INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC ISP 10611-5

Third edition
2003-06-15

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)

Reference number
ISO/IEC ISP 10611-5:2003(E)

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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)*

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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.

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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.

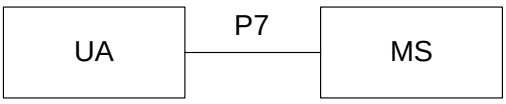

Figure 1 - AMH13 scenario

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.

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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)

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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.

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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

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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)

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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	

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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):

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Ref	Question	Response	Comments
2.6	Use of Directory (DIR)		class(es):

A.1 Basic requirements

A.1.1 Supported application contexts

Ref	Application Context	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ms-access	m	m	m	m		
2	ms-reliable-access	o	o	o	o		

A.1.2 Supported operations

A.1.2.1 Bind and Unbind

Ref	Operation	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	MSBind	m	m	m	m		see A.1.3.1
2	MSUnbind	m	m	m	m		

A.1.2.2 Message Submission Service Element (MSSE)

Ref	Operation	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	MessageSubmission	m	m	m	m		see A.1.3.2
2	ProbeSubmission	o	o	m	m		see A.1.3.3
3	CancelDeferredDelivery	o	o	m	m		see A.1.3.4
4	SubmissionControl	o	i	o	c[1]		see A.1.3.5
1 if the MS has a P3 interface to the MTA then o else if supported by the MTA then m else o							

A.1.2.3 Message Retrieval Service Element (MRSE)

Ref	Operation	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	Summarize	o	o	m	m		see A.1.3.6

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Ref	Operation	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2	List	o	o	m	m		see A.1.3.7
3	Fetch	m	m	m	m		see A.1.3.8
4	Delete	m	m	m	m		see A.1.3.9
5	Register-MS	o	o	m	m		see A.1.3.10
6	Alert	o	o	o	o		see A.1.3.11

A.1.2.4 Message Administration Service Element (MASE)

Ref	Operation	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	Register	o	o	o	m		see A.1.3.12
2	ChangeCredentials (MTA to MS-user)	o	i	o	i		see A.1.3.13
3	ChangeCredentials (MS-user to MTA via MS)	o	o	o	m		see A.1.3.13

NOTES

1 The first edition of the base standard erroneously defines the ChangeCredentials (MTA to UA) operation in the context of P7. It is removed in the second and subsequent editions of the base standard.

2 For an MS-user, some or all of the services and functionality supported by these operations may be implemented by other means as a local matter.

A.1.3 Operation arguments/results

A.1.3.1 MSBind

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	initiator-name	m	m	m	m		
1.2	initiator-credentials	m	m	m	m		
1.2.1	simple	m	m	m	m		
1.2.1.1	IA5String	o	o	m	m		
1.2.1.2	OCTET STRING	o	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1.2.2	strong	o	o	o	o		
1.2.2.1	bind-token	m	m	m	m		
1.2.2.1.1	signature-algorithm-identifier	m	m	m	m		
1.2.2.1.2	name	m	m	m	m		
1.2.2.1.2.1	recipient-name	m	m	m	m		
1.2.2.1.2.2	mta	–	–	–	–		
1.2.2.1.3	time	m	m	m	m		
1.2.2.1.4	signed-data	o	o	o	o		
1.2.2.1.5	encryption-algorithm-identifier	o	o	o	o		
1.2.2.1.6	encrypted-data	o	o	o	o		
1.2.2.2	certificate	o	o	o	o		see A.1.8/13
1.2.2.3	certificate-selector	o	o	o	o		see A.1.8/15
1.3	security-context	o	o	o	o		see A.1.9/3
1.4	fetch-restrictions	o	o	o	o		
1.4.1	allowed-content-types	o	o	o	m		
1.4.2	allowed-EITs	o	o	o	o		
1.4.3	maximum-content-length	o	o	o	m		
1.5	ms-configuration-request	o	o	o	m		
2	RESULT						
2.1	responder-credentials	m	m	m	m		
2.1.1	simple	m	m	m	m		
2.1.1.1	IA5String	m	m	o	o		
2.1.1.2	OCTET STRING	m	m	o	m		
2.1.2	strong	o	o	o	o		
2.1.2.1	bind-token	m	m	m	m		
2.1.2.1.1	signature-algorithm-identifier	m	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2.1.2.1.2	name	m	m	m	m		
2.1.2.1.2.1	recipient-name	m	m	m	m		
2.1.2.1.2.2	mta	–	–	–	–		
2.1.2.1.3	time	m	m	m	m		
2.1.2.1.4	signed-data	o	o	o	o		
2.1.2.1.5	encryption-algorithm-identifier	o	o	o	o		
2.1.2.1.6	encrypted-data	o	o	o	o		
2.1.2.2	certificate	o	o	o	o		see A.1.8/13
2.1.2.3	certificate-selector	o	o	o	o		see A.1.8/15
2.2	available-auto-actions	o	o	m	m		
2.2.1	auto-alert	o	o	o	o		
2.2.2	auto-forward	o	o	o	o		
2.3	available-attribute-types	o	o	m	m		
2.4	alert-indication	o	o	o	o		
2.5	content-types-supported	o	o	m	m		

A.1.3.2 MessageSubmission

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	envelope	m	m	m	m		see A.1.4
1.2	content	m	m	m	m		
2	RESULT						
2.1	message-submission-identifier	m	m	m	m		see A.1.8/8
2.2	message-submission-time	m	m	m	m		
2.3	content-identifier	o	c[1]	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2.4	extensions	m	m	m	m		see A.1.9/1
2.4.1	originating-MTA-certificate	o	i	o	i		see A.1.8/13
2.4.2	proof-of-submission	o	i	o	i		see A.1.9/6
2.4.3	originating-MTA-certificate-selector	o	i	o	i		see A.1.8/15
1 if supported in message submission envelope then m else –							

A.1.3.3 ProbeSubmission

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	envelope	m	m	m	m		see A.1.5
2	RESULT						
2.1	probe-submission-identifier	m	m	m	m		see A.1.8/8
2.2	probe-submission-time	m	m	m	m		
2.3	content-identifier	o	c[1]	m	m		
1 if supported in probe submission envelope then m else –							

A.1.3.4 CancelDeferredDelivery

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	message-submission-identifier	m	m	m	m		see A.1.8/8
2	RESULT						
2.1	NULL	m	m	m	m		

