

3. Appendix 1 - Region Specific Services - Technical Descriptions for Packet Switched Access Arrangements

Abbreviated Call - Packet (8036)

This capability allows the customer to access predefined addresses by utilizing a predesignated unique alphanumeric character(s) in lieu of the normal call initiation process. The port is not limited to sole access of the predefined address when normal call initiation procedures are followed.

Generic Name of ONA Service	Product Name	BSE or CNS
Abbreviated Call - Packet	Qwest - Abbreviated Call - Packet	CNS

Default Window Size - Packet (5022,8007)

This permits the customer to select a nonstandard default window size of three in one or both directions of transmission. If nonstandard default window sizes are not selected, the default window size of two will apply to both directions of transmission. Default window sizes are set at subscription time.

Generic Name of ONA Service	Product Name	BSE or CNS
Default Window Size - Packet	NX - Default Window Size	BSE or CNS
	Qwest - Nonstandard Window Size - Packet	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Flow Control Parameter Negotiation - Packet (8003)

Flow control allows the data receiver to limit the rate at which it accepts data by controlling the window size and maximum packet size for each direction of transmission. Negotiation is done on a per call basis during the call setup.

Generic Name of ONA Service	Product Name	BSE or CNS
Flow Control Parameter Negotiation - Packet	Qwest - Flow Control Parameters (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Incoming Calls Barred - Packet (5024,8001)

Incoming Calls Barred allows the customer the option to prevent incoming virtual circuit calls from being sent to their data terminal equipment (DTE). When used in conjunction with a Closed User Group (CUG) this feature prevents individual members of the CUG from receiving calls from outside of the CUG. This option will allow call origination only.

Generic Name of ONA Service	Product Name	BSE or CNS
Incoming Calls Barred - Packet	NX - Incoming Calls Barred	BSE or CNS
	Qwest - CUG Incoming Access Barred (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic service arrangements.

Logical Channels - Packet (8005)

Logical Channels capability allows the data terminal equipment (DTE) to derive multiple logical channels from a single physical access line. This is accomplished by specifying the logical channel number on every packet which crosses the network interface.

Generic Name of ONA Service	Product Name	BSE or CNS
Logical Channels - Packet	Qwest - Logical Channel (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Logical Channel Layout - Packet (8004)

This capability permits the arrangement of logical channels to be configured as incoming, outgoing, two way and/or private virtual circuit. The logical channel layout is established at subscription time.

Generic Name of ONA Service	Product Name	BSE or CNS
Logical Channel Layout - Packet	Qwest - Logical Channel Layout (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Multiple Network Addresses/Port - Packet (3001,5027,8006)

This capability allows more than one network address to be assigned to a single access port. Multiple addresses can be purchased in blocks, up to a maximum number of 1000. Messages are delivered according to predetermined customer specifications.

Generic Name of ONA Service	Product Name	BSE or CNS
Multiple Network Addresses/Port	BA - Multiple Network Addresses (Packet)	BSE
	NX - Multiple Network Addresses/Port	BSE or CNS
	NX – Multiple Network Addresses	BSE or CNS
	Qwest - Multiple Network Addresses (Packet)	BSE

Reference: Bell Atlantic Technical Reference 72211, Interface Specification for the Bell Atlantic Public Data Network, Issue C, December 1991.

This service, if offered as a BSE, is associated with the Packet Switched X.25 basic serving arrangement.

Outgoing Calls Barred (5028,8002)

This capability allows the customer the option to prohibit outgoing virtual calls for their data terminal equipment (DTE). When used in conjunction with a Closed User Group (CUG) this feature prevents individual members of the CUG from establishing calls outside of the CUG. This option will allow the receipt of incoming virtual circuit calls only.

Generic Name of ONA Service	Product Name	BSE or CNS
Outgoing Calls Barred - Packet	NX - Outgoing Calls Barred	BSE or CNS
	Qwest - CUG Outgoing Access Barred (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Permanent Virtual Circuit - Packet (5029,8008)

Permanent virtual circuits are the electronic equivalent of a private line between two points. At the customer's option, a virtual circuit is established between two customer data terminal locations (DTEs) within the network on a dedicated basis. These two locations are electronically connected, operating similar to a private line between the two points. The association between the two DTEs is established via service provisioning.

