HIGH CAPACITY SERVICES (REGION 16)

A AVAILABILITY OF SERVICE

This Product Guide contains the terms and conditions, rates and charges for Circuit Terminations other than Non-Competitive End User Circuit Terminations, Circuit Mileage and certain Optional Features and Functions ordered for such Circuit 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.

DS1 (1.544 Mbps) (month to month) and Individual DS3 – Noncapacity System High Capacity Services with a 1-year minimum service period are available where facilities exist in Region 16. (C) (C)

Effective December 1, 2020, orders for 3- and 12-System DS3s with 1-year minimum service periods and orders for new Individual and/or System DS3s with 3-year minimum service periods are no longer permitted. Subject to Part 0, Section 1, the Company will continue to provide such DS3s pursuant to this Section on any existing 3- and 12-System DS3s with 1-year minimum service periods and existing Individual, 3- and 12-System DS3s with 3-year minimum service periods that were in-service as of December 1, 2020 or any order for such DS3s placed with the Company prior to December 1, 2020 (collectively, Existing 1-year 3- and 12-System DS3s and 3-year Individual, 3- and 12-System DS3s), subject to the following conditions: (N)

- The Company will continue to provide Existing 1-year 3- and 12-System DS3s and 3-year Individual, 3- and 12-System DS3s until (i) the Customer discontinues; or (ii) the current service commitment period expires, whichever comes first.
- Renewals of Existing 1-year 3- and 12-System DS3s and 3-year Individual, 3- and 12-System DS3s are not permitted.
- Moves and changes are permitted provided that they do not require a new minimum service period. (N)

Effective May 30, 2019, orders for new DS3s with 5- or 7-year minimum service periods are no longer permitted. Subject to Part 0, Section 1, the Company will continue to provide DS3s with 5- and 7-year minimum service periods pursuant to this Section on any existing DS3s with 5- and 7-year minimum service periods that were in-service as of May 30, 2019, or any order for DS3s with 5- or 7-year minimum service periods that was placed with the Company prior to May 30, 2019 (collectively, Existing 5-year and 7-year DS3s), subject to the following conditions:

- The Company will continue to provide Existing 5- and 7-year DS3s until (i) the Customer discontinues its 5-year or 7-year DS3; or (ii) the current service commitment period expires, whichever comes first.
- Renewals of Existing 5-year and 7-year DS3s are not permitted.
- Moves and changes are permitted provided that they do not require a new minimum service period.

B. SERVICE DESCRIPTION

A High Capacity circuit is a circuit for the transmission of nominal 64.0 kbps or 1.544 or, 44.736, Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the Customer. High Capacity circuits are provided between Customer designated premises or between a Customer designated premises and a Company hub. High Capacity DS1 and DS3 Services may also be connected to Customer transmission equipment and facilities where the Customer is provided Expanded Interconnection Service as defined in The Verizon Telephone Companies Tariff FCC No. 16, Section 17. High Capacity circuits may also be connected to an in-service Company provided integrated optical service, provided that such connections are technically and operationally feasible, as determined by the Company.

The Customer may provide the Network Channel Terminating Equipment associated with the High Capacity circuit at the Customer's premises.

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C. TECHNICAL SPECIFICATIONS PACKAGES

Technical specifications and optional features and functions are delineated in Technical Reference GR-54-CORE, Issue 1 and GR-342-CORE, Issue 1.

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

E. OPTIONAL FEATURES AND FUNCTIONS

1. Central Office Multiplexing

a. DS3 to DS1 - An arrangement that converts a 44.736 Mbps circuit to 28 DS1 circuits using digital time division multiplexing.

b. DS1 to Voice - An arrangement that converts a 1.544 Mbps circuit to 24 circuits for use with Voice Grade Services.

If this DS1 terminates in a DDS hub, a channel(s) of the DS1 can be used to provide DDS; however, DDS Service stops at the DS1 interface.

Up to 16 channels of this DS1 can be used for Direct Digital Service (DDS-like Service) with the assurance that circuit performance parameters will be met. If more than 16 channels are used for DDS-like Service, the performance parameters for the DS1 and all circuits riding the DS1 will not be guaranteed.

c. DS1 to DS0 - An arrangement that converts a 1.544 Mbps circuit to twenty three (23) 64.0 Kbps circuits utilizing digital time division multiplexing.

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

CCC provides a Bipolar with Eight Zero Substitution (B8ZS) encoding technique that allows a Customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity Channel with no restraint on the quantity or sequence of one (mark) and zero (space) bits. This arrangement allows Customers to derive 64 kbps clear channels. This Service is provided only on 1.544 Mbps High Capacity Channels between two Customer designated premises and is subject to availability of facilities. This arrangement requires the Customer-provided multiplexing equipment to be compatible with the B8ZS line code as specified in Technical Reference GR- 54-CORE, Issue 1, and Technical Reference GR- 342-CORE, Issue 1.

** A 64.0 kbps circuit is available as a circuit(s) of a 1.544 Mbps facility to a Company hub.

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F. APPLICATION OF RATES AND CHARGES

A DS3 (44.736Mbps) High Capacity Circuit Termination may be ordered as an Individual System. A Circuit Termination may be ordered with an electrical or optical interface. (D)

DS3 Circuit Terminations are non-distance sensitive and are provided on a protected basis.

