

ACCESS SERVICE

28 - BellSouth Wavelength Channel Service

28. BellSouth Wavelength Channel Service

28.1 General Description

- (A) BellSouth Wavelength Channel service provides high volume transparent and bit rate specific optical transport capabilities in a point-to-point configuration. BellSouth Wavelength Channel service is available as individual stand-alone Wavelength Channels, which provide various transport capabilities between a customer location and it's normal Telephone Company Central Office. BellSouth Wavelength Channel service contains wavelength local channel and interoffice channels for use in individual stand-alone Wavelength Channel service arrangements. The origination and termination points of Wavelength Channels will affect the design and/or availability of BellSouth Wavelength Channel service, or its Wavelength Channels. The technical parameters for BellSouth Wavelength Channel service are described in BellSouth Technical Reference #73630 BT.

BellSouth Wavelength Channel service individual stand-alone Wavelength Channels are available with Transparent Transport or Bit Rate Specific Wavelength Channels capabilities. Transparent Transport Wavelength Channels are available with transmission speeds of 1.25 Gbps, ⁽¹⁾ 2.5 Gbps, 2.5Gbps to 10 Gbps and Bit Rate Specific Wavelength Channels with OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, 10 Gbps WAN Transport, OC-3, OC-12, OC-48 Transport With Transparent Overhead, Fast Ethernet at 100Mbps, Fibre Channel 100 Transport, Fibre Channel 200 Transport, Fibre Connection (FICON™) Channel Transport, Fibre Connection (FICON™) Express Channel Transport or ESCON™/SBCON Channel Transport capabilities are available as per TR73630BT. An individual stand-alone Wavelength Channel is also available with 1000 Mbps Transport Bit Rate Specific transmission capabilities. The stand-alone 1000 Mbps Transport Bit Rate Specific Wavelength Channel is available only for connecting a customer's premises to 1000 Mbps service components of LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service at a serving wire center or for 1000 Mbps Transport connections between different serving wire centers for LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service. 1000 Mbps Transport Bit Rate Specific Wavelength Channels are not available for stand-alone arrangements that directly connect two customer premises. GigE Transport Bit Rate Specific Wavelength Channels are intended to directly connect two customer premises and are not available as channels on BellSouth Wavelength Dedicated Ring service, SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), or LightGate service (a.k.a. BellSouth Point to Point Network).

(N)

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⁽¹⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits.

(N)
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BellSouth Wavelength Channel Service previously appeared in Part 11, Section 29

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28. BellSouth Wavelength Channel Service

28.1 General Description

(A) (Cont'd)

Where customers desire to channelize their OC-3, OC-12, OC-48, and OC-192 Bit Rate Channels and/or WaveGate Wavelength Channels in the central office, then corresponding central office channel system/interfaces associated with LightGate Service (a.k.a. BellSouth SPA Point to Point Network), contained in Section 7 of this Guidebook shall be used.

WaveGate Local Channels may connect to (1) a WaveGate Interoffice Channel, or (2) to two Bit Rate Specific Wavelength Interoffice Channels, or to (3) a LightGate service (a.k.a. BellSouth SPA Point to Point Network) central office channel system.

WaveGate Interoffice Channels may connect to (1) a WaveGate Local Channel, or (2) to two Wavelength Local Channels, or (3) to BellSouth Wavelength Dedicated Ring service.

Individual Wavelength Local Channels and Interoffice Channels are available as individual two fiber unprotected channels or with Optical Network Protection. Unprotected channels may be provided with Client Protection as two unprotected, diversely routed two-fiber channels. Each channel is ordered individually in this latter arrangement. Two Wavelength Channels may only be connected to a four-fiber interface when the Telephone Company provides SONET channelization on either end or both ends of the service. Except as provided for below, the customer's equipment provides protection channel switching functionality in the event of a working facility failure.

Protection switching of diversely routed client protected Wavelength Channels is only provided by the Telephone Company when customers utilize SONET channelization offered with this service and/or provided as a link connectable service with BellSouth Dedicated Ring Service, LightGate service, or SMARTRing service. Where the Telephone Company provides SONET channelization at both ends of a customer's channel, including Link segments provided by other compatible services, then the switching is automatic to protection facilities. Where the customer provides SONET channelization at one end of Wavelength Channels with client protection, then the customer's equipment must be jointly engineered with Telephone Company SONET equipment to achieve this capability. DWDM Wavelength Channels switch individually rather than at the Dedicated Ring level as is the case with services like LightGate Service (a.k.a. BellSouth SPA Point to Point Network) or SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring). An example of automatic protection is:

- Two OC-12 Client Protected Wavelength Interoffice Channels are ordered to terminate in a LightGate service OC-12 Channelization System Central Office Channel Interface on one end and link connect to two BellSouth Dedicated Ring Client Protected OC-12 Channels and a SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring) OC-12 Customer Node.

