INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC ISP 10611-5

Third edition
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Information technology — International Standardized Profiles AMH1n — Message Handling Systems — Common Messaging —

Part 5: AMH13 — MS Access (P7)

Technologies de l'information — Profils normalisés internationaux AMH1n — Systèmes de messagerie — Messagerie commune — Partie 4: AMH13 — Accès à MS (P7)

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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.

In addition to developing International Standards, ISO/IEC JTC 1 also develops 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 adopted by the joint technical committee 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.

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

ISO/IEC ISP 10611-5 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

This third edition cancels and replaces the second edition (ISO/IEC ISP 10611-5:1997), which has been technically revised.

ISO/IEC ISP 10611 consists of the following parts, under the general title *Information technology — International Standardized Profiles AMH1n — Message Handling Systems — Common Messaging*:

— *Part 1: MHS Service Support*

— *Part 2: Specification of ROSE, RTSE, ACSE, Presentation and Session Protocols for use by MHS*

— *Part 3: AMH11 — Message Transfer (P1)*

— *Part 4: AMH12 and AMH14 — MTS Access (P3) and MTS 94 Access (P3)*

— *Part 5: AMH13 — MS Access (P7)*

— *Part 6: AMH15 — MS 94 Access (P7)*

Introduction

This part of ISO/IEC ISP 10611 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 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 10611 was originally 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). The first and second editions of this part of ISO/IEC ISP 10611 were harmonized between these three Workshops and ratified by the plenary assemblies of all three Workshops.

Responsibility for maintenance and further development of MHS ISPs has been transferred to ISO/IEC JTC1/SC33/WG1, who have produced this edition to encompass additions and corrections to ISO/IEC 10021. Because new core requirements have been added for support of Universal Characters in addresses which will take time to be implemented within MHS systems, it is expected that the second edition of this part of ISO/IEC ISP 10611 will remain available for an overlap period.

Information technology — International Standardized Profiles AMH1n — Message Handling Systems — Common Messaging —

Part 5:
AMH13 — MS Access (P7)

1 Scope

1.1 General

This part of ISO/IEC ISP 10611 covers access to a message store (MS) using the P7 MS Access Protocol (see also figure 1). These specifications form part of the Common Messaging application functions, as defined in the parts of ISO/IEC ISP 10611, which form a common basis for content type-dependent International Standardized Profiles for MHS that will be developed.

1.2 Position within the taxonomy

This part of ISO/IEC ISP 10611 is the fifth part of a multipart ISP identified in ISO/IEC TR 10000-2 as “AMH1, Message Handling Systems - Common Messaging”.

This part of ISO/IEC ISP 10611 specifies the following profile:

AMH13 - MS Access (P7)

The AMH13 profile may be combined with any T-Profiles (see ISO/IEC TR 10000) specifying the OSI connection-mode Transport service.

1.3 Scenario

The model used is one of access to a message store (MS) by an MS-user - specifically, the intercommunication between an MS and an MS-user (i.e. a user agent) using the P7 protocol, as shown in figure 1.

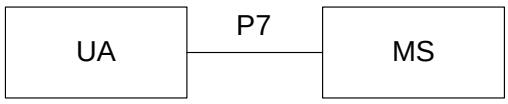

Figure 1 - AMH13 scenario

The AMH13 profile covers all aspects of the MS Abstract Service, as defined in the 1990 publication of ISO/IEC 10021-5, when realized using the P7 protocol. (The AMH15 profile covers the MS 94 Abstract Service).

The OSI upper layer services and protocols to support the Message Handling Systems functions covered by the AMH13 profile are specified in the set of standards identified in table 1.

Table 1 - AMH13 profile model

Application Layer	MHS	ISO/IEC 10021-6
	ROSE	see ISO/IEC ISP 10611-2
	RTSE	see ISO/IEC ISP 10611-2
	ACSE	see ISO/IEC ISP 10611-2
Presentation Layer		see ISO/IEC ISP 10611-2
Session Layer		see ISO/IEC ISP 10611-2

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 10611 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 E.

