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# INTERNATIONAL STANDARD

# ISO/IEC 10021-9

Second edition  
1999-12-15

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## Information technology — Message Handling Systems (MHS): Electronic Data Interchange Messaging System

*Technologies de l'information — Systèmes de messagerie (MHS): Système  
de messagerie avec échange de données informatisé*

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Reference number  
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this part of ISO/IEC 10021 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 10021-9 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

This second edition cancels and replaces the first edition (ISO/IEC 10021-9:1995), which has been technically revised. It also incorporates Amendment 1:1998 and Corrigendum 1:1998.

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: Guide for Messaging Systems Managers*

Annexes A to J form a normative part of this part of ISO/IEC 10021. Annexes K to M are for information only.

## INTERNATIONAL STANDARD

## ITU-T RECOMMENDATION

# INFORMATION TECHNOLOGY – MESSAGE HANDLING SYSTEMS (MHS): ELECTRONIC DATA INTERCHANGE MESSAGING SYSTEM

## 1 Scope

This Recommendation | International Standard is one of a series on 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 (AU) 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 (MTA) which collectively perform the store-and-forward message transfer function.

This Recommendation | International Standard defines the message handling application called EDI messaging (EDIMG), a form of message handling tailored for exchange of Electronic Data Interchange (EDI) information, a new message content type and associated procedures known as Pedi. It is designed to meet the requirements of users of ISO 9735 (EDIFACT), and other commonly used EDI systems.

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.

## 2 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 indicated below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunications Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

### 2.1 Presentation references

This Recommendation | International Standard cites the following Presentation specifications:

- ITU-T Recommendation X.680 (1997) | ISO/IEC 8824-1:1998, *Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation.*
- ITU-T Recommendation X.681 (1997) | ISO/IEC 8824-2:1998, *Information technology – Abstract Syntax Notation One (ASN.1): Information object specification.*
- ITU-T Recommendation X.690 (1997) | ISO/IEC 8825-1:1998, *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 Directory references

This Recommendation | International Standard cites the following Directory specifications:

- ITU-T Recommendation X.500 (1997) | ISO/IEC 9594-1:1998, *Information technology – Open Systems Interconnection – The Directory: Overview of concepts, models, and services.*
- ITU-T Recommendation X.501 (1997) | ISO/IEC 9594-2:1998, *Information technology – Open Systems Interconnection – The Directory: Models.*
- ITU-T Recommendation X.520 (1997) | ISO/IEC 9594-6:1998, *Information technology – Open Systems Interconnection – The Directory: Selected attribute types.*
- ITU-T Recommendation X.521 (1997) | ISO/IEC 9594-7:1998, *Information technology – Open Systems Interconnection – The Directory: Selected object classes.*

## 2.3 Message Handling references

This Recommendation | International Standard cites the following Message Handling System specifications:

- ITU-T Recommendation F.400/X.400 (1999), *Message handling services: Message handling system and service overview.*
- ITU-T Recommendation F.435 (1999) | ISO/IEC 10021-8:1999, *Electronic Data Interchange Messaging Service.*  
ISO/IEC 10021-1:1999, *Information technology – Message Handling Systems (MHS) – Part 1: System and service overview.*
- ITU-T Recommendation X.402 (1999) | ISO/IEC 10021-2:1999, *Information technology – Message Handling Systems (MHS): Overall architecture.*
- ITU-T Recommendation X.411 (1999) | ISO/IEC 10021-4:1999, *Information technology – Message Handling Systems (MHS): Message transfer system: Abstract service definition and procedures.*
- ITU-T Recommendation X.413 (1999) | ISO/IEC 10021-5:1999, *Information technology – Message Handling Systems (MHS): Message Store: Abstract service definition.*
- ITU-T Recommendation X.420 (1999) | ISO/IEC 10021-7:1999, *Information technology – Message Handling Systems (MHS): Interpersonal messaging system.*

## 2.4 Additional references

This Recommendation | International Standard cites the following specification:

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