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**CCITT**

**X.485**

COMITÉ CONSULTATIF  
INTERNATIONAL  
TÉLÉGRAPHIQUE ET TÉLÉPHONIQUE

(09/92)

**RÉSEAUX DE COMMUNICATIONS  
DE DONNÉES**

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**SYSTÈMES DE MESSAGERIE: SYSTÈME  
DE MESSAGERIE VOCALE  
FORMULAIRE DE DÉCLARATION  
DE CONFORMITÉ D'UNE INSTANCE  
DE PROTOCOLE**



**Recommandation X.485**

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## **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 plénaires, 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.485, élaborée par la Commission d'études VII, a été approuvée le 10 septembre 1992 selon la procédure définie dans la Résolution n° 2.

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### **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 définit le formulaire de déclaration de conformité d'une instance de protocole (PICS) d'un système de messagerie vocale à utiliser pour déclarer prendre en charge un protocole OSI de système de messagerie (MHS) (*message handling system*) destiné à être utilisé pour un échange de messages codés vocaux en mode enregistrement et retransmission, conformément aux dispositions de la Recommandation F.440.

Le formulaire de PICS indiqué dans la présente Recommandation est une adjonction aux autres spécifications du système MHS définies dans les Recommandations de la série X.400 du CCITT ou la Norme internationale 10021.

## **Recommandation X.485**

### **SYSTÈMES DE MESSAGERIE: SYSTÈME DE MESSAGERIE VOCALE FORMULAIRE DE DÉCLARATION DE CONFORMITÉ D'UNE INSTANCE DE PROTOCOLE**

(1992)

#### **1 Domaine d'application**

Pour évaluer la conformité d'une instance particulière, il est nécessaire de connaître, par la déclaration qui en est faite, les services et options mis en œuvre pour un protocole OSI donné. Une telle déclaration est appelée déclaration de conformité d'une instance de protocole (PICS) (*protocol implementation conformance statement*).

La présent Recommandation indique le formulaire de PICS relatif au protocole du système VMG défini dans les Recommandations X.440 et F.440.

#### **2 Références normatives**

Les Recommandations du CCITT et Normes internationales suivantes contiennent des dispositions qui, par suite de la référence qui y est faite, constituent des dispositions valables pour la présente Recommandation. Au moment de la publication, les éditions indiquées étaient en vigueur. Toute Recommandation et Norme sont sujettes à révision et les parties prenantes aux accords fondés sur la présente Recommandation sont invitées à rechercher la possibilité d'appliquer les éditions les plus récentes des Recommandations et Normes indiquées ci-après. Les membres de la CEI et de l'ISO possèdent le registre des Normes internationales en vigueur. Le Secrétariat du CCITT tient à jour une liste des Recommandations du CCITT actuellement en vigueur.

##### **2.1 Paires de Recommandations du CCITT / Normes internationales équivalentes par leur contenu technique**

- Recommandation X.400 du CCITT (1988), *Système de messagerie: principes du système et du service de messagerie*.

ISO/CEI 10021-1:1990, *Technologies de l'information – Communication de texte – Systèmes d'échange de texte en mode message – Partie 1: Présentation du système et des services*.

- Recommandation X.402 du CCITT (1988), *Systèmes de messagerie: Architecture globale*.

ISO/CEI 10021-2:1990, *Technologies de l'information – Communication de texte – Systèmes d'échange de texte en mode message – Partie 2: Architecture générale*.

- Recommandation X.407 du CCITT (1988), *Systèmes de messagerie: Conventions pour la définition du service abstrait*.

ISO/CEI 10021-3:1990, *Technologies de l'information – Communication de texte – Systèmes d'échange de texte en mode message – Partie 3: Conventions relatives à la définition du service abstrait*.

- Recommandation X.411 du CCITT (1988), *Systèmes de messagerie: Système de transfert de messages: Définition du service abstrait et procédures*.

ISO/CEI 10021-4:1990, *Technologies de l'information – Communication de texte – Systèmes d'échange de texte en mode message – Partie 4: Système de transfert des messages: Procédures et définition du service abstrait*.

- Recommandation X.413 du CCITT (1988), *Systèmes de messagerie: Définition du service abstrait d'enregistrement de messages (MS)*.

ISO/CEI 10021-5: 1990, *Technologies de l'information – Communication de texte – Systèmes d'échange de texte en mode message – Partie 5: Dépôt des messages: Définition du service abstrait*.