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28. BellSouth Wavelength Channel Service (Cont'd)

28.1 General Description (Cont'd)

(A) (Cont'd)

Individual unprotected stand-alone Wavelength Local Channels and/or stand-alone Wavelength Interoffice Channels may also be configured with Channel Network Protection. With Channel Network Protection for stand-alone Wavelength Local Channels, two (2) Unprotected Wavelength Local Channels are configured as primary and secondary wavelengths at a customer's premises. With Channel Network Protection for stand-alone Wavelength Interoffice Channels, two (2) Unprotected Wavelength Interoffice Channels are configured as primary and secondary wavelengths at a central office when the stand-alone Wavelength Interoffice Channels terminate into a collocation arrangement. The primary and secondary wavelengths utilize Telephone Company equipment at a customer's premises and/or collocation location to provide a level of survivability for a customer's service in case of a failure associated with one of the two (2) Unprotected Wavelength Channels. Channel Network Protection is available for use only with Unprotected Wavelength Channels that (1) directly connect two customer premises, (2) directly connect a customer premises with a collocation arrangement, or (3) directly connect collocation locations in different serving wire centers.

BellSouth Wavelength Channel service Optical Network Protected Wavelength Channels, utilize two (2) wavelength channels in conjunction with Telephone Company equipment to provide a level of survivability for a customer's service in case of a loss of fiber optic signal associated with one of the two wavelengths. With Optical Network Protected Wavelength Channels, the optical network protection equipment is associated with both ends of the wavelength channel, in which case a 2-fiber Network Interface will be provided at both ends of the Optical Network Protected Wavelength Channel. A customer may also choose to have optical network protection equipment associated with only the customer premises end of an Optical Network Protected Wavelength Channel. Individual wavelength channels with Optical Network Protection are available only for wavelength channels that connect to a BellSouth Wavelength Dedicated Ring arrangement. Optical Network Protected Wavelength Channels must conform to specifications as provided in Technical Reference 73630.

SMARTRing Service (a.k.a. BellSouth SPA Dedicated Ring) may interconnect with Optical Network Protected Wavelength Channels, and it is restricted to an end-to-end 2-fiber Network Interface only.

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28. BellSouth Wavelength Channel Service

28.1 General Description

(A) (Cont'd)

BellSouth Wavelength Channel Service Interoffice Channels provide individual transparent or Bit Rate Specific Channels. They are available as two-fiber unprotected, or client protected channels. Customers may order them individually or in combination with BellSouth Channel Service Local Channels. They may also link to BellSouth Wavelength Dedicated Ring Service, LightGate service (a.k.a. BellSouth SPA Point to Point Network), or SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring). They are as follows:

- Transparent Wavelength Channels are available at 1.25 Gbps⁽¹⁾ and 2.5 Gbps, transmission rates. (N)
- Bit Rate Specific Wavelength Channels are available at OC-3, OC-12, OC-48, OC-192, OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, 10 Gbps WAN Transport, 10 Gbps LAN Transport, and 1000 Mbps Transport transmission rates.
- BellSouth Wavelength Channel Service is furnished where suitable facilities are available as determined by the Telephone Company. A combination of technologies may be employed to satisfy service specifications.

BellSouth Wavelength Channel Service monthly rates and nonrecurring charges apply for individual Transparent and Bit Rate Specific Wavelength Local Channels, and individual Interoffice Channels. BellSouth Wavelength Channel service is available under the Transport Payment Plan (TPP) commitment terms and conditions specified in Section 2.4 of this Guidebook, or under a Month-to-Month service arrangement. The minimum service period for rate elements is four months.

Rates and charges apply per Wavelength Channel basis for each 1.25 Gbps⁽¹⁾ or 2.5 Gbps Transparent Wavelength Channel, and each OC-3, OC-12, OC-48, OC-192, OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, 10 Gbps WAN Transport, 10 Gbps LAN Transport or 1000 Mbps Transport Bit Rate Specific Channel, and each OC-3, OC-12, OC-48 and OC-192 WaveGate Channel. Where customers desire WaveGate Channels, channel interface rates and charges associated with LightGate Service (a.k.a. BellSouth SPA Point to Point Network) are required to activate lower level DS1, DS3, STS-1, and OC-N channel interfaces, as contained in Section 7 of this Guidebook. Those channel interfaces are subject to the terms and conditions as described in Section 7 of this Guidebook. (N)

⁽¹⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits. (N)

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28. BellSouth Wavelength Channel Service

28.2 Rate Conditions

(A) (Cont'd)

BellSouth Wavelength Channel Service Interoffice Wavelength Channels are available for interoffice channels that connect to a BellSouth Wavelength Dedicated Ring service.

