

TARIFF DISTRIBUTION

FILE PACKAGE NO.: NC-21-0042

DATE: December 9, 2021

STATE: NORTH CAROLINA

EFFECTIVE DATE: 12/01/2021

TYPE OF DISTRIBUTION: Approved

PURPOSE: Introduce new 12 Month Term and grandfather
(obsolete) terms greater than 12 months for
SMARTRing Service.

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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 SMARTRing Service. In addition, no move, add, or change orders of any type will be accepted.

(N)

(N)

(N)

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 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 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 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, preceding 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.

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)

B7.7.2 Application of Rates (Cont'd)

- 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. (T)
 3. A termination charge will be applicable if services provided under a CSPP arrangement are disconnected prior to the end of the chosen service period. The applicable charge is equal to the number of months remaining in the rate stabilized service period times fifty percent (50%) of the monthly rates for SMARTRing service which include all Nodes, Local Channels, Alternate Central Office Channels, Internodal Channels and/or Interoffice Channels provided under the CSPP arrangement. For services under the month-to-month payment plan, a termination charge is equal to the number of months remaining in the twelve month minimum times the month-to-month rates in effect for SMARTRing service at the time of termination.
Termination liability charges will not apply to any OC-3+ SMARTRing service disconnected on or after May 30, 2015.
 4. When a service period under an existing CSPP arrangement is completed and a customer elects to revert to a month-to-month payment option, no minimum period is applicable.
 5. Additions of services or rate elements, for activating spare or unused capacities of a SMARTRing service under a CSPP arrangement, must be activated at the same rates and charges specified under the existing CSPP arrangement. Channel interfaces may be ordered as specified in 1. preceding.
 6. Additions of services or rate elements, i.e. new local channels, interoffice channels, etc., other than for activating spare or unused capacities, must be under a new CSPP arrangement at rates and charges as specified in 1. preceding. The new CSPP arrangement must be at least 24 months and must be coterminous with the CSPP arrangement for the existing SMARTRing service.

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 renewing subscribers. (N)

B7. DIGITAL NETWORK SERVICE

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

B7.7.3 Architecture (Cont'd)

A. SMARTRing Service (Cont'd)

Applicable rate elements for this service are: (Cont'd)

- Metro Ethernet and SMARTRing Metro Ethernet Access Links are limited to the following connections:

<u>Metro Ethernet Connection</u>	<u>SMARTRing Metro Ethernet Access Link Fractional 1000 Mbps at – Central Office</u>	<u>SMARTRing Metro Ethernet Access Link Fractional 1000 Mbps at – Customer Premises</u>
Basic 1000 Mbps	1000 Mbps	1000 Mbps
Premium 100 Mbps Optical (Fixed)	150 Mbps	150 Mbps
Premium 250 Mbps (Fixed)	300 Mbps	300 Mbps
Premium 500 Mbps (Fixed)	600 Mbps	600 Mbps
Premium 100, 250, 500 Mbps (Burst)	1000 Mbps	1000 Mbps
Premium 900 Mbps, 1000 Mbps	1000 Mbps	1000 Mbps
Virtual Ethernet Service 100 Mbps	150 Mbps	150 Mbps
Virtual Ethernet Service 200 Mbps	300 Mbps	300 Mbps
Virtual Ethernet Service 300 Mbps	300 Mbps	300 Mbps
Virtual Ethernet Service 450 Mbps	450 Mbps	450 Mbps
Virtual Ethernet Service 600 Mbps	600 Mbps	600 Mbps
Virtual Ethernet Service 750, 900, 1000 Mbps	1000 Mbps	1000 Mbps

- Customer requested upgrades of SMARTRing service will involve a service outage associated with Basic Shared Ethernet LAN Access Links, for which a credit for service outage shall not apply.
- Shared Node Interconnection (SNI) is available, based on equipment capability, whereby two SMARTRing service arrangements belonging to the same customer may share a node in a central office that is common to both rings.

