

Australian Standard™

**Information technology—
Text communication—
Message-oriented text
interchange systems**

**Part 8: Electronic data interchange
messaging service**

[ISO/IEC title: Information technology—Message Handling Systems (MHS), Part 8: Electronic Data Interchange Messaging Service]

This Australian Standard was prepared by Committee IT/1, Information Systems—Interconnection. It was approved on behalf of the Council of Standards Australia on 18 March 1998 and published on 5 June 1998.

The following interests are represented on Committee IT/1:

Australian Bankers Association
Australian Bureau of Statistics
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
Telecom New Zealand
Telstra Corporation, Australia

Review of Australian Standards. *To keep abreast of progress in industry, Australian 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 Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

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

This Standard was issued in draft form for comment as DR 97542.

Australian Standard™

**Information technology—
Text communication—
Message-oriented text
interchange systems**

**Part 8: Electronic data interchange
messaging service**

First published as AS 4033.8—1998.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT/1, Information Systems—Interconnection. The Standard is the result of a consensus among the representatives on the Joint Committee that it be produced as an Australian Standard. It is identical with and has been reproduced from ISO/IEC 10021-8:1995, Information technology—Message Handling Systems (MHS), Part 8: *Electronic Data Interchange Messaging Service*.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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 Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

Reference to International Standard or other Publication

Australian/New Zealand Standard

ISO

AS/NZS

9735 Electronic data interchange for administration, commerce and transport (EDIFACT)—Application level syntax rules

3801 Electronic data interchange for administration, commerce and transport (EDIFACT)—Application level syntax rules

ISO/IEC

9594 Information technology—Open Systems Interconnection—The Directory

4019 Information technology—Open Systems Interconnection—The Directory

9594-2 Part 2: Models

4019.2 Part 2: Models

9594-7 Part 7: Selected object classes

4019.7 Part 7: Selected object classes

9594-8 Part 8: Authentication framework

4019.8 Part 8: Authentication framework

AS

10021 Information technology—Text Communication—Message-Oriented Text Interchange Systems (MOTIS)

4033 Information technology—Text communication—Message-oriented text interchange systems

10021-1 Part 1: Systems and Service Overview

4033.1 Part 1: Systems and service overview

10021-2 Part 2: Overall Architecture

4033.2 Part 2: Overall architecture

10021-5 Part 5: Message Store: Abstract Service Definition

4033.5 Part 5: Message store— Abstract service definition

10021-7 Part 7: Interpersonal Messaging System

4033.7 Part 7: Interpersonal messaging system

10021 Information technology—Message Handling Systems (MHS)

—

10021-9 Part 9: Electronic Data Interchange Messaging System

—

CONTENTS

	<i>Page</i>
1 Scope	1
2 Normative references	1
3 Definitions	2
3.1 Terms defined in this part of ISO/IEC 10021	2
3.1.1 EDI forwarding	2
3.1.2 EDI message	2
3.1.3 EDI messaging user	2
3.1.4 EDI notification	2
3.1.5 EDI message responsibility	2
3.2 Terms imported from ISO/IEC 9735	3
3.3 Terms imported from ANSI X12	3
4 Abbreviations	4
5 Conventions	4
6 EDI messaging service	5
6.1 Introduction	5
6.2 EDI messaging	5
6.3 EDI messaging environment	5
6.4 EDI messaging user	6
7 EDI messaging system	6
7.1 Introduction	6
7.2 Information flow in the EDIMS	7
7.3 EDI messaging service functional model	8
7.4 Structure of EDI messages	9
7.5 EDI notification	11
8 EDIM responsibility and forwarding	11
8.1 Introduction	11
8.2 Forwarding and secondary distribution	12
8.3 Case 1: No forwarding	12
8.4 Case 2: Content not changed and EDIM responsibility forwarded	13
8.5 Case 3: EDIM responsibility not forwarded	15
9 EDI naming, addressing and use of directory	17
10 EDI security	17
11 Intercommunication with physical delivery services	18
11.1 Introduction	18
11.2 Delivery and notifications	18
11.3 Transfer of EDIM responsibility	18
11.4 Physical rendition	19
12 Use of message store for EDI	21
13 Elements of service	21
14 Classification of elements of service	21
14.1 Basic EDI messaging service	21
14.2 EDI messaging service optional user facilities	22