BellSouth Wavelength Channel Service Interoffice Wavelength Channel rates and charges are based upon the total quantity of all interoffice wavelength channels that connect to BellSouth Wavelength Dedicated Ring service at a central office. If a BellSouth Wavelength Channel Service Interoffice Wavelength Channel connects at each both ends to BellSouth Wavelength Dedicated Ring service, then the Wavelength Category shall be determined by the higher of the local channels associated with the BellSouth Wavelength Dedicated Ring service. Each transparent transport or bit rate specific local channel is considered as one channel, except WaveGate Channels, which are considered as two channels. For example, a customer that has three BellSouth Wavelength Channel Service Interoffice Wavelength Channels activated that connect to BellSouth Wavelength Dedicated Ring service would pay the rate per Interoffice Channel for the 1 Wavelength through 3 Wavelength Category. If the customer later grows to four BellSouth Wavelength Channel Service Interoffice Wavelength Channels activated that connect to BellSouth Wavelength Dedicated Ring service, the rate the customer pays for each Interoffice Channel is then based on rates and charges associated with the 4 through 7 Interoffice Channel category as follows. When the fourth BellSouth Wavelength Channel Service Interoffice Wavelength Channels is put into service, the rates and charges for it are associated with the 4 through 7 Interoffice Channel Category. For the three existing BellSouth Wavelength Channel Service Interoffice Wavelength Channels, the effective date of the change in their rates and charges to the 4 through 7 Interoffice Channel Category shall be the date associated with the customer's next bill period, following the installation of the fourth Wavelength Channel. These rate changes are not retroactive to the installation date of the fourth Interoffice Channel. Similar changes in rates shall apply for a customer's growth in activated Interoffice Channels to the 8 through 15 Interoffice Channel category, the 16 through 23 Interoffice Channel Category, the 24 through 31 Interoffice Channel Category and for the 32 and over Interoffice Channel Category. If a customer disconnects an Interoffice Channel, resulting in the activated Interoffice Channels dropping to a lower Interoffice Channel category, effective with the customer's next bill period, all of the customer's remaining Interoffice Channels shall be rated at the rate associated with the lower Interoffice Channel category.

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28. BellSouth Wavelength Channel Service

28.2 Rate Conditions

(A) (Cont'd)

When BellSouth Wavelength Channel Service Wavelength Channels are setup in a Client Protection arrangement, there is no charge for establishing Client Protection if it is setup at the time the associated Wavelength Channels are activated. If Client Protection is established on Wavelength Channels subsequent to their activation, a Client Protection Rearrangement Charge applies per existing Wavelength Channel configured for Client Protection. This charge would also apply if a customer has Client Protection existing and wants to rearrange the Wavelength Channels associated with the existing Client Protection arrangement. Also, if a customer removes channels from an existing Client Protection arrangement, the Client Protection Rearrangement Charge applies to the Wavelength Channels that are removed from the Client Protection arrangement, unless the Wavelength Channels are disconnected.

For BellSouth Wavelength Channel service, the capability exists for a customer to utilize all or part of a BellSouth Wavelength Channel service to transport switched access. The customer must place an order for each individual BellSouth SWA Channel provided over BellSouth Wavelength Channel service Shared Use Facilities and specify the channel assignment for each such service. When this occurs, ratcheting of BellSouth Wavelength Channel service rate elements (i.e. Wavelength Channels) will be based on the number of voice grade (a.k.a. BellSouth SPA DSO VG) equivalent trunks/lines of that rate element used for BellSouth SWA access. Reduction factors will be developed to reduce the charges on system level billing as well as the billing on individual Wavelength Channels. The system reduction factor will be based on the equivalent capacity of all of the activated Wavelength Channels as follows. A 1.25 Gbps⁽¹⁾ unprotected Wavelength Channel is considered as 16,128 voice grade equivalents. A 2.5 Gbps unprotected Wavelength Channel is considered as 32,256 voice grade equivalents. A 1000 Mbps Transport is considered as 16,128 voice grade equivalents. An OC-3, unprotected Wavelength Channel is considered as 2,016 voice grade equivalents. An OC-3+ or OC-12, unprotected Wavelength Channel is considered as 8,064 voice grade equivalents. An OC-48 or OC-48+, unprotected Wavelength Channel is Transport With Transparent Overhead and the 10 Gbps WAN Transport Wavelength Channels are considered as 129,024 voice grade equivalents. An OC-3 WaveGate Wavelength Channel is considered as 2,016 voice grade equivalents. An OC-12 WaveGate Wavelength Channel is considered as 8,064 voice grade equivalents. An OC-48 WaveGate Wavelength Channel is considered as 32,256 voice grade equivalents. An OC-192 WaveGate Wavelength Channel is considered as 129,024 voice grade equivalents. The reduction factor for individual Wavelength Channels shall be based on the equivalent capacity, as described above, of the specific Wavelength Channel that is carrying BellSouth SWA services.

(N)

⁽¹⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits.

