

PICS-AMH11-2.0

**Protocol Implementation Conformance Statement (PICS)  
For Isode Release 15.0  
for the  
Message Transfer Agent**

Based on ISPICS Proforma for ISO/IEC ISP 10611-3 (AMH11)<sup>1</sup>

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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 AMH11. 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)
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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.

- 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)

## A.0 Identification of the implementation

### A.0.1 Identification of PICS

Ref	Question	Response
1	Date of statement (DD/MM/YY)	2011/03/14
2	PICS serial number	PICS-AMH11-2.0
3	System conformance statement cross reference	

### A.0.2 Identification of IUT

Ref	Question	Response
1	Implementation name	M-Switch
2	Implementation version	R15.0v0
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	Isode Limited
2	Contact name(s)	Will Sheward
3	Address	5 Castle Business Village, 36 Station Road, Hampton, Middx, TW12 2BX

4	Telephone number	+44 (0) 20 8783 0203
5	Telex number	
6	Fax number	+44 (0) 20 8783 9292
7	E-mail address	sales@isode.com
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?	Y	

#### A.0.6 Statement of profile conformance

Ref	Question	Response	Comments
1	Are all mandatory requirements of profile AMH111 implemented?	Y	
2	Are all mandatory requirements of profile AMH112 implemented?	Y	
3	Are all mandatory requirements of any of the following optional functional groups implemented?		
3.1	Conversion (CV)	Y	Implicit conversion only
3.2	Distribution List (DL)	Y	
3.3	Physical Delivery (PD)	Y	Support of PD EOS on submission
3.4	Redirection (RED)	Y	
3.5	Latest Delivery (LD)	Y	

3.6	Return of Contents (RoC)	Y	
3.7	Security (SEC)	Y	class(es):S0 only
3.8	Use of Directory (DIR)	Y	
3.9	84 Interworking (84IW)	Y	

## A.1 Basic requirements

### A.1.1 Initiator/responder capability

Ref	Capability	Base	Profile	Support
1	Initiator	m	m	Y
2	Responder	m	m	Y

### A.1.2 Supported application contexts

Ref	Application Context	Base		Profile	Support
		CCITT	ISO/IEC		
1	mts-transfer	m	m	m	Y
2	mts-transfer-protocol	m	o	c1	Y
3	mts-transfer-protocol-1984	m	o	c2	Y

c1 - if conformance to AMH112 is claimed then m else o

c2 - if conformance to AMH112 or the 84 Interworking functional group is claimed then m else o

### A.1.3 Supported operations

#### A.1.3.1 Bind and Unbind

Ref	Operation	Base	Profile	Support	Notes/References
1	MTABind	m	m	Y	
2	MTAUnbind	m	m	Y	

#### A.1.3.2 Message Transfer Service Element (MTSE)

Ref	Operation	Base	Profile	Support	Notes/References
1	MessageTransfer	m	m	Y	
2	ReportTransfer	m	m	Y	
3	ProbeTransfer	m	m	Y	

## A.1.4 Operation arguments/results

## A.1.4.1 MTABind

Ref	Element	Base	Profile	Support	Notes/References
1	ARGUMENT				
1.1	NULL	m	m	Y	
1.2	SET	m	m	Y	
1.2.1	initiator-name	m	m	Y	
1.2.2	initiator-credentials	m	m	Y	
1.2.2.1	simple	m	m	Y	
1.2.2.1.1	OCTET STRING	o	m	Y	
1.2.2.1.2	IA5String	o	c1	Y	
1.2.2.2	strong	o	o	ND	
1.2.2.2.1	bind-token	m	m	Y	
1.2.2.2.1.1	signature-algorithm-identifier	m	m	Y	
1.2.2.2.1.2	name	m	m	Y	
1.2.2.2.1.3	time	m	m	Y	
1.2.2.2.1.4	signed-data	o	o	Y	
1.2.2.2.1.5	encryption-algorithm-identifier	o	o	N	
1.2.2.2.1.6	encrypted-data	o	o	N	
1.2.2.2.2	certificate	o	o	Y	
1.2.3	security-context	o	o	ND	
2	RESULT				
2.1	NULL	m	m	Y	
2.2	SET	m	m	Y	
2.2.1	responder-name	m	m	Y	
2.2.2	responder-credentials	m	m	Y	
2.2.2.1	simple	m	m	Y	
2.2.2.1.1	OCTET STRING	o	m	Y	
2.2.2.1.2	IA5String	o	c1	Y	