Generic Name of ONA Service	Product Name	BSE or CNS
Permanent Virtual Circuit - Packet	NX - Permanent Virtual Circuit	BSE or CNS
	Qwest - Permanent Virtual Circuit (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Reverse Charge Request Option (Packet) (5030,8009)

Reverse charging allows the originating user to request that the call be charged to the called party during call setup. The reverse charging call request is delivered to the called party only when their data terminal equipment (DTE) is configured for Reverse Charge Acceptance. If the terminating DTE does not subscribe to Reverse Charge Acceptance, the call will be cleared.

Generic Name of ONA Service	Product Name	BSE or CNS
Reverse Charge Request Option (Packet)	NX - Reverse Charge Request	BSE or CNS
	Qwest - Reverse Charge Option (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 basic serving arrangement.

4. Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Access Arrangements

Access To Customer Premises Announcement (5035)

This feature allows an ESP to furnish customized announcement services to an Automated Call Distribution customer. ACPA connects callers in the ACD queue to customer provided announcements or music. Using this feature the ESP can provide and manage announcements on behalf of the customer. The ESP requires private line access for each ACPA arrangement.

Generic Name of ONA Service	Product Name	BSE or CNS
Access To Customer Premises Announcements	NX – Extended Basic Referral	BSE

FEATURE OPERATION:

The ESP furnishes an announcement to the ACPA port over a private line. The ACD will automatically connect a caller in queue to the ACPA port when the feature is present.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	DMS-100
Earliest Generic Release	BCS36

2. This is a feature of Automatic Call Distribution.

Access To Order Entry System (4004)

This capability will allow ESPs to provide basic ordering information to the business office through a mechanized interface.

Generic Name of ONA Service	Product Name	BSE or CNS
Access To Order Entry System	BS - Administrative Management Service (AMS)	BSE or CNS

FEATURE OPERATION:

A new offering, currently using the BellSouth project name of Administrative Management Service (AMS), will provide a mechanized interface for customers to provide service ordering information to the appropriate business office.

This service will be offered on a dial-up or dedicated basis. The ESPs will not have direct access to the Order Entry System, but will have access through the AMS frontend processor. The front-end processor will provide the necessary security and information screening.

References: not available.

This service, if offered as a BSE, is associated with the Access To Operations Support Systems Information BSE (which is associated with the Dedicated Digital (< 64 kbps) basic serving arrangement).

ADSL Service (4032)

ADSL Service is an interstate data access service that allows Internet Service Providers (ISPs) or Network Service Providers (NSPs) to provide service to their customer(s) using Asymmetric Digital Subscriber Line technology. This capability allows ISPs/NSPs to establish a point-to-point virtual circuit between an end user premises location and another location designated by the subscribing ISP/NSP. ADSL Service allows downstream speeds from 192 Kbps to 6.0 Mbps and upstream speeds from 192 Kbps to 640 Kbps. ADSL Service requires ATM switch connectivity between the ATM switch and the ISP's/NSP's designated location.

Generic Name of ONA Service	Product Name	BSE or CNS
ADSL Service	BS – BellSouth ADSL Service	BSE

DS0-B Subrate Multiplexing Service (4015)

DS0-B Subrate Multiplexer (SRM) service provides time division multiplexing of multiple client digital derived data channels into a single standard interface for efficient interconnection to an ESP.

Generic Name of ONA Service	Product Name	BSE or CNS
DS0-B Subrate Multiplexing Service	BS - DS0-B Interface	BSE or CNS

FEATURE OPERATION:

Service is established via a service order placed by the ESP with the local operating company. Appropriate dedicated transport facilities (including local channel and applicable interoffice mileage elements) are also ordered for access to the SRM. The ESP negotiates and makes arrangements with its clients to connect their individual derived data channels to the SRM. These orders must be coordinated with the ESP in order to ensure adequate facilities are available and appropriate channel assignments, as specified by the ESP, are made.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS.

