UNIÓN INTERNACIONAL DE TELECOMUNICACIONES

UIT-T X.483
(10/96)
SECTOR DE NORMALIZACIÓN
DE LAS TELECOMUNICACIONES
DE LA UIT

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»)

Reemplazada por una versión más reciente

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PREFACIO

El UIT-T (Sector de Normalización de las Telecomunicaciones) es un órgano permanente de la Unión Internacional de Telecomunicaciones (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.° 1 de la CMNT (Helsinki, 1 al 12 de marzo de 1993).

La Recomendación UIT-T X.483 ha sido revisada por la Comisión de Estudio 7 (1993-1996) del UIT-T y fue aprobada por el procedimiento de la Resolución N.° 1 de la CMNT el 5 de octubre de 1996.

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NOTA

En esta Recomendación, la expresión «Administración» se utiliza para designar, en forma abreviada, tanto una administración de telecomunicaciones como una empresa de explotación reconocida de telecomunicaciones.

Reemplazada por una versión más reciente

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RESUMEN

Esta Recomendación proporciona el formulario de declaración de conformidad de implementación de protocolo (PICS, *protocol implementation conformance statement*) para el protocolo P3 especificado en las Recomendaciones X.411 y X.419 y en ISO/CEI 10021 Partes 4 y 6. El formulario PICS presenta en forma tabular los elementos obligatorios y facultativos del protocolo P3.

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) y es entregado a uno o más usuarios (los destinatarios). El MTS comprende varios agentes de transferencia de mensajes (MTA), que transfieren los mensajes y los entregan a los destinatarios.

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).

Recomendación X.483

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

(Ginebra, 1992; revisada en 1996)

1   Alcance

Esta Recomendación proporciona el formulario de declaración de conformidad de implementación de protocolo (PICS) para el protocolo P3 especificado en las Recomendaciones X.411 (1988) y X.419 (1988) y en ISO/CEI 10021:1990 Partes 4 y 6. El formulario PICS presenta en forma tabular los elementos obligatorios y facultativos del protocolo P3.

Este formulario PICS se basa en las directrices pertinentes sobre formularios PICS que figuran en la Recomendación X.296. En el Anexo A se proporcionan detalles acerca de la utilización de este formulario.

2   Referencias normativas

Las siguientes Recomendaciones 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. Todos 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.

Las enmiendas y los corrigenda a las normas de base referenciadas figuran en el Anexo B.

NOTA – Se considerará que las referencias hechas en el cuerpo de esta Recomendación a cláusulas específicas de Recomendaciones del UIT-T se aplican también a las cláusulas correspondientes de las normas equivalentes de la ISO/CEI (como se indica a continuación), a menos que se especifique lo contrario.

–   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*. (Véase también ISO/CEI 9646-1.)

–   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*. (Véase también ISO/CEI 9646-7.)

–   Recomendación X.402 del CCITT (1992), *Sistemas de tratamiento de mensajes: Arquitectura global*. (Véase también ISO/CEI 10021-2.)

–   Recomendación X.411 del CCITT (1992), *Sistemas de tratamiento de mensajes: Sistema de transferencia de mensajes: Definición del servicio abstracto y procedimientos*. (Véase también ISO/CEI 10021-4.)

–   Recomendación X.419 del CCITT (1992), *Sistemas de tratamiento de mensajes: Especificaciones de protocolo*. (Véase también ISO/CEI 10021-6.)

–   ISO/CEI 9646-1:1994, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 1: General concepts*.

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

– ISO/CEI 10021-2:1990, *Information technology – Text Communication – Message-Oriented Text Interchange Systems (MOTIS) – Part 2: Overall Architecture*.

– ISO/CEI 10021-4:1990, *Information technology – Text Communication – Message-Oriented Text Interchange Systems (MOTIS) – Part 4: Message Transfer System: Abstract Service Definition and Procedures*.