2.2.2.2	strong	o	o	Y	
2.2.2.2.1	bind-token	m	m	Y	
2.2.2.2.1.1	signature-algorithm-identifier	m	m	Y	
2.2.2.2.1.2	name	m	m	Y	
2.2.2.2.1.3	time	m	m	Y	
2.2.2.2.1.4	signed-data	o	o	Y	
2.2.2.2.1.5	encryption-algorithm-identifier	o	o	N	
2.2.2.2.1.6	encrypted-data	o	o	N	

c1 - if the P1 mts-transfer-protocol-1984 AC is supported then m else o

#### A.1.4.2 MessageTransfer

Ref	Element	Base	Profile	Support	Notes/References
1	MessageTransferEnvelope	m	m	Y	
1.1	(per message fields)				
1.1.1	message-identifier	m	m	Y	
1.1.2	originator-name	m	m	Y	
1.1.3	original-encoded-information-types	m	m-	Y	
1.1.4	content-type	m	m-	Y	
1.1.5	content-identifier	m	m	Y	
1.1.6	priority	m	m	Y	
1.1.7	per-message-indicators	m	m	Y	
1.1.8	deferred-delivery-time	o	m-	Y	
1.1.9	per-domain-bilateral-information	o	m-	Y	
1.1.10	trace-information	m	m	Y	
1.1.11	extensions	m	m	Y	
1.1.11.1	recipient-reassignment-prohibited	o	m	Y	
1.1.11.2	dl-expansion-prohibited	o	m	Y	
1.1.11.3	conversion-with-loss-prohibited	o	m	Y	
1.1.11.4	latest-delivery-time	o	m-	Y	
1.1.11.5	originator-return-address	o	m-	Y-	

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1.1.11.6	originator-certificate	o	m-	Y	
1.1.11.7	content-confidentiality-algorithm-identifier	o	m-	Y	
1.1.11.8	message-origin-authentication-check	o	m-	Y-	
1.1.11.9	message-security-label	o	m-	Y	
1.1.11.10	content-correlator	m	m	Y	
1.1.11.11	dl-expansion-history	m	m-	Y	
1.1.11.12	internal-trace-information	m	m	Y	
1.2	per-recipient-fields	m	m	Y	
1.2.1	recipient-name	m	m	Y	
1.2.2	originally-specified-recipient-number	m	m	Y	
1.2.3	per-recipient-indicators	m	m	Y	
1.2.4	explicit-conversion	o	m-	Y-	
1.2.5	extensions	m	m	Y	
1.2.5.1	originator-requested-alternate-recipient	o	m-	Y	
1.2.5.2	requested-delivery-method	o	m-	Y-	
1.2.5.3	physical-forwarding-prohibited	o	m-	Y-	
1.2.5.4	physical-forwarding-address-request	o	m-	Y-	
1.2.5.5	physical-delivery-modes	o	m-	Y-	
1.2.5.6	registered-mail-type	o	m-	Y-	
1.2.5.7	recipient-number-for-advice	o	m-	Y-	
1.2.5.8	physical-rendition-attributes	o	m-	Y-	
1.2.5.9	physical-delivery-report-request	o	m-	Y-	
1.2.5.10	message-token	o	m-	Y-	
1.2.5.11	content-integrity-check	o	m-	Y-	
1.2.5.12	proof-of-delivery-request	o	m-	Y-	
1.2.5.13	redirection-history	m	m-	Y	
2	content	m	m	Y	