B7.7.4 Rates and Charges

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

	Nonrecurring Charge	Month To Month	12 Months	24 to 48¹ Months	49 to 72¹ Months	73 to 96¹ Months	USOC	
1. Local Channel Mileage Rates (All capacities)								
(a) Per Local Channel	\$500.00	-	-	-	-	-	1HVXX	(C)
(b) Per quarter air mile	-	\$95.00	\$83.00	\$83.00	\$73.00	\$68.00	1HVAX	(N)

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

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 48¹ Months	49 to 72¹ Months	73 to 96¹ Months	USOC	
2. Alternate Central Office Channel Mileage Rates (All Capacities)								(C)
(a) Alternate C.O. Channel, per channel	500.00	-	-	-	-	-	1HAXX	(C)
(b) Per quarter air mile	-	685.00	280.00	280.00	175.00	140.00	1HAAX	(N)
3. Interoffice 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) Fixed, OC-3+ capacity	190.00	145.00	130.00	130.00	115.00	105.00	1HXFX	(N)
(d) Fixed, OC-48 and OC-48+ capacity	190.00	340.00	270.00	270.00	260.00	250.00	1HXFX	(N)
(e) Fixed, OC-192 and OC-192+ capacity	240.00	770.00	635.00	635.00	610.00	590.00	1HXFX	(N)
(f) Per quarter air mile (OC-3 capacity)	-	45.00	32.00	32.00	23.00	18.00	1HXAX	(N)
(g) Per quarter air mile (OC-12 capacity)	-	50.00	36.00	36.00	30.00	23.00	1HXAX	(N)
(h) Per quarter air mile (OC-3+ capacity)	-	50.00	36.00	36.00	30.00	23.00	1HXAX	(N)
(i) Per quarter air mile (OC-48 and OC-48+ capacity)	-	50.00	36.00	36.00	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)
4. Internodal Channel Mileage Rates (All Capacities)								
(a) Per Internodal Channel, Same Wire Center area	500.00	-	-	-	-	-	1HNXX	
(b) Per quarter air mile, Same Wire Center	-	1,400.00	535.00	535.00	415.00	345.00	1HNWX	(N)
(c) Per Internodal Channel, Same Office Park/Campus Environment in Contiguous Serving Wire Center areas	500.00	-	-	-	-	-	1HNZX	
(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)

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

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)
5. Customer Node (per Node)								
(a) OC-3 capacity	\$440.00	\$2,200.00	\$990.00	\$990.00	\$900.00	\$810.00	SHNC3	(M)(N)
(b) OC-3+ capacity	440.00	2,700.00	1,845.00	1,845.00	1,575.00	1,350.00	SHNN5	(M)(N)
(c) OC-12 capacity	465.00	3,400.00	1,980.00	1,980.00	1,800.00	1,575.00	SHNC1	(M)(N)
(d) OC-48 capacity	465.00	5,220.00	4,410.00	4,410.00	4,050.00	3,510.00	SHNN8	(M)(N)
(e) OC-48+ capacity	465.00	5,850.00	4,410.00	4,410.00	4,050.00	3,510.00	SHNN9	(M)(N)
(f) OC-192 capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNN6	(M)(N)
(g) OC-192+ capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNN2	(M)(N)
6. Customer Channel Interface (per Node)								
(a) Per DS1	175.00	35.00	30.00	30.00	25.00	20.00	SHNBB	(N)
(b) Per DS3	130.00	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	400.00	745.00	515.00	515.00	475.00	440.00	SHN1F	(N)
(g) Per OC-12, 4 fiber	400.00	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 Asymmetrical Arrangement	330.00	25.00	22.00	22.00	20.00	18.00	SHNBS	(N)
(m) Per DS3 (Asymmetrical with DS1)	360.00	550.00	450.00	450.00	400.00	350.00	SHN1T	(N)
(n) Per 10 Mbps	450.00	500.00	175.00	175.00	155.00	140.00	SHN1M	(N)
(o) Per 100 Mbps (3 STS-1) – Electrical	450.00	540.00	210.00	210.00	190.00	170.00	SHN1N	(N)
(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. (N)

