TARIFF DISTRIBUTION

FILE PACKAGE NO.: SC-21-0054

DATE:

November 29, 2021

SOUTH CAROLINA

STATE:

EFFECTIVE DATE: 12/01/2021

TYPE OF DISTRIBUTION: Approved

PURPOSE: SMARTRing - Introduce 12 Month Term, Grandfather Terms Greater than 12 Months

TARIFF SECTION	PAGE NUMBER	PAGE REVISION
H007	30	0005
H007	30.0.1	0002
H007	31.1	0005
H007	34	0004
H007	34.1	0000
H007	35	0008
H007	35.0.1	0007
H007	35.1	0004
H007	36	0005
H007	36.0.1	0006
H007	36.1	0005
H007	36.2	0003

(N)

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EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.6 Reserved for Future Use

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service

Service Availability

Effective December 1, 2021, neither new nor existing customers will be permitted to purchase new SMARTRing Service ("Service"). In addition, (A) Service Payment Plans greater than 12-months in length will no longer be available; and (B) requests to move, add, change, upgrade, or downgrade existing Service arrangements will not be accepted, with the following exceptions: (1) existing customers will be permitted to modify their existing Service and will be able to add new circuits to their existing Service, but will not be permitted to add new nodes in any locations; (2) any such new circuits will be subject to the customer's existing term payment plan or term agreement for the Service to which they are added. Following the expiration of a customer's existing term agreement, Service will be provided on a month-to-month basis at the applicable Month-to-Month rates until the service is discontinued.

Effective November 30, 2023, unless specified to the contrary in their existing Service agreements, existing customers may not renew Payment Plans or term agreements for Service. In addition, no move, add, or change orders of any type will be accepted.

B7.7.1 General

A. SMARTRing service is a dedicated, high capacity, network designed to provide increased reliability and functionality via a self-healing ring topology between multiple customer designated locations and Company Central Offices where facilities can be made available as determined by the Company. This network consists of fiber routed through local, alternate central office, internodal and/or interoffice channel facilities that transmit DS1, DS3, STS-1, OC-3, OC-12, OC-48, OC-192, 10 Mbps, 100 Mbps, Fractional 1000 Mbps and/or 1000 Mbps channel services simultaneously over primary and alternate paths between customer designated locations and Company Central Offices. This ring topology will continually monitor DS1, DS3, STS-1, OC-3, OC-12, OC-48, OC-192, 10 Mbps, 100 Mbps, Fractional 1000 Mbps and/or 1000 Mbps, service quality, detect any failure within the system, and automatically self-heal itself around a point of failure to ensure the flow of DS1, DS3, STS-1, OC-3, OC-12, OC-48, OC-192, 10 Mbps, 100 Mbps, Fractional 1000 Mbps and/or 1000 Mbps services between locations within the self-healing network. SMARTRing service further provides an adjunct optional feature and function capability for the establishment of a virtual packet ring which may be utilized for the transport of Basic Shared Ethernet LAN traffic on a best effort basis. For locations where a customer requests SMARTRing service and facilities are not available, construction charges will apply as set forth in Section B5. for cases involving extraordinary cost.

Customers may purchase SMARTRing asymmetrical¹ optical interfaces up to the full ring capacity at a customer node or central office node, as shown in the Channel Interface chart following. For example, an OC-12 SMARTRing may have an OC-12 asymmetrical optical interface and an OC-48 SMARTRing may have an OC-48 asymmetrical optical interface. The interface capacity cannot exceed the node capacity of the host SMARTRing.

B. SMARTRing service is available at OC-3, OC-3+, OC-12, OC-48, 48+, OC-192 and OC-192+ capacities.

OC-3 SMARTRing service is available as an individual service or in an Overlay Ring Arrangement riding the customer's host OC-12, OC-48, OC-48+, OC-192 or OC-192+ SMARTRing service. OC-3 SMARTRing service provides an equivalent capacity of 3 DS3s, or any combination thereof not to exceed an OC-3 capacity.

Channel Interface Capacity Reallocation allows the customer to reallocate channel interfaces on a node subsequent to the initial installation of the channel interfaces.

Effective December 2, 2004, OC-3+ SMARTRing service is not available for new individual service installations. Existing OC-3+ SMARTRing service installed as an individual service, or in combination with OC-12 SMARTRing service, as of December 2, 2004 may continue in place. OC-3+ SMARTRing service Overlay Ring Arrangements riding the customer's host OC-48, OC-48+, OC-192 or OC-192+ SMARTRing service are available for host rings installed prior to December 2, 2004. OC-3+ SMARTRing service provides an equivalent OC-3 capacity, not to exceed 3 DS3s at each node, with a maximum ring capacity of 12 DS3s, not to exceed an OC-12 ring capacity.

