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SERIE X: REDES DE DATOS Y COMUNICACIÓN
ENTRE SISTEMAS ABIERTOS

Sistemas de tratamiento de mensajes

**Sistemas de tratamiento de mensajes –
Formulario de declaración de conformidad de
implementación de protocolo para el
protocolo P3**

Recomendación UIT-T X.483

(Anteriormente Recomendación del CCITT)

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RECOMENDACIÓN UIT-T X.483

SISTEMAS DE TRATAMIENTO DE MENSAJES – FORMULARIO DE DECLARACIÓN DE CONFORMIDAD DE IMPLEMENTACIÓN DE PROTOCOLO PARA EL PROTOCOLO P3

Resumen

Esta Recomendación proporciona el formulario de declaración de conformidad de implementación de protocolo (PICS, *protocol implementation conformance statement*) para el protocolo P3 de sistemas de tratamiento de mensajes (MHS, *message handling systems*), especificado en la Rec. UIT-T X.411 | ISO/CEI 10021-4 y Rec. UIT-T X.419 | ISO/CEI 10021-6. El formulario PICS presenta en forma tabular los elementos obligatorios y facultativos del protocolo P3.

Orígenes

La Recomendación UIT-T X.483, ha sido revisada por la Comisión de Estudio 7 (1997-2000) del UIT-T y fue aprobada por el procedimiento de la Resolución N.º 1 de la CMNT el 25 de septiembre de 1998.

Según la decisión de la Comisión de Estudio 7 (18 de junio de 1999) de publicar una nueva edición de las Recomendaciones relativas a los sistemas de tratamiento de mensajes, se decidió, de acuerdo con el Director de la TSB, publicar también las Recomendaciones X.481, X.482, X.483, X.484 y X.486 con fecha 1999.

PREFACIO

La UIT (Unión Internacional de Telecomunicaciones) es el organismo especializado de las Naciones Unidas en el campo de las telecomunicaciones. El UIT-T (Sector de Normalización de las Telecomunicaciones de la UIT) es un órgano permanente de la UIT. Este órgano estudia los aspectos técnicos, de explotación y tarifarios y publica Recomendaciones sobre los mismos, con miras a la normalización de las telecomunicaciones en el plano mundial.

La Conferencia Mundial de Normalización de las Telecomunicaciones (CMNT), que se celebra cada cuatro años, establece los temas que han de estudiar las Comisiones de Estudio del UIT-T, que a su vez producen Recomendaciones sobre dichos temas.

La aprobación de Recomendaciones por los Miembros del UIT-T es el objeto del procedimiento establecido en la Resolución N.º 1 de la CMNT.

En ciertos sectores de la tecnología de la información que corresponden a la esfera de competencia del UIT-T, se preparan las normas necesarias en colaboración con la ISO y la CEI.

NOTA

En esta Recomendación, la expresión *empresa de explotación reconocida (EER)* designa a toda persona, compañía, empresa u organización gubernamental que explote un servicio de correspondencia pública. Los términos *Administración, EER y correspondencia pública* están definidos en la *Constitución de la UIT (Ginebra, 1992)*.

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Introducción

La presente Recomendación forma parte de un conjunto de Recomendaciones que definen el tratamiento de mensajes en un entorno de sistemas abiertos distribuidos.

La finalidad del tratamiento de mensajes es el intercambio de mensajes entre usuarios con un sistema de almacenamiento y reenvío. Un mensaje presentado por un usuario (el originador) es transferido a través del sistema de transferencia de mensajes (MTS, *message transfer system*) y es entregado a uno o más usuarios (los recibientes). El MTS comprende varios agentes de transferencia de mensajes (MTA, *message transfer agent*), que transfieren los mensajes y los entregan a los recibientes.

Para evaluar las capacidades de una implementación particular, es necesario disponer de una declaración que indique las capacidades y opciones que han sido implementadas para un protocolo OSI determinado. Dicha declaración se denomina declaración de conformidad de implementación de protocolo (PICS).

SISTEMAS DE TRATAMIENTO DE MENSAJES – FORMULARIO DE DECLARACIÓN DE CONFORMIDAD DE IMPLEMENTACIÓN DE PROTOCOLO PARA EL PROTOCOLO P3¹

1 Alcance

Esta Recomendación proporciona el formulario de declaración de conformidad de implementación de protocolo (PICS) para el protocolo P3 especificado en la Rec. UIT-T X.411 | ISO/CEI 10021-4 y en la Rec. UIT-T X.419 | ISO/CEI 10021-6. El formulario de PICS presenta en forma tabular los elementos obligatorios y facultativos del protocolo P3.

Este formulario PICS se basa en las directrices pertinentes sobre formularios de PICS que figuran en la Rec. UIT-T X.296 | ISO/CEI 9646-7.

2 Referencias normativas

Las siguientes Recomendaciones del UIT-T y otras referencias contienen disposiciones que, mediante su referencia en este texto, constituyen disposiciones de la presente Recomendación. Al efectuar esta publicación, estaban en vigor las ediciones indicadas. Todas las Recomendaciones y otras referencias son objeto de revisiones por lo que se preconiza que los usuarios de esta Recomendación investiguen la posibilidad de aplicar las ediciones más recientes de las Recomendaciones y otras referencias citadas a continuación. Se publica periódicamente una lista de las Recomendaciones UIT-T actualmente vigentes.

2.1 Recomendaciones | Normas Internacionales idénticas

- Recomendación UIT-T X.402 (1999) | ISO/CEI 10021-2:1999, *Tecnología de la información – Sistemas de tratamiento de mensajes: Arquitectura global.*
- Recomendación UIT-T X.411 (1999) | ISO/CEI 10021-4:1999, *Tecnología de la información – Sistemas de tratamiento de mensajes – Sistema de transferencia de mensajes: Definición del servicio abstracto y procedimientos.*
- Recomendación UIT-T X.419 (1999) | ISO/CEI 10021-6:1999, *Tecnología de la información – Sistema de tratamiento de mensajes: Especificaciones de protocolo.*

2.2 Pares de Recomendaciones | Normas Internacionales de contenido técnico equivalente

- Recomendación UIT-T X.290 (1995), *Metodología y marco de las pruebas de conformidad de interconexión de sistemas abiertos de las Recomendaciones sobre los protocolos para aplicaciones del UIT-T – Conceptos generales.*

ISO/CEI 9646-1:1994, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 1: General concepts.*
- Recomendación UIT-T X.296 (1995), *Metodología y marco de las pruebas de conformidad de interconexión de sistemas abiertos de las Recomendaciones sobre los protocolos para aplicaciones del UIT-T – Declaraciones de conformidad de implementación.*

ISO/CEI 9646-7:1995, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 7: Implementation Conformance Statements.*

3 Definiciones

Los términos utilizados en esta Recomendación se definen en las Recomendaciones | Normas Internacionales referenciadas.

