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CONSULTATIVE COMMITTEE

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DATA COMMUNICATION NETWORKS

P2 PROTOCOL: PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS) PROFORMA

Recommendation X.481

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation X.481 was prepared by Study Group VII and was approved under the Resolution No. 2 procedure on the 10th of September 1992.

CCITT NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized private operating agency.

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INTRODUCTION

This Recommendation is one of a set of Recommendations for Message Handling. The entire set provides a comprehensive blueprint for a Message Handling System (MHS) realized by any number of cooperating open systems.

The purpose of an MHS is to enable users to exchange messages on a store-and-forward basis. A message submitted on behalf of one user, the originator, is conveyed by the message transfer system (MTS) and subsequently delivered to the agents of one or more additional users, the recipients. Access Units (AUs) link the MTS to communication systems of other kinds (e.g. postal systems). A user is assisted in the preparation, storage, and display of messages by a user agent (UA). Optionnally, it is assisted in the storage of messages by a Message Store (MS) . The MTS comprises a number of message transfer agents (MTAs) which collectively perform the store-and-forward message transfer function.

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given OSI protocol. Such a statement is called a Protocol Implementation Conformance Statement (PICS) .

This Recommendation includes the PICS Proforma for the P2 protocol as defined in the Recommendation X.420.

Recommendation X.481

P2 PROTOCOL: PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS) PROFORMA

(1992)

1 Scope

This Recommendation provides the PICS Proforma for the P2 protocol as specified in Recommendation X.420. This PICS Proforma is in compliance with the relevant requirements, and in accordance with the relevant guidance for PICS Proforma, given in ISO/IEC 9642-2.

Detail of the use of this proforma is provided in Annex A.

The scope of this Recommendation is the specification of the conformance statements for an Interpersonal Messaging System User Agent (IPMS-UA) and Interpersonal Messaging System Message Store (IPMS-MS).

2 Normative references

– CCITT Recommendation X.400, *Message Handling: System and Service overview*.

– CCITT Recommendation X.402, *Message Handling System: Overall Architecture*.

– CCITT Recommendation X.408, *Message Handling System: Encoded information type conversion rules*.

– CCITT Recommendation X.420, *Message Handling System: Interpersonal Messaging System.*

ISO/IEC 9646-1: 1991, *Information technology – Open systems interconnection – Conformance testing methodology and framework – Part 1: General concepts*. [See also CCITT Recommendation X.290 (1991)].

ISO/IEC 9646-2: 1991, *Information technology – Open systems interconnection – Conformance testing methodology and framework – Part 2: Abstract test suite specification.* [See also CCITT Recommendation X.291 (1991)].

MHS Implementors Guide version 8.

3 Definitions

This Recommendation uses terms defined in Recommendation X.420.

This Recommendation uses the following terms defined in ISO/IEC 9646-1:

– PICS Proforma;

– Protocol Implementation Conformance Statement (PICS).

4 Abbreviations

ADMD	Administration management domain
AU	Access unit
EOS	Element of service
I	Implemented
IPM	Interpersonal message
IPMS-MS	Interpersonal messaging system message store
IPMS-UA	Interpersonal messaging system user agent
IPN	Interpersonal notification
IUT	Implementation under test
MHS	Message handling system
MS	Message store
MTA	Message transfer agent
MTS	Message transfer system
O/R	Originator/recipient
OSI	Open Systems Interconnection
P2	Protocol 2
PDU	Protocol data unit
PEL	Protocol element
PICS	Protocol implementation conformance statement
UA	User agent

5 Conventions

The PICS Proforma is designed as an annex to this Recommendation (see Annex A).

6 Conformance

The supplier of a protocol implementation that is claimed to conform to Recommendation X.420 is required to complete a copy of the PICS Proforma provided in Annex A and is required to provide the information necessary to identify both the supplier and the implementation.

ANNEX A

(to Recommendation X.481)

P2 Protocol: Protocol Implementation Conformance Statement (PICS) Proforma

(This annex forms an integral part of this Recommendation)

A.1 *Identifications*

A.1.1 *Identification of PICS*

Ref. No.	Question	Response
1	Date of Statement (DD/MM/YY)	
2	PICS Serial Number	
3	System Conformance Statement Cross Reference	

A.1.2 *Identification of the Implementation and/or System*

Ref. No.	Question	Response
1	Implementation Name	
2	Version Number	
3	Machine Name	
4	Machine Version Number	
5	Operating System Name	
6	Operating System Version	
7	Special Configuration [1)]	
8	Other Information	

1) Please enter here one of the following configurations:

conf. 1: IPMS-UA collocated with an MTA;

conf. 2: remote IPMS-UA;

conf. 3: IPMS-UA making use of a Message Store;

conf. 4: IPMS-MS.

Copyright release for PICS Proforma:

Users of this document may freely reproduce the PICS Proforma in this annex so that it can be used for its intended purpose and may further publish the completed PICS.

A.1.3 *Identification of the System Supplier and/or Test Laboratory Client*

Ref. No.	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.2 *Identification of the Protocol*

Ref. No.	Question	Response
1	Title, Reference Number and date of publication of the protocol standard	
2	Protocol Version Numbers	
3	Addenda implemented	
4	Implemented Defect Reports (Ref. No.)	

A.3 *Global statement of Conformance*

Ref. No.	Question	D	I
1	Are all mandatory capabilities implemented?	m	[ ]

Note – Answering "No" to this section indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conformant. Such information shall be provided in A.6.9, "Other information".

A.4 *Instructions for completing the PICS Proforma*

A.4.1 *Definition of support*

A capability is said to be supported if the Implementation Under Test (IUT) is able:

– to generate the corresponding service parameters (either automatically or because the end user explicitly requires that capability);

– to interpret, handle and when required make available to the end user the corresponding service parameter(s).

A capability is referred to as either an originator capability "O" (when the MHS end-user is acting as originator) or a recipient capability "R" (when the MHS end-user is acting as recipient).

A protocol element is said to be supported for origination if the IUT is able to generate it under some circumstances (either automatically or because end-user explicitly requires a related capability).

A protocol element is said to be supported for reception if it is correctly interpreted and handled and also, when required, made available to the end-user.

A.4.2 *D (Defined) column*

This column indicates the level of support required for conformance to Recommendation X.420.

