31.1 Regulations

A. Description of Service

1. Sprint SONET Ring Service is a dedicated high capacity network (bandwidth) designed to provide the customer reliable functionality for the transmission of voice, data, and video via a self-healing ring topology between multiple customer-designated locations and Sprint central offices. Sprint SONET Ring Service will only be offered using 2-fiber unidirectional path switch ring (UPSR) topology. The Sprint SONET Ring Service network will consist of fiber optic facilities routed through Local, Alternative Central Office, Internodal, and/or Interoffice Channel facilities that transmit DS1, DS3, OC3, OC3c, and OC12 channel services simultaneously over primary and alternative diverse paths between customer designated locations and Sprint central offices. Continuous monitoring of the DS1, DS3, OC3, OC3c, and/or OC12 service quality will occur. Detection of a failure within the system will result in automatic self-healing around the point of failure to ensure that the DS1, DS3, OC3, OC3c, and/or OC12 services between locations within the Sprint SONET Ring Service network will continue.

2. Sprint SONET Ring Service provides survivable facilities and high speed synchronous optical fiber-based full duplex data transmission capabilities. There are two levels of Sprint SONET Ring Service: OC3 is provided at a terminating bit rate of 155.52 Mbps; and OC12 is provided at a terminating bit rate of 622.08 Mbps.

3. Sprint SONET Ring Service is provided for periods of 1, 3, or 5 years. When a customer orders Sprint SONET Ring Service, the customer and Sprint will work cooperatively to plan, engineer, provision and manage Sprint SONET Ring Service.

4. The required format and interface specifications are contained in Technical Reference Publication GR-253.

5. Current SONET standards do not provide for asynchronous DS3 to DS1 multiplexing. An STS1 channel may be mapped for either one DS3 or 28 DS1s. However, DS1s within a DS3 are not accessible within the SONET architecture, and their performance cannot be guaranteed for this reason. When the customer requests that an OC3 or OC12 service be configured with a combination of DS3 and DS1 channels, a DS3 to DS1 multiplexing arrangement, as set forth in Section 31.1.B.12, will be required.

6. The customer ordering Sprint SONET Ring Service must order a minimum of two nodes, one of which must be a Customer Node and one of which must be a Central Office Node. The maximum number of nodes will be determined by the technical characteristics and capability of the ring configuration requested.

7. Customers of Sprint SONET Ring Service will need to provide Sprint with a matrix detailing the configuration interface assignments desired among the nodes on the dedicated ring. The matrix must provide detail by node, by STS group. This matrix will assist Sprint in ensuring that node to node channels are linked appropriately. Customers must provide suitable floor space, controlled environment, and source of non-switched suitable power to support the service.
B. Specifications

1. Customer Node. Customer Nodes provide ring switching capabilities at customer designated locations other than Sprint central offices that are part of Sprint SONET Ring Service. This rate element offers OC3 and OC12 network capacities and is provided with or without Sprint provided equipment. Customer Node equipment provided by the customer must be compatible with that of Sprint. When a customer elects to furnish its own node equipment at the customer's premises, Sprint will install a cross-connect device on Sprint’s side of the demarcation point, allowing the customer to connect their node equipment.

2. Central Office Node. Central Office Nodes provide ring switching capabilities at Sprint central offices that are part of Sprint SONET Ring Service. This rate element offers OC3 and OC12 network capacities.

3. Configuration Card. A Configuration Card provides DS1, DS3, and OC3c electrical channelization and/or OC3 and OC12 optical channelization that may take place at each Customer or Central Office Node located on Sprint SONET Ring Service. The Configuration Card rate element applies for every interface capacity that originates or terminates at a Customer or Central Office Node. When the customer elects to furnish its own terminal equipment at the Customer Node, the rate for the Configuration Card at the Customer Node does not apply.

4. Local Channel

(a) The Local Channel provides for the communications path between a Customer Node and the serving wire center of the premises where the Customer Node is located. One Local Channel rate element will apply per customer designated premises for each Local Channel terminated.

