INTERNATIONAL STANDARD

ISO/IEC 10021-7

Second edition
1997-07-01

Information technology — Message Handling Systems (MHS): Interpersonal messaging system

Technologies de l'information — Systèmes de messagerie (MHS): Système de messagerie entre personnes

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 10021-7 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 18, *Document processing and related communication*, in collaboration with ITU-T. The identical text is published as ITU-T Recommendation X.420.

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This second edition cancels and replaces the first edition (ISO/IEC 10021-7:1990), which has been technically revised. It also incorporates Amendment 1:1994, Amendment 3:1994, Technical Corrigendum 1:1991, Technical Corrigendum 2:1991, Technical Corrigendum 3:1992, Technical Corrigendum 4:1992, Technical Corrigendum 5:1992, Technical Corrigendum 6:1993, Technical Corrigendum 7:1994, Technical Corrigendum 8:1994 and Technical Corrigendum 9:1994.

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ISO/IEC 10021 consists of the following parts, under the general title *Information technology — Message Handling Systems (MHS)*:

— *Part 1: System and Service Overview*

— *Part 2: Overall architecture*

— *Part 3: Abstract Service Definition Conventions*

— *Part 4: Message transfer system: Abstract service definition and procedures*

— *Part 5: Message store: Abstract service definition*

— *Part 6: Protocol specifications*

— *Part 7: Interpersonal messaging system*

— *Part 8: Electronic Data Interchange Messaging Service*

— *Part 9: Electronic Data Interchange Messaging System*

— *Part 10: MHS routing*

— *Part 11: MTS routing*

— *Part 12: PICS proforma for MOTIS*

— *Part 13: PICS proforma for message transfer access protocol*

— *Part 14: PICS proforma for message store access protocol*

— *Part 15: PICS proforma for interpersonal messaging*

— *Part 16: Inter application message service definition protocol*

— *Part 17: Inter application specification*

Annexes A to K, M and N form an integral part of this part of ISO/IEC 10021. Annexes O to Q are for information only.

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Introduction

This Specification is one of a set of Recommendations | International Standards for Message Handling. The entire set provides a comprehensive blueprint for a Message Handling System (MHS) realized by any number of cooperating open systems.

The purpose of an MHS is to enable users to exchange messages on a store-and-forward basis. A message submitted on behalf of one user, the originator, is conveyed by the Message Transfer System (MTS) and subsequently delivered to the agents of one or more additional users, the recipients. Access Units (AUs) link the MTS to communication systems of other kinds (e.g. postal systems). A user is assisted in the preparation, storage, and display of messages by a User Agent (UA). Optionally, it is assisted in the storage of messages by a Message Store (MS). The MTS comprises a number of Message Transfer Agents (MTAs) which collectively perform the store-and-forward message transfer function.

This Specification defines the Message Handling application called *Interpersonal Messaging*, specifying in the process the message content type and associated procedures known as *P2*.

This Specification was developed jointly by ITU-T and ISO/IEC. It is published as common text as ITU-T Rec. X.420 | ISO/IEC 10021-7.

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INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – MESSAGE HANDLING SYSTEMS (MHS): INTERPERSONAL MESSAGING SYSTEM

SECTION 1 – INTRODUCTION

1 Scope

This Recommendation | International Standard defines **Interpersonal Messaging**, a form of Message Handling tailored for ordinary interpersonal business or private correspondence.

This Recommendation | International Standard is one of a series on Message Handling. ITU-T Rec. X.402 | ISO/IEC 10021-2 constitutes the introduction to the series and identifies the other documents in it.

The architectural basis and foundation for Message Handling are defined in still other Recommendations | International Standards. ITU-T Rec. X.402 | ISO/IEC 10021-2 identifies those documents as well.

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This Recommendation | International Standard is structured as follows. Section 1 is this introduction. Section 2 defines the kinds of information objects exchanged in Interpersonal Messaging. Section 3 defines the associated abstract service. Section 4 specifies how it is provided. Annexes provide important supplemental information.

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The requirements for conformance to this Recommendation | International Standard are given in clause 22.

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2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of ISO and IEC maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

2.1 Open Systems Interconnection

This Specification cites the following OSI specifications:

Identical Recommendations | International Standards

- ITU-T Recommendation X.227 (1995) | ISO/IEC 8650-1:1996, *Information technology – Open Systems Interconnection – Connection-oriented protocol for the Association Control Service Element: Protocol specification.*
- ITU-T Recommendation X.680 (1994) | ISO/IEC 8824-1:1995, *Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation.*
- ITU-T Recommendation X.681 (1994) | ISO/IEC 8824-2:1995, *Information technology – Abstract Syntax Notation One (ASN.1): Information object specification.*
- ITU-T Recommendation X.682 (1994) | ISO/IEC 8824-3:1995, *Information technology – Abstract Syntax Notation One (ASN.1): Constraint specification.*
- ITU-T Recommendation X.683 (1994) | ISO/IEC 8824-4:1995, *Information technology – Abstract Syntax Notation One (ASN.1): Parameterization of ASN.1 specifications.*

