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Ameritech SMDS Service Interface Specifications

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1. SMDS INTERFACE SPECIFICATIONS

Ameritech will offer SMDS as a public high-speed cell-switched data service providing multi-megabit per second throughout and very low delay characteristics between subscriber sites. SMDS is designed to provide a high performance shared network service. It will allow for the "spontaneous" connection of unaffiliated customers.

Customers will have the ability to request the bandwidth they require from the SMDS network. Access Classes will be 1.2Mbps, 4Mbps, 10Mbps, 16Mbps, 25Mbps, and 34Mpbs. Ameritech will use the IEEE 802.6 (Version D15) standard as the subscriber interface for SMDS service, with initial access based on DS-1 and DS-3 technology. As the Asynchronous Transfer Mode/ Synchronous Optical Network (ATM/SONET) technology evolves, network access speeds will increase to 155Mbps and eventually 622Mbps.

Once a customer is connected to the SMDS network SMDS provides for connectionless packet transfer; that means that each unit of information is handled across the access facility and switched through the network as a separate operation that does not require prior establishment of an end-to-end network connection. Features to be supported by Ameritech across this network interface include: multiple addresses per Subscriber Network Interface (SNI), group addressing, usage measurement capability, address screening, and access classes.

The Bellcore Technical References TR-TSV-000772 "Generic System Requirements in Support of Switched Multi-Megabit Data Service" and TR-TSV-000773 "Local Access System Generic Requirements and Interfaces in Support of Switched Multi-Megabit Data Service" as modified below constitute the definition of Ameritech SMDS Service and the generic requirements of equipment supporting the service. It is anticipated that over time the difference between the specifications for Ameritech SMDS and the above Bellcore TRs will change and eventually will be eliminated.

2. REASON FOR REISSUE

This specification is being reissued to announce a second early availability version of SMDS.

Ameritech will now support two early availability versions of SMDS, Version 1 and Version 2. Version 1 was announced in Issue 1 of this specification.

3. EARLY AVAILABILITY SMDS

Version 1

The Version 1 Implementation of Ameritech SMDS Service has the following differences from the referenced Telcordia (formerly Bellcore) TR Documents:

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- The choice of Access Classes will be limited to 1.2Mbps, 4Mbps and 10Mbps.
- The maximum packet size at SIP Level 3 will be 4000 octets.
- Group Address Membership will be limited to 20 members per Group Address.

Version 2

The Version 2 Implementation of Ameritech SMDS Service has the following differences from the referenced Telcordia (formerly Bellcore) TR Documents:

- The choice of Access Classes will include 1.2Mpbs, 4Mbps, 10Mbps, 16Mbps, 25Mbps and 34Mbps.
- The maximum packet size at SIP Level 3 will be 7124 octets.
- The maximum number of members of a group will be provided at service negotiation time.*
- Multi-access arrangements are not supported with the 1.2Mbps access class.
- The number of “multiple concurrent PDUs” (Requirements 3-29, TR-TSV-000772) will be provided at service negotiation time.* (Per the technical requirements, a default value of 1 PDU from the CPE to the SS must be supported as an option by the customer premises equipment.)

* Equipment designed to meet the technical requirements will interoperate with the network given appropriate parameter settings.

With the above differences in mind, the technical information pertaining to the Ameritech SMDS Service Interface can otherwise be found in the following documents:

TR-TSV-000772 Generic System Requirements in Support of Switched Multi-Megabit Data Service

TR-TSV-000773 Local Access System Generic Requirements in Support of Switched Multi-Megabit Data Service.

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