1. This capability is independent of central office switch type.
2. The DS0-B SRM is interconnected to the ESP's client via an appropriate derived data channel service in the local serving office.
3. The ESP interconnects to the DS0-B SRM via an appropriate four-wire dedicated transport facility.
4. The DS0-B signal is a standard DDS signal as specified in Technical Advisory TA-TSY-00280.

References:

See BellSouth documents TR73548 "Derived Channel Access Service Digital Data Over Voice Network Interface Specifications", Issue I June 1990 and Addendum I March 1991.

This service, if offered as a BSE, is associated with the Dedicated Derived Channel BSA.

Ethernet Ports Over SONET (EPOS) (8065)

Ethernet Ports Over SONET (EPOS) is a protocol for the point-to-point transmission of data over customer-purchased SONET-based facilities (SST and SHNS). EPOS allows for Ethernet to Ethernet interfaces and Ethernet to 155 Mbps, 622 Mbps or 2.5 Gbps SONET interfaces. EPOS is available at port speeds of 10 Mbps, 100 Mbps or 1 Gbps. EPOS is available on an interstate basis - consult the appropriate Tariff Reference data to determine specific availability.

General Name of ONA Service	Product Name	BSE or UNS
Ethernet Ports Over SONET (EPOS)	Qwest - Ethernet Ports Over SONET (EPOS)	BSE

* This service has been deemed non-dominant at the Federal level in accordance with the Commission's Qwest Enterprise Forbearance Order, which granted relief to Qwest from its obligations under *Computer Inquiry* rules in connection with its existing packet-switched broadband telecommunications and existing optical transmission services. See *In the Matter of Qwest Petition for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Broadband Services*, Memorandum Opinion and Order, WC Docket No. 06125, FCC 08-168, released Aug. 5, 2008.

High Capacity Digital Hand-Off Service (3026)

High Capacity Digital Hand-Off Service carries voice grade local exchange and Channel Services between the customer's serving central office and the customer's compatible premises equipment using a DS1 facility with the D4 format. Up to 24 local exchange voice and Channel Services can be supported on the facility. The facility is handed-off to the customer in the D4 format.

Generic Name of ONA Service	Product Name	BSE or CNS
High Capacity Digital Hand-Off Service	BA - High Capacity Digital Hand-Off Service	BSE

FEATURE OPERATION:

At the time the service is ordered the customer must designate which services are to be carried on each of the 24 channels in the DS1 facility. Future additions and changes to channel assignments must be coordinated with the Telephone Company.

Where the serving central office is a digital switch, the facility may run from the customer's high capacity interface directly into the central office switch. Only DID trunks may be carried over this directly connected facility.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. The High Capacity Digital Hand-Off facility is a digital channel operating at a transmission speed of 1.544 Mbps. It is a simultaneous two-way transmission media using serial, bipolar, return-to-zero, isochronous, alternating mark inversion format.
2. 1000 Channel metallic services and Digital Data Service may not be transported over these facilities.
3. Reference: GR-54 DS1 High-Capacity Digital Service End User Metallic Interface Specifications, Issue 1, December 1995 (replaces TR-NPL-000054, Issue 1)

This service is a BSE associated with the Dedicated High Capacity Digital (1.544 Mbps) Basic Serving Arrangement in the local exchange tariff and an alternative of Line Side BSA in the access tariff.

Inband Signaling (3018)

Inband Signaling provides the ability to order analog voice grade Special Access circuits with signaling arrangements as described in TR-NWT-000335.

Generic Name of ONA Service	Product Name	BSE or CNS
Inband Signaling	BA - Inband Signaling	BSE

Reference:

- TR-NWT-000335 Voice Grade Special Access Service - Transmission Parameter Limits and Interface Combinations, Issue 3, May 1993
- MDP-326-584 - Table 4 Data Communications Using Voiceband Private Line Channels, Issue 1, October 1973 [no longer listed]

This service, if offered as a BSE, is associated with the Dedicated Voice Grade basic serving arrangement.