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 48¹ Months	49 to 72¹ Months	73 to 96¹ Months	USOC	
6. Customer Channel Interface (per Node) (Cont'd)								
(q) Per Fractional 1000 Mbps								
- 50 Mbps 850 nm Multi-mode – 1 STS-1	450.00	520.00	<i>190.00</i>	190.00	170.00	150.00	SHN1O	(N)
- 50 Mbps 1310 nm Single-mode – 1 STS-1	450.00	520.00	<i>190.00</i>	190.00	170.00	150.00	SHN3O	(N)
- 150 Mbps 850 nm Multi-mode – 3c STS-1	450.00	560.00	<i>230.00</i>	230.00	210.00	190.00	SHN1P	(N)
- 150 Mbps 1310 nm Single-mode – 3c STS-1	450.00	560.00	<i>230.00</i>	230.00	210.00	190.00	SHN3P	(N)
- 150 Mbps 850 nm Multi-mode – 3 STS-1	450.00	560.00	<i>230.00</i>	230.00	210.00	190.00	SHN3J	(N)
- 150 Mbps 1310 nm Single-mode – 3 STS-1	450.00	560.00	<i>230.00</i>	230.00	210.00	190.00	SHN3L	(N)
- 300 Mbps 850 nm Multi-mode – 6c STS-1	450.00	600.00	<i>300.00</i>	300.00	280.00	260.00	SHN1R	(N)
- 300 Mbps 1310 nm Single-mode – 6c STS-1	450.00	600.00	<i>300.00</i>	300.00	280.00	260.00	SHN3R	(N)
- 300 Mbps 850 nm Multi-mode – 6 STS-1	450.00	600.00	<i>300.00</i>	300.00	280.00	260.00	SHN3M	(N)
- 300 Mbps 1310 nm Single-mode – 6 STS-1	450.00	600.00	<i>300.00</i>	300.00	280.00	260.00	SHN3Q	(N)
- 450 Mbps 850 nm Multi-mode – 9c STS-1	450.00	640.00	<i>340.00</i>	340.00	310.00	290.00	SHN1U	(N)
- 450 Mbps 1310 nm Single-mode – 9c STS-1	450.00	640.00	<i>340.00</i>	340.00	310.00	290.00	SHN3U	(N)
- 450 Mbps 850 nm Multi-mode – 9 STS-1	450.00	640.00	<i>340.00</i>	340.00	310.00	290.00	SHN3T	(N)
- 450 Mbps 1310 nm Single-mode – 9 STS-1	450.00	640.00	<i>340.00</i>	340.00	310.00	290.00	SHN39	(N)
- 600 Mbps 850 nm Multi-mode – 12c STS-1	450.00	700.00	<i>380.00</i>	380.00	340.00	320.00	SHN1V	(N)
- 600 Mbps 1310 nm Single-mode – 12c STS-1	450.00	700.00	<i>380.00</i>	380.00	340.00	320.00	SHN3V	(N)
- 600 Mbps 850 nm Multi-mode – 12 STS-1	450.00	700.00	<i>380.00</i>	380.00	340.00	320.00	SHNBY	(N)
- 600 Mbps 1310 nm Single-mode – 12 STS-1	450.00	700.00	<i>380.00</i>	380.00	340.00	320.00	SHNBZ	(N)
- 1000 Mbps 850 nm Multi-mode – 21 STS-1	400.00	740.00	<i>520.00</i>	520.00	475.00	425.00	SHN1K	(N)
- 1000 Mbps 1310 nm Single-mode – 21 STS-1	400.00	740.00	<i>520.00</i>	520.00	475.00	425.00	SHN3K	(N)
- 1000 Mbps 850 nm Multi-mode – 24c STS-1	400.00	740.00	<i>520.00</i>	520.00	475.00	425.00	SHN3G	(N)
- 1000 Mbps 1310 nm Single-mode – 24c STS-1	400.00	740.00	<i>520.00</i>	520.00	475.00	425.00	SHN3H	(N)
(r) Per Flex DS1	360.00	45.00	<i>34.00</i>	34.00	27.00	25.00	SHN1Q	(N)
(s) Per 100 Mbps (1 STS-1) Metro Ethernet Backbone	800.00	500.00	<i>175.00</i>	175.00	155.00	140.00	SHN1J	(N)
(t) Per 100 Mbps (3 STS-1) Metro Ethernet Backbone	800.00	540.00	<i>210.00</i>	210.00	190.00	170.00	SHN33	(N)
(u) Per 1000 Mbps Metro Ethernet Backbone	850.00	740.00	<i>520.00</i>	520.00	475.00	425.00	SHN34	(N) (M)

