



Wavelength Channel Service – ISI (“Company”)

Wavelength Channel Service – Stand Alone

ISI Wavelength Channel service provides high volume transparent and bit rate specific optical transport capabilities in a point-to-point configuration. ISI Wavelength Channel service is available as individual stand-alone Wavelength Channels or via a Dedicated System, which provides various transport capabilities between a customer location and its normal Company Point of Presence (“POP”). ISI Wavelength Channel service contains wavelength local channel and interoffice channels for use in individual stand-alone Wavelength Channel service arrangements or for use in extending Dedicated System wavelength channels to locations beyond the customer’s normal ISI POP. The origination and termination points of Wavelength Channels will affect the design and/or availability of ISI Wavelength Channel service, or its Wavelength Channels. The technical parameters for ISI Wavelength Channel service are described herein.

ISI 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 1/2/2.5/4/8/10/40 Gbps, and Bit Rate Specific Wavelength Channels with OC-12/48/192/768 Transport With Transparent Overhead, STM-4/16/64/256 Transport With Transparent Overhead, or 1/2.5/10 Gbps WAN Transport capabilities are available. The stand-alone 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transport Bit Rate Specific Wavelength Channel is available only for connecting a customer’s ports (within an ISI POP, or extended to a customer specified location) to 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps service components of ISI-P2P service (a.k.a. ISI Point to Point Network), OptixRing service (a.k.a. ISI SPA Dedicated Ring), ISI Wavelength Dedicated Ring service and ISI Wavelength Channel service at a serving ISI POP or for 1 Gbps or 10 Gbps Transport connections between different ISI POPs for ISI-P2P service (a.k.a. ISI Point to Point Network), OptXRing service (a.k.a. ISI SPA Dedicated Ring), ISI Wavelength Dedicated Ring service and ISI Wavelength Channel service. 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transport Bit Rate Specific Wavelength Channels are not available for stand-alone arrangements that directly connect two customer ports.

ISI Wavelength Channel Service Dedicated Systems are available with three levels of service capabilities as follows:

- Dedicated System 1 - Provides capability for 2 unprotected wavelength channels
- Dedicated System 2 - Provides capability for 4 unprotected wavelength channels
- Dedicated System 3 - Provides capability for 8 unprotected wavelength channels

- A OC-192 ISI RingDrop Local Channel from a Dedicated System 1 is ordered with a OC-192 Channelization System ISI POP Channel Interface (from ISI-P2P Service).



- A OC-12 ISI RingDrop Local Channel from a Dedicated System 3 is ordered with two OC-12 Bit Rate Specific Interoffice Wavelength Channels and a OC-12 Channelization System ISI POP Channel Interface (from ISI-P2P Service).
- A OC-3 ISI RingDrop Local Channel from a Dedicated System 2 is ordered with two Bit Rate specific OC-3 Interoffice Wavelength Channels to another city where they link to two ISI Wavelength Dedicated Ring Client Protected OC-3 Channels and finally terminate in a OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-3 Customer Node.
- Two OC-12 Client Protected Wavelength Interoffice Channels are ordered to terminate in a ISI-P2P service OC-12 Channelization System ISI POP Channel Interface on one end and link connect to two ISI Dedicated Ring Client Protected OC-12 Channels and a OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-12 Customer Node.
- Two OC-12 Client Protected Wavelength Local Channels from a Dedicated System 3 are link connected to Client Protected Wavelength Channels associated with a Dedicated Ring Service and a OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-12 Customer Node. The customer's equipment at the originating customer ports served by the Dedicated System must be jointly engineered to function with the Company's OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-12 Customer Node at the terminating ports.

Self-healing protection switching is currently not available with ISI Wavelength Channel service Dedicated System Wavelength Channels, ISI Wavelength Dedicated Ring service or 1 Gbps or 10 Gbps Transport Bit Rate Specific Channels.

