

ADVANCED DATA SERVICES

## DESCRIPTION OF ADVANCED DATA SERVICES (Continued)

## 4.2 TRANSPARENT LAN SERVICES

## 4.2.1 General

Transparent LAN Services (TLS) are high speed fiber-based data services which use a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas. TLS delivers an interface of 10 Mbps, 100 Mbps, 1000 Mbps or 10 Gbps from the Customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available as two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either EMS or ERS as the service type for each domain:

Ethernet Multipoint Service (EMS) - a connection-less Ethernet TLS service that allows connectivity among multiple customer-designated locations within a LATA.

With the EMS service type, Ethernet TLS helps to protect data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to enhance traffic separation, privacy and security between customers on the shared switch and backbone. Subscribers in a CUG can only access their own data. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain.

Ethernet Relay Service (ERS) - a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer-designated locations within a LATA.

With the ERS service type, an Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS domain. ERS provides point-to-point connectivity between pairs of customer's access lines. A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

(C)

With ERS service type, an Ethernet Virtual Private – Local Area Network (EVP-LAN) can be established with EVP-LAN EVCs. An EVP-LAN is a multipoint Virtual LAN comprised of a CUG of two or more EVCs. EVP-LAN EVCs are designated by the Customer within an ERS Premier domain.

7  
(N)

J