

AS/NZS 4232:1994
ISO/IEC 10588:1993

Australian/New Zealand Standard

**Information technology—Use of
X.25 packet layer protocol in
conjunction with X.21/X.21bis to
provide the OSI connection-mode
network service**

STANDARDS AUSTRALIA 

STANDARDS NEW ZEALAND 



Documents

Document Sharing Hub

AS/NZS 4232:1994

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 17 June 1994 and on behalf of the Council of Standards New Zealand on 9 May 1994. It was published on 17 October 1994.

The following interests are represented on Committee IT/1:

Australian Bankers Association
 Australian Bureau of Statistics
 Australian Chamber of Commerce and Industry
 Australian Committee of Directors and Principals
 Australian Computer Society
 Australian Computer Users Association
 Australian Information Industry Association
 Australian Vice Chancellors Committee
 Department of Defence, Australia
 Department of Industry, Science and Technology, Australia
 Government Computing Service, New Zealand
 Information Exchange Steering Committee, Australia
 Institute of Information and Communication Technologies, CSIRO, Australia
 OPTUS Communications, Australia
 Telecom Australia
 Telecom New Zealand

Review of Standards. To keep abreast of progress in industry, Joint Australian/New Zealand Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Joint Standards and related publications will be found in the Standards Australia and Standards New Zealand Catalogue of Publications; this information is supplemented each month by the magazines 'The Australian Standard' and 'Standards New Zealand', which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS/NZS 4232:1994

Australian/New Zealand Standard

Information technology—Use of X.25 packet layer protocol in conjunction with X.21/X.21bis to provide the OSI connection-mode network service

First published as Joint Standard AS/NZS 4232:1994.

PUBLISHED JOINTLY BY:

STANDARDS AUSTRALIA
1 The Crescent,
Homebush NSW 2140 Australia

STANDARDS NEW ZEALAND
Level 10, Standards House,
155 The Terrace,
Wellington 6001 New Zealand

ISBN 0 7262 9125 0



Documents
Document Sharing Hub

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT/1 on Information Systems—Interconnection. It is identical with and has been reproduced from ISO/IEC 10588:1993, *Information technology—Use of X.25 Packet Layer Protocol in conjunction with X.21/X.21 bis to provide the OSI connection-mode Network Service*.

This Standard is issued as a Joint Standard under the terms of the Active Cooperation Agreement between Standards Australia and Standards New Zealand.

The objective of this Standard is to provide users of the OSI 7-layer network with a specification of the mapping of the OSI connection-mode network service primitives and parameters to and from the elements of the protocols used by X.25 and X.21.

This 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, through the OSI Help Desk, a service to coordinate and disseminate information concerning difficulties which are identified in using this Standard.

Users of this Standard are advised by Standards Australia and Standards New Zealand, under arrangements made with ISO and IEC, as well as certain other Standards organizations, that the number of this Standard is not reproduced on each page; its identity is shown only on the cover and title pages.

For the purpose of this Standard, the source text should be modified as follows:

- (a) *Terminology* The words ‘this Australian/New Zealand Standard’ should replace the words ‘this International Standard’ wherever they appear.
- (b) *Decimal marker* Substitute a full point for a comma where it appears as a decimal marker.
- (c) *References* The references to international Standards should be replaced by references, where appropriate, to the following Australian or Joint Australian/New Zealand Standards:

<i>Reference to International Standard or other publication</i>		<i>Australian or Joint Australian/New Zealand Standard</i>	
ISO		AS	
7498	Information processing systems— Open Systems Interconnection— Basic Reference Model	2777	Information processing systems— Open Systems Interconnection— Basic reference model
7776	Information processing systems— Data communication—High-level data link control procedures— Description of the X.25 LAPB- compatible DTE data link procedures	3512	Information processing systems— Data communication—High-level data link control procedures— Description of the X.25 LAPB- compatible DTE data link procedures
8878	Information processing systems— Data communications—Use of X.25 to provide the OSI Connection- Mode Network Service	3604	Information processing systems— Data communications—Use of X.25 to provide the OSI connection- mode network service

iii

ISO/IEC		AS/NZS	
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
		AS	
8348	Information technology—Network service definition for Open Systems Interconnection	2994	Information processing systems—Data communications—Network service definition
ISO/TR			
8509	Information processing systems—Open Systems Interconnection—Service conventions	3620	Information processing systems—Open Systems Interconnection—Service conventions
ITU-T Recommendation			
X.2	International data transmission services and optional user facilities in public data networks and ISDNs	—	
X.21	Interface between data terminal equipment and data circuit-terminating equipment for synchronous operation on public data networks	—	
X.21 bis	Use on public data networks of data terminal equipment (DTE) which is designed for interfacing to synchronous V-series modems	—	
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	—	
X.30	Support of X.21, X.21 bis and X.20 bis based data terminal equipments (DTEs) by an integrated services digital network (ISDN)	—	
X.31	Support of packet mode terminal equipment by an ISDN	—	
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 telephone network or an integrated services digital network or a circuit switched public data network	—	

CONTENTS

	<i>Page</i>
1 Scope.....	1
2 Normative references.....	1
3 Definitions.....	2
4 Abbreviations	3
5 Overview	4
6 Control of underlying connections	5
7 Data link layer	8
8 Packet layer.....	8
 Annexes	
A X.30 Terminal Adaptors for ISDN	10

© Copyright STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Users of Standards are reminded that copyright subsists in all Standards Australia and Standards New Zealand publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia or Standards New Zealand may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia or Standards New Zealand. Permission may be conditional on an appropriate royalty payment. Australian requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia. New Zealand requests should be directed to Standards New Zealand.

Up to 10 percent of the technical content pages of a Standard may be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia or Standards New Zealand.

Inclusion of copyright material in computer software programs is also permitted without royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia or Standards New Zealand at any time.