The values are as follows:

m Mandatory support is required;

o Optional support is permitted for conformance to the Recommendation. If implemented it must conform to the specifications and restrictions contained in the Recommendation. These restrictions may affect the optionality of other items;

c The item is conditional, the support of this item is subject to a predicate which is referenced in the note column;

n/a The item is not applicable.

If Security, Physical Delivery or Message Store options are not supported the corresponding items shall be considered as not applicable.

A.4.3 *I (Implemented) column*

This column shall be completed by the supplier or implementor, when a "[ ]" is present, to indicate the level of implementation of each item. The proforma has been designed such that the only entries required in that column are:

Y Yes, the item has been implemented;

N No, the item has not been implemented;

– The item is not applicable.

In the PICS Proforma tables, every leading items marked 'm' should be supported by the IUT. Sub-items marked 'm' should be supported if the corresponding leading feature is supported by the IUT.

All entries within the PICS Proforma shall be made in ink. Alterations to such entries shall be made by crossing out, not erasing nor making the original entry illegible, and writing the new entry alongside. All such alterations to records shall be initialled by the staff making them.

A.4.4 *Permitted Range of values/values supported columns*

In the column marked "PERMIT. RANGE OF VALUES", the upper-bounds values (e.g. length and occurences) have been stated according to the standard. For each line for which an entry in this column is made, the constraints or supported values should be indicated in the "VALUES SUPPORTED" column.

The minimum and maximum lengths and numbers of occurences shall be entered for originator.

The maximum length and number of occurences shall be entered for reception.

A.4.5 *Note column*

The 'Note' column has to be read as follows:

Notexx Refers to Note xx;

pxx Refers to predicate xx (see A.4.7);

#yy Refers to A.6.6.4 yy;

d A value defined as defaultable in the Recommendation, when absent in the PDU shall be interpreted as having the default value specified in the Recommendation;

PHY Physical item;

SEC Security item;

X.500 See X.500-Series Recommendations for a complete definition.

A.4.6 *Item reference numbers*

Each line within the PICS Proforma which requires implementation details to be entered is numbered at the left hand edge of the line. This numbering is included as a means of uniquely identifying all possible implementation details within the PICS Proforma.

The means of referencing individual responses is done by the following sequence:

a) a reference to the smallest subclause enclosing the relevant item;

b) a solidus character, '/';

c) the reference number of the row in which the response appears.

An example of the use of this notation would be A.6.3/1, which refers to the Authorising Users Indication element of service.

A.4.7 *Predicate definitions*

If the classification of an Element of Service (EOS) or a Protocol ELement (PEL) is subject to a predicate support of the item is mandatory if the related predicate is true. Otherwise support of the item is optional.

Within that annex predicates are clearly defined or are defined as follow:

px = “Item_number”.Y

or

px = S.Y.Z

where

S (Service) takes the value A.6.3

Y Takes the values “O” for originator or “R” for recipient

Z Is the number of the element of service in A.6.3

List of predicates

pl pl7 or pl6;

p2 Blind copy recipient indication EOS supported in ORIGINATION (S.O.3);

p3 Obsoleting indication EOS supported in ORIGINATION (S.O.14);

p4 Cross-referencing indication EOS supported in ORIGINATION (S.O.5);

p5 Expiry date indication EOS supported in ORIGINATION (S.O.6);

p6 Reply request indication EOS supported in ORIGINATION (S.O.18);

p7 Reply request indication EOS supported in ORIGINATION (S.O.19);

p8 Auto-forwarded indication EOS supported in ORIGINATION (S.O.2);

p9 pl0 or pl2;

pl0 Incomplete copy indication EOS supported in ORIGINATION (S.O.9);

pll Incomplete copy indication EOS supported in RECEPTION (S.R.9);

pl2 Language indication EOS supported in ORIGINATION (S.O.11);

pl3 ipm-return PEL supported in RECEPTION (A.6.6.4.1/1.2.3.R);

pl4 ipm-return PEL supported in ORIGINATION (A.6.6.4.1/1.2.3.O);

pl5 Receipt notification request indication EOS supported in RECEPTION (S.R.17);

pl6 Receipt notification request indication EOS supported in ORIGINATION (S.O.17);

pl7 Non Receipt notification request indication EOS supported in ORIGINATION (S.O.13);

pl9 Importance indication EOS supported in ORIGINATION (S.O.8);

p20 Authorizing users indication EOS supported in ORIGINATION (S.O.1);

p22 Forwarded IP-message indication EOS supported in ORIGINATION (S.O.7);

p23 At least one of the EXTENSION fields is supported in ORIGINATION;

p24 At least one of the EXTENSION fields is supported in RECEPTION;

p25 The implementation is a conf.3 or conf.4 (see A.1.2/7 for definitions).

Examples:

pl9 S.O.8 means that pl9 is true if the Importance indication element of service is supported.

pl9 A.6.3/8.O has the same meaning.

pl3 A.6.6.4.1/1.2.3.R means that pl3 is true if the ipm-return protocol element is supported in reception.

A.4.8 *Additional comments*

1) Parameters which are not supported for reception should normally not be regarded as a protocol violation.

2) In the following tables, every leading parameter marked “m” should be supported by the IUT in order to fullfil the static conformance requirements. Sub-parameters marked “m” should be supported if the corresponding leading parameter is supported by the IUT.

3) For ORNames relating to a user of the own system (“local ORName”) the IUT might choose to make certain restrictions on the supported forms of ORAddresses. Users of another system (“remote ORName”), however, shall be adressable without any restrictions.

4) Where an upper bound is used to specify the size of a teletex string the value applies to the number of characters and the double of the value applies to the number of octets.

A.5 *Abbreviations*

The following abbreviations are used in this PICS Proforma:

D Defined

I Implemented

m mandatory

N NO

n/a Not Applicable

o optional

c conditional

d default

O/R O = Origination / R = Reception

PHY PHYsical Delivery

SEC SECurity

Y YES

EOS Element of Service

PEL Protocol ELement

A.6 *Capabilities and Options*

Introduction

In this part of the PICS Proforma the supported application contexts, the major capabilities of the supported application contexts and functions are identified. Further the PDUs and Operations are identified. And finally the operation Arguments and PDU Parameters are identified.