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A.1.3.5 SubmissionControl

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	controls	m	m	m	m		
1.1.1	restrict	m	m	o	m		
1.1.2	permissible-operations	m	m	o	c1		
1.1.3	permissible-maximum-content-length	m	m	o	c1		
1.1.4	permissible-lowest-priority	m	m	o	c[1]		
1.1.5	permissible-security-context	o	o	o	o		see A.1.9/3
2	RESULT						
2.1	waiting	m	m	m	m		
2.1.1	waiting-operations	o	o	m	m		
2.1.2	waiting-messages	o	o	m	m		
2.1.3	waiting-content-types	o	o	m	m		
2.1.4	waiting-encoded-information-types	o	o	m	m		see A.1.8/10
1 if the MS has a P3 interface to the MTA then m else if supported by the MTA then m else o							

A.1.3.6 Summarize

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	information-base-type	o	o	m	m		see A.1.8/5
1.2	selector	m	m	m	m		see A.1.8/7
1.3	summary-requests	o	o	m	m		
2	RESULT						
2.1	next	o	c[1]	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2.2	count	m	m	m	m		
2.3	span	m	m	m	m		
2.4	summaries	o	c[2]	m	m		
2.4.1	absent	m	m	m	m		
2.4.2	present	m	m	m	m		
2.4.2.1	type	m	m	m	m		
2.4.2.2	value	m	m	m	m		
2.4.2.3	count	m	m	m	m		

1 if limit is supported in the Selector then m else –

2 if the request is supported then m else –

A.1.3.7 List

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	information-base-type	o	o	m	m		see A.1.8/5
1.2	selector	m	m	m	m		see A.1.8/7
1.3	requested-attributes	m	m	m	m		see A.1.8/1
2	RESULT						
2.1	next	m	m	m	m		
2.2	requested	m	m	m	m		see A.1.8/2

A.1.3.8 Fetch

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	information-base-type	o	o	m	m		see A.1.8/5
1.2	item	m	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1.2.1	search	o	o	o	m		see A.1.8/7
1.2.2	precise	o	o	o	m		
1.3	requested-attributes	m	m	m	m		see A.1.8/1
2	RESULT						
2.1	entry-information	m	m	m	m		see A.1.8/2
2.2	list	o	o	o	m		
2.3	next	o	o	o	m		

A.1.3.9 Delete

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	information-base-type	o	o	m	m		see A.1.8/5
1.2	items	m	m	m	m		
1.2.1	selector	o	o	m	m		see A.1.8/7
1.2.2	sequence-numbers	o	m	m	m		
2	RESULT						
2.1	NULL	m	m	m	m		

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A.1.3.10 Register-MS

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	auto-action-registrations	o	o	o	o		see A.1.12
1.2	auto-action-deregistrations	o	c[1]	o	c[1]		
1.3	list-attribute-defaults	o	o	o	o		
1.4	fetch-attribute-defaults	o	o	o	o		
1.5	change-credentials	m	m	m	m		
1.5.1	old-credentials	m	m	m	m		
1.5.1.1	simple	m	m	m	m		
1.5.1.1.1	ia5-String	o	o	m	m		
1.5.1.1.2	octet-string	o	m	m	m		
1.5.2	new-credentials	m	m	m	m		
1.5.2.1	simple	m	m	m	m		
1.5.2.1.1	ia5-String	o	o	m	m		
1.5.2.1.2	octet-string	o	m	m	m		
1.6	user-security-labels	o	o	o	o		see A.1.9/3
2	RESULT						
2.1	NULL	m	m	m	m		

1 If auto-action-deregistrations is supported, then all auto actions for which support is claimed in A.1.12 shall be supported.

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A.1.3.11 Alert

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	alert-registration-identifier	m	m	m	m		
1.2	new-entry	o	o	m	m		see A.1.8/2
2	RESULT						
2.1	NULL	m	m	m	m		

A.1.3.12 Register

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	user-name	o	o	o	c[1]		see A.1.10.2
1.2	user-address	o	o	o	c[1]		
1.3	deliverable-encoded-information-types	o	o	o	c[1]		see A.1.8/10
1.4	deliverable-maximum-content-length	o	o	o	c[1]		
1.5	default-delivery-controls	o	o	o	c[1]		
1.5.1	restrict	o	o	o	c[1]		
1.5.2	permissible-operations	o	o	o	c[1]		
1.5.3	permissible-maximum-content-length	o	o	o	c[1]		
1.5.4	permissible-lowest-priority	o	o	o	c[1]		
1.5.5	permissible-content-types	o	o	o	c[1]		
1.5.6	permissible-encoded-information-types	o	o	o	c[1]		see A.1.8/10
1.6	deliverable-content-types	o	o	o	c[1]		
1.7	labels-and-redirections	o	o	o	c[1]		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1.7.1	user-security-label	o	o	o	c[1]		see A.1.9/3
1.7.2	recipient-assigned-alternate-recipient	o	o	o	c[1]		
2	RESULT						
2.1	NULL	m	m	m	m		
1 if the MS has a P3 interface to the MTA then m else if supported by the MTA then m else o							

A.1.3.13 ChangeCredentials

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	old-credentials	m	m	m	m		
1.1.1	simple	m	m	m	m		
1.1.1.1	ia5-String	o	o	m	m		
1.1.1.2	octet-string	o	m	m	m		
1.2	new-credentials	m	m	m	m		
1.2.1	simple	m	m	m	m		
1.2.1.1	ia5-String	o	o	m	m		
1.2.1.2	octet-string	o	m	m	m		
2	RESULT						
2.1	NULL	m	m	m	m		

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A.1.4 MessageSubmissionEnvelope

