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INTEGRATED SERVICES DIGITAL NETWORK (ISDN) INTERNETWORK INTERFACES

SERVICE INTERWORKING

ITU-T Recommendation I.501

(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 I.501 was prepared by the ITU-T Study Group XVIII (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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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 I.501

SERVICE INTERWORKING

(Helsinki, 1993)

1 General

In the provision of services in an ISDN, there will exist situations where a service will require interworking with one or more other services. The intent of this Recommendation is to develop the general principles of service interworking and identify the key interworking requirements needed to support service interworking in ISDNs, between ISDNs, and between ISDNs and other networks.

Specific ISDN service descriptions, as viewed from a user perspective, are provided in the I.200-Series Recommendations. Network interworking is provided in the I.500-Series Recommendations.

2 Definitions

teleservice interworking: Refers to the functions and requirements supporting the communication of terminals belonging to different ISDN teleservices (e.g. ISDN teletex to ISDN telefax). Such interworking will involve the use of communication-dependent interworking functions as defined in Recommendation I.510. Teleservice interworking can be supported by interworking functions provided by the network, by a service provider, and/or by terminals.

bearer service interworking: Refers to the functions and requirements supporting the communication of terminals operating over different ISDN bearer services within an ISDN.

ISDN internal interworking: Refers to the functions and requirements for interworking between different connection elements within an ISDN, for example to support the communication of terminals belonging to one and the same teleservice but supported by different low layer capabilities.

network interworking: Refers to the functions and requirements supporting the interworking of networks with different low layer capabilities in order to support the interworking of services across the network boundary, for example, to support 3.1 kHz audio transfer.

Teleservices interworking and bearer services interworking may also include the support of supplementary services as appropriate.

These types of interworking are not mutually exclusive. In certain scenarios, more than one type of interworking may take place; for example, both teleservice interworking and network interworking may occur in the case of ISDN facsimile group 4 to PSTN facsimile group 3 interworking. It is also noted that the functionality to support bearer services interworking and ISDN internal interworking may be the same in most ISDNs (see Tables 1 and 2).