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 standalone Wavelength Local Channels, two (2) Unprotected Wavelength Local Channels are configured as primary and secondary wavelengths at a customer's ports. 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 ISI POP when the stand-alone Wavelength Interoffice Channels terminate into a collocation arrangement. The primary and secondary wavelengths utilize Company equipment at a customer's ports 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 ports, (2) directly connect customer ports with a collocation arrangement, or (3) directly connect collocation locations in different serving ISI POPs or third party centers.

ISI 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 ISI Channel Service Local Channels. They may also link to ISI Wavelength Dedicated Ring Service, ISI-P2P service (a.k.a. ISI SPA Point to Point Network), or OptixRing service (a.k.a. ISI SPA Dedicated Ring). They are as follows:



For stand-alone Wavelength Local Channels configured with Channel Network Protection that directly connect two customer ports, two (2) Unprotected Wavelength Local Channels and/or InterPOP Channels are configured as primary and secondary wavelengths between the customer's ports. 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 ports 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 port and the collocation arrangement. The primary and secondary wavelengths utilize Channel Network Protection.

Secondary Wavelength service components to provide network protection and apply per customer port 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.

Wavelength Channel Service - Dedicated System

ISI Wavelength Channel service provides high volume transparent and bit rate specific optical transport capabilities in a point-to-point configuration. With ISI Wavelength Channel service, a Dedicated System provides various transport capabilities between a customer location and it's normal Company POP. In addition, ISI Wavelength Channel service contains wavelength interoffice channels and local channels for use in extending Dedicated System wavelength channels to locations beyond the customer's normal Company POP. The origination and termination points of Wavelength Channels will affect the design and/or availability of ISI Wavelength Channel service, or it's Wavelength Channels. The technical parameters for ISI Wavelength Channel service are described herein.

ISI Wavelength Channel Service Dedicated Systems are available with three levels of service capabilities as follows:

- Dedicated System 1 - Provides capability for 2 unprotected wavelength channels
- Dedicated System 2 - Provides capability for 4 unprotected wavelength channels
- Dedicated System 3 - Provides capability for 8 unprotected wavelength channels

ISI Wavelength Channel Service Dedicated Systems provide the capability, to activate multiple Transparent Transport, Bit Rate Specific, and/or ISI RingDrop local channels:
 -Transparent Wavelength Channels are available on a per wavelength Channel basis with transmission speeds of 1 Gbps and 10 Gbps.



-Bit Rate Specific Wavelength Channels are available at OC-12, OC-48, OC-192, OC-192 Transport with Transparent Overhead, STM-64 Transport with Transparent Overhead, 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps WAN Transport and 1 Gbps, 2.5 Gbps or 10Gbps Transport transmission rates.

-ISI RingDrop Wavelength Channels provide SONET OC-12, OC-48, OC-192 or OC-768 channelization capabilities at the customer ports and four-fiber channel termination in the serving ISI POP.

Customer Channel Interfaces associated with ISI-P2P Service (a.k.a. ISI SPA Point to Point Network) shall be used with ISI RingDrop Wavelength Local Channels.

Where customers desire to channelize their OC-12, OC-48, OC-192 or OC-768 Bit Rate Channels and/or ISI RingDrop Wavelength Channels in the ISI POP, then corresponding ISI POP channel system/interfaces associated with ISI-P2P Service (a.k.a. ISI SPA Point to Point Network), shall be used.

ISI RingDrop Local Channels may connect to (1) a ISI RingDrop Interoffice Channel, or (2) to two Bit Rate Specific Wavelength Interoffice Channels, or to (3) a ISI-P2P service (a.k.a ISI SPA Point to Point Network) ISI POP channel system.

ISI RingDrop Interoffice Channels may connect to (1) an ISI RingDrop Local Channel, or (2) to two Wavelength Local Channels, or (3) to ISI Wavelength Dedicated Ring service.