## A.1.4.3 Report Transfer

Ref	Element	Base	Profile	Support	Notes/References
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1	ReportTransferEnvelope	m	m	Y	
1.1	report-identifier	m	m	Y	
1.2	report-destination-name	m	m	Y	
1.3	trace-information	m	m	Y	
1.4	extensions	m	m	Y	
1.4.1	message-security-label	o	m-	Y	
1.4.2	originator-and-DL-expansion-history	m	m	Y	
1.4.3	reporting-DL-name	o	m-	Y-	
1.4.4	reporting-MTA-certificate	o	m-	Y-	
1.4.5	report-origin-authentication-check	o	m-	Y-	
1.4.6	internal-trace-information	m	m	Y	
2	ReportTransferContent	m	m	Y	
2.1	(per report fields)				
2.1.1	subject-identifier	m	m	Y	
2.1.2	subject-intermediate-trace-information	o	m	Y	
2.1.3	original-encoded-information-types	m	m	Y	
2.1.4	content-type	m	m	Y	
2.1.5	content-identifier	m	m	Y	
2.1.6	returned-content	o	m-	Y	
2.1.7	additional-information	o	m-	Y	
2.1.8	extensions	m	m	Y	
2.1.8.1	content-correlator	m	m	Y	
2.2	per-recipient-fields	m	m	Y	
2.2.1	actual-recipient-name	m	m	Y	
2.2.2	originally-specified-recipient-number	m	m	Y	
2.2.3	per-recipient-indicators	m	m	Y	
2.2.4	last-trace-information	m	m	Y	
2.2.5	originally-intended-recipient-name	m	m	Y	
2.2.6	supplementary-information	o	m-	Y	

2.2.7	extensions	m	m	Y	
2.2.7.1	redirection-history	m	m	Y	
2.2.7.2	physical-forwarding-address	o	m-	Y-	
2.2.7.3	recipient-certificate	o	m-	Y-	
2.2.7.4	proof-of-delivery	o	m-	Y-	

#### A.1.4.4 ProbeTransfer

Ref	Element	Base	Profile	Support	Notes/References
1	ProbeTransferEnvelope	m	m	Y	
1.1	(per probe fields)				
1.1.1	probe-identifier	m	m	Y	
1.1.2	originator-name	m	m	Y	
1.1.3	original-encoded-information-types	m	m-	Y	
1.1.4	content-type	m	m-	Y	
1.1.5	content-identifier	m	m	Y	
1.1.6	content-length	m	m	Y	
1.1.7	per-message-indicators	m	m	Y	
1.1.8	per-domain-bilateral-information	o	m-	Y	
1.1.9	trace-information	m	m	Y	
1.1.10	extensions	m	m	Y	
1.1.10.1	recipient-reassignment-prohibited	o	m	Y	
1.1.10.2	dl-expansion-prohibited	o	m	Y	
1.1.10.3	conversion-with-loss-prohibited	o	m	Y	
1.1.10.4	originator-certificate	o	m-	Y-	
1.1.10.5	message-security-label	o	m-	Y	
1.1.10.6	content-correlator	m	m	Y	
1.1.10.7	probe-origin-authentication-check	o	m-	Y-	
1.1.10.8	internal-trace-information	m	m	Y	
1.2	per-recipient-fields	m	m	Y	
1.2.1	recipient-name	m	m	Y	

1.2.2	originally-specified-recipient-number	m	m	Y	
1.2.3	per-recipient-indicators	m	m	Y	
1.2.4	explicit-conversion	o	m-	Y	
1.2.5	extensions	m	m	Y	
1.2.5.1	originator-requested-alternate-recipient	o	m-	Y	
1.2.5.2	requested-delivery-method	o	m-	Y-	
1.2.5.3	physical-rendition-attributes	o	m-	Y-	
1.2.5.4	redirection-history	m	m-	Y	

### A.1.5 Common data types

Ref	Element	Base	Profile	Support	Notes/References
1	MTSIdentifier				
1.1	global-domain-identifier	m	m	Y	
1.2	local-identifier	m	m	Y	
2	GlobalDomainIdentifier				
2.1	country-name	m	m	Y	
2.2	administration-domain-name	m	m	Y	
2.3	private-domain-identifier	m	m	Y	
3	EncodedInformationTypes				
3.1	built-in-encoded-information-types	m	m	Y	
3.2	(non-basic parameters)	o	m-	Y-	
3.3	extended-encoded-information-types	m	m	Y	
4	PerMessageIndicators				
4.1	disclosure-of-other-recipients	m	m	Y	
4.2	implicit-conversion-prohibited	m	m	Y	
4.3	alternate-recipient-allowed	m	m	Y	
4.4	content-return-request	o	m-	Y	
4.5	reserved	o	m-	Y-	
4.6	bit-5	o	m-	Y-	

