Recommendation X.244

PROCEDURE FOR THE EXCHANGE OF PROTOCOL IDENTIFICATION DURING VIRTUAL CALL ESTABLISHMENT ON PACKET SWITCHED PUBLIC DATA NETWORKS

(Malaga-Torremolinos, 1984)

The CCITT,

considering

(a) that Recommendation X.25 defines the interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit;

(b) that Recommendation X.32 defines the interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for terminals operating in the packet mode and accessing a packet switched public data network through a public switched network;

(c) that Recommendation X.29 defines the procedures for the exchange of control information and user data between a packet assembly/disassembly facility (PAD) and a packet mode DTE or another PAD;

(d) that Recommendation X.224 defines the Transport Layer Protocol for Open Systems Interconnection for CCITT Applications, which includes provision of a Transport Protocol Identification; and

(e) that there is a need to identify and/or negotiate at virtual call establishment the protocol which is to operate above the packet level,

unanimously recommends

that for data terminal equipment operating in the packet mode the mechanism for identification and/or negotiation of the protocol which is to operate above the packet level should be as specified below.

1 Introduction

This Recommendation defines the procedures for the exchange of protocol identification during virtual call establishment on packet switched public data networks. This procedure operates above the packet level of Recommendation X.25. It makes use of bits 8 and 7 of the first octet of the user data field in the call set-up packets defined in Recommendation X.25.

2 Call user data field

The following procedure applies to the call user data field of Call Request and Incoming Call packets.

If the call user data field is present, the use and format of this field are determined by bits 8 and 7 of the first octet of this field (see Note below).

If bits 8 and 7 of the first octet of the call user data field are 00, a portion of the call user data field is used for protocol identification in accordance with other Recommendations such as Recommendation X.29 and Recommendation X.224.

If bits 8 and 7 of the first octet of the call user data field are 01, a portion of the call user data field may be used for protocol identification in accordance with specifications of Administrations.

If bits 8 and 7 of the first octet of the call user data field are 10, a portion of the call user data field may be used for protocol identification in accordance with specifications of international user bodies.

If bits 8 and 7 of the first octet of the call user data field are 11, no constraints are placed on the use by the DTE of the remainder of the call user data field.

Users are cautioned that if bits 8 and 7 of the first octet of the call user data field have any value other than 11, a protocol may be identified that is implemented within public data networks.

Note - When a virtual call is being established between two packet mode DTEs, the network does not act on any part of the call user data field.

3 Called user data field

The following procedure applies to the called user data field of Call Accepted and Call Connected packets used in conjunction with the fast select facility.

If the called user data field is present, the use and format of this field is determined by bits 8 and 7 of the first octet of this field (see Note below).

If bits 8 and 7 of the first octet of the called user data field are 00, a portion of the called user data field is used for protocol identification in accordance with other Recommendations.

If bits 8 and 7 of the first octet of the called user data field are 01, a portion of the called user data field may be used for protocol identification in accordance with specifications of Administrations.

If bits 8 and 7 of the first octet of the called user data field are 10, a portion of the called user data field may be used for protocol identification in accordance with specifications of international user bodies.

If bits 8 and 7 of the first octet of the called user data field are 11, no constraints are placed on the use by the DTE of the remainder of the called user data field.

Users are cautioned that if bits 8 and 7 of the first octet of the called user data field have any value other than 11, a protocol may be identified that is implemented within public data networks.

Note - When a virtual call is being established between two packet mode DTEs, the network does not act on any part of the called user data field.