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- **Note 1:** An asymmetrical arrangement allows a customer to input a lower level interface at one node and aggregate onto a higher level optical interface at another Customer Node. For example, the customer has a four node OC-48 SMARTRing with DS3 interfaces at Nodes A, B and C. The customer wants to aggregate multiple DS3s to Node location D, which can be an OC-48 optical interface. The customer can aggregate up to 48 DS3 interfaces to the OC-48 optical interface at Node D via Connecting Facility Assignments (CFA) in the ordering process.

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.1 General (Cont'd)

B. (Cont'd)

Effective May 30, 2015, (i) term plans for OC-3+ SMARTRing Service (including OC-3+ Overlay Ring Arrangements) may not be extended or renewed, (ii) OC-3+ Overlay Ring Arrangements may no longer be established on customers' host OC-12, OC-48, OC-48+, OC-192 or OC-192+ SMARTRing Service, and (iii) move, addition or change orders for OC-3+ SMARTRing Service (including OC-3+ Overlay Ring Arrangements) will no longer be accepted. No later than November 30, 2015, or upon expiration of customers' existing term plans, whichever is later, OC-3+ SMARTRing Service (including OC-3+ Overlay Ring Arrangements) must be disconnected.

When a customer orders OC-3+ SMARTRing service in combination with OC-12 SMARTRing service, capacity and channel (M) interface availability at each Customer Node and Central Office Node location is determined by the size node ordered by the customer.

OC-12 SMARTRing service is available as an individual service, or in combination with OC-3+ SMARTRing service, or in an Overlay Ring Arrangement riding the customer's host OC-48, OC-48+, OC-192, or OC-192+ SMARTRing service. OC-12 SMARTRing service provides an equivalent capacity of 12 DS3s.

OC-48 SMARTRing service is available as an individual service, or with overlaying rings in capacities of OC-3, OC-3+ and/or OC-12, or in an Overlay Ring Arrangement riding the customer's OC-192 or OC-192+ SMARTRing service. OC-48 SMARTRing service provides an equivalent capacity of 48 DS3s.

OC-48+ SMARTRing service is available as an individual bi-directional service, or with overlaying rings in capacities of OC-3, OC-3+ and/or OC-12, or in an Overlay Ring Arrangement riding the customer's OC-192+ SMARTRing service. It provides equivalent capacity of 24 DS3s between consecutive node locations on the ring. The maximum capacity of the OC-48+ SMARTRing service is determined by the number of Customer and Central Office nodes on the ring.

OC-192 SMARTRing service is available as an individual service, or with overlaying rings in capacities of OC-3, OC-3+, OC-12 and/or OC-48. OC-192 SMARTRing service provides an equivalent capacity of 192 DS3s.

OC-192+ SMARTRing service is available as an individual bi-directional service, or with overlaying rings in capacities of OC-3, OC-3+, OC-12, OC-48 and/or OC-48+. It provides equivalent capacity of 96 DS3s between consecutive node locations on the ring. The maximum capacity of the OC-192+ SMARTRing service is determined by the number of Customer and Central Office nodes on the ring.

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.2 Application of Rates (Cont'd)