Individual Wavelength Local Channels and Interoffice Channels are available as individual two fiber unprotected channels. They may also 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 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 Company when customers utilize SONET channelization offered with this service and/or provided as a link connectable service with ISI Dedicated Ring Service, ISI-P2P service, or OptixRing service. Where the 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 Company SONET equipment to achieve this capability. DWDM Wavelength Channels switch individually rather than at the Dedicated System or Dedicated Ring level as is the case with services like ISI-P2P Service (a.k.a. ISI SPA Point to Point Network) or OptixRing service (a.k.a. ISI SPA Dedicated Ring).

Examples of automatic protection include:

- A OC-48 ISI RingDrop Local Channel from a Dedicated System 4 is cross-connected to another OC-48 ISI RingDrop Local Channel associated with another Dedicated System 2.
- A OC-192 ISI RingDrop Local Channel from a Dedicated System 1 is ordered with a OC-192 Channelization System ISI POP Channel Interface (from ISI-P2P Service).



- A OC-12 ISI RingDrop Local Channel from a Dedicated System 3 is ordered with two OC-12 Bit Rate Specific Interoffice Wavelength Channels and a OC-12 Channelization System ISI POP Channel Interface (from ISI-P2P Service).
- Two OC-12 Client Protected Wavelength Interoffice Channels are ordered to terminate in a ISI-P2P service OC-12 Channelization System ISI POP Channel Interface on one end and link connect to two ISI Dedicated Ring Client Protected OC-12 Channels and a OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-12 Customer Node.
- Two OC-12 Client Protected Wavelength Local Channels from a Dedicated System 3 are link connected to Client Protected Wavelength Channels associated with a Dedicated Ring Service and a OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-12 Customer Node. The customer's equipment at the originating customer ports served by the Dedicated System must be jointly engineered to function with the Company's OptixRing service (a.k.a. ISI SPA Dedicated Ring) OC-12 Customer Node at the terminating ports. Self-healing protection switching is currently not available with ISI Wavelength Channel service, ISI Wavelength Dedicated Ring service or 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transport Bit Rate Specific Channels.

ISI 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 ISI Channel Service Local Channels. They may also link to ISI Wavelength Dedicated Ring Service, ISI-P2P service (a.k.a. ISI SPA Point to Point Network), or OptixRing service (a.k.a. ISI SPA Dedicated Ring). They are as follows:

- Transparent Wavelength Channels are available at 1 Gbps and 10 Gbps, transmission rates.
- Bit Rate Specific Wavelength Channels are available at OC-12, OC-48, OC-192 or OC-768 Transport With Transparent Overhead, STM-4/16/64/256 Transport With Transparent Overhead, and 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transport transmission rates.
- ISI Wavelength Channel Service is furnished where suitable facilities are available as determined by the Company. A combination of technologies may be employed to satisfy service specifications.

Rate Components

ISI Wavelength Channel Service monthly rates and nonrecurring charges apply for individual Transparent and Bit Rate Specific Wavelength Local Channels, Dedicated Systems and associated Wavelength Channels, and individual Interoffice Channels. ISI Wavelength Channel service is available under the Transport Payment Plan (TPP, a term based plan) commitment terms and conditions specified herein, or under a Month-to-Month service arrangement. The minimum service period for rate elements is twelve months.

Rates and charges apply per Wavelength Channel basis for each 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transparent Wavelength Channel, and each OC-12, OC-48, OC-192, OC-768 Transport With Transparent Overhead, 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transport Bit Rate Specific Channel, and each OC-12, OC-48 and OC-192, OC-768 ISI RingDrop Channel. Where customers desire ISI RingDrop Channels, channel interface



rates and charges associated with ISI-P2P Service (a.k.a. ISI SPA Point to Point Network) are required to activate lower level OC-N channel interfaces. Those channel interfaces are subject to the terms and conditions as described herein.

Volume discounts are available for ISI Wavelength Channel service Dedicated System local channels and/or interoffice channels that are ordered under TPP Terms and Conditions. These volume discounts are determined as described in the description of local channel and interoffice channel in the following paragraphs.

