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INTERWORKING BETWEEN NETWORKS GENERAL

GENERAL ARRANGEMENTS FOR INTERWORKING BETWEEN PACKET SWITCHED PUBLIC DATA NETWORKS (PSPDNs) AND COMMON CHANNEL SIGNALLING NETWORK (CCSN)

ITU-T Recommendation X.326

(Extract from the *Blue Book*)

NOTES

- 1 ITU-T Recommendation X.326 was published in Fascicle VIII.6 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).
- 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.326

GENERAL ARRANGEMENTS FOR INTERWORKING BETWEEN PACKET SWITCHED PUBLIC DATA NETWORKS (PSPDNs) AND COMMON CHANNEL SIGNALLING NETWORK (CCSN)

(Melbourne, 1988)

The CCITT,

considering

(a) that Recommendation X.300 defines the general principles for interworking between public networks, and between public data 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 already specifies detailed procedures applicable to call control between two PDNs of the same type;

(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 connection-mode network service;

(h) that Recommendations Q.711 to 716 describe the signalling connection control part (SCCP) for common channel signalling;

(i) the need to operate operations, administration and maintenance (OA and M) applications over a variety of networks, including CCSN and PSPDNs; and consequently the need for CCSN and PSPDNs to be able to interwork,

unanimously recommends

that arrangements for the interworking between PSPDNs and CCSN 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 "subnetworks" for consideration in interworking situations.

This Recommendation describes the interworking arrangements between PSPDNs and CCSN. 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

1.1 Network operations, administration and maintenance (OA and M) applications need to be able to operate over a variety of networks, including public data networks.

1.2 This Recommendation describes the interworking between CCSN and packet switched public data networks (PSPDNs), which may be needed for the transmission of operational information between Administrations, as a means of data transmission between operational centres and/or terminals for those Administrations. This is illustrated in the following Figure 1/X.326.

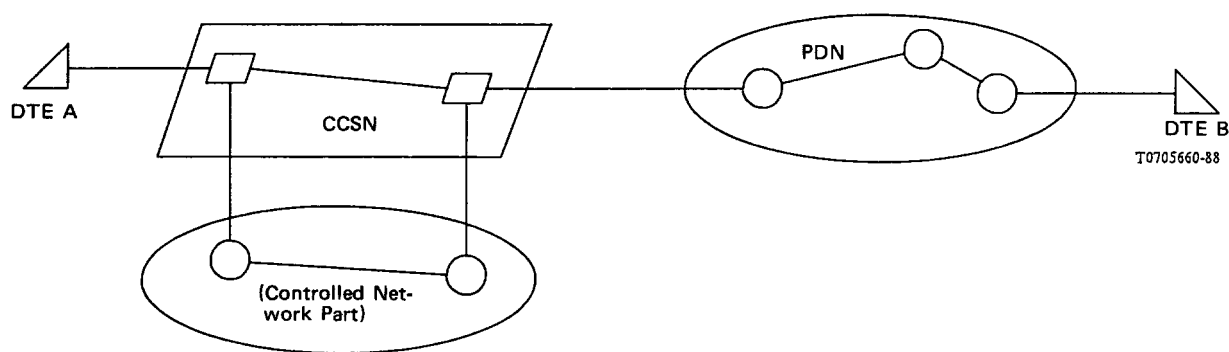


FIGURE 1/X.326
Interworking between PDN and CCSN

1.3 It should be noted that, when dealing with OA and M protocols, a great confusion may appear between:

- the network which is used to convey the OA and M information (e.g. CCSN or PDN in Figure 1/X.326 above);
- the network which is controlled by the CCSN, with the support of the OA and M applications.

It may furthermore happen that the controlled network interwork with a PDN, as illustrated in the following Figure 2/X.326. Such an interworking is not considered as interworking between CCSN and PDN; consequently it is not described in the present Recommendation.