- E. SMARTRing service OC-3, OC-12, or OC-48 channel interfaces are associated with optical circuits within a SMARTRing service arrangement. These optical circuits may be provisioned as concatenated. When an optical circuit is provisioned as concatenated, the multiple STS-1s within the optical circuit are provided as a single entity with a single overhead channel. When an optical circuit is provisioned as concatenated at the time the circuit is installed, there is no additional charge for provisioning it as concatenated. When an existing non-concatenated optical circuit is requested to be reconfigured as concatenated, a concatenation rearrangement charge shall apply. This rearrangement charge shall also apply for existing concatenated circuits that are requested to be converted to non-concatenated.
- F. SMARTRing service interfaces may be ordered as asymmetrical (i.e., a circuit enters one node at a lower level interface and exits at another node at a higher level interface). For example, a customer may have a service that connects to a ring via an OC-3 interface at a node. That service is then transported around the ring and connects via an OC-12 interface to another of the customer's services. The allowable asymmetrical interface arrangements for the various ring sizes are as shown in Technical Reference TR-73582. The interface rates for asymmetrical arrangements are the same as the rates for symmetrical arrangements except as follows:
 - For lower level DS1 interfaces in an asymmetrical arrangement with an STS-1 interface, the DS1 within an STS-1 Asymmetrical Arrangement interface rate element applies in lieu of the STS-1 interface for the higher level termination.
 - For lower level DS1 interfaces in an asymmetrical arrangement with a DS3 interface, the DS3 (Asymmetrical with DS1) interface rate element applies in lieu of the DS3 interface for the higher level termination of the asymmetrical arrangement
- G. In addition, customers with DS3 interfaces at the Customer Node electing to connect with DS1 services at a Central Office Node, must obtain a 28 DS1 Channel System, and the appropriate number of DS1 Channel Interfaces. The applicable rate elements for this arrangement are a DS3 Interface at the Customer Node and a 28 DS1 Channel System with DS1 Interfaces at the Central Office Node. The SMARTRing service 28 DS1 Channel System does not require a DS3 interface at the Central Office Node. A maximum of 28 DS1 Channel Interfaces can be activated for each 28 DS1 System utilized. Nonrecurring charges apply for each 28 DS1 Channel System. Nonrecurring charges also apply for each DS1 Channel Interface in a 28 DS1 Channel System. The recurring rate applies for each 28 DS1 Channel System and each DS1 Channel Interface in a 28 DS1 Channel System.
- H. In order to accommodate more flexible customer situations, SMARTRing service is available under several payment plans: 12 months, 36 Month Term Payment Plan (24-48 months)¹, 60 Month Term Payment Plan (49-72 months)¹, or 84 Month Term Payment Plan (73-96 months)¹. The 12, 36, 60, and 84 Month Term Payment Plans¹ are provided under conditions specified in the Channel Services Payment Plan, (CSPP), B2.4.9 preceding, except as modified following. For all payment plans, the following terms and conditions apply:
 - 1. All rate elements, except Channel Interfaces for a given SMARTRing service, whether initially or subsequently ordered, must be provided under the same payment plan with the same service period and are coterminous upon disconnect of the SMARTRing service. Channel Interfaces may be ordered under payment plans equal to or less than the selected payment period for the given SMARTRing service.
 - 2. The *month-to-month* rates applicable *upon* payment plan *expiration* are subject to Company-initiated changes.
 - **Note 1:** All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, thencurrent MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

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B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges

- A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service)
 - 1. Local Channel Mileage Rates (All Capacities)

			Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
1.		al Channel Mileage Rates capacities)								
	(a)	Per Local Channel	\$500.00	-	-	-	-	-	1HVXX	(N)
	(b)	Per quarter air mile	-	\$95.00	\$83.00	\$83.00	\$73.00	\$68.00	1HVAX	(N)
2.		rnate Central Office Channel Milea Capacities)	age Rates							
	(a)	Alternate C.O. Channel, per channel	500.00	-	-	-	-	-	1HAXX	(N)
	(b)	Per quarter air mile	-	685.00	280.00	280.00	175.00	140.00	1HAAX	(N)
3.	Inter	office Channel Mileage Rates								
	(a)	Fixed, OC-3 capacity	190.00	50.00	36.00	36.00	32.00	27.00	1HXFX	(N)
	(b)	Fixed, OC-12, capacity	190.00	145.00	130.00	130.00	115.00	105.00	1HXFX	(N)
	(c)	Per quarter air mile	-	35.00	30.00	30.00	23.00	18.00	1HXAX	(N)
		(OC-3 capacity)								
	(d)	Per quarter air mile (OC-12 capacity)	-	40.00	35.00	35.00	30.00	23.00	1HXAX	(N)
	(e)	Fixed, OC-3+ capacity	190.00	145.00	130.00	130.00	115.00	105.00	1HXFX	(N)
	(f)	Fixed, OC-48 and OC-48+ capacity	190.00	340.00	270.00	270.00	260.00	250.00	1HXFX	(N)
	(g)	Fixed, OC-192 and OC-192+ capacity	240.00	770.00	635.00	635.00	610.00	590.00	1HXFX	(N)
	(h)	Per quarter air mile (OC-3+ capacity)	-	45.00	35.00	35.00	30.00	23.00	1HXAX	(N)
	(i)	Per quarter air mile (OC-48 and OC-48+ capacity)	-	50.00	35.00	35.00	30.00	23.00	1HXAX	(N)
	(j)	Per quarter air mile (OC-192 and OC-192+ capacity)	-	50.00	36.00	36.00	30.00	23.00	1HXAX	(N)

Note 1: All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then-current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or (N) renewing subscribers.