¹ El anexo A de la presente Recomendación coincide desde el punto de vista técnico con el anexo A de ISO/CEI ISP 10611-4, *Information technology – International Standardized Profiles AMH1n – Message Handling Systems – Common Messaging – Part 4: AMH12 and AMH14 – MTS Access (P3) and MTS 94 Access (P3).*

4 Abreviaturas

En esta Recomendación se utilizan las siguientes siglas:

ISP	Perfil normalizado internacional (<i>international standardized profile</i>)
MHS	Sistemas de tratamiento de mensajes (<i>message handling systems</i>)
MS	Memoria de mensajes (<i>message store</i>)
MTA	Agente de transferencia de mensajes (<i>message transfer agent</i>)
OSI	Interconexión de sistemas abiertos (<i>open systems interconnection</i>)
PDU	Unidad de datos de protocolo (<i>protocol data unit</i>)
PICS	Declaración de conformidad de implementación de protocolo (<i>protocol implementation conformance statement</i>)
UA	Agente de usuario (<i>user agent</i>)

5 Conformidad

Un formulario de PICS conforme será equivalente técnicamente al texto del formulario de PICS de esta Recomendación y observará la numeración y el orden de los elementos del formulario de PICS de esta Recomendación.

Un formulario de PICS conforme a esta Recomendación deberá:

- a) describir una implementación conforme a la Rec. UIT-T X.411 | ISO/CEI 10021-4 y a la Rec. UIT-T X.419 | ISO/CEI 10021-6;
- b) ser un formulario de PICS conforme, completado según las instrucciones que se dan en el anexo A;
- c) incluir la información necesaria para identificar de manera única tanto al proveedor como a la implementación.

Anexo A²

Formulario de declaración de conformidad de implementación de protocolo (PICS) para el protocolo P3 de acceso de sistema de transferencia de mensajes

(Este anexo es parte integrante de la presente Recomendación)

Contents of the PICS proforma

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Subclause A.1 specifies the basic requirements for conformance to this Recommendation. Subclause A.2 is allocated but not used, it is present to keep the numbering alignment with the corresponding ISP. Subclause A.3 allows additional information to be provided for certain aspects of an implementation where no specific requirements are included in the base specifications. All subclauses shall be completed as appropriate.

NOTE – The numbering of subclauses and items in this annex is identical to that in ISO/IEC ISP 10611-4, "Information technology – International Standardized Profiles AMH1n – Message Handling Systems – Common Messaging – Part 4: AMH12 and AMH14 – MTS Access (P3) and MTS 94 Access (P3)".

A.0 Instructions and identification

A.0.1 Instructions

A.0.1.1 Purpose of the proforma

The purpose of the PICS proforma is to provide suppliers of implementations of the P3 protocol with a consistent means of stating which proforma has been implemented.

² **Comunicado sobre derechos de autor del formulario de PICS**

Los usuarios de esta Recomendación pueden producir libremente el formulario de PICS de este anexo a fin de que pueda ser utilizado para los fines previstos, y pueden además publicar el PICS cumplimentado.

The proforma is in the form of a questionnaire and consists of a set of items. An item is provided for each capability for which no implementation choice is allowed. Items are also provided for mandatory capabilities for which no implementation choice is allowed. Each item includes an item number, an item description, a status value specifying the support requirement, and room for a support answer to be provided by the supplier.

A.0.1.2 Item numbering

Each line in the PICS proforma which requires implementation detail to be entered is given a number in the first column. The item number column provides a means of uniquely referencing each possible answer within the PICS proforma.

A.0.1.3 Base column

In each table, the "Base" column reflects the level of support required for conformance to the base standard.

The generic term "MTS-user" is used in the tables where the distinction between different types of MTS-user is not significant. Where a column is headed "UA", then an MS is only required to be able to pass through such elements transparently between a UA and the MTA.

The following classifications are used in this PICS to specify static conformance requirements – i.e. capability.

NOTE – The Profile column is used for functional profiles and uses the same classification.

In the case of 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.

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 for origination is not claimed, then the element is not generated and, in the case of non-support of a critical extension by an MTA implementation on delivery, shall cause a non-delivery notification to be returned. If support for reception is not claimed, and the element is an argument, then an implementation may ignore a non-critical extension on delivery but shall otherwise generate an appropriate error indication. If support for reception is not claimed, and the element is a result, then the element may be ignored. 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 Recommendation. If these conditions are met, the element shall be treated as if it were specified as mandatory support. If these conditions are not met, the element shall be treated as if it were specified as optional support (unless otherwise stated).

out of scope (i): The element is outside the scope of this Recommendation – i.e. it will not be the subject of a conformance test.

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

A.0.1.4 Support column

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 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.0.1.5 References column

The "References" 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).

A reference to a specific item is specified by the following sequence:

- a) if the reference is to an item in another document, then the reference starts with unambiguous identifier for that document;
- b) the number of the subclause enclosing the table, or the number of the table if they are numbered;
- c) a solidus character "/";
- d) the item number, to identify the row in which the answer appears.

A.0.2 Identification of PICS proforma corrigenda

The supplier of the PICS proforma shall identify any corrigenda that have been applied (i.e. Technical Corrigendum or equivalent) to the published proforma. Suppliers of the proforma should modify the proforma, or attach relevant additional pages in order to apply the corrigenda and then record the application of the corrigenda in the table below.