ISI Wavelength Channel Service Dedicated System Wavelength Channel rates and charges apply for each Dedicated System Wavelength Channel activated. For services under the Transport Payment Plan, the rate associated with Dedicated System Wavelength Channels is based upon the total quantity of all Dedicated System Wavelength Channels activated.

For example, a customer with an ISI Wavelength Channel Service that has three Wavelength Channels activated would pay the rate per Wavelength Channel for the 1 Wavelength through 2 Wavelength Category. If the customer later grows to four Dedicated System Wavelengths Channels activated, the rate the customer pays for each Wavelength Channel is then based on rates and charges associated with the 3 through 4 Wavelength Channels category as follows. When the third Wavelength channel is put into service, the rates and charges for it are associated with the 3 through 4 Wavelength Channel Category. For the three existing Wavelength Channels, the effective date of the change in their rates and charges to the 3 through 4 Wavelength Channel Category shall be the date associated with the customer's next bill period, following the installation of the third Dedicated System Wavelength Channel.

These rate changes are not retroactive to the installation date of the third Dedicated System Wavelength Channel. Similar changes in rates shall apply for a customer's growth in activated Dedicated System Wavelength Channels to the 5 through 8 Wavelength Channel category.

If a customer disconnects a Wavelength Channel, resulting in the activated Dedicated System Wavelength Channels dropping to a lower Wavelength Channel category, effective with the customer's next bill period, all of the customer's remaining Dedicated System Wavelength Channels shall be rated at the rate associated with the lower Wavelength Channel category.

Volume discounts are available for interoffice channels that connect to either an ISI Wavelength Channel Service Dedicated System or to ISI Wavelength Dedicated Ring service.

ISI Wavelength Channel Service Interoffice Wavelength Channel rates and charges are based upon the total quantity of all interoffice wavelength channels that connect to either an ISI Wavelength Channel Service Dedicated System or to ISI Wavelength Dedicated Ring service at an ISI POP. If an ISI Wavelength Channel Service Interoffice Wavelength Channel connects at each both ends to either ISI Wavelength Channel Service Dedicated System or to ISI Wavelength Dedicated Ring service, then the Wavelength Category shall be determined by the higher of the local channels associated with the ISI Wavelength Channel Service Dedicated System or ISI Wavelength



Dedicated Ring service. Each transparent transport or bit rate specific local channel is considered as one channel, except ISI RingDrop Channels, which are considered as two channels. For example, a customer that has two ISI Wavelength Channel Service Interoffice Wavelength Channels activated that connect to either a ISI Wavelength Channel Service Dedicated System or to ISI Wavelength Dedicated Ring service would pay the rate per Interoffice Channel for the 1 Wavelength through 2 Wavelength Category.

If the customer later grows to three ISI Wavelength Channel Service Interoffice Wavelength Channels activated that connect to either a ISI Wavelength Channel Service Dedicated System or to ISI Wavelength Dedicated Ring service, the rate the customer pays for each Interoffice Channel is then based on rates and charges associated with the 3 through 4 Interoffice Channel category as follows. When the third ISI Wavelength Channel Service Interoffice Wavelength Channels is put into service, the rates and charges for it are associated with the 3 through 4 Interoffice Channel Category. For the two existing ISI Wavelength Channel Service Interoffice Wavelength Channels, the effective date of the change in their rates and charges to the 3 through 4 Interoffice Channel Category shall be the date associated with the customer's next bill period, following the installation of the third Dedicated System Wavelength Channel. These rate changes are not retroactive to the installation date of the third Interoffice Channel. Similar changes in rates shall apply for a customer's growth in activated Interoffice Channels to the 5 through 8 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.

When ISI 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.

Wavelength Channel Service - Dedicated Ring

ISI Wavelength Dedicated Ring service provides high volume transparent and bit rate specific optical transport capabilities in a dedicated ring configuration. ISI Wavelength Dedicated Ring service provides the capability for a customer to activate individual Wavelength Channels. The origination and termination points of Wavelength Channels



will affect the design and/or availability of ISI Wavelength Dedicated Ring service, or its Wavelength Channels.