- Recommandation X.419 du CCITT (1988), *Systèmes de messagerie: Spécifications de protocoles*.
- ISO/CEI 10021-6:1990, *Technologies de l'information – Communication de texte – Systèmes d'échange de texte en mode message – Partie 6: Spécification de protocole*.
- Recommandation X.290 du CCITT (1991), *Cadre et méthodologie des tests de conformité OSI pour les Recommandations sur les protocoles pour les applications du CCITT: Concepts généraux*.
- ISO/CEI 9646-1:1991, *Technologie de l'information – Cadre général et méthodologie des tests de conformité OSI – Partie 1: Concepts généraux*.
- Recommandation X.291 du CCITT (1991), *Cadre général et méthodologie de tests de conformité OSI pour les Recommandations sur les protocoles pour les applications du CCITT – Spécification des suites de tests abstraites*.
- Norme ISO/CEI 9646-2:1991, *Technologie de l'information – Cadre général et méthodologie des textes de conformité OSI – Partie 2: Spécification des suites de tests abstraites*.

## 2.2 Références additionnelles

- Recommandation F.440 du CCITT (1992), *Service public de messagerie vocale*.
- Recommandation X.440 du CCITT (1992), *Systèmes de messagerie: Système de messagerie vocale*.

## 3 Définitions

La présente Recommandation utilise les termes définis dans la Recommandation X.440.

## 4 Abréviations

La présente Recommandation utilise les abréviations définies dans la Rec. X.440 | ISO/CEI 10021.

## 5 Conventions

Ce formulaire PICS est défini comme une annexe à la présente Recommandation.

## 6 Clause de conformité

Le fournisseur d'une instance de protocole qui doit être conforme à la Recommandation X.440 doit remplir un exemplaire du formulaire PICS fourni dans l'annexe A et donner les informations nécessaires à l'identification du fournisseur et de la mise en œuvre.

ANNEXE A

(à la Recommandation X.485)

**Formulaire PICS pour le protocole VMG de la Recommandation X.440 (1992)**

(Cette annexe fait partie intégrante de la présente Recommandation)

A.1 *PICS cover page proforma*

A.1.1 *Identification of PICS*

PICS serial No.:
Date:

A.1.2 *Identification of the implementation*

Name:
Version:
Special configuration:
Other information:

A.1.3 *Identification of the system supplier*

Protocol supplier (if not the system supplier)	
Name:	Contact:
Street:	Phone No.:
City:	Telex No.:
Country:	Fax No.:
Rec. X.400:	

A.1.4 *Identification of the protocol*

Number/Revision date:
Addenda applicable:
Implementor's Guide version:

Droits de reproduction du formulaire PICS

Les utilisateurs de la présente Recommandation 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.1.5 Global statement of conformance

Are all mandatory features implemented? (Yes or No):

Answering “No” to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be indicated in the PICS, with an explanation of why the implementation is non-conforming.

#### A.1.6 VM application entity implemented

Three groups of VM application entities are specified. At least one VM application entity shall be identified when completing the PICS.

*Note* – If the implementation supports both the VM User Agent and VM Forwarding, both items A.1.6.1 and A.1.6.1.1 shall be indicated.

Item	Type of VM Application Entity and Functionality	O/R	I	Reference to Rec. X.440 (§)
A.1.6.1	VM User Agent	O/R	[ ]	15.1 and 21
A.1.6.1.1	with VM-Forwarding	O/R	[ ]	15.1, 17.3.3 and 21
A.1.6.1.2	with Message Store	O/R	[ ]	15.2 and 21
A.1.6.1.3	with Message Store and VM-Forwarding	O/R	[ ]	15.2, 17.3.3 and 21
A.1.6.2	VM Message Store	O/R	[ ]	15.2 and 21
A.1.6.2.1	VMGS-MS Attributes	O/R	[ ]	Table 1
A.1.6.2.2	VMGS-MS Auto Actions	O/R	[ ]	18.4
A.1.6.3	VM Telephone Service Access Unit (TSAU)	O/R	[ ]	15.3

### A.2 Instructions for completing the PICS proforma

#### A.2.1 Abbreviations and keys

The following abbreviation is used in this Recommendation:

PICS Protocol Implementation Conformance Statement

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

The S/M column in § A.5, Message Store Attributes, indicates whether single-valued(S) or multi-valued(M) support is required. The AE column of § A.6 means VM application entity.

The D column reflects the definitions in this Recommendation. Each entry in this column is chosen from the following list:

- m Mandatory support is required;
- O Optional support is permitted. If implemented it shall conform to the Recommendation;
- C Conditional, the support of this element is subject to a predicate which is referenced in the Note column (see § A.4.4);
- n/a Not Applicable.