Corrigenda to ITU-T Recommendation X.483

Cor.:
Cor.:
Cor.:
Cor.:
Implementors' Guide version:

A.0.3 Identification of the implementation

A.0.3.1 Date of statement

Ref.	Question	Response
1	Date of statement (YYYY-MM-DD)	

A.0.3.2 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.0.3.3 Identification of supplier

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

A.0.3.4 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	MHS Implementors' Guide version implemented	

A.0.3.5 Type of implementation

Ref.	Implementation Type	Response
1	MTS-user (UA or MS)	
2	MTA	

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

A.0.3.6 Global statement of conformance

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

A.1 Basic requirements

A.1.1 Supported application contexts

Ref.	Application Context	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	mts-access-88	o		o ⁴			
2	mts-forced-access-88	o		o ⁴			
3	mts-reliable-access-88	o		o ⁵			
4	mts-forced-reliable-access-88	o		o ⁵			
5	mts-access-94	o		o ⁴			
6	mts-forced-access-94	o		o ⁴			
7	mts-reliable-access-94	o		o ⁵			
8	mts-forced-reliable-access-94	o		o ⁵			
4	If either of mts-access or mts-forced-access application contexts is supported, then both of them for that "year" shall be supported.						
5	If either of mts-reliable-access or mts-forced-reliable-access application contexts is supported, then all four contexts for that "year" shall be supported.						

A.1.2 Supported operations

A.1.2.1 Bind and Unbind

Ref.	Operation	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	MTSBind access	m		m			see A.1.3.1
2	MTSUnbind access	m		m			
3	MTSBind forced access	m		m			see A.1.3.1
4	MTSUnbind forced access	m		m			

A.1.2.2 Message Submission Service Element (MSSE)

Ref.	Operation	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	MessageSubmission	m		m			see A.1.3.2
2	ProbeSubmission	o		m			see A.1.3.3
3	CancelDeferredDelivery	o		m			see A.1.3.4
4	SubmissionControl	o		o			see A.1.3.5
NOTE – If the MTS-user is an MS, then the requirement is only to be able to pass through these operations (i.e. between the MTA and a local or remote UA) unaltered.							

A.1.2.3 Message Delivery Service Element (MDSE)

Ref.	Operation	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	MessageDelivery	m		m			see A.1.3.6
2	ReportDelivery	m		m			see A.1.3.7
3	DeliveryControl	o		m			see A.1.3.8

A.1.2.4 Message Administration Service Element (MASE)

Ref.	Operation	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	Register	o		o			see A.1.3.9
2	ChangeCredentials (MTA to UA)	o		o			see A.1.3.10
3	ChangeCredentials (UA to MTA)	o		o			see A.1.3.10

NOTE – For a UA or MTA, 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 MTSBind

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	initiator-name	m		m			
1.1.1	user-agent	c ³		c ³			see A.1.10.2
1.1.2	mTA	c ⁴		c ⁴			
1.1.3	message-store	c ⁵		c ³			see A.1.10.2
1.2	messages-waiting	o		o			
1.3	initiator-credentials	m		m			
1.3.1	simple	m		m			
1.3.1.1	octet-string	o		o			
1.3.1.2	ia5-string	o		o			
1.3.2	strong	o		o			
1.3.2.1	bind-token	m		m			see A.1.8/7
1.3.2.2	certificate	o		o			see A.1.8/8
1.3.2.3	certificate-selector	o		o			see A.1.8/10

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1.3.3	protected	c ⁸		c ⁸			
1.3.3.1	signature	m		m			
1.3.3.1.1	password	o		o			
1.3.3.1.2	time1	o		o			
1.3.3.1.3	time2	o		o			
1.3.3.1.4	random1	o		o			
1.3.3.1.5	random2	o		o			
1.3.3.2	time1	o		o			
1.3.3.3	time2	o		o			
1.3.3.4	random1	o		o			
1.3.3.5	random2	o		o			
1.4	security-context	o		o			see A.1.9/3
1.5	extensions	c ⁸		c ⁸			
2	RESULT						
2.1	responder-name	m		m			
2.1.1	user-agent	c ⁴		c ⁴			see A.1.10.2
2.1.2	mTA	c ³		c ³			
2.1.3	message-store	c ⁶		c ⁴			see A.1.10.2
2.2	messages-waiting	o		o			
2.3	responder-credentials	m		m			
2.3.1	simple	m		m			
2.3.1.1	octet-string	o		o			
2.3.1.2	ia5-string	o		o			
2.3.2	strong	o		o			
2.3.2.1	bind-token	m		m			
2.3.2.1.1	signature-algorithm-identifier	m		m			
2.3.2.1.2	name	m		m			
2.3.2.1.3	time	m		m			
2.3.2.1.4	signed-data	o		o			
2.3.2.1.5	encryption-algorithm-identifier	o		o			
2.3.2.1.6	encrypted-data	o		o			
2.3.2.2	certificate	o		o			see A.1.8/8
2.3.2.3	certificate-selector	o		o			see A.1.8/10
2.3.3	protected	c ⁸		c ⁸			
2.3.3.1	signature	m		m			
2.3.3.1.1	password	o		o			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.3.3.1.2	time1	o		o			
2.3.3.1.3	time2	o		o			
2.3.3.1.4	random1	o		o			
2.3.3.1.5	random2	o		o			
2.3.3.2	time1	o		o			
2.3.3.3	time2	o		o			
2.3.3.4	random1	o		o			
2.3.3.5	random2	o		o			
2.4	extensions	c ⁸		c ⁸			
3 if the MTS-user is the initiator then m else – 4 if the MTA is the initiator then m else – 5 if the MTS-user is a MS and is the initiator then m else – 6 if the MTS-user is a MS and the MTA is the initiator then m else – 8 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.3.2 MessageSubmission

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	envelope	m		m			see A.1.4
1.2	content	m		m			
2	RESULT						
2.1	message-submission-identifier	m		m			see A.1.8/1
2.2	message-submission-time	m		m			
2.3	content-identifier	o		m			
2.4	extensions	m		m			see A.1.9/1
2.4.1	originating-MTA-certificate	o		o			see A.1.8/8
2.4.2	proof-of-submission	o		o			see A.1.9/7
2.4.3	originating-MTA-certificate-selector	o		o			see A.1.8/10
2.4.4	extensions	c ³		c ³			
3 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.3.3 ProbeSubmission

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	envelope	m		m			see A.1.5
2	RESULT						
2.1	probe-submission-identifier	m		m			see A.1.8/1
2.2	probe-submission-time	m		m			
2.3	content-identifier	o		m			
2.4	PrivateExtensions	c ³		c ³			
3 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.3.4 CancelDeferredDelivery

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

A.1.3.5 SubmissionControl

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	controls	m		m			
1.1.1	restrict	m		o			
1.1.2	permissible-operations	m		o			
1.1.3	permissible-maximum-content-length	m		o			
1.1.4	permissible-lowest-priority	m		o			
1.1.5	permissible-security-context	o		o			see A.1.9/3
2	RESULT						

