SPRINT PROPOSED LANGUAGE

PART E - UNBUNDLED NETWORK ELEMENTS (UNEs)

(E)1. General Terms

(E)1.1 The Parties will implement the requirements of the Third Report and Order, CC Docket No. 96-98, Released November 5, 1999 (UNE Remand) in accordance with the effective dates set forth therein and all subsequent FCC, Commission or court orders.

(E)1.2 The Parties have agreed to the terms and conditions for access to UNEs based in large part on the existing law, rules, regulations, and interpretations thereof regarding USW's unbundling obligations in effect as of the date of this Agreement (the "Existing Unbundling Rules").

(E)1.3 To the extent that the Existing Unbundling Rules are changed, vacated, dismissed, stayed, or modified, this Agreement shall be amended to incorporate such changes in accordance with Section (A)1.2 of this Agreement. USW shall have no obligation under this Agreement as amended to provide access to any network element which USW has no obligation to unbundle under an effective FCC or Commission rule identifying specific unbundling requirements.

(E)1.4 To the extent that USW provides Sprint access to any network element in any manner and Sprint accepts such access, either Party does so without prejudice to any position either Party takes in any forum, including but not limited to USW's position that the network element does not satisfy the "necessary" and "impair" access standard of 47 U.S.C. % 251(d)(2) or Sprint's position that said requirement is satisfied.

(E)1.5 Pursuant to the following terms and conditions, USW will provide to Sprint Unbundled Network Elements (UNEs) as specified below. Sprint may use any of these UNEs to provide Telecommunications Services to its end-users including other telecommunications providers Sprint may convert special access services to combinations of unbundled loops and transport elements, so long as Sprint provides a significant amount of local exchange service, in addition to exchange access service, to any particular customer. Sprint may order access to USW UNEs in the locations and manner as required by law (E)1.6 USW will not separate already combined UNEs unless requested by Sprint. Where the UNEs are already combined, those elements will remain functional without any unnecessary interruption in service. The Parties acknowledge that the term "currently combined" in Rule 51.315(b) is still pending Eighth Circuit Court of Appeals interpretation. USW will combine UNEs as required by commission and FCC requirements:

(E)1.7 In addition to obtaining UNEs, Sprint may also purchase finished services from the USW Tariffs. USW will provide the finished services to Sprint at

Sprint's Collocation space. Sprint may connect finished services to UNEs or any other element if the combination occurs in Sprint's Physical Collocation space. The combination of finished services and UNEs may not take place on the ICDF.

(E)1.8 Sprint may connect UNEs in any technically compatible manner. USW will provide Sprint with the same features, functions and capabilities of a particular element that USW provides to itself, so that Sprint can provide any Telecommunications Services that can be offered by means of the element. USW will provide unbundled elements to Sprint at the same quality with what USW provides itself, its affiliates to the extent required by law, or similarly situated third party telecommunications carriers. Sprint may request additional features, functions and capabilities through the BFR process as explained in Part G of this Agreement.

(E)1.9 USW provides UNEs on an individual basis. Sprint is responsible for the end-to-end transmission and circuit functionality.

(E)1.10 Installation intervals for UNEs are provided in USW's Interconnect & Resale Resource Guide.

(E)1.11 Maintenance and Repair Center contact telephone numbers are provided in the Interconnect & Resale Resource Guide which is located on the USW Web site.

(E)1.12 In order to properly maintain and modernize the network, USW may make necessary modifications and changes to the UNEs in its network on an as needed basis. Such changes may result in minor changes to transmission parameters. Changes that affect network interoperability require advance notice pursuant to the Notice of Changes Section of this Agreement.

(E)1.13 Interconnection Tie Pairs (ITP) are required for each unbundled network element, ancillary service or interconnection service delivered to Sprint. The ITP provides the connection between the unbundled network element or interconnection service and demarcation point. The ITP is ordered in conjunction with a UNE. There is a recurring charge for the ITP. The ITP may be ordered per termination.

(E)1.14 Part H of this Agreement contains the rates for Unbundled Network Elements.

(E)1.15 LSR's and/or ASR's are generally used to order UNEs. UNEs may be ordered on an individual basis. To the extent USW is required by law to provide combinations on a combined basis, Sprint and USW will work together cooperatively within the industry to develop guidelines for ordering combinations of UNEs.

(E)1.15.1 USW agrees to provide the following UNEs pursuant to the FCC's orders in CC Docket No. 96-98 which are addressed in more detail below.

(E)1.15.1.1 Local Loop

The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in a USW Central Office and the loop demarcation point at an end user customer premises, including inside wire owned by USW. The local loop network element includes all features, functions and capabilities of such transmission facilities. Those features, functions and capabilities include the following:

- Two-wire analog voice grade
- Four-wire analog voice grade
- Two-wire conditioned to transmit digital signals
- Four-wire conditioned to transmit digital signals
- Dark fiber
- Attached electronics (except those electronics used for the provision of advanced services, e.g., Digital Subscriber Line Multiplexers)
- Line Conditioning
- High Capacity Loops, including DS1, DS3 and fiber

(E)1.15.1.2 Loop Spectrum (Line Sharing) To the extent and when required by law, Loop Spectrum UNE is the offering of unbundled data spectrum components of a local loop offered via a central office POTS splitter. This will enable the separate offering of voice and data services across the same local loop.

(E)1.15.1.3 Subloops

The Subloop UNE is defined as any portion of the loop that is technically feasible to access at terminals in USW's outside plant, including inside wire (owned by USW). An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole or pedestal, the network interface device (NID), the minimum point of entry, the single point of interconnection (at multi-unit premises), the main distribution frame, the remote terminal, and the feeder distribution interface (FDI).

(E)1.15.1.4 Line Conditioning

Line conditioning is defined as removal from the loop of any devices that may diminish the capability of the loops to deliver high speed switched wireline telecommunications capabilities, including xDSL service. Such devices include, but are not limited to, bridge taps, low pass filters, and range extenders.

(E)1.15.1.5 Network Interface Device (NID)

The network interface device is defined as any means of interconnection of end user customer premises wiring to USW distribution plant, such as a cross-connect device used for that purpose.

(E)1.15.1.6 Switching Capability

(E)1.15.1.6.1 Local Switching Capability (including Local Tandem Capability). The Local Switching Capability UNE is defined as line side facilities, trunk side facilities, and all features, functions and capabilities of the switch.

(E)1.15.1.6.2 Local Tandem Switching Capability. The tandem switching capability UNE is defined as trunk-connect facility, the basic switch trunk function of connecting trunks to trunks, and the functions that are centralized in tandem switches.

(E)1.15.1.6.3 Packet Switching Capability. The Packet Switching Capability UNE is defined as the basic packet switching function of routing or forwarding packets, frames, cells, or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by Digital Subscriber Line Access Multiplexers.

(E)1.15.1.7 Interoffice Transmission Facilities

Interoffice Transmission Facilities UNE includes Dedicated Transport, Dark Fiber Transport, and Shared Transport.

(E)1.15.1.8 Signaling Networks and Call-Related Databases

This UNE shall include signaling networks, call-related databases, and service management systems.

(E)1.15.1.9 Operator Services and Directory Assistance

Operator Services are any automatic or live assistance to a consumer to arrange for billing or completion, or both, of a telephone call. Directory Assistance is a service that allows subscribers to retrieve telephone numbers of other subscribers.

(E)1.15.1.10 Operations Support System (OSS)

Operations Support System consist of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by USW's database and information.

Directory AssistanceList [Move Directory List from Section F.

(E)1.16 Combination of Unbundled Network Elements.

(E)1.16.1 To the extent required by law, USW shall provide Unbundled Network Elements in a manner that allows Sprint to combine such network elements in order to provide a telecommunications service.

(E)1.16.2 To the extent required by law, USW shall not separate requested network elements that are already combined.

(E)1.16.3 Upon request USW shall perform the functions necessary to combine unbundled network elements in any manner, even if those elements are not ordinarily combined in USW's network, and even if those elements are not currently combined for a given customer, provided that such combination is technically feasible and would not impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with USW's network.

(E)1.16.4 Upon request USW shall perform the functions necessary to combine USW unbundled network elements with elements possessed by Sprint in any technically feasible manner.

(E)1.16.5 Combinations (including those that replicate USW end-user services) should be priced at a level no greater than the sum total of the individual unbundled network element prices.

(E)1.16.6 USW shall support the ordering and provisioning of these combinations as an unbundled network element- platform (UNE-P). Ordering, provisioning, and maintenance processes will be consistent with established industry standards. In the event that industry standards have not been finalized prior to Sprint's request for these services, the parties agree to negotiate an acceptable interim solution and support the development of industry standards for joint implementation. Sprint may order Elements either individually or in any combination pursuant to Commission rules and regulations. Combinations ("Combinations") consist of multiple elements that are logically related to enable Sprint to provide service in a geographic area or to a specific customer. Depending on the particular elements ordered by Sprint which form a combination, those elements may generally be placed on the same order by Sprint. Designed services may not be placed on the same order as simple services such as traditional elements used for a 1FB. Sprint will provide USW with a list of combinations it desires to use.

(E)1.16.7 USW will evaluate the administrative feasibility of creating new codes in order that Combinations can be identified and described by Sprint so that they can be ordered and provisioned together and not require the enumeration of each Element within that Combination on each provisioning order. Such an evaluation shall include the effects on all CLECs. At such point as USW offers any combination capability to any other party it will immediately make it to available Sprint.

(E)1.16.8 USW will provide unbundled elements to Sprint at the same quality with what USW provides itself, its affiliates to the extent required by law, or similarly situated third party telecommunications carriers. This must at a minimum include: switch features; treatment during overflow/congestion conditions; equipment/interface protection; power redundancy; sufficient spare facilities to ensure provisioning, repair, performance, and availability; standard facility interfaces; real time access to integrated test functionality (manual testing for interconnection), disaster recovery, and permitting Sprint to interconnect Sprint facilities or facilities provided by Sprint or by third parties with each of USW's UNEs.

(E)1.16.9 When new UNEs are identified or developed by USW, USW shall make those new elements available to Sprint pursuant to FCC rules as effective.

(E)1.16.10 Unbundled elements will conform to the minimum standards contained in FCC Rule 51.305 and subject to the provisions of CC Docket No. 96-98 First Report and Order ("First R&O") released August 8, 1996, as effective. The provision of these services is subject to change by subsequent amendment of rules by the FCC.

(E)2. Unbundled Dedicated Interoffice Transport

(E)2.1 Description

(E)2.1.1 Unbundled Dedicated Interoffice Transport (UDIT) provides Sprint with a network element of a single transmission path between USW Wire Centers in the same LATA and state. UDIT is a bandwidth-specific interoffice transmission path designed to a DSX panel (or equivalent) in each USW Wire Center. Sprint must have a presence in the USW Serving Wire Center and have requested termination capacity through the Collocation process. UDIT is available in DS0, DS1, DS3, OC-3, and OC-12, where facilities are available. UDIT is distance sensitive and is for the sole use of Sprint. Sprint can assign channels and transport its choice of voice or data. UDIT is a point-to-point service and not a self-healing product. Specifications, interfaces and parameters are described in Technical Publication 77389B (or C).

(E)2.1.1.1 USW shall not restrict the type or jurisdiction of traffic that Sprint may place on such dedicated facilities.