- ITU-T Recommendation X.690 (1994) | ISO/IEC 8825-1:1995, *Information technology – ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER).*
- ITU-T Recommendation X.880 (1994) | ISO/IEC 13712-1:1995, *Information technology – Remote Operations: Concepts, model and notation.*

2.2 Message Handling Systems

This Specification cites the following Message Handling System specifications:

Identical Recommendations | International Standards

- ITU-T Recommendation X.402 (1995) | ISO/IEC 10021-2:1996, *Information technology – Message Handling Systems (MHS): Overall architecture.*
- ITU-T Recommendation X.411 (1995) | ISO/IEC 10021-4:1997, *Information technology – Message Handling Systems (MHS): Message transfer system: Abstract service definition and procedures.*
- ITU-T Recommendation X.413 (1995) | ISO/IEC 10021-5:1995, *Information technology – Message Handling Systems (MHS): Message store: Abstract service definition.*
- ITU-T Recommendation X.419 (1995) | ISO/IEC 10021-6:1996, *Information technology – Message Handling Systems (MHS): Protocol specifications.*

Paired Recommendations | International Standards equivalent in technical content

- ITU-T Recommendation F.400/X.400 (1996), *Message handling: System and service overview.*

  ISO/IEC 10021-1:1997, *Information technology – Message Handling Systems (MHS) – Part 1: System and Service Overview.*

Additional references

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- CCITT Recommendation X.408 (1988), *Message handling systems: Encoded information type conversion rules.*
- CCITT Recommendation X.420 (1984), *Message handling systems: Interpersonal messaging system.*

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2.3 Directory Systems

This Specification cites the following Directory System specifications:

Identical Recommendations | International Standards

- ITU-T Recommendation X.501 (1993) | ISO/IEC 9594-2:1995, *Information technology – Open Systems Interconnection – The Directory: Models.*
- ITU-T Recommendation X.520 (1993) | ISO/IEC 9594-6:1995, *Information technology – Open Systems Interconnection – The Directory: Selected attribute types.*

2.4 Language Code

This Specification cites the following Language Code specification:

- ISO 639:1988, *Code for the representation of names of languages.*

2.5 Character Sets

This Specification cites the following Character Set specifications:

- ISO/IEC 2022:1994, *Information technology – Character code structure and extension techniques.*
- ISO 2375:1985, *Data processing – Procedure for registration of escape sequences.*
- ISO 8859-1:1987, *Information processing – 8-bit single-byte coded graphic character sets – Part 1: Latin alphabet No. 1.*
- CCITT Recommendation T.61 (1988), *Character repertoire and coded character sets for the international Teletex service.*

2.6 Telematic services

This Specification cites the following Telematic Service specifications:

- ITU-T Recommendation T.4 (1993), *Standardization of group 3 facsimile apparatus for document transmission.*
- ITU-T Recommendation T.30 (1993), *Procedures for document facsimile transmission in the general switched telephone network.*
- CCITT Recommendation T.100 (1984), *International information exchange for interactive videotex.*
- ITU-T Recommendation T.101 (1994), *International interworking for videotex services.*
- CCITT Recommendation T.330 (1988), *Telematic access to interpersonal message system.*

2.7 File Transfer

This Specification cites the following File Transfer specifications:

- ISO 8571-1:1988, *Information processing systems – Open Systems Interconnection – File Transfer, Access and Management – Part 1: General introduction.*
- ISO 8571-2:1988, *Information processing systems – Open Systems Interconnection – File Transfer, Access and Management – Part 2: Virtual Filestore Definition.*
- ISO 8571-2:1988/Amd.1:1992, *Information processing systems – Open Systems Interconnection – File Transfer, Access and Management – Part 2: Virtual Filestore Definition – Amendment 1: Filestore Management.*
- ISO 8571-4:1988, *Information processing systems – Open Systems Interconnection – File Transfer, Access and Management – Part 4: File Protocol Specification.*
- ISO 8571-4:1988/Amd.1:1992, *Information processing systems – Open Systems Interconnection – File Transfer, Access and Management – Part 4: File Protocol Specification – Amendment 1: Filestore Management.*

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2.8 Open Document Architecture

This Specification cites the following Open Document Architecture specifications:

- ITU-T Recommendation T.415 (1993) | ISO/IEC 8613-5:1994, *Information technology – Open Document Architecture (ODA) and interchange format: Open Document Interchange Format.*

2.9 Digital Encoding of Sound

This Specification cites the following specifications on the Digital Encoding of Sound:

- CCITT Recommendation G.711 (1988), *Pulse Code Modulation (PCM) of voice frequencies.*
- CCITT Recommendation G.726 (1990), *40, 32, 24, 16 kbit/s Adaptive Differential Pulse Code Modulation (ADPCM).*
- CCITT Recommendation G.728 (1992), *Coding of speech at 16 kbit/s using low-delay code excited linear prediction.*
- IEC 908:1987, *Compact disc digital audio system.*

3 Definitions

For the purposes of this Specification, the definitions given in ITU-T Rec. X.402 | ISO/IEC 10021-2 apply.

4 Abbreviations

For the purposes of this Specification, the abbreviations given in ITU-T Rec. X.402 | ISO/IEC 10021-2 apply.

5 Conventions

This Specification uses the descriptive conventions identified below.