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	originator-name	m	m	m	m		see A.1.10.2
2	original-encoded-information-types	m	m	m	m		see A.1.8/10
3	content-type	m	m	m	m		see A.1.8/11
4	content-identifier	o	o	m	m		
5	priority	m	m	m	m		
6	per-message-indicators	m	m	m	m		see A.1.8/12
7	deferred-delivery-time	o	o	m	m		
8	extensions	m	m	m	m		see A.1.9/1
8.1	recipient-reassignment-prohibited	o	m[2]	o	m		
8.2	dl-expansion-prohibited	o	m[2]	o	m		
8.3	conversion-with-loss-prohibited	o	o	o	m		
8.4	latest-delivery-time	o	o	o	c[1]		
8.5	originator-return-address	o	o	o	c[1]		see A.1.10.1
8.6	originator-certificate	o	o	o	c[1]		see A.1.8/13
8.7	content-confidentiality-algorithm-identifier	o	o	o	c[1]		
8.8	message-origin-authentication-check	o	o	o	c[1]		see A.1.9/2
8.9	message-security-label	o	o	o	c[1]		see A.1.9/3
8.10	proof-of-submission-request	o	i	o	i		
8.11	content-correlator	o	o	m	m		
8.12	certificate-selectors	o	o	o	c[1]		see A.1.9/7
8.13	multiple-originator-certificates	o	o	o	c[1]		see A.1.9/9
8.14	dl-exempted-recipients	o	o	o	c[1]		see A.1.10.1
8.15	forwarding-request	o	o	o	o		
8.16	PrivateExtensions	o	o	o	o		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
9	per-recipient-fields	m	m	m	m		
9.1	recipient-name	m	m	m	m		see A.1.10.1
9.2	originator-report-request	m	m	m	m		
9.3	explicit-conversion	o	o	o	m		
9.4	extensions	m	m	m	m		see A.1.9/1
9.4.1	originator-requested-alternate-recipient	o	o	o	c[1]		see A.1.10.1
9.4.2	requested-delivery-method	o	o	o	c[1]		
9.4.3	physical-forwarding-prohibited	o	o	o	c[1]		
9.4.4	physical-forwarding-address-request	o	o	o	c[1]		
9.4.5	physical-delivery-modes	o	o	o	c[1]		
9.4.6	registered-mail-type	o	o	o	c[1]		
9.4.7	recipient-number-for-advice	o	o	o	c[1]		
9.4.8	physical-rendition-attributes	o	o	o	c[1]		
9.4.9	physical-delivery-report-request	o	o	o	c[1]		
9.4.10	message-token	o	o	o	c[1]		see A.1.9/4
9.4.11	content-integrity-check	o	o	o	c[1]		
9.4.12	proof-of-delivery-request	o	o	o	c[1]		
9.4.13	certificate-selectors-override	o	o	o	c[1]		see A.1.9/8
9.4.14	recipient-certificate	o	o	o	c[1]		see A.1.8/13
9.4.15	IPMPerRecipientEnvelope Extensions	o	o	o	c[1]		
9.4.16	PrivateExtensions	o	o	o	o		

1 if the MS has a P3 interface to the MTA then m else if supported by the MTA then m else o

2 only the capability to generate the "prohibited" value is required

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A.1.5 ProbeSubmissionEnvelope

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	originator-name	m	m	m	m		see A.1.10.2
2	original-encoded-information-types	m	m	m	m		see A.1.8/10
3	content-type	m	m	m	m		see A.1.8/11
4	content-identifier	o	o	m	m		
5	content-length	o	m	m	m		
6	per-message-indicators	m	m	m	m		see A.1.8/12
7	extensions	m	m	m	m		see A.1.9/1
7.1	recipient-reassignment-prohibited	o	m[2]	o	m		
7.2	dl-expansion-prohibited	o	m[2]	o	m		
7.3	conversion-with-loss-prohibited	o	o	o	m		
7.4	originator-certificate	o	o	o	c[1]		see A.1.8/13
7.5	message-security-label	o	o	o	c[1]		see A.1.9/3
7.6	content-correlator	o	o	m	m		
7.7	probe-origin-authentication-check	o	o	o	c[1]		see A.1.9/5
7.8	certificate-selectors	o	o	o	c[1]		see A.1.9/7
7.9	PrivateExtensions	o	o	o	o		
8	per-recipient-fields	m	m	m	m		
8.1	recipient-name	m	m	m	m		see A.1.10.1
8.2	originator-report-request	m	m	m	m		
8.3	explicit-conversion	o	o	o	m		
8.4	extensions	m	m	m	m		see A.1.9/1
8.4.1	originator-requested-alternate-recipient	o	o	o	c[1]		see A.1.10.1
8.4.2	requested-delivery-method	o	o	o	c[1]		
8.4.3	physical-rendition-attributes	o	o	o	c[1]		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
8.4.4	PrivateExtensions	o	o	o	o		

1 if the MS has a P3 interface to the MTA then m else if supported by the MTA then m else o

2 only the capability to generate the "prohibited" value is required

A.1.6 AutoForwardRegistrationParameter

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	filter	o	o	m	m		see A.1.8/3
2	auto-forward-arguments	m	m	m	m		
2.1	originator-name	m	m	m	m		see A.1.10.2
2.2	content-identifier	o	c[1]	o	m		
2.3	priority	o	o	o	m		
2.4	per-message-indicators	o	m	m	m		see A.1.8/12
2.5	deferred-delivery-time	o	o	o	m		
2.6	extensions	o	c[2]	o	m		see A.1.4/8
2.7	per-recipient-fields	o	c[2]	m	m		see A.1.4/9
3	delete-after-auto-forwarding	o	o	m	m		
4	other-parameters	o	o	o	o		

1 if supported in message submission envelope then m else o

2 the requirements for support of the sub-elements of this element are as specified in ISO/IEC ISP 10611-4 (i.e. at least the minimum requirements of ISO/IEC ISP 10611-4 with respect to the component sub-elements shall be met)

A.1.7 AutoAlertRegistrationParameter

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	filter	o	o	m	m		see A.1.8/3
2	alert-addresses	o	o	o	o		
2.1	address	m	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2.2	alert-qualifier	o	o	o	o		
3	requested-attributes	o	o	m	m		see A.1.8/1

A.1.8 Common data types

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	AttributeSelection						
1.1	type	m	m	m	m		
1.2	from	o	o	m	m		
1.3	count	o	o	m	m		
2	EntryInformation						
2.1	sequence-number	m	m	m	m		
2.2	attributes	m	m	m	m		
3	Filter						
3.1	item	m	m	m	m		see A.1.8/4
3.2	and	o	o	m	m		
3.3	or	o	o	m	m		
3.4	not	o	m	m	m		
4	FilterItem						
4.1	equality	o	o	m	m		
4.2	substrings	o	o	o	o		
4.2.1	type	m	m	m	m		
4.2.2	strings	m	m	m	m		
4.2.2.1	initial	o	o	m	m		
4.2.2.2	any	o	o	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
4.2.2.3	final	o	o	m	m		
4.3	greater-or-equal	o	o	m	m		
4.4	less-or-equal	o	o	m	m		
4.5	present	o	o	m	m		
4.6	approximate-match	o	o	o	o		
5	InformationBase						
5.1	stored-messages	m	m	m	m		
5.2	inlog	–	i	–	i		
5.3	outlog	–	i	–	i		
6	Range						
6.1	sequence-number-range	o	o	m	m		
6.1.1	from	o	o	m	m		
6.1.2	to	o	o	m	m		
6.2	creation-time-range	o	o	m	m		
6.2.1	from	o	o	m	m		
6.2.2	to	o	o	m	m		
7	Selector						
7.1	child-entries	o	o	m	m		
7.2	range	o	o	m	m		see A.1.8/6
7.3	filter	o	o	m	m		see A.1.8/3
7.4	limit	o	c[3]	m	m		
7.5	override	o	c[1]	o	c[1]		
8	MTSIdentifier						
8.1	global-domain-identifier	m	m	m	m		see A.1.8/9