Multiplexing - Digital (2000,2001,2002,2018,3005,4007,5034,7034,8013)

Multiplexing is a technique that uses a single transmission facility to provide several transmission channels, such as by sharing the time slots of the channel (time-division multiplexing) or superimposing many frequencies at the same time (frequency-division multiplexing) in order that many signal sources and links may communicate during a given time period. This capability may include multiplexing such as:

- **DS0 To Subrates** - This capability provides for the time division multiplexing of multiple digital data signals operating at the subrate speeds of 2.4 Kbps, 4.8 Kbps, or 9.6 Kbps with a 64 Kbps DS0 digital signal.
- **Multiplexing - DS1/Analog or DS0** - This capability provides for the pulse code modulation and/or time division multiplexing of multiple analog voice and/or multiple 64 Kbps DS0 digital signals into a 1.544 Mbps data stream for the purposes of reducing the number of transmission links required between two points.
- **Multiplexing - DS1 To DS0** - This capability provides for the time division multiplexing of up to twenty-four 64 Kbps DS0 digital signals into a 1.544 Mbps DS1 digital signal.
- **Multiplexing - DS1 To Voice Grade** - This capability provides for the pulse code modulation and time division multiplexing of up to twenty-four 4 kHz voice grade channels into a 1.544 Mbps DS1 digital signal.
- **Multiplexing - DS3/DS1** - This capability provides for the time division multiplexing of up to twenty-eight 1.544 Mbps DS1 digital signals into a 44.736 Mbps DS3 digital signal.

Generic Name of ONA Service	Product Name	BSE or CNS
Multiplexing - Digital	AM - Ameritech DS1 to DDS/DS0 Multiplexing	BSE
	AM - Ameritech DS1 to Voice/Ameritech Base Rate Multiplexing	BSE
	AM - Ameritech DS3 to Ameritech DS1 Multiplexing	BSE
	AM - DS0 To Subrate Multiplexing	BSE
	BA - Multiplexing	BSE
	BS - DS1/Analog or DS0 Multiplexer	BSE or CNS
	BS - DS ₀ /DS1 Multiplexer	BSE or CNS
	NX - DS3/DS1 Multiplexer	BSE
	NX - Superpath 1.5	BSE
	SWB - Multiplexing	BSE
Qwest - Multiplexing	DSE	

References:

- TR-TSY-000009 Asynchronous Digital Multiplexes Requirements and Objectives, Issue 1, May 1986 (no longer listed).
- TR-TSY-000010 Synchronous DS3 Add-Drop Multiplex (ADM 3/X) Requirements and Objectives, Issue 1, February 1988.
- Ameritech - See GA-342 High Capacity Digital Special Access Service Transmission Parameter Limits and Interface Combinations, Issue 1, December 1995 (replaces TR-INA-000342, Issue 1)

This service, if offered as a BSE, is associated with the Dedicated Voice Grade and the Dedicated High Capacity basic serving arrangements.

For Ameritech, DS1 to DDS/DS0 and DS1 to Voice/Base Rate are associated with Dedicated High Capacity Digital (1.544 Mbps) type BSA; DS3 to DS1 is associated with Dedicated High Capacity Digital (>1.544 Mbps) type BSA.

DS3/DS1 multiplexer is associated with the Dedicated Digital 45 Mbps BSA.

User Initiated Diagnostics (4009)

This capability will allow ESPs to electronically report and check the status of local and access, circuit and line troubles into support systems. Customers may also receive hard copy printouts.

Generic Name of ONA Service	Product Name	BSE or CNS
User Initiated Diagnostics	BS - Administrative Management Service (AMS)	BSE or CNS

FEATURE OPERATION:

A new offering, currently using the BellSouth project name of Administrative Management Service (AMS), will provide a mechanized interface for customers to access this service.

This service will be offered on a dial-up or dedicated basis. The ESPs will not have direct access to the Order Entry System, but will have access through the AMS front-end processor. The front-end processor will provide the necessary security and information screening.

References: not available.

This service, if offered as a BSE, is associated with the Access To Operations Support Systems Information BSE (which is associated with the Dedicated Digital (< 64 kbps) basic serving arrangement).

Versanet (8053)

Versanet is a derived channel transport service. Versanet is only available on an intrastate basis. Please refer to the appropriate Tariff Reference data for availability in any specific state.

Generic Name of ONA Service	Product Name	BSE or CNS
Versanet	Qwest - Versanet	CNS

References: Not available.

