



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

X.220

(03/93)

OPEN SYSTEMS INTERCONNECTION – GENERAL CONNECTION MODE PROTOCOL SPECIFICATIONS

USE OF X.200-SERIES PROTOCOLS IN CCITT APPLICATIONS

ITU-T Recommendation X.220

(Previously "CCITT Recommendation")

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The 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 Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation X.220 was prepared by the ITU-T Study Group VII (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR, or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

2 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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Recommendation X.220**USE OF X.200-SERIES PROTOCOLS IN CCITT APPLICATIONS**

(Melbourne, 1988; revised Helsinki, 1993)

The CCITT,

considering

- (a) that Administrations in many countries are implementing a variety of telecommunications services;
- (b) that these services may be carried on a variety of networks;
- (c) that users of these services desire a unifying architecture for the applicable protocols;
- (d) that such an architecture is provided by Recommendation X.200 which defines the Reference Model of Open Systems Interconnection for CCITT applications;
- (e) that a number of protocols conforming to this architecture are defined in the X.200-Series of Recommendations and in other Recommendations,

unanimously declares

that for CCITT applications the functional suites of protocols, which involve the use of protocols in the X.200-Series of Recommendations, are summarized in this Recommendation. Details, as well as any conformance requirements, are contained in the relevant Recommendations.

A growing number of data terminal equipments are being designed to support more than one CCITT service and/or are being designed to be capable of being connected to more than one type of network. In order to facilitate the design of such equipments, the various OSI protocol suites involving use of the X.200-Series of Recommendations are documented herein.

These protocol suites are depicted in Figure 1, which portrays the protocols according to the seven layers defined in Recommendation X.200. The CCITT applications covered are Message Handling Systems (MHS), Directory, Transaction Processing (TP), Systems Management, Teletex and Document Architecture Transfer and Manipulation. The networks covered are PSPDN, CSPDN, PSTN and ISDN. The intent is to give a general view of the set of protocol suites in a single figure, while relying on the other Recommendations referenced to provide the necessary additional details.