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28. BellSouth Wavelength Channel Service

28.2 Rate Conditions

(A) (Cont'd)

For stand-alone Wavelength Local Channels configured with Channel Network Protection that directly connect two customer premises, two (2) Unprotected Wavelength Local Channels and/or Interoffice Channels are configured as primary and secondary wavelengths between the customer's premises. The primary and secondary wavelengths utilize Channel Network Protection - Primary Wavelength and Channel Network Protection - Secondary Wavelength service components to provide network protection and apply per customer premise requested with network protection.

For stand-alone Wavelength Local Channels configured with Channel Network Protection that directly connect a customer premises and a collocation arrangement, two (2) Unprotected Wavelength Local Channels and/or Interoffice Channels are configured as primary and secondary wavelengths between the customer's premise and the collocation arrangement. The primary and secondary wavelengths utilize Channel Network Protection - Primary Wavelength and Channel Network Protection - Secondary Wavelength service components to provide network protection and apply per customer premise and /or collocation location requested with network protection.

For stand-alone Wavelength Interoffice Channels configured with Channel Network Protection that directly connect collocation locations in two different serving wire centers, two (2) Unprotected Wavelength Interoffice Channels are configured as primary and secondary wavelengths between the customer's collocation locations. The primary and secondary wavelengths utilize Channel Network Protection - Primary Wavelength and Channel Network Protection - Secondary Wavelength service components to provide network protection and apply per collocation location requested with network protection.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(A) Wavelength Local Channel

(1) Transparent Transport, Per Wavelength Local Channel⁽¹⁾

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>	
- 1.25 Gbps, unprotected ⁽⁵⁾	\$1,000.00	\$2,805.00	WDCDT	(N)
- 2.5 Gbps, unprotected	1,000.00	3,570.00	WDCDT	
- 2.5 Gbps to 10 Gbps, unprotected	1,000.00	7,495.00	WDCDT	
- 1.25 Gbps, Optical Network Protected ⁽⁵⁾	1,500.00	5,189.00	WDCDR	(N)
- 2.5 Gbps, Optical Network Protected	1,500.00	6,605.00	WDCDR	

(2) Bit Rate Specific, Per Wavelength Local Channel⁽¹⁾

- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport ⁽²⁾ , unprotected	1,000.00	7,495.00	WDCCS	
- 10 Gbps LAN Transport, ⁽²⁾ unprotected	1,000.00	7,495.00	WDCCS	(T)
- 1000 Mbps Transport, ⁽³⁾ unprotected	1,000.00	2,805.00	WDCCS	
- GigE Wavelength Transport, ⁽⁴⁾ unprotected	1,000.00	2,805.00	WDCCS	

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽³⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer and is available only for connection at a serving wire center to 1000 Mbps service components of LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service as described preceding.

⁽⁴⁾ 1 Gbps Wavelength Transport does not contain any monitoring above the physical layer.

⁽⁵⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(A) Wavelength Local Channel

(2) Bit Rate Specific, Per Wavelength Local Channel⁽¹⁾

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
- OC-3 Transport With Transparent Overhead, unprotected	\$1,000.00	\$1,390.00	WDCCS
- OC-12 Transport With Transparent Overhead, unprotected	1,000.00	2,029.00	WDCCS
- OC-48 Transport With Transparent Overhead, unprotected	1,000.00	3,570.00	WDCCS
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ unprotected	1,000.00	1,265.00	WDCCS
- Fibre Channel 100 Transport, unprotected	1,000.00	2,805.00	WDCCS
- Fibre Channel 200 Transport, unprotected	1,000.00	3,035.00	WDCCS
- Fibre Connection (FICON™) Channel Transport, unprotected	1,000.00	2,805.00	WDCCS
- Fibre Connection (FICON™) Express Channel Transport, unprotected	1,000.00	3,035.00	WDCCS
- ESCON™/SBCON Channel Transport, unprotected	1,000.00	1,800.00	WDCCS

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ Available only for connection at a serving wire center to like service components of LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service.

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28.3 Rates and Charges

(A) Wavelength Local Channel

(2) Bit Rate Specific, Per Wavelength Local Channel⁽¹⁾

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽¹⁾ Optical Network Protected	\$1,500.00	\$13,866.00	WDCCR
- 10 Gbps LAN Transport, ⁽²⁾ Optical Network Protected	\$1,500.00	\$13,866.00	WDCCR
- 1000 Mbps Transport, ⁽³⁾ Optical Network Protected	1,500.00	5,189.00	WDCCR
- OC-3 Transport With Transparent Overhead, ⁽⁴⁾ Optical Network Protected	1,500.00	2,570.00	WDCCR
- OC-12 Transport With Transparent Overhead, ⁽⁴⁾ Optical Network Protected	1,500.00	3,753.00	WDCCR
- OC-48 Transport With Transparent Overhead, ⁽⁴⁾ Optical Network Protected	1,500.00	6,605.00	WDCCR

⁽¹⁾ Available only for connection at a serving wire center to like service components of LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service.

⁽²⁾ 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽³⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer and is available only for connection at a serving wire center to 1000 Mbps service components of LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service as described preceding.