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4.7	bit-6	o	m-	Y-	
4.8	service-message	o	m-	ND	
5	PerDomainBilateralInformation				
5.1	country-name	m	m-	Y	
5.2	administration-domain-name	m	m-	Y	
5.3	private-domain-identifier	o	m-	Y	
5.4	bilateral-information	m	m-	Y	
6	TraceInformation				
6.1	TraceInformationElement	m	m	Y	
6.1.1	global-domain-identifier	m	m	Y	
6.1.2	domain-supplied-information	m	m	Y	
6.1.2.1	arrival-time	m	m	Y	
6.1.2.2	routing-action	m	m	Y	
6.1.2.2.1	relayed	m	m	Y	
6.1.2.2.2	rerouted	o	c1	Y-	
6.1.2.3	attempted-domain	o	c1	Y-	
6.1.2.4	(additional actions)				
6.1.2.4.1	deferred-time	m	c2	Y	
6.1.2.4.2	converted-encoded-information-types	o	m-	Y	
6.1.2.4.3	other-actions	o	m-	Y	
6.1.2.4.3.1	redirected	o	m-	Y	
6.1.2.4.3.2	dl-operation	o	m-	Y	
7	LastTraceInformation				
7.1	arrival-time	m	m	Y	
7.2	converted-encoded-information-types	m	m	Y	
7.3	report-type	m	m	Y	

7.3.1	delivery	m	m	Y	
7.3.1.1	message-delivery-time	m	m	Y	
7.3.1.2	type-of-MTS-user	m	m	Y	
7.3.2	non-delivery	m	m	Y	
7.3.2.1	non-delivery-reason-code	m	m	Y	
7.3.2.2	non-delivery-diagnostic-code	m	m	Y	
8	ContentType				
8.1	built-in	m	m-	Y	
8.2	extended	o	m-	Y	

c1 - if rerouting is supported (see A.3.4/2) then m else m-

c2 - if deferred delivery is supported (see A.3.4/1) then m else m-

## A.1.6 Extension data types

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

4.2.4.2	content-integrity-check	o	m-	Y-	
4.2.4.3	message-security-label	o	m-	Y-	
4.2.4.4	proof-of-delivery-request	o	m-	Y-	
4.2.4.5	message-sequence-number	o	m-	Y-	
4.2.5	encryption-algorithm-identifier	o	m-	Y-	
4.2.6	encrypted-data	o	m-	Y	
4.2.6.1	content-confidentiality-key	o	m-	Y-	
4.2.6.2	content-integrity-check	o	m-	Y-	
4.2.6.3	message-security-label	o	m-	Y-	
4.2.6.4	content-integrity-key	o	m-	Y-	
4.2.6.5	message-sequence-number	o	m-	Y-	
5	InternalTraceInformation				
5.1	global-domain-identifier	m	m	Y	
5.2	mta-name	m	m	Y	
5.3	mta-supplied-information	m	m	Y	
5.3.1	arrival-time	m	m	Y	
5.3.2	routing-action	m	m	Y	
5.3.2.1	relayed	m	m	Y	
5.3.2.2	rerouted	o	c1	Y-	
5.3.3	attempted	o	c1	Y-	
5.3.3.1	mta	o	m	Y-	
5.3.3.2	domain	o	m	Y-	
5.3.4	(additional actions)				
5.3.4.1	deferred-time	m	c2	Y	
5.3.4.2	converted-encoded-information-types	o	m-	Y	
5.3.4.3	other-actions	o	m-	Y	
5.3.4.3.1	redirected	o	m-	Y	
5.3.4.3.2	dl-operation	o	m-	Y	

6	ProbeOriginAuthenticationCheck				
6.1	algorithm-identifier	m	m	Y-	
6.2	content-identifier	o	m	Y-	
6.3	message-security-label	o	m	Y-	
7	ProofOfDelivery				
7.1	algorithm-identifier	m	m	Y-	
7.2	delivery-time	m	m	Y-	
7.3	this-recipient-name	m	m	Y-	
7.4	originally-intended-recipient-name	o	m	Y-	
7.5	content	m	m	Y-	
7.6	content-identifier	o	m	Y-	
7.7	message-security-label	o	m	Y-	
8	ReportOriginAuthenticationCheck			Y-	
8.1	algorithm-identifier	m	m	Y-	
8.2	content-identifier	o	m	Y-	
8.3	message-security-label	o	m	Y-	
8.4	per-recipient	m	m	Y-	
8.4.1	actual-recipient-name	m	m	Y-	
8.4.2	originally-intended-recipient-name	o	m	Y-	
8.4.3	delivery	o	m	Y-	
8.4.3.1	message-delivery-time	m	m	Y-	
8.4.3.2	type-of-MTS-user	m	m	Y-	
8.4.3.3	recipient-certificate	o	m	Y-	
8.4.3.4	proof-of-delivery	o	m	Y-	
8.4.4	non-delivery	o	m	Y-	
8.4.4.1	non-delivery-reason-code	m	m	Y-	



