SprintLink Frame Relay Components

Customer Premise Equipment (CPE) and Network Addressing
- An Agency uses Frame Relay Access Devices (FRAD) or frame relay compatible routers at Agency sites
- SED / CPE conducts a Local Management Interface (LMI) session (304, Annex A, Annex D) with the Sprint network edge router (SprintLink/Peerless IP (PIP))
- Customer sites use Frame Relay Data Link Connection Identifiers (DLCIs) to identify each PVC
- Sprint can use private IP space within an Agency network to provide complete end-to-end privacy.

Local Access
Customer accesses the SprintLink network via a local access facility provided by a local Postal Telephone and Telegraph (PTT), Local Exchange Carrier (LEC) or Alternate Access Vendor (AAV).

Ports
- Sprint Frame Relay ports are provisioned on a SprintLink edge router; either a Cisco Gigabit Switch Router (GSR) or 7500
- These edge router ports are configured as Frame Relay interfaces and conduct an LMI session with the CPE
- L2TPv3 (layer-2 tunneling protocol version 3) protocol provides encapsulation/decapsulation function (i.e., IP header is added/removed from Frame Relay Layer 2 frames).

PVCs/Tunnels
- L2TPv3 creates a “PVC” across the SprintLink core, linking the Frame Relay DLCIs at each site
- L2TPv3 provides security through multiple authentication “keys” (i.e., session Identification (ID), security “tag”).

Transport
- SprintLink transport provides equivalent security to legacy Frame Relay services - the default transport for SprintLink Frame Relay
- The SprintLink IP or PIP network serves as the network core for the Sprint Frame Relay service. This design is selected up front and has no cost implications for an Agency
- PIP transport provides additional security but no Internet access in exchange - Agencies will need to specially request PIP transport
- IP-encapsulated Frame Relay packets benefit from intelligent, optimal routing over the IP core
- Backbone links consist of OC-192 and OC-48 fiber plants (PIP - OC-48 backbone only).