Mapping between X.400 keys and PICS entry

Rec. X.400	PICS
BASIC MT SERVICE	m
ESSENTIAL OPTIONAL	m
ADDITIONAL OPTIONAL PER MESSAGE	o
ADDITIONAL OPTIONAL CONTRACTUAL	o

A.6.1 *Initiator/Responder capability*

"N/A".

A.6.2 *Supported Application Contexts and Options*

Supported Application Contexts

"N/A".

Supported Options

Ref. No.	Question	D (ISO)	D (CCITT)	I
1	Are all Security capabilities implemented?	o	o	[ ]
2	Are all Physical Delivery capabilities implemented?	o	o	[ ]

A.6.3 *Major Capabilities*

Note – Within the following tables "O/R" means "Origination/Reception".

Message Transfer, Physical Delivery, Security and Message Store elements of service have been listed into separate tables.

IPM elements of service

Ref. No.	MHS Element of service	O/R	D	I	Clause ref. (Rec. X.400)
1	Authorizing users indication	O R	o m	[ ] [ ]	B.5
2	Auto-forwarded indication	O R	o m	[ ] [ ]	B.6
3	Blind copy recipient indication	O R	o m	[ ] [ ]	B.8
4	Body part encryption indication	O R	o m	[ ] [ ]	B.9
5	Cross-referencing indication	O R	o m	[ ] [ ]	B.18
6	Expiry date indication	O R	o m	[ ] [ ]	B.29
7	Forwarded IP-message indication	O R	o m	[ ] [ ]	B.31
8	Importance indication	O R	o m	[ ] [ ]	B.35
9	Incomplete copy indication	O R	o o	[ ] [ ]	B.36
10	IP-message identification	O R	m m	[ ] [ ]	B.37
11	Language indication	O R	o m	[ ] [ ]	B.38
12	Multi-part body	O R	o m	[ ] [ ]	B.46
13	Non-receipt notification request indication	O R	o m	[ ] [ ]	B.48
14	Obsoleting indication	O R	o m	[ ] [ ]	B.52
15	Originator indication	O R	m m	[ ] [ ]	B.55
16	Primary and copy recipients indication	O R	m m	[ ] [ ]	B.62
17	Receipt notification request indication	O R	o o	[ ] [ ]	B.67
18	Reply request indication	O R	o m	[ ] [ ]	B.72
19	Reply IP-message indication	O R	m m	[ ] [ ]	B.73
20	Sensitivity indication	O R	o m	[ ] [ ]	B.80
21	Subject indication	O R	m m	[ ] [ ]	B.88
22	Typed body	O R	m m	[ ] [ ]	B.90

Ref. No.	MHS Element of service	O/R	D	I	Clause ref. (Rec. X.400)
23	Access management	O R	m m	[ ] [ ]	B.1
24	Alternate recipient allowed	O R	o o	[ ] [ ]	B.3
25	Alternate recipient assignment	O R	n/a o	[ ] [ ]	B.4
26	Content type indication	O R	m m	[ ] [ ]	B.12
27	Conversion prohibition	O R	m m	[ ] [ ]	B.13
28	Conversion prohibition in case of loss of information	O R	o o	[ ] [ ]	B.14
29	Converted indication	O R	n/a m	[ ] [ ]	B.15
30	Deferred delivery	O R	m n/a	[ ] [ ]	B.19
31	Deferred delivery cancellation	O R	o n/a	[ ] [ ]	B.20
32	Delivery notification	O R	m n/a	[ ] [ ]	B.21
33	Delivery time stamp indication	O R	n/a m	[ ] [ ]	B.22
34	Designation of recipient by directory name	O R	o n/a	[ ] [ ]	B.24
35	Disclosure of other recipients	O R	o m	[ ] [ ]	B.25
36	DL Expansion history indication	O R	n/a m	[ ] [ ]	B.26
37	DL Expansion prohibited	O R	o n/a	[ ] [ ]	B.27
38	Explicit conversion	O R	o n/a	[ ] [ ]	B.30
39	Grade of delivery selection	O R	m m	[ ] [ ]	B.32
40	Hold for delivery	O R	n/a o	[ ] [ ]	B.33

Ref. No.	MHS Element of service	O/R	D	I	Clause ref. (Rec. X.400)
41	Implicit conversion	O R	n/a o	[ ] [ ]	B.34
42	Latest delivery designation	O R	o n/a	[ ] [ ]	B.39
43	Message identification	O R	m m	[ ] [ ]	B.41
44	Multi-destination delivery	O R	n/a m		
45	Non-delivery notification	O R	n/a m	[ ] [ ]	B.47
46	Original encoded information types indication	O R	m m	[ ] [ ]	B.54
47	Originator requested alternate recipient	O R	o n/a	[ ] [ ]	B.56
48	Prevention of non-delivery notification	O R	o n/a	[ ] [ ]	B.61
49	Probe	O R	o n/a	[ ] [ ]	B.63
50	Redirection disallowed by originator	O R	o n/a	[ ] [ ]	B.68
51	Redirection of incoming messages	O R	n/a o	[ ] [ ]	B.69
52	Requested preferred delivery method	O R	o o	[ ] [ ]	B.76
53	Restricted delivery	O R	n/a o	[ ] [ ]	B.77
54	Return of content	O R	o n/a	[ ] [ ]	B.78
55	Submission time stamp indication	O R	m m	[ ] [ ]	B.89
56	Use of distribution list	O R	o n/a	[ ] [ ]	B.92
57	User/UA capabilities registration	O R	m m	[ ] [ ]	B.93

Physical Delivery services

This table shall be filled in only if Physical Delivery is supported (see A.6.2/2).

