HIGH CAPACITY SERVICES (REGION 1)

A. AVAILABILITY OF SERVICE

This Product Guide contains the terms and conditions, rates and charges for Channel Terminations other than Non-Competitive End User Channel Terminations, Channel Mileage and certain Optional Features and Functions ordered for such Channel Terminations, including Multiplexing. Ordering options for other Special Access Services needed to complete a circuit are available under Company FCC Tariffs as described in Part 0, Section 1.

High Capacity Services are available where facilities exist in Region 1.

B. SERVICE DESCRIPTION

A High Capacity channel is a channel for the digital transmission of 1.544 or 44.736 Mbps isochronous serial data. The actual bit rate and framing formats are a function of the channel interface selected by the Customer. High Capacity channels are provided between Customer designated premises, between a Customer designated premises and a Company Hub, between a Customer designated premises and a wire center where connection to Company provided frame relay service or ATM-cell relay services occurs, between a Customer designated premises, or Hub-to-Hub for IntelliMux® Service(s) at 1.544 and 44.736 Mbps transmission. High Capacity channels may also be connected to Company provided SONET services, provided that such connections are technically and operationally feasible, as determined by the Company.

High Capacity Services are provided pursuant to the technical specifications and technical specification packages set forth in GR-54-CORE, Issue 1, GR-342-CORE, Issue 1, and GR-499-CORE, Issue 4.

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B. SERVICE DESCRIPTION (Cont'd)

1. DS1 High Capacity/1.544 Mbps Service

DS1 service (a 1.544 Mbps facility) is provided with an electrical interface.

A nominal 64.0 kbps service is available only as a channel of a 1.544 Mbps facility between two Company Digital Data Hubs or as a cross connect of two 2.4, 4.8, 9.6, 56.0, or 64.0 kbps channels of two DS1 services at a Digital Data Hub(s). The Customer must provide system and channel assignment data.

2. DS3 High Capacity/44.736 Mbps Services

DS3 service is available in standard channel termination configurations and is provided with an electrical interface.

DS3 channels can be connected at the wire center serving that premises to individual terminating DS3 channels, individual DS3 channels for multiplexing at designated Hubs, or to other DS3 services for multi-DS3 premises-to-premises connections. DS3 Channel Mileage is provided on an individual DS3 channel basis. The DS3 to DS1 multiplexing function is available in Company Hubs as indicated in the NECA Tariff FCC No. 4.

C. TECHNICAL SPECIFICATIONS PACKAGES

The technical specifications and optional features and functions for High Capacity Service are delineated in Technical Reference GR-54-CORE, Issue 1, GR-342-CORE, Issue 1, and GR-499-CORE, Issue 4.

D. Channel interfaces for High Capacity Service may be found at the common language product of iconectiv.com.

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E. OPTIONAL FEATURES AND FUNCTIONS

1. Central Office Multiplexing

a. DS3 to DS1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing. The DS3 to DS1 multiplexing function is available in Company Hubs.

b. DS1 to Voice

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services. A channel(s) of this DS1 to the Hub can also be used for WATS Access Line Services.

c. DS1 to Digital

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with individual digital data circuits to the Hub at speeds of 2.4, 4.8, 9.6, 56, or 64 Kbps. A channel(s) of this DS1 to the Hub can also be used for WATS Access Line or Voice Grade Services.

d. DS1 to DS0

An arrangement that converts a 1.544 Mbps channel to 23 56 kbps channels utilizing digital time division multiplexing. Where an existing arrangement is modified for use with DS0 to Subrate equipped with Secondary Channel, a conversion charge shall apply.

e. DS0 to Subrate

An arrangement that converts a 56 kbps channel to subspeeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps channels using digital time division multiplexing. This arrangement is only available in conjunction with item (d) above.

The Secondary Channel (**SC**) option is only available on new orders for service. The addition of SC to an existing DS0 to Subrate arrangement will be treated as a disconnect and new connection.

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E. OPTIONAL FEATURES AND FUNCTIONS (Cont'd)

2. Clear Channel Capability (**CCC**)

a. CCC is an arrangement that allows a Customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity channel or a 1.544 Mbps High Capacity channel subtending from a multiplexed 44.736 Mbps High Capacity channel with no constraint on the quantity or sequence of ones (mark) and zero (space) bits. This arrangement requires the Customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (**B8ZS**) line code as described in Technical References GR-54-CORE, Issue 1, and GR-342-CORE, Issue 1.

b. CCC is provided on 1.544 Mbps High Capacity channels between two Customer designated premises and on multiplexed 44.736 High Capacity channels or multiplexed 1.544 High Capacity channels* between a Company Hub office and a Customer designated premises, and is subject to the availability of facilities.

c. The optional feature may be ordered at the same time the High Capacity service is ordered or it may be ordered as an addition to an existing High Capacity service. Customers must agree to out-of-service periods required to add this feature to an existing High Capacity service.

