum no later than February 7, 1998. (T)

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.5 Discounts to Certain Entities(A) Qualifying Schools and Libraries

- (1) Qualifying schools and libraries shall be entitled to a 50% discount off tariffed rates for Frame Relay Services after the appropriate federal E-rate discount is applied. (N)
- (2) Only public or nonprofit schools providing elementary or secondary education, and which do not have endowments of more than \$50 million, shall qualify for the discounted rates for schools. (N)
- (3) Only those libraries that are eligible for participation in state-based plans for funds under Title III of the Library Services and Construction Act (20 USC 335c et seq.), shall qualify for the discounted rates for libraries.
- (4) Pursuant to California Teleconnect Fund (CTF) Administrative Letter No. 10, the 50% CTF discount shall be applied after applying the appropriate federal E-rate discount. The 50% CTF discount shall be calculated as follows: (N)
- (a) If the customer has not been approved to receive E-rate discounts, whether or not its application is pending, the 50% discount will be applied to the CTF-eligible services after deducting a statewide average E-rate discount (determined by the CPUC) from the billed amount.
- (b) If the customer has been approved to receive E-rate discounts, the 50% discount will be applied to the CTF-eligible services after deducting the actual E-rate discounts from the billed amount. (N)

Material omitted now located on Original Sheet 87.4.1.4.

(Continued)

	<u>Issued By</u>	Date Filed <u>DEC 09 2005</u>
Advice Letter No. <u>1185-A</u>	<u>Brian H. Strom</u>	Effective <u>JAN 08 2006</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.2 Frame Relay Service (FRS) (Cont'd)3.2.5 Discounts to Certain Entities(A) Qualifying Schools and Libraries (Cont'd)

(4) (Cont'd)

(c) The statewide average discount is deducted from the customer's services solely for the purposes of calculating the CTF discount. The statewide average discount shall be added back to the billed amount for payment by the customer. However, when the customer receives its approved E-rate benefit, the customer's account will be retroactively adjusted to reflect the approved E-rate.

(d) If the customer's application with the federal E-rate has been denied, the 50% CTF discount shall apply to the full rate of the CTF-eligible services.

(e) If the customer is a necessary small school, the 50% CTF discount applies to the full rate of the CTF-eligible services, unless the customer presents the federal E-rate discount, at which point the federal E-rate discount shall apply before applying the CTF discount.

(f) If the customer subscribes to CTF-eligible services that are ineligible for E-rate discounts, the 50% discount applies to the full rate of the CTF-eligible services.

(B) Health Care Institutions (T)

Qualifying municipal and county government owned and operated hospitals, health clinics and district owned and operated hospitals and health clinics shall be entitled to a 50% discount off tariffed rates for SMDS. (x)

(C) Resale of Discounted Service

The discounted rates described above may not be resold to, or shared with, any other non-qualifying entity or person.

(x) Correction.

(Continued)

	<u>Issued By</u>	<u>Date Filed</u> JAN 13 2006
<u>Advice Letter No.</u> 1200	<u>Steve C. Oldham</u>	<u>Effective</u> FEB 13 2006
<u>Decision No.</u>	<u>President – CEO</u>	<u>Resolution No.</u>

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.3 Switched Multi-megabit Data Service (SMDS)3.3.1 General Description(A) Basic Service Description

Switched Multi-megabit Data Service (SMDS), is a high speed data service that offers broadband switching over a wide geographic area. SMDS can be provided with either a lineside or trunkside interface.

Customer premises are connected to the SMDS port via DS1 and DS3 Special Access High Capacity Services as described in Section 7 following. The DS1 or DS3 must be ordered in addition to the SMDS. One SMDS address is assigned to each DS1 or DS3 service accessing the SMDS network. A maximum of sixteen addresses can be assigned to each DS1 or DS3.

The customer must provide to the Telephone Company a current local contact and telephone contact number that is readily accessible 24 hours a day, 7 days a week. The customer's local contact will act as the point of contact for inquiries, trouble reports, and security management involving the service configuration.

The SMDS network will only transmit information between authorized users within a customer-defined closed user-group. A closed user group is a set of source and destination addresses allowed to exchange data traffic in the SMDS network.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.3 Switched Multi-megabit Data Service (SMDS)3.3.2 Technical Specifications

SMDS technical specifications from the Bell Communications Research, Inc. include the following references:

TR-TSV-000772, Issue 1, Effective date May 1991.

TR-TSV-00773, Issue 1, May 1991, Revision 1, January 1993, effective date March 1993.

TR-TSV-001060, Issue 1, May 1991, Revision 2, March 1993, effective date March 1993.

TR-TSV-001062, Issue 1, March 1993, effective date March 1993.

TR-TSV-001064, Issue 1, December 1992, effective date December 1992.

3.3.3 Rate Elements Description(A) SMDS Lineside Interface

The SMDS Lineside Interface (LI) port is used to connect the customer to the Pacific Bell SMDS Network as defined in Bellcore Technical References TR-TSV-000772 and TR-TSV-000773. DS1 or DS3 Special Access High Capacity service is used to connect from the customer premises to the SMDS LI port. The SMDS LI port is available at the 1.17 Mbps speed when connected by the DS1 Special Access High Capacity Service and at the 4 Mbps, 10 Mbps, 16 Mbps, 25 Mbps, and 34 Mbps speeds when connected by a DS3 Special Access High Capacity Service.

