INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC ISP 12062-2

Second edition
1997-12-15

Information technology — International Standardized Profiles AMH2n — Message Handling Systems — Interpersonal Messaging — Part 2: AMH21 — IPM Content

Technologies de l'information — Profils normalisés internationaux AMH2n — Systèmes de messagerie — Messagerie entre personnes — Partie 2: AMH21 — Contenu de IPM

Reference number
ISO/IEC ISP 12062-2:1997(E)

Contents

Annexes

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. In addition to developing International Standards, ISO/IEC JTC 1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or a set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 12062-2 was prepared with the collaboration of

— OSI Asia-Oceania Workshop (AOW);

— European Workshop for Open Systems (EWOS);

— Open Systems Environment Implementors' Workshop (OIW).

This second edition cancels and replaces the first edition (ISO/IEC ISP 12062-2:1995), which has been technically revised. It also incorporates Technical Corrigendum 1:1996.

ISO/IEC ISP 12062 consists of the following parts, under the general title *Information technology - International Standardized Profiles AMH2n - Message Handling Systems - Interpersonal Messaging*:

— *Part 1: IPM MHS Service Support*

— *Part 2: AMH21 - IPM Content*

— *Part 3: AMH22 - IPM Requirements for Message Transfer (P1)*

— *Part 4: AMH23 and AMH25 - IPM Requirements for MTS Access (P3) and MTS 94 Access (P3)*

— *Part 5: AMH24 - IPM Requirements for Enhanced MS Access (P7)*

— *Part 6: AMH26 - IPM Requirements for Enhanced MS 94 Access (P7)*

Annexes A and B form an integral part of this part of ISO/IEC ISP 12062.
Annex C is for information only.

Introduction

This part of ISO/IEC ISP 12062 is defined within the context of Functional Standardization, in accordance with the principles specified by ISO/IEC TR 10000, “Framework and Taxonomy of International Standardized Profiles”. The context of Functional Standardization is one part of the overall field of Information Technology (IT) standardization activities, covering base standards, profiles, and registration mechanisms. A profile defines a combination of base standards that collectively perform a specific well-defined IT function. Profiles standardize the use of options and other variations in the base standards, and provide a basis for the development of uniform, internationally recognized system tests.

One of the most important rôles for an ISP is to serve as the basis for the development (by organizations other than ISO and IEC) of internationally recognized tests. ISPs are produced not simply to ‘legitimize’ a particular choice of base standards and options, but to promote real system interoperability. The development and widespread acceptance of tests based on this and other ISPs is crucial to the successful realization of this goal.

The text for this part of ISO/IEC ISP 12062 was developed in close cooperation between the MHS Expert Groups of the three Regional Workshops: the North American OSE Implementors’ Workshop (OIW), the European Workshop for Open Systems (EWOS) (jointly with the corresponding expert group of the European Telecommunications Standards Institute - ETSI) and the OSI Asia-Oceania Workshop (AOW). This part of ISO/IEC ISP 12062 is harmonized between these three Workshops and it has been ratified by the plenary assemblies of all three Workshops.

Information technology – International Standardized Profiles AMH2n – Message Handling Systems – Interpersonal Messaging –

Part 2:
AMH21 - IPM Content

1 Scope

1.1 General

This part of ISO/IEC ISP 12062 covers the interchange of messages between Interpersonal Messaging (IPM) User Agents (UAs) (see also figure 1). These specifications form part of the Interpersonal Messaging application functions, as defined in the parts of ISO/IEC ISP 12062, and are based on the Common Messaging content type-independent specifications in ISO/IEC ISP 10611.

1.2 Position within the taxonomy

This part of ISO/IEC ISP 12062 is the second part of a multipart ISP identified in ISO/IEC TR 10000-2 as "AMH2, Message Handling Systems - Interpersonal Messaging" (see also ISO/IEC TR 10000-1, 8.2 for the definition of multipart ISPs).

This part of ISO/IEC ISP 12062 specifies the following profile:

AMH21 - IPM Content

The AMH21 profile may optionally be combined with profiles AMH23, AMH24, AMH25 or AMH26 (see annex D of ISO/IEC ISP 12062-1) specifying OSI MHS communications protocols and supporting services for an IPM UA.

1.3 Scenario

The model used is one of indirect interchange of interpersonal messages (content types 22 and 2) between IPM UAs via an intermediate Message Transfer System (MTS), as shown in figure 1. The provision of, and access to, the MTS is outside the scope of this profile.