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SC-21-0054

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (N) (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

4.		rnodal Channel Mileage Rates Capacities)	Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(N) (C) (C) (M) (M)
	(a)	Per Internodal Channel, Same Wire Center area	\$500.00	-	-	-	-	-	1HNXX	(N)(M)
	(b)	Per quarter air mile, Same Wire Center	-	\$1,400.00	\$535.00	\$535.00	\$415.00	\$345.00	1HNWX	(N)(M)
	(c)	Per Internodal Channel, Same Office Park/Campus Environment in Contiguous Serving Wire Center areas	500.00	-	-	-	-	-	1HNZX	(N)(M)
	(d)	Per quarter air mile, same Office Park/Campus Environment in contiguous Serving Wire Center areas	-	1,600.00	650.00	650.00	465.00	390.00	1HNCX	(N)(M)

Note 1: All term plans for SMARTRing Service which are established, renewed, or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then-current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or (N) renewing subscribers.

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

			Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
5.	Cust	omer Node (per Node)								
	(a)	OC-3 capacity	\$415.00	\$2,200.00	\$990.00	\$990.00	\$900.00	\$810.00	SHNC3	(N)
	(b)	OC-3+ capacity	415.00	2,700.00	1,845.00	1,845.00	1,575.00	1,350.00	SHNN5	(N)
	(c)	OC-12 capacity	455.00	3,400.00	1,980.00	1,980.00	1,800.00	1,575.00	SHNC1	(N)
	(d)	OC-48 capacity	455.00	5,220.00	4,410.00	4,410.00	4,050.00	3,510.00	SHNN8	(N)
	(e)	OC-48+ capacity	455.00	5,850.00	4,410.00	4,410.00	4,050.00	3,510.00	SHNN9	(N)
	(f)	OC-192 capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNN6	(N)
	(g)	OC-192+ capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNN2	(N)
6.	Cust	omer Channel Interface (per Node))							
	(a)	Per DS1	175.00	35.00	30.00	30.00	25.00	20.00	SHNBB	(N)
	(b)	Per DS3	140.00	170.00	135.00	135.00	130.00	125.00	SHNZT	(N)
	(c)	Per STS-1	190.00	220.00	170.00	170.00	150.00	140.00	SHN13	(N)
	(d)	Per OC-3, 2 fiber	190.00	255.00	190.00	190.00	170.00	160.00	SHN1D	(N)
	(e)	Per OC-3, 4 fiber	190.00	515.00	380.00	380.00	340.00	320.00	SHN15	(N)
	(f)	Per OC-12, 2 fiber	340.00	745.00	515.00	515.00	475.00	440.00	SHN1F	(N)
	(g)	Per OC-12, 4 fiber	340.00	1,490.00	1,030.00	1,030.00	950.00	880.00	SHN19	(N)
	(h)	Per OC-48, 2 fiber	420.00	1,600.00	1,325.00	1,325.00	1,215.00	1,050.00	SHN1A	(N)
	(i)	Per OC-48, 4 fiber	420.00	3,200.00	2,650.00	2,650.00	2,430.00	2,100.00	SHN1B	(N)
	(j)	Per OC-192, 2 fiber	1,600.00	7,500.00	4,800.00	4,800.00	3,300.00	2,850.00	SHNE1	(N)
	(k)	Per OC-192, 4 fiber	1,600.00	15,000.00	9,600.00	9,600.00	6,600.00	5,700.00	SHNE2	(N)
	(l)	Per DS1 within an STS-1	330.00	25.00	22.00	22.00	20.00	18.00	SHNBS	(N)
		Asymmetrical Arrangement								
	(m)	Per DS3	360.00	550.00	450.00	450.00	400.00	350.00	SHN1T	(N)
		(Asymmetrical with DS1)								
	(n)	Per 10 Mbps	450.00	500.00	175.00	175.00	155.00	140.00	SHN1M	(N)
	(0)	Per 100 Mbps (3 STS-1) -	450.00	540.00	210.00	210.00	190.00	170.00	SHN1N	(N)
		Electrical								
	(p)	Per 100 Mbps (3 STS-1) – Optical 1310 nm Single-mode	450.00	540.00	210.00	210.00	190.00	170.00	SHN3N	(N)

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

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EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

	Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
6. Customer Channel Interface (per Node) (Con	0							
(q) Per Fractional 1000 Mbps								
- 50 Mbps 850 nm Multi-mode – 1 STS-1	\$450.00	\$520.00	\$190.00	\$190.00	\$170.00	\$150.00	SHN10	(N)
- 50 Mbps 1310 nm Single-mode – 1 STS-1	450.00	520.00	190.00	190.00	170.00	150.00	SHN3O	(N)
- 150 Mbps 850 nm Multi-mode – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN1P	(N)
- 150 Mbps 1310 nm Single-mode – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN3P	(N)
- 150 Mbps 850 nm Multi-mode – 3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN3J	(N)
- 150 Mbps 1310 nm Single-mode – 3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN3L	(N)
- 300 Mbps 850 nm Multi-mode – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN1R	(N)
- 300 Mbps 1310 nm Single-mode – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN3R	(N)
- 300 Mbps 850 nm Multi-mode – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN3M	(N)
- 300 Mbps 1310 nm Single-mode – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN3Q	(N)
- 450 Mbps 850 nm Multi-mode – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHN1U	(N)
- 450 Mbps 1310 nm Single-mode – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHN3U	(N)
 450 Mbps 850 nm Multi-mode – 9 STS-1 	450.00	640.00	340.00	340.00	310.00	290.00	SHN3T	(N)
 450 Mbps 1310 nm Single-mode – 9 STS-1 	450.00	640.00	340.00	340.00	310.00	290.00	SHN39	(N)
 600 Mbps 850 nm Multi-mode – 12c STS-1 	450.00	700.00	380.00	380.00	340.00	320.00	SHN1V	(N)
- 600 Mbps 1310 nm Single-mode – 12c STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHN3V	(N)
 600 Mbps 850 nm Multi-mode – 12 STS-1 	450.00	700.00	380.00	380.00	340.00	320.00	SHNBY	(N)
- 600 Mbps 1310 nm Single-mode – 12 STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNBZ	(N)
- 1000 Mbps 850 nm Multi-mode – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN1K	(N)
- 1000 Mbps 1310 nm Single-mode – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN3K	(N)
- 1000 Mbps 850 nm Multi-mode – 24c STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN3G	(N)
- 1000 Mbps 1310 nm Single-mode – 24c STS-	400.00	740.00	520.00	520.00	475.00	425.00	SHN3H	(N)
(r) Per Flex DS1	360.00	45.00	34.00	34.00	27.00	25.00	SHN1Q	(N)
(s) Per 100 Mbps (1 STS-1) Metro Ethernet	800.00	500.00	175.00	175.00	155.00	140.00	SHN1J	(N)
Backbone								
(t) Per 100 Mbps (3 STS-1) Metro Ethernet	800.00	540.00	210.00	210.00	190.00	170.00	SHN33	(N)
Backbone								
(u) Per 1000 Mbps Metro Ethernet Backbone	850.00	740.00	520.00	520.00	475.00	425.00	SHN34	(N)

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Note 1: All term plans for SMARTRing Service which are established, renewed, or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, thencurrent MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

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EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

6.	Cust	omer Channel Interface (per Node)	Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
0.	(v)	Per Fractional 1000 Mbps Metro Ethernet Backbone	, (com d)							(M)
		- 150 Mbps (3 STS-1)	\$850.00	\$560.00	\$230.00	\$230.00	\$210.00	\$190.00	SHN35	(N)(M)
		- 300 Mbps (6 STS-1) - 450 Mbps (9 STS-1)	850.00 850.00	600.00 640.00	300.00 340.00	300.00 340.00	280.00 310.00	260.00 290.00	SHN36 SHN37	(N)(M) (N)(M)
		- 600 Mbps (12 STS-1)	850.00	700.00	380.00	380.00	340.00	320.00	SHN38	(N)(M)
	(w)	Per Fibre Connection (FICON) (21 STS-1)	500.00	810.00	570.00	570.00	520.00	470.00	SHNBC	(N)
	(x)	Per Fibre Connection (FICON) (24c STS-1)	500.00	810.00	570.00	570.00	520.00	470.00	SHNBD	(N)
	(y)	Per Fibre Connection (FICON) Express (48 STS-1)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNBE	(N)
	(z)	(46 STS-1) Per Fibre Connection (FICON) Express (48c STS-1)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNBF	(N)
	(aa)	Per Fibre Channel 100 (21 STS-1)	500.00	830.00	580.00	580.00	530.00	480.00	SHNBG	(N)
	(ab)	Per Fibre Channel 100 (24c STS-1)	500.00	830.00	580.00	580.00	530.00	480.00	SHNBH	(N)
	(ac)	Per Fibre Channel 200 (48 STS-1)	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNBJ	(N)
	(ad)	Per Fibre Channel 200 (48c STS-1)	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNBK	(N)

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

(M1)

