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**SERIES X: DATA NETWORKS AND OPEN SYSTEM
COMMUNICATIONS**

Public data networks – Transmission, signalling and
switching

**SERIES Y: GLOBAL INFORMATION INFRASTRUCTURE
AND INTERNET PROTOCOL ASPECTS**

Internet protocol aspects – Transport

Ethernet over LAPS

ITU-T Recommendation X.86/Y.1323

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Ethernet over LAPS

Summary

This Recommendation specifies how to operate Ethernet (defined by IEEE WG 802.3) over LAPS (Link Access Procedure – SDH) and provides a simple technique to connect LANs and provides Ethernet LAN extension over Wide Area Network (WAN) within a private and/or public network. The characteristics of this technique include low latency variance, remote performance monitoring capability, remote fault indication capability, active flow control in burst traffic condition and ease of use and maintenance, especially in the area of SDH transmission.

Source

ITU-T Recommendation X.86/Y.1323 was prepared by ITU-T Study Group 7 (2001-2004) and approved under the WTSA Resolution 1 procedure on 2 February 2001.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Introduction

The Internet market has been growing at a great rate. Growth is an important issue and creates the need to expand the scope of Ethernet area. Transferring Ethernet (defined by IEEE WG 802.3) over LAPS is a simple and cheap technique to connect LANs within a private and public network. This Recommendation expands the scope of LAPS which was introduced in ITU-T X.85/Y.1321 to adapt Ethernet frame to LAPS. The full transparency is guaranteed for mapping Ethernet frame to LAPS, and mapping LAPS to SDH. The model of Ethernet over LAPS shall be particularly well suited for the network resource of the existing network infrastructure.