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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 48¹ Months	49 to 72¹ Months	73 to 96¹ Months	USOC	
6. Customer Channel Interface (per Node) (Cont'd)								(M)
(v) Per Fractional 1000 Mbps Metro Ethernet Backbone								(M)
- 150 Mbps (3 STS-1)	\$850.00	\$560.00	<i>\$230.00</i>	\$230.00	\$210.00	\$190.00	SHN35	(M)(N)
- 300 Mbps (6 STS-1)	850.00	600.00	<i>300.00</i>	300.00	280.00	260.00	SHN36	(M)(N)
- 450 Mbps (9 STS-1)	850.00	640.00	<i>340.00</i>	340.00	310.00	290.00	SHN37	(M)(N)
- 600 Mbps (12 STS-1)	850.00	700.00	<i>380.00</i>	380.00	340.00	320.00	SHN38	(M)(N)
(w) Per Fibre Connection (FICON) (21 STS-1)	500.00	810.00	<i>570.00</i>	570.00	520.00	470.00	SHNBC	(M)(N)
(x) Per Fibre Connection (FICON) (24c STS-1)	500.00	810.00	<i>570.00</i>	570.00	520.00	470.00	SHNBD	(M)(N)
(y) Per Fibre Connection (FICON) Express (48 STS-1)	520.00	1,280.00	<i>1,060.00</i>	1,060.00	970.00	840.00	SHNBE	(M)(N)
(z) Per Fibre Connection (FICON) Express (48c STS-1)	520.00	1,280.00	<i>1,060.00</i>	1,060.00	970.00	840.00	SHNBF	(M)(N)
(aa) Per Fibre Channel 100 (21 STS-1)	500.00	830.00	<i>580.00</i>	580.00	530.00	480.00	SHNBG	(N)
(ab) Per Fibre Channel 100 (24c STS-1)	500.00	830.00	<i>580.00</i>	580.00	530.00	480.00	SHNBH	(N)
(ac) Per Fibre Channel 200 (48 STS-1)	520.00	1,360.00	<i>1,130.00</i>	1,130.00	1,030.00	890.00	SHNBJ	(N)
(ad) Per Fibre Channel 200 (48c STS-1)	520.00	1,360.00	<i>1,130.00</i>	1,130.00	1,030.00	890.00	SHNBK	(N)
7. Central Office Node (per Node)								
(a) OC-3 capacity	\$410.00	\$1,400.00	<i>\$990.00</i>	\$990.00	\$900.00	\$810.00	SHNH3	(N)
(b) OC-3+ capacity	410.00	2,250.00	<i>1,845.00</i>	1,845.00	1,575.00	1,350.00	SHNH5	(N)
(c) OC-12 capacity	465.00	2,600.00	<i>1,980.00</i>	1,980.00	1,800.00	1,575.00	SHNH1	(N)
(d) OC-48 capacity	465.00	4,860.00	<i>4,110.00</i>	4,110.00	4,050.00	3,510.00	SHNH8	(N)
(e) OC-48+ capacity	465.00	5,490.00	<i>4,110.00</i>	4,110.00	4,050.00	3,510.00	SHNH9	(N)
(f) OC-192 capacity	540.00	25,000.00	<i>9,375.00</i>	9,375.00	8,250.00	7,300.00	SHNH7	(N)
(g) OC-192+ capacity	540.00	25,000.00	<i>9,375.00</i>	9,375.00	8,250.00	7,300.00	SHNH6	(N)
(h) OC-3 Shared Node Interconnection	550.00	980.00	<i>690.00</i>	690.00	630.00	570.00	SHNHA	(N)
(i) OC-12 Shared Node Interconnection	550.00	1,820.00	<i>1,390.00</i>	1,390.00	1,260.00	1,100.00	SHNHB	(N)
(j) OC-48 Shared Node Interconnection	550.00	3,400.00	<i>2,880.00</i>	2,880.00	2,840.00	2,460.00	SHNHC	(N)
(k) OC-48+ Shared Node Interconnection	550.00	3,840.00	<i>2,880.00</i>	2,880.00	2,840.00	2,460.00	SHNHD	(N)

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

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)