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.1	waiting	m		m			
2.1.1	waiting-operations	o		m			
2.1.2	waiting-messages	o		m			
2.1.3	waiting-content-types	o		m			
2.1.4	waiting-encoded-information-types	o		m			see A.1.8/3

A.1.3.6 MessageDelivery

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	(envelope)	m		m			see A.1.6
1.2	content	m		m			
2	RESULT						
2.1	recipient-certificate	o		o			see A.1.8/8
2.2	proof-of-delivery	o		o			see A.1.9/6
2.3	recipient-certificate-selector	o		o			see A.1.8/10
2.4	extensions	c ¹		c ¹			
1 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.3.7 ReportDelivery

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	(envelope)	m		m			see A.1.7
1.2	returned-content	o		o			
2	RESULT						
2.1	NULL	c ²		c ²			
2.2	extensions	c ³		c ³			
2 if any access-88 application context is supported (A.1.1 items 1, 2, 3 or 4) then m else o							
3 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.3.8 DeliveryControl

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	controls	m		m			
1.1.1	restrict	m		m			
1.1.2	permissible-operations	o		m			
1.1.3	permissible-maximum-content-length	o		m			
1.1.4	permissible-lowest-priority	o		m			
1.1.5	permissible-content-types	o		m			
1.1.6	permissible-encoded-information-types	o		m			if conformance to AMH12 is claimed see A.1.8/3
1.1.6.1	unacceptable-eits	c ¹		c ¹			
1.1.6.2	acceptable-eits	c ¹		c ¹			
1.1.6.3	exclusively-acceptable-eits	c ¹		c ¹			
1.1.7	permissible-security-context	o		o			see A.1.9/3
1.2	extensions	c ¹		c ¹			
2	RESULT						
2.1	waiting	m		m			
2.1.1	waiting-operations	m		o			
2.1.2	waiting-messages	m		o			
2.1.3	waiting-content-types	m		o			
2.1.4	waiting-encoded-information-types	m		o			see A.1.8/3
2.2	extensions	c ¹		c ¹			
1 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.3.9 AMH12 Register

This classification applies only to the AMH12 context. (The AMH14 register operation is specified in A.1.3.11)

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	user-name	o		o			see A.1.10.2
1.2	user-address	o		o			
1.3	deliverable-encoded-information-types	o		o			see A.1.8/3
1.4	deliverable-maximum-content-length	o		o			
1.5	default-delivery-controls	o		o			
1.5.1	restrict	o		o			
1.5.2	permissible-operations	o		o			
1.5.3	permissible-maximum-content-length	o		o			
1.5.4	permissible-lowest-priority	o		o			
1.5.5	permissible-content-types	o		o			
1.5.6	permissible-encoded-information-types	o		o			see A.1.8/3
1.6	deliverable-content-types	o		o			
1.7	labels-and-redirections	o		o			
1.7.1	user-security-label	o		o			see A.1.9/3
1.7.2	recipient-assigned-alternate-recipient	o		o			
2	RESULT						
2.1	NULL	m		m			

A.1.3.10 ChangeCredentials

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

A.1.3.11 AMH14 Register

This classification applies only to the AMH14 context. (The AMH12 register operation is specified in A.1.3.9)

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	user-name	o		o			see A.1.10.2
1.2	user-address	o		o			
1.3	deliverable-class	o		o			
1.3.1	content-types	o		o			
1.3.2	maximum-content-length	o		o			
1.3.3	acceptable-encoded-information-types-constraints	o		o			
1.3.3.1	unacceptable-eits	o		m			
1.3.3.2	acceptable-eits	o		m			
1.3.3.3	exclusively-acceptable-eits	o		m			
1.3.4	security-labels	o		o			
1.3.5	extensions	o		o			
1.4	default-delivery-controls	o		o			
1.4.1	permissible-operations	o		o			

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1.4.2	permissible-maximum-content-length	o		o			
1.4.3	permissible-lowest-priority	o		o			
1.4.4	permissible-content-types	o		o			
1.4.5	permissible-encoded-information-types	o		o			
1.4.5.1	unacceptable-eits	o		o			
1.4.5.2	acceptable-eits	o		o			
1.4.5.3	exclusively-acceptable-eits	o		o			
1.5	redirections	o		o			
1.5.1	redirections-classes	o		o			
1.5.1.1	content-types	o		o			
1.5.1.2	maximum-content-length	o		o			
1.5.1.3	acceptable-encoded-information-types-constraints	o		o			
1.5.1.3.1	unacceptable-eits	o		o			
1.5.1.3.2	acceptable-eits	o		o			
1.5.1.3.3	exclusively-acceptable-eits	o		o			
1.5.1.4	security-labels	o		o			see A.1.9/3
1.5.1.5	priority	o		o			
1.5.1.6	objects	o		o			
1.5.1.6.1	messages	o		o			
1.5.1.6.2	reports	o		o			
1.5.1.6.3	both	o		o			
1.5.1.7	applies-only-to	o		o			
1.5.1.8	extensions	o		o			
1.5.2	recipient-assigned-alternate-recipient	o		o			
1.6	redirected-delivery	o		o			see A.1.8/6
1.7	retrieve-registrations	o		o			
1.7.1	standard-parameters	o		o			
1.7.1.1	user-name	o		o			
1.7.1.2	user-address	o		o			
1.7.1.3	deliverable-class	o		o			
1.7.1.4	default-delivery-controls	o		o			
1.7.1.5	redirections	o		o			

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1.7.1.6	restricted-delivery	o		o			
1.7.2	extensions	o		o			
1.8	extensions	o		o			
2	RESULT						
2.1	empty-result	o		o			
2.2	non-empty-result	o		o			
2.2.1	registered information	o		o			
2.2.1.1	user-name	o		o			see A.1.10.2
2.2.1.2	user-address	o		o			
2.2.1.3	deliverable-class	o		o			
2.2.1.3.1	content-types	o		o			
2.2.1.3.2	maximum-content-length	o		o			
2.2.1.3.3	acceptable-encoded-information-types-constraints	o		o			
2.2.1.3.3.1	unacceptable-eits	o		o			
2.2.1.3.3.2	acceptable-eits	o		o			
2.2.1.3.3.3	exclusively-acceptable-eits	o		o			
2.2.1.3.4	security-labels	o		o			
2.2.1.3.5	extensions	o		o			
2.2.1.4	default-delivery-controls	o		o			
2.2.1.4.1	restrict	o		o			
2.2.1.4.2	permissible-operations	o		o			
2.2.1.4.3	permissible-maximum-content-length	o		o			
2.2.1.4.4	permissible-lowest-priority	o		o			
2.2.1.4.4	permissible-content-types	o		o			
2.2.1.4.6	permissible-encoded-information-types	o		o			
2.2.1.4.6.1	unacceptable-eits	o		o			
2.2.1.4.6.2	acceptable-eits	o		o			
2.2.1.4.6.3	exclusively-acceptable-eits	o		o			
2.2.1.5	redirections	o		o			
2.2.1.5.1	redirections-classes	o		o			
2.2.1.5.1.1	content-types	o		o			