– ISO/CEI 10021-6:1990, *Information technology – Text Communication – Message-Oriented Text Interchange Systems (MOTIS) – Part 6: Protocol Specifications*.

3 Definiciones

Los términos utilizados en esta Recomendación se definen en las normas de base referenciadas.

4 Abreviaturas

A los efectos de esta Recomendación, se utilizan las siguientes abreviaturas.

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

Nivel de soporte para elementos y características de protocolo:

m	soporte total obligatorio
m-	soporte mínimo obligatorio
o	soporte facultativo
c	soporte condicional
i	fuera del ámbito
–	no se aplica

5 Conformidad

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

Un PICS conforme a esta Recomendación deberá:

a) describir una implementación conforme a las Recomendaciones X.411 y X.419 y a la Norma ISO/CEI 10021, Partes 4 y 6;

b) ser un formulario 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.

NOTA – Los requisitos de conformidad de la ISO/CEI y el UIT-T difieren actualmente con relación al soporte de contextos de aplicación P3, tal como se describe en A.1.2.

Anexo A[1]

**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 esta Recomendación)

In the event of a discrepancy becoming apparent between the body of this Recommendation and the tables in this annex, this annex is to take precedence.

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 the one in ISO/IEC 10611-4 "Information technology – International Standardized Profiles AMH1N – Message Handling Systems – Common Messaging – Part 4: AMH12-MTS Access (P3)"

In each table, the "Base" column reflects the level of support required for conformance to the base standard, using the classification and notation defined in A.0.2.5.

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).

Contents of the PICS proforma

A.0   Identification of the implementation

A.0.1   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.

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[1] **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.

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Corrigenda to ITU-T Recommendation X.483 (1996)

Corr:
Corr:
Corr:
Corr:
Implementors' Guide version:

A.0.2   Instructions

A.0.2.1   Purpose of the proforma

The purpose of the PICS proforma is to provide suppliers of implementations of the P2 protocol with a consistent means of stating which proforma has been implemented.

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.0.2.2   Symbols, terms and abbreviations

The following definitions apply.

A.0.2.3   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 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.0.2.4   Base column

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

> NOTE 1 – 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 full 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 minimal support (**m-**): The element shall be supported. However, an implementation is only required to be able to copy the syntax of the element to the corresponding element of a message, probe or report for onward transfer or delivery, as appropriate, according to the procedures as specified in the MHS base standards, unless further qualified for the output envelope in question in ISO/IEC ISP 10611 (i.e. the classification of the output envelope takes precedence). An implementation is not required to be able to take any explicit action based on the semantics of such an element other than to treat the element as supported for criticality purposes. An implementation is not required to be able to originate such an element.

NOTE 2 – The m- classification is not used in this Recommendation. It is included to meet the requirements for functional standardisation.

NOTE 3 – The m- classification is designed to distinguish those cases where the MHS base standards define more than one level of functionality and the minimum required level of support in ISO/IEC ISP 10611 is the minimum functionality defined in the base standards. Where the only functionality defined in the base standards is copying the element as described above, then the m classification is used in preference to m-.

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.0.2.5 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 profile support classification).

Y- the element or feature is minimally supported (i.e. satisfying the requirements of the m- profile support classification).

N the element or feature is not supported, further qualified to indicate the action taken on receipt of such an element as follows:

ND – the element is discarded/ignored;
NR – the PDU is rejected (with an appropriate error indication where applicable).

– or blank the element or feature is not applicable (i.e. a major feature or composite protocol element which includes this element or feature is not supported or is minimally supported).

A.0.3 Identification of the implementation

A.0.3.1 Date of statement

Ref.	Question	Response
1	Date of statement (DD/MM/YY)	

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	Comments
1	Are all mandatory base standards requirements implemented?		