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SC-21-0054

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

		Nonnoouning	Month To	12	24 to 48 ¹	49 to 72 ¹	73 to 96 ¹		
		Nonrecurring Charge	Month	12 Months		Months	Months	USOC	(C) (C)
7.	Central Office Node (per Node)	Charge	wionui	Months	wonths	wontins	WIGHTIS	USUC	(0)
(a)	OC-3 capacity	\$385.00	\$1.400.00	\$990.00	\$990.00	\$900.00	\$810.00	SHNH3	(N)(M)
(b)	OC-3+ capacity	385.00	2,250.00	1,845.00	1,845.00	1,575.00	1,350.00	SHNH5	(N)(M)
(c)	OC-12 capacity	440.00	2,600.00	1,980.00	1,980.00	1,800.00	1,575.00	SHNH1	(N)(M)
(d)	OC-48 capacity	440.00	4,860.00	4,110.00	4,110.00	4,050.00	3,510.00	SHNH8	(N)(M)
(e)	OC-48+ capacity	440.00	5,490.00	4,110.00	4,110.00	4,050.00	3,510.00	SHNH9	(N)(M)
(f)	OC-192 capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNH7	(N)(M)
(g)	OC-192+ capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNH6	(N)(M)
(h)	OC-3 Shared Node Interconnection	550.00	980.00	690.00	690.00	630.00	570.00	SHNHA	(N)(M)
(i)	OC-12 Shared Node Interconnection	550.00	1,820.00	1,390.00	1,390.00	1,260.00	1,100.00	SHNHB	(N)(M)
(j)	OC-48 Shared Node Interconnection	550.00	3,400.00	2,880.00	2,880.00	2,840.00	2,460.00	SHNHC	(N)(M)
(k)	OC-48+ Shared Node Interconnection	550.00	3,840.00	2,880.00	2,880.00	2,840.00	2,460.00	SHNHD	(N)(M)
8.	Central Office Channel Interface (per N	lode)							
(a)	Per DS1	140.00	35.00	30.00	30.00	25.00	20.00	SHNCB	(N)
(b)	Per DS3	205.00	115.00	85.00	85.00	80.00	75.00	SHNYT	(N)
(c)	Per STS-1	190.00	150.00	105.00	105.00	100.00	90.00	SHNO2	(N)
(d)	Per OC-3, 2 fiber	340.00	255.00	190.00	190.00	170.00	160.00	SHNCD	(N)
(e)	Per OC-3, 4 fiber	340.00	515.00	380.00	380.00	340.00	320.00	SHNO4	(N)
(f)	Per OC-12, 2 fiber	535.00	745.00	515.00	515.00	475.00	440.00	SHNCF	(N)
(g)	Per OC-12, 4 fiber	535.00	1,490.00	1,030.00	1,030.00	950.00	880.00	SHNC9	(N)
(h)	Per OC-48, 2 fiber	650.00	1,600.00	1,325.00	1,325.00	1,215.00	1,050.00	SHNCJ	(N)
(i)	Per OC-48, 4 fiber	650.00	3,200.00	2,650.00	2,650.00	2,430.00	2,100.00	SHNCK	(N)
(j)	Per OC-192, 2 fiber	1,600.00	7,500.00	4,800.00	4,800.00	3,300.00	2,850.00	SHNE3	(N)
(k)	Per OC-192, 4 fiber	1,600.00	15,000.00	9,600.00	9,600.00	6,600.00	5,700.00	SHNE4	(N)
(1)	Per 28 DS1 Channel System (DS3)	195.00	650.00	550.00	550.00	500.00	450.00	SHNW8	(N)
(m)	Per 28 DS1 Channel System (STS-1)	195.00	750.00	550.00	550.00	500.00	450.00	SHNCS	(N)
(n)	Per DS1 on 28 DS1 Channel System	170.00	12.00	8.00	8.00	7.00	6.00	SHNCA	(N)
	(DS3)								
(o)	Per DS1 on 28 DS1 Channel System	170.00	40.00	35.00	35.00	30.00	25.00	SHNCG	(N)
	(STS-1)								
(p)	Per DS1 within an STS-1	360.00	25.00	22.00	22.00	20.00	18.00	SHNCH	(N)
	Asymmetrical Arrangement								
(q)	Per DS3	400.00	550.00	450.00	450.00	400.00	350.00	SHNCT	(N)
	(Asymmetrical with DS1)								
(r)	Per 10 Mbps	450.00	500.00	175.00	175.00	155.00	140.00	SHNCM	(N)
(s)	Per 100 Mbps (3 STS-1) - Electrical	450.00	540.00	210.00	210.00	190.00	170.00	SHNCN	(N)
(t)	Per 100 Mbps (3 STS-1) - Optical	550.00	540.00	210.00	210.00	190.00	170.00	SHNDU	(N)
. /	• • • •								