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
8.2	local-identifier	m	m	m	m		
9	GlobalDomainIdentifier						
9.1	country-name	m	m	m	m		
9.2	administration-domain-name	m	m	m	m		
9.3	private-domain-identifier	o	m	m	m		
10	EncodedInformationTypes						
10.1	built-in-encoded-information-types	m	m	m	m		
10.2	(non-basic parameters)	o	o	o	c[2]		
10.3	extended-encoded-information-types	o	m	m	m		
11	ContentType						
11.1	built-in	o	o	m	m		
11.2	extended	o	o	m	m		
12	PerMessageIndicators						
12.1	disclosure-of-other-recipients	o	o	m	m		
12.2	implicit-conversion-prohibited	m	m	m	m		
12.3	alternate-recipient-allowed	o	o	m	m		
12.4	content-return-request	o	o	o	c[2]		
12.5	reserved	o	o	o	m		
12.6	bit-5	o	o	o	m		
12.7	bit-6	o	o	o	m		
12.8	service-message	o	o	o	m		
13	Certificates						
13.1	userCertificate	m	m	m	m		see A.1.8/14

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
13.2	certificationPath	o	m	o	m		see A.1.8/14
14	Certificate						
14.1	version	o	m	o	m		
14.2	serialNumber	m	m	m	m		
14.3	signature	m	m	m	m		
14.4	issuer	m	m	m	m		
14.5	validity	m	m	m	m		
14.6	subject	m	m	m	m		
14.7	subjectPublicKeyInfo	m	m	m	m		
14.8	issuerUniqueIdentifier	o	o	o	o		
14.9	subjectUniqueIdentifier	o	o	o	o		
14.10	extensions	m	m	m	m		
14.10.1	authorityKeyIdentifier	o	o	o	o		
14.10.2	subjectKeyIdentifier	o	o	o	o		
14.10.3	keyUsage	o	m	o	m		
14.10.4	extKeyUsage	o	o	o	o		
14.10.5	privateKeyUsagePeriod	o	m	o	m		
14.10.6	certificatePolicies	o	m	o	m		
14.10.7	policyMappings	o	o	o	o		
14.10.8	subjectAltName	o	m	o	m		
14.10.8.1	otherName	o	m-	o	m-		
14.10.8.1.1	mta-name	o	m-	o	m-		
14.10.8.2	rfc822Name	–	–	–	–		
14.10.8.3	dNSName	–	–	–	–		
14.10.8.4	x400Address	o	m-	o	m-		
14.10.8.5	directoryName	o	m-	o	m-		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
14.10.8.6	ediPartyName	–	–	–	–		
14.10.8.7	uniformResourceIdentifier	–	–	–	–		
14.10.8.8	iPAddress	–	–	–	–		
14.10.8.9	registeredID	–	–	–	–		
14.10.9	issuerAltName	o	o	o	o		
14.10.10	subjectDirectoryAttributes	o	o	o	o		
14.10.11	basicConstraints	o	m	o	m		
14.10.12	nameConstraints	o	o	o	o		
14.10.13	policyConstraints	o	o	o	o		
14.10.14	cRLDistributionPoints	o	o	o	o		
15	CertificateAssertion						
15.1	serialNumber	o	m	o	m		
15.2	issuer	o	m	o	m		
15.3	subjectKeyIdentifier	o	m	o	m		
15.4	authorityKeyIdentifier	o	m	o	m		
15.5	certificateValid	o	m	o	m		
15.6	privateKeyValid	o	m	o	m		
15.7	subjectPublicKeyAlgID	o	m	o	m		
15.8	keyUsage	o	m	o	m		
15.9	subjectAltName	o	m	o	m		
15.10	policy	o	m	o	m		
15.11	pathToName	–	–	–	–		

1 if fetch restrictions are supported (see A.1.3.1/1.4) then m else –

2 if the MS has a P3 interface to the MTA then m else if supported by the MTA then m else o

3 if the selector is considered in the context of the summarize operation then o else m

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A.1.9 Extension data types

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	ExtensionField						
1.1	type	o	m	m	m		
1.1.1	standard-extension	m	m	m	m		
1.1.2	private-extension	o	o	m	m		see A.3.6
1.2	criticality	m	m	m	m		
1.3	value	m	m	m	m		
2	MessageOriginAuthenticationCheck						
2.1	algorithm-identifier	m	m	m	m		
2.2	content	m	m	m	m		
2.3	content-identifier	o	m	o	m		
2.4	message-security-label	o	m	o	m		see A.1.9/3
3	MessageSecurityLabel						
3.1	security-policy-identifier	o	o	o	m		
3.2	security-classification	o	o	o	m		
3.3	privacy-mark	o	o	o	m		
3.4	security-categories	o	o	o	m		
4	MessageToken						
4.1	token-type-identifier	m	m	m	m		
4.2	asymmetric-token	m	m	m	m		
4.2.1	signature-algorithm-identifier	m	m	m	m		
4.2.2	name	m	m	m	m		
4.2.3	time	m	m	m	m		
4.2.4	signed-data	o	o	o	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
4.2.4.1	content-confidentiality-algorithm-identifier	o	o	o	m		
4.2.4.2	content-integrity-check	o	o	o	m		
4.2.4.3	message-security-label	o	o	o	m		see A.1.9/3
4.2.4.4	proof-of-delivery-request	o	o	o	m		
4.2.4.5	message-sequence-number	o	o	o	m		
4.2.5	encryption-algorithm-identifier	o	o	o	m		
4.2.6	encrypted-data	o	o	o	m		
4.2.6.1	content-confidentiality-key	o	o	o	m		
4.2.6.2	content-integrity-check	o	o	o	m		
4.2.6.3	message-security-label	o	o	o	m		see A.1.9/3
4.2.6.4	content-integrity-key	o	o	o	m		
4.2.6.5	message-sequence-number	o	o	o	m		
5	ProbeOriginAuthenticationCheck						
5.1	algorithm-identifier	m	m	m	m		
5.2	content-identifier	o	m	o	m		
5.3	message-security-label	o	m	o	m		see A.1.9/3
6	ProofOfSubmission						
6.1	algorithm-identifier	m	m	m	m		
6.2	message-submission-envelope	m	m	m	m		
6.3	content	m	m	m	m		
6.4	message-submission-identifier	m	m	m	m		
6.5	message-submission-time	m	m	m	m		
7	CertificateSelectors						
7,1	encryption-recipient	o	o	o	m		see A.1.8/15

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
7,2	encryption-originator	o	o	o	m		see A.1.8/15
7,3	content-integrity-check	o	o	o	m		see A.1.8/15
7,4	token-signature	o	o	o	m		see A.1.8/15
7,5	message-origin-authentication	o	o	o	m		see A.1.8/15
8	CertificateSelectorsOverride						
8,1	encryption-recipient	o	o	o	m		see A.1.8/15
8,2	encryption-originator	o	o	o	m		see A.1.8/15
8,3	content-integrity-check	o	o	o	m		see A.1.8/15
8,4	token-signature	o	o	o	m		see A.1.8/15
9	ExtendedCertificate						
9.1	directory-entry	o	o	o	m		
9.2	certificate	o	m	o	m		see A.1.8/13

