INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC ISP 12063-3

First edition
1995-07-15

Information technology — International Standardized Profiles AMH3n — Message Handling Systems — EDI Messaging —

Part 3:
AMH32 — EDIMG Requirements for Message Transfer (P1)

Technologies de l'information — Profils normalisés internationaux AMH3n — Systèmes de messagerie — Messagerie EDI —

Partie 3: AMH32 — Exigences EDIMG pour transfert de message (P1)

Reference number
ISO/IEC ISP 12063-3:1995(E)

Contents

ISO/IEC Copyright Office • Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

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 JTC1. In addition to developing International Standards, ISO/IEC JTC1 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 set of functions.

International Standardized Profile ISO/IEC ISP 12063-3 was prepared with the collaboration of:

- OSI Asia-Oceania Workshop (AOW)
- European Workshop for Open Systems (EWOS), jointly with the European Telecommunications Standards Institute (ETSI)
- OSE Implementors' Workshop (OIW)

ISO/IEC ISP 12063 consists of the following parts, under the general title *Information technology - International Standardized Profiles AMH3n - Message Handling Systems - EDI Messaging*:

- Part 1 : EDIMG MHS Service Support

- Part 2 : AMH31 - EDIMG Content

- Part 3 : AMH32 - EDIMG Requirements for Message Transfer (P1)

- Part 4 : AMH33 - EDIMG Requirements for MTS Access (P3)

- Part 5 : AMH34 - EDIMG Requirements for Enhanced MS Access (P7)

Annexes A, B and C form an integral part of this part of ISO/IEC ISP 12063.

Introduction

This part of ISO/IEC ISP 12063 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 roles 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 12063 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 12063 is harmonized between these three Workshops and it has been ratified by the plenary assemblies of all three Workshops.

Information technology – International Standardized Profiles AMH3n – Message Handling Systems – EDI Messaging –

Part 3 :
AMH32 – EDIMG Requirements for Message Transfer (P1)

1 Scope

1.1 General

This part of ISO/IEC ISP 12063 covers message transfer between Message Transfer Agents (MTAs) in an EDI Messaging (EDIMG) environment using the P1 Message Transfer Protocol (see also figure 1). These specifications form part of the EDI Messaging application functions, as defined in the parts of ISO/IEC ISP 12063, 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 12063 is the third part of a multipart ISP identified in ISO/IEC TR 10000-2 as "AMH3, Message Handling Systems - EDI Messaging" (see also ISO/IEC TR 10000-1, subclause 8.2 for the definition of multipart ISPs).

This part of ISO/IEC ISP 12063 specifies the following profile:

AMH32 - EDIMG Requirements for Message Transfer (P1)

The AMH32 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 two or more MTAs intercommunicating within a Message Transfer System (MTS) using the P1 protocol, as shown in figure 1.

Figure 1 - AMH32 scenario

NOTE - In an ITU-T context, a domain may be treated as an MTA for the purposes of conformance to the AMH32 profile.

The AMH32 profile covers all aspects of the MTA Abstract Service, as defined in clause 12 of ISO/IEC 10021-4, when realised using the P1 protocol in an EDIMG environment.

The OSI upper layer services and protocols to support the Message Handling Systems functions covered by the AMH32 profile are specified in subclause 1.3 of ISO/IEC ISP 10611-3.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 12063. 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 12063 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 C.

NOTE - References in the body of this part of ISO/IEC 12063 to specific clauses of ISO/IEC documents refer also to the corresponding clauses of the equivalent ITU-T Recommendations (as noted below) unless otherwise stated.

ISO/IEC TR 10000-1: 1992, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1: Framework.*

ISO/IEC TR 10000-2: 1994, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2: Principles and taxonomy for OSI profiles.*

ISO/IEC 10021-1: 1990, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 1: System and Service Overview. [see also CCITT Recommendation F.400(1992)]*

ISO/IEC 10021-2: 1990, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 2: Overall Architecture. [see also CCITT Recommendation X.402(1992)]*

ISO/IEC 10021-4: 1990, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 4: Message Transfer System: Abstract Service Definition and Procedures. [see also CCITT Recommendation X.411(1992)]*

ISO/IEC 10021-6: 1990, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 6: Protocol Specifications. [see also CCITT Recommendation X.419(1992)]*

ISO/IEC ISP 10611-3: 1994, *Information technology - International Standardized Profiles AMH1n - Message Handling Systems - Common Messaging - Part 3: AMH11 - Message Transfer (P1).*

ISO/IEC ISP 12063-1: 1995, *Information technology - International Standardized Profiles AMH3n - Message Handling Systems - EDI Messaging - Part 1: EDIMG MHS Service Support.*

CCITT Recommendation F.400(1992), *Message handling services: Message handling system and service overview.*

CCITT Recommendation X.402(1992), *Message handling systems: Overall architecture.*

CCITT Recommendation X.411(1992), *Message handling systems - Message transfer system: Abstract service definition and procedures.*

CCITT Recommendation X.419(1992), *Message handling systems - Protocol specifications.*

3 Definitions

For the purposes of this part of ISO/IEC ISP 12063, the following definitions apply.

Terms used in this part of ISO/IEC ISP 12063 are defined in the referenced base standards; in addition, the following terms are defined.

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 programmable interface, are outside the scope of this version of ISO/IEC ISP 12063).

3.2 Support classification

NOTE - No classifications are used in this part of ISO/IEC ISP 12063, as the requirements for support of arguments, results and other protocol features by an MTA are as specified in ISO/IEC 10611-3.