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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	m		m			
2	mts-forced-access	m		m			
3	mts-reliable-access	o		o			
4	mts-forced-reliable-access	o		o			

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			A.1.3.1
2	MTSUnbind access	m		m			
3	MTSBind forced access	m		m			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			A.1.3.2
2	ProbeSubmission	o		m			A.1.3.3
3	CancelDeferredDelivery	o		m			A.1.3.4
4	SubmissionControl	m		o			A.1.3.5

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			A.1.3.6
2	ReportDelivery	m		m			A.1.3.7
3	DeliveryControl	o		m			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			A.1.3.9
2	ChangeCredentials (MTA to UA)	o		o			A.1.3.10
3	ChangeCredentials (UA to MTA)	o		o			A.1.3.10

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	m	m		
1.1.1	mTS-user	c3	c3	o3	c3		Table A.1.10.b
1.1.2	mTA	c4	c4	o4	c4		Table A.1.10.b
1.1.3	message-store	c5	c5	o3	c3		Table A.1.10.b
1.2	messages-waiting	m	m	m	m		
2.1.1	mTS-user	c4	c4	c4	c4		Table A.1.10.b
2.1.2	mTA	c3	c3	c3	c3		Table A.1.10.b
2.1.3	message-store	c6	c6	c4	c4		Table A.1.10.b
1.3	initiator-credentials	m		m			
1.3.1	simple	m		m			
1.3.1.1	OCTET STRING	o		o			
1.3.1.2	IA5String	o		o			
1.3.2	strong	o		o			
1.3.2.1	bind-token	m		m			
1.3.2.1.1	signature-algorithm-identifier	m		m			
1.3.2.1.2	name	m		m			

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Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1.3.2.1.3	time	m		m			
1.3.2.1.4	signed-data	o		o			
1.3.2.1.5	encryption-algorithm-identifier	o		o			
1.3.2.1.6	encrypted-data	o		o			
1.3.2.2	certificate	o		o			
1.4	security-context	o		o			A.1.9/3
2	RESULT						
2.1	responder-name	m		m			
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	IA5String	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			
c3	if the MTS-user is the initiator then m else –						
c4	if the MTA is the initiator then m else –						
c5	if the MTS-user is an MS and is the initiator then m else –						
c6	if the MTS-user is an MS and the MTA is the initiator then m else –						

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A.1.3.2   MessageSubmission

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	envelope	m		m			A.1.4
1.2	content	m		m			
2	RESULT						
2.1	message-submission-identifier	m		m			A.1.8/1
2.2	message-submission-time	m		m			
2.3	content-identifier	o		m			
2.4	extensions	m		m			A.1.9/1
2.4.1	originating-MTA-certificate	o		o			
2.4.2	proof-of-submission	o		o			A.1.9/7

A.1.3.3   ProbeSubmission

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	envelope	m		m			A.1.5
2	RESULT						
2.1	probe-submission-identifier	m		m			A.1.8/1
2.2	probe-submission-time	m		m			
2.3	content-identifier	o		m			

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			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			A.1.9/3
2	RESULT						
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			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			A.1.6
1.2	content	m		m			
2	RESULT						
2.1	recipient-certificate	o		o			
2.2	proof-of-delivery	o		o			A.1.9/6

Reemplazada por una versión más reciente

A.1.3.7   ReportDelivery

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	(envelope)	m		m			A.1.7
1.2	returned-content	o		o			
2	RESULT						
2.1	NULL	m		m			

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			A.1.8/3
1.1.7	permissible-security-context	o		o			A.1.9/3
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			A.1.8/3

A.1.3.9   Register

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	ARGUMENT						
1.1	user-name	o		o			Table A.1.10.a
1.2	user-address	o		o			
1.3	deliverable-encoded-information-types	o		o			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			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			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	IA5String	o		o			

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1.1.2	strong	o		o			
1.1.2.1	bind-token	m		m			A.1.3.1
1.1.2.2	certificate	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	IA5String	o		o			
1.2.2	strong	o		o			
1.2.2.1	bind-token	m		m			A.1.3.1
1.2.2.2	certificate	o		o			
2	RESULT						
2.1	NULL	m		m			