⁽⁴⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(A) Wavelength Local Channel

(2) Bit Rate Specific, Per Wavelength Local Channel⁽¹⁾

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ Optical Network Protected	\$1,500.00	\$2,340.00	WDCCR
- Fibre Channel 100 Transport, Optical Network Protected	1,500.00	5,189.00	WDCCR
- Fibre Channel 200 Transport, Optical Network Protected	1,500.00	5,614.00	WDCCR
- Fibre Connection (FICON™) Channel Transport, Optical Network Protected	1,500.00	5,189.00	WDCCR
- Fibre Connection (FICON™) Express Channel Transport, Optical Network Protected	1,500.00	5,614.00	WDCCR
- ESCON™/SBCON Channel Transport, Optical Network Protected	1,500.00	3,330.00	WDCCR

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ Available only for connection at a serving wire center to like service components of LightGate service (a.k.a. BellSouth Point to Point Network), SMARTRing service (a.k.a. BellSouth SPA Dedicated Ring), BellSouth Wavelength Dedicated Ring service and BellSouth Wavelength Channel service.

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28.3 Rates and Charges

(A) Wavelength Local Channel

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
(3) Client Protection Rearrangement Charge, Subsequent to Initial installation	\$1,500.00	NA	CPROT
(4) Channel Network Protection ⁽¹⁾			
- Per Primary Wavelength	300.00	535.00	WDCCY
- Per Secondary Wavelength	300.00	535.00	WDCCZ

Transport Payment Plan			
<u>Recurring Charges</u>			
<u>Plan A</u>	<u>Plan B</u>	<u>Plan C</u>	
12-36	37-60	61-96	
<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>USOC</u>

(5) Transparent Transport, Per Wavelength Local Channel ⁽²⁾				
- 1.25 Gbps, unprotected ⁽³⁾	\$2,415.00	\$2,010.00	\$1,800.00	WDCDT (N)
- 2.5 Gbps, unprotected	2,975.00	2,590.00	2,250.00	WDCDT
- 2.5 Gbps to 10 Gbps, unprotected	NA	NA	4,725.00	WDCDT
- 1.25 Gbps, Optical Network Protected ⁽³⁾	4,468.00	3,719.00	3,330.00	WDCDR (N)
- 2.5 Gbps, Optical Network Protected	5,504.00	4,792.00	4,163.00	WDCDR

⁽¹⁾ For use with stand-alone Wavelength Local Channels configured for Channel Network Protection and for use with stand-alone Wavelength Interoffice Channels configured for Channel Network Protection at locations that connect to a collocation arrangement as described preceding.

⁽²⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽³⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits.

(N)
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28.3 Rates and Charges

(A) Wavelength Local Channel

	Transport Payment Plan			USOC
	Recurring Charges			
	Plan A	Plan B	Plan C	
	12-36	37-60	61-96	
	<u>Months</u>	<u>Months</u>	<u>Months</u>	
(6) Bit Rate Specific, Per Wavelength Local Channel ⁽¹⁾				
- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽²⁾ unprotected	\$6,250.00	\$5,430.00	\$4,725.00	WDCCS
- 10 Gbps LAN Transport, ⁽²⁾ unprotected	6,250.00	5,430.00	4,725.00	WDCCS
- 1000 Mbps Transport, ⁽³⁾ unprotected	2,415.00	2,010.00	1,800.00	WDCCS
- GigE Wavelength Transport, ⁽⁴⁾ unprotected	2,415.00	2,010.00	1,800.00	WDCCS

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽³⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

⁽⁴⁾ 1 Gbps Wavelength Transport does not contain any monitoring above the physical layer.

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28.3 Rates and Charges

(A) Wavelength Local Channel

	Transport Payment Plan			USOC
	Recurring Charges			
	Plan A 12-36 Months	Plan B 37-60 Months	Plan C 61-96 Months	
(6) Bit Rate Specific, Per Wavelength Local Channel ⁽¹⁾				
- OC-3 Transport With Transparent Overhead, unprotected	\$1,070.00	\$930.00	\$810.00	WDCCS
- OC-12 Transport With Transparent Overhead, unprotected	1,691.00	1,407.00	1,260.00	WDCCS
- OC-48 Transport With Transparent Overhead, unprotected	2,975.00	2,590.00	2,250.00	WDCCS
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ unprotected	975.00	850.00	737.00	WDCCS
- Fibre Channel 100 Transport, unprotected	2,415.00	2,010.00	1,800.00	WDCCS
- Fibre Channel 200 Transport, unprotected	2,529.00	2,202.00	1,913.00	WDCCS
- Fibre Connection (FICON TM) Channel Transport, unprotected	2,415.00	2,010.00	1,800.00	WDCCS
- Fibre Connection (FICON TM) Express Channel Transport, unprotected	2,529.00	2,202.00	1,913.00	WDCCS
- ESCON TM /SBCON Channel Transport, unprotected	1,335.00	1,160.00	1,010.00	WDCCS