ISI Wavelength Dedicated Ring service utilizes diversely routed transport facilities that connect node locations together in a dedicated ring arrangement. Each section of the ISI Wavelength Dedicated Ring service ring, between Node Locations, is called a ring segment.

With ISI Wavelength Dedicated Ring service, a minimum of three Node Locations is required. A Node Location is a service delivery/drop site where equipment is located that provides customers connectivity to ISI Wavelength Dedicated Ring service. One node only is available per customer designated location/address. The three Node Locations may all be ISI POP Node Locations in Company ISI POPs, or the three Node Locations may be a ISI POP Node Location in a Company ISI POP, a Customer Node Location at a customer's designated location in the Company's service area and the third Node Location may be either a ISI POP Node Location in a Company ISI POP or a Node Location at another customer designated location in the Company's service area. Additional Node Locations for either arrangement may be any combination thereof. The maximum number of Node Locations will be determined based on equipment capability. Optical Signal Amplification Nodes do not apply toward the ISI Wavelength Dedicated Ring service minimum of three Node Locations.

ISI Wavelength Dedicated Ring service Dual Shelf service configurations provide the customer the capability to activate up to 8 wavelengths east and 8 wavelengths west. These Wavelengths are activated via ISI Wavelength Dedicated Ring service Primary System. Dual Shelf and ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf Components –

The ISI Wavelength Dedicated Ring service Primary System. Dual Shelf contains the capability for 8 wavelengths east and 8 wavelengths west. Additional wavelengths east and additional wavelengths west capacity may be activated via incremental ISI Wavelength Dedicated Ring service Expansion System.

Dual Shelves – Expansion System

Each ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf provides the capability for 8 wavelengths east and 8 wavelengths west.

ISI Wavelength Dedicated Ring service Single Shelf service configurations provide the customer the capability to activate up to 8 wavelengths east and 8 wavelengths west. These wavelengths are activated via ISI Wavelength Dedicated Ring service Primary System. Single Shelf and ISI Wavelength Dedicated Ring service expansion system.

Single Shelf components –

The ISI Wavelength Dedicated Ring service Primary System. Single Shelf contains the capability for 8 wavelengths east and 8 wavelengths west. The remaining 8 wavelength east and 8 wavelength west capacity may be activated via an incremental ISI Wavelength Dedicated Ring service Expansion System.

Single Shelf service component –

ISI Wavelength Dedicated Ring service is available with unprotected Wavelength Channels. With ISI Wavelength Dedicated Ring service, a customer may configure his



unprotected Wavelength Channels to provide Client Protection, in which the customer's equipment provides switching functionality to divert his traffic from one Wavelength Channel to another in the event of a facility failure.

Customers must coordinate the setup of ISI Wavelength Dedicated Ring service up in a Client Protection configuration with the Company. In a Client Protection Configuration, the customer will order and utilize two Wavelength Channels in combination with his equipment to provide protection. In a Client Protection configuration, the customer must specify the routing of the Wavelength Channels to be used.

ISI Wavelength Dedicated Ring service Wavelength Channels may be activated with Transparent Transport and/or Bit Rate Specific service capabilities. Transparent transport capabilities include a 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps transparent service arrangement. Bit rate specific transport include 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps Transport, OC-12, OC-48, OC-192 and OC-768 transport with transparent overhead, 1 Gbps, 2.5 Gbps, 10 Gbps or 40 Gbps WAN transport, and ISI RingDrop transport with SONET OC-12, OC-48, OC-192, or OC-768 channelization capabilities at the customer ports and four-fiber channel termination in the serving ISI POP. ISI RingDrop transport is available for use only with Dual Shelf service arrangements. Customer Channel Interfaces associated with ISI-P2P Service (a.k.a. ISI SPA Point to Point Network) shall be used with ISI RingDrop service. A customer may connect a transparent ISI wavelength Dedicated Ring service Wavelength Channel at a serving wire center to another ISI Wavelength Dedicated Ring service's transparent Wavelength Channel. Bit rate specific Wavelength Channels may connect at a serving wire center to another ISI Wavelength Dedicated Ring service's bit rate specific Wavelength Channel, or to compatible OptixRing service (a.k.a. ISI Dedicated Ring), or ISI-P2P service (a.k.a. ISI SPA Point to Point Network) service components. Four-fiber non-channelized configurations may not be connected to a Wavelength Channel.