(1) Optional Features and Functions(a) Group Addressing

Group Addressing allows a single source to send the same data to up to 128 recipients simultaneously. Non-recurring charges and monthly rates for Group Addressing are charged per group address.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.3 Switched Multi-megabit Data Service (SMDS) (Cont'd)3.3.3 Rate Elements Description (Cont'd)(A) SMDS Lineside Interface (Cont'd)(1) Optional Features and Functions (Cont'd)(b) Customer Network Information

Customer Network Information permits users to obtain information on data traffic activities, including counts of data packets sent and received from each of the customer's access links.

(2) Changes

Charges for changes will be made on a per service order basis. Changes include additions or deletions in group member addresses, additions or deletions in Closed User group membership, and upgrades in class of service of 4 Mbps up to the maximum of 34 Mbps.

(B) SMDS Trunkside Interface

A SMDS Trunkside Interface (TI) port is only available at the 34 Mbps speed. Customers must have compatible switching and transport capabilities as defined in Bellcore Technical Reference TR-TSV-001060. A DS3 Special Access High Capacity Service is used to connect the customer premises to the SMDS TI port. No SMDS optional features are available with SMDS TI.

(Continued)

	<u>Issued By</u>	Date Filed <u>SEP 10 2003</u>
Advice Letter No. <u>839</u>	<u>Brian H. Strom</u>	Effective <u>OCT 24 2003</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)3.3 Switched Multi-megabit Data Service (SMDS) (Cont'd)3.3.4 Discounts to Certain Entities(A) Qualifying Schools and Libraries

- (1) Qualifying schools and libraries shall be entitled to a 50% discount off tariffed rates for Switched Multi-megabit Data Services (SMDS) after the appropriate federal E-rate discount is applied. (N)
- (2) Only public or nonprofit schools providing elementary or secondary education, and which do not have endowments of more than \$50 million, shall qualify for the discounted rates for schools. (N)
- (3) Only those libraries that are eligible for participation in state-based plans for funds under Title III of the Library Services and Construction Act (20 USC 335c et seq.), shall qualify for the discounted rates for libraries.
- (4) Pursuant to California Teleconnect Fund (CTF) Administrative Letter No. 10, the 50% CTF discount shall be applied after applying the appropriate federal E-rate discount. The 50% CTF discount shall be calculated as follows: (N)
- (a) If the customer has not been approved to receive E-rate discounts, whether or not its application is pending, the 50% discount will be applied to the CTF-eligible services after deducting a statewide average E-rate discount (determined by the CPUC) from the billed amount.
- (b) If the customer has been approved to receive E-rate discounts, the 50% discount will be applied to the CTF-eligible services after deducting the actual E-rate discounts from the billed amount. (N)

Material omitted now located on Original Sheet 87.8.

(Continued)

	<u>Issued By</u>	Date Filed <u>DEC 09 2005</u>
Advice Letter No. <u>1185-A</u>	<u>Brian H. Strom</u>	Effective <u>JAN 08 2006</u>
Decision No. _____	<u>President - CEO</u>	Resolution No. _____

ACCESS SERVICE

3. Broadband Fast Packet Access Services (Cont'd)

3.3 Switched Multi-megabit Data Service (SMDS) (Cont'd)

3.3.4 Discounts to Certain Entities

(A) Qualifying Schools and Libraries

(4) (Cont'd)

- (c) The statewide average discount is deducted from the customer's services solely for the purposes of calculating the CTF discount. The statewide average discount shall be added back to the billed amount for payment by the customer. However, when the customer receives its approved E-rate benefit, the customer's account will be retroactively adjusted to reflect the approved E-rate.
- (d) If the customer's application with the federal E-rate has been denied, the 50% CTF discount shall apply to the full rate of the CTF-eligible services.
- (e) If the customer is a necessary small school, the 50% CTF discount applies to the full rate of the CTF-eligible services, unless the customer presents the federal E-rate discount, at which point the federal E-rate discount shall apply before applying the CTF discount.
- (f) If the customer subscribes to CTF-eligible services that are ineligible for E-rate discounts, the 50% discount applies to the full rate of the CTF-eligible services.

(B) Health Care Institutions

(T)

Qualifying municipal and county government owned and operated hospitals, health clinics and district owned and operated hospitals and health clinics shall be entitled to a 50% discount off tariffed rates for SMDS.

(x)

(x)

(C) Resale of Discounted Service

The discounted rates described above may not be resold to, or shared with, any other non-qualifying entity or person.

(x) Correction

(Continued)

	<u>Issued By</u>	<u>Date Filed</u>	<u>JAN 13 2006</u>
<u>Advice Letter No.</u>	<u>Steve C. Oldham</u>	<u>Effective</u>	<u>FEB 13 2006</u>
<u>Decision No.</u>	<u>President – CEO</u>	<u>Resolution No.</u>	