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

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SC-21-0054

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

		Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C)
8.	Central Office Channel Interface (per Node)		WIOIIII	monuns	wonths	wontins	WOITINS	USUC	(0)
(u)	Per Fractional 1000 Mbps								(M)
	- 50 Mbps – 1 STS-1	\$450.00	\$520.00	\$190.00	\$190.00	\$170.00	\$150.00	SHNCO	(N)(M)
	- 150 Mbps – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHNCP	(N)(M)
	- 150 Mbps –3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHNDV	(N)(M)
	- 300 Mbps – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHNCR	
	- 300 Mbps – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHNDX	
	- 450 Mbps – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHNCU	(N)(M)
	- 450 Mbps – 9 STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHNDY	(N)(M)
	- 600 Mbps – 12c STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNCV	(N)(M)
	- 600 Mbps – 12 STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNDZ	(N)(M)
	- 1000 Mbps – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHNCW	(N)(M)
	- 1000 Mbps – 24c STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHNDW	(N)(M)
(v)	Per Flex DS1	250.00	40.00	30.00	30.00	25.00	20.00	SHNCQ	(N)(M)
(w)	Per 100 Mbps (1 STS-1) Metro Ethernet Backbone	800.00	500.00	175.00	175.00	155.00	140.00	SHNOJ	(N)
(x)	Per 100 Mbps (3 STS-1) Metro Ethernet Backbone	800.00	540.00	210.00	210.00	190.00	170.00	SHNCX	(N)
(y)	Per 1000 Mbps Metro Ethernet Backbone	850.00	740.00	520.00	520.00	475.00	425.00	SHNC5	(N)
(z)	Per Fractional 1000 Mbps Metro Ethernet Backbone								
	- 150 Mbps (3 STS-1)	850.00	560.00	230.00	230.00	210.00	190.00	SHND5	(N)
	- 300 Mbps (6 STS-1)	850.00	600.00	300.00	300.00	280.00	260.00	SHND6	(N)
	- 450 Mbps (9 STS-1)	850.00	640.00	340.00	340.00	310.00	290.00	SHND7	(N)
	- 600 Mbps (12 STS-1)	850.00	700.00	380.00	380.00	340.00	320.00	SHND8	(N)
(aa)	Per Fibre Connection (FICON) (21 STS-1)	500.00	810.00	570.00	570.00	520.00	470.00	SHNDB	(N)
(ab)	Per Fibre Connection (FICON) (24c STS-1)	500.00	810.00	570.00	570.00	520.00	470.00	SHNDC	(N)
(ac)	Per Fibre Connection (FICON) Express (48 STS-1)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNDD	(N)
(ad)	Per Fibre Connection (FICON) Express (48c STS-1)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNDE	(N)
(ae)	Per Fibre Channel 100 (21 STS-1)	500.00	830.00	580.00	580.00	530.00	480.00	SHNDF	(N)
(af)	Per Fibre Channel 100 (24c STS-1)	500.00	830.00	580.00	580.00	530.00	480.00	SHNDG	(N)
(ag)	Per Fibre Channel 200 (48 STS-1)	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNDH	(N)
(ah)	Per Fibre Channel 200 (48c STS-1)	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNDJ	(N)

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EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

- A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)
 - 9. Channel Interface Capacity Reallocation