(b) Monthly recurring rates for Local Channels apply for each air mile increment of the channel. Air mileage is measured using V&H coordinates between nodes. Fractions of an airline mile are rounded up to the next mile. The minimum charge is one airline mile except when the customer designated premises and the serving wire center are located in the same Sprint building, or where both customer designated premises are in the same building. In those instances, the Intraoffice Channel charge, as set forth in Section 31.1.B.8 following, will apply in lieu of the one-mile minimum Local Channel charge.

5. Alternate Central Office Channel. The Alternate Central Office Channel provides for the communications path between a Customer Node and an Alternate Central Office. The primary Central Office Node and any Alternate Central Office Node and applicable Configuration Cards must be associated with the same Sprint SONET Ring Service. Monthly recurring rates for Alternative Central Office Channels apply for each air mile increment of the channel. Air mileage is measured using V&H coordinates between nodes. Fractions of an airline mile are rounded up to the next mile. The minimum charge is one airline mile.

6. Interoffice Channel. The Interoffice Channel provides for the communications path between directly connected Sprint Central Offices located on a Sprint SONET Ring Service. This rate element does not apply where Central Office Nodes are adjacently connected in the same central office on the same Sprint SONET Ring Service for the purposes of providing additional node capacity. Monthly recurring rates for Interoffice Channels apply for each air mile increment of the channel. Air mileage is measured using V&H coordinates between nodes. Fractions of an airline mile are rounded up to the next mile. The minimum charge is one airline mile.
7. Internodal Channel. The Internodal Channel provides for the communications path between two directly connected Customer Nodes of a given Sprint SONET Ring Service located (a) in the same serving wire center area, (b) in the same office park/campus environment or contiguous property located in contiguous serving wire center areas, or (c) in different serving wire center areas. Monthly recurring rates for Internodal Channels apply for each air mile increment of the channel. Air mileage is measured using V&H coordinates between nodes. Fractions of an airline mile are rounded up to the next mile. The minimum charge is one airline mile.

8. Intraoffice Channel. The Intraoffice Channel provides for the communications path when the customer designated premises and the serving wire center are located in the same Sprint building, or where both customer designated premises are in the same building. Flat rated monthly recurring rates apply for each Intraoffice Channel.

9. Sprint SONET Ring Service Reconfiguration Charge
   (a) Sprint SONET Ring Service Reconfiguration Charge allows the customer to request that Sprint reallocate Configuration Cards located at each Customer or Central Office Node subsequent to the initial service installation.
   (b) If a new configuration is requested at the Customer or Central Office Node subsequent to the initial activation, a Sprint SONET Ring Service Reconfiguration Charge will apply on a per service basis. The Sprint SONET Ring Service Reconfiguration Charge is in addition to all applicable Configuration Card charges associated with the new configuration.

10. Sprint SONET Ring Service Regeneration Charges. Due to the technical limitations of SONET facilities, additional regeneration equipment may be required for essential detection and retransmission of SONET signals between nodes. Additional regeneration equipment will only be provided by Sprint when the actual fiber facility distance between the nodes exceeds SONET design limits. A monthly recurring Sprint SONET Ring Service Regeneration Charge will apply for each regenerator required for the provision of Sprint SONET Ring Service.

11. Sprint SONET Ring Service Rearrangements
   (a) For service rearrangements involving OC3 or OC12 Sprint SONET Ring Service, a charge equal to one half the Optical Service Charge will apply for each Customer or Central Office Node rearranged. The Optical Service Charge recovers the labor involved with designing, provisioning, and installing Customer and Central Office Nodes.
   (b) Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period requirements or a change in the physical location of the point of termination at a customer designated premises. Changes in the type of service or service termination are treated as disconnects and starts. Changes in the physical location of the point of the termination are treated as moves requiring additional non-recurring charges.

12. Multiplexed Service Connection. A Multiplexed Service Connection is an arrangement that allows one DS1, DS3, OC3, or OC12 channel of a multiplexed Sprint service to be connected to one DS1, DS3, OC3, or OC12 channel with like signaling of another Sprint service. For example, the lesser speed may be a LightLink® DS3 channel connected between a multiplexed Sprint SONET Ring Service. A Multiplexed Service Connection will be provided at all Sprint locations where Central Office Multiplexing is performed.