(E)2.1.2 Unbundled Multiplexer is offered as a stand alone element associated with UDIT. A 3/1 Multiplexer provides Sprint with the ability to de-multiplex the DS3 44.736 Mbps signal to 28 DS1 1.544 Mbps channels. The 3/1 Multiplexer includes a DS3 terminated at a DS3 ICDF Frame and 28 DS1s terminated at the DS1 ICDF Frame. A 1/0 Multiplexer provides Sprint with the ability to de-multiplex the DS1 1.544 Mbps signal to 24 DS0 64 Kbps channels. The 1/0 Multiplexer includes a DS1 terminated at a DS1 ICDF Frame and 24 DS0s terminated at the intermediate distribution frame.

(E)2.1.3 Extended UDIT (E-UDIT) provides Sprint with an Unbundled Network Element that is a band-width specific transmission path between a USW Wire Center and the Wire Center of Sprint or an Interexchange Carrier IXC POP within the same USW Serving Wire Center area. E-UDIT is available in DS1, DS3, OC-3 and OC-12 where USW facilities exist sufficient to carry the desired bandwidth and must be joint-engineered with USW. E-UDIT is a dedicated service for the sole use of the Sprint. The E-UDIT may be used for voice or data traffic but may not be used for bypass of toll or access charges. One end

of the E-UDIT must terminate in the local USW Serving Wire Center. This termination will be at the appropriate cross-connect frame. Sprint must have a presence in the USW Serving Wire Center and have requested termination capacity through the Collocation process. E-UDIT is a point-to-point service and not a self-healing product. Associated rates are not distance sensitive. Specifications, interfaces and parameters are described in Technical Publication 77389C.

(E)2.1.4 Meet Point Unbundled Dedicated Interoffice Transport (UDIT) provides Sprint with a network element of a single transmission path between a USW Wire Center and a mutually agreed meet point with another ILEC not in USW territory. Sprint must have a presence in the USW office and have requested termination capacity through the Collocation process. Sprint orders the UDIT from a local USW Wire Center to another ILEC office not in USW territory. USW provides the interoffice facility up to the meet point and the jumpers to the tie cable at the DSX in the USW Wire Center. It is Sprint's responsibility to design from the DSX to the ICDF (as defined in Section (D)1.1.5) and on to whatever connection is planned in the Wire Center. Sprint can assign channels and transport its choice of voice or data. Specifications, interfaces and parameters are described in Technical Publication 77389C. It does not offer metallic-based functions.

(E)2.2 Terms and Conditions

(E)2.2.1 Sprint is responsible for performing cross connections between UDIT, E-UDIT and other UNEs and transmission design work including regeneration requirements for such connections.

(E)2.2.2 For the 3/1 Multiplexer, Sprint must order all multiplexing elements and requirements at the initial installation, including all 28 DS1s and the settings on the multiplexer cards. If options are not selected and identified on the order by Sprint, the order will be held until options are selected. For the 1/0 Multiplexer, the low side channels may be ordered as needed.

(E)2.2.3 For DS-1 E-UDIT, USW may provide facilities to the other carrier's Wire Center to provide a joint-engineered DS1 signal. The E-UDIT handed off to the other carrier will be that ordered by Sprint. For E-UDIT above DS-1, USW provides an Optical Interface at the location requested by Sprint. This Interface will be on a Fiber Distribution Panel (FDP) provided by USW and placed where approved by the other carrier and building owner. In the case of the IXC E-UDIT, the space must be provided by the IXC carrier.

Another E-UDIT option is that USW meets the other carrier at a mutually agreed upon location for the convenience of both

carriers, without affecting the rates. Each carrier provides all facilities and equipment on its side of the meeting point. USW and the other carrier will jointly engineer the facility and meet with an agreeable type. The meet point facility may be handed off at the requested rate (e.g.,DS3) or may be a splice depending upon agreement. Where a third carrier is involved, the E-UDIT handed off to Sprint by USW and/or the other carrier will be that ordered by Sprint. USW will designate which channel on the facility will carry the E-UDIT.

E-UDIT is intended to be transport between the appropriate USW Serving Wire Center and another carrier's Wire Center, distinct from an end user and within USW territory. E-UDIT cannot traverse a USW Wire Center. The location of the other carrier will be considered a carrier Wire Center only if it meets certain criteria: 1) Its location has V&H coordinates, 2) The Wire Center contains a device that switches traffic, or a node leading to such a switch, 3) The switch is registered with a CLLI code listed in the LERG.

Sprint is responsible for design between any DSX and the ICDF (and on to whatever connection is planned) at the USW Wire Center and for design beyond the DSX or equivalent at Sprint or IXC Wire Center. USW will cooperate with the other carrier to test the E-UDIT circuit, but USW is not responsible for end-to-end testing if E-UDIT is cross-connected to another element.

Sprint places its own equipment and joint engineering applies to all E-UDIT.

If facilities do not exist at the time of order, Sprint may request an inquiry through an Automatic Quote and Contract Billing (AQCB) (Special Assembly) process by the Account Team. AQCB is required for a meet point. The request for construction will be reviewed by the USW funding committee to determine the assignment of costs. Sprint shall pay USW for all non-reusable construction costs.

(E)2.2.4 Meet Point billing is implemented when the UDIT goes from a USW Wire Center to another ILEC not in USW territory. The arrangement may require new contract negotiations with the ILEC involved. A billing percentage will be applied according to mileage.

USW and the other ILEC will determine the manner in which the UDIT signal is transported between offices and the meet point methods. In general, for USW to provide UDIT requires that the interoffice facilities carry traffic at least one step higher.

(E)2.3 Rate Elements

(E)2.3.1 DS1 UDIT

(E)2.3.1.1 DS1 Transport Termination (Fixed)

A network element consisting of a 1.544 Mbps termination at a DSX or DCS and providing a connection between the interoffice transport facility and other network elements. It must be ordered with a DS1 Transport.

(E)2.3.1.2 DS1 Transport Facilities (Per Mile)

An interoffice transport network element providing a transmission path up to 1.544 Mbps between USW Central Offices. This is a mileage sensitive element based on the V&H coordinates of the DS1 UDIT. The mileage is calculated between the originating and terminating offices.

(E)2.3.1.3 DS1 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the DS1 termination service.

(E)2.3.2 DS3 UDIT

(E)2.3.2.1 DS3 Transport Termination (Fixed)

A network element consisting of a 44.736 Mbps termination at a DSX or DCS and providing a connection between the interoffice transport facility and other network elements. It must be ordered with a DS3 transport.

(E)2.3.2.2 DS3 Transport Facilities (Per Mile)

An interoffice transport network element providing a transmission path up to 44.736 Mbps between USW Central Offices. This is a mileage sensitive element based on the V&H coordinates of the DS3 UDIT. The mileage is calculated between the originating and terminating offices.

(E)2.3.2.3 DS3 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the DS3 termination service.

(E)2.3.3 DS0 UDIT

(E)2.3.3.1 DS0 Transport Termination (Fixed)

A network element consisting of a 64 Kbps termination at an intermediate distribution frame and providing a connection between the interoffice transport facility and other network elements. It must be ordered with a DS0 transport.

(E)2.3.3.2 DS0 Transport Facilities (Per Mile)

An interoffice transport network element providing a transmission path up to 64 Kbps between USW Central Offices. This is a mileage sensitive element based on the V&H coordinates of the DS0 UDIT. The mileage is calculated between the originating and terminating offices.

(E)2.3.3.3 DS0 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the DS0 termination service.

(E)2.3.3.4 Low Side Channelization (LSC)

A recurring charge for low side multiplexed channel cards and settings at each end of the DS0 UDIT.

(E)2.3.4 OC-3 UDIT

(E)2.3.4.1 OC-3 Transport Termination (Fixed)

A network element consisting of a 155.52 Mbps termination at a FDP and providing a connection between the interoffice transport facility and other network elements. It must be ordered with an OC-3 Transport.

(E)2.3.4.2 OC-3 Transport Facilities (Per Mile)

An interoffice transport network element providing a transmission path up to 155.52 Mbps between USW Central Offices. This is a mileage sensitive element based on the V&H coordinates of the OC-3 UDIT. The mileage is calculated between the originating and terminating offices.

(E)2.3.4.3 OC-3 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the OC-3 termination service.

(E)2.3.5 OC-12 UDIT

(E)2.3.5.1 OC-12 Transport Termination (Fixed)

A network element consisting of a 622.08 Mbps termination at a FDP and providing a connection between the interoffice transport facility and other network elements. It must be ordered with a OC-12 transport.

(E)2.3.5.2 OC-12 Transport Facilities (Per Mile)

An interoffice transport network element providing a transmission path up to 622.08 Mbps between USW Central Offices. This is a mileage sensitive element based on the V&H coordinates of the OC-12 UDIT. The mileage is calculated between the originating and terminating offices.

(E)2.3.5.3 OC-12 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the OC-12 termination service.

(E)2.3.6 3/1 Multiplexing

(E)2.3.6.1 Recurring Multiplexing

The DS3 Central Office multiplexer provides de-multiplexing of one DS3 44.736 Mbps to 28 1.544 Mbps channels.

(E)2.3.6.2 Non-Recurring Multiplexing

One-time charges apply for a specific work activity associated with installation of the multiplexing service.

(E)2.3.7 1/0 Multiplexing

(E)2.3.7.1 Recurring Multiplexing

The DS0 Central Office multiplexer provides de-multiplexing of one DS1 1.544 Mbps to 24 64 Kbps channels.

(E)2.3.7.2 Non-recurring Multiplexing

One-time charges apply for a specific work activity associated with installation of the multiplexing service.

(E)2.3.7.3 Low Side Channelization (LSC)

A recurring charge for low side multiplexed channel cards and settings.

(E)2.3.8 DS-1 E-UDIT

(E)2.3.8.1 DS-1 Facility

A network element providing a transmission path up to 1.544 Mbps between a USW Central Office Serving Wire Center and Sprint serving Wire Center or IXC POP. This is a non-mileage sensitive element, regardless of whether a meeting point is established.

(E)2.3.8.2 DS-1 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the DS-1. DS-1 E-UDIT requires coordinated testing.

(E)2.3.9 DS-3 E-UDIT

(E)2.3.9.1 DS-3 Facility

A network element providing a transmission path up to 44.736 Mbps between a USW Central Office Serving Wire Center and Sprint Serving Wire Center or IXC POP. This is a non-mileage sensitive element, regardless of whether a meeting point is established.

(E)2.3.9.2 DS-3 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the DS-3. DS-3 E-UDIT requires coordinated/cooperative testing.

(E)2.3.10 OC-3 E-UDIT

(E)2.3.10.1 OC-3 Facility

A network element providing a transmission path up to 155.52 Mbps between a USW Central Office Serving Wire Center and Sprint Serving Wire Center or IXC POP. This is a non-mileage sensitive element, regardless of whether a meeting point is established.

(E)2.3.10.2 OC-3 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the OC-3. OC-3 E-UDIT requires coordinated/cooperative testing.

(E)2.3.11 OC-12 E-UDIT

(E)2.3.11.1 OC-12 Facility

A network element providing a transmission path up to 622.08 Mbps between a USW Central Office Serving Wire Center and Sprint Serving Wire Center or IXC POP. This is a non-mileage sensitive element, regardless of whether a meeting point is established.

(E)2.3.11.2 OC-12 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the OC-12. OC12 E-UDIT requires coordinated/cooperative testing.

(E)2.3.12 MEET POINT UDIT (DS-0, DS-1, DS-3, OC-3, OC-12)

(E)2.3.12.1 Transport Termination (USW end only)

A network element consisting of the requested Mbps termination at a FDP and providing a connection between the interoffice transport facility and other network elements at the USW Wire Center. Each level (DS-1, DS-3, etc.) is separately priced.