ISO/IEC TR 10000-1:1998, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1: General principles and documentation framework*

ISO/IEC TR 10000-2:1998, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2: Principles and Taxonomy for OSI Profiles*

ITU-T Recommendation F.400/X.400 (1999), *Message Handling Systems - System and service overview*

ISO/IEC 10021-1:2003, *Information technology - Message Handling Systems (MHS) - Part 1: System and Service Overview [see also ITU-T Recommendation F.400/X.400]*

ITU-T Recommendation X.402 (1999) | ISO/IEC 10021-2:—[1)], *Information technology - Message Handling Systems (MHS): Overall architecture*

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.419 (1999), *Message Handling Systems - Protocol Object Identifiers*

ISO/IEC ISP 10611-1:1999, *Information technology - International Standardized Profiles AMH1n - Message Handling Systems - Common Messaging - Part 1: MHS Service Support*

1) To be published. (Revision of ISO/IEC 10021-2:1996)

ISO/IEC ISP 10611-2:1997, *Information technology - International Standardized Profiles AMH1n - Message Handling Systems - Common Messaging - Part 2: Specification of ROSE, RTSE, ACSE, Presentation and Session Protocols for use by MHS*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

Terms used in this part of ISO/IEC ISP 10611 are defined in the referenced base standards; in addition, the following terms are defined.

3.1 General

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.

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 10611).

3.2 Support classification

To specify the support level of operations, arguments, results, attributes and other protocol features for this part of ISO/IEC ISP 10611, the following terminology is defined.

The following classifications are used in this part of ISO/IEC ISP 10611 to specify static conformance requirements - i.e. capability.

In the case of arguments and results (protocol elements), the classification is relative to that of the containing 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.

mandatory support (**m**) : the element or feature shall be fully 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. Mandatory support of an MS attribute for the MS requires that it is supported in the context of all applicable supported operation arguments and results and also for use within a selector to the level of support claimed for the filter item. Mandatory support of an MS attribute by the MS-user requires that it is supported in the context of at least one supported operation argument and result or supported in a selector to the level of support claimed for the filter item (see table A.3.5). The way in which attribute values are stored by an MS implementation, or used by an MS-user implementation, is otherwise a local matter.

optional support (**o**) : an implementation is not required to support the element or feature. If support is claimed, the element shall be treated as if it were specified as mandatory support. If support is not claimed, and the element is an argument, then an implementation shall generate an appropriate error indication if the element is received. If support is not claimed, and the element is a result, then an implementation may ignore the element if it is received. If support of an operation as a responder is not claimed, then an appropriate error indication shall be generated (as a minimum, a ROSE reject shall be generated).

conditional support (**c**) : the element shall be supported under the conditions specified in this part of ISO/IEC ISP 10611. 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).

out of scope (**i**) : the element is outside the scope of this part of ISO/IEC ISP 10611 - i.e. it will not be the subject of an ISP conformance test.

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

4 Abbreviations

AMH	Application Message Handling
ASN.1	Abstract Syntax Notation One
DIR	Use of Directory
EoS	Element of Service
FG	Functional group
ISP	International Standardized Profile
MHS	Message Handling Systems
MS	Message store
MTA	Message transfer agent
OSI	Open Systems Interconnection
PD	Physical Delivery
SEC	Security
UA	User agent

Support level for protocol elements and features (see 3.2):

m	mandatory support
o	optional support
c	conditional support
i	out of scope
–	not applicable
r	required
x	excluded

5 Conformance

This part of ISO/IEC ISP 10611 states requirements upon implementations to achieve interworking. A claim of conformance to this part of ISO/IEC ISP 10611 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 10611 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 AMH13 as specified in this part of ISO/IEC ISP 10611, a PICS shall be made available stating support or non-support of each option identified in this part of ISO/IEC ISP 10611.

The scope of conformance to profile AMH13 covers both MSs and MS-users (i.e. UAs). A claim of conformance to profile AMH13 shall state whether the implementation claims conformance as an MS or as an MS-user.

5.2 MHS conformance

This part of ISO/IEC ISP 10611 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 AMH13 as specified in this part of ISO/IEC ISP 10611 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 AMH13 as specified in this part of ISO/IEC ISP 10611 it shall be stated whether or not they support any of the optional functional groups as specified in ISO/IEC ISP 10611-1 which are applicable to the scope of this profile and to the role (i.e. MS or MS-user) for which conformance is claimed. 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 10611-1. The MHS Elements of Service corresponding to such procedures are indicated in annex A of ISO/IEC ISP 10611-1.