13. Multipoint service is not available with Sprint SONET Ring Service.
14. A Channel Service Unit (CSU) or appropriate termination equipment provided by the customer is required at a customer's or authorized user's premises to perform such functions as:

(a) proper termination of the service  
(b) amplification  
(c) signal shaping  
(d) remote loop-back

15. Unless specified following, the regulations for Sprint SONET Ring Service specified herein apply in addition to the regulations set forth in other sections of these Local Terms of Service or Sprint's Tariffs.

16. Temporary Suspension of Service (Vacation Service) at the customer's request, as defined in the Local Terms of Service, is not allowed.

17. Service Diagram. The following diagrams depict generic views of Sprint SONET Ring Service:

**Six-node Sprint SONET Ring Service℠**

A Configuration Card may apply at each node. The rate element applies for capacity that originates or terminates at a node. A Configuration Card provides for electrical (DS1, DS3, OC3c) or optical (OC3 and OC12).

**Two-node Sprint SONET Ring Service℠**

A Configuration Card may apply at each node. The rate element applies for capacity that originates or terminates at a node. A Configuration Card provides for electrical (DS1, DS3, OC3c) or optical (OC3 and OC12).
C. Definitions

1. Channel Service Unit (CSU) - The term "Channel Service Unit (CSU)" denotes equipment provided by the customer to terminate a digital facility on the customer's premises.

2. OC3 - This denotes a channel service expressed in terms of its digitally encoded data bit rate in accordance with the North American hierarchy of digital signal levels. It has a 155.52 Mbps transmission data rate.

3. OC12 - This denotes a channel service expressed in terms of its digitally encoded data bit rate in accordance with the North American hierarchy of digital signal levels. It has a 622.08 Mbps transmission data rate.

4. Nonrecurring Charge - A one-time charge for the initial installation, the installation of functions and features and service rearrangements.

5. Serving Wire Center - The local telephone central office assigned to subscribers in a predetermined geographic area.

D. Connections

1. Customer-Provided Terminal Equipment, Customer-Provided Derivation Equipment and Customer-Provided Communications Systems may be connected to Sprint SONET Ring Service when such connection is made in accordance with the provisions specified in the remainder of this Section 31.1.D.

2. Responsibility of Sprint

(a) The responsibility of Sprint will be limited to the furnishing and maintenance of Sprint SONET Ring Service to a network interface on the customer’s premises where provision is made for the connection of local service.

(b) Sprint will not be responsible for installation, operation or maintenance of any terminal equipment or communications systems provided by the customer. Sprint SONET Ring Service is not represented as adapted for the use of such equipment or system. Where such equipment or system is connected to Sprint facilities, the responsibility of Sprint will be limited to the furnishing of facilities suitable for Sprint SONET Ring Service and to the maintenance and operation in a manner proper for such digital service. Sprint will not be responsible for:

(1) The through transmission of signals generated by such equipment or system, or for the quality of, or defects in, such transmission, or

(2) The reception of signals by such equipment or systems, or

(3) Damage to terminal equipment or communications systems provided by a customer or authorized user due to testing.

(c) Sprint will not be responsible to the customer if changes in any of the facilities, operations or procedures of Sprint utilized in the provision of Sprint SONET Ring Service render any
facilities or equipment provided by a customer obsolete, or require modification or alteration of such equipment or system or otherwise affects its use or performance.

(d) Sprint is responsible for maintaining and repairing the facilities it furnishes. The customer may not rearrange, disconnect, remove or attempt to repair any equipment installed by Sprint without prior written consent of Sprint.

(e) In order to maintain the quality of Sprint SONET Ring Service, Sprint reserves the right to perform preventative maintenance and software updates to the network. Sprint has classified maintenance as follows:

(1) Scheduled Maintenance. Scheduled maintenance is performed for functions such as hardware and software upgrades and network optimization. Sprint will perform these tasks in a maintenance window that is anticipated to minimize disruption of customer service and activity. Sprint will provide advance notice of all scheduled maintenance.

(2) Demand Maintenance. Demand maintenance may occur as a result of unexpected events and is performed when Sprint SONET Ring Service network elements are in jeopardy. Sprint will perform this type of maintenance at its discretion. Due to the nature of demand maintenance, prior notification may not be possible; however, the customer will be informed when the maintenance has been completed.

3. Responsibility of the Customer

(a) The customer is responsible for installing and testing the customer premises equipment or facilities to insure that when they are connected to Sprint SONET Ring Service such equipment or facilities are operating properly.