A.1.10 OR-names

A.1.10.1 OR-name forms for identification of remote MTS-users

Ref	OR-Name Form	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	mnemonic OR-address	m	m	m	m		see A.1.10.3
2	numeric OR-address	o	o	m	m		see A.1.10.4
3	terminal OR-address	o	o	m	m		see A.1.10.5
4	formatted postal OR-address	o	o	m	m		see A.1.10.6
5	unformatted postal OR-address	o	o	m	m		see A.1.10.7
6	directory-name	o	o	m	m		

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A.1.10.2 OR-name forms for local MS-user authentication

Ref	OR-Name Form	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	mnemonic OR-address	o	m	o	m		see A.1.10.3
2	numeric OR-address	o	o	o	m		see A.1.10.4
3	terminal OR-address	o	o	o	m		see A.1.10.5
4	formatted postal OR-address	—	—	—	—		
5	unformatted postal OR-address	—	—	—	—		
6	directory-name	o	o	o	o		

The following tables shall be completed according to the OR-address forms for which support is claimed above.

A.1.10.3 Mnemonic OR-address

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m	m	m	m		
1.1	country-name	m	m	m	m		
1.2	administration-domain-name	m	m	m	m		
1.3	private-domain-name	o	m	m	m		
1.4	organization-name	o	m	m	m		
1.5	personal-name	o	m	m	m		
1.5.1	surname	m	m	m	m		
1.5.2	given-name	o	m	m	m		
1.5.3	initials	o	m	m	m		
1.5.4	generation-qualifier	o	m	m	m		
1.6	organizational-unit-names	o	m	m	m		
2	built-in-domain-defined-attributes	o	c[1]	c[1]	c[1]		
3	extension-attributes	o	m	m	m		
3.1	common-name	o	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
3.2	teletex-common-name	o	m	m	m		
3.3	universal-common-name	o	m	m	m		see A.1.10.8
3.4	teletex-organization-name	o	m	m	m		
3.5	universal-organization-name	o	m	m	m		see A.1.10.8
3.46	teletex-personal-name	o	m	m	m		
3.6.1	surname	m	m	m	m		
3.6.2	given-name	o	m	m	m		
3.6.3	initials	o	m	m	m		
3.6.4	generation-qualifier	o	m	m	m		
3.7	universal-personal-name	o	m	m	m		
3.7.1	surname	m	m	m	m		see A.1.10.8
3.7.2	given-name	o	m	m	m		see A.1.10.8
3.7.3	initials	o	m	m	m		see A.1.10.8
3.7.4	generation-qualifier	o	m	m	m		see A.1.10.8
3.8	teletex-organizational-unit-names	o	m	m	m		
3.9	universal-organizational-unit-names	o	m	m	m		see A.1.10.8
3.10	teletex-domain-defined-attributes	o	c[1]	c[1]	c[1]		
3.11	universal-domain-defined-attributes	o	c[1]	c[1]	c[1]		see A.1.10.8
1 if the mnemonic OR-address form is considered in the context of local MTS-user identification then o else m							

A.1.10.4 Numeric OR-address

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m	m	m	m		
1.1	country-name	m	m	m	m		
1.2	administration-domain-name	m	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1.3	private-domain-name	o	m	m	m		
1.4	numeric-user-identifier	m	m	m	m		
2	built-in-domain-defined-attributes	o	c[1]	c[1]	c[1]		
3	extension-attributes	o	m	m	m		
3.1	teletex-domain-defined-attributes	o	c[1]	c[1]	c[1]		
3.2	universal-domain-defined-attributes	o	c[1]	c[1]	c[1]		see A.1.10.8
1 if the numeric OR-address form is considered in the context of local MTS-user identification then o else m							

A.1.10.5 Terminal OR-address

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m	m	m	m		
1.1	country-name	o	m	m	m		
1.2	administration-domain-name	o	m	m	m		
1.3	network-address	m	m	m	m		
1.4	terminal-identifier	o	m	m	m		
1.5	private-domain-name	o	m	m	m		
1.6	organization-name	o	o	o	o		
1.7	personal-name	o	o	o	o		
1.8	organizational-unit-names	o	o	o	o		
2	built-in-domain-defined-attributes	o	c[1]	c[1]	c[1]		
3	extension-attributes	o	m	m	m		
3.1	extended-network-address	m	m	m	m		
3.1.1	e163-4-address	o	o	m	m		
3.1.2	psap-address	o	o	m	m		
3.2	terminal-type	o	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
3.3	common-name	o	o	o	o		
3.4	teletex-common-name	o	o	o	o		
3.5	universal-common-name	o	o	o	o		see A.1.10.8
3.6	teletex-organization-name	o	o	o	o		
3.7	universal-organization-name	o	o	o	o		see A.1.10.8
3.8	teletex-personal-name	o	o	o	o		
3.9	universal-personal-name	o	o	o	o		see A.1.10.8
3.10	teletex-organizational-unit-names	o	o	o	o		
3.11	universal-organizational-unit-names	o	o	o	o		see A.1.10.8
3.12	unformatted-postal-address	o	o	o	o		
3.13	universal-unformatted-postal-address	o	o	o	o		see A.1.10.8
3.14	teletex-domain-defined-attributes	o	c[1]	c[1]	c[1]		
3.15	universal-domain-defined-attributes	o	c[1]	c[1]	c[1]		see A.1.10.8
1 if the numeric OR-address form is considered in the context of local MTS-user identification then o else m							

A.1.10.6 Formatted postal OR-address

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m	m	m	m		
1.1	country-name	m	m	m	m		
1.2	administration-domain-name	m	m	m	m		
1.3	private-domain-name	o	m	m	m		
2	extension-attributes	m	m	m	m		
2.1	physical-delivery-country-name	m	m	m	m		
2.2	physical-delivery-office-name	o	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2.3	universal-physical-delivery-office-name	o	m	m	m		see A.1.10.8
2.4	physical-delivery-office-number	o	m	m	m		
2.5	universal-physical-delivery-office-number	o	m	m	m		see A.1.10.8
2.6	physical-delivery-organization-name	o	m	m	m		
2.7	universal-physical-delivery-organization-name	o	m	m	m		see A.1.10.8
2.8	physical-delivery-personal-name	o	m	m	m		
2.9	universal-physical-delivery-personal-name	o	m	m	m		see A.1.10.8
2.10	postal-code	m	m	m	m		
2.11	poste-restante-address	o	m	m	m		
2.12	universal-poste-restante-address	o	m	m	m		see A.1.10.8
2.13	post-office-box-address	o	m	m	m		
2.14	universal-post-office-box-address	o	m	m	m		see A.1.10.8
2.15	pds-name	o	m	m	m		
2.16	street-address	o	m	m	m		
2.17	universal-street-address	o	m	m	m		see A.1.10.8
2.18	unique-postal-name	o	m	m	m		
2.19	universal-unique-postal-name	o	m	m	m		see A.1.10.8
2.20	extension-OR-address-components	o	m	m	m		
2.21	universal-extension-OR-address-components	o	m	m	m		see A.1.10.8
2.22	extension-physical-delivery-address-components	o	m	m	m		
2.23	universal-extension-physical-delivery-address-components	o	m	m	m		see A.1.10.8
2.24	local-postal-attributes	o	m	m	m		