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(A) Wavelength Local Channel

	Transport Payment Plan			USOC
	Recurring Charges			
	Plan A	Plan B	Plan C	
	12-36	37-60	61-96	
	Months	Months	Months	

(6) Bit Rate Specific, Per Wavelength Local Channel⁽¹⁾

- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽²⁾ Optical Network Protected	\$11,563.00	\$10,046.00	\$8,741.00	WDCCR
- 10 Gbps LAN Transport, ⁽²⁾ Optical Network Protected	\$11,563.00	\$10,046.00	\$8,741.00	WDCCR
- 1000 Mbps Transport, ⁽³⁾ Optical Network Protected	4,468.00	3,719.00	3,330.00	WDCCR
- OC-3 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	1,980.00	1,720.00	1,500.00	WDCCR
- OC-12 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	3,127.00	2,603.00	2,331.00	WDCCR
- OC-48 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	5,504.00	4,792.00	4,163.00	WDCCR

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽³⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

ACCESS SERVICE

28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(A) Wavelength Local Channel

	Transport Payment Plan			USOC
	Recurring Charges			
	Plan A 12-36 Months	Plan B 37-60 Months	Plan C 61-96 Months	
(6) Bit Rate Specific, Per Wavelength Local Channel ⁽¹⁾				
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ Optical Network Protected	\$1,805.00	\$1,570.00	\$1,365.00	WDCCR
- Fibre Channel 100 Transport, Optical Network Protected	4,468.00	3,719.00	3,330.00	WDCCR
- Fibre Channel 200 Transport, Optical Network Protected	4,678.00	4,073.00	3,538.00	WDCCR
- Fibre Connection (FICON™) Channel Transport, Optical Network Protected	4,468.00	3,719.00	3,330.00	WDCCR
- Fibre Connection (FICON™) Express Channel Transport, Optical Network Protected	4,678.00	4,073.00	3,538.00	WDCCR
- ESCON™/SBCON Channel Transport, Optical Network Protected	2,470.00	2,145.00	1,870.00	WDCCR

⁽¹⁾ For all stand-alone connections or connections, either direct or via a BellSouth Wavelength Channel Service Interoffice Channel, to BellSouth Wavelength Dedicated Ring Service wavelength channels.

⁽²⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(A) Wavelength Local Channel

	Transport Payment Plan			<u>USOC</u>
		<u>Recurring Charges</u>		
	<u>Plan A</u>	<u>Plan B</u>	<u>Plan C</u>	
	12-36	37-60	61-96	
	<u>Months</u>	<u>Months</u>	<u>Months</u>	
(7) Channel Network Protection ⁽¹⁾				
- Per Primary Wavelength	\$355.00	\$285.00	\$250.00	WDCCY
- Per Secondary Wavelength	355.00	285.00	250.00	WDCCZ

⁽¹⁾ For use with stand-alone Wavelength Local Channels configured for Channel Network Protection and for use with stand-alone Wavelength Interoffice Channels configured for Channel Network Protection at locations that connect to a collocation arrangement as described preceding.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

(1) Transparent Transport, Per Wavelength Interoffice Channel

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>	
- 1.25 Gbps, unprotected ⁽⁴⁾	\$500.00	\$2,400.00	WDCC1	(N)
- 2.5 Gbps, unprotected	750.00	2,700.00	WDCC1	
- 2.5 Gbps to 10 Gbps, unprotected	1,000.00	6,300.00	WDCC1	
- 1.25 Gbps, Optical Network Protected ⁽⁴⁾	500.00	4,440.00	WDCC5	(N)
- 2.5 Gbps, Optical Network Protected	750.00	4,995.00	WDCC5	

(2) Bit Rate Specific, Per Wavelength Interoffice Channel

- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽¹⁾ unprotected	1,000.00	6,300.00	WDCC2	
- 10 Gbps LAN Transport, ⁽¹⁾ unprotected	1,000.00	6,300.00	WDCC2	
- 1000 Mbps Transport, ⁽²⁾ unprotected	500.00	2,400.00	WDCC2	
- GigE Wavelength Transport, ⁽³⁾ unprotected	500.00	2,400.00	WDCC2	
- OC-3, OC-12 or OC-48, unprotected	750.00	2,700.00	WDCC2	
- OC-192, unprotected	1,000.00	6,300.00	WDCC2	

⁽¹⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽²⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

⁽³⁾ 1 Gbps Wavelength Transport does not contain any monitoring above the physical layer.

⁽⁴⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits.