(b) The operating characteristics of the customer premises equipment or facilities will be such as to not interfere with any of the services offered by Sprint. Such use is subject to the further provisions that the equipment provided by a customer does not: endanger the safety of Sprint employees or the public; damage, require change in or alteration of the equipment or other facilities of Sprint; interfere with the proper functioning of such equipment or facilities; impair the operation of Sprint’s facilities or otherwise injure the public in its use of Sprint’s services. Upon notice that the equipment provided by a customer is causing or is likely to cause such hazard or interference, the customer will take such steps as necessary to remove or prevent such hazard or interference.

(c) The customer’s responsibility will include cooperative testing with Sprint as may be necessary. Where regeneration and/or equalization adjustments or changes may be required to compensate for rearrangements and/or changes in outside plant facilities, the customer will be responsible for all expenses incurred in changes to his customer premises equipment.

4. Connection of Customer-Provided Terminal Equipment, Customer-Provided Derivation Equipment and Customer-Provided Communications Systems

(a) The following provisions will apply:

(1) Customer-Provided Terminal Equipment and/or Customer-Provided Communications Systems may be connected at the premises of the customer to Sprint SONET Ring Service.
(2) The customers, by use of their own derivation equipment, may create digital bit streams from Sprint SONET Ring Service and such equipment may be connected for transmission of such bit streams when connected through a customer-provided CSU.

(3) The undertaking of Sprint is to furnish Sprint SONET Ring Service as ordered and specified by the customer except as specified in Section 31.1.D.4(d).

(b) Connections to Other Services Furnished by Sprint to the Same Customer. Sprint SONET Ring Service furnished by Sprint may be connected by the customer to another service or to other services furnished by Sprint as specified in Section 31.1.D.4(a)(2). Connected services are subject to all rules and regulations governing the provisioning of those services.

(c) Connections to Other Services Furnished by Sprint to Different Customers. The customer may connect at the premises of the customer, to another Sprint SONET Ring Service or other services furnished by Sprint to different customers as specified in Section 31.1.D.4(a)(2). Connected services are subject to all rules and regulations governing provisioning of those services.

(d) Connection of Channel Service Units. A Channel Service Unit (CSU) or appropriate termination equipment must be provided by the customer to connect a Sprint-provided digital facility. This equipment must comply with the technical requirements outlined in Part 68 of the FCC Rules and Regulations.

(e) The customer shall be responsible for payment of a Maintenance of Service Charge for visits by Sprint to the customer's premises where the service difficulty or trouble report results from the use of equipment or facilities provided by the customer.

(f) The customer may not rearrange, disconnect, remove or attempt to repair any equipment installed by Sprint without the prior written consent of Sprint.

(g) For maintenance purposes, upon request of Sprint, the customer will be responsible for notifying Sprint of the type of digital terminating equipment used.

31.2 TERM PLAN

A. The minimum service period is 1 year. A term plan provides the customer with discounted rates for Sprint SONET Ring Service. Sprint SONET Ring Service may be ordered under a term plan for fixed periods of 1 year, 3 years, or 5 years. All rate elements within the same Sprint SONET Ring Service facility must be ordered under the same commitment period. The customer must order the term plan in writing to Sprint.

B. The customer must specify the length of the initial service period at the time the service is ordered.

C. At the end of the term plan the customer may subscribe to a new term plan at Sprint's then-prevailing rates. If the customer does not specify renewal terms in writing 90 days prior to the expiration of the 3 or 5 year service period, the commitment period and Sprint SONET Ring Service rates for the 1 year term will automatically be applied. If the customer does not specify renewal terms in writing prior to the expiration of the 1 year service period, the commitment period and the Sprint SONET Ring Service rates in effect at the time of expiration will automatically renew. The customer can terminate Sprint SONET Ring Service at the end of the minimum commitment period with no penalty or obligation to continue the service.
D. Rate increases or decreases will automatically be applied to the monthly term plan rates for the remaining term of the term plan. If Sprint initiated rate increases to any rate element or combination of rate elements causes the charges for the entire Sprint SONET Ring Service under the term plan to increase by 10% or more annually, then the customer may cancel the term plan without incurring termination liability charges provided the customer notifies Sprint within 30 days after the effective date of the rate increase.