8.4.4.2	non-delivery-diagnostic-code	o	m	Y-	
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c1 - if rerouting is supported then m else m-

c2 - if deferred delivery is supported then m else m-

### A.1.70/R names

Ref	O/R Name Form	Base	Profile	Support	Notes/References
1	mnemonic O/R address	m	m-	Y	
2	numeric O/R address	m	m-	Y	
3	terminal O/R address	m	m-	Y	
4	formatted postal O/R address	m	m-	Y	
5	unformatted postal O/R address	m	m-	Y	
6	directory-name	o	m-	Y	

The following tables shall be completed according to the O/R address forms for which support is claimed above.

NOTE - Classification of an attribute as m indicates only that its presence is required for the O/R address form, not that the capability to make routing decisions on that attribute is required (see also A.3.1).

#### A.1.7.1Mnemonic O/R address

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

3.1	common-name	o	m-	Y	
3.2	teletex-common-name	o	m-	Y	
3.3	teletex-organization-name	o	m-	Y	
3.4	teletex-personal-name	o	m-	Y	
3.4.1	surname	m	m	Y	
3.4.2	given-name	o	m-	Y	
3.4.3	initials	o	m-	Y	
3.4.4	generation-qualifier	o	m-	Y	
3.5	teletex-organizational-unit-names	o	m-	Y	
3.6	teletex-domain-defined-attributes	o	m-	Y	

#### A.1.7.2 Numeric O/R address

Ref	Element	Base	Profile	Support	Notes/References
1	built-in-standard-attributes	m	m	Y	
1.1	country-name	m	m	Y	
1.2	administration-domain-name	m	m	Y	
1.3	private-domain-name	o	m-	Y	
1.4	numeric-user-identifier	m	m	Y	
2	built-in-domain-defined-attributes	o	m-	Y	
3	extension-attributes	o	m-	Y	
3.1	teletex-domain-defined-attributes	o	m-	Y	

#### A.1.7.3 Terminal O/R address

Ref	Element	Base	Profile	Support	Notes/References
1	built-in-standard-attributes	m	m	Y	
1.1	country-name	o	m-	Y	
1.2	administration-domain-name	o	m-	Y	
1.3	network-address	m	m	Y	
1.4	terminal-identifier	o	m-	Y	
1.5	private-domain-name	o	m-	Y	
1.6	organization-name	o	m-	Y	

1.7	personal-name	o	m-	Y	
1.8	organizational-unit-names	o	m-	Y	
2	built-in-domain-defined-attributes	o	m-	Y	
3	extension-attributes	o	m-	Y	
3.1	extended-network-address	m	m	Y	
3.1.1	e163-4-address	o	m-	Y	
3.1.2	psap-address	o	m-	Y	
3.2	terminal-type	o	m-	Y	
3.3	common-name	o	m-	Y	
3.4	teletex-common-name	o	m-	Y	
3.5	teletex-organization-name	o	m-	Y	
3.6	teletex-personal-name	o	m-	Y	
3.7	teletex-organizational-unit-names	o	m-	Y	
3.8	unformatted-postal-address	o	m-	Y	
3.9	teletex-domain-defined-attributes	o	m-	Y	

#### A.1.7.4 Formatted postal O/R address

Ref	Element	Base	Profile	Support	Notes/References
1	built-in-standard-attributes	m	m	Y	
1.1	country-name	m	m	Y	
1.2	administration-domain-name	m	m	Y	
1.3	private-domain-name	o	m-	Y	
2	extension-attributes	m	m	Y	
2.1	physical-delivery-country-name	m	m	Y	
2.2	physical-delivery-office-name	o	m-	Y	
2.3	physical-delivery-office-number	o	m-	Y	
2.4	physical-delivery-organization-name	o	m-	Y	
2.5	physical-delivery-personal-name	o	m-	Y	
2.6	postal-code	m	m	Y	
2.7	poste-restante-address	o	m-	Y	