(E)2.3.12.2 Transport Facilities (Per Mile)

A network element providing the requested transmission path between a USW Central Office Serving Wire Center and the meet point. This is the UDIT mileage sensitive element (for DS-1, DS-3, etc.) based on V&H multiplied by a Billing Percentage (BP).

(E)2.3.12.3 Non-Recurring Termination

One-time charges apply for a specific work activity associated with installation of the UDIT. Meet Point UDIT requires coordinated/cooperative testing.

(E)2.3.12.4 Recurring and non-recurring charges for Meet Point UDIT are the same as for the comparable bandwidth of UDIT. Only one EICT is applied for Meet Point UDIT.

(E)2.4 Shared Transport

USW shall provide Shared Interoffice Transport in a non-discriminary manner according to the following terms and conditions

(E)2.4.1 Description

(E)2.4.1.1 Shared Transport is defined as interoffice transmission facilities shared by more than one carrier, including USW, between end offices switches, between end offices switches and tandem switches, and between tandem switches, and USW's network.

(E)2.4.1.2 Shared Transport is only provided with Unbundled Local Switch Ports, as described in Section _____ of this Agreement. The existing routing tables resident in the switch will direct both USW and Sprint traffic over USWs interoffice message trunk network.

(E)2.4.1.3 Sprint may custom route operator services or directory assistance calls to unique operator services/directory services trunks.

(E)2.4.1.4 Sprint may not mix Unbundled Dedicated Interoffice Transport (UDIT) and shared transport in the same EAS/local calling area.

(E)2.4.2 Terms and Conditions

(E)2.4.2.1 Sprint shall provide an 18-month forecast of anticipated demand by route to USW.

(E)2.4.2.2 Sprint shall submit forecasts at least quarterly.

(E)2.4.3 Rate Elements

(E)2.4.3.1 Shared Transport will be billed on a minute-of-use basis in accordance with the rate described in Part H.

(E)2.4.4 Ordering Process

Shared Transport is ordered with Unbundled Line Port and Unbundled Local Switching via the LSR process. Shared transport is assumed to be the choice of routing when ordering a port, unless specified differently by Sprint. Ordering processes are contained in Section _____ of this Agreement. Installation intervals are incorporated in the Unbundled Line Port and are listed in the Interconnect and Resale Resource Guide.

(E)2.5 Ordering Process

(E)2.5.1 Ordering processes and installation intervals are contained in the Service Interval Guide. UDIT and E-UDIT are ordered via the ASR process.

(E)2.5.2 UDIT is ordered with basic installation. USW will notify Sprint when the work activity is complete. Test results performed by USW are not provided to Sprint. E-UDIT requires coordinated/ cooperative installation and test results will be provided.

(E)2.5.3 UDIT 3/1 multiplexing is provisioned as a complete system with terminations at the high side and low side ICDF frames and all multiplexing cards. Sprint must order settings for all cards at the time of the multiplexing request.

(E)2.5.4 For UDIT 1/0 multiplexing, the high side is fully provisioned with the order. The low side is provisioned when low side channels are ordered. Optional card settings are selected by Sprint at the time of the DS0 order.

(E)2.6 Maintenance and Repair

The Parties will use end-to-end automated testing capabilities where available to isolate trouble. If the trouble cannot be isolated using an automated testing procedure, the Parties will test the facilities on their side of the demarcation point to identify the trouble location. When there is no test point at the demarcation point, the Parties will perform trouble isolation to identify where trouble points exist. Where necessary, the Parties will perform cooperative testing to isolate the trouble. Sprint cross- connections will be repaired by Sprint and USW cross-connections will be repaired by USW.

(E)3. Unbundled Loops

(E)3.1 Description

The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in a USW Central Office and the loop demarcation point at an end user customer premises, including inside wire owned by USW. The local loop network element includes all features, functions and capabilities of such transmission facilities.

(E)3.1.1 Analog voice grade

Analog Unbundled Loops are available as a two-wire or four-wire voice grade, point-to-point configuration suitable for local exchange type services within the analog voice frequency range of 300 to 3000 Hz.

(E)3.1.2 ISDN

ISDN digital grade loops will support digital transmission of two 64 Kbps bearer channels and one 16 Kbps data channel. BRI ISDN is a 2B+D Basic Rate Interface-Integrated Services Digital Network (BRI-ISDN) Loop which will meet national ISDN standards and conform to ANSI T1.601-1992 and conforms to Power Spectral Density Mask.

SPRINT also desires ISDN PRI services – (details to be determined)

(E)3.1.3 Dark fiber

Dark fiber is fiber that has not been activated through connection to the electronics that “light” it, and thereby render it capable of carrying communication services.

(E)3.1.4 xDSL

(E)3.1.4.1 A two-wire ADSL-Compatible loop is a non-loaded, twisted copper pair that meets revised resistance design or carrier serving area design guidelines. An ADSL two-wire loop provides a transmission path that is suitable for data rates up to a 6 Mpbs digital signal downstream (toward the end user) at a 6dB performance margin and up to a 640 Kbps digital signal upstream (away from the end user) at a 6dB performance margin while simultaneously carrying an analog voice signal, although Sprint is not restricted to those bandwidth specifications in providing its services, provided that Sprint complies with appropriate industry standards. An ADSL two-wire loop terminates in a two-wire electrical interface at the end user premises and at the USW Central Office frame. The upstream and downstream ADSL

power spectral density masks and dc line power limits referenced in ANSI T1.413.1998 shall apply.

(E)3.1.4.2 A two-wire HDSL-Compatible loop consists of a single two-wire, non-loaded, twisted copper pair that meets the carrier serving area design criteria. The HDSL power spectral density mask and dc line power limits referenced in Bellcore/Telcordia TA-NWT-001210 shall apply. The HDSL-2 power spectral density mask and dc line power limits referenced in T1E1.4/99-006R5 shall apply.

(E)3.1.4.3 A four-wire HDSL-Compatible loop consists of 2 two-wire, non-loaded, twisted copper pairs that meet the carrier serving area design criteria. The HDSL power spectral density mask and dc line power limits referenced in Bellcore/Telcordia TA-NWT-001210 shall apply.

(E)3.1.4.4 A two-wire SDSL (Symmetrical Rate) Digital Grade loop supports symmetrical upstream and down stream data rates.

(E)3.1.4.5 A two-wire VDSL (Very high-bit-rate) Digital Grade loop supports down stream data rates above 10 mbps.

(E)3.1.4.6 Other DSL Technologies: As the Industry accepts other power spectral density masks which do not exceed ADSL, HDSL, ISDN or HDSL-2 limits, USW will provide unbundled loops for the purpose of Sprint providing these new services to its end users.

(E)3.1.5 High Capacity

A four-wire DS-1-compatible loop (Digital Grade Loop) is a transmission path that supports the transmission of digital signals up to a maximum binary information rate of 1.544 Mbps and terminates in a four-wire electrical interface at the End user premises and a Sprint Collocation node at a USW central office. A DS-1 Digital Grade Loop is capable of operating in a full duplex, time division (digital) multiplexing mode. A DS-1 Digital Grade Loop provides transmission capacity equivalent to 24 voice grade channels with associated signaling, twenty-four 56 Kbps digital channels when in band signaling is provided or twenty-four 64 Kbps channels with the selection of the Clear Channel signaling option.

(E)3.2 Loop Specifications

(E)3.2.1 All of the services described in Section 3.1 Descriptions may be provisioned using one or more of the following loop specifications. Sprint will identify the applicable loop specification when placing an order for a USW loop using the appropriate NC code. Sprint will identify its transmission equipment by providing the appropriate NCI code.

(E)3.2.2 The following CSA description is the standard Sprint will use in pre-qualifying loops for certain products. USW does not agree, guarantee or warrant that a specific loop ordered by Sprint will conform to CSA design specifications.

(E)3.2.3 CSA design specifications were originally developed to support 56 Kbps Digital Data Service (DDS) delivery to customers served by Digital Loop Carrier (DLC) systems. A CSA loop is defined as a wire pair that meets CSA design guidelines whether it originates from a central office or from a remote terminal site. Generally, most short loops around a central office are consistent with CSA rules even though constructed using Resistance Design rules.

(E)3.2.3.1 CSA loops are designed to meet the following specifications.

(E)3.2.3.1.1 Non-loaded cable only.

(E)3.2.3.1.2 Multi-gauge cable is restricted to two gauges (excluding short cable sections used for stubbing or fusing).

(E)3.2.3.1.3 Total bridged tap length may not exceed 2.5 kft. No single bridged tap may exceed 2.0 kft.

(E)3.2.3.1.4 The amount of 26 gauge cable (used alone or in combination with other gauge cable) may not exceed a total length of 9 kft including bridged tap.

(E)3.2.3.1.5 For single gauge or multi-gauge cables containing only 19, 22, or 24 gauge cable, the total length including bridged tap may not exceed 12 kft.

(E)3.2.3.1.6 The total cable length including bridged tap of multi-gauge cable that contains 26 gauge cable may not exceed:

$$12 - \left[\frac{3 \times L_{26}}{9 - L_{BTAP}} \right] kft$$

Where:

L_{26} = total length of 26 gauge cable in kft, excluding bridged taps.

L_{BTAP} = total length of all bridged taps in kft.

(E)3.2.3.1.7 Loops that comply with CSA design standards will support HDSL, HDSL2, and SDSL at a 768 Kbps symmetrical transmission rate, and ADSL at a 6 Mbps by 640 Kbps asymmetrical transmission rate.

(E)3.2.3.1.8 LXC is a Telcordia approved NC code for CSA loops and is supported by the OBF.

(E)3.3 Revised Resistance Design (RRD) Loop Specification

(E)3.3.1 The following RRD description is the standard Sprint will use in pre-qualifying loops for certain products. USW does not agree, guarantee or warrant that a specific loop ordered by Sprint will conform to Revised Resistance Design (RRD) specifications.

(E)3.3.2 RRD specifications were developed to control loop transmission performance. RRD loops are designed on a global basis to guarantee that loop transmission loss is statistically distributed and that no single loop in the distribution network exceeds the signaling range of the central office.

(E)3.3.3 The RRD specification allows for loops up to 24 kft in length, however all RRD loops over 18 kft must be loaded. DSL technologies must operate over non-loaded loops, and thus for use by DSL technologies RRD loops are limited to 18 kft in length.

(E)3.3.4 RRD loops requested by Sprint and used for DSL transmission must meet the following specifications before Sprint will accept the loop.

(E)3.3.4.1 Non-loaded cable only.

(E)3.3.4.2 Length of 18 kft or less including bridged tap.

(E)3.3.4.3 Less than 6 kft of bridged tap.

(E)3.3.4.4 Loop resistance of 1300 ohms or less

(E)3.3.5 Loops that comply with the RRD design standards described in section 6.03 will support SDSL up to a 384 Kbps symmetrical transmission rate and ADSL up to a 1.5 Mbps by 384 Kbps asymmetrical transmission rate.

(E)3.3.6 LXR is a Telcordia approved NC code for RRD loops and is supported by the OBF.

(E)3.3.6.1 RRD loops may be ordered from USW using a Telcordia standard Network Channel (NC) code of LXR. Prior to Sprint ordering loops using the LXR code, Sprint will pre-qualify the loops based on the above standards. If, after receiving the Sprint order, USW determines, based on its records, that the loop does not meet the standards, USW will notify Sprint of its findings and will work cooperatively with Sprint, if possible, to resolve any issues and/or discuss alternatives.

(E)3.3.7 Unloaded Loop (LX-N)

All unloaded loops, including those meeting CSA or RRD design specifications, are included in this category. There are no loop length restrictions.

Unloaded loops not required to meet CSA or RRD design specifications are ordered using the Telcordia NC code of LX-N.

