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# Australian Standard®

Information processing systems— Data communications—X.25 packet level protocol for data terminal equipment



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# Australian Standard®

Information processing systems— Data communications—X.25 packet level protocol for data terminal equipment

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#### **PREFACE**

This Standard was prepared by the Standards Australia Committee on Information Processing Systems. It is identical with and has been reproduced from International Standard ISO 8208: 1987; drawn up by ISO TC 97, Information Processing Systems.

This Standard specifies the procedures, formats and optional user facilities at the packet level for Data Terminal Equipment (DTE) operating in conformance with CCITT Recommendation X.25. Both virtual call and permanent virtual circuit modes of operation are covered.

It covers DTE operation at the packet level when accessing a public or private packet-switched network conforming to CCITT Recommendation X.25 by means of a dedicated path or a circuit-switched connection. It also covers the additional packet level procedures necessary for two DTEs conforming to this Standard to communicate directly (i.e., without an intervening packet-switched network) over a dedicated path or a circuit-switched connection.

This Standard also provides guidelines for private networks that use CCITT Recommendation X.25 to connect to packet-switched public data networks and that may also offer an X.25 interface to a DTE.

The Standard is one of a series of Open Systems Interconnection (OSI) Standards which are currently under development. Since OSI Standards are developmental, there may be some minor difficulties encountered in their implementation. For this reason, Standards Australia will be providing a limited interpretation service to coordinate and disseminate information concerning difficulties which are identified in using this Standard.

For the purpose of this Australian Standard, the text of the ISO Standard given herein should be modified as follows:

- (a) Terminology. The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (b) References. The references to International Standards should be replaced by references to Australian Standards as follows:

Reference to International Standard Appropriate Australian Standard ISO 7776 Information processing sys-3512 Information processing systemstems—Data communications— Data communications—High-level High-level data link control procedata link control proceduresdures—Description of the X.25 Description of the X.25 LAPB-LAPB-compatible DTE data link compatible DTE data link proprocedures cedures 8348 Information processing systems-2994 Information processing systems-Data communications—Network Data communications—Network service definition service definition CCITT International data transmission services and optional user facilities in public data networks X.25 Interface between data terminal equipment (DTE) and data circuitterminating equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit X.29 Procedures for the exchange of

control information and user data between a packet assembly/ disassembly (PAD) facility and a packet mode DTE or another

PAD.

## Reference to International Standard

#### CCITT

- X.32 Interface between data terminal equipment (DTE) and data circuitterminating equipment (DCE) for terminals operating in the packet mode and accessing a packet switched public data network through a public switched network or a circuit switched public data network
- X.75 Terminal and transit call control procedures and data transfer system on international circuits between packet-switched data networks
- X.96 Call progress signals in public data networks
- X.244 Procedure for the exchange of protocol identification during virtual call establishment on packetswitched public data networks
- D.12 Measurement unit for charging by volume in the international packet-switched data communication service

#### Appropriate Australian Standard

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# Information processing systems—Data communications—X.25 packet level protocol for data terminal equipment

## 1 Scope and field of application

This International Standard specifies the procedures, formats and optional user facilities at the Packet Level for Data Terminal Equipment (DTE) operating in conformance with CCITT Recommendation X.25. Both Virtual Call and Permanent Virtual Circuit modes of operation are covered.

This International Standard covers DTE operation at the Packet Level when accessing a public or private packet-switched network conforming to CCITT Recommendation X.25 by means of a dedicated path or a circuit-switched connection. It also covers the additional Packet Level procedures necessary for two DTEs conforming to this International Standard to communicate directly (i.e., without an intervening packet-switched network) over a dedicated path or a circuit-switched connection.

This International Standard also provides guidelines for private networks that use CCITT Recommendation X.25 to connect to packet-switched public data networks and that may also offer an X.25 interface to a DTE (see the annex).

#### 2 References

ISO 7776, Information processing systems — Data communications — High-level data link control procedures — Description of the X.25 LAPB-compatible DTE data link procedures.

ISO 8348, Information processing systems — Data communications — Network Service Definition.

CCITT Recommendation X.2, International data transmission services and optional user facilities in public data networks.

CCITT Recommendation X.25, 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.

CCITT Recommendation X.29, Procedures for the exchange of control information and user data between a packet assembly/disassembly (PAD) facility and a packet mode DTE or another PAD.

CCITT Recommendation X.32, 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 or a circuit switched public data network.

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CCITT Recommendation X.96, Call progress signals in public data networks.

CCITT Recommendation X.244, Procedure for the exchange of protocol identification during virtual call establishment on packet-switched public data networks.

CCITT Recommendation D.12, Measurement unit for charging by volume in the international packet-switched data transmission service.