5. Appendix 1 - Regional Specific Services - Technical Descriptions for Dedicated Network Access Link Service Arrangements

Call Event and Management Signaling Service (CEMSS) (8063)

Call Event and Management Signaling Service (CEMSS) provides a mediated service interface between a customer-provided application platform and a telephone company gateway. CEMSS allows providers to send specific Internet Protocol (IP) messages through the Company gateway. The messages will be routed to the telephone company Advanced Intelligent Network (AIN) Service Control Point (SCP) for interaction with certain basic services associated with the subscriber local loop designated by the CEMSS customer. CEMSS may be used by service providers to obtain call event messages, perform call control functions and as a means to access and manage AIN service parameters associated with subscriber lines served from telephone company AIN-capable local switches.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Event and Management Signaling Service (CEMSS)	Qwest – Call Event and Management Signaling Service (CEMSS)	BSE

Reference: not available.

CEMSS Subscriber (8064)

Call Event and Management Signaling Service (CEMSS) Subscriber is an Advanced Intelligent Network (AIN) based feature required for interaction with the CEMSS application. Two AIN triggers are provisioned on CEMSS Subscriber lines in the telephone company network to allow feature management and interaction via the AIN Service Control Point (SCP).

Generic Name of ONA Service	Product Name	BSE or CNS
Call Event and Management Signaling Service (CEMSS) Subscriber	Qwest – CEMSS Subscriber	CNS

Reference: not available.

Order Entry Service (8011)

This capability delivers to an ESP the ANI of callers to certain telephone numbers along with the called number. The call is not delivered to the ESP. The ANI and called number are forwarded by the telephone company via a private line data link. This capability currently supports cable television pay-per-view applications. The ANI identifies which client ordered the service and the called number indicates which service (television broadcast) was ordered.

Generic Name of ONA Service	Product Name	BSE or CNS
Order Entry Service	Qwest - ANI Order Entry Service	BSE

References: not available.

This service, if offered as a BSE, is associated with the Dedicated Network Access Link basic serving arrangement.

Initial Address Message (2006)

Signaling System Seven (SS7) provides out of band transmission of SS7 protocol signaling information between the end office switching system or the tandem office switching system and the customer's designated premises. The SS7 Signaling option requires the customer to purchase Signal Transfer Point Access and the Basic Initial Address Message Delivery option. This feature is available in SS7 signaling equipped end or tandem offices with Feature Group D and terminating Feature Group B.

The Initial Address Message provides the ESP a common switching optional feature using an SS7 message along with other information relating to the routing and handling of the call to the next switch.

The Initial Address Message Delivery option requires the customer to purchase Signal Point Access and SS7 Signaling option.

Generic Name of ONA Service	Product Name	BSE or CNS
Initial Address Message	AM - Initial Address Message	BSE

FEATURE OPERATION:

This Initial Address Message option permits the following optional SS7 signaling call setup parameters: User Service Information, Called Party Number, Calling Party Number, Charge Number, Originating Line Information, Transit Network Selection, Carrier Selection, Service Code and Access Transport.

User Service Information is an SS7 Parameter which may be coded to indicate any one of four circuit mode bearer points for addressing ISDN customer premises equipment.

The Called Party Number parameter is the called directory number delivery.

Calling Party Number is available on a direct SS7 equipped end office connection or a connection to the access tandem when there is not Multifrequency and SS7 signaling interworking.

The Charge Number parameter is the Automatic Number Identification number (ANI). (See Calling Billing Number Delivery - FG D Protocol).

Originating Line Information parameter via SS7 is equivalent to the information digits provided with ANI digits to an interexchange carrier. This data identifies the following items: that (1) the originating telephone number is the station billing number, no special treatment is required, (2) it is a multiparty line- the telephone number is a four/eight-party line and cannot be identified - number must be obtained by operator or some other manner, (3) and ANI failure has occurred, (4) this is a hotel/motel originating call, (5) this is a coinless station, hospital, inmate, etc. call requiring special screening or handling, (6) the call is an Automatic Identified Outward Dialed (AIOD) call from customer premises equipment (CPE).

Transit Network Selection is an SS7 parameter which indicates to an intermediate node or network which carrier and circuit group is to be selected.