(E)3.3.8 Fiber Loops [to be developed based on UNE Remand Order]

(E)3.4 Terms and Conditions

(E)3.4.1 General

(E)3.4.1.1 When Sprint purchases a local loop from USW, as defined in Section 3.2, they shall have an exclusive right to the use of that loop.

(E)3.4.1.2 The loop may include its attached electronics, including multiplexing equipment used to derive the loop transmission capacity except for electronics used to provide advanced services.

(E)3.4.1.3 USW will provide Sprint with the same loops USW uses to provision its own retail services. USW will modify the loops it provides Sprint on the same basis it modifies the loop to provide equivalent services to its own customers. Sprint may request

additional modifications to meet its unique service offerings and USW will not unreasonably withhold performing such modifications. If USW cannot provide Sprint with the loop as ordered, USW will advise Sprint of available alternatives.

(E)3.4.1.4 USW will provide a loop that is equipped with all transmission equipment necessary to provide equivalent communications capabilities as USW makes available for its own retail operations over loops of equivalent length between a customer's premise and the traditional serving central office of that customer's premise.

(E)3.4.1.5 Analog Unbundled Loops are available as a two-wire or four-wire voice grade, point-to-point configuration suitable for local exchange type services within the analog voice frequency range of 300 to 3000 Hz. For the two-wire configuration, Sprint must specify the signaling option.

(E)3.4.2 The actual loop facilities may utilize various technologies or combinations of technologies. When Sprint requests an unbundled loop currently provided by USW's Integrated Digital Loop Carrier (IDLC) or other similar technologies, USW will move the requested unbundled loop to a spare cable pair, universal digital loop carrier, or other transmission equipment for the purpose of unbundling the loop. If, however, no spare unbundled loop is available, USW will, within the standard FOC interval, or as soon as USW is aware there is no facility, notify Sprint of the lack of available facilities. Where no spare facilities are available, Sprint may pursue other options, including those found in the Subloop Unbundling section of this Agreement or submit a request for quote for a construction quote for new facilities. However, the Parties agree that USW is not bound by law to construct such facilities.

(E)3.4.2.1 When Sprint requests a Basic Rate ISDN capable Loop, USW will dispatch a technician to provide an Extension Technology that may include the placement of repeaters, either Central Office or in the field, or BRITES cards in both the COT and RT in order to make the Loop ISDN Capable. The ISDN Capable Loop may also require conditioning, (e.g., removal of loads or bridged tap). Sprint will be charged an Extension Technology recurring charge in addition to the unbundled Loop recurring charge as specified in Part H of this Agreement.

(E)3.4.2.2 When Sprint requests a DS1 Capable Loop, USW will install the electronics at both ends including any intermediate repeaters. The DS1 Capable Loop may also require conditioning, (e.g., removal of loads or bridged tap). If required, Sprint will be charged a non-recurring charge in addition to the Unbundled Loop recurring charge.

(E)3.4.2.3 USW reserves the right to limit the provisioning of BRI and/or DS1 capable loops in some areas served by Loop facilities and/or transmission equipment that are not compatible with BRI and/or DS1 service.

(E)3.4.2.4 To the extent Sprint purchases an unbundled loop to provide ISDN, XDSL or DS1 services, such use of the loop will be identified on the loop order by using the appropriate NC/NCI code. USW will provide conditioned loops for telecommunications services requiring loops unfettered by any intervening equipment so that Sprint may provide a variety of telecommunications services by attaching appropriate terminal equipment at the ends. Conditioning charges may apply when USW conditions such loops to meet the requested transmission standard.

(E)3.4.3 Unbundled Loops are provided in accordance with the specifications, interfaces and parameters described in USW's Technical Publication 77384. USW's sole obligation is to provide and maintain Unbundled Loops in accordance with such specifications, interfaces and parameters. USW does not warrant that Unbundled Loops are compatible with any specific facilities or equipment or can be used for any particular purpose or service. Transmission characteristics may vary depending on the distance between Sprint's end user and USW's end office and may vary due to characteristics beyond the control of USW. USW, in order to properly maintain and modernize the network, may make necessary modifications and changes to the UNEs in its network on an as needed basis. Such changes may result in minor changes to transmission parameters. Changes that affect network interoperability require advance notice pursuant to the Notice of Changes Section of this Agreement.

(E)3.4.4 Sprint's DSL Equipment Standards

(E)3.4.4.1 The following DSL equipment standards are provided by Sprint to assist USW in its efforts to manage their network.

(E)3.4.4.2 Sprint will deploy ADSL equipment that operates under the Power Spectral Density mask defined in

ANSI standard T1.413, Issue 2 (including Annex F).

(E)3.4.4.3 Sprint will deploy HDSL and SDSL equipment that operates under the Power Spectral Density mask defined in Bellcore TA-NWT-001210.

(E)3.4.4.4 Sprint will deploy HDSL2 equipment that operates under the Power Spectral Density mask defined in ANSI document T1E1.4/99-006R5.

(E)3.4.5 Installation Options

(E)3.4.5.1 Sprint has four installation options available when ordering an Unbundled Loop. Depending upon the type of Loop ordered (analog or digital capable), the rates for the installation options will vary.

(E)3.4.5.2 Basic Installation Option for Existing Service

The Basic Installation option may be ordered for existing (reuse) service only. For an existing USW or other CLEC end user changing to Sprint, the Basic Installation option is a “lift and lay” procedure with no associated circuit testing. USW “lifts” the Loop from its current termination and “lays” it on a new termination connecting to Sprint. USW will notify Sprint when the work activity is complete.

(E)3.4.5.3 Basic Installation with Performance Testing Option for New Service

The Basic Installation with Performance Testing option may be ordered for new service only. For new service that has not previously existed, USW will complete the circuit wiring per the WORD document and/or the service order. USW will perform the required performance tests to ensure the new circuit meets the required parameter limits. The test results are recorded as benchmarks for future testing purposes. The test results are forwarded to Sprint by USW.

(E)3.4.5.4 Coordinated Installation With Cooperative Testing Option

The Coordinated Installation with Cooperative Testing option may be ordered for new or existing service. For an existing USW or other CLEC end

user changing to Sprint, the Coordinated Installation option is a “lift and lay” procedure with cooperative testing. Sprint has the option of designating a specific appointment time when the order is placed. If no appointment time is specified when the order is initiated, Sprint will provide such information to USW at least 48 hours prior to the desired appointment time. At the appointment time, USW will “lift” the Loop from its current termination and “lay” it on its new termination connecting to Sprint. USW will complete the required performance tests and perform other testing as requested by Sprint. Testing requested by Sprint that exceeds testing requirements contained in USW’s Technical Publication 77384 will be billed to Sprint. Test results will be recorded as benchmarks for future testing and will be forwarded to Sprint.

Upon Sprint’s request, USW will provide at the customer’s premise a properly terminated drop at the Network Interface Device (NID) or demarcation. A proper termination shall be defined as a purely resistive termination of 900 ohms between the tip and ring conductors. Continuity is established from the Sprint tie cable pair, through any intermediate field cross connect points, and is properly terminated at the NID. In an attempt to avoid additional truck rolls behind a service order, Sprint will provide a toll free number for use by USW field technicians. When this method of order completion is used, the Sprint Operations center will immediately test the loop condition, and accept or reject the loop based on the test results. USW will also provide to Sprint at no additional cost, cooperative testing to test any network element provided by USW and to test the overall functionality of network elements that are connected to one another or to equipment or facilities provided or leased by Sprint, to the extent USW has the ability to perform such tests. The cooperative testing provided for in this paragraph is exclusive of any maintenance service and related testing that BA is required to provide for unbundled network elements under this Agreement.

(E)3.4.5.5 Coordinated Installation Without Testing for Existing Service

Coordinated Installation without Testing may be ordered for 2-wire analog loop start or ground start unbundled Loops. For an existing USW or other CLEC end user changing to Sprint, this option remains a “lift and lay” procedure, but offers Sprint the ability to coordinate the conversion activity, allowing Sprint’s end user to pre-plan for minimal service interruption. At Sprint’s designated time, USW will contact Sprint with notification that the work activity is beginning. If no appointment time is specified when the order is initiated, Sprint will provide such information to USW at least 48 hours prior to the desired appointment time. At the appointment time, USW “lifts” the Loop from its current termination and “lays” it on its new termination connecting to Sprint. Once the work has been completed USW will notify Sprint that the “lift and lay” procedure has been completed.

(E)3.4.6 Multiplexing of the Unbundled Loop. Sprint may order multiplexing for Unbundled Loops under the same multiplexing provisions and pricing as provided in the UDIT Section of this Part E.

(E)3.5 Rate Elements

The following Unbundled Loop rate elements are contained in Part H of this Agreement.

(E)3.5.1

(E)3.5.2 Non-Loaded - 2 and 4 wire non-loaded loops.. After these Loops are ordered and the design layout record is reviewed by Sprint, it is Sprint’s responsibility to determine if the Loop meets the technical parameters set forth by the specific digital service. [This should be moved to ordering] Charges shall apply for unloading cable pairs in the event that non-loaded Loops are not available.

(E)3.5.3 Digital Capable Loops Charges shall apply for conditioning of the digital capable loops over 12kft, as requested by Sprint, if necessary, as determined by USW. .

(E)3.5.4 Unbundled Loop recurring monthly rates.

(E)3.5.5 Unbundled Loop non-recurring installation charges based on the installation option requested.

(E)3.5.6 DS1 or DS3 Regeneration non-recurring charge as described earlier in this Section.

(E)3.5.7 Conditioning of circuits over 12 kft non-recurring charge as described earlier in this Section. (E)3.5.8 Basic Rate ISDN Extension Technology recurring charge as described earlier in this Section.

(E)3.6 Ordering Process

(E)3.6.1 Specific channel performance options for the loops can be ordered by identifying the Network Channel (NC)/Network Channel Interface (NCI) for the functions desired. USW will provide Sprint with the available NC/NCI codes and their descriptions.

(E)4. Loop Qualifying Tool

(E)4.1 Description

(E)4.1.1 USW's Loop Qualifying Tool will provide Sprint with the necessary information to assist Sprint in determining if a loop qualifies for xDSL service based on available USW records. To access the IMA electronic Loop Qualifying Tool, Sprint will request an ADSL Loop Qualification pre-order transaction and enter the end users telephone number or street address. The response screen displays the following information:

- The number of lines.
- The results of the ADSL qualifications test.
- The loop description for all loops tested. Sprint will receive the following raw, unfiltered cable data as reflected in USW's data records:
- The total loop length in kilofeet.
- The total bridged tap, length in kilofeet.
- The insertion loss for non-loaded loops (in decibels) calculated at 196-kilohertz frequency with 135-ohm termination.
- The circuit type: copper or pair gain.
- The number of pairs available;
- The loop loading information.

In addition, access to the following raw, unfiltered cable data, as reflected in USW data records, will be provided:

- The composition of the loop material, including, but not limited to, fiber optics or copper.
- The loop length to include the length and location of each type of transmission media.
- The wire gauge(s) of the loop.

(E)4.1.2 The Loop Qualifying Tool will enable Sprint to determine if the loop is qualified to support its desired type of xDSL service. Additionally, the loop make-up enables Sprint to determine the type of loop to order and whether conditioning is necessary.

(E)4.1.3 In addition, USW will provide Loop Qualified information based on individual zip code of the end users in a particular wire center, NXX code, or any other basis that USW provides such information to itself.

(E)4.1.4. At such time that OBF has established guidelines for pre-order loop qualification, the Parties will cooperate to implement pre-order loop qualification functions based upon such guidelines.