Ref. No.	MHS Element of service	O/R	D	I	Clause ref. (Rec. X.400)
58	Additional physical rendition	O R	o o	[ ] [ ]	B.2
59	Basic physical rendition	O R	o n/a (Note)	[ ] [ ]	B.7
60	Counter collection	O R	o n/a (Note)	[ ] [ ]	B.16
61	Counter collection with advice	O R	o o	[ ] [ ]	B.17
62	Delivery via Bureaufax service	O R	o o	[ ] [ ]	B.23
63	EMS (Express Mail Service)	O R	o n/a (Note)	[ ] [ ]	B.28
64	Ordinary mail	O R	o n/a (Note)	[ ] [ ]	B.53
65	Physical delivery notification by MHS	O R	o o	[ ] [ ]	B.57
66	Physical delivery notification by PDS	O R	o n/a (Note)	[ ] [ ]	B.58
67	Physical forwarding allowed	O R	o n/a (Note)	[ ] [ ]	B.59
68	Physical forwarding prohibited	O R	o n/a (Note)	[ ] [ ]	B.60
69	Registered mail	O R	o o	[ ] [ ]	B.70
70	Registered mail to addresses in person	O R	o o	[ ] [ ]	B.71
71	Request for forwarding address	O R	o o	[ ] [ ]	B.75
72	Special delivery	O R	o n/a (Note)	[ ] [ ]	B.81
73	Undeliverable mail with return of physical message	O R	o n/a (Note)	[ ] [ ]	B.91

Note — PDAU feature.

Security services

This table shall be filled in only if Security is supported (see A.6.2/1).

Ref. No.	MHS Element of service	O/R	D	I	Clause ref. (Rec. X.400)
74	Content confidentiality	O R	o o	[ ] [ ]	B.10
75	Content integrity	O R	o o	[ ] [ ]	B.11
76	Message flow confidentiality	O R	o n/a	[ ] [ ]	B.40
77	Message origin authentication	O R	o o	[ ] [ ]	B.42
78	Message security labelling	O R	o o	[ ] [ ]	B.43
79	Message sequence integrity	O R	o o	[ ] [ ]	B.44
80	Non-repudiation of delivery	O R	o o	[ ] [ ]	B.49
81	Non-repudiation of origin	O R	o o	[ ] [ ]	B.50
82	Non-repudiation of submission	O R	o o	[ ] [ ]	B.51
83	Probe origin authentication	O R	o n/a	[ ] [ ]	B.64
84	Proof of delivery	O R	o o	[ ] [ ]	B.65
85	Proof of submission	O R	o n/a	[ ] [ ]	B.66
86	Report origin authentication	O R	o o	[ ] [ ]	B.74
87	Secure access management	O R	o o	[ ] [ ]	B.79

MS elements of service

This table shall be filled in only if predicate p25 is TRUE.

Ref. No.	MHS Element of service	O/R	D	I	Clause ref. (Rec. X.400)
87	MS register	O R	n/a o	[ ] [ ]	B.4n
88	Stored message alert	O R	n/a o	[ ] [ ]	B.82
89	Stored message auto-forward	O R	n/a o	[ ] [ ]	B.83
90	Stored message deletion	O R	n/a m (Note 1)	[ ] [ ]	B.84
91	Stored message fetching	O R	n/a m (Note 1)	[ ] [ ]	B.85
92	Stored message listing	O R	n/a m (Note 2)	[ ] [ ]	B.86
93	Stored message summary	O R	n/a m (Note 2)	[ ] [ ]	B.87

Note 1 – Mandatory service applying to MSs and UAs.

Note 2 – Mandatory service applying to MSs and optional service applying to UAs.

A.6.4 *Timers and Protocol parameters*

"N/A".

A.6.5 *Supported PDUs*

Ref. No.	Supported PDUs	O/R	D	I	Clause ref. (Rec. X.420)
1	Interpersonnal Message (IPM)	O R	m m	[ ] [ ]	7
2	Interpersonnal Notification (IPN)	O R	m c p1	[ ] [ ]	8

A.6.6 *Supported PDU parameters*

Consistency between this section and section A.6.3 is guarded by section A.4.7.

A.6.6.1 *IPM*

	Parameter	O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
1	Heading	O R	m m	[ ] [ ]				7.2
1.1	this-IPM	O R	m m	[ ] [ ]	#1.3			7.2.1
1.2	originator	O R	m m	[ ] [ ]	#1.2			7.2.2
1.3	authorizing-users	O R	c m	[ ] [ ]	p20 #1.2			7.2.3
1.4	primary-recipients	O R	m m	[ ] [ ]	#1.1			7.2.4
1.5	copy-recipients	O R	m m	[ ] [ ]	#1.1			7.2.5
1.6	blind-copy-recipients	O R	c m	[ ] [ ]	p2 #1.1			7.2.6
1.7	replied-to-IPM	O R	m m	[ ] [ ]	#1.3			7.2.7
1.8	obsoleted-IPMs	O R	c m	[ ] [ ]	p3 #1.3			7.2.8
1.9	related-IPMs	O R	c m	[ ] [ ]	p4 #1.3			7.2.9
1.10	subject	O R	m m	[ ] [ ]		128 128		7.2.10
1.11	expiry-time	O R	c m	[ ] [ ]	p5			7.2.11
1.12	reply-time	O R	c m	[ ] [ ]	p6			7.2.12
1.13	reply-recipients	O R	c m	[ ] [ ]	p6 #1.2			7.2.13
1.14	importance	O R	m m	[ ] [ ]	d d			7.2.14
1.14.1	low	O R	o m	[ ] [ ]				
1.14.2	normal	O R	o m	[ ] [ ]				
1.14.3	high	O R	o m	[ ] [ ]				

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
1.15	sensitivity	O R	c m	[ ] [ ]	p7			7.2.15
1.16	auto-forwarded	O R	c m	[ ] [ ]	p8			7.2.16
1.17	extensions	O R	c m	[ ] [ ]	p9			7.2.17
1.17.1	incomplete-copy	O R	c c	[ ] [ ]	p10 p11			Annex A.1
1.17.2	languages	O R	c m	[ ] [ ]	p12			Annex A.2
2	Body	O R	m m	[ ] [ ]				7.3
2.1	ia5-text	O R	o o	[ ] [ ]				7.3.1
2.1.1	IA5TextParameters	O R	m m	[ ] [ ]				
2.1.1.1	Repertoire	O R	m m	[ ] [ ]	d d			
2.1.1.1.1	ita2	O R	o m	[ ] [ ]				
2.1.1.1.2	ita5	O R	o o	[ ] [ ]				
2.1.2	IA5TextData	O R	m m	[ ] [ ]				
2.2	voice	O R	Note 4 Note 4	[ ] [ ]				7.3.2
2.3	g3-facsimile	O R	o o	[ ] [ ]				7.3.3
2.3.1	G3FacsimileParameters	O R	m m	[ ] [ ]				
2.3.1.1	number-of-pages	O R	o o	[ ] [ ]				
2.3.1.2	G3FacsimileNonBasic Parameters	O R	m m	[ ] [ ]				
2.3.2	G3FacsimileData	O R	m m	[ ] [ ]				
2.4	g4-class1	O R	o o	[ ] [ ]				7.3.4
2.5	teletex	O R	o o	[ ] [ ]				7.3.5
2.5.1	TeletexParameters	O R	m m	[ ] [ ]				
2.5.1.1	number-of-pages	O R	o o	[ ] [ ]				