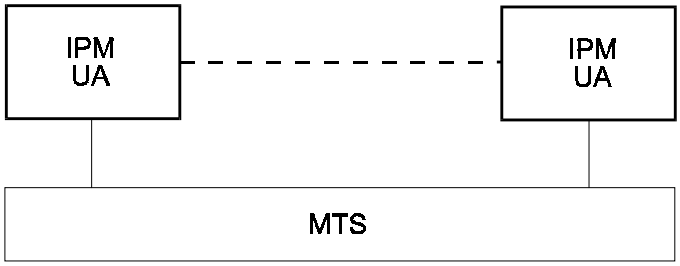

Figure 1 - AMH21 scenario

The MHS services and functions covered by the AMH21 profile are specified in ISO/IEC 10021-7. There are no OSI upper layer services and protocols within the scope of the AMH21 profile.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 12062. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this part of ISO/IEC ISP 12062 are warned against automatically applying any more recent editions of the documents listed below, since the nature of references made by ISPs to such documents is that they may be specific to a particular edition. Members of IEC and ISO maintain registers of currently valid International Standards and ISPs, and the Telecommunications Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

Amendments and corrigenda to the base standards referenced are listed in annex B.

NOTES

1 - References in the body of this part of ISO/IEC ISP 12062 to specific clauses of ISO/IEC documents shall be considered to refer also to the corresponding clauses of the equivalent ITU-T Recommendations (as noted below) unless otherwise stated.

2 - Informative references are found in annex C.

ISO/IEC 8859 (all parts), *Information technology - 8-bit single-byte coded graphic character sets.*

CCITT Recommendation T.415 (1993), | ISO/IEC 8613-5: 1994, *Information technology - Open Document Architecture (ODA) and Interchange Format - Part 5: Open Document Interchange Format (ODIF).*

ISO/IEC TR 10000-1:—[1)], *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1: General principles and documentation framework.*

ISO/IEC TR 10000-2:—[1)], *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2: Principles and Taxonomy for OSI profiles.*

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

ISO/IEC 10021-1:—[2)], *Information technology - Message Handling Systems (MHS): System and service overview [see also ITU-T Recommendation F.400/X.400].*

ITU-T Recommendation X.402 (1995) | ISO/IEC 10021-2: 1996, *Information technology - Message Handling Systems (MHS): Overall architecture.*

ITU-T Recommendation X.420 (1996) | ISO/IEC 10021-7: 1997, *Information technology - Message Handling Systems (MHS): Interpersonal messaging system.*

ISO/IEC ISP 12062-1: 1997, *Information technology - International Standardized Profiles AMH2n - Message Handling Systems - Interpersonal Messaging - Part 1: IPM MHS Service Support.*

3 Definitions

For the purposes of this part of ISO/IEC ISP 12062, the following definitions apply.

Terms used in this part of ISO/IEC ISP 12062 are defined in the referenced base standards; in addition, the following terms are defined.

1) To be published. (Revision of ISO/IEC TR 10000:1995)

2) To be published. (Revision of ISO/IEC 10021-1:1990)

3.1 General

3.1.1 Basic requirement: an Element of Service, protocol element, procedural element or other identifiable feature specified in the base standards which is required to be supported by all MHS implementations.

3.1.2 Functional group: a specification of one or more related Elements of Service, protocol elements, procedural elements or other identifiable features specified in the base standards which together support a significant optional area of MHS functionality.

NOTE - A functional group can cover any combination of MHS features specified in the base standards for which the effect of implementation can be determined at a standardized external interface - i.e. via a standard OSI communications protocol (other forms of exposed interface, such as a standardized programmatic interface, are outside the scope of this version of ISO/IEC ISP 12062).

3.2 Support classification

To specify the support level of information objects and items for this part of ISO/IEC ISP 12062, the following terminology is defined.

The following classifications are used in this part of ISO/IEC ISP 12062 to specify static conformance requirements - i.e. capability.

The classification of information objects and items (elements) is relative to that of the containing information element, if any. Where the constituent elements of a non-primitive element are not individually specified, then each shall be considered to have the classification of that element. Where the range of values to be supported for an element is not specified, then all values defined in the MHS base standards shall be supported.