(E)4.1.5 When USW cannot provide a loop that is equal to the specifications requested by Sprint through the NC/NCI coded order, USW will reject the order back to Sprint with all applicable rejection information. (E)4.1.6 All Unbundled Loops are ordered via an LSR. Information on completing the LSR is contained in the Interconnect & Resale Resource Guide.

(E)4.1.7 The installation intervals for the Analog, Non-Loaded Loops and Digital Capable Loops are defined in USW's Interconnect & Resale Resource Guide. The interval will start when USW receives a complete and accurate Local Service Request (LSR). This interval may be impacted by order volumes and load control considerations. Refer to USW's Interconnect & Resale Resource Guide when ordering multiple Loops (up to 25) at the same location. If more than twenty-five orders are issued at the same address, the request will be handled on an individual case basis. Related orders with related orders will be physically worked within the same calendar day.

(E)4.1.8 When ordering Unbundled Loops, Sprint is responsible for obtaining or providing facilities and equipment that are compatible with the service.

(E)4.1.9 When applicable, Sprint will be responsible for providing battery and dial tone to its connection point two business days prior to the due date on the service order.

(E)4.1.10 LSRs are processed through the Interconnect Service Center. Refer to USW's Interconnect & Resale Resource Guide for the appropriate cut-off times for order receipt.

(E)4.1.11 Firm Order Confirmation (FOC) will be sent on all Unbundled Loop firm order requests. Refer to USW's Interconnect & Resale Resource Guide for the FOC interval.

(E)4.1.12 USW will provide Design Layout Records (DLR) when requested on terms and conditions consistent with USW end users.

(E)4.1.13 USW will provide jeopardy notification that is similar to that provided to USW end users.

(E)4.1.14 USW will provide completion notification that is similar to that provided to USW end users.

(E)4.1.15 Miscellaneous Charges may include Due Date Change Charges, Design Change Charges, Cancellation Charges, Additional Dispatch Charge, Expedite Order Charge, Additional Engineering, Installation Out of Hours, Maintenance of Service, Premises Work Charges, Additional Cooperative Testing, Non-Scheduled Testing, Automatic Scheduled Testing, Cooperative Scheduled Testing, Manual Testing, Manual Scheduled Testing. Rates are contained in the applicable state Tariff.

(E)4.2 Maintenance and Repair

(E)4.2.1 When Sprint orders a specified Local Loop (reference section 3.1 above), USW shall meet and maintain the required physical loop characteristics as originally delivered. If for any reason conditioning or modifications are required to return the loop to the original loop design, or, to the extent controlled by USW, to the original characteristics of the loop, such modifications will be made by USW at no cost to Sprint. If Sprint requests a modification to the original loop design, such modification will be made at a cost to Sprint. If a Sprint product has been installed but, at Sprint's option, Sprint uses the loop to provide a different product that exceeds the original designed capacity of a facility, i.e., interferes with other services, a mutually agreed upon process will be developed to resolve the service problem.

(E)4.2.2 Sprint is responsible for its own end user base and will have the responsibility for resolution of any service trouble report(s) from its end users. Sprint will perform trouble isolation on the Unbundled Loop and any associated UNEs prior to reporting trouble to USW. USW will work cooperatively with Sprint to resolve trouble reports when the trouble condition has been isolated and found to be within a portion of USW's network. The Parties will cooperate in developing mutually acceptable test report standards. When the trouble is not in USW's network, Sprint shall be charged maintenance charges in accordance with the applicable time and materials charges in USW's Tariff. Billing of Time and Materials will be accompanied by sufficient detail to verify such charges.

(E)4.2.3 USW will perform tests to isolate the service trouble. If no trouble is found, USW will notify Sprint. If the trouble is isolated to the Central Office, or a USW facility, USW will repair, without charge, as long as the trouble is not attributed to Sprint's Collocation equipment, cabling, and/or cross connects. If the trouble is attributed to Sprint's Collocation equipment, cabling or cross connects, USW will notify Sprint and charges will apply. If the trouble is on the end user's side of the NID, the trouble will be referred back to Sprint and charges will apply for trouble isolation.

(E)4.2.4 Sprint will have responsibility for testing its equipment, network facilities and the Unbundled Loop facility. If USW performs tests of the Unbundled Loop facility at Sprint's request, and the fault is not in USW facilities, a trouble isolation charge shall apply.

(E)4.2.5 Spectrum Management

(E)4.2.5.1 USW will implement spectrum management practices that provide methods to resolve service degradation caused by disturbers on nearby pairs when there are industry standards adopted for spectrum management. Methods may include forms of binder management designed to protect services from the effects of known disturbers.

(E)4.2.5.2 USW reserves the right to limit the provisioning of BRI and DS1 capable loops in some areas served by loop facilities and/or transmission equipment that are not compatible with BRI and/or DS1 service. USW reserves the right to make some cables unavailable to Sprint, itself, and other similarly situated third party telecommunications carriers based on spectrum management. Considerations.

(E)5. Network Interface Device (NID)

(E)5.1 Description

The NID is an independent UNE which provides a technology neutral interface between USW's loop distribution plant and the customer premises wiring and includes all features, functions, and capabilities of the device. The NID provides a protective ground connection, provides protection against lightning and other high voltage surges and is capable of terminating cables such as twisted pair cable. If Sprint orders unbundled Loops on a reuse basis, the existing drop and USW's NID may remain in place and continue to carry the signal to the end user's equipment.

(E)5.2 Terms and Conditions

(E)5.2.1 USW shall allow Sprint access to the network interface device as required under FCC rules.

(E)5.2.2 Any costs associated with Sprint connecting its facilities to the USW NID will be the responsibility of Sprint.

(E)5.2.3 If Sprint purchases an unbundled loop, Sprint may provide its own NID or have USW provide the NID.

(E)5.2.4 If Sprint installs its own NID, Sprint may connect its NID to the USW NID by placing a cross-connect between the two. When provisioning a NID to NID connection, Sprint will isolate the USW facility in the NID in a manner that does not damage the USW facility. At no time will either Party remove or rearrange the other Party's NID and associated facilities.

(E)5.2.5 USW will retain sole ownership of the USW NID and its contents on USW's side. USW will not conduct wholesale NID change-outs, or inventory NID locations. However, if the USW NID is found to be defective or of a technology which USW would change the NID in the normal course of upgrading its network for its end users (e.g., carbon type), USW will at no charge to Sprint, replace the NID.

(E)5.3 Rate Elements

(E)5.3.1 If Sprint requests a non-modular unit to be replaced with a modular NID, USW will do so. Charges will be assessed for the NID and the technician's installation and travel time. Any costs associated with USW's connection of Sprint's NID to USW's NID, will be the responsibility of Sprint. This is a nonrecurring charge and is contained in Part H of this Agreement.

(E)5.3.2 Recurring rates for the NID are contained in Part H. The recurring NID rate may be included in a combined price with the unbundled loop. In such situations, if ordered by the Commission, the NID rate element will be removed from the loop price and will be added into Part H as a separate rate element.

(E)5.4 Ordering Process

When Sprint submits an LSR for an Unbundled Loop, Sprint will indicate in the Loop Service form if a modular NID is required at the end user's location.

(E)5.5 Maintenance and Repair

If USW is dispatched to a location and finds the existing protector in a state of disrepair, the protector will be replaced with a new modular NID at no cost to Sprint. If USW is dispatched to an end user's location on a maintenance issue and finds the modular NID to be defective, USW will replace the defective element or, if beyond repair, the entire device.

(E)6. Local Tandem Switching

USW shall provide local tandem switching capability as described below pursuant to the FCC rules. Notwithstanding, USW shall not be required to unbundle local tandem switching capability for Sprint end users with four or more voice grade (DS0) equivalents or lines, and when said end users are located in USW tandem switches located in:

- The top 50 Metropolitan Statistical Areas as set forth in Appendix B of the Third Report and Order, and
- In Density Zone 1, as defined in Section 69.123 on January 1, 1999.

(E)6.1 Description

(E)6.1.1 The local tandem switching capability establishes a temporary transmission path between two other switches, but not including the transport needed to complete the call. The local tandem switching capability also includes the functions that are centralized in local tandems rather than in separate end office switches. A host/remote end office configuration is not a Tandem Switching arrangement.

The local tandem switching capability includes:

- Trunk connect facilities, which include, but are not limited to, the connection between trunk termination at a cross connect panel and switch trunk card.
- The basic switch trunk function of connecting trunks to trunks; and
- The functions that are centralized in tandem switches (as distinguished from separate end office switches), including but not limited to, call recording, the routing of calls to operator services, and signaling conversion features.

(E)6.2 Terms and Conditions

(E)6.2.1 If Sprint obtains its local tandem switching from a third party tandem provider, tandem to tandem connections will be required between USW and the third party tandem provider.

(E)6.2.2 Port access to the local tandem switch is provided in DS1 increments.

(E)6.3 Technical Requirements [12-08-99 See Third Report and Order, Appendix C, Rule 51.319 (c)(2), para 4.]

(E)6.3.1 The requirements for Local Tandem Switching include, but are not limited to, the following:

(E)6.3.2 Local Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed.

(E)6.3.3 To the extent technically available, Local Tandem Switching shall record billable events, on the same basis USW records such events for itself, and send them to the area billing centers designed by Sprint.

(E)6.3.4 Local Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on Sprint traffic shall be at parity with controls being provided or imposed on USW traffic (e.g. USW shall not intentionally and selectively block Sprint traffic and leave its traffic unaffected or less affected).

(E)6.4 Rate Elements

(E)6.4.1 A DS1 Trunk Port is a 4-wire DS1 trunk side switch port terminating at a DS1 demarcation point and incurs a non-recurring charge. Each DS1 Tandem Trunk Port includes a subset of 24 DS0 channels capable of supporting local message type traffic and incurs a non-recurring charge to establish trunk group members.

(E)6.4.2 Use of Local Tandem Switching is billed on an originating per minute of use basis.

(E)6.5 Ordering Process

Requests for DS1 Trunk Port(s) must be followed by separate order(s) to establish new Trunk Group(s) or to augment existing Trunk Group(s).

(E)7. Local Circuit Switching Capability

(E)7.1 Description

(E)7.1.1 Local Circuit Switching Capability provides the functionality required to connect the appropriate lines or trunks wired to the Main Distributing Frame (MDF) or Digital Cross-Connect (DSX) panel to a desired line or trunk. Such functionality shall include all of the features, functions, and capabilities of the switching port for Sprint that USW provides for its own services. Local Circuit Switching Capability includes the following components:

(E)7.1.1.1 Line-side switching includes, but is not limited to, connection to an ICDF where a cross-connect to a loop may be obtained and a switch card with connection to the card.

(E)7.1.1.2 Trunk-side switching includes, but is not limited to, connection to trunk cross-connect and trunk card with features and functions.

(E)7.1.1.3 Functionality may include, but is not limited to: line signaling and signaling software, digit reception, dialed number translations, call screening, routing, recording, call supervision, dial tone, switching, telephone number provisioning, white page listing, all other features that the switch is capable of providing, including but not limited to, customer calling, customer local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch.

(E)7.1.2 Notwithstanding, USW shall not be required to unbundle local circuit switching capability for Sprint end users with four or more voice grade (DS0) equivalents or lines, and when said end users are located in USW local circuit switches located in:

(E)7.1.2.1 The top 50 Metropolitan Statistical Areas as set forth in Appendix B of the Third Report and Order, and

(E)7.1.2.2 In Density Zone 1, as defined in Section 69.123 on January 1, 1999.