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
2.5.1.2	telex-compatible	O R	m m	[ ] [ ]	d d			
2.5.1.3	TeletexNonBasicParameters	O R	m m	[ ] [ ]				
2.5.1.3.1	graphic-character-sets	O R	o o	[ ] [ ]				
2.5.1.3.2	control-character-sets	O R	o o	[ ] [ ]				
2.5.1.3.3	page-formats	O R	o o	[ ] [ ]				
2.5.1.3.4	miscellaneous-terminal-capabilities	O R	o o	[ ] [ ]				
2.5.1.3.5	private-use	O R	o o	[ ] [ ]				
2.5.2	TeletexData	O R	m m	[ ] [ ]				
2.6	videotex	O R	o o	[ ] [ ]				7.3.6
2.6.1	VideotexParameters	O R	m m	[ ] [ ]				
2.6.1.1	VideotexSyntax	O R	o o	[ ] [ ]				
2.6.1.1.1	ids	O R	o o	[ ] [ ]				
2.6.1.1.2	data-syntax1	O R	o o	[ ] [ ]				
2.6.1.1.3	data-syntax2	O R	o o	[ ] [ ]				
2.6.1.1.4	data-syntax3	O R	o o	[ ] [ ]				
2.6.2	VideotextData	O R	m m	[ ] [ ]				
2.7	encrypted	O R	Note 4 Note 4	[ ] [ ]				7.3.7
2.8	message	O R	c m	[ ] [ ]	p22			7.3.8
2.8.1	MessageParameters	O R	m m	[ ] [ ]				
2.8.1.1	delivery-time	O R	o o	[ ] [ ]				
2.8.1.2	delivery-envelope	O R	o o	[ ] [ ]				

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
2.8.1.2.1	content-type	O R	o o	[ ] [ ]				
2.8.1.2.2	originator-name	O R	o o	[ ] [ ]				
2.8.1.2.3	original-encoded-information-types	O R	o o	[ ] [ ]				
2.8.1.2.4	priority	O R	o o	[ ] [ ]				
2.8.1.2.5	delivery-flags	O R	o o	[ ] [ ]				
2.8.1.2.6	other-recipient-names	O R	o o	[ ] [ ]				
2.8.1.2.7	this-recipient-names	O R	o o	[ ] [ ]				
2.8.1.2.8	originally-intented-recipient-names	O R	o o	[ ] [ ]				
2.8.1.2.9	converted-encoded-information-types	O R	o o	[ ] [ ]				
2.8.1.2.10	message-submission-time	O R	o o	[ ] [ ]				
2.8.1.2.11	content-identifier	O R	o o	[ ] [ ]				
2.8.1.2.12	extensions	O R	c c	[ ] [ ]	p 23 p 24			
2.8.1.2.13	conversion-with-loss-prohibited	O R	o o	[ ] [ ]				
2.8.1.2.14	requested-delivery-method	O R	o o	[ ] [ ]				
2.8.1.2.15	physical-forwarding-prohibited	O R	o o	[ ] [ ]				
2.8.1.2.16	physical-forwarding-address-request	O R	o o	[ ] [ ]				
2.8.1.2.17	physical-delivery-modes	O R	o o	[ ] [ ]				
2.8.1.2.18	registered-mail-type	O R	o o	[ ] [ ]				
2.8.1.2.19	recipient-number-for-advise	O R	o o	[ ] [ ]				
2.8.1.2.20	physical-rendition-attributes	O R	o o	[ ] [ ]				
2.8.1.2.21	origintaor-return-address	O R	o o	[ ] [ ]				

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
2.8.1.2.22	physical-delivery-report-request	O R	o o	[ ] [ ]				
2.8.1.2.23	originator-certificate	O R	o o	[ ] [ ]				
2.8.1.2.24	message-token	O R	o o	[ ] [ ]				
2.8.1.2.25	content-confidentiality-algorithm-identifier	O R	o o	[ ] [ ]				
2.8.1.2.26	content-integrity-check	O R	o o	[ ] [ ]				
2.8.1.2.27	message-origin-authentication-check	O R	o o	[ ] [ ]				
2.8.1.2.28	message-security-label	O R	o o	[ ] [ ]				
2.8.1.2.29	proof-of-delivery-request	O R	o o	[ ] [ ]				
2.8.1.2.30	rediction-history	O R	o o	[ ] [ ]				
2.8.1.2.31	d1-expansion-history	O R	o o	[ ] [ ]				
2.8.2	MessageData (IPM)	O R	m m	[ ] [ ]				
2.9	mixed-mode	O R	o o	[ ] [ ]				7.3.9
2.10	bilaterally-defined	O R	o o	[ ] [ ]				7.3.10
2.11	nationally-defined	O R	o o	[ ] [ ]				7.3.11
2.12	externally-defined	O R	o o	[ ] [ ]				7.3.12
2.12.1	ExternallyDefined Parameters	O R	m m	[ ] [ ]				
2.12.2	ExternallyDefinedData	O R	m m	[ ] [ ]				

Note — Encoding not standardized.