4 Abbreviations

84IW	84 Interworking
CV	Conversion
DIR	Use of Directory
DL	Distribution List
EDI	Electronic data interchange
EDIMG	EDI Messaging
FG	Functional group
ISP	International Standardized Profile
ISPICS	International Standard Protocol Implementation Conformance Statement
LD	Latest Delivery
MHS	Message Handling Systems
MTA	Message transfer agent
MTS	Message Transfer System
OSI	Open Systems Interconnection
PD	Physical Delivery
Pedi	Protocol for electronic data interchange
RED	Redirection
SEC	Security
UA	User agent

5 Conformance

This part of ISO/IEC ISP 12063 states requirements upon implementations to achieve interworking. A claim of conformance to this part of ISO/IEC ISP 12063 is a claim that all requirements in the relevant base standards are satisfied, and that all requirements in the following clauses and in annexes A and B of this part of ISO/IEC ISP 12063 are satisfied.

5.1 Conformance statement

For each implementation claiming conformance to profile AMH32 as specified in this part of ISO/IEC ISP 12063, a PICS shall be made available stating support or non-support of each option identified in this part of ISO/IEC ISP 12063.

The scope of conformance to profile AMH32 is restricted to MTAs that support message transfer. A claim of conformance to profile AMH32 shall confirm that implementation supports profile AMH111 and shall state whether the implementation also supports profile AMH112 (jointly referenced as AMH11 in this part of ISO/IEC ISP 12063 where a distinction is unnecessary) as specified in ISO/IEC ISP 10611-3.

5.2 MHS conformance

This part of ISO/IEC ISP 12063 specifies implementation options or selections such that conformant implementations will satisfy the conformance requirements of ISO/IEC 10021 and optionally those of the ITU-T X.400 series of Recommendations (see subclause 5.2 of ISO/IEC ISP 10611-3).

Implementations conforming to profile AMH32 as specified in this part of ISO/IEC ISP 12063 shall conform to the basic requirements of profile AMH11, as specified in ISO/IEC ISP 10611-3.

Implementations conforming to profile AMH32 as specified in this part of ISO/IEC ISP 12063 shall additionally implement all the mandatory support (m) features identified as basic requirements in annexes A and B 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 AMH32 as specified in this part of ISO/IEC ISP 12063, it shall be stated whether or not they support any of the optional functional groups as specified in ISO/IEC ISP 12063-1 which are applicable to the scope of this profile. For each functional group for which support is claimed, an implementation shall additionally implement all the mandatory support (m) features identified for that functional group in annex B 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 12063-1. The MHS Elements of Service corresponding to such procedures are indicated in annex A of ISO/IEC ISP 12063-1.

5.3 Underlying layers conformance

Implementations conforming to profile AMH32 as specified in this part of ISO/IEC ISP 12063 shall also meet the requirements for support of underlying layers as specified in subclause 5.3 of ISO/IEC ISP 10611-3.

Annex A[1]

(normative)

ISPICS Proforma

for ISO/IEC ISP 12063-3 (AMH32)

This annex modifies the P1 ISPICS proforma as contained in annex A of ISO/IEC ISP 10611-3 for the purposes of conformance to the AMH32 profile.

NOTE - The tables and other material in this annex replace the corresponding clauses of annex A of ISO/IEC ISP 10611-3 or should otherwise be inserted as appropriate.

In the event of a discrepancy becoming apparent in the body of this part of ISO/IEC ISP 12063 and the tables in this annex, this annex is to take precedence.

Clause A.1 specifies the basic requirements for conformance to profile AMH32. Clause A.2 specifies additional requirements to those specified in clause 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 12063 or 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 part of ISO/IEC ISP 12063 (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 convention is 'clause number' / 'item number' .
E.g. the PICS serial number in A.0.1 on the next page is referenced as A.0.1/2.

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)
Y-	the element or feature is minimally 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 or is minimally supported)

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[1] **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 (DD/MM/YY)	
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)	not applicable
3	Addenda/amendments/corrigenda implemented	
4	Defect reports implemented	not applicable

A.0.5 Global statement of conformance

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

A.0.6 Statement of profile conformance

Ref	Question	Response	Comments
1	Are all mandatory requirements of profile AMH111 implemented?		
2	Are all mandatory requirements of profile AMH112 implemented?		
3	Are all mandatory requirements of profile AMH32 implemented ?		
4	Are all mandatory requirements of any of the following optional functional groups implemented?		
4.1	EDI Conversion (CV)		
4.2	EDI Distribution List (DL)		
4.3	EDI Physical Delivery (PD)		
4.4	EDI Redirection (RED)		
4.5	EDI Latest Delivery (LD)		
4.6	EDI Security		class(es):
4.7	EDI Use of Directory (DIR)		
4.8	EDI 84 Interworking (84IW)		

Annex B

(normative)

ISPICS Requirements List

for ISO/IEC ISP 12063-3 (AMH32)

In the event of a discrepancy becoming apparent in the body of this part of ISO/IEC ISP 12063 and the tables in this annex, this annex is to take precedence.

This annex specifies the support constraints and characteristics of ISO/IEC ISP 12063-3 on what shall or may appear in the implementation columns of an ISPICS. Such requirements are additional to those specified in annex A of ISO/IEC ISP 10611-3 as modified by annex A of this part of ISO/IEC ISP 12063 (references are to the corresponding table entries in those annexes).

Clause B.1 specifies the basic requirements for conformance to profile AMH32. Clause B.2 specifies additional requirements to those specified in clause B.1 for each of the optional functional groups if conformance to such a functional group is claimed.

In each table, the "Profile" column specifies the level of support required by this part of ISO/IEC ISP 12063 (using the classification and notation defined in 3.2). The supplier of an implementation for which conformance to profile AMH32 is claimed should complete the Support column of the tables in annex A of ISO/IEC ISP 10611-3 as modified by annex A of this part of ISO/IEC ISP 12063 in accordance with the requirements contained therein together with any additional requirements in this annex.

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).