ISI Wavelength Dedicated Ring service, rates and charges associated with ring level service are the Primary System, Expansion System and Optical Signal Amplification Node components. In addition, Wavelength Channel rates and charges apply for the wavelengths activated on the ring.

ISI Wavelength Dedicated Ring service Primary System and Expansion System rates and charges apply at each Node on the ring for ISI Wavelength Dedicated Ring service equipment associated with the establishment of the service. These service components are further classified as Dual Shelf or Single Shelf. Also included in this service component is the fiber transport required in connecting the service between Node Locations.

A Dual Shelf service arrangement has the capability to activate up to 8 wavelengths east and 8 wavelengths west. These 16 wavelengths are activated at a Node location via a Dual Shelf Primary System and Dual Shelf Expansion Systems. A Dual Shelf Primary System has the capability to activate up to 8 wavelengths east and 8 wavelengths west and a Dual Shelf Expansion System has the capability to activate up to 8 wavelengths east and 8 wavelengths west. The east and west wavelength capability associated in the following description of the Dual Shelf rate application is described as wavelengths without showing the east and west capability. Two (2) Primary System. Dual Shelf service components apply per node location. These charges are in addition to the ISI



Wavelength Dedicated Ring service Primary System. Dual Shelf rates and charges described above. For example, if a customer desires to increase the capacity of his ISI Wavelength Dedicated Ring service from 8 Wavelengths to 16 Wavelengths, then two ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges apply per Node Location on the ring. If the customer later decides to increase the capacity of this ISI Wavelength Dedicated Ring service from 8 Wavelengths to 16 Wavelengths, then two more ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges apply at each Node Location on the ring. The ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges associated with the increase to the 16 Wavelength capacity are in addition to the ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges associated with the increase to the 16 Wavelength capacity. If the customer later decides to increase the capacity of his ISI Wavelength Dedicated Ring service from 16 Wavelengths to 24 Wavelengths, then two more ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges apply at each Node Location on the ring. The ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges associated with the increase to the 24 Wavelength capacity are in addition to the ISI Wavelength Dedicated Ring service Expansion System. Dual Shelf charges associated with the increase to the 8 Wavelength and 16 Wavelength capacity.

Dual Shelves ordered under the Transport Payment Plan are to be coterminous with it's associated Primary System.

ISI Wavelength Dedicated Ring service Single Shelf service configurations provide the customer the capability to activate up to 8 wavelengths east and 8 wavelengths west. These wavelengths are activated via ISI Wavelength Dedicated Ring service Primary System. Single Shelf and ISI Wavelength Dedicated Ring service Expansion system.

Single Shelf components –

The ISI Wavelength Dedicated Ring service Primary System. Single Shelf contains the capability for 8 wavelengths east and 8 wavelengths west. Additional 8 wavelength east and 8 wavelength west capacity may be activated via an incremental ISI Wavelength Dedicated Ring service Expansion System.

Single Shelf service component –

For customer Single Shelf wavelength requirements above the 8 wavelength capability of a Single Shelf service arrangement, another separate Single Shelf service arrangement is required.

Service Level Agreements (SLAs) are offered with this service, and provide customers with end-to-end performance backed by service credits if minimum quality standards are not met by the Company.