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.2.1.5.1.2	maximum-content-length	o		o			
2.2.1.5.1.3	acceptable-encoded-information-types-constraints	o		o			
2.2.1.5.1.3.1	unacceptable-eits	o		o			
2.2.1.5.1.3.2	acceptable-eits	o		o			
2.2.1.5.1.3.3	exclusively-acceptable-eits	o		o			
2.2.1.5.1.4	security-labels	o		o			
2.2.1.5.1.5	priority	o		o			
2.2.1.5.1.6	objects	o		o			
2.2.1.5.1.6.1	messages	o		o			
2.2.1.5.1.6.2	reports	o		o			
2.2.1.5.1.6.3	both	o		o			
2.2.1.5.1.7	applies-only-to	o		o			
2.2.1.5.1.8	extensions	o		o			
2.2.1.5.2	recipient-assigned-alternate-recipient	o		o			
2.2.1.6	redirected-delivery	o		o			see A.1.8/6
2.2.1.7	extensions	o		o			
2.2.2	extensions	o		o			

A.1.4 MessageSubmissionEnvelope

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	originator-name	m		m			see A.1.10.2
2	original-encoded-information-types	m		m			see A.1.8/3
3	content-type	m		m			
4	content-identifier	o		m			
5	priority	m		m			
6	per-message-indicators	m		m			see A.1.8/5
7	deferred-delivery-time	o		m			
8	extensions	m		m			see A.1.9/1
8.1	recipient-reassignment-prohibited	o		o			
8.2	dl-expansion-prohibited	o		o			
8.3	conversion-with-loss-prohibited	o		o			
8.4	latest-delivery-time	o		o			

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
8.5	originator-return-address	o		o			see A.1.10.1
8.6	originator-certificate	o		o			see A.1.8/8
8.7	content-confidentiality-algorithm-identifier	o		o			
8.8	message-origin-authentication-check	o		o			see A.1.9/2
8.9	message-security-label	o		o			see A.1.9/3
8.10	proof-of-submission-request	o		o			
8.11	content-correlator	o		m			
8.12	certificate-selectors	o		o			see A.1.9/9
8.13	multiple-originator-certificates	o		o			see A.1.9/11
8.14	dl-exempted-recipients	o		o			see A.1.10.1
8.15	PrivateExtensions	c ²		c ²			
9	per-recipient-fields	m		m			
9.1	recipient-name	m		m			see A.1.10.1
9.2	originator-report-request	m		m			
9.3	explicit-conversion	o		o			
9.4	extensions	m		m			see A.1.9/1
9.4.1	originator-requested-alternate-recipient	o		o			see A.1.10.1
9.4.2	requested-delivery-method	o		o			
9.4.3	physical-forwarding-prohibited	o		o			
9.4.4	physical-forwarding-address-request	o		o			
9.4.5	physical-delivery-modes	o		o			
9.4.6	registered-mail-type	o		o			
9.4.7	recipient-number-for-advice	o		o			
9.4.8	physical-rendition-attributes	o		o			
9.4.9	physical-delivery-report-request	o		o			
9.4.10	message-token	o		o			see A.1.9/4
9.4.11	content-integrity-check	o		o			
9.4.12	proof-of-delivery-request	o		o			
9.4.13	certificate-selectors-override	o		o			see A.1.9/10
9.4.14	recipient-certificate	o		o			see A.1.8/8
9.4.15	IPMPerRecipientEnvelopeExtensions	o		o			
9.4.16	PrivateExtensions	c ²		c ²			
2 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.5 ProbeSubmissionEnvelope

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	originator-name	m		m			see A.1.10.2
2	original-encoded-information-types	m		m			see A.1.8/3
3	content-type	m		m			
4	content-identifier	o		m			
5	content-length	o		m			
6	per-message-indicators	m		m			see A.1.8/5
7	extensions	m		m			see A.1.9/1
7.1	recipient-reassignment-prohibited	o		o			
7.2	dl-expansion-prohibited	o		o			
7.3	conversion-with-loss-prohibited	o		o			
7.4	originator-certificate	o		o			see A.1.8/8
7.5	message-security-label	o		o			see A.1.9/3
7.6	content-correlator	o		m			
7.7	probe-origin-authentication-check	o		o			see A.1.9/5
7.8	certificate-selectors	o		o			see A.1.9/9
7.9	PrivateExtensions	c ²		c ²			
8	per-recipient-fields	m		m			
8.1	recipient-name	m		m			see A.1.10.1
8.2	originator-report-request	m		m			
8.3	explicit-conversion	o		o			
8.4	extensions	m		m			see A.1.9/1
8.4.1	originator-requested-alternate-recipient	o		o			see A.1.10.1
8.4.2	requested-delivery-method	o		o			
8.4.3	physical-rendition-attributes	o		o			
8.4.4	PrivateExtensions	c ²		c ²			
2 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –							

