ITU - Telecommunication Standardization Sector **Temporary Document 2056/Rev.1**

STUDY GROUP **17**

Geneva, 27 February - 8 March 2002

Question(s):	7/17
SOURCE:	ITU-T SG 17 (27 February - 8 March 2002)
TITLE:	Request for comments on draft Recommendation on Multiple Services Ring

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COMMUNICATIONS

TO:	IEEE 802 and 802.17 WG	
APPROVAL:	Agreed to at SG 17 meeting	
FOR:	Action	
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Multiple Service Ring (MSR) is defined for use on a bi-directional symmetric counter-rotating two fibre optical rings. Primary optical transport mechanism is defined to leverage the low cost Wide Area Interface Sublayer (WIS) of 10Gigabit Ethernet (IEEEP802.3ae)®. SDH/SONET physical transport is also supported. The service tributary interfaces of MSR are defined to support Ethernet, Digital Video Broadcasting, ATM, Packet over SONET/SDH (POS)(X.85 IP over SDH using LAPS) and X.86 Ethernet over LAPS. MSR data node is defined to support forwarding of the MSR data link frame similar to functionality found in a more complex routing data system. MSR is targeted for market areas of the world having a low cost labour force, provisioning and support requirements.

The expansion of business and personal use of data network services are driving the need to deploy data services infrastructure facilities in parts of the world that have yet to be deployed. MSR has the capability of providing low cost deployment of multiple broadband services to locations in previously undeveloped areas. MSR, as a data delivery services system does not have the complexity of multiple layers of equipment and support systems. MSR provides a major cost benefit by leveraging the relationship of fewer automation features and lower cost labour force. The simplicity of MSR is achieved by integrating the functionality of multiple levels of system (e.g., router, data switch and transport system). This produces a new kind of data system that incorporates some of the functions of routers, bridges, data switches, and transport systems. This also provides a new economic model for deploying and supporting data services in undeveloped markets.

MSR does provide for data link layer services fault protection, point-to-point, multicast and broadcast data functions. Continued compatibility with all existing requirements and standards from ITU-T and other organizations is required. MSR is designated to achieve all of these.

ITU-T SG17 at its 27 February - 8 March 2002 meeting studied the subject of operation of Multiple Services Ring to satisfy the requirements of data communications. Since the IEEE-SA standards Board on 10Gigabit Ethernet and IEEE 802.3 is building up its technical expertise in SDH/SONET and related wide area transport mechanisms. Attached, in the form of a draft Recommendation, is the base document SG17 is using to progress this work. IEEE 802 and 802.17 WG are kindly requested to provide technical comments on this text before July 22 2002.

Attachment: TD 2053 (not reproduced)

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