3.2.1 mandatory support (**m**)**:** the element shall be supported. An implementation shall be able to generate the element, and/or receive the element and perform all associated procedures (i.e. implying the ability to handle both the syntax and the semantics of the element) as relevant, as specified in the MHS base standards. Where support for origination (generation) and reception are not distinguished, then both capabilities shall be assumed.

NOTES

1 - In the case of character repertoires, mandatory support implies that the IPM UA implementation is able to generate and/or receive the encodings of all characters within those repertoires. How graphic characters are originated and rendered is outside the scope of this ISP.

2 - Where required by the base standards, mandatory support also implies that the IPM UA implementation is able to pass the element on the origination port/reception port to/from the corresponding element on the submission port/delivery port/retrieval port.

3.2.2 optional support (**o**)**:** an implementation is not required to support the element. If support is claimed, then the element shall be treated as if it were specified as mandatory support. If the element is not supported on reception, then it shall be ignored.

3.2.3 conditional support (**c**)**:** the element shall be supported under the conditions specified in this part of ISO/IEC ISP 12062. If these conditions are met, the element shall be treated as if it were specified as mandatory support. If these conditions are not met, the element shall be treated as if it were specified as optional support (unless otherwise stated).

3.2.4 out of scope (**i**)**:** the element is outside the scope of this part of ISO/IEC ISP 12062 - i.e. it will not be the subject of an ISP conformance test.

3.2.5 not applicable (**–**)**:** the element is not applicable in the particular context in which this classification is used.

4 Abbreviations

84IW	84 Interworking
AMH	Application Message Handling
ASN.1	Abstract Syntax Notation One
CV	Conversion
DIR	Use of Directory
DL	Distribution List
EoS	Element of Service
FG	Functional group
FWD	Manual Forwarding
IPM	Interpersonal Messaging / Interpersonal Message
IPN	Interpersonal Notification
ISP	International Standardized Profile
LD	Latest Delivery
MHS	Message Handling Systems
MS	Message store
MT	Message transfer
MTA	Message transfer agent
MTS	Message Transfer System
OSI	Open Systems Interconnection
PD	Physical Delivery
RED	Redirection
RoC	Return of Content
SEC	Security
UA	User agent

Support level for information objects (see 3.2):

m	mandatory support
o	optional support
c	conditional support
i	out of scope
–	not applicable

5 Conformance

The scope of conformance to profile AMH21 covers the functionality of, and interoperability between, IPM UAs. Conformance to profile AMH21 does not imply the provision of a standard OSI communications protocol for access to the MTS. Conformance to profile AMH21 does not imply the provision of an exposed IPM service interface (whether a human user interface or a standardized programmatic interface).

This part of ISO/IEC ISP 12062 states requirements upon implementations to achieve interworking. A claim of conformance to this part of ISO/IEC ISP 12062 is a claim that all requirements in the relevant base standards are satisfied, and that all requirements in the following clauses and in annex A of this part of ISO/IEC ISP 12062 are satisfied. Annex A states the relationship between these requirements and those of the base standards.

5.1 Conformance statement

For each implementation claiming conformance to profile AMH21 as specified in this part of ISO/IEC ISP 12062, a PICS shall be made available stating support or non-support of each option identified in this part of ISO/IEC ISP 12062.

5.2 MHS conformance

This part of ISO/IEC ISP 12062 specifies implementation options or selections such that conformant implementations will satisfy the conformance requirements of ISO/IEC 10021 and the ITU-T X.400 Recommendations.

Implementations conforming to profile AMH21 as specified in this part of ISO/IEC ISP 12062 shall implement all the mandatory support (m) features identified as basic requirements in annex A except those features that are components of an unimplemented optional feature. It shall be stated which optional support (o) features are implemented.

For implementations conforming to profile AMH21 as specified in this part of ISO/IEC ISP 12062, it shall be stated whether or not they support any of the optional functional groups as specified in ISO/IEC ISP 12062-1 which are applicable to the scope of this profile. For each functional group for which support is claimed, an implementation shall implement all the mandatory support (m) features identified for that functional group in annex A except those features that are components of an unimplemented optional feature. It shall be stated which optional support (o) features are implemented.

Implementations shall support the procedures associated with supported protocol elements as specified in the base standards and as further specified in ISO/IEC ISP 12062-1. The MHS Elements of Service corresponding to such procedures are indicated in annex A of ISO/IEC ISP 12062-1.