AS/NZS 4157.1:2000
ISO/IEC 8882-1:1996

Australian/New Zealand Standard™

Information technology—Telecommunications and information exchange between systems—X.25 DTE conformance testing

Part 1: General principles

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.

The following interests are represented on Committee IT/1:

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Australian/New Zealand Standard™

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Part 1: General principles

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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 4157.1:1994. This Standard is identical with and has been reproduced from ISO/IEC 8882-1:1996, *Information technology—Telecommunications and information exchange between systems—X.25 DTE conformance testing*, Part 1: *General principles*.

The objective of this suite of Standards is to provide designers of X.25 networks with a definition for testing data terminal equipment (DTE) connected to data circuit terminating or with another DTE equipment conforming with X.25 protocols.

This Standard is Part 1 of AS/NZS 4157, *Information technology—Telecommunications and information exchange between systems—X.25 DTE conformance testing*, which is published in Parts as follows:

Part 1: General principles (this Standard)
Part 2: Data link layer conformance test suite
Part 3: Packet layer conformance test suite

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 part of ISO/IEC 8882' 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/IEC		AS/NZS	
7498	Information technology—Open Systems Interconnection—Basic Reference Model	2777	Information technology—Open Systems Interconnection—Basic reference model
7498-1	Part 1: The Basic Model	2777.1	Part 1: The basic model
7776	Information technology—Telecommunications and information exchange between systems—High-level data link control procedures—Description of the X.25 LAPB-compatible DTE data link procedures	3512	Information technology—Telecommunications and information exchange between systems—High-level data link control procedures—Description of the X.25 LAPB-compatible DTE data link procedures
8208	Information technology—Data communications—X.25 Packet Layer Protocol for Data Terminal Equipment	3621	Information technology—Data communications—X.25 packet layer protocol for data terminal equipment

ISO/IEC		AS/NZS	
8882	Information technology—Telecommunications and information exchange between systems—X.25 DTE conformance testing	4157	Information technology—Telecommunications and information exchange between systems X.25 DTE conformance testing
8882-2	Part 2: Data link layer conformance test suite	4157.2	Part 2: Data link layer conformance test suite
8882-3	Part 3: Packet layer conformance test suite	4157.3	Part 3: Packet layer conformance test suite
9646	Information technology—Open Systems Interconnection—Conformance testing methodology and framework	4103	Information technology—Open Systems Interconnection—Conformance testing methodology and framework
9646-1	Part 1: General concepts	4103.1	Part 1: General concepts
9646-2	Part 2: Abstract Test Suite specification	4103.2	Part 2: Abstract test suite specification
9646-3	Part 3: The Tree and Tabular Combined Notation (TTCN)	4103.3	Part 3: The tree and tabular combined notation
CCITT			
Rec. X.25	Interface between Data Terminal Equipment (DTE) and Data Circuit-Terminating Equipment (DCE) for Terminals Operating in the Packet Mode on Public Data Networks	—	
Rec. 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	—	
Rec. 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	—	

NOTES

AUSTRALIAN/NEW ZEALAND STANDARD

Information technology — Telecommunications and information exchange between systems — X.25–DTE conformance testing —

Part 1:
General principles

1 Scope

ISO/IEC 8882 defines the testing of a DTE operating at the Data Link Layer and at the Packet Layer when accessing, by means of a dedicated path connection, switched or permanent, a public or private packet-switched network conforming to CCITT Recommendation X.25 or another DTE conforming to ISO/IEC 7776 and ISO/IEC 8208.

The tests will test the conformance of an implementation by observing its external behaviour. The conformance tests will not test the DTE performance characteristics, the diagnostic and maintenance functions, the correctness of the protocol itself, or DTE internal implementation, or the full capabilities as stated in the PICS.

This part of ISO/IEC 8882

— provides a general introduction;

— refers to those applicable International Standards;

— defines terms applicable to X.25–DTE conformance testing;

— states the test case derivation and description; and

— states the test methodology.

ISO/IEC 8882–1 contains no statement of conformance. Specific statements of conformance are given in ISO/IEC 8882–2 and ISO/IEC 8882–3.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 8882. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 8882 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/IEC 7498–1 : 1994, *Information technology — Open Systems Interconnection — Basic Reference Model : The Basic Model.*

ISO/IEC 7776 : 1995, *Information technology — Telecommunications and information exchange between systems — High-level data link control procedures — Description of the X.25 LAPB-compatible DTE data link procedures.*

ISO/IEC 8208 : 1995, *Information technology — Data communications — X.25 Packet Layer Protocol for Data Terminal Equipment.*

NOTE — ISO/IEC 8208 : 1995 supersedes ISO/IEC 8208 : 1990. However, when this part of ISO/IEC 8882 was under development, the previous edition was valid and this part of ISO/IEC 8882 is therefore based on that edition, which is listed below.

ISO/IEC 8208 : 1990, *Information technology — Data communications — X.25 Packet Layer Protocol for Data Terminal Equipment.*

ISO/IEC 8882–2 : 1995, *Information technology — Telecommunications and information exchange between systems — X.25 DTE conformance testing — Part 2: Data link layer conformance test suite.*

ISO/IEC 8882–3 : 1995, *Information technology — Telecommunications and information exchange between systems — X.25 DTE conformance testing — Part 3: Packet layer conformance test suite.*

ISO/IEC 9646–1 : 1994, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 1: General concepts. (See also CCITT Recommendation X.290 (1992)).*

ISO/IEC 9646–2 : 1994, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 2: Abstract Test Suite specification. (See also CCITT Recommendation X.291 (1992)).*

ISO/IEC 9646–3 : 1992, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 3: The Tree and Tabular Combined Notation (TTCN).*

CCITT Recommendation X.25 (1980), *Interface between Data Terminal Equipment (DTE) and Data Circuit-Terminating Equipment (DCE) for Terminals Operating in the Packet Mode on Public Data Networks.*

CCITT Recommendation X.25 (1984), *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.25 (1988), *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.*