10.	(a) Concatenation	Per Node, Per occurrence Rearrangement Charge	ce				Ch	ecurring narge 65.00	USOC SHRBC	
11.	(a)	Per OC-3, OC-12 or OC as concatenated or non-o initial installation of the Service Rearrangement	concatenated subs	e	Monthly Rate \$-]	Nonrec Chai Initial Su \$-	rge	USOC NRCCN	
11.	(a) (b)	Surveillance, Per Node, Reconfiguration, Per ST			- - 12 Months	24 to 48 ² Months	- 49 to 72 ² Months	255.00 365.00 73 to 96 ² Months	SHNRR SHNR1 USOC	(C) (C
12.		Ethernet LAN Access Link	k							
	(1) Per 10	Premises Access Link Co) Mbps Basic Shared net LAN Access Link -	\$2,050.00	\$730.00	\$250.00	\$250.00	\$220.00	\$200.00	SHN1G	(N
	(2) Per 10	00 Mbps Basic Shared net LAN Access Link -	2,050.00	780.00	300.00	300.00	280.00	250.00	SHN1H	(N
	(3) Per 10 Ethern	00 Mbps Basic Shared 1et LAN Access Link – al 1310 nm Single-mode ¹	2,050.00	780.00	300.00	300.00	280.00	250.00	SHN11	(N
		actional 1000 Mbps Basic		LAN Access		ical ¹				
	•	850 nm Multi-mode	2,050.00	750.00	280.00	280.00	250.00	240.00	SHN1S	(N
		1310 nm Single-mode	2,050.00	750.00	280.00	280.00	250.00	240.00	SHN3S	()
		ops 850 nm Multi-mode	2,050.00	810.00 810.00	330.00	330.00	300.00	280.00	SHN1W	()
		ops 1310 nm Single-mode ops 850 nm Multi-mode	2,050.00 2,050.00	810.00 870.00	330.00 440.00	330.00 440.00	300.00 410.00	280.00 380.00	SHN3W SHN1X	() ()
		ops 1310 nm Single-mode	<i>,</i>	870.00 870.00	440.00	440.00	410.00	380.00	SHN1X SHN3X	() ()
		os 850 nm Multi-mode	2,050.00	930.00	490.00	490.00	450.00	420.00	SHN1Y	(1
		os 1310 nm Single-mode	2,050.00	930.00	490.00	490.00	450.00	420.00	SHN3Y	(1
		os 850 nm Multi-mode	2,050.00	1,020.00	550.00	550.00	490.00	460.00	SHN1Z	(1
		os 1310 nm Single-mode	2,050.00	1,020.00	550.00	550.00	490.00	460.00	SHN3Z	(1
			2 0 5 0 00	1,120.00	650.00	650.00	590.00	560.00	SHNJA	(N
	- 1000 Mb	ps 850 nm Multi-mode	2,050.00	1,120.00	050.00	030.00	590.00	200.00	JIIIJA	(1)

Note 1: Basic Shared Ethernet LAN Access Link interfaces are available based on equipment capability and only at Customer Nodes.

Note 2: All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then-current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

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B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

		Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
12.	Basic Shared Ethernet LAN Access Link	(Cont'd)							
	(b) Metro Ethernet Access Link Connec	tion							
	 Per Fractional 1000 Mbps Access Link – Metro Ethernet Customer Premises 								
	- 150 Mbps 850 nm Multi-mode	\$2,050.00	\$980.00	\$800.00	\$800.00	\$500.00	\$400.00	SHNMA	(N)
	- 150 Mbps 1310 nm Single-mode	2,050.00	980.00	800.00	800.00	500.00	400.00	SHNSA	(N)
	- 300 Mbps 850 nm Multi-mode	2,050.00	1,220.00	930.00	930.00	580.00	540.00	SHNMB	(N)
	- 300 Mbps 1310 nm Single-mode	2,050.00	1,220.00	930.00	930.00	580.00	540.00	SHNSB	(N)
	- 450 Mbps 850 nm Multi-mode	2,050.00	1,310.00	990.00	990.00	630.00	590.00	SHNMC	(N)
	- 450 Mbps 1310 nm Single-mode	2,050.00	1,310.00	990.00	990.00	630.00	590.00	SHNSC	(N)
	- 600 Mbps 850 nm Multi-mode	2,050.00	1,430.00	1,075.00	1,075.00	690.00	650.00	SHNMD	(N)
	- 600 Mbps 1310 nm Single-mode	2,050.00	1,430.00	1,075.00	1,075.00	690.00	650.00	SHNSD	(N)
	- 1000 Mbps 850 nm Multi-mode	2,050.00	1,570.00	1,200.00	1,200.00	830.00	790.00	SHNME	(N)
	- 1000 Mbps 1310 nm Single-mode	2,050.00	1,570.00	1,200.00	1,200.00	830.00	790.00	SHNSE	(N)
	(2) Per Fractional 1000 Mbps								
	Access Link – Metro Ethernet								
	Central Office								
	- 150 Mbps	2,050.00	980.00	800.00	800.00	500.00	400.00	SHNOA	(N)
	- 300 Mbps	2,050.00	1,220.00	930.00	930.00	580.00	540.00	SHNOB	(N)
	- 450 Mbps	2,050.00	1,310.00	990.00	990.00	630.00	590.00	SHNOC	(N)
	- 600 Mbps	2,050.00	1,430.00	1,075.00	1,075.00	690.00	650.00	SHNOD	(N)
	- 1000 Mbps	2,050.00	1,570.00	1,200.00	1,200.00	830.00	790.00	SHNOE	(N)
13.	Virtual Packet Ring Rearrangement Char	ge							
		-		Monthly	Non	recurring	Charge		

- Rate
 Initial
 Subsequent

 (a)
 Per service order associated with a rearrangement to increase or decrease a virtual packet ring subsequent to the initial setup of the virtual packet ring
 \$500.00
 - **Note 1:** All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then-current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

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SHNRP