2.8	post-office-box-address	o	m-	Y	
2.9	pds-name	o	m-	Y	
2.10	street-address	o	m-	Y	
2.11	unique-postal-name	o	m-	Y	
2.12	extension-OR-address-components	o	m-	Y	
2.13	extension-physical-delivery-address-components	o	m-	Y	
2.14	local-postal-attributes	o	m-	Y	

### A.1.7.5 Unformatted postal O/R address

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

## 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 Conversion (CV)

#### A.2.1.10 Operation arguments/results

##### A.2.1.1.1 MessageTransfer

Ref	Element	Profile
A.1.4.2/1.1.3	original-encoded-information-types	m
A.1.4.2/1.1.4	content-type	m
A.1.4.2/1.2.4	explicit-conversion	c1

c1 - if implicit conversion is not supported (see A.3.3/2) then m else m-

#### A.2.1.1.2ProbeTransfer

Ref	Element	Profile
A.1.4.4/1.1.3	original-encoded-information-types	m
A.1.4.4/1.1.4	content-type	m
A.1.4.4/1.2.4	explicit-conversion	c1

c1 - if implicit conversion is not supported (see A.3.3/2) then m else m-

#### A.2.1.2Common data types

Ref	Element	Profile
A.1.5/6	TraceInformation	
A.1.5/6.1.2.4.2	converted-encoded-information-types	m

**A.2.1.3 Extension data types**

Ref	Element	Profile
A.1.6/5	InternalTraceInformation	
A.1.6/5.3.4.2	converted-encoded-information-types	m

**A.2.2 Distribution List (DL)****A.2.2.1 Operation arguments/results****A.2.2.1.1 MessageTransfer**

Ref	Element	Profile	Support
A.1.4.2/1.1.11.11	dl-expansion-history	m	Y

**A.2.2.1.2 ReportTransfer**

Ref	Element	Profile	Support
A.1.4.3/1.4.3	reporting-dl-name	m	Y

**A.2.2.2 Common data types**

Ref	Element	Profile	Support
A.1.5/6	TraceInformation		
A.1.5/6.1.2.4.3	other-actions	m	Y
A.1.5/6.1.2.4.3.2	dl-operation	m	Y

**A.2.2.3 Extension data types**

Ref	Element	Profile	Support
A.1.6/5	InternalTraceInformation		
A.1.6/5.3.4.3	other-actions	m	Y-
A.1.6/5.3.4.3.2	dl-operation	m	Y

### A.2.3 Physical Delivery (PD)

The support requirements specified below are for an MTA with a co-located PDAU. Support of the PD FG on submission is specified in ISO/IEC ISP 10611-4.

#### A.2.3.1 Operation arguments/results

##### A.2.3.1.1 MessageTransfer

Ref	Element	Profile
A.1.4.2/1.2.5.5	physical-delivery-modes	m
A.1.4.2/1.2.5.8	physical-rendition-attributes	m
A.1.4.2/1.2.5.9	physical-delivery-report-request	m

##### A.2.3.1.2 ReportTransfer

Ref	Element	Profile
A.1.4.3/2.2.7.2	physical-forwarding-address	m

##### A.2.3.1.3 ProbeTransfer

Ref	Element	Profile
A.1.4.4/1.2.5.3	physical-rendition-attributes	m

#### A.2.3.2 O/R names

Ref	O/R Name Form	Profile
A.1.7/4	formatted postal O/R address	m
A.1.7/5	unformatted postal O/R address	m

##### A.2.3.2.1 Formatted postal O/R address

Ref	Element	Profile
A.1.7.4/2.2	physical-delivery-office-name	m
A.1.7.4/2.3	physical-delivery-office-number	m
A.1.7.4/2.4	physical-delivery-organization-name	m
A.1.7.4/2.5	physical-delivery-personal-name	m
A.1.7.4/2.7	poste-restante-address	m
A.1.7.4/2.8	post-office-box-address	m
A.1.7.4/2.9	pds-name	m