(E)7.2 Description

(E)7.2.1 Unbundled Analog Line Port

The Unbundled Analog line port is a two-wire connection from the MDF to the ICDF, as defined in Section (D)1.1.5, (or equivalent connected with an EICT) that allows the provisioning of vertical features. A non-recurring charge applies to establish the line side port.

Vertical features are software attributes on end office switches. Vertical features for the Unbundled Analog Line Port are available separately, but not limited to, the following:

Call Hold
Call Transfer
Three Way Calling
Call Pickup

Call Waiting – Terminating/Cancel Call Waiting
Distinctive Ringing
Speed Call Long – Customer Change
Station Dial Conferencing (6-way)
Call Forwarding Busy Line
Call Forwarding Don't Answer
Call Forwarding Variable
Call Forwarding Variable Remote
CLASS – Call Waiting ID
CLASS – Calling Name & Number
CLASS – Calling Number Delivery
CLASS – Calling Number Delivery - Block
CLASS – Continuous Redial
CLASS – Last Call Return
CLASS – Priority Calling
CLASS – Selective Call Forwarding
CLASS – Selective Call Rejection
CLASS – Anonymous Call Rejection
*Automatic Callback Calling/Ring Again
Call Park (Store & Retrieve)
*Dial Call Waiting
*Directed Call Pick Up with Barge In
Message Waiting Indication A/V
*Trunk Answer Any Station

* = Iowa only

Sprint may request features that are not listed above but are activated in a USW end office on a individual case basis. Sprint may request features that are not activated in a USW end office using the BFR process.

(E)7.2.2 Unbundled BRI ISDN Digital Line Port

(E)7.2.2.1 Basic Rate Interface Integrated Services Digital Network (BRI ISDN) is a digital architecture that provides integrated voice and data capability (2 wire). A BRI ISDN Port is a Digital 2B+D (2 Bearer Channels for voice or data and 1 Delta Channel for signaling and D Channel Packet) line side switch connection with BRI ISDN voice and data basic elements. The BRI ISDN Port has InterLATA and IntraLATA (where available) carrier choice, access to 911, and USW Operator Services. For flexibility and customization, optional features can be added. BRI ISDN Port does not offer B Channel Packet service capabilities. The serving arrangement conforms to the internationally developed, published, and recognized standards generated by International

Telegraph and Telephone Union (formerly CCITT).

(E)7.2.2.2 Vertical features are software attributes on end office switches. Vertical features included in the BRI ISDN Digital Line port are as follows:

- 2 B & D
- 2 Primary Directory Numbers (PDNs)
- Call Appearances – Two per Terminal
- Normal Ringing
- Caller ID Blocking per call

Sprint may request features that are not listed above but are activated in a USW end office on a individual case basis. Sprint may request features that are not activated in a USW end office using the BFR process.

(E)7.2.3 Trunk Ports

(E)7.2.3.1 DS1 Message Trunk Port

An Unbundled DS1 Message Trunk Port is a DS1 trunk side switch port terminating at a DSX1. Each DS1 Trunk Port includes a subset of 24 DS0 channels capable of supporting local message type traffic. Requests for DS1 Trunk Port(s) must be followed by a separate order for a Message Trunk Group, as further described in this Section. A non-recurring charge applies to establish the trunk port.

(E)7.2.3.1.1 Message Trunk Group

A Message Trunk Group is a software feature that establishes the trunk group and its associated trunk members. Signaling and addressing attributes are defined at the group level. Trunk members may be associated with individual channels of the DS1 Trunk Port.

(E)7.2.3.1.2 Requests for establishing new out going and two-way Message Trunk Groups must be coordinated with and followed by requests for Customized Routing. Incoming only trunk groups do not require Custom Routing.

(E)7.3 Terms and Conditions

(E)7.3.1 Sprint shall be responsible for updating the 911/E911 database through USW's third party database provider for any unbundled switch port ordered. Additional 911/E911 provisions are contained in Part F of this Agreement.

(E)7.3.2 When Sprint orders unbundled ports, Sprint will use such unbundled ports within ninety (90) calendar days or Sprint shall relinquish those ports to USW for use by other Telecommunication Carriers.

(E)7.3.3 The point of access for port connection is the ICDF of the USW Serving Wire Center. The unbundled port is extended to the ICDF with an EICT. The tie cables between a Collocation, the ICDF, and the USW distribution frame are established with Sprint's facility forecast.

(E)7.4 Rate Elements

(E)7.4.1 Each port type described above will have a separate associated port charge, including monthly recurring charges and one-time non-recurring charges.

(E)7.4.2 Local originating usage will be measured and billed on minutes of use.

(E)7.4.3 Vertical features will be offered as options for unbundled local switching at rates set forth in Part H.

(E)7.5 Ordering

Ordering intervals will be consistent with USW's Interconnect & Resale Resource Guide.

(E)7.6 Technical Requirements

(E)7.6.1 USW shall control congestion points in the same manner for Sprint as it does for itself, e.g., mass calling events, and network routing abnormalities, using capabilities such as Automatic Call Gapping, Automatic Congestion Control, and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or USW.

(E)7.6.1.1 Protective Protocols

Either Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps on traffic toward each others network,

when required to protect the public switched network from congestion due to facility failures, switch congestion or failure or focused overload. Sprint and USW will immediately notify each other of any protective control action planned or executed.

(E)7.6.1.2 Expansive Protocols

Where the capability exists, originating or terminating traffic reroutes may be implemented by either party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk servicing. Expansive controls will only be used when mutually agreed to by the parties.

(E)7.6.1.3 Mass Calling

Sprint and USW shall cooperate and share pre-planning information, where available, regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes, to prevent or mitigate the impact of these events on the public switched network.

(E)8. Packet Switching

(E)8.1 Description

(E)8.1.1 The packet switching capability network element is defined as the basic packet switching function of routing or forwarding packets, frames, cells or other data units based on address or other routing information contained in the packets, frames cells or other data units, and the functions that are performed by Digital Subscribe Line Access Mulitplexers (DSLAM), including but not limited to:

- The ability to terminate copper customer loops (which includes both a low band voice channel and a high-band channel, or solely a data channel);
- The ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches:
- The ability to extract data units from the data channels on the loops, and
- The ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.

(E)8.2 Terms and Conditions

(E)8.2.1 USW shall be required to provide nondiscriminatory access to unbundled packet switching capability only where each of the following conditions are satisfied:

(E)8.2.1.1 USW has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end office to remote terminal, pedestal or environmentally controlled vault);

(E)8.2.1.2 There are no spare copper loops capable of supporting the xDSL services Sprint seeks to offer;

(E)8.2.1.3 USW has placed its DSLAM in the remote terminal and has not permitted a requesting carrier to deploy a DSLAM at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has Sprint obtained a virtual collocation arrangement at these subloop interconnection points; and

(E)8.2.1.4 USW has deployed packet switching capability for its own use.

(E)8.3 Rate Elements

[to be developed]

(E)8.4 Ordering

[to be developed]

(E)9. Enhanced Extended Links (EEL]:

USW will provide to Sprint the ability to provision Enhanced Extended Links (EEL) to allow Sprint to serve end users by extending an end user's loop from the end office serving that end user where Sprint is not collocated to a different end office in which Sprint is already collocated for the provisioning of services. The EEL allows Sprint to aggregate loops at fewer collocation locations and increase their efficiency by transporting aggregated loops over efficient high capacity facilities to their central switching location.

(E)9.1 Description

USW will provide Sprint with the components of the EEL, which include the local loop, multiplexing at the end user serving office, the ability to connect at the interconnection distribution frame, and access to dedicated transport

from the end user serving wire center to the Sprint collocation wire center and termination to the Sprint collocation cage. This may be provided at the DS0 level subject to the 512 CCS requirement referenced in Section (C), wherein Sprint will purchase a dedicated DS1.

(E)9.2 Terms and Conditions

This section requires further development.

(E)9.3 Ordering

The EEL may be ordered on an individual LSR basis.
This section requires further development.

(E)9.4 Rate Elements

This section requires further development.

(E)10. Customized Routing

(E)10.1 Description

Customized Routing is a software function of a switch that provides a Sprint specific originating routing application path between line side ports and a specific DS1 Trunk Port and Message Trunk Group(s) via the switching matrix and a Routing table or tables. Customized Routing will combine end office switching and dedicated trunks allowing Sprint the ability to route traffic by class of service to specific dedicated or shared message trunks. For example, Customized Routing will allow Sprint the ability to route Operator Services, Directory Assistance and Local calling traffic to Unbundled Message Trunk Ports and Group(s). Customized Routing may be ordered as an application with Resale or Unbundled Switching.

(E)10.2 Terms and Conditions

(E)10.2.1 Customized Routing will be offered on a first-come, first-served basis.

(E)10.2.2 Coin signaling is only available as part of “smart PAL” service.

(E)10.2.3 Sprint shall provide a comprehensive routing plan associated with any custom routing request.

(E)10.2.4 Sprint must place the associated trunk orders prior to the establishment or deployment of Line Class Codes.

(E)10.2.5 Line Class Codes are deployed in specific End Offices.

(E)10.3 Rate Elements

(E)10.3.1 Development of a Line Class Code is billed as a non-recurring charge on an individual case basis for each switch in which a new Line Class Code is installed.

(E)10.3.2 Installation of a Line Class Code is billed as a non-recurring charge on an individual case basis for each switch in which it is installed.

(E)10.4 Ordering Process

(E)10.4.1 Sprint must issue a Service Inquiry form detailing the routing and facility requirements for Customized Routing prior to a pre-order meeting with USW. Refer to the New Customer Questionnaire for a copy of the Service Inquiry.

(E)10.4.2 After the Service Inquiry form is completed and provided to USW, the pre-order meeting will be established to provide USW with the comprehensive network plan, specific custom routing requirements and desired due dates.

(E)10.4.3 USW will provide Sprint a detailed time and cost estimate thirty (30) business days after the pre-order meeting. After the time and cost estimate is provided and any appropriate trunk orders are issued, Sprint will issue an LSR for Line Class Code development and implementation. Refer to the Interconnect & Resale Resource Guide.

(E)11. Common Channel Signaling Capability/SS7

(E)11.1 Description

(E)11.1.1 Common Channel Signaling Capability/SS7 (CCSAC/SS7) provides multiple pieces of signaling information via the SS7 network. This signaling information includes, but is not limited to, specific information regarding calls made on associated Feature Group D trunks and/or LIS trunks, Line Information Database (LIDB) data, Local Number Portability (LNP), Custom Local Area Signaling Services (CLASS), 8XX set up information, Call Set Up information and transient messages.

(E)11.1.2 The signaling information is used by Sprint for:

- Faster call set-up and tear down
- Holding times reduced
- Development of unique routing and control information
- Leaving voice path open while using the signaling path for call set-up as well as network management data.

(E)11.1.3 Optional Features of CCSAC/SS7 are dependent on specific Sprint design requirements as well as the existence of adequate transport facilities. Transport facilities must be in

place to accommodate Call Set Up of related Feature Group D and/or LIS messages, transient messages, and other ancillary services (e.g., LIDB data and 8XX set up information).

(E)11.2 Terms and Conditions

(E)11.2.1 All elements of the unbundled CCSAC/SS7 arrangement will be developed on an individual case basis based on Sprint's design requirements. All of Sprint's unbundled design elements are subject to facility requirements identified below.

(E)11.2.2 At a minimum, transport facilities must exist from Sprint's Point of Presence or Signaling Point of Interface (SPOI) to the identified USW STP location. Unbundled transport facilities to accommodate CCSAC/SS7 signaling may be developed using UNEs defined in this Part E above.