8. Central Office Channel Interface (per Central Office Node)

	Nonrecurring Charge	Month To Month	12 Months	24 to 48¹ Months	49 to 72¹ Months	73 to 96¹ Months	USOC	
(a) Per DS1	125.00	35.00	30.00	30.00	25.00	20.00	SHNCB	(N)
(b) Per DS3	185.00	115.00	85.00	85.00	80.00	75.00	SHNYT	(N)
(c) Per STS-1	185.00	150.00	105.00	105.00	100.00	90.00	SHNO2	(N)
(d) Per OC-3, 2 fiber	375.00	255.00	190.00	190.00	170.00	160.00	SHNCD	(N)
(e) Per OC-3, 4 fiber	375.00	515.00	380.00	380.00	340.00	320.00	SHNO4	(N)
(f) Per OC-12, 2 fiber	600.00	745.00	515.00	515.00	475.00	440.00	SHNCF	(N)
(g) Per OC-12, 4 fiber	600.00	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)
(l) Per 28 DS1 Channel System (DS3)	180.00	650.00	550.00	550.00	500.00	450.00	SHNW8	(N)
(m) Per 28 DS1 Channel System (STS-1)	185.00	750.00	650.00	650.00	600.00	575.00	SHNCS	(N)
(n) Per DS1 on 28 DS1 Channel System (DS3)	155.00	12.00	8.00	8.00	7.00	6.00	SHNCA	(N)
(o) Per DS1 on 28 DS1 Channel System (STS-1)	155.00	40.00	35.00	35.00	30.00	25.00	SHNCG	(N)
(p) Per DS1 within an STS-1 Asymmetrical Arrangement	360.00	25.00	22.00	22.00	20.00	18.00	SHNCH	(N)
(q) Per DS3 (Asymmetrical with DS1)	400.00	550.00	450.00	450.00	400.00	350.00	SHNCT	(N)
(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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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)

8. Central Office Channel Interface (per Node) (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) (M)
(u) Per Fractional 1000 Mbps								
- 50 Mbps – 1 STS-1	\$450.00	\$520.00	\$190.00	\$190.00	\$170.00	\$150.00	SHNCO	(M)(N)
- 150 Mbps – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHNCP	(M)(N)
- 150 Mbps – 3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHNDV	(M)(N)
- 300 Mbps – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHNCR	(M)(N)
- 300 Mbps – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHNDX	(M)(N)
- 450 Mbps – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHNCU	(M)(N)
- 450 Mbps – 9 STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHNDY	(M)(N)
- 600 Mbps – 12c STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNCV	(M)(N)
- 600 Mbps – 12 STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNDZ	(M)(N)
- 1000 Mbps – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHNCW	(M)(N)
- 1000 Mbps – 24c STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHNDW	(M)(N)
(v) Per Flex DS1	250.00	40.00	30.00	30.00	25.00	20.00	SHNCQ	(M)(N)
(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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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

(a) Per Node, Per occurrence	Nonrecurring Charge	USOC
	\$280.00	SHRBC

10. Concatenation Rearrangement Charge

(a) Per OC-3, OC-12 or OC-48 optical circuit rearranged as concatenated or non-concatenated subsequent to the initial installation of the circuit	Monthly Rate	Nonrecurring Charge Initial	Subsequent	USOC
	-	-	\$500.00	NRCCN

11. SMARTRing Service Rearrangement

(a) Surveillance, Per Node, per SMARTRing service	-	-	255.00	SHNRR
(b) Reconfiguration, Per STS-1 group, per Node	-	-	365.00	SHNR1

Nonrecurring Charge	Month To Month	12 Months	24 to 48² Months	49 to 72² Months	73 to 96² Months	USOC	
							(C)