Network Availability

- Network Availability of 99.95% per month, including the local loop, is provided by the Company. This equates to less than 21.6 minutes of downtime



per month (based on a 30-day month), excluding maintenance windows and other appropriate exclusions (see *Exclusions* following). Network Availability is calculated as the percentage of time that the ISI Wavelength Services network is capable of accepting and delivering customer data to the total time in the measurement period. The calculation for network Availability for a given calendar month is as follows:

- Network Availability = [24 hours x days in month x 60 minutes x number of customer sites] – network outage time (measured in minutes) [24 hours x days in month x 60 minutes x number of customer sites]
- As noted in the above formula, all ports included in a customer's network are utilized in calculating *Network Availability*.
- The customer is responsible for (1) notifying the Company within 45 days after the end of the month when the service parameter falls below the committed level, and (2) requesting a service credit.
- Upon verification by the Company that the actual service performance for that parameter was less than the committed level, the customer will be provided a service credit equal to 10% of the monthly recurring charge for that service parameter for all affected ports.

Grade of Service SLAs are provided for ISI Wavelength Service. If the Company fails to meet service parameters defined for each Grade of Service, a service credit will be offered to the customer given certain conditions are met:

- The customer is responsible for (1) notifying the Company within 45 days after the end of the month when the service parameter falls below (or above) the committed level, and (2) requesting a service credit.
- Upon notification by the customer that the actual service performance for that parameter was less than the committed level, the Company has 30 days to correct the problem.
- If after 30 days, the service performance for that parameter is still less than the committed level, the customer will be provided a service credit equal to 25% of the monthly recurring charge for that service parameter for all affected ports for the month in which the service parameters fall below (or above) the committed level.
- Packet Delivery Rate, Latency and Jitter calculations will be measured only when the ISI Wavelength Service network is available.

Exclusions (Service Level Agreements and Grade of Service credits)

The Company will be excluded from providing Service Level Agreements credits and Grade of Service credits should any of the following conditions occur:

- Force major events such as, but not limited to, an earthquake, hurricane, flood, fire, storms, tornadoes, explosion, lightning, power surges or failure, fiber cuts, strikes or labor disputes. Loss or damage resulting from any cause beyond the Company's reasonable control such as acts of war, civil disturbances, acts of civil or military authorities or public enemy.



- All SLAs are offered across the Company's network. The any components beyond the local facility including the Network Interface (NI), the CSU/DSU/Channel band/Extended Demarcation are excluded from the SLA calculation.
- Data loss during the Company's scheduled maintenance window.
- Data exceeding subscribed Usage.
- Failures attributed to facilities or equipment provided by customer or its contractors, equipment vendors, another local exchange carrier or inter-exchange carrier.
- Any type of Customer Network Management functionality is not included in SLAs.

For Basic Plus multipoint-to-multipoint service, the Company will use controls to limit the amount of multicast and broadcast traffic to protect the ISI Wavelength Services network against traffic storms. The maximum throughput of multicast traffic will be set at 1 Mbps per customer port, while the maximum throughput of broadcast traffic will be set at 200 packets per second per port. Packets dropped by traffic controls will be excluded from SLA calculations. The Company recommends that customers enable controls for multicast, broadcast and unknown unicast traffic within the customer network(s).

Data exiting the network through the customer ports are excluded from SLA calculations to the extent that it exceeds the CIR for those ports.

18. The responsibility of the Company shall be limited to furnishing the ISI Wavelength Services network. Subject to this responsibility, the Company shall not be responsible for the through transmission of signals generated by CPE or for the quality of, or defects in, such transmission or the rejection of signal by CPE. The Company shall not be responsible for installation, operation, maintenance or adapting ISI Wavelength Services to the technological requirements of specific CPE. In addition, the Company shall not be responsible to the customer if changes in any of the equipment, operations or procedures of the Company used in the provisioning of ISI Wavelength Services render any facilities provided by the customer obsolete; or require modification or alteration of such equipment or system; or otherwise affect its use or performance, provided the Company has met all applicable information disclosure requirements otherwise required by law.