AS/NZS 4161:2000
ISO/IEC 8480:1995

Australian/New Zealand Standard™

Information technology—Telecommunications and information exchange between systems—DTE/DCE interface back-up control operation using ITU-T Recommendation V.24 interchange circuits

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT/1, Information Systems—Interconnection. It was approved on behalf of the Council of Standards Australia on 21 September 1999 and on behalf of the Council of Standards New Zealand on 20 September 1999. It was published on 10 January 2000.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT/1, Information Systems—Interconnection to supersede AS/NZS 4161:1994. This Standard is identical with and has been reproduced from ISO/IEC 8480:1995, *Information technology—Telecommunications and information exchange between systems—DTE/DCE interface back-up control operation using ITU-T Recommendation V.24 interchange circuits*.

The objective of this Standard is to provide users of telecommunication leased lines with a specification for the procedure for back-up operation applicable to data transmission on a leased line when implemented through a single interface, controlling both the leased and the back-up facilities using ITU-T Recommendation V.24.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text 'this International Standard' should read 'this Australian/New Zealand Standard'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to equivalent Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian or Australian/New Zealand Standard*	
ISO		AS	
2110	Information technology—Data communication—25-pole DTE/DCE interface connector and contact number assignments	2748	Information technology—Data communication—25-pole DTE/DCE interface connector and contact number assignments
ISO/IEC		AS/NZS	
11569	Information technology—Telecommunications and information exchange between systems—26-pole interface connector mateability dimensions and contact number assignments	4244	Information technology—Telecommunications and information exchange between systems—26-pole interface connector mateability dimensions and contact number assignments
ITU-T			
Rec. V.24	List of definitions for interchange circuits between data terminal equipment and data circuit-terminating equipment	—	

AUSTRALIAN/NEW ZEALAND STANDARD

Information technology — Telecommunications and information exchange between systems — DTE/DCE interface back-up control operation using ITU-T Recommendation V.24 interchange circuits

1 Scope

This International Standard specifies the procedures for back-up operation applicable to data transmission on a leased line when implemented through a single interface, controlling both the leased and the back-up facilities, using ITU-T Recommendation V.24 interchange circuits in conjunction with either the 25-pole connector (ISO 2110) or the 26-pole connector (ISO/IEC 11569).

The method used to switch the transmission of data automatically from the leased line to or from the back-up facility is not specified in this International Standard.

This International Standard is not applicable where back-up (calling or answering) is achieved by manual means.

NOTES

1 The procedures specified in this International Standard may be used at the answering end only, the calling end only, or both ends of a connection.

2 An ordinary DCE (i.e. one not implementing back-up control) may be provided at either end of the back-up circuit and only for back-up purposes. For example, a calling station could provide one or more separate auto-dial GSTN lines to provide back-up on demand to a greater number of leased lines.

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 2110:1989, *Information technology - Data communication - 25-pole DTE/DCE interface connector and contact number assignments.*

ISO/IEC 11569:1993, *Information technology - Telecommunications and information exchange between systems - 26-pole interface connector mateability dimensions and contact number assignments.*

ITU-T Recommendation[1] V.24:1993, *List of definitions for interchange circuits between data terminal equipment and data circuit-terminating equipment.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 answering station: the station at which the DCE switches to the back-up facility when a back-up request is received (e.g. an incoming call).

3.2 authorized mode: the mode in which switching to the back-up facility is done at the DCE initiative when the DCE is authorized by the DTE to do so.

NOTE - In the event that the DTE cannot control this facility over the interface, selection of this mode within the DCE during installation is permitted.

3.3 calling station: the station at which the DCE has to send to the called station a back-up request (e.g. a call for the other end to switch to the back-up facility).

3.4 direct mode: the mode in which switching to the back-up facility is done at the DTE initiative.

4 Switching to back-up operation

The state diagrams applicable to back-up operation, encompassing the procedures at both the calling and the answering stations, are shown in figure 1 for direct mode, and in figure 2 for authorized mode.

When interchange circuit 108 is implemented, it shall be in the ON condition. When circuit 108 is not implemented, the DCE shall operate as if circuit 108 were present and in the ON condition.

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[1] Previously CCITT Recommendation