Recommendation X.323

GENERAL ARRANGEMENTS FOR INTERWORKING BETWEEN PACKET SWITCHED

PUBLIC DATA NETWORKS (PSPDNs)

(Melbourne, 1988)

The CCITT,

considering

(a) that Recommendation X.300 defines the general principles for interworking between public data networks, and between public networks and other networks for the provision of data transmission services;

(b) that Recommendation X.301 defines the general arrangements for call control within a subnetwork and between subnetworks for the provision of data transmission services;

(c) that Recommendation X.302 defines the general arrangements for internal network utilities within a subnetwork and between subnetworks for the provision of data transmission services;

(d) that Recommendation X.75 specifies packet switching signalling system between public networks providing data transmission services;

(e) that Recommendation X.10 describes categories of access to PSPDNs and ISDNs for the provision of data transmission services;

(f) that Recommendation X.213 describes the network service definition for open systems interconnection for CCITT applications;

(g) that Recommendation X.305 describes functionalities of subnetworks relating to the support of the OSI network service;

(h) the need for arrangements when interworking between ISDNs and PSPDNs for the provision of data transmission services,

unanimously recommends

that arrangements for the interworking between PSPDNs for the provision of data transmission services be in accordance with the principles and arrangements specified in this Recommendation.

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0 Introduction

This Recommendation is one of a set of Recommendations produced to facilitate considerations of interworking between networks. It is based on Recommendation X.300 which defines the general principles for interworking between public data networks and between public data networks and other networks. Recommendation X.300 indicates in particular how collections of physical equipment can be represented as ÒsubnetworksÓ for consideration in interworking situations.

This Recommendation describes the interworking arrangements between PSPDNs for the provision of data transmission services. These interworking arrangements should include all the capabilities required to support the network service for open systems interconnection for CCITT applications as described in Recommendation X.213.

1 Scope and field of application

The purpose of this Recommendation is to describe the general arrangements for interworking between PSPDNs for the provision of data transmission services. These arrangements are applicable only to the interworking involving transmission capabilities, and not to interworking involving communication capabilities as described in Recommendation X.300.

2 References

[1] Recommendation X.300

[2] Recommendation X.301

[3] Recommendation X.302

[4] Recommendation X.305

[5] Recommendation X.31

[6] Recommendation X.75

[7] Recommendation X.1

[8] Recommendation X.2

[9] Recommendation X.10

[10] Recommendation I.211

[11] Recommendation I.500

[12] Recommendation X.121

[13] Recommendation E.164

3 Definitions

This Recommendation makes use of the following terms defined in Recommendation X.300:

a) transmission capability,

b) communication capability,

c) subnetwork functionality,

d) data transmission service.

4 Abbreviations

CNIC Clearing Network Identification Code

CUG Closed User Group

CUG/OA CUG with outgoing access

DTE Data Terminal Equipment

IWF Interworking Function

PSPDN Packet Switched Public Data Network

TNIC Transit Network Identification Code

5 General aspects

This Recommendation, in describing arrangements between two subnetworks for the provision of data transmission services, adheres to the general principles of Recommendation X.300. The environments of these two subnetworks are described in the following sections.

5.1 *PSPDN*

The PSPDN provides packet-switched data transmission services as defined in Recommendations X.1 and X.2 for the provision of data transmission services. The PSPDN may be accessed by DTEs by the categories of access C and D as defined in Recommendation X.10.

5.2 *Call control between the PSPDNs*

The general arrangements for call control between the PSPDNs are as defined in Recommendation X.301. Network utilities used between the PSPDNs are as defined in Recommendation X.302 (not visible for users).

6 **Specific** interworking arrangements

6.1 *Interworking between PSPDNs*

The detailed procedures for interworking are defined in Recommendation X.75. In particular, the following applies:

6.1.1 *Transfer of addressing information*

The considerations on the transfer of addressing information as described in Recommendation X.301 may apply.

6.1.2 *Arrangements for facilities related to the QOS of the call*

These arrangements are described in Recommendation X.301.

6.1.3 *Arrangements for facilities related to protection mechanisms requested by the user of a call*

These arrangements are described in Recommendation X.301.

6.1.4 *Arrangements for internal network utilities (not visible for users)*

These arrangements are as described in Recommendation X.302.