1. Individual System

An Individual System is a single DS3 between a CDL and the serving wire center. The appropriate NRC is applied per Circuit Termination.

Circuit Mileage rate elements are applied per Circuit Termination when mileage between offices is required. In instances when a Circuit Termination is ordered to a second CDL in conjunction with an Individual System Circuit Termination and Circuit Mileage between offices is required Circuit Mileage rate elements are applied per circuit.

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2. 3-System#

The 3-System allows the same Customer, between the same CDL and the serving wire center, to order additional DS3 Circuit Terminations, up to a maximum of two. Additional Circuit Terminations may only be added with the same interface, electrical or optical, as the First System. The appropriate NRC is applied per Circuit Termination.

Circuit Mileage rate elements are applied per Circuit Termination when mileage between offices is required. In instances when a Circuit Termination is ordered to a second CDL in conjunction with a 3-System Circuit Termination and Circuit Mileage between offices is required Circuit Mileage rate elements are applied per circuit.

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Service availability limited. Refer to Section A preceding.

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F. APPLICATION OF RATES AND CHARGES (Cont'd)

3. 12-System#

The 12-System allows the same Customer, between the same CDL and the serving wire center, to order additional DS3 Circuit Terminations, with a maximum of eleven. Additional Circuit Terminations may only be added with the same interface, electrical or optical, as the First System. The appropriate NRC is applied per Circuit Termination.

Circuit Mileage rate elements are applied per Circuit Termination when mileage between offices is required. In instances when a Circuit Termination is ordered to a second CDL in conjunction with a 12-System Circuit Termination and Circuit Mileage between offices is required, Circuit Mileage rate elements are applied per circuit in accordance with Part 0, Section 7B2.

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4. DS3 Minimum Service Periods#

Individual System DS3 Service are offered under a one-year minimum service period. Prior to December 1, 2020, DS3s were offered under four minimum service periods, each with different rate levels. The minimum service periods were 1, 3#, 5 and 7 years.

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5. Expiration of DS3 Service Periods

Upon expiration of a service commitment period, the Customer

- For Individual System DS3s under a 1- year minimum service period, a new DS3 minimum service period will begin based on the previously effective service period.
- For Individual System DS3s under a 3-, 5- or 7-year minimum service period, billing will be converted to Service provided under a 1-year minimum service period, and a new DS3 minimum service period will begin.

1. For 3-System and 12-System DS3s, billing will be converted to Individual System(s) provided under a 1-year minimum service period, and new DS3 minimum service period(s) will begin. Nonrecurring charges will not apply for this conversion.

All terms and conditions, including subsequent Termination Liabilities will apply to the new DS3 Period.

Limited availability. Refer to Section A preceding.

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F. APPLICATION OF RATES AND CHARGES (Cont'd)

6. Discontinuance Without Liability – DS3 Minimum Service Period

Rates for DS3 Service may vary during the minimum service period; however, for DS3 Minimum Service Periods established prior to December 17, 2019, should the recurring charges for a Customer's DS3 Service increase, in aggregate, by more than 10% from the original recurring charges during the minimum service period, the Customer may, at their option, terminate the DS3 Service without penalty or liability.

The Customer may cancel the minimum service period of a DS3 Service that is provided under this Section in order to replace the DS3 Service with a Replacing Service pursuant to the Technology Migration regulations set forth in Part 0, Section 2.

7. Discontinuance With Liability – DS3 Minimum Service Period

When a DS3 Service is discontinued prior to the end of the minimum service period, the Customer will be liable for a percentage of the total monthly charges for the remaining portion of the minimum service period. This charge will be based on the rates in effect at the time of disconnect. The Customer's total liability is dependent upon the number of months remaining within the year that the Service is discontinued times the liability rate for that year plus the total monthly charges for each annual period remaining in the minimum service period times the applicable liability rate. The liability rates for each year of the minimum service period are as follows:

Year In Which Service Is Discontinued	Liability Rate
1	45%
2	30%
3	25%
4	20%
5	15%
6	10%
7	5%

For example, if a Customer with a three year minimum service period discontinues DS3 Service after six months within the 1st year, the Customer will be liable for 45% of the total monthly charges for six months, 30% of the total monthly charges for the 2nd year, 25% of the total monthly charges for the 3rd year.

Certain material previously found on this page can now be found on 1st Revised Page 4.

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F. APPLICATION OF RATES AND CHARGES (Cont'd)

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8. DS3 Technology Migration (T)

A Customer subscribing to DS3 High Capacity Service under a minimum service period may disconnect such DS3 High Capacity Service in order to replace it with a Replacing Service pursuant to the Technology Migration regulations set forth in Part 0, Section 2.

9. Downgrade to a Smaller Capacity System DS3 (T)

Downgrades from a larger capacity system to a smaller capacity system will not be allowed without the full assessment of the liabilities described in Section F7 preceding for the original larger system, plus the full application of all charges for the smaller system. Credit will not be given for any number of months the original system was maintained. A new minimum service period will be required for the smaller capacity system.

10. DS3 Service Disconnect (T)

When a Customer requests the disconnect of a DS3 Service in the three/twelve capacity system, the disconnect steps are applied on a last in, first out basis. When only the First DS3 Service exists on a three/twelve capacity system, that Service will be disconnected.

11. Coordinated Retermination (T)

For DS1 and DS3 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.