The I column describes the actual capabilities of the implementation and shall be completed by the supplier using a symbol chosen from the following list:

- Y Item is implemented (subject to stated constraints);
- N Item is not implemented;
- Item is not applicable.

The O/R column separates the capabilities for Origination and Reception/Relay.

- O Origination;
- R Reception/Relay.

#### A.2.2 *Supported functions*

A function is supported for Origination if the corresponding element of service is made available by the service provider to the end-user, which if required can invoke the element of service itself.

A function is supported for Reception if the service provider actually handles the protocol element(s) associated with the element of service and makes the service available to the end-user.

Mapping between F.440 keys and PICS entries:

<i>F.440</i>	<i>PICS</i>
Basic Services	M
Essential Optional	M
Additional Optional	O

#### A.2.3 *Protocol data unit (PDU) parameters*

A Protocol element is supported for Origination if the IUT is able to generate it under some circumstances (either automatically or because VMGS-user explicitly required a related service).

A protocol element is supported for Reception if it is correctly interpreted and handled. When required it will be made available to the VMGS-user.

#### A.2.4 *Predicate definitions*

The classification of an element of service or a protocol element may be subject to a predicate. The support of a predicated item is mandatory when the related predicate is true. Otherwise support of the item is optional.

Within that annex predicates are defined as follow:

px = "Item\_number".

where:

"item" is a column title in the tables starting in A.3.

List of predicates:

*PredicateItem*

p 1	A.1.6.3
p2	A.1.6.1.1 or A.1.6.1.3
p3	A.1.6.2.2
p4	A. 1.6.(1.2 or 1.3 or 2 or 2.2)
p5	A.1.6.2 or A.1.6.2.2
p6	A.1.6.1.3
p7	A.1.6.1.2 or A.1.6-1.4
p8	A.3.62 or A.5.54

p9 p8 and (A.1.6.1 or A.1.6.1.3)

p10 12.1 of Rec. X.413 (1992)

p11 A.1.6.2

#### A.2.5 Abbreviations

The following abbreviations are used in the headings of this proforma:

O/R Origination/Reception;

D Defined in this Recommendation;

I Implemented.

Note Predicate Reference

#### A.3 Major Capabilities: Voice Messaging Elements of Service

Item	Element of Service	O/R	D	I	Reference to Recs. F.400 or X.440 (Note) (§)
A.3.1	Access Management	O R	M M	[ ] [ ]	B.1
A.3.2	Attendant Assisted Delivery	O R	O C	[ ] [ ]	E.1 p1
A.3.3	Auto-Forwarding Indication	O R	O M	[ ] [ ]	B.6
A.3.4	Body Part Encryption Indication	O R	O O	[ ] [ ]	B.9
A.3.5	Content Confidentiality	O R	O O	[ ] [ ]	B.10
A.3.6	Content Integrity	O R	O O	[ ] [ ]	B.11
A.3.7	Content Type Indication	O R	M M	[ ] [ ]	B.12
A.3.8	Conversion Prohibition	O R	M M	[ ] [ ]	B.13
A.3.9	Converted Indication	O R	M M	[ ] [ ]	B.15
A.3.10	Deferred Delivery	O R	M n/a	[ ] [ ]	B.19
A.3.11	Deferred Delivery Cancellation	O R	O n/a	[ ] [ ]	B.20
A.3.12	Delegation of Recipient by Directory Name	O R	O n/a	[ ] [ ]	B.24
A.3.13	Delivery Notification	O R	M n/a	[ ] [ ]	B.21
A.3.14	Delivery Time Stamp Indication	O R	M M	[ ] [ ]	B.22
A.3.15	Disclosure of Other Recipients	O R	O M	[ ] [ ]	B.25