(N)
(N)

ACCESS SERVICE

28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

(2) Bit Rate Specific, Per Wavelength Interoffice Channel

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
- OC-3 Transport With Transparent Overhead, ⁽¹⁾ unprotected	\$500.00	\$1,825.00	WDCC2
- OC-12 Transport With Transparent Overhead, ⁽¹⁾ unprotected	500.00	2,257.00	WDCC2
- OC-48 Transport With Transparent Overhead, ⁽¹⁾ unprotected	750.00	2,700.00	WDCC2
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ unprotected	500.00	1,720.00	WDCC2
- Fibre Channel 100 Transport, ⁽²⁾ unprotected	500.00	2,400.00	WDCC2
- Fibre Channel 200 Transport, ⁽²⁾ unprotected	750.00	2,548.00	WDCC2
- Fibre Connection (FICON TM) Channel Transport, ⁽²⁾ unprotected	500.00	2,400.00	WDCC2
- Fibre Connection (FICON TM) Express Channel Transport, ⁽²⁾ unprotected	750.00	2,548.00	WDCC2
- ESCON TM /SBCON Channel Transport, ⁽²⁾ unprotected	500.00	1,935.00	WDCC2

⁽¹⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽²⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

(2) Bit Rate Specific, Per Wavelength Interoffice Channel

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽¹⁾ Optical Network Protected	\$1,000.00	\$11,655.00	WDCCT
- 10 Gbps LAN Transport, ⁽¹⁾ Optical Network Protected	1,000.00	11,655.00	WDCCT
- 1000 Mbps Transport, ⁽²⁾ Optical Network Protected	500.00	4,440.00	WDCCT
- OC-3 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	500.00	3,570.00	WDCCT
- OC-12 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	500.00	4,176.00	WDCCT
- OC-48 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	750.00	8,778.00	WDCCT
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ Optical Network Protected	500.00	3,445.00	WDCCT
- Fibre Channel 100 Transport, ⁽²⁾ Optical Network Protected	500.00	4,440.00	WDCCT
- Fibre Channel 200 Transport, ⁽²⁾ Optical Network Protected	750.00	4,713.00	WDCCT
- Fibre Connection (FICON™) Channel Transport, ⁽²⁾ Optical Network Protected	500.00	4,440.00	WDCCT
- Fibre Connection (FICON™) Express Channel Transport, ⁽²⁾ Optical Network Protected	750.00	4,713.00	WDCCT
- ESCON™/SBCON Channel Transport, ⁽²⁾ Optical Network Protected	500.00	3,765.00	WDCCT

⁽¹⁾ 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽²⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

(2) Bit Rate Specific, Per Wavelength Interoffice Channel

	<u>NRC</u>	<u>Month to Month</u>	<u>USOC</u>
- OC-3 WaveGate	2,625.00	16,482.00	WDCCW
- OC-12 WaveGate	3,060.00	17,367.00	WDCCW
- OC-48 WaveGate	3,500.00	22,995.00	WDCCW
- OC-192 WaveGate	4,375.00	35,508.00	WDCCW

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

	Transport Payment Plan			USOC
	Recurring Charges			
	Plan A	Plan B	Plan C	
	12-36	37-60	61-96	
	Months	Months	Months	

(3) Per Interoffice Channel

(a) Transparent Transport, Per Interoffice Channel

- 1.25 Gbps, unprotected ⁽⁴⁾	\$1,505.00	\$1,345.00	\$1,200.00	WDCC1 (N)
- 2.5 Gbps, unprotected	1,830.00	1,635.00	1,460.00	WDCC1
- 2.5 Gbps to 10 Gbps, unprotected	NA	NA	2,520.00	WDCC1
- 1.25 Gbps, Optical Network Protected ⁽⁴⁾	3,256.00	2,936.00	2,553.00	WDCC5 (N)
- 2.5 Gbps, Optical Network Protected	4,107.00	3,574.00	3,108.00	WDCC5

(b) Bit Rate Specific, Per Interoffice Channel

- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽¹⁾ unprotected	3,780.00	3,150.00	2,520.00	WDCC2
- 10 Gbps LAN Transport, ⁽¹⁾ unprotected	3,780.00	3,150.00	2,520.00	WDCC2
- 1000 Mbps Transport, ⁽²⁾ unprotected	1,505.00	1,345.00	1,200.00	WDCC2
- GigE Wavelength Transport, ⁽³⁾ unprotected	1,505.00	1,345.00	1,200.00	WDCC2
- OC-3, OC-12 or OC-48, unprotected	1,830.00	1,635.00	1,460.00	WDCC2
- OC-192, unprotected	3,780.00	3,150.00	2,520.00	WDCC2

⁽¹⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽²⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

⁽³⁾ 1 Gbps Wavelength Transport does not contain any monitoring above the physical layer.

⁽⁴⁾ Effective November 1, 2014, the 1.25 Gbps Wavelength service channel option is no longer available for new circuits. There is no change for existing circuits.