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Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
2.25	universal-local-postal-attributes	o	m	m	m		see A.1.10.8

A.1.10.7 Unformatted postal OR-address

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m	m	m	m		
1.1	country-name	m	m	m	m		
1.2	administration-domain-name	m	m	m	m		
1.3	private-domain-name	o	m	m	m		
2	extension-attributes	m	m	m	m		
2.1	unformatted-postal-address	m	m	m	m		
2.2	universal-unformatted-postal-address	m	m	m	m		see A.1.10.8
2.3	physical-delivery-country-name	m	m	m	m		
2.4	postal-code	m	m	m	m		
2.5	pds-name	o	m	m	m		

A.1.10.8 UniversalOrBMPString

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	UniversalOrBMPString						
1.1	character-encoding						
1.1.1	two-octets	m	m [1]	m	m		
1.1.2	four-octets	m	m [1]	m	m		
1.2	iso-639-language-code	o	o	o	o		

1 this mandatory requirement is to support either alternative character-encoding on origination, and both alternatives on reception.

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A.1.11 General attributes

Ref	Attribute	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	certificate-selectors	o	o	o	o		see A.1.9/7
2	child-sequence-numbers	o	o	m	m		
3	content	m	m	m	m		
4	content-confidentiality-algorithm-identifier	o	o	o	o		
5	content-correlator	o	o	o	o		
6	content-identifier	o	o	o	o		
7	content-integrity-check	o	o	o	o		
8	content-length	o	o	o	m		
9	content-returned	o	o	o	o		
10	content-type	m	m	m	m		
11	conversion-with-loss-prohibited	o	o	o	o		
12	converted-EITs	o	o	o	o		
13	creation-time	o	o	m	m		
14	delivered-EITs	o	o	o	m		
15	delivery-flags	o	o	o	o		
16	dl-exempted-recipients	o	o	o	o		
17	dl-expansion-history	o	o	o	o		
18	entry-type	o	o	m	m		
19	internal-trace-information	o	o	o	o		
20	message-delivery-envelope	m	m1	m	m		
21	message-delivery-time	o	o	o	o		
22	message-identifier	o	o	o	o		
23	message-origin-authentication-check	o	o	o	o		
24	message-security-label	o	o	o	o		

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Ref	Attribute	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
25	message-submission-time	o	o	o	o		
26	message-token	o	o	o	o		
27	multiple-originator-certificates	o	o	o	o		see A.1.9/9
28	original-EITs	o	o	o	o		
29	originally-intended-recipient-name	o	o	o	o		
30	originator-certificate	o	o	o	o		see A.1.8/13
31	originator-name	o	o	o	m		
32	other-recipient-names	o	o	o	o		
33	parent-sequence-number	o	o	m	m		
34	per-recipient-report-delivery-fields	o	o	m	m		
35	priority	o	o	o	m		
36	proof-of-delivery-request	o	o	o	o		
37	recipient-certificate	o	o	o	o		see A.1.8/13
38	redirection-history	o	o	o	o		
39	report-delivery-envelope	m	m[1]	m	m		
40	report-origin-authentication-check	o	o	o	o		
41	reporting-DL-name	o	o	o	o		
42	reporting-MTA-certificate	o	o	o	o		see A.1.8/13
43	retrieval-status	m	m	m	m		
44	security-classification	o	o	o	o		
45	sequence-number	m	m	m	m		
46	signature-verification-status	o	o	o	o		
47	subject-submission-identifier	o	o	m	m		
48	this-recipient-name	o	o	o	o		
49	trace-information	o	o	o	o		

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Ref	Attribute	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1	the requirements for support of the elements of a delivery envelope by an MS-user are as specified in ISO/IEC ISP 10611-4 (i.e. a claim of support of such an attribute means that at least the minimum requirements of ISO/IEC ISP 10611-4 with respect to the component elements of the envelope are met)						

A.1.12 Auto actions

Ref	Element	MS-user		MS		Support	Notes/References
		Base	Profile	Base	Profile		
1.	auto-forward	o	o	o	o		see A.1.6
2	auto-alert	o	o	o	o		see A.1.7
3	other-auto-actions:	o	o	o	o		

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A.2 Optional functional groups

The following requirements are additional to those specified in A.1 if support of the functional group is claimed (references are to the corresponding table entries in A.1).

A.2.1 Distribution List (DL): Exempted Recipients class (DL+ER)

A.2.1.1 MessageSubmissionEnvelope

Ref	Element	Profile	
		MS-user	MS
A.1.4/8.14	dl-exempted-recipients	m	m

A.2.1.2 General attributes

Ref	Element	Profile	
		MS-user	MS
A.1.11/16	dl-exempted-recipients	m	m

A.2.2 Physical Delivery (PD)

The support requirements specified below are for an MS-user on submission. Support of the PDAU is specified in ISO/IEC ISP 10611-3 and ISO/IEC ISP 10611-4.

A.2.2.1 MessageSubmissionEnvelope

Ref	Element	Profile	
		MS-user	MS
A.1.4/9.4.3	physical-forwarding-prohibited	m	
A.1.4/9.4.5	physical-delivery-modes	m	

A.2.2.2 OR-names

Ref	OR-Name Form	Profile	
		MS-user	MS
A.1.10.1/4	formatted postal OR-address	m	
A.1.10.1/5	unformatted postal OR-address	m	

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A.2.3 Latest Delivery (LD)

A.2.3.1 MessageSubmissionEnvelope

Ref	Element	Profile	
		MS-user	MS
A.1.4/8.4	latest-delivery-time	m	

A.2.4 Return of Content (RoC)

A.2.4.1 Common data types

Ref	Element	Profile	
		MS-user	MS
A.1.8/12	PerMessageIndicators		
A.1.8/12.4	content-return-request	m	

A.2.4.2 General attributes

Ref	Element	Profile	
		MS-user	MS
A.1.11/9	content-returned	m	m

A.2.5 Security (SEC)

The support requirements for all SEC classes are as specified in A.1 unless otherwise specified below. Elements classified as cC shall be treated as m if support of a confidential security class variant (SnC) is claimed, else as o.