For implementations conforming to profile AMH13 as specified in this part of ISO/IEC ISP 10611, the P7 application context(s) for which conformance is claimed shall be stated.

5.3 Underlying layers conformance

Implementations conforming to profile AMH13 as specified in this part of ISO/IEC ISP 10611 shall also conform to ISO/IEC ISP 10611-2 in accordance with the P7 application context(s) for which conformance is claimed.

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Annex A[2]

(normative)

ISPICS Proforma

for ISO/IEC ISP 10611-5 (AMH13)

In the event of a discrepancy becoming apparent in the body of this part of ISO/IEC ISP 10611 and the tables in this annex, this annex is to take precedence.

NOTE - It is intended that a future version of this annex will be in the form of an ISPICS Requirements List (IPRL) of a published base standards PICS proforma which uses the same structure, classification scheme and notation as currently employed in this annex.

Clause A.1 specifies the basic requirements for conformance to profile AMH13. Clause A.2 specifies additional requirements to those specified in A.1 for each of the optional functional groups if conformance to such a functional group is claimed. Clause A.3 allows additional information to be provided for certain aspects of an implementation where no specific requirements are included in ISO/IEC ISP 10611. All three clauses shall be completed as appropriate.

In each table, the "Base" column reflects the level of support required for conformance to the base standard and the "Profile" column specifies the level of support required by this ISP (using the classification and notation defined in 3.2).

The “Ref” column is provided for cross-referencing purposes. The notation employed for references also indicates composite elements which contain sub-elements (a sub-element reference is prefixed by the reference of the composite element).

The “Support” column is provided for completion by the supplier of the implementation as follows:

Y	the element or feature is fully supported (i.e. satisfying the requirements of the m profile support classification)
N	the element or feature is not supported, further qualified to indicate the action taken on receipt of such an element as follows: ND - the element is discarded/ignored NR - the PDU is rejected (with an appropriate error indication where applicable)
– or blank	the element or feature is not applicable (i.e. a major feature or composite protocol element which includes this element or feature is not supported)

[2]**Copyright release for ISPICS proformas**

Users of this International Standardized Profile may freely reproduce the ISPICS proforma in this annex so that it can be used for its intended purpose and may further publish the completed ISPICS.

A.0 Identification of the implementation

A.0.1 Identification of PICS

Ref	Question	Response
1	Date of statement (YYYY-MM-DD)	
2	PICS serial number	
3	System conformance statement cross reference	

A.0.2 Identification of IUT

Ref	Question	Response
1	Implementation name	
2	Implementation version	
3	Hardware name	
4	Hardware version	
5	Operating system name	
6	Operating system version	
7	Special configuration	
8	Other information	

A.0.3 Identification of supplier

Ref	Question	Response
1	Organization name	
2	Contact name(s)	
3	Address	
4	Telephone number	
5	Telex number	
6	Fax number	
7	E-mail address	
8	Other information	

A.0.4 Identification of protocol

Ref	Question	Response
1	Title, reference number and date of publication of the protocol standard	
2	Protocol version(s)	1988 version
3	Addenda/amendments/corrigenda implemented	
4	Defect reports implemented	not applicable

A.0.5 Type of implementation

Ref	Implementation Type	Response
1	MS-user (UA)	
2	MS (co-located with MTA)	
3	MS (P3 interface to MTA)	

NOTE - A separate PICS shall be completed for each implementation type for which conformance is claimed.

A.0.6 Global statement of conformance

Ref	Question	Response
1	Are all mandatory base standards requirements implemented?	

A.0.7 Statement of profile conformance

Ref	Question	Response	Comments
1	Are all mandatory requirements of profile AMH13 implemented?		
2	Are all mandatory requirements of any of the following optional functional groups implemented?		
2.1	Distribution List (DL)		only class DL+ER is applicable
2.2	Physical Delivery (PD)		not applicable in the case of an MS
2.3	Latest Delivery (LD)		not applicable in the case of an MS
2.4	Return of Content (RoC)		
2.5	Security (SEC)		class(es):