

Australian Standard™

**Information technology—  
Telecommunications and information  
exchange between systems—  
DTE to DTE direct connections**

This Australian Standard was prepared by Committee IT/1, Information Systems—Interconnection. It was approved on behalf of the Council of Standards Australia on 28 April 2000 and published on 8 June 2000.

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## PREFACE

This Standard was prepared by the Standards Australia Committee IT/1, Information Systems—Interconnection. This Standard is identical with and has been reproduced from ISO/IEC 8481:1996, *Information technology—Telecommunications and information exchange between systems—DTE to DTE direct connections*.

The objective of this Standard is to provide designers of OSI networks with a description of an arrangement for interconnection of data terminal equipment(DTE), without intermediate data circuit-terminating equipment, in terms of electrical, mechanical, and functional characteristics. The interconnections are restricted to point-to-point connections.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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<i>Reference to International Standard</i>	<i>Australian or Australian/New Zealand Standard</i>
ISO	AS
4903 Information technology—Data communications—15-pole DTE/DCE interface connector and contact number assignments	3613 Information technology—Data communications—15-pole DTE/DCE interface connector and contact number assignments
CCITT	
Rec.X.24 List of definitions for interchange circuits between data terminal equipment (DTE) and Data circuit-terminating equipment (DCE) on public data networks (PDN)	—
ITU-T	
Rec.V.11 Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s	—

## AUSTRALIAN STANDARD

# Information technology - Telecommunications and information exchange between systems - DTE to DTE direct connections

## 1 Scope

This International Standard describes an arrangement for interconnection of Data Terminal Equipment (DTE), without intermediate Data Circuit-terminating Equipment (DCE), in terms of electrical, mechanical, and functional characteristics. This International Standard applies to DTEs with interface circuits standardised in CCITT Recommendation X.24 for transmission over public data networks. The interconnections are restricted to point-to-point connections.

NOTE - The extension to multipoint configurations is at present under study and would use electrical characteristics according to ISO/IEC 8482 - Information Technology - Telecommunications and Information Exchange between Systems - Twisted pair Multipoint interconnection.

This International Standard applies to DTEs which employ the balanced electrical characteristics of ITU-T V.11 for data signalling rates up to 10 Mbit/s.

The interconnection may be used for start-stop or synchronous transmission. For synchronous transmission, this International Standard applies to DTEs which use circuit X - DTE transmit element timing - and circuit S - Signal element timing - (see clause 5).

An informative annex provides information for the interconnection of DTEs with interface circuits according to ITU-T Recommendation V.24 or with electrical characteristics according to ITU-T Recommendations V.10 or V.28.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4903:1989, *Information technology - Data communication - 15-pole DTE/DCE interface connector and contact number assignments*.

ITU-T Recommendation V.11 (1994)<sup>1</sup>, *Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s*.

CCITT Recommendation X.24 (1989), *List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) on public data networks (PDN)*.

1) Previously CCITT Recommendation.

## 3 Interconnection configuration

Only one type of DTE to DTE interconnection configuration is considered for point-to-point connections with interfaces according to CCITT Recommendation X.24; this being shown in figure 1.

There are two lines of demarcation between the two interconnecting DTEs, one located at each DTE connector. The adaptor and any cable linking these two DTE connectors are not part of either DTE.

Intermediate balanced pair cable may be provided with a maximum length mainly dependent on the parameters of the electrical characteristics of the interchange circuits and the data signalling rate.

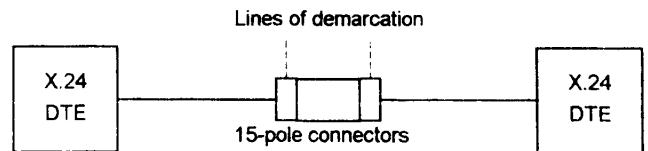


Figure 1 - DTE interconnection configuration