Item	Element of Service	O/R	D	I	Reference to Recs. F.400 or X.440 (Note) (§)
A.3.16	DL Expansion Prohibited	O R	O n/a	[ ] [ ]	B.27
A.3.17	Expiry Date (+Time) Indication	O R	O O	[ ] [ ]	B.29
A.3.18	Forwarding Voice-Message Indicator	O R	C M	[ ] [ ]	p2,E.2
A.3.19	Grade of Delivery Selection	O R	M M	[ ] [ ]	B.32
A.3.20	Hold for Delivery	O R	O C	[ ] [ ]	B.33 MTS dependency
A.3.21	Implicit Conversion	O R	O C	[ ] [ ]	B.34 MTS dependency
A.3.22	Importance Indication	O R	M M	[ ] [ ]	B.35
A.3.23	Language Indication	O R	O O	[ ] [ ]	B.38
A.3.24	Latest Delivery Designation	O R	O n/a	[ ] [ ]	B.39
A.3.25	Message Flow Confidentiality	O R	O O	[ ] [ ]	B.40
A.3.26	Message Identification	O R	M M	[ ] [ ]	B.41
A.3.27	MS Register	O R	O n/a	[ ] [ ]	B.95
A.3.28	Multi Destination Delivery	O R	M n/a	[ ] [ ]	B.45
A.3.29	Non-Delivery Notification	O R	M M	[ ] [ ]	B.47
A.3.30	Non-Receipt Notification	O R	M M	[ ] [ ]	B.48
A.3.31	Non-repudiation of Content Originated	O R	O O	[ ] [ ]	G.1
A.3.32	Non-repudiation of Content Received	O R	O O	[ ] [ ]	G.2
A.3.33	Non-repudiation of Content Received Request	O R	O O	[ ] [ ]	G.3
A.3.34	Non-repudiation of Voice Notification	O R	O O	[ ] [ ]	G.4
A.3.35	Non-repudiation of Voice Notification Request	O R	O O	[ ] [ ]	G.5
A.3.36	Obsoleting Indication	O R	O O	[ ] [ ]	B.52
A.3.37	Prevention Non-Delivery Notification	O R	M n/a	[ ] [ ]	B.61

Item	Element of Service	O/R	D	I	Reference to Recs. F.400 or X.440 (Note) (§)
A.3.38	Proof of content received	O R	O O	[ ] [ ]	G.6
A.3.39	Proof of content received request	O R	O O	[ ] [ ]	G.7
A.3.40	Proof of voice notification	O R	O O	[ ] [ ]	G.8
A.3.41	Proof of voice notification request	O R	O O	[ ] [ ]	G.9
A.3.42	Receipt Notification Request Indication	O R	M M	[ ] [ ]	B.67
A.3.43	Redirection Disallowed by Originator	O R	O M	[ ] [ ]	B.68
A.3.44	Redirection of Incoming Message	O R	O C	[ ] [ ]	B.68 MTS dependency
A.3.45	Replying Voice-message Indicator	O R	O M	[ ] [ ]	E.3
A.3.46	Restricted Delivery	O R	O C	[ ] [ ]	B.77 MTS dependency
A.3.47	Secure Access Management	O R	O O	[ ] [ ]	B.79
A.3.48	Sensitivity Indication	O R	M M	[ ] [ ]	B.80
A.3.49	Stored Message Alert	O R	O C	[ ] [ ]	B.82 p3
A.3.50	Stored Message Auto Forward	O R	O C	[ ] [ ]	B.83 p3, p4
A.3.51	Stored Message Deletion	O R	n/a C	[ ] [ ]	B.84 p3, p4
A.3.52	Stored Message Fetching	O R	n/a C	[ ] [ ]	B.85 p3
A.3.53	Stored Message Listing	O R	n/a C	[ ] [ ]	B.86 p3
A.3.54	Stored Message Summary	O R	n/a C	[ ] [ ]	B.87 p3
A.3.55	Stored VM-auto-forward	O R	O C	[ ] [ ]	E.4
A.3.56	Submission Time Stamp Indication	O R	M M	[ ] [ ]	B.89
A.3.57	TS-recipient Spoken Name Indication	O R	O C	[ ] [ ]	E.5 p1
A.3.58	TSAU-recipient	O R	M C	[ ] [ ]	E.6 p1
A.3.59	Typed Body	O R	M M	[ ] [ ]	B.91

Item	Element of Service	O/R	D	I	Reference to Recs. F.400 or X.440 (Note) (§)
A.3.60	Use of Distribution List	O R	M n/a	[ ]	B.92
A.3.61	User/UA Capability Registration	O R	M M	[ ]	B.93
A.3.62	V-message Creation Time	O R	M M	[ ]	E.7
A.3.63	V-message Duration Indicator	O R	M M	[ ]	E.8
A.3.64	V-message Identification	O R	M M	[ ]	E.9
A.3.65	VM-encoding Algorithm Identifier	O R	M M	[ ]	E.10
A.3.66	VM-forwarding	O R	O M	[ ]	E.11
A.3.67	VM.multi-part Body	O R	M M	[ ]	E.12
A.3.68	VM Recipient Indicator	O R	M M	[ ]	E.14
A.3.69	VM-service status notification Request	O R	M M	[ ]	E.15
A.3.70	VM spoken name indication	O R	M M	[ ]	E.16
A.3.71	VM subject indication	O R	M M	[ ]	E.17
A.3.72	VN receiver	O R	O O	[ ]	E.13

Note – References to B – subclauses are found in Annex B of Rec. F.400. References to E – and G – subclauses are found in Annexes E and G of Recommendation F.440.