(E)11.2.3 Sprint's CCSAC/SS7 design requirements will include, but are not limited to:

(E)11.2.3.1 STP Port - This element is the point of termination to the signal switching capabilities of the STP. Access to a USW STP Port is required at a DS0 level.

(E)11.2.3.2 Specific Point Code detail including the identification of Sprint's Originating, Destination and Signaling Options (i.e., ISDN User Part [ISUP] or Transaction Capabilities Application Part [TCAP]) requirements.

(E)11.2.3.3 All signaling routing requirements must be identified in Sprint's design. Information will include industry standard codes identifying USW end offices, tandems, sub-tending end offices and STPs to be included in the designed unbundled signaling arrangement.

(E)11.2.4 The CCSAC/SS7 unbundled arrangement must meet the following requirements:

(E)8.2.4.1 Both USW and Sprint are obligated to follow existing industry standards as described in Bellcore/Telcordia documents including but not limited to GR-905 CORE, GR-954-CORE, GR-394-CORE and USW Technical Publication 77342.

(E)11.2.4.2 Sprint's switch or network SS7 node must meet industry and USW certification standards.

(E)11.2.4.3 Transport as identified above must be provisioned at a minimum DS1 capacity at Sprint's Point of Presence or SPOI. This facility must be exclusively used for the transmission of network control signaling data.

(E)11.2.4.4 CPN will be delivered by Sprint to USW in accordance with FCC requirements.

(E)11.2.4.5 Carrier Identification Parameter (CIP) will be delivered by Sprint to USW in accordance with industry standards, where technically feasible.

(E)11.2.4.6 Provisions relating to call related databases (i.e. 8XX, LIDB, Advanced Intelligent Network (AIN), etc.) are contained in Part F of this Agreement.

(E)11.3 Rate Elements

Rates for the unbundled CCSAC/SS7 elements designed by Sprint will be applied on an individual case basis (ICB) based on Sprint's specific design requirements. Both nonrecurring and monthly recurring rates may be applicable. Message rating applies to all messages traversing the USW signaling network. Messages which are transient in nature (not destined for USW databases) will be assessed message rates. Pricing detail is provided in Part H of this Agreement. Possible rate elements for unbundled CCSAC/SS7 elements could include, but are not limited to:

(E)11.3.1 Nonrecurring Rates

CCSAC Option Activation Charge – Assessed for adding or changing a point code in the signaling network. The specific application being requested determines the specific charge application of either basic or database. In addition, this charge will be billed based on the first and each additional point code requested on the same order.

(E)11.3.2 Recurring Rates

(E)11.3.2.1 STP Port - a monthly recurring charge, per connection into the STP.

(E)11.3.2.2 Signal Formulation Charge - assessed per call set-up request (ISUP), for formulating signaling messages at the USW end office or USW tandem in association with call set-up.

(E)11.3.2.3 Signal Transport Charge - assessed per call set-up request (ISUP) that is transported between the USW STP and a USW end office or tandem switch associated with call set-up. Also assessed

per data request (TCAP) transported to or from a USW STP and destined for a foreign database.

(E)11.3.2.4 Signal Switching Charge - assessed per call set-up request (ISUP) that is switched at the USW STP. Also assessed per data request (TCAP) switched at the USW STP and destined for a foreign network or database.

(E)11.4 Ordering

(E)11.4.1 CCSAC/SS7 unbundled Sprint-designed elements will initially require design information from Sprint. Ordering for CCSAC/SS7 will be handled on an individual case basis, using service activation meetings between Sprint and USW. Sprint will provide a Translation Questionnaire, Link Data Sheet and ASR during the service activation meetings.

(E)11.4.2 USW will provide jeopardy notification, Design Layout Reports, Completion Notification and Firm Order Confirmation in a non-discriminatory manner.

(E)11.4.3 Due date intervals for CCSAC/SS7 will be established on an individual case basis.

(E)11.4.4 The service order interval will begin when a complete and accurate ASR is received by USW.

(E)12 Loop Spectrum Unbundling

USWC agrees to unbundle and offer as separate unbundled network elements the “data spectrum” and “POTS spectrum” components of the local loop. At the request of Sprint, spectrum may be shared by USW and Sprint on the same loop. The parties agree to mutually develop the technical and interface requirements associated with spectrum unbundling to a mutually satisfactory solution, and one that conforms with applicable future regulatory and industry directives.

(E)12.1 Terms and Conditions

(E)12.1.1 Line Sharing (Spectrum Unbundling)

(E)12.1.1.1 General

(E)12.1.1.1.1 Line sharing will be permitted for any ADSL technologies. As additional technologies that may be compatible with existing services on a loop become available, the parties will address their possible deployment. The ADSL technology used by the Sprint will be within the PSD mask

parameters set forth in T1.413 or other applicable industry standards.

(E)12.1.1.1.2 To order a shared line, a Sprint must have a POTS splitter collocated in the central office that serves the end-user of that line, and Sprint must provide the end-user with, and is responsible for the installation of, a splitter, filter(s) and/or other equipment necessary for the end-user to receive separate voice and data services across the same loop.

(E)12.1.1.1.3 Line sharing will be implemented in phases. The details of each phase are set out in Appendix A below to these Terms and Conditions.

(E)12.1.1.1.4 During Phase I of line sharing implementation, Sprint will not order conditioning or deconditioning of shared lines to remove load coils, bridged taps or electronics. If USW begins conditioning or deconditioning lines for its Megabit services, Sprint will have the same option.

(E)12.1.1.1.5 In later phases, Sprint may be able to order conditioning or deconditioning of a loop to make it capable of supporting ADSL.

(E)12.1.1.1.6 Sprint initially will use USW's existing pre-qualification system and order processes to pre-qualify and order shared lines. USW and Sprint will continue to work together to modify these processes and systems to better support line sharing.

(E)12.1.1.1.7 USW will initially provision shared lines within the current standard unbundled loop provisioning interval. The parties acknowledge that this interval is subject to change based on systems mechanization and/or

relevant state or federal regulatory orders.,

(E)12.1.2 Collocation and Operation of Line Sharing Equipment

(E)12.1.2.1 Sprint will have the option to either purchase the central office POTS splitter of its choosing or to have USW purchase the splitter on Sprint's behalf. Sprint will lease the POTS splitter to USW at no cost. Subject to agreed to or ordered pricing, USW will install and maintain the splitter in the central office. USW will install the splitter in one of three locations in the central office:

(E)12.1.2.1.1 in a relay rack as close to the interconnection distribution frame (ICDF) or the Sprint DS0 termination points as possible;

(E)12.1.2.1.2 on the ICDF; or

(E)12.1.2.1.3 where options (a) and (b) are not available, on the main distribution frame or in some other appropriate location. USW will pre-wire the splitter data ports to the Sprint collocation area. The issue of splitter placement in the central office may be revisited after initial implementation to explore additional options and configurations.

(E)12.1.2.2 Sprint may use any central office POTS splitter meeting either of the following criteria: (a) the splitter was tested during the technical tests ordered by the Minnesota Public Utilities Commission in Docket No. P-999/CI-99-678; or (b) the splitter meets the requirements for central office equipment collocation set by the FCC in its March 31, 1999 order in CC Docket No. 98-147.

(E)12.1.2.3 USW will revise collocation applications to include requests for information regarding line sharing equipment. If Sprint requests that a central office where it is not currently collocated be provisioned for line sharing, Sprint will indicate its request on the collocation application for that central office. If Sprint's collocation application is accepted, USW will make the office ready for line sharing during the interval applicable to Sprint request for collocation.

(E)12.1.3 (E)12.1.3.1 To be "service ready for line sharing," a central office must have all splitters for all of Sprint that timely provided splitters for collocation in the central office installed, tested and accepted. If Sprint does not provide its necessary equipment for requested splitter collocation on time, Sprint will separately negotiate with USW the interval for installation of the splitter in the central office.

(E)12.1.3.2 Sprint will provide to USW a prioritized list of the central offices other than the initial COs, that Sprint want to be made service ready for line sharing (the "Prioritized List").

(E)12.1.3.3 USW will accept orders for shared lines to end-users served out of its COs. Sprint and USW will work together to address any operational issues.

(E)12.1.3.4 To deploy POTS splitters in a CO or in a central office from the Prioritized List on the schedule set, Sprint must either (a) have an existing presence and DSLAM equipment in the central office; or (b) have a pending application for collocation of DSL equipment in the central office on record.

(E)12.1.3.5 If USW receives an application for new collocation in a central office where Sprint does not already have a presence USW will treat the application as a standard collocation application under the terms and conditions of the applicable interconnection agreement. Line sharing in such offices will begin on an agreed to schedule at the end of the Prioritized List schedule.

(E)12.1.3.6 USW and Sprint agree to work together to address and, where necessary and possible, find solutions for the following "Line Sharing Implementation Issues": (a) the implementation of an effective process to handle Sprint orders for shared lines; (b) USW's ability to handle the existing and forecasted volume of Sprint orders for shared lines; (c) USW's ability to make central office loop assignments for the existing and forecasted volume of Sprint orders for shared lines; (d) the ability of USW and Sprint to coordinate repairs; (e) the experience of the shared line customer; (f) Sprint forecasts of shared line orders.

(E)12.1.3.7 USW will install POTS splitters in the central offices identified on the Prioritized List, in the order identified on the list. USW will endeavor to

make three to five central offices per week service ready for line sharing. USW will continue to install the splitters independent of any decisions regarding USW's ability to take orders out of any central office immediately following completion of the installation.

(E)12.1.3.8 USW commits to make between 15 and 23 central offices from the Prioritized List service ready for line sharing, and to begin accepting shared line orders out of those central offices. USW and Sprint agree to jointly review and revise USW's ability to meet this commitment weekly based on the Line Sharing Implementation Issues.

(E)12.1.3.9 Sprint will provide USW with updated six-month forecasts for shared line orders and (b) USW will provide Sprint with an updated six-month forecast of its ability to provision shared line orders.

(E)12.1.3.10 USW will provide Sprint with a list of the central offices appearing on the Prioritized List from which USW is not yet accepting shared line orders. The parties will agree on a schedule identifying when USW will begin accepting shared line orders out of those offices.

(E)12.1.4 Repair and Maintenance

(E)12.1.4.1 USW will allow Sprint to access the shared line at the point where the combined voice and data loop is connected to the ICDF. The point of demarcation will be at the place where the data loop leaves the splitter on its way to Sprint's ADSL equipment.

(E)12.1.4.2 USW will be responsible for repairing voice services and the physical line between the network interface device at the customer premise and the point of demarcation in the central office. Sprint will be responsible for repairing data services. Each entity will be responsible for maintaining its own equipment. The party that controls the central office splitter will be responsible for maintaining it.

(E)12.1.4.3 USW and Sprint will work together to diagnose and resolve any troubles reported by the end-user and to develop a permanent process for repair of shared lines. In the interim, USW and Sprint will work together to address customer initiated repair

requests and to prevent adverse impacts to the customer.

(E)12.1.5 Pricing

(E)12.1.5.1 USW and Sprint agree to the following negotiated, interim prices for shared lines and the collocation of splitters. The negotiated shared line price of $6.05 and the non-recurring installation charge will be subject to true up based on a separate TELRIC-based cost docket that the parties will jointly request be initiated and completed by the Commission.

Category	Element	Interim Price
Shared Line Non-Recurring	Installation charge	IA* price for basic installation
	Trouble Isolation Charge	IA price
Shared Line Recurring	Shared line	$6.05
	2 EICT (Expanded Interconnection Channel Terminations)	IA price
Splitter Collocation Non-Recurring	Installation (See Paragraph 24)	IA price (time and materials)
Splitter Collocation Recurring	Equipment bay – per shelf	IA price
	Tie cable terminations	IA price

* The interconnection agreement for Sprint ordering the shared line.