E. The customer can extend term plan commitment periods at any time during the term of the plan, up to a maximum of 5 years. The number of remaining months in the original term plan will become part of the total term in the new term plan.

31.3 TERMINATION LIABILITY CHARGES

A. If a customer under a term plan disconnects all or a portion of Sprint SONET Ring Service prior to the expiration of the term plan, then a Termination Liability Charge will apply to those services that are disconnected. The Termination Liability Charge will be a one-time charge equal to sum of 50% of the payments remaining for the rest of the term plan.

B. Customers may move Customer Nodes and/or Central Office Nodes on the Sprint SONET Ring Service and not be subject to Termination Liability Charges providing the terms of the term plan are maintained. If charges as specified in Section 31.4.A following were applied to the service being terminated or moved, any termination or move charges associated with that construction apply, as well as any construction charges at the new location.

C. Termination Liability Charges will not apply when a service or rate element under a term plan is disconnected prior to the expiration of a selected service period as a result of a change in regulatory jurisdiction and/or a customer requested upgrade to a next generation service offering, under the following conditions:

1. The service period of the new term plan for the new service offering is a period equal to or exceeding the remaining service period of the disconnected term plan, and

2. The service orders to install the new service and disconnect the old service are related together, and there is no lapse in service between the installation of the new service and the disconnection of the old service, and

3. The service orders to install the new service and disconnect the old service are for the same customer and central office locations.

D. Sprint will determine whether the replacement service qualifies as a next generation service offering.

E. Nonrecurring charges and Service Connection Charges for the new service will apply according to the requirements of the new service.

F. Commission approval of the above termination liability language is not intended to indicate that the Commission has approved or sanctioned any terms or provisions contained therein. Signatories to such contracts will be free to pursue whatever legal remedies they may have should a dispute arise.

31.4 APPLICATION OF RATES

A. The rates specified for Sprint SONET Ring Service contemplate the provision of a digital quality facility utilizing existing interoffice carrier equipment and/or exchange cable facilities compatible
with this service. If equipment, new facilities or changes to existing facilities are required for the
provision of this service, then charges as specified in Section 5 of the Local Terms of Service will
apply in addition to the rates for Sprint SONET Ring Service.

B. The rates and charges for Sprint SONET Ring Service are in addition to any applicable rates and
charges set forth in other sections of Sprint’s Tariffs or Local Terms of Service. The applicable
rates for Sprint SONET Ring Service include monthly recurring rates and nonrecurring charges,
both of which are billed in advance.

C. Monthly recurring rates for Local, Alternative Central Office Interoffice, and Internodal Channels
apply for each air mile increment of the channel. Air mileage is measured using V&H coordinates
between nodes. Fractions of an airline mile are rounded up to the next mile. The minimum charge
is one airline mile, except when the customer designated premises and the serving wire center
are collocated in Sprint building, or where both customer designated premises are in the same
building. In those instances, the Intraoffice Channel monthly recurring rate would apply rather
than the initial one mile minimum.

D. For Internodal Channels, monthly recurring charges apply, as appropriate, for the same serving
wire center area or contiguous serving wire center areas. Monthly recurring rates for Customer
and Central Office Nodes apply per node and are based upon the capacity of the ring
configuration.

E. Monthly recurring rates for Configuration Cards apply for each origination and each termination of
an activated DS1, DS3, OC3, OC3c, and/or OC12 at the Customer or Central Office Node.

F. The service period for Sprint SONET Ring Service is 1, 3 or 5 years.

G. Charges for Special Types of Construction or Facilities, as set forth in Section 5 of the Local
Terms of Service, may apply where facilities and/or operating conditions do not permit the
provision of Sprint SONET Ring Service and the customer desires Sprint to provision the Sprint
SONET Ring Service.

H. Customers may be required to pay charges for Special Types of Construction or Facilities as set
forth in Section 5 of the Local Terms of Service when a four fiber optical service configuration is
requested in lieu of the 2 fiber UPSR topology for Sprint SONET Ring Service. Where dual
entrance facilities currently exist to a customer premises, special construction charges will not be
assessed when the customer requests connection at both entrance facilities.