A.1.4   MessageSubmissionEnvelope

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	originator-name	m		m			Table A.1.10.b
2	original-encoded-information-types	m		m			A.1.8/3
3	content-type	m		m			
4	content-identifier	o		m			
5	priority	m		m			
6	per-message-indicators	m		m			A.1.8/5
7	deferred-delivery-time	o		m			
8	extensions	m		m			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			Table A.1.10.a
8.6	originator-certificate	o		o			
8.7	content-confidentiality-algorithm-identifier	o		o			
8.8	message-origin-authentication-check	o		o			A.1.9/2
8.9	message-security-label	o		o			A.1.9/3
8.10	proof-of-submission-request	o		o			
8.11	content-correlator	o		m			
9	per-recipient-fields	m		m			
9.1	recipient-name	m		m			Table A.1.10.a
9.2	originator-report-request	m		m			
9.3	explicit-conversion	o		o			
9.4	extensions	m		m			A.1.9/1
9.4.1	originator-requested-alternate-recipient	o		o			Table A.1.10.a
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			A.1.9/4
9.4.11	content-integrity-check	o		o			
9.4.12	proof-of-delivery-request	o		o			

Reemplazada por una versión más reciente

A.1.5   ProbeSubmissionEnvelope

Ref.	Element	UA		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	originator-name	m		m			Table A.1.10.b
2	original-encoded-information-types	m		m			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			A.1.8/5
7	extensions	m		m			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			
7.5	message-security-label	o		o			A.1.9/3
7.6	content-correlator	o		m			
7.7	probe-origin-authentication-check	o		o			A.1.9/5
8	per-recipient-fields	m		m			
8.1	recipient-name	m		m			Table A.1.10.a
8.2	originator-report-request	m		m			
8.3	explicit-conversion	o		o			
8.4	extensions	m		m			A.1.9/1
8.4.1	originator-requested-alternate-recipient	o		o			Table A.1.10.a
8.4.2	requested-delivery-method	o		o			
8.4.3	physical-rendition-attributes	o		o			

A.1.6   MessageDeliveryEnvelope

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	message-delivery-identifier	m		m			A.1.8/1
2	message-delivery-time	m		m			
3	other-fields	m		m			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
3.1	content-type	m		m			
3.2	originator-name	m		m			Table A.1.10.a
3.3	original-encoded-information-types	m		m			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			Table A.1.10.b
3.7	this-recipient-name	m		m			Table A.1.10.a
3.8	originally-intended-recipient-name	m		m			Table A.1.10.a
3.9	converted-encoded-information-types	m		m			A.1.8/3
3.10	message-submission-time	m		m			
3.11	content-identifier	o		m			
3.12	extensions	m		m			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			
3.12.12	message-token	o		o			A.1.9/4
3.12.13	content-confidentiality-algorithm-identifier	o		o			
3.12.14	content-integrity-check	o		o			
3.12.15	message-origin-authentication-check	o		o			A.1.9/2
3.12.16	message-security-label	o		o			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			

A.1.7   ReportDeliveryEnvelope

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	subject-submission-identifier	m		m			A.1.8/1
2	content-identifier	o		m			
3	content-type	m		m			
4	original-encoded-information-types	m		m			A.1.8/3
5	extensions	m		m			A.1.9/1
5.1	message-security-label	o		o			A.1.9/3
5.2	content-correlator	o		m			
5.3	originator-and-DL-expansion-history	m		m			
5.4	reporting-DL-name	o		o			Table A.1.10.a
5.5	reporting-MTA-certificate	o		o			
5.6	report-origin-authentication-check	o		o			A.1.9/8
6	per-recipient-fields	m		m			
6.1	actual-recipient-name	m		m			Table A.1.10.a
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			A.1.8/3
6.5	originally-intended-recipient-name	m		m			Table A.1.10.a
6.6	supplementary-information	o		o			
6.7	extensions	m		m			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			
6.7.4	proof-of-delivery	o		o			A.1.9/6