12. Basic Shared Ethernet LAN Access Link

(a) Customer Premises Access Link Connection

(1) Per 10 Mbps Basic Shared Ethernet LAN Access Link - Electrical ¹	\$2,050.00	\$730.00	\$250.00	\$250.00	\$220.00	\$200.00	SHN1G	(N)
(2) Per 100 Mbps Basic Shared Ethernet LAN Access Link - Electrical ¹	2,050.00	780.00	300.00	300.00	280.00	250.00	SHN1H	(N)
(3) Per 100 Mbps Basic Shared Ethernet LAN Access Link – Optical 1310 nm Single-mode ¹	2,050.00	780.00	300.00	300.00	280.00	250.00	SHN11	(N)
(4) Per Fractional 1000 Mbps Basic Shared Ethernet LAN Access Link – Optical ¹								
- 50 Mbps 850 nm Multi-mode	2,050.00	750.00	280.00	280.00	250.00	240.00	SHN1S	(N)
- 50 Mbps 1310 nm Single-mode	2,050.00	750.00	280.00	280.00	250.00	240.00	SHN3S	(N)
- 150 Mbps 850 nm Multi-mode	2,050.00	810.00	330.00	330.00	300.00	280.00	SHN1W	(N)
- 150 Mbps 1310 nm Single-mode	2,050.00	810.00	330.00	330.00	300.00	280.00	SHN3W	(N)
- 300 Mbps 850 nm Multi-mode	2,050.00	870.00	440.00	440.00	410.00	380.00	SHN1X	(N)
- 300 Mbps 1310 nm Single-mode	2,050.00	870.00	440.00	440.00	410.00	380.00	SHN3X	(N)
- 450 Mbps 850 nm Multi-mode	2,050.00	930.00	490.00	490.00	450.00	420.00	SHN1Y	(N)
- 450 Mbps 1310 nm Single-mode	2,050.00	930.00	490.00	490.00	450.00	420.00	SHN3Y	(N)
- 600 Mbps 850 nm Multi-mode	2,050.00	1,020.00	550.00	550.00	490.00	460.00	SHN1Z	(N)
- 600 Mbps 1310 nm Single-mode	2,050.00	1,020.00	550.00	550.00	490.00	460.00	SHN3Z	(N)
- 1000 Mbps 850 nm Multi-mode	2,050.00	1,120.00	650.00	650.00	590.00	560.00	SHNJA	(N)
- 1000 Mbps 1310 nm Single-mode	2,050.00	1,120.00	650.00	650.00	590.00	560.00	SHNKA	(N)

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)

12. Basic Shared Ethernet LAN Access Link (Cont'd)

(b) Metro Ethernet Access Link Connection

	Nonrecurring Charge	Month To Month	12 Months	24 to 48¹ Months	49 to 72¹ Months	73 to 96¹ Months	USOC	
(1) Per Fractional 1000 Mbps Access Link – Metro Ethernet Customer Premises								(C)
- 150 Mbps 850 nm Multi-mode	\$2,050.00	\$980.00	<i>\$800.00</i>	\$800.00	\$500.00	\$400.00	SHNMA	(N)
- 150 Mbps 1310 nm Single-mode	2,050.00	980.00	<i>800.00</i>	800.00	500.00	400.00	SHNSA	(N)
- 300 Mbps 850 nm Multi-mode	2,050.00	1,220.00	<i>930.00</i>	930.00	580.00	540.00	SHNMB	(N)
- 300 Mbps 1310 nm Single-mode	2,050.00	1,220.00	<i>930.00</i>	930.00	580.00	540.00	SHNSB	(N)
- 450 Mbps 850 nm Multi-mode	2,050.00	1,310.00	<i>990.00</i>	990.00	630.00	590.00	SHNMC	(N)
- 450 Mbps 1310 nm Single-mode	2,050.00	1,310.00	<i>990.00</i>	990.00	630.00	590.00	SHNSC	(N)
- 600 Mbps 850 nm Multi-mode	2,050.00	1,430.00	<i>1,075.00</i>	1,075.00	690.00	650.00	SHNMD	(N)
- 600 Mbps 1310 nm Single-mode	2,050.00	1,430.00	<i>1,075.00</i>	1,075.00	690.00	650.00	SHNSD	(N)
- 1000 Mbps 850 nm Multi-mode	2,050.00	1,570.00	<i>1,200.00</i>	1,200.00	830.00	790.00	SHNME	(N)
- 1000 Mbps 1310 nm Single-mode	2,050.00	1,570.00	<i>1,200.00</i>	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	<i>800.00</i>	800.00	500.00	400.00	SHNOA	(N)
- 300 Mbps	2,050.00	1,220.00	<i>930.00</i>	930.00	580.00	540.00	SHNOB	(N)
- 450 Mbps	2,050.00	1,310.00	<i>990.00</i>	990.00	630.00	590.00	SHNOC	(N)
- 600 Mbps	2,050.00	1,430.00	<i>1,075.00</i>	1,075.00	690.00	650.00	SHNOD	(N)
- 1000 Mbps	2,050.00	1,570.00	<i>1,200.00</i>	1,200.00	830.00	790.00	SHNOE	(N)

13. Virtual Packet Ring Rearrangement Charge

	Monthly Rate	Nonrecurring Charge		USOC
		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	SHNRP

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