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X.481

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**RÉSEAUX DE COMMUNICATIONS
DE DONNÉES**

**PROTOCOLE P2: FORMULAIRE DE
DÉCLARATION DE CONFORMITÉ D'UNE
INSTANCE DE PROTOCOLE (PICS)**



Recommandation X.481

AVANT-PROPOS

Le CCITT (Comité consultatif international télégraphique et téléphonique) est un organe permanent de l'Union internationale des télécommunications (UIT). Il est chargé de l'étude des questions techniques, d'exploitation et de tarification, et émet à ce sujet des Recommandations en vue de la normalisation des télécommunications à l'échelle mondiale.

L'Assemblée plénière du CCITT, qui se réunit tous les quatre ans, détermine les thèmes d'étude et approuve les Recommandations rédigées par ses Commissions d'études. Entre les Assemblées plénières, l'approbation des Recommandations par les membres du CCITT s'effectue selon la procédure définie dans la Résolution n° 2 du CCITT (Melbourne, 1988).

La Recommandation X.481, élaborée par la Commission d'études VII, a été approuvée le 10 septembre 1992 selon la procédure définie dans la Résolution n° 2.

REMARQUE

Dans cette Recommandation, le terme «Administration» désigne indifféremment une administration de télécommunication ou une exploitation privée reconnue.

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INTRODUCTION

La présente Recommandation fait partie d'une série de Recommandations relatives à la messagerie. Toute cette série donne un schéma exhaustif d'un système de messagerie (MHS) constitué par un nombre quelconque de systèmes ouverts qui coopèrent.

L'objet d'un système de messagerie est de permettre aux usagers d'échanger des messages en mode enregistrement et retransmission. Un message déposé par un usager, l'expéditeur, est acheminé par un système de transfert de message (MTS) et remis par la suite aux agents d'un ou plusieurs autres usagers, les destinataires. Les unités d'accès (AU) relient le MTS aux autres sortes de systèmes de communication (les systèmes postaux par exemple). Un usager est aidé dans la préparation, le stockage et l'affichage des messages par un agent d'utilisateur (UA). Il peut être au besoin assisté dans le stockage des messages par une mémoire de messages (MS). Le système MTS comprend un certain nombre d'agents de transfert de messages (MTA) qui, de manière collective, assurent la fonction de transfert avec enregistrement et retransmission.

Pour évaluer la conformité d'une instance particulière de protocole, il est nécessaire de disposer d'une déclaration précisant les capacités et les options qui ont été incluses pour un protocole OSI donné. Cette déclaration est appelée déclaration de conformité d'une instance de protocole (PICS).

La présente Recommandation contient le formulaire de déclaration PICS pour le protocole P2, tel qu'il est défini dans la Recommandation X.420.

**PROTOCOLE P2: FORMULAIRE DE DÉCLARATION DE CONFORMITÉ
D'UNE INSTANCE DE PROTOCOLE (PICS)**

(1992)

1 Domaine d'application

La présente Recommandation fournit le formulaire de déclaration PICS pour le protocole P2, tel qu'il est spécifié dans la Recommandation X.420. Ce formulaire de déclaration PICS est conforme aux spécifications pertinentes et respecte les directives données dans ISO/CEI 9642-2 à propos du formulaire de déclaration PICS.

On trouvera les détails concernant l'utilisation de ce formulaire dans l'annexe A.

Le domaine d'application de la présente Recommandation est la spécification des déclarations de conformité pour un agent d'utilisateur du système de messagerie de personne à personne (IPMS-UA) et une mémoire de messages du système de messagerie de personne à personne (IPMS-MS).

2 Références normatives

- Recommandation X.400 du CCITT, *Système de messagerie: Principes du système et du service de messagerie*.
- Recommandation X.402 du CCITT, *Systèmes de messagerie: Architecture globale*.
- Recommandation X.408 du CCITT, *Systèmes de messagerie: Règles de conversion entre différents types d'informations codées*.
- Recommandation X.420 du CCITT, *Systèmes de messagerie: Système de messagerie de personne à personne*.

ISO/CEI 9646-1:1991, *Technologies de l'information – Interconnexion de systèmes ouverts – Cadre général et méthodologie des tests de conformité OSI – Partie 1: Concepts généraux*. [Voir aussi la Recommandation X.290 du CCITT (1991).]

ISO/CEI 9646-2:1991, *Technologies de l'information – Interconnexion de systèmes ouverts – Cadre général et méthodologie des tests de conformité OSI – Partie 2: Spécification des suites de tests abstraites*. [Voir aussi la Recommandation X.291 du CCITT (1991).]

Version 8 du Guide destiné aux utilisateurs du système de messagerie.

3 Définitions

La présente Recommandation utilise les termes définis dans la Recommandation X.420.

La présente Recommandation utilise également les termes suivants définis dans ISO/CEI 9646-1:

- formulaire de déclaration PICS;
- déclaration de conformité d'une instance de protocole (PICS).

4 Abréviations

ADMD	Domaine de gestion d'administration (<i>administration management domain</i>)
AU	Unité d'accès (<i>access unit</i>)
EOS	Élément de service (<i>element of service</i>)
I	Implemented
IPM	Messagerie de personne à personne (<i>interpersonal message</i>)
IPMS-MS	Mémoire de messages du système de messagerie de personne à personne (<i>interpersonal messaging system message store</i>)
IPMS-UA	Agent d'utilisateur du système de messagerie de personne à personne (<i>interpersonal messaging system user agent</i>)
IPN	Notification de personne à personne (<i>interpersonal notification</i>)
IUT	Instance sous test (<i>implementation under test</i>)
MHS	Système de messagerie (<i>message handling system</i>)
MS	Mémoire de messages (<i>message store</i>)
MTA	Agent de transfert de messages (<i>message transfer agent</i>)
MTS	Système de transfert de messages (<i>message transfer system</i>)
O/R	Expéditeur/destinataire (<i>originator/recipient</i>)
OSI	Interconnexion de systèmes ouverts (<i>open systems interconnection</i>)
P2	Protocole 2 (<i>protocol 2</i>)
PDU	Unité de données de protocole (<i>protocol data unit</i>)
PEL	Élément de protocole (<i>protocol element</i>)
PICS	Déclaration de conformité d'une instance de protocole (<i>protocol implementation conformance statement</i>)
UA	Agent d'utilisateur (<i>user agent</i>)

5 Conventions

Le formulaire de déclaration PICS fait l'objet d'une annexe à la présente Recommandation (voir l'annexe A).

6 Conformité

Le fournisseur d'une instance de protocole déclarée conforme aux spécifications de la Recommandation X.420 doit remplir un exemplaire du formulaire de déclaration PICS reproduit dans l'annexe A et fournir les renseignements nécessaires à l'identification du fournisseur et de l'instance de protocole.

ANNEXE A
(à la Recommandation X.481)

Protocole P2: Formulaire de déclaration de conformité d'une instance de protocole (PICS)

(Cette annexe fait partie intégrante de la présente Recommandation)

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.

Droits de reproduction du formulaire PICS:

Les utilisateurs du présent document sont autorisés à reproduire le formulaire PICS de la présente annexe pour utiliser celui-ci conformément à son objet. Ils sont également autorisés à publier le formulaire une fois celui-ci complété.

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 occurrences) 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 occurrences shall be entered for originator.

The maximum length and number of occurrences 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

p1 p17 or p16;

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);
- pl1 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 fulfill 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 ELe ment

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.

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-intended-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 originaor-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-obsolete	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 nrm-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 detailed in Annex C of Recommendation X.420 and Table C-1/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.

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