A.6.6.2 *IPN*

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
1	subject-ipm	O R	m m	[ ] [ ]	#1.3			8.1.1
2	ipn-originator	O R	o m	[ ] [ ]	#1.2			8.1.2
3	ipm-preferred-recipient	O R	m m	[ ] [ ]	#1.2			8.1.3
4	conversion-eits	O R	m m	[ ] [ ]				8.1.4
5	notification-extensions	O R	o o	[ ] [ ]				
6	NonReceiptFields	O R	m c	[ ] [ ]	p17			8.2
6.1	non-receipt-reason	O R	m m	[ ] [ ]				8.2.1
6.1.1	ipm-discarded	O R	m m	[ ] [ ]				
6.1.2	ipm-auto-forwarded	O R	c m	[ ] [ ]	p22			
6.2	discard-reason	O R	m m	[ ] [ ]				8.2.2
6.2.1	ipm-expired	O R	m m	[ ] [ ]				
6.2.2	ipm-obsoleted	O R	m m	[ ] [ ]				
6.2.3	ipm-subscription-terminated	O R	m m	[ ] [ ]				
6.3	auto-forward-comment	O R	c m	[ ] [ ]	p22	256 256		8.2.3
6.4	returned-ipm	O R	c c	[ ] [ ]	p13 p14			8.2.4
6.5	nrn-extensions	O R	o o	[ ] [ ]				
7	ReceiptFields	O R	c c	[ ] [ ]	p15 p16			8.3
7.1	receipt-time	O R	m m	[ ] [ ]				8.3.1
7.2	acknowledgement-mode	O R	m m	[ ] [ ]	d d			8.3.2
7.2.1	manual	O R	m m	[ ] [ ]				
7.2.2	automatic	O R	o m	[ ] [ ]				
7.3	suppl-receipt-info	O R	o m	[ ] [ ]	256 256			8.3.3
7.4	rn-extensions	O R	o o	[ ] [ ]				
8	other-notification-type-fields	O R	o o	[ ] [ ]				

A.6.6.3 *Message Store Attributes*

As described in Recommendation X.413, an MS maintains and provides access to certain attributes (e.g. the importance) of each information object it holds. An attribute comprises a type and, depending upon the type, one or more values.

This section classifies the MS attributes specific to Interpersonal Messaging and only applies to conf.3 and conf.4 (see A.1.2/7).

For each IPM or IPN it holds or handled the implementation shall support the following attributes. Support level for these attributes is detailled in Annex C of Recommendation X.420 and Table C-l/X.420.

Attributes	D	I	Note
Acknowledgment Mode	o	[ ]	
Authorizing Users	o	[ ]	
Auto-forward Comment	o	[ ]	
Auto-forwarded	o	[ ]	
Bilaterally Defined Body Parts	o	[ ]	
Blind Copy Recipients	o	[ ]	
Body	m	[ ]	
Conversion EITs	o	[ ]	
Copy Recipients	o	[ ]	
Discard Reason	o	[ ]	
Encrypted Body Parts	o	[ ]	
Encrypted Data	o	[ ]	
Encrypted Parameters	o	[ ]	
Expiry Time	o	[ ]	
Extended Body Part Types	o	[ ]	
G3 Facsimile Body Parts	o	[ ]	
G3 Facsimile Data	o	[ ]	
G3 Facsimile Parameters	o	[ ]	
G4 Class 1 Body Parts	o	[ ]	
Heading	m	[ ]	
IA5 Text Body Parts	o	[ ]	
IA5 Text Data	o	[ ]	
IA5 Text Parameters	o	[ ]	
Importance	o	[ ]	
Incomplete Copy	o	[ ]	
IPM Entry Type	m	[ ]	
IPM Preferred Recipient	o	[ ]	
IPM Synopsis	o	[ ]	
IPN Originator	o	[ ]	
Languages	o	[ ]	

Attributes	D	I	Note
Message Body Parts	o	[ ]	
Message Data	o	[ ]	
Message Parameters	o	[ ]	
Mixed-mode Body Parts	o	[ ]	
Nationally Defined Body Parts	o	[ ]	
Non-receipt Reason	o	[ ]	
NRN Requestors	o	[ ]	
Obsoleted IPMs	o	[ ]	
Originator	o	[ ]	
Primary Recipients	o	[ ]	
Receipt Time	o	[ ]	
Related IPMs	o	[ ]	
Replied-to IPM	o	[ ]	
Reply Recipients	o	[ ]	
Reply Requestors	o	[ ]	
Reply Time	o	[ ]	
Returned IPM	o	[ ]	
RN Requestors	o	[ ]	
Sensitivity	o	[ ]	
Subject	o	[ ]	
Subject IPM	m	[ ]	
Suppl Receipt Info	o	[ ]	
Teletex Body Parts	o	[ ]	
Teletex Data	o	[ ]	
Teletex Parameters	o	[ ]	
This IPM	m	[ ]	
Videotext Body Parts	o	[ ]	
Videotex Data	o	[ ]	
Videotex Parameters	o	[ ]	
Voice Body Parts	o	[ ]	
Voice Data	o	[ ]	
Voice Parameters	o	[ ]	

A.6.6.4 *Common data types and ORNames*

A.6.6.4.1 *Common data types*

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
1	RecipientSpecifier							7.1.2
1.1	Recipient	O R	m m	[ ] [ ]	#1.2			
1.2	Notification-requests	O R	c m	[ ] [ ]	p1			
1.2.1	rn	O R	c c	[ ] [ ]	p16 p15			
1.2.2	nrn	O R	c m	[ ] [ ]	p17			
1.2.3	ipm-return	O R	o o	[ ] [ ]				
1.3	reply-requested	O R	c m	[ ] [ ]	p6			
1.4	recipient-extensions	O R	o o	[ ] [ ]				
2	ORDescriptor							7.1.3
2.1	FormalName	O R	m m	[ ] [ ]				
2.1.1	ORName	O R	m m	[ ] [ ]	#2			
2.2	FreeFormName	O R	m m	[ ] [ ]		64 64		
2.3	TelephoneNumber	O R	m m	[ ] [ ]		32 32		
3	IPMIdentifier							7.1.1
3.1	ORName	O R	m m	[ ] [ ]	#2			
3.2	LocalIPMIdentifier	O R	m m	[ ] [ ]		64 64		

A.6.6.4.2 *ORNames*

ORNames consist of a mandatory address part and an optional directory-name part. The address part is a COMPONENT OF ORAddress. Recommendation X.402, 18.5, distinguishes five different forms of ORAddresses. These forms are presented in the following table.

This clause deals with remote MTS-user ORNames only. The register operation may enable the MTS-user to change its local ORName. An MD is not required to provide MTS-users with the ability to change their ORNames. If it does so, the MD may restrict that ability. It may prohibit certain MTS-users from changing their ORNames, or it may restrict the scope of the change to a locally defined subset of the components of their ORNames. A proposed new ORName shall be rejected if it is already assigned to another MTS-user.