	<i>Page</i>
15 Quality of service	25
15.1 EDI message status	25
15.2 Support by providers of EDI service	25
15.3 Model of delivery and notification times	25
15.4 EDI message delivery time targets	26
15.5 EDI notification time targets	27
15.6 Error protection	27
15.7 Availability of service	27
ANNEXES	
A - Glossary of terms	28
B - Definitions of elements of service	32
C - Security overview	37
D - EDI naming, addressing, and use of directory	45
E - Cross referencing overview	50
TABLES	
1 - Case 1: No forwarding	13
2 - Case 2: EDIM responsibility forwarded	14
3 - Case 3: EDIM responsibility not forwarded	17
4 - Provision and use of secure messaging elements of service by MHS components	18
5 - Elements of service belonging to the basic EDI messaging service	21
6 - EDI messaging optional user facilities selectable on a per-message basis	23
7 - EDI messaging service optional user facilities agreed for a contractual period of time	25
8 - EDIN time targets	27
FIGURES	
1 - EDI messaging environment	6
2 - EDI messaging system	7
3 - Information flow in EDI messaging system	8
4 - EDI messaging service functional mode	9
5 - EDI message structure	10
6 - EDI message structure for a typical EDI transaction	10
7 - Case 1: No forwarding	12
8 - Case 2: EDIM responsibility forwarded	14
9 - Case 3: EDIM responsibility not forwarded, Part 1	16
10 - Case 3: EDIM responsibility not forwarded	16
11 - M/PD delivery and notification times model	20
12 - Notification time model	26
C-1 - EDIM Responsibility transfer	42
D-1 - DIT structure for EDI requirements	46
D-2 - An aliasing example	47
D-3 - A country oriented aliasing example	48
E-1 - Cross referencing in EDI messaging	50

© Copyright – STANDARDS AUSTRALIA

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

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

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no 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 at any time.

AUSTRALIAN STANDARD

Information technology—Text communication— Message-oriented text interchange systems

Part 8: Electronic data interchange messaging service

1 Scope

This part of ISO/IEC 10021 defines the overall system and service of EDI messaging.

Other aspects of message handling systems and services are defined in other parts of ISO/IEC 10021. The layout of Standards | Recommendations defining the message handling system and services is shown in table 1 of ISO/IEC 10021-1 | CCITT Recommendation X/F.400. The public services built on MHS, as well as access to and from the MHS for public services are defined in the ITU-T's F.400-Series of Recommendations.

The technical aspects of MHS are defined in the multi-part series numbered ISO/IEC 10021 and ITU-T's X.400-Series of Recommendations. The overall system architecture of MHS is defined in ISO/IEC 10021-2 | CCITT Recommendation X.402. The technical aspects of EDI messaging are defined in ISO/IEC 10021-9 | CCITT Recommendation X.435.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 10021. 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 10021 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 9594-2:1990, *Information technology – Open Systems Interconnection – The Directory – Part 2: Models*.
(See also CCITT Recommendation X.501 (1988))

ISO/IEC 9594-7:1990, *Information technology – Open Systems Interconnection – The Directory – Part 7: Selected object classes*.
(See also CCITT Recommendation X.521 (1988))

ISO/IEC 9594-8:1990, *Information technology – Open Systems Interconnection – The Directory – Part 8: Authentication framework*.
(See also CCITT Recommendation X.509 (1988))

ISO 9735:1988, *Electronic data interchange for administration, commerce and transport (EDIFACT) - Application level syntax rules*.

ISO/IEC 10021-1:1990, *Information technology – Text Communication – Message-Oriented Text Interchange Systems (MOTIS) - Part 1: System and Service Overview*.
(See also CCITT Recommendation F.400 (1992) | X.400 (1993))

ISO/IEC 10021-2:1990, *Information technology – Text Communication – Message-Oriented Text Interchange Systems (MOTIS) - Part 2: Overall Architecture*.
(See also CCITT Recommendation X.402 (1992))