A.1.6 MessageDeliveryEnvelope

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	message-delivery-identifier	m		m			see A.1.8/1
2	message-delivery-time	m		m			
3	other-fields	m		m			
3.1	content-type	m		m			
3.2	originator-name	m		m			see A.1.10.1
3.3	original-encoded-information-types	m		m			see A.1.8/3
3.4	priority	m		m			
3.5	delivery-flags	m		m			
3.5.1	implicit-conversion-prohibited	m		m			
3.6	other-recipient-names	m		m			see A.1.10.1
3.7	this-recipient-name	m		m			see A.1.10.1
3.8	originally-intended-recipient-name	m		m			see A.1.10.1
3.9	converted-encoded-information-types	m		m			see A.1.8/3
3.10	message-submission-time	m		m			
3.11	content-identifier	o		m			
3.12	extensions	m		m			see A.1.9/1
3.12.1	conversion-with-loss-prohibited	o		o			
3.12.2	requested-delivery-method	o		o			
3.12.3	physical-forwarding-prohibited	o		o			
3.12.4	physical-forwarding-address-request	o		o			
3.12.5	physical-delivery-modes	o		o			
3.12.6	registered-mail-type	o		o			
3.12.7	recipient-number-for-advice	o		o			
3.12.8	physical-rendition-attributes	o		o			
3.12.9	originator-return-address	o		o			
3.12.10	physical-delivery-report-request	o		o			
3.12.11	originator-certificate	o		o			see A.1.8/8
3.12.12	message-token	o		o			see A.1.9/4
3.12.13	content-confidentiality-algorithm-identifier	o		o			
3.12.14	content-integrity-check	o		o			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
3.12.15	message-origin-authentication-check	o		o			see A.1.9/2
3.12.16	message-security-label	o		o			see A.1.9/3
3.12.17	proof-of-delivery-request	o		o			
3.12.18	redirection-history	o		m			
3.12.19	dl-expansion-history	o		m			
3.12.20	trace-information	c ¹		c ¹			
3.12.21	internal-trace-information	c ¹		c ¹			
3.12.22	certificate-selectors	o		o			see A.1.9/9
3.12.23	certificate-selectors-override	o		o			see A.1.9/10
3.12.24	multiple-originator-certificates	o		o			see A.1.9/11
3.12.25	recipient-certificate	o		o			see A.1.8/8
3.12.26	dl-exempted-recipients	o		o			see A.1.10.1
3.12.27	IPMPerRecipientEnvelopeExtensions	o		o			
3.12.28	PrivateExtensions	c ¹		c ¹			

1 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –

A.1.7 ReportDeliveryEnvelope

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	subject-submission-identifier	m		m			see A.1.8/1
2	content-identifier	o		m			
3	content-type	m		m			
4	original-encoded-information-types	m		m			see A.1.8/3
5	extensions	m		m			see A.1.9/1
5.1	message-security-label	o		o			see A.1.9/3
5.2	content-correlator	o		m			
5.3	redirection-history	c ²		c ³			
5.4	originator-and-DL-expansion-history	m		m			
5.5	reporting-DL-name	o		o			see A.1.10.1
5.6	reporting-MTA-certificate	o		o			see A.1.8/8
5.7	report-origin-authentication-check	o		o			see A.1.9/8
5.8	trace-information	c ²		c ²			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
5.9	internal-trace-information	c ²		c ²			
5.10	reporting-MTA-certificate-selector	o		o			see A.1.8/10
5.11	reporting-MTA-name	c ²		c ³			see A.1.9/12
5.12	PrivateExtensions	c ²		c ²			
6	per-recipient-fields	m		m			
6.1	actual-recipient-name	m		m			see A.1.10.1
6.2	delivery	m		m			
6.2.1	message-delivery-time	m		m			
6.2.2	type-of-MTS-user	m		m			
6.3	non-delivery	m		m			
6.3.1	non-delivery-reason-code	m		m			
6.3.2	non-delivery-diagnostic-code	o		m			
6.4	converted-encoded-information-types	m		m			see A.1.8/3
6.5	originally-intended-recipient-name	m		m			see A.1.10.1
6.6	supplementary-information	o		o			
6.7	extensions	m		m			see A.1.9/1
6.7.1	redirection-history	o		m			
6.7.2	physical-forwarding-address	o		o			
6.7.3	recipient-certificate	o		o			see A.1.8/8
6.7.4	proof-of-delivery	o		o			see A.1.9/6
6.7.5	recipient-certificate-selector	o		o			see A.1.8/10
6.7.6	PrivateExtensions	c ²		c ²			
<p>2 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then o else –</p> <p>3 if any access-94 application context is supported (A.1.1 items 5, 6, 7 or 8) then m else o</p>							

A.1.8 Common data types

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	MTSIdentifier						
1.1	global-domain-identifier	m		m			see A.1.8/2
1.2	local-identifier	m		m			
2	GlobalDomainIdentifier						

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.1	country-name	m		m			
2.2	administration-domain-name	m		m			
2.3	private-domain-identifier	m		m			
3	EncodedInformationTypes						
3.1	built-in-encoded-information-types	m		m			
3.2	(non-basic parameters)	o		o			
3.3	extended-encoded-information-types	m		m			
4	ContentType						
4.1	built-in	o		o			
4.2	extended	o		o			
5	PerMessageIndicators						
5.1	disclosure-of-other-recipients	o		m			
5.2	implicit-conversion-prohibited	m		m			
5.3	alternate-recipient-allowed	o		m			
5.4	content-return-request	o		o			
5.5	reserved	o		o			
5.6	bit-5	o		o			
5.7	bit-6	o		o			
5.8	service-message	o		o			
6	Restricted						
6.1	permitted	o		o			
6.2	source-type	o		o			
6.2.1	originated-by	o		o			
6.2.2	redirected-by	o		o			
6.2.3	dl-expanded-by	o		o			
6.3	source-name	o		o			
6.3.1	exact-match	o		o			
6.3.2	pattern-match	o		o			
7	BindToken	m		m			
7.1	signature-algorithm-identifier	m		m			
7.2	name	m		m			
7.3	time	m		m			
7.4	signed-data	m		m			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
7.5	encryption-algorithm-identifier	o		o			
7.6	encrypted-data	o		o			
8	Certificates						
8.1	userCertificate	m		m			see A.1.8/9
8.2	certificationPath	o		o			see A.1.8/9
9	Certificate						
9.1	version	o		o			
9.2	serialNumber	m		m			
9.3	signature	m		m			
9.4	issuer	m		m			
9.5	validity	m		m			
9.6	subject	m		m			
9.7	subjectPublicKeyInfo	m		m			
9.8	issuerUniqueIdentifier	o		o			
9.9	subjectUniqueIdentifier	o		o			
9.10	extensions	m		m			
9.10.1	authorityKeyIdentifier	o		o			
9.10.2	subjectKeyIdentifier	o		o			
9.10.3	keyUsage	o		o			
9.10.4	extKeyUsage	o		o			
9.10.5	privateKeyUsagePeriod	o		o			
9.10.6	certificatePolicies	o		o			
9.10.7	policyMappings	o		o			
9.10.8	subjectAltName	o		o			
9.10.8.1	otherName	o		o			
9.10.8.1.1	mta-name	o		o			
9.10.8.2	rfc822Name	-		-			
9.10.8.3	dNSName	-		-			
9.10.8.4	x400Address	o		o			
9.10.8.5	directoryName	o		o			
9.10.8.6	ediPartyName	-		-			
9.10.8.7	uniformResourceIdentifier	-		-			
9.10.8.8	iPAddress	-		-			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
9.10.8.9	registeredID	–		–			
9.10.9	issuerAltName	o		o			
9.10.10	subjectDirectoryAttributes	o		o			
9.10.11	basicConstraints	o		o			
9.10.12	nameConstraints	o		o			
9.10.13	policyConstraints	o		o			
9.10.14	cRLDistributionPoints	o		o			
10	CertificateAssertion						
10.1	serialNumber	o		o			
10.2	issuer	o		o			
10.3	subjectKeyIdentifier	o		o			
10.4	authorityKeyIdentifier	o		o			
10.5	certificateValid	o		o			
10.6	privateKeyValid	o		o			
10.7	subjectPublicKeyAlgID	o		o			
10.8	keyUsage	o		o			
10.9	subjectAltName	o		o			
10.10	policy	o		o			
10.11	pathToName	–		–			