A.1.7.4/2.10	street-address	m
A.1.7.4/2.11	unique-postal-name	m
A.1.7.4/2.12	extension-OR-address-components	m
A.1.7.4/2.13	extension-physical-delivery-address-components	m
A.1.7.4/2.14	local-postal-attributes	m

#### A.2.3.2.2 Unformatted postal O/R address

Ref	Element	Profile
A.1.7.5/2.4	pds-name	m

### A.2.4 Redirection (RED)

#### A.2.4.1 Operation arguments/results

##### A.2.4.1.1 MessageTransfer

Ref	Element	Profile
A.1.4.2/1.2.5.1	originator-requested-alternate-recipient	m
A.1.4.2/1.2.5.13	redirection-history	m

##### A.2.4.1.2 ProbeTransfer

Ref	Element	Profile
A.1.4.4/1.2.5.1	originator-requested-alternate-recipient	m
A.1.4.4/1.2.5.4	redirection-history	m

#### A.2.4.2 Common data types

Ref	Element	Profile
A.1.5/6	TraceInformation	
A.1.5/6.1.2.4.3	other-actions	m
A.1.5/6.1.2.4.3.1	redirected	m

#### A.2.4.3 Extension data types

Ref	Element	Profile
A.1.6/5	InternalTraceInformation	



A.1.6/5.3.4.3	other-actions	m
A.1.6/5.3.4.3.1	redirected	m

## A.2.5 Latest Delivery (LD)

### A.2.5.1 Operation arguments/results

#### A.2.5.1.1 MessageTransfer

Ref	Element	Profile
A.1.4.2/1.1.11.4	latest-delivery-time	m

## A.2.6 Return of Content (RoC)

### A.2.6.1 Operation arguments/results

#### A.2.6.1.1 ReportTransfer

Ref	Element	Profile
A.1.4.3/2.1.6	returned-content	m

#### A.2.6.2 Common data types

Ref	Element	Profile
A.1.5/4	PerMessageIndicators	
A.1.5/4.4	content-return-request	m

## A.2.7 Security (SEC)

The support requirements for all SEC security classes are as specified in A.1 unless otherwise specified below. There are no additional requirements for the confidential security class variants (SnC) above those for the primary security classes.

**A.2.7.10 Operation arguments/results****A.2.7.1.1 MTABind**

Ref	Element	Profile		
		S0	S1	S2
A.1.4.1/1.2.2	initiator-credentials	mr	mr	mr
A.1.4.1/1.2.2.1	simple		ix	ix
A.1.4.1/1.2.2.2	strong		mr	mr
A.1.4.1/1.2.2.2.1.4	signed-data		mr	mr
A.1.4.1/1.2.3	security-context		mr	mr
A.1.4.1/2.2.2	responder-credentials	mr	mr	mr
A.1.4.1/2.2.2.1	simple		ix	ix
A.1.4.1/2.2.2.2	strong		mr	mr
A.1.4.1/2.2.2.2.1.4	signed-data		mr	mr

**A.2.7.1.2 MessageTransfer**

Ref	Element	Profile		
		S0	S1	S2
A.1.4.2/1.1.11.8	message-origin-authentication-check			mr
A.1.4.2/1.1.11.9	message-security-label		mr	mr
A.1.4.2/1.2.5.10	message-token		mr	mr

**A.2.7.1.3 ReportTransfer**

Ref	Element	Profile		
		S0	S1	S2
A.1.4.3/1.4.1	message-security-label		mr	mr
A.1.4.3/1.4.5	report-origin-authentication-check			mr
A.1.4.3/2.2.7.4	proof-of-delivery	m	m	m

**A.2.7.1.4ProbeTransfer**

Ref	Element	Profile		
		S0	S1	S2
A.1.4.4/1.1.10.5	message-security-label		mr	mr
A.1.4.4/1.1.10.7	probe-origin-authentication-check			mr

