



Reasons For Not Standardizing an Optical Connector

Karl Reinke

January 18, 1999

Reasons For Not Standardizing an Optical Connector

- **There are three main reasons why an optical connector should not be standardized in 802.5v**
 - Precedents set by the existing 802.5 and 802.3 standards and draft standards
 - Corporate issues
 - Technological issues

•Current Precedents in 802.3 and 802.5

- **802.3-1998 (Which incorporated 802.3z) states in section 38.11.3**

The 1000BASE-SX and 1000BASE-LX MDI optical receptacles shall be the duplex SC, meeting the following requirements:

- a) Meet the dimension and interface specifications of IEC 61754-4 [B24] and IEC 61754-4, Interface 4-2.
- b) Meet the performance specifications as specified in ISO/IEC 11801.
- c) Ensure that polarity is maintained.
- d) The receive side of the receptacle is located on the left when viewed looking into the transceiver optical ports with the keys on the bottom surface.

Current Precedents in 802.3 and 802.5 (cont.)

- **802.5-1998 Amd. 1-1998 does not specify a connector (although the SC is specified as the conformance test interface connector in 13.7.2.6)**
- **802.5t-d2.5 goes further and states in 13.9.1.5 that “The implementer may also use any other suitable connector style not listed here” which means you can use anything.**

Corporate Issues

- A corporation may wish to have common look to their products
- A corporation may have deals with certain suppliers
- The goal of HSTR and GBTR was to leverage the Ethernet solutions to minimize cost. If 802.5v specifies a connector we loose that advantage

Technology Issues

- **We cannot determine at this time who will be able to deliver a viable small form factor solution**
- **At best manufacturers are in early production**