A.1.9 Extension data types

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ExtensionField						
1.1	type	o		m			
1.1.1	standard-extension	m		m			
1.1.2	private-extension	o		o			see A.3.6
1.2	criticality	m		m			
1.3	value	m		m			
2	MessageOriginAuthenticationCheck						
2.1	algorithm-identifier	m		m			
2.2	content	m		m			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.3	content-identifier	o		o			
2.4	message-security-label	o		o			see A.1.9/3
3	SecurityLabel						also named message security label
3.1	security-policy-identifier	o		o			
3.2	security-classification	o		o			
3.3	privacy-mark	o		o			
3.4	security-categories	o		o			
4	MessageToken						
4.1	token-type-identifier	m		m			
4.2	asymmetric-token	m		m			
4.2.1	signature-algorithm-identifier	m		m			
4.2.2	name	m		m			
4.2.3	time	m		m			
4.2.4	signed-data	o		o			
4.2.4.1	content-confidentiality-algorithm-identifier	o		o			
4.2.4.2	content-integrity-check	o		o			
4.2.4.3	message-security-label	o		o			see A.1.9/3
4.2.4.4	proof-of-delivery-request	o		o			
4.2.4.5	message-sequence-number	o		o			
4.2.5	encryption-algorithm-identifier	o		o			
4.2.6	encrypted-data	o		o			
4.2.6.1	content-confidentiality-key	o		o			
4.2.6.2	content-integrity-check	o		o			
4.2.6.3	message-security-label	o		o			see A.1.9/3
4.2.6.4	content-integrity-key	o		o			
4.2.6.5	message-sequence-number	o		o			
5	ProbeOriginAuthenticationCheck						
5.1	algorithm-identifier	m		m			
5.2	content-identifier	o		o			
5.3	message-security-label	o		o			see A.1.9/3
6	ProofOfDelivery						
6.1	algorithm-identifier	m		m			
6.2	delivery-time	m		m			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
6.3	this-recipient-name	m		m			see A.1.10.1
6.4	originally-intended-recipient-name	o		o			see A.1.10.1
6.5	content	m		m			
6.6	content-identifier	o		o			
6.7	message-security-label	o		o			see A.1.9/3
7	ProofOfSubmission						
7.1	algorithm-identifier	m		m			
7.2	message-submission-envelope	m		m			
7.3	content	m		m			
7.4	message-submission-identifier	m		m			
7.5	message-submission-time	m		m			
8	ReportOriginAuthenticationCheck						
8.1	algorithm-identifier	m		m			
8.2	content-identifier	o		o			
8.3	message-security-label	o		o			see A.1.9/3
8.4	per-recipient	m		m			
8.4.1	actual-recipient-name	m		m			see A.1.10.1
8.4.2	originally-intended-recipient-name	o		o			see A.1.10.1
8.4.3	delivery	o		o			
8.4.3.1	message-delivery-time	m		m			
8.4.3.2	type-of-MTS-user	m		m			
8.4.3.3	recipient-certificate	o		o			see A.1.8/8
8.4.3.4	proof-of-delivery	o		o			see A.1.9/6
8.4.3.5	recipient-certificate-selector	o		o			see A.1.8/10
8.4.4	non-delivery	o		o			
8.4.4.1	non-delivery-reason-code	m		m			
8.4.4.2	non-delivery-diagnostic-code	o		o			
9	CertificateSelectors						
9.1	encryption-recipient	o		o			see A.1.8/10
9.2	encryption-originator	o		o			see A.1.8/10
9.3	content-integrity-check	o		o			see A.1.8/10
9.4	token-signature	o		o			see A.1.8/10

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
9.5	message-origin-authentication	o		o			see A.1.8/10
10	CertificateSelectorsOverride						
10.1	encryption-recipient	o		o			see A.1.8/10
10.2	encryption-originator	o		o			see A.1.8/10
10.3	content-integrity-check	o		o			see A.1.8/10
10.4	token-signature	o		o			see A.1.8/10
11	ExtendedCertificate						
11.1	directory-entry	o		o			
11.2	certificate	o		o			see A.1.8/8
12	ReportingMTAName						
12.1	domain	m		m			see A.1.8/2
12.2	mta-name	m		m			
12.3	mta-directory-name	o		o			

A.1.10 OR-names

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

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

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

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

NOTE – For the MTA the registration capabilities are stated in table A.3.4.

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	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m		m			
1.1	country-name	m		m			
1.2	administration-domain-name	m		m			
1.3	private-domain-name	o		o			
1.4	organization-name	o		o			
1.5	personal-name	o		o			
1.5.1	surname	m		m			
1.5.2	given-name	o		o			
1.5.3	initials	o		o			
1.5.4	generation-qualifier	o		o			
1.6	organizational-unit-names	o		o			
2	built-in-domain-defined-attributes	o		o			
3	extension-attributes	o		o			
3.1	common-name	o		o			
3.2	teletex-common-name	o		o			
3.3	universal-common-name	o		o			see A.1.10.8
3.4	teletex-organization-name	o		o			
3.5	universal-organization-name	o		o			see A.1.10.8
3.6	teletex-personal-name	o		o			
3.6.1	surname	m		m			
3.6.2	given-name	o		o			
3.6.3	initials	o		o			
3.6.4	generation-qualifier	o		o			
3.7	universal-personal-name	o		o			
3.7.1	surname	m		m			see A.1.10.8
3.7.2	given-name	o		o			see A.1.10.8
3.7.3	initials	o		o			see A.1.10.8
3.7.4	generation-qualifier	o		o			see A.1.10.8
3.8	teletex-organizational-unit-names	o		o			
3.9	universal-organizational-unit-names	o		o			see A.1.10.8
3.10	teletex-domain-defined-attributes	o		o			
3.11	universal-domain-defined-attributes	o		o			see A.1.10.8