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.420)
ORAddress forms:								
1	MnemonicORAddress	O R	m m	[ ] [ ]	A			18.5.1
2	NumericORAddress	O R	m m	[ ] [ ]	A			18.5.2
3	TerminalORAddress	O R	m m	[ ] [ ]	A			18.5.4
4	FormattedPostalORAddress	O R	m m	[ ] [ ]	PHY			18.5.3
5	UnformattedPostalORAddress	O R	m m	[ ] [ ]	PHY			18.5.3

The following tables specify for each ORName form classification of their constituent components.

The Notes used in the following tables are defined hereafter:

Note 1 – A numeric value can be encoded with a printable string and has the same significance as if encoded as a numeric string.

Note 2 – Shall be present when the issuing management domain is not an ADMD.

Note 3 – This ORName form allows only the following extension attribute types, all other are prohibited.

Note 4 – When an Extension-attribute field is supported, it is assumed that the corresponding "extension-attribute-type" and "extension-attribute-values" are also supported.

Note 5 – See CCITT Rec. ISO/IEC 9594-2 | CCITT Rec. X.501.

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
6	ORName with MnemonicORAddress							
6.1	address							
6.1.1	CountryName	O R	m m	[ ] [ ]				
6.1.1.1	x121-dcc-code	O R	m m	[ ] [ ]		3 3		
6.1.1.2	iso-3166-alpha2-code	O R	m m	[ ] [ ]		2 2		
6.1.2	AdministrationDomainName	O R	m m	[ ] [ ]				
6.1.2.1	numeric	O R	m m	[ ] [ ]		16 16		
6.1.2.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
6.1.3	PrivateDomainName	O R	m m	[ ] [ ]	(Note 2)			
6.1.3.1	numeric	O R	m m	[ ] [ ]		16 16		
6.1.3.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
6.1.4	OrganizationName	O R	m m	[ ] [ ]		64 64		
6.1.5	PersonalName	O R	m m	[ ] [ ]				
6.1.5.1	surname	O R	m m	[ ] [ ]		40 40		
6.1.5.2	given-name	O R	m m	[ ] [ ]		16 16		
6.1.5.3	initials	O R	m m	[ ] [ ]		5 5		
6.1.5.4	generation-qualifier	O R	m m	[ ] [ ]		3 3		
6.1.6	OrganizationalUnitNames	O R	m m	[ ] [ ]		4 4		
6.1.6.1	OrganizationalUnitName	O R	m m	[ ] [ ]		32 32		
6.1.7	DomainDefinedAttributes	O R	o o	[ ] [ ]		4 4		
6.2	Extensions	O R	m m	[ ] [ ]	(Note 3) (Note 4)	256 256		
6.2.1	CommonName	O R	m m	[ ] [ ]		64 64		
6.2.2	TeletexCommonName	O R	m m	[ ] [ ]		64 64		
6.2.3	TeletexOrganizationalName	O R	m m	[ ] [ ]		64 64		

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
6.2.4	TeletexPersonalName	O R	m m	[ ] [ ]				
6.2.4.1	surname	O R	m m	[ ] [ ]		40 40		
6.2.4.2	given-name	O R	m m	[ ] [ ]		16 16		
6.2.4.3	initials	O R	m m	[ ] [ ]		5 5		
6.2.4.4	generation-qualifier	O R	m m	[ ] [ ]		3 3		
6.2.5	TeletexOrganizationalUnitNames	O R	m m	[ ] [ ]		4 4		
6.2.5.1	TeletexOrganizationalUnit Name	O R	m m	[ ] [ ]		32 32		
6.2.6	TeletexDomainDefinedAttributes	O R	o o	[ ] [ ]		4 4		
6.3	directory-name	O R	o o	[ ] [ ]	(Note 5)			
7	ORName with NumericORAddress							
7.1	address							
7.1.1	CountryName	O R	m m	[ ] [ ]				
7.1.1.1	x121-dcc-code	O R	m m	[ ] [ ]		3 3		
7.1.2	AdministrationDomainName	O R	m m	[ ] [ ]				
7.1.2.1	numeric	O R	m m	[ ] [ ]		16 16		
7.1.3	PrivateDomainName	O R	m m	[ ] [ ]	(Note 2)			
7.1.3.1	numeric	O R	m m	[ ] [ ]		16 16		
7.1.4	NumericUserIdentifier	O R	m m	[ ] [ ]		32 32		
7.1.5	DomainDefinedAttributes	O R	o o	[ ] [ ]		4 4		
7.2	directory-name	O R	o o	[ ] [ ]	(Note 5)			
8	ORName with TerminalORAddress							
8.1	address							
8.1.1	CountryName	O R	m m	[ ] [ ]				
8.1.1.1	x121-dcc-code	O R	m m	[ ] [ ]		3 3		
8.1.1.2	iso-3166-alpha2-code	O R	m m	[ ] [ ]		2 2		

Parameter		O/R	D	I	Note	Permitted range of Values	Values supported	Clause Reference (Rec. X.402)
8.1.2	AdministrationDomainName	O R	m m	[ ] [ ]				
8.1.2.1	numeric	O R	m m	[ ] [ ]		16 16		
8.1.2.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
8.1.3	NetworkAddress	O R	m m	[ ] [ ]		16 16		
8.1.4	TerminalIdentifier	O R	m m	[ ] [ ]		24 24		
8.1.5	PrivateDomainName	O R	m m	[ ] [ ]	(Note 2)			
8.1.5.1	numeric	O R	m m	[ ] [ ]		16 16		
8.1.5.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
8.1.6	DomainDefinedAttributes	O R	o o	[ ] [ ]		4 4		
8.2	Extensions	O R	m m	[ ] [ ]	(Note 3) (Note 4)	256 256		
8.2.1	ExtendedNetworkAddress	O R	m m	[ ] [ ]				
8.2.1.1	el63-4-address	O R	m m	[ ] [ ]				
8.2.1.1.1	number	O R	m m	[ ] [ ]		15 15		
8.2.1.1.2	sub-address	O R	m m	[ ] [ ]		40 40		
8.2.1.2	psap-address	O R	m m	[ ] [ ]	X.500			
8.2.2	TerminalType	O R	m m	[ ] [ ]				
8.2.2.1	telex	O R	m m	[ ] [ ]				
8.2.2.2	teletex	O R	m m	[ ] [ ]				
8.2.2.3	g3-facsimile	O R	m m	[ ] [ ]				
8.2.2.4	g4-facsimile	O R	m m	[ ] [ ]				
8.2.2.5	ia5-terminal	O R	m m	[ ] [ ]				
8.2.2.6	videotex	O R	m m	[ ] [ ]				
8.3	directory-name	O R	m m	[ ] [ ]	(Note 5)			

This table shall be filled in only if Physical Delivery is supported (see A.6.2/2).