Reemplazada por una versión más reciente

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			A.1.8/2
1.2	local-identifier	m		m			
2	GlobalDomainIdentifier						
2.1	country-name	m		m			
2.2	administration-domain-name	m		m			
2.3	private-domain-identifier	o		o			
3	EncodedInformationTypes						
3.1	built-in-encoded-information-types	m		m			
3.2	(non-basic parameters)	o		o			
3.3	extended-encoded-information-types	o		o			
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			

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			not in CCITT Rec. X.411
1.2	criticality	m		m			
1.3	value	m		m			
2	MessageOriginAuthentication Check						
2.1	algorithm-identifier	m		m			
2.2	content	m		m			
2.3	content-identifier	o		o			
2.4	message-security-label	o		o			A.1.9/3
3	MessageSecurityLabel						
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			A.1.9/3
4.2.4.4	proof-of-delivery-request	o		o			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
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			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			A.1.9/3
6	ProofOfDelivery						
6.1	algorithm-identifier	m		m			
6.2	delivery-time	m		m			
6.3	this-recipient-name	m		m			Table A.1.10.a
6.4	originally-intended-recipient-name	o		o			Table A.1.10.a
6.5	content	m		m			
6.6	content-identifier	o		o			
6.7	message-security-label	o		o			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			

Reemplazada por una versión más reciente

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
8	ReportOriginAuthentication Check						
8.1	algorithm-identifier	m		m			
8.2	content-identifier	o		o			
8.3	message-security-label	o		o			A.1.9/3
8.4	per-recipient	m		m			
8.4.1	actual-recipient-name	m		m			Table A.1.10.a
8.4.2	originally-intended-recipient-name	o		o			Table A.1.10.a
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			
8.4.3.4	proof-of-delivery	o		o			A.1.9/6
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			

A.1.10   O/R names

TABLE A.1.10.a

O/R name forms for identification of remote MTS-user

Ref.	O/R Name Form	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
1	mnemonic O/R address	m		m			A.1.10.1
2	numeric O/R address	o		m			A.1.10.2
3	terminal O/R address	o		m			A.1.10.3
4	formatted postal O/R address	o		o			A.1.10.4
5	unformatted postal O/R address	o		o			A.1.10.5
6	directory-name	o		o			

Reemplazada por una versión más reciente

TABLE A.1.10.b

O/R name forms for binding to the MTS-user

Ref.	O/R Name Form	MTS-user			Support	Notes/References
		Base	Profile			
1	mnemonic O/R address	o	m			A.1.10.1
2	numeric O/R address	o	o			A.1.10.2
3	terminal O/R address	o	o			A.1.10.3
4	formatted postal O/R address	–	–			
5	unformatted postal O/R address	–	–			
6	directory-name	o	o			
NOTE 1 – For the MTA, the registration capabilities are stated in the table in A.3.4. The following tables shall be completed according to the O/R address forms for which support is claimed above. NOTE 2 – Classification of an attribute as m for an MTA indicates *only* that its presence is required for the O/R address form.						

A.1.10.1 Mnemonic O/R 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	teletex-organization-name	o		o			
3.4	teletex-personal-name	o		o			

Reemplazada por una versión más reciente

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
3.4.1	surname	m		m			
3.4.2	given-name	o		o			
3.4.3	initials	o		o			
3.4.4	generation-qualifier	o		o			
3.5	teletex-organizational-unit-names	o		o			
3.6	teletex-domain-defined-attributes	o		o			

A.1.10.2 Numeric O/R 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			

A.1.10.3 Terminal O/R 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			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
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	o		o			
3.1.2	psap-address	o		o			
3.2	terminal-type	o		o			
3.3	common-name	o		o			
3.4	teletex-common-name	o		o			
3.5	teletex-organization-name	o		o			
3.6	teletex-personal-name	o		o			
3.7	teletex-organizational-unit-names	o		o			
3.8	unformatted-postal-address	o		o			
3.9	teletex-domain-defined-attributes	o		m			