A.2.5.1 Supported operations

A.2.5.1.1 Message Administration Service Element (MASE)

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.2.4/3	ChangeCredentials (MS-user to MTA via MS)		i	i		i	i

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A.2.5.2 Operation arguments/results

A.2.5.2.1 MSBind

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.3.1/1.2	initiator-credentials						
A.1.3.1/1.2.1	simple		i	i		i	i
A.1.3.1/1.2.2	strong		m	m		m	m
A.1.3.1/1.2.2.1.4	signed-data		m	m		m	m
A.1.3.1/1.2.2.2	certificate		m	m		m	m
A.1.3.1/1.2.2.3	certificate-selector		m	m		m	m
A.1.3.1/1.3	security-context		m	m		m	m
A.1.3.1/2.1	responder-credentials						
A.1.3.1/2.1.1	simple		i	i		i	i
A.1.3.1/2.1.2	strong		m	m		m	m
A.1.3.1/2.1.2.1.4	signed-data		m	m		m	m
A.1.3.1/2.1.2.2	certificate		m	m		m	m
A.1.3.1/2.1.2.3	certificate-selector		m	m		m	m

A.2.5.2.2 MessageSubmission

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.3.2/2.4.1	originating-MTA-certificate	i	i	o	i	i	o
A.1.3.2/2.4.2	proof-of-submission	i	i	m	i	i	m
A.1.3.2/2.4.3	originating-MTA-certificate-selector	i	i	o	i	i	o

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A.2.5.2.3 SubmissionControl

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.3.5/1.1.2	permissible-operations				m	m	m
A.1.3.5/1.1.3	permissible-maximum-content-length				m	m	m
A.1.3.5/1.1.4	permissible-lowest-priority				m	m	m
A.1.3.5/1.1.5	permissible-security-context		m	m		m	m

A.2.5.2.4 Register-MS

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.3.10/1.5	change-credentials		i	i		i	i
A.1.3.10/1.6	user-security-labels		m	m		m	m

A.2.5.2.5 Register

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.3.12/1.7.1	user-security-label		m	m		m	m

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A.2.5.3 MessageSubmissionEnvelope

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.4/8.6	originator-certificate	m	m	m	m	m	m
A.1.4/8.7	content-confidentiality-algorithm-identifier	cC	cC	cC	m	m	m
A.1.4/8.8	message-origin-authentication-check			m	m	m	m
A.1.4/8.9	message-security-label		m	m	m	m	m
A.1.4/8.10	proof-of-submission-request			m			m
A.1.4/8.12	certificate-selectors	m	m	m	m	m	m
A.1.4/8.13	multiple-originator-certificates	m	m	m	m	m	m
A.1.4/9.4.10	message-token	m	m	m	m	m	m
A.1.4/9.4.11	content-integrity-check	m	m	m	m	m	m
A.1.4/9.4.12	proof-of-delivery-request		m	m		m	m
A.1.4/9.4.13	certificate-selectors-override	m	m	m	m	m	m
A.1.4/9.4.14	recipient-certificate	cC	cC	cC	m	m	m

A.2.5.4 ProbeSubmissionEnvelope

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.5/7.4	originator-certificate			m	m	m	m
A.1.5/7.5	message-security-label		m	m	m	m	m
A.1.5/7.7	probe-origin-authentication-check			m	m	m	m
A.1.5/7.8	certificate-selectors			m	m	m	m

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A.2.5.5 Common data types

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.8/14	Certificate						
A.1.8/14.10.8.4	x400Address	m	m	m		m	m

A.2.5.6 Extension data types

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.9/2	MessageOriginAuthenticationCheck						
A.1.9/2.4	message-security-label		m	m		m	m
A.1.9/3	MessageSecurityLabel						
A.1.9/3.1	security-policy-identifier		m	m		m	m
A.1.9/3.2	security-classification		m	m		m	m
A.1.9/3.3	security-categories		m	m		m	m
A.1.9/4	MessageToken						
A.1.9/4.2.4	signed-data	m	m	m	m	m	m
A.1.9/4.2.4.1	content-confidentiality-algorithm-identifier	cC	cC	cC	m	m	m
A.1.9/4.2.4.2	content-integrity-check	m	m	m	m	m	m
A.1.9/4.2.4.3	message-security-label		m	m		m	m
A.1.9/4.2.4.4	proof-of-delivery-request		m	m		m	m
A.1.9/4.2.5	encryption-algorithm-identifier		m	m		m	m
A.1.9/4.2.6	encrypted-data		m	m		m	m
A.1.9/4.2.6.2	content-integrity-check	m	m	m	m	m	m
A.1.9/4.2.6.3	message-security-label		m	m		m	m
A.1.9/5	ProbeOriginAuthenticationCheck						

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Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.9/5.3	message-security-label		m	m		m	m

A.2.5.7 General attributes

Ref	Element	MS-user			MS		
		S0	S1	S2	S0	S1	S2
A.1.11/5	certificate-selectors	m	m	m	m	m	m
A.1.11/4	content-confidentiality-algorithm-identifier	cC	cC	cC	cC	cC	cC
A.1.11/7	content-integrity-check	m	m	m	m	m	m
A.1.11/23	message-origin-authentication-check			m			m
A.1.11/24	message-security-label		m	m		m	m
A.1.11/26	message-token	m	m	m	m	m	m
A.1.11/27	multiple-originator-certificates	m	m	m	m	m	m
A.1.11/30	originator-certificate	m	m	m	m	m	m
A.1.11/36	proof-of-delivery-request		m	m		m	m
A.1.11/37	recipient-certificate	cC	m	m	cC	m	m
A.1.11/40	report-origin-authentication-check			m			m
A.1.11/42	reporting-MTA-certificate			m			m
A.1.11/44	security-classification		m	m		m	m
A.1.11/46	signature-verification-status						m

A.2.6 Use of Directory (DIR)

A.2.6.1 Extension data types

Ref	Element	Profile	
		MS-user	MS
A.1.9/9	ExtendedCertificate		
A.1.9/9.1	directory-entry	c[1]	

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Ref	Element	Profile	
		MS-user	MS
1 shall be supported if DIR+SEC class is claimed			

A.2.6.2 OR-names

Ref	OR-name Form	Profile	
		MS-user	MS
A.1.10.1/6	directory-name	m	
A.1.10.2/6	directory-name	m	m

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A.3 Additional information

A.3.1 Content types supported

The following table shall be completed to indicate (Y or ✓) which content type(s) the implementation can support on submission and on retrieval (see subclause 6.1 of ISO/IEC ISP 10611-1).