3. Extended Superframe Format

Extended Superframe Format is an optional feature that passes a Customer provided framing format for 1.544 Mbps High Capacity service. Extended Superframe Format extends the Customer's 1.544 Mbps framing structure from 12 to 24 frames and divides the 8 Kbps 193rd bit position pattern into three distinct functionalities: 2 kbps for frame synchronization, 2 kbps for cyclic redundancy checking, and 4 kbps used for performance monitoring information.

4. Shared Network Arrangement

At the option of the Customer, a Shared Network Arrangement is available as specified in Part 0, Section 13.

a. Under the Shared Network Arrangement, the Company may share with the host subscriber record information pertaining to the services of other users of the shared network. Such disclosure will be under the sole discretion of the Company as is necessary to perform billing reconciliations and/or other functions required in connection with maintaining account records.

b. Part 0, Section 13 contains the application of rates and charges specific to Shared Network Arrangements.

* Available only in a DS1-to-Digital Multiplexing configuration.

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E. OPTIONAL FEATURES AND FUNCTIONS (Cont'd)

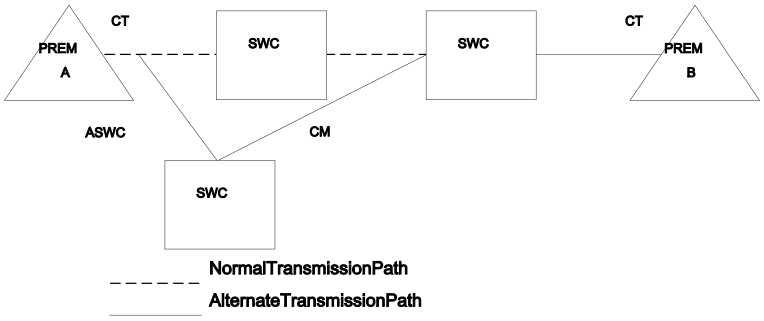
5. Alternate Serving Wire Center

a. Alternate Serving Wire Center (**ASWC**) is an optional feature which provides a transmission path for a High Capacity Service between the Customer's designated premises and a serving wire center separate from the normal serving wire center.

b. The Company will designate the serving wire center to be used as the alternate. The ASWC feature is available where contiguous wire centers with adjacent fiber feeder routes exist. Where facilities are not available, Special Construction rates, terms and conditions may apply. Where service is available, provisioning is based on a Negotiated Interval as described in Part 0, Section 5.

c. The monthly rate for ASWC applies per point of termination, including per IEF DS1 with Separated VT1.5s, and is in addition to the Channel Terminations, IEF Terminations and Interfaces, and Channel Mileage Rates and Charges for each High Capacity or IEF service provided over the alternate path. Channel mileage for the alternately routed service is based on mileage measured from or to the alternate serving wire center.

Example: Rate application for a High Capacity service connecting two Customer premises via ASWC.



Rate Elements	Applicable Charges
2 Channel Terms (CT)	Monthly and nonrecurring
Channel Mileage (CM)	Monthly
1 ASWC	Monthly

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F. APPLICATION OF RATES AND CHARGES

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1. The minimum service period for DS1 High Capacity services is two months. The minimum service period for a DS3 High Capacity service is one year. (T)

2. If the Customer requests the addition of B8ZS and/or ESF options to an existing high capacity DS1 service, or the addition of a B8ZS to an existing high capacity DS3 service, a charge equal to the channel termination first non-recurring change charge will apply for each channel termination converted. This rate application does not apply when either of these options are initially ordered with the service. (T)

3. Coordinated Retermination (T)

   For 1.544 Mbps/DS1 High Capacity or 44.736 Mbps/DS3 High Capacity moves of a primary circuit termination from one Company Central Office to another Company Central Office, the Customer may pay a Coordinated Retermination Charge in lieu of treating the move as a discontinuance and start of service. The Coordinated Retermination Charge applies per circuit reterminated. The Company will coordinate the work activities required in order to minimize the length of time the service being moved is unavailable. Monthly rates will apply as if the circuit remained in service with no disruption. There will be no change in minimum period requirements. No termination liabilities will apply except where the retermination eliminates chargeable services such as IOF mileage for which specific termination liabilities exist.