A.1.10.4 Formatted postal O/R 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	physical-delivery-office-number	o		o			

Ref.	Element	MTS-user		MTA		Support	Notes/References
		Base	Profile	Base	Profile		
2.4	physical-delivery-organization-name	o		o			
2.5	physical-delivery-personal-name	o		o			
2.6	postal-code	m		m			
2.7	poste-restante-address	o		o			
2.8	post-office-box-address	o		o			
2.9	pds-name	o		o			
2.10	street-address	o		o			
2.11	unique-postal-name	o		o			
2.12	extension-OR-address-components	o		o			
2.13	extension-physical-delivery-address-components	o		o			
2.14	local-postal-attributes	o		o			

A.1.10.5 Unformatted postal O/R 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	physical-delivery-country-name	m		m			
2.3	postal-code	m		m			
2.4	pds-name	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 the one 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	undefined (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)		

Reemplazada por una versión más reciente

A.3.3 Encoded information type conversions supported

The following table shall be completed for an MTA if support of conversion is claimed 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 O/R 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.	O/R 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		
8	numeric-user-identifier		

Ref.	O/R Address Attribute	Deliverable	Comments
9	personal name teletex-personal-name		
10	organizational-unit-names teletex-organizational-unit-names		
11	common-name teletex-common-name		
12	built-in-domain-defined-attributes teletex-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) (Note 1)		
2	limit on the number of recipients that may be specified in a message envelope (if any) (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 the number of users for delivery at a single MTA).			

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Anexo B

Enmiendas y corrigenda

(Este anexo es parte integrante de esta Recomendación)

Los corrigenda a las Recomendaciones referenciadas figuran en la Guía de los realizadores del MHS conjunta, versión 11, marzo de 1994 (Grupo del Relator Especial de la UIT sobre sistemas de tratamiento de mensajes y el ISO/CEI JTC1/SC18/WG4 SWG sobre mensajería).

B.1   Enmiendas y corrigenda para las especificaciones de base 1990/1992

Las modificaciones y corrigenda siguientes de las normas internacionales equivalentes se consideran referencias normativas en esta Recomendación.

ISO/CEI 10021-1/Cor.1:1991	ISO/CEI 10021-2/Cor.6:1994	ISO/CEI 10021-6/Cor.2:1991
ISO/CEI 10021-1/Cor.2:1991	ISO/CEI 10021-2/Cor.7:1994	ISO/CEI 10021-6/Cor.3:1992
ISO/CEI 10021-1/Cor.3:1992	ISO/CEI 10021-4/Cor.1:1991	ISO/CEI 10021-6/Cor.4:1992
ISO/CEI 10021-1/Cor.4:1992	ISO/CEI 10021-4/Cor.2:1991	ISO/CEI 10021-6/Cor.5:1992
ISO/CEI 10021-1/Cor.5:1992	ISO/CEI 10021-4/Cor.3:1992	ISO/CEI 10021-6/Cor.6:1993
ISO/CEI 10021-1/Cor.6:1994	ISO/CEI 10021-4/Cor.4:1992	ISO/CEI 10021-6/Cor.7:1994
ISO/CEI 10021-2/Cor.1:1991	ISO/CEI 10021-4/Cor.5:1992	
ISO/CEI 10021-2/Cor.2:1991	ISO/CEI 10021-4/Cor.6:1993	ISO/CEI 10021-1/Enm.2:1994
ISO/CEI 10021-2/Cor.3:1992	ISO/CEI 10021-4/Cor.7:1994	ISO/CEI 10021-2/Enm.1:1994
ISO/CEI 10021-2/Cor.4:1992	ISO/CEI 10021-4/Cor.8:1994	ISO/CEI 10021-2/Enm.2:1994
ISO/CEI 10021-2/Cor.5:1993	ISO/CEI 10021-6/Cor.1:1991	ISO/CEI 10021-4/Enm.1:1994

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