**A.2.7.2Extension data types**

Ref	Element	Profile		
		S0	S1	S2
A.1.6/2	MessageOriginAuthenticationCheck			
A.1.6/2.4	message-security-label		mr	mr
A.1.6/3	MessageSecurityLabel			
A.1.6/3.1	security-policy-identifier		mr	mr
A.1.6/3.2	security-classification		m	m
A.1.6/3.4	security-categories		m	m
A.1.6/4	MessageToken			
A.1.6/4.2.4	signed-data	m	m	m
A.1.6/4.2.4.3	message-security-label	m	m	m
A.1.6/4.2.4.4	proof-of-delivery-request	m	m	m
A.1.6/4.2.5	encryption-algorithm-identifier		m	m
A.1.6/4.2.6	encrypted-data		m	m
A.1.6/4.2.6.3	message-security-label	m	m	m
A.1.6/6	ProbeOriginAuthenticationCheck			
A.1.6/6.3	message-security-label		mr	mr
A.1.6/7	ProofOfDelivery			

A.1.6/7.7	message-security-label		mr	mr
A.1.6/8	ReportOriginAuthenticationCheck			
A.1.6/8.3	message-security-label		mr	mr

## A.2.8 Use of Directory (DIR)

### A.2.8.10/R names

Ref	O/R Name Form	Profile
A.1.7/6	directory-name	m

## A.2.9 84 Interworking (84IW)

There are no additional requirements for support of protocol elements for support of the 84IW FG. However, MTAs shall meet the requirements specified in subclause 7.9 of ISO/IEC 10611-1.

### A.3 Additional information

#### A.3.1 Routing capability

The following table shall be completed to indicate (Y or ) which O/R address attributes the implementation can use for onward route determination (see subclause 8.3 of ISO/IEC ISP 10611-1). Any constraints on the use of an attribute for routing purposes (e.g. whether routing can be based on specific values of the attribute or only on the presence of such attribute, any limitation on the range of values, character repertoires, etc) shall be indicated in the Comments column.

Ref	O/R Address Attribute	Routeable	Comments
1	country-name	Y	
2	administration-domain-name	Y	
3	network-address extended-network-address	Y	
4	terminal-identifier	Y	
5	terminal-type	Y	
6	private-domain-name	Y	
7	organization-name teletex-organization-name	Y	
8	numeric-user-identifier	Y	
9	personal name teletex-personal-name	Y	
10	organizational-unit-names teletex-organizational-unit-names	Y	
11	common-name teletex-common-name	y	
12	built-in-domain-defined-attributes teletex-domain-defined-attributes	Y	
13	pds-name	Y	
14	physical-delivery-country-name	Y	
15	postal-code	Y	

Any other criteria that can be used to determine routing decisions should be indicated below.

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### A.3.2 Content types supported

The following table shall be completed to confirm (Y or ) that all possible content types, whether denoted by integer or by object identifier, are supported on transfer (see subclause 6.1 of ISO/IEC ISP 10611-1).

Ref	Content Type	Supported	Comments
1	(all)	Y	

### A.3.3 Encoded information type conversions supported

The following table shall be completed if support of the Conversion FG is claimed to indicate (Y or ) which encoded information type conversions the implementation can perform (see subclause 7.1 of ISO/IEC ISP 10611-1). The supplier shall also state in the Comments column for which content types support of the conversion capability is claimed and under what conditions loss of information is determined (if applicable).

Ref	Encoded Information Type Conversion	Supported	Comments
1	explicit-conversion	N	
1.1	ia5-text-to-teletex (0)		
1.2	ia5-text-to-g3-facsimile (8)		
1.3	ia5-text-to-g4-class-1 (9)		
1.4	ia5-text-to-videtex (10)		
1.5	teletex-to-ia5-text (11)		
1.6	teletex-to-g3-facsimile (12)		
1.7	teletex-to-g4-class-1 (13)		
1.8	teletex-to-videtex (14)		
1.9	videtex-to-ia5-text (16)		
1.10	videtex-to-teletex (17)		
2	implicit conversion (specify)	Y	ia5-text to teletex ia5-text to GeneralText Teletx to ia5-text teletex to GeneralText GeneralText to ia5-text GeneralText to teletex

### A.3.4 Implementation capabilities

The following table shall be completed to indicate (Y or ) other implementation capabilities supported.

Ref	Capability	Supported	Comments
1	deferred delivery	Y	
2	rerouteing	N	

### A.3.5 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)		Limited by hardware
2	limit on the number of recipients that may be specified in a message envelope (if any) (see note 2)	32767	Transfer limit is standard upper bound
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).