(E)12.1.5.2 (E)12.1.5.3 USW agrees to impute to its Megabit product tariff a shared line cost of at least $6.05. The shared line price set forth in the table above will be $0 until such time as the Megabit tariff imputing the shared line cost becomes effective.

(E)12.1.5.4 For purpose of the collocation of splitters in the initial COs and the central offices identified on the Prioritized List, USW and Sprint agree that the costs normally associated with the quote preparation fee in the USW/ Sprint interconnection agreements will be calculated on a time and materials basis and included in the installation charges. The parties agree that installation charges will be paid by Sprint after receipt of an invoice from USW detailing the time and material charges. Nothing in this paragraph is intended to waive or otherwise affect any party's right to dispute the appropriateness of any element of this installation charge.

(E)12.1.6 Other

(E)12.1.6.1 USW and Sprint will make customers aware of the conditions described on Appendix B to these Terms and Conditions when that customer orders Sprint services across a shared line.

Maintenance and Repair

1. The customer should call USW for problems related to its voice service. The customer should call its Sprint contact for problems related to its data service.

2. The customer's data service is dependent on their voice service. If there is a problem with the physical line that brings down the voice service completely, the customer may also lose data services for some period of time.

3. Customers will lose Sprint data services during implementation if USW voice services across the line are cancelled or terminated for any reason.

4. During Phase I implementation, customers must make separate arrangements with both USW and Sprint contact for DSL services if the customer wishes to transfer both services to a new location

(E)13. Subloop Unbundling

(E)13.1 Description

The Subloop UNE is defined as any portion of the loop that is technically feasible to access at terminals in USW's outside plant, including inside wire (owned by USW). An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole or pedestal, the network interface device (NID), the minimum point of entry, the single point of interconnection (at multi-unit premises), the main distribution frame, the remote terminal, and the feeder distribution interface (FDI).

(E)13.1.1 Next Generation Digital Loop Carrier (NGDLC)

(E)13.1.1.1 When USW deploys "next generation digital loop carriers" (NGDLC) that allows the placement of xDSL line cards and remote xDSL functionality, such NGDLC functionality shall be unbundled and offered separately if requested by Sprint.

(E)13.2 Terms and Conditions

(E)13.2.1 Access to unbundled loop elements may be made, to the extent technically feasible, at any Feeder Distribution Interface (FDI) whether the FDI is located at a cabinet, Controlled Environmental Vault (CEV), remote terminal, utility room in a multi-dwelling unit, or any other accessible terminal.

(E)13.2.2 USW is not required to build additional space for the purpose of accessing UNEs. Sprint shall not be precluded from constructing their own facilities adjacent to USW's facilities. Sprint shall obtain any necessary rights of way required and shall coordinate its facility placement with USW when placing their facilities adjacent to USW's facilities. Obstacles that Sprint may encounter from cities, counties, electric power companies and similar third parties, when it seeks to interconnect its equipment at subloop access points, will be the responsibility of Sprint to resolve with the municipality, utility, or other third party.

(E)13.2.3 The Parties will cooperate in determining the optimum point and method to access subloop elements. The Parties agree that they will not have direct access to the other Party's network. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security.

(E)13.2.4 If the Parties are unable to reach an agreement, they may utilize the Dispute Resolution process in this Agreement. Alternatively, Sprint may seek arbitration under Section 252 of the Act with the Commission, wherein USW shall have the burden of demonstrating to the Commission that there is insufficient space or that the requested interconnection is not technically feasible.

(E)13.2.5 USW shall provide a Multiple Dwelling Unit (MDU) single point of interconnection at multi-unit premises that is suitable for use by multiple carriers. The Parties will cooperate to determine the optimum point of interconnection. If the Parties are unable to reach an agreement, they may utilize the Dispute Resolution process in this Agreement.

(E)13.2.6 Access to subloop is subject to the FCC rules on Collocation.

(E)13.2.7 Standard access to subloop will be at the Feeder Distribution Interface (FDI). Non-standard access will be submitted via the BFR process in this Agreement.

(E)13.2.8 Subloop types and specifications mirror those described in Sections (E)3.1 Unbundled Loop Descriptions and (E)3.2 Unbundled Loop Specifications.

(E)13.3 Rate Elements

[to be developed]

(E)13.4 Ordering

(E)13.4.1 The Parties will cooperatively develop procedures for ordering and provisioning subloop elements consistent with procedures for ordering unbundled loop. These procedures will incorporate the following issues.

(E)13.4.2 Sprint will order subloop interconnection by identifying the end points of the subloop element.

(E)13.4.2.1 Subloop interconnection will be provisioned utilizing the EDI interface.

(E)13.4.2.2 Subloop elements will be identified by NC/NCI codes.

(E)13.4.2.3 USW and Sprint will cooperate in developing standard intervals.

(E)13.XX Unbundled Customer Controlled Rearrangement Element (UCCRE)

USW shall provide Unbundled Customer Controlled Rearrangement Element (UCCRE) in a non-discriminatory manner according to the following terms and conditions.

(E)13.1.2.1 Description

(E)13.1.2.1.1 Unbundled Customer Controlled Rearrangement Element (UCCRE) provides the means by which Sprint controls the configuration of unbundled network elements (UNEs) or ancillary services on a near real time basis through a digital cross connect device. UCCRE utilizes the Digital Cross-Connect System (DCS). UCCRE is available in USW Wire Centers that contain a DCS and such DCS is UCCRE compatible.

(E)13.1.2.2 Terms and Conditions

(E)13.1.2.2.1 DCS ports are DS1, DS3 and Virtual Ports (Virtual Ports are for connecting one end user to another). The DCS port is

connected to the demarcation point using the cables via the appropriate DSX cross-connect panel. The DSX panel serves both as a "Design-To" point and a network interface at the DCS. Sprint is responsible for designing to the "Design-To" point. Sprint may connect the UCCRE ports to its elements or Sprint designed equipment. If Sprint desires DSO port functionality, Sprint will order a DS1 UCCRE port and provide its own multiplexer (or DS1 UDIT multiplexers) and connect them together. This combination will form the equivalent of 24 DSO-level ports.

(E)13.1.2.2.2 The reconfiguration of the service is accomplished at the DS0 signal level. Reconfiguration of these services can be accomplished through two methods: Dial Up or Attendant Access.

(E)13.1.2.2.2.1 Dial Up Access. USW will provide access to mutually agreed upon OCCRE points in those offices where UCCRE is available. USW will provide and engineer this service in the same manner that it is currently provided to USW's end users.

(E)13.1.2.2.2.2 Attendant Access. When Sprint requests USW to make changes on its behalf, an attendant access charge will apply per transaction.

(E)13.1.2.3 Rate Elements

(E)13.1.2.3.1 Recurring rate elements include:

- DS1 Port;
- DS3 Port
- Dial Up Access

- Attendant Access

(E)13.1.2.3.2 Non-recurring rate elements include:

- DS1 Port
- DS3 Port
- Virtual Ports

(E)13.1.2.4 Ordering Process

(E)13.1.2.5 Ordering processes and installation intervals are specified in the Interconnection and Resale Resource Guide and are the same as specified in Section _____ for UDIT. UCCRE is ordered via the ASR process.

(E)13.1.2.6 UCCRE is ordered with the Basic Installation option. USW will begin the work activity on the negotiated due date and notify Sprint when the work activity is complete. Test results by USW are not provided to Sprint.

(E)14. Additional Unbundled Elements

Sprint may request nondiscriminatory access to, and where appropriate, development of additional UNEs not covered in this Agreement pursuant to the Bona Fide Request Process.

(E)15. Construction Charges

USW will conduct an individual financial assessment of any request, which requires construction of network capacity, facilities, or space for access to or use of UNEs. When USW constructs to fulfill Sprint's request for UNEs, USW will bid this construction on a case-by-case basis. USW will charge for the construction through non-recurring charges and a term agreement for the remaining recurring charge, as described in Part G of this Agreement.

(E)16. 8XX Database Query Service

(E)16.1 Description

8XX Database Query Service is an originating service which provides for the forwarding of Sprint end user dialed 8XX-NXX-XXXX calls to a toll carrier, based on the dialed 8XX number. When an 8XX call is originated by Sprint's end user, Sprint's SSP (SS7 equipped end office) will send an 8XX query to the USW 8XX Service Control Point (SCP) through the USW Signaling Transfer Point (STP). The USW SCP will perform the carrier

identification function based on the dialed digits to determine the toll carrier trunk group to which the call should be routed in accordance with the Service Management System/800 (SMS/800) information residing in the USW SCP. The SCP will transmit the results of the carrier identification function back to Sprint's SSP through the USW STP. The results of the carrier identification function will be the Carrier Identification Code (CIC) and/or the vertical features associated with the 8XX number. Call routing information in the SMS/800 Database reflects the desires of the owner of the 8XX number as entered in the SMS/800 by its chosen responsible organization. The rates for 8XX Database query Service only apply to queries from Sprint's switch to USW 8XX Database. If Sprint routes 8XX traffic to USW for delivery to an interexchange carrier, the call shall be handled as jointly provided switched access. If Sprint routes such traffic to USW without performing the query, USW shall perform the query in accordance with its switched access tariff.

(E)16.2 8XX Optional Features

(E)16.2.1 POTS Translation - Delivers the ten-digit Plain Old Telephone Service (POTS) number to Sprint. To determine that the call originated as an 8XX number, the trunk group must be provisioned with Automatic Number Identification (ANI). ANI digit 24 will be delivered to the trunk group.

(E)16.2.2 Call Handling and Destination Features - This will allow routing options by specifying a single carrier, multiple carriers, single termination or multiple terminations. Multiple terminations may require the POTS translation feature. Variable routing options are:

- Routing by originating NPA-NXX-XXXX
- Time of day
- Day of week
- Specified date
- Allocation by percentage

(E)16.3 Rate Elements

(E)16.3.1 The recurring charges for 8XX Database Query Service, POTS Translation, and Call Handling and Destination Features are contained in Part H of this Agreement.

(E)16.3.2 The rates for 8XX Database Query Service only apply to queries for local 8XX calls. Local calls are defined as 8XX calls where the calling party number and the terminating party number (the POTS number to which the 8XX number is translated) are in the same free calling area. For all other calls, reference existing interstate and intrastate access Tariffs.

(E)16.3.3 A non-recurring Point Code Activation Charge will apply for Sprint to activate 8XX Database Query Service. This rate element is contained in the CCSAC/SS7 Section of Part H.

(E)16.4 Ordering Process

Sprint shall order access to USW local STP (links and ports) prior to or in conjunction with 8XX Database Query Service.

(E)16.5 Technical Requirements

(E)16.5.1 USW shall make USW's Toll Free Number Database available, through its STPs, for Sprint to query from Sprint's designated switch.

(E)16.5.2 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a USW switch.

(E)16.6 Interface Requirements

The signaling interface between Sprint's or other local switch and the Toll-Free Number Database shall use the TCAP protocol as specified in the technical references together with the signaling network interface.

(E)16.7 Technical References

SCPs/Databases shall be consistent with the following technical references:

(E)16.7.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, Issue 3 (Bellcore/Telcordia, December 1998);

(E)16.7.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP) (Bellcore/Telcordia, March 1994);

(E)16.7.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore/Telcordia, October 1995);

(E)16.7.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore/Telcordia, October 1995) (Replaces TR-NWT-001149);

(E)16.7.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore/Telcordia, October 1995); and

(E)16.7.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore/Telcordia, May 1995).