A.1.10.4 Numeric OR-address

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m		m			
1.1	country-name	m		m			
1.2	administration-domain-name	m		m			
1.3	private-domain-name	o		o			
1.4	numeric-user-identifier	m		m			
2	built-in-domain-defined-attributes	o		o			
3	extension-attributes	o		o			
3.1	teletex-domain-defined-attributes	o		o			
3.2	universal-domain-defined-attributes	o		o			see A.1.10.8

A.1.10.5 Terminal OR-address

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m		m			
1.1	country-name	o		o			
1.2	administration-domain-name	o		o			
1.3	network-address	m		m			
1.4	terminal-identifier	o		o			
1.5	private-domain-name	o		o			
1.6	organization-name	o		o			
1.7	personal-name	o		o			
1.8	organizational-unit-names	o		o			
2	built-in-domain-defined-attributes	o		o			
3	extension-attributes	o		o			
3.1	extended-network-address	m		m			
3.1.1	e163-4-address	c ¹		o			
3.1.2	psap-address	c ¹		o			
3.2	terminal-type	o		o			
3.3	common-name	o		o			
3.4	teletex-common-name	o		o			
3.5	universal-common-name	o		o			see A.1.10.8

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
3.6	teletex-organization-name	o		o			
3.7	universal-organization-name	o		o			see A.1.10.8
3.8	teletex-personal-name	o		o			
3.9	universal-personal-name	o		o			see A.1.10.8
3.10	teletex-organizational-unit-names	o		o			
3.11	universal-organizational-unit-names	o		o			see A.1.10.8
3.12	unformatted-postal-address	o		o			
3.13	universal-unformatted-postal-address	o		o			see A.1.10.8
3.14	teletex-domain-defined-attributes	o		m			
3.15	universal-domain-defined-attributes	o		m			see A.1.10.8
1 At least one of the elements 'e163-4-address' and 'psap-address' shall be supported.							

A.1.10.6 Formatted postal OR-address

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	built-in-standard-attributes	m		m			
1.1	country-name	m		m			
1.2	administration-domain-name	m		m			
1.3	private-domain-name	o		o			
2	extension-attributes	m		m			
2.1	physical-delivery-country-name	m		m			
2.2	physical-delivery-office-name	o		o			
2.3	universal-physical-delivery-office-name	o		o			see A.1.10.8
2.4	physical-delivery-office-number	o		o			
2.5	universal-physical-delivery-office-number	o		o			see A.1.10.8
2.6	physical-delivery-organization-name	o		o			
2.7	universal-physical-delivery-organization-name	o		o			see A.1.10.8
2.8	physical-delivery-personal-name	o		o			
2.9	universal-physical-delivery-personal-name	o		o			see A.1.10.8
2.10	postal-code	m		m			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.11	poste-restante-address	o		o			
2.12	universal-poste-restante-address	o		o			see A.1.10.8
2.13	post-office-box-address	o		o			
2.14	universal-post-office-box-address	o		o			see A.1.10.8
2.15	pds-name	o		o			
2.16	street-address	o		o			
2.17	universal-street-address	o		o			see A.1.10.8
2.18	unique-postal-name	o		o			
2.19	universal-unique-postal-name	o		o			see A.1.10.8
2.20	extension-OR-address-components	o		o			
2.21	universal-extension-OR-address-components	o		o			see A.1.10.8
2.22	extension-physical-delivery-address-components	o		o			
2.23	universal-extension-physical-delivery-address-components	o		o			see A.1.10.8
2.24	local-postal-attributes	o		o			
2.25	universal-local-postal-attributes	o		o			see A.1.10.8

A.1.10.7 Unformatted postal OR-address

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

A.1.10.8 UniversalOrBMPString

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

A.2 Optional functional groups

Not applicable for the base standard PICS.

NOTE – The numbering of subclauses and items in this annex is identical to that in ISO/IEC 10611-4.

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 delivery. Any differences between support on submission and support on delivery shall be indicated in the Comments column. In the case of an MTA with a PDAU, any further constraints for the PDAU shall be indicated in the Comments column.

Ref.	Content Type	Supported	Comments
1	built-in		
1.1	unidentified (0)		
1.2	interpersonal-messaging-1984 (2)		
1.3	interpersonal-messaging-1988 (22)		
1.4	(EDI messaging) (35)		
2	extended (specify)		

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 delivery. Any differences between support on submission and support on delivery shall be indicated in the Comments column.

Ref.	Encoded Information Type	Supported	Comments
1	built-in		
1.1	unknown (0)		
1.2	ia5-text (2)		
1.3	g3-facsimile (3)		
1.4	g4-class-1 (4)		
1.5	teletex (5)		
1.6	videotex (6)		
1.7	voice (7)		
1.8	mixed-mode (9)		
1.9	other (specify)		
2	extended (specify)		

A.3.3 Encoded information type conversions supported

If conversion is supported, the following table shall be completed for an MTA to indicate (Y or ✓) which encoded information type conversions the implementation can perform. 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		
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-videotex (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-videotex (14)		
1.9	videotex-to-ia5-text (16)		
1.10	videotex-to-teletex (17)		
2	implicit conversion (specify)		

A.3.4 Delivery capability

The following table shall be completed for an MTA to indicate (Y or ✓) which OR-address attributes may be used for registration of local MTS-users and thus to determine delivery. Any constraints on the use of an attribute for delivery purposes (e.g. any limitation on the range of values, character repertoires, etc) shall be indicated in the Comments column.

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

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

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)		
2	limit on the number of recipients that may be specified in a message envelope (if any) (see Note 2)		
3	other (specify)		

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

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

Anexo B

Enmiendas y corrigenda

(Este anexo es parte integrante de la presente Recomendación)

Las Recomendaciones y Normas Internacionales están sujetas a examen y revisión constantes por parte de la UIT-T y de la ISO/CEI. Las siguientes enmiendas y corrigenda han sido aprobadas por el UIT-T y la ISO/CEI y se consideran referencias normativas en esta Recomendación.

Ninguno.

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