(N)
(N)

ACCESS SERVICE

28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

	Transport Payment Plan			<u>USOC</u>
	<u>Recurring Charges</u>			
	<u>Plan A</u>	<u>Plan B</u>	<u>Plan C</u>	
	12-36	37-60	61-96	
	<u>Months</u>	<u>Months</u>	<u>Months</u>	
 (3) Per Interoffice Channel				
(b) Bit Rate Specific, Per Interoffice Channel				
- OC-3 Transport With Transparent Overhead, ⁽¹⁾ unprotected	\$1,405.00	\$1,275.00	\$1,160.00	WDCC2
- OC-12 Transport With Transparent Overhead, ⁽¹⁾ unprotected	1,672.00	1,508.00	1,311.00	WDCC2
- OC-48 Transport With Transparent Overhead, ⁽¹⁾ unprotected	2,220.00	1,932.00	1,680.00	WDCC2
- Fast Ethernet at 100 Mbps Transport, ⁽²⁾ unprotected	1,325.00	1,205.00	1,095.00	WDCC2
- Fibre Channel 100 Transport, ⁽²⁾ unprotected	1,760.00	1,587.00	1,380.00	WDCC2
- Fibre Channel 200 Transport, ⁽²⁾ unprotected	1,887.00	1,642.00	1,428.00	WDCC2
- Fibre Connection (FICON TM) Channel Transport, ⁽²⁾ unprotected	1,760.00	1,587.00	1,380.00	WDCC2
- Fibre Connection (FICON TM) Express Channel Transport, ⁽²⁾ unprotected	1,887.00	1,642.00	1,428.00	WDCC2
- ESCON TM /SBCON Channel Transport, ⁽²⁾ unprotected	1,490.00	1,355.00	1,230.00	WDCC2

⁽¹⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer.

⁽²⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

	Transport Payment Plan			USOC
	Recurring Charges			
	Plan A	Plan B	Plan C	
	12-36	37-60	61-96	
	Months	Months	Months	

(3) Per Interoffice Channel

(b) Bit Rate Specific, Per Interoffice Channel (Cont'd)

- OC-192 Transport With Transparent Overhead, STM-64 Transport With Transparent Overhead, or 10 Gbps WAN Transport, ⁽¹⁾ Optical Network Protected	\$8,492.00	\$7,286.00	\$5,661.00	WDCCT
- 10 Gbps LAN Transport, ⁽¹⁾ Optical Network Protected	8,492.00	7,286.00	5,661.00	WDCCT
- 1000 Mbps Transport, ⁽²⁾ Optical Network Protected	3,256.00	2,936.00	2,553.00	WDCCT
- OC-3 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	2,750.00	2,495.00	2,270.00	WDCCT
- OC-12 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	3,093.00	2,789.00	2,425.00	WDCCT
- OC-48 Transport With Transparent Overhead, ⁽¹⁾ Optical Network Protected	7,219.00	6,281.00	5,463.00	WDCCT

⁽¹⁾ 10 Gbps WAN Transport Wavelength Channels operate at 9.953 Gbps and do not contain any monitoring above the physical layer. 10 Gbps LAN Transport Wavelength Channels operate at 10.3125 Gbps and do not contain any monitoring above the physical layer.

⁽²⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

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28. BellSouth Wavelength Channel Service

28.3 Rates and Charges

(B) BellSouth Wavelength Channel Service Interoffice Channel

	Transport Payment Plan			<u>USOC</u>
	<u>Recurring Charges</u>			
	<u>Plan A</u>	<u>Plan B</u>	<u>Plan C</u>	
	12-36	37-60	61-96	
	<u>Months</u>	<u>Months</u>	<u>Months</u>	

(3) Per Interoffice Channel

(b) Bit Rate Specific, Per Interoffice Channel (Cont'd)

- Fast Ethernet at 100 Mbps Transport, ⁽¹⁾ Optical Network Protected	\$2,650.00	\$2,410.00	\$2,190.00	WDCCT
- Fibre Channel 100 Transport, ⁽¹⁾ Optical Network Protected	3,256.00	2,936.00	2,553.00	WDCCT
- Fibre Channel 200 Transport, ⁽¹⁾ Optical Network Protected	3,491.00	3,038.00	2,642.00	WDCCT
- Fibre Connection (FICON™) Channel Transport, ⁽¹⁾ Optical Network Protected	3,256.00	2,936.00	2,553.00	WDCCT
- Fibre Connection (FICON™) Express Channel Transport, ⁽¹⁾ Optical Network Protected	3,491.00	3,038.00	2,642.00	WDCCT
- ESCON™/SBCON Channel Transport, ⁽¹⁾ Optical Network Protected	2,895.00	2,635.00	2,395.00	WDCCT
- OC-3 WaveGate	10,619.00	9,415.00	8,674.00	WDCCW
- OC-12 WaveGate	11,117.00	10,345.00	9,564.00	WDCCW
- OC-48 WaveGate	14,712.00	12,570.00	11,780.00	WDCCW
- OC-192 WaveGate	22,405.00	19,873.00	18,255.00	WDCCW

⁽¹⁾ 1000 Mbps Transport does not contain any monitoring above the physical layer.

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