If support on retrieval is claimed, then support of MS attributes may also be claimed by so indicating (Y or ✓) in the "Supported Attributes" column. A claim of support of MS attributes means that any mandatory requirements in the relevant content type-specific base standards for support of MS attributes are met.

Ref	Content Type	Supported		Supported	Comments
		Submission	Retrieval	Attributes	
1	built-in			–	
1.1	unidentified (0)			–	
1.2	interpersonal-messaging-1984 (2)			–	
1.3	interpersonal-messaging-1988 (22)				see notes
1.4	(EDI messaging) (35)				
2	extended (specify)				

NOTES

1 The IPM Subject attribute shall be supported, in addition to the IPM specific base standard support requirements of MS attributes.

2 A system which only supports content type interpersonal-messaging(2) without interpersonal-messaging(22) and which makes use of a MS is not a scenario described in the Base Standard, and shall be avoided.

A.3.2 Encoded information types supported

The following table shall be completed to indicate (Y or ✓) which encoded information type(s) the implementation can support on submission and on retrieval (see subclause 6.1 of ISO/IEC ISP 10611-1).

Ref	Encoded Information Type	Supported		Comments
		Submission	Retrieval	
1	built-in			
1.1	undefined (0)			
1.2	ia5-text (2)			
1.3	g3-facsimile (3)			
1.4	g4-class-1 (4)			
1.5	teletex (5)			

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Ref	Encoded Information Type	Supported		Comments
		Submission	Retrieval	
1.6	videotex (6)			
1.7	voice (7)			
1.8	mixed-mode (9)			
1.9	other (specify)			
2	extended (specify)			

A.3.3 Support of filter

The following table shall be completed to indicate any constraints on the support of filter.

Ref	Constraint	Value	Comments
1	Maximum number of levels of recursion/nesting of filter supported		
2	Maximum number of elements that can be logically combined at any one level		

A.3.4 Implementation constraints

The following table shall be completed to indicate any constraints imposed by the implementation.

Ref	Constraint	Limit	Comments
1	limit on message size (if any) (see note 1)		
2	limit on the number of recipients that may be specified in a message envelope (if any) (see note 2)		
3	other (specify)		

NOTES

1 Any limit on the maximum size of message content and/or envelope shall be stated.

2 Any limit on the number of recipients that may be specified in a message envelope shall be stated (this does not imply a static capability to register that number of users for delivery at a single MTA).

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A.3.5 Support of attributes by the MS-user

The following table shall be completed for the MS-user to indicate, for each supported MS attribute, all the operations, arguments, results and filter items for which the attribute is supported.

Ref	Attribute	Comments
1	certificate-selectors	
2	child-sequence-numbers	
3	content	
4	content-confidentiality-algorithm-identifier	
5	content-correlator	
6	content-identifier	
7	content-integrity-check	
8	content-length	
9	content-returned	
10	content-type	
11	conversion-with-loss-prohibited	
12	converted-EITs	
13	creation-time	
14	delivered-EITs	
15	delivery-flags	
16	dl-exempted-recipients	
17	dl-expansion-history	
18	entry-type	
19	internal-trace-information	
20	message-delivery-envelope	
21	message-delivery-time	
22	message-identifier	
23	message-origin-authentication-check	
24	message-security-label	

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Ref	Attribute	Comments
25	message-submission-time	
26	message-token	
27	multiple-originator-certificates	
28	original-EITs	
29	originally-intended-recipient-name	
30	originator-certificate	
31	originator-name	
32	other-recipient-names	
33	parent-sequence-number	
34	per-recipient-report-delivery-fields	
35	priority	
36	proof-of-delivery-request	
37	recipient-certificate	
38	redirection-history	
39	report-delivery-envelope	
40	report-origin-authentication-check	
41	reporting-DL-name	
42	reporting-MTA-certificate	
43	retrieval-status	
44	security-classification	
45	sequence-number	
46	signature-verification-status	
47	subject-submission-identifier	
48	this-recipient-name	
49	trace-information	

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A.3.6 Supported extensions

The following table shall be completed to indicate which extensions and where they are supported in addition to the standard extensions for which support must already be stated in the various tables of clauses A.1 and A.2. For each extension it shall be references to where in the protocol they might appear.

Ref	Extension identifier	Reference	Comments

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Annex B

(normative)

Amendments and corrigenda

International Standards are subject to constant review and revision by the ISO/IEC Technical Committees concerned. The following amendments and corrigenda are approved by ISO/IEC JTC1 and ITU-T SG 7 and are considered as normative references in this part of ISO/IEC ISP 10611.

None currently, as all approved amendments and corrigenda to ISO/IEC 10021 will be incorporated into the latest edition.

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Annex C

(informative)

Bibliography

The following documents are informatively reference in this text. All documents are subject to revision, and parties to agreements based on this part of ISO/IEC ISP 10611 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.

NOTES
1 - References in the body of this part of ISO/IEC 10611 to specific clauses of ISO/IEC documents refer also to the corresponding clauses of the equivalent ITU-T Recommendations.
2 - Normative references are specified in clause 2.

CCITT Recommendation X.400(1988), *Message handling system and service overview*

ISO/IEC 10021-1:1990, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 1: System and service Overview*

CCITT Recommendation X.400(1992), *Message handling system and service overview*

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

CCITT Recommendation X.402(1988), *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.402(1992), *Message handling systems: Overall architecture*

ISO/IEC 10021-2:1990/Amd.1:1994

ISO/IEC 10021-2:1990/Amd.2:1994

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

CCITT Recommendation X.408 (1988), *Message handling systems: Encoded information type conversion rules*

CCITT Recommendation X.413(1988), *Message handling systems: Message store: Abstract service definition*

ISO/IEC 10021-5: 1990, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 5: Message Store: Abstract Service Definition*

CCITT Recommendation X.413(1992), *Message handling systems: Message store: Abstract service definition*

ISO/IEC 10021-5:1994, *Information technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 5: Message Store: Abstract Service Definition*

ITU-T Recommendation X.413 (1995) | ISO/IEC 10021-5:1996, *Information technology - Message Handling Systems (MHS): Message Store: Abstract service definition*

CCITT Recommendation X.419(1988), *Message handling systems: Protocol specifications*

ISO/IEC 10021-6:1990, *Information Technology - Text Communication - Message-Oriented Text Interchange Systems (MOTIS) - Part 6: Protocol Specifications*

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

ITU-T Recommendation X.419 (1995) | ISO/IEC 10021-6:1996, *Information technology - Message Handling Systems (MHS): Protocol 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.682 (1997) | ISO/IEC 8824-3:1998, *Information technology - Abstract Syntax Notation One (ASN.1): Constraint specification*

ITU-T Recommendation X.683 (1997) | ISO/IEC 8824-4:1998, *Information technology - Abstract Syntax Notation One (ASN.1): Parameterization of ASN.1 specifications*

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