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
9	ORName with FormattedPostalORAddress							
9.1	address							
9.1.1	CountryName	O R	m m	[ ] [ ]				
9.1.1.1	x121-dcc-code	O R	m m	[ ] [ ]		3 3		
9.1.1.2	iso-3166-alpha2-code	O R	m m	[ ] [ ]		2 2		
9.1.2	AdministrationDomainName	O R	m m	[ ] [ ]				
9.1.2.1	numeric	O R	m m	[ ] [ ]		16 16		
9.1.2.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
9.1.3	PrivateDomainName	O R	m m	[ ] [ ]	(Note 2)			
9.1.3.1	numeric	O R	m m	[ ] [ ]		16 16		
9.1.3.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
9.2	Extensions	O R	m m	[ ] [ ]	(Note 3) (Note 4)	256 256		
9.2.1	PhysicalDeliveryCountryName	O R	m m	[ ] [ ]				
9.2.1.1	x121-dcc-code	O R	m m	[ ] [ ]		3 3		
9.2.1.2	iso-3166-alpha2-code	O R	m m	[ ] [ ]		2 2		
9.2.2	PhysicalDeliveryOfficeName	O R	m m	[ ] [ ]				
9.2.2.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.2.2	teletex-string	O R	m m	[ ] [ ]		30 30		

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
9.2.3	PhysicalDeliveryOfficeNumber	O R	m m	[ ] [ ]				
9.2.3.1	printable-string	O R	o o	[ ] [ ]		30 30		
9.2.3.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.4	PhysicalDeliveryOrganizationName	O R	m m	[ ] [ ]				
9.2.4.1	printable-string	O R	o o	[ ] [ ]		30 30		
9.2.4.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.5	PhysicalDeliveryPersonalName	O R	m m	[ ] [ ]				
9.2.5.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.5.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.6	PostalCode	O R	m m	[ ] [ ]				
9.2.6.1	numeric-code	O R	m m	[ ] [ ]		16 16		
9.2.6.2	printable-code	O R	m m	[ ] [ ]	(Note 1)	16 16		
9.2.7	PosteRestanteAddress	O R	m m	[ ] [ ]				
9.2.7.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.7.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.8	PostOfficeBoxAddress	O R	m m	[ ] [ ]				
9.2.8.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.8.2	teletex-string	O R	m m	[ ] [ ]		30 30		

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
9.2.9	PDSName	O R	m m	[ ] [ ]		16 16		
9.2.10	StreetAddress	O R	m m	[ ] [ ]				
9.2.10.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.10.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.11	UniquePostalName	O R	m m	[ ] [ ]				
9.2.11.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.11.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.12	ExtensionORAddressComponents	O R	m m	[ ] [ ]				
9.2.12.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.12.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.13	ExtensionPhysicalDelivery AddressComponents	O R	m m	[ ] [ ]				
9.2.13.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.13.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.2.14	LocalPostalAttributes	O R	m m	[ ] [ ]				
9.2.14.1	printable-string	O R	m m	[ ] [ ]		30 30		
9.2.14.2	teletex-string	O R	m m	[ ] [ ]		30 30		
9.3	directory-name	O R	m m	[ ] [ ]	(Note 5)			

This table shall be filled in only if Physical Delivery is supported (see A.6.2/2).

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
10	ORName with UnformattedPostalORAddress							
10.1	address							
10.1.1	CountryName	O R	m m	[ ] [ ]				
10.1.1.1	x121-dcc-code	O R	m m	[ ] [ ]		3 3		
10.1.1.2	iso-3166-alpha2-code	O R	m m	[ ] [ ]		2 2		
10.1.2	AdministrationDomainName	O R	m m	[ ] [ ]				
10.1.2.1	numeric	O R	m m	[ ] [ ]		16 16		
10.1.2.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
10.1.3	PrivateDomainName	O R	m m	[ ] [ ]	(Note 2)			
10.1.3.1	numeric	O R	m m	[ ] [ ]		16 16		
10.1.3.2	printable	O R	m m	[ ] [ ]	(Note 1)	16 16		
10.2	Extensions	O R	m m	[ ] [ ]	(Note 3) (Note 4)	256 256		
10.2.1	UnformattedPostalAddress	O R	m m	[ ] [ ]				
10.2.1.1	printable-address	O R	m m	[ ] [ ]		6 6		
10.2.1.1.1	PrintableString	O R	m m	[ ] [ ]		30 30		
10.2.1.2	teletex-string	O R	m m	[ ] [ ]		180 180		
10.2.2	PhysicalDeliveryCountryName	O R	m m	[ ] [ ]				
10.2.2.1	x121-dc-code	O R	m m	[ ] [ ]		3 3		

Parameter		O/R	D	I	Note	Permitted range of values	Values supported	Clause reference (Rec. X.402)
10.2.2.2	iso-3166-alpha2-code	O R	m m	[ ] [ ]		2 2		
10.2.3	PostalCode	O R	m m	[ ] [ ]				
10.2.3.1	numeric-code	O R	m m	[ ] [ ]		16 16		
10.2.3.2	printable-code	O R	m m	[ ] [ ]	(Note 1)	16 16		
10.2.4	PDSName	O R	m m	[ ] [ ]		16 16		
10.3	directory-name	O R	m m	[ ] [ ]	(Note 5)			

A.6.7 *Negotiation Capabilities*

"N/A".

A.6.8 *Protocol Error Handling*

"N/A".

A.6.9 *Other Information*

This table can be used to provide any other relevant information.

Ref. No.	Other information

A.7 *Multi-layer Dependencies*

A.7.1 *Upper layers*

"N/A".

A.7.2 *Lower layers*

No modifications are imposed to the requirements on lower layers.