

INTERNATIONAL STANDARD

ISO/IEC 11588-1

First edition
1996-05-15

Information technology — Message Handling Systems (MHS) management —

Part 1: Model and architecture

*Technologies de l'information — Gestion de systèmes de messagerie
(MHS) —*

Partie 1: Modèle et architecture



Reference number
ISO/IEC 11588-1:1996(E)

AVA Documents
Document Sharing Hub

CONTENTS

	<i>Page</i>
1 Scope	1
2 Normative references	1
3 Definitions	2
4 Abbreviations	4
5 Conventions	5
6 MHS Management standards overview	5
7 MHS Management model	6
8 Functions	10
9 MHS Management	12
Annex A – Example scenarios and management functions	14

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 11588-1 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.460.

ISO/IEC 11588 consists of the following parts, under the general title *Information technology — Message Handling Systems (MHS) management*:

- *Part 1: Model and architecture*
- *Part 2: Information*
- *Part 3: Logging information*
- *Part 8: Message transfer agent entity*

Annex A of this part of ISO/IEC 11588 is for information only.

Introduction

This Specification provides, through its four sections plus annex, an overview of the MHS Management functions.

The first section briefly introduces the reader to the terminology, abbreviations, conventions and definitions used throughout the Recommendation | International Standard. Although primarily used as a reference section, both new and experienced Recommendation | International Standard readers should note the additional definitions and conventions.

Section two introduces MHS Management as a member of the family of OSI Systems management standards. It guides readers towards the other Recommendation | International Standards in the MHS Management series which may be of interest.

Section three, the MHS Management Model, addresses the needs of systems management designers to know how to fit their solutions together with the standards. For this purpose the model featured in figures will be a useful aid to visualise the relationships existing amongst the different functional layers and between the functional areas so far identified.

Section four, the MHS Management Architecture, helps the reader to understand how MHS Management fits into and relates to the overall OSI Systems management architecture. This should be of specific interest to implementors who need to know the protocol and service requirements.

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – MESSAGE HANDLING SYSTEMS (MHS) MANAGEMENT: MODEL AND ARCHITECTURE

SECTION 1 – INTRODUCTION

1 Scope

This Recommendation | International Standard establishes a model for MHS Management which is consistent with the management layers defined in Telecommunications Management Network. This Recommendation | International Standard establishes an architecture for managing MHS Systems which is consistent with OSI Systems management.

This Recommendation | International Standard provides an overview to the family of MHS Management standards.

The scope of this family of Recommendations | International Standards is to provide guide-lines and define tools to be used for the management of MHS Systems. This includes the management within and between ADMs and/or PRMs. Examples of objects to be managed are: MTA, UA, AU, and MS.

This Recommendation | International Standard provides an overview of the MHS Management functions.

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 IEC and ISO 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 Identical Recommendations | International Standards

- ITU-T Recommendation X.200 (1994) | ISO/IEC 7498-1:1994, *Information technology – Open Systems Interconnection – Basic Reference Model: The basic model.*
- ITU-T Recommendation X.462 (1995) | ISO/IEC 11588-3:1996, *Information technology — Message Handling Systems (MHS) management: Logging information.*
- ITU-T Recommendation X.467 (1995) | ISO/IEC 11588-8:1996, *Information technology — Message Handling Systems (MHS) management: Message transfer agent entity.*
- CCITT Recommendation X.701 (1992) | ISO/IEC 10040:1992, *Information technology – Open Systems Interconnection – Systems management overview.*
- CCITT Recommendation X.720 (1992) | ISO/IEC 10165-1:1993, *Information technology – Open Systems Interconnection – Structure of management information: Management information model.*
- CCITT Recommendation X.730 (1992) | ISO/IEC 10164-1:1993, *Information technology – Open Systems Interconnection – Systems management: Object management function.*

2.2 Paired Recommendations | International Standards

- ITU-T Recommendation X.402 (1995), *Message Handling Systems: Overall architecture.*
ISO/IEC 10021-2:1990, *Information technology – Text Communication – Message-Oriented Text Interchange Systems (MOTIS) – Part 2: Overall Architecture.*

- CCITT Recommendation X.700 (1992), *Management framework for Open Systems Interconnection (OSI) for CCITT applications*.
ISO/IEC 7498-4:1989, *Information processing systems – Open Systems Interconnection – Basic Reference Model – Part 4: Management framework*.
- CCITT Recommendation X.710 (1991), *Common management information service definition for CCITT applications*.
ISO/IEC 9595:1991, *Information technology – Open Systems Interconnection – Common management information service definition*.

2.3 Additional references

- CCITT Recommendation M.3010 (1992), *Principles for a telecommunications management network*.
- ITU-T Manual X.461 (1995) | ISO/IEC TR 11588-2:1996, *Information technology – Message Handling Systems (MHS) management: Information*.

3 Definitions

For the purposes of this Recommendation | International Standard, the following definitions apply.

3.1 Basic Reference Model definitions

This Recommendation | International Standard is based on the concepts in the Basic Reference Model for Open Systems Interconnection (see ITU-T Rec. X.200 | ISO/IEC 7498-1) and makes use of the following term defined in that model:

- systems management

3.2 Telecommunications Management Network definitions

This Recommendation | International Standard makes use of the following terms defined in Principles for a Telecommunications Management Network (CCITT Recommendation M.3010):

- a) business management layer;
- b) management information model;
- c) network element layer;
- d) network element management layer;
- e) network management layer;
- f) service management layer.

3.3 OSI Systems Management definitions

This Recommendation | International Standard makes use of the following terms defined in the OSI Management Framework (CCITT Rec. X.700 | ISO/IEC 7498-4):

- a) managed object;
- b) management information base.

This Recommendation | International Standard makes use of the following terms defined in OSI Systems Management Overview (CCITT Rec. X.701 | ISO/IEC 10040):

- a) agent;
- b) agent role;
- c) generic definitions;
- d) managed object class;
- e) managed (open) system;
- f) management information;
- g) manager;
- h) manager role;