#### A.4 Voice Messaging Protocol Data Unit (PDU) Parameters

##### A.4.1 VMG information objects

Item	InformationObject	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.1.1	vm	O R	M M	[ ]				6
A.4.1.2	vm	O R	M M	[ ]				6

#### A.4.2 VM identifier

Item	VMIdentifier	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.2.1	user	O R	M M	[ ] [ ]				7.1
A.4.2.2	user-relative-reference	O R	M M	[ ] [ ]				7.1

#### A.4.3 OR descriptor

Item	OR Descriptor	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.3.1	formal-name (OR address)	O R	O <sup>a)</sup> M	[ ] [ ]				7.2
A.4.3.2	free-fom-name (text)	O R	O <sup>a)</sup> M	[ ] [ ]				7.2
A.4.3.3	telephone-number (text)	O R	O <sup>a)</sup> M	[ ] [ ]				7.2

a) At least one shall be supported on origination.

#### A.4.4 Extension productions

Item	Extentions	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.4.1	ExtensionField	O R	O M	[ ] [ ]				7.4
A.4.4.1.1	type	O R	M M	[ ] [ ]				7.4
A.4.4.1.2	criticality	O R	M M	[ ] [ ]				7.4
A.4.4.1.3	value	O R	M M	[ ] [ ]				7.4

#### A.4.5 Voice Messaging protocol structure

Item	VM	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.5.1	heading	O R	M M	[ ] [ ]				8
A.4.5.2	body	O R	M M	[ ] [ ]				8

A.4.6 *VM heading*

Item	Heading	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.1	this-VM	O R	M M	[ ] [ ]				8.1.1
A.4.6.2	originator	O R	M M	[ ] [ ]				8.1.2
A.4.6.3	recipients	O R	M M	[ ] [ ]				8.1.3
A.4.6.4	obsoleted-VMs	O R	O O	[ ] [ ]				8.1.4
A.4.6.5	vm-subject	O R	O M	[ ] [ ]				8.1.5
A.4.6.6	expiry-time	O R	O O	[ ] [ ]				8.1.6
A.4.6.7	importance	O R	M M	[ ] [ ]				8.1.7
A.4.6.8	sensitivity	O R	M M	[ ] [ ]				8.1.8
A.4.6.9	message-forwarded	O R	C M	[ ] [ ]	p2			8.1.9
A.4.6.10	vm-forwarding-permitted	O R	M M	[ ] [ ]				8.1.10
A.4.6.11	language	O R	O O	[ ] [ ]				8.1.11
A.4.6.12	voice-encoding-type	O R	M M	[ ] [ ]				8.1.12
A.4.6.12.1	id-bp-g721-32k-adpcm	O R	M M	[ ] [ ]				8.1.12 and Annex A
A.4.6.12.2	id-bp-private-octet	O R	O O	[ ] [ ]				8.1.12 and Annex A
A.4.6.12.3	id-bp-undefined-octet	O R	O O	[ ] [ ]				8.1.12 and Annex A
A.4.6.13	vm-creation-time	O R	O O	[ ] [ ]				8.1.13
A.4.6.14	vn-receiver-field	O R	O M	[ ] [ ]				8.1.14
A.4.6.15	vmgs-user-security-elements	O R	O O	[ ] [ ]				8.1.15
A.4.6.16	heading-extensions	O R	O M	[ ] [ ]				8.1.16

A.4.6.1 *Per recipient sub field*

Item	RecipientsSubField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.1.1	recipient	O R	M M	[ ] [ ]				8.1.3.1
A.4.6.1.2	vn-requests-field	O R	M M	[ ] [ ]				8.1.3.2
A.4.6.1.3	attendant-assisted-delivery-request	O R	O C	[ ] [ ]	p1			8.1.3.3
A.4.6.1.4	recipient-extensions	O R	O M	[ ] [ ]				8.1.3.4

A.4.6.1.1 *VM Notification Requests*

Item	VMNotificationRequestsField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.1.1.1	vm-notification-requests	O R	M M	[ ] [ ]				8.1.3.2
A.4.6.1.1.1.1	receipt-notice (m)	O R	M M	[ ] [ ]				8.1.3.2
A.4.6.1.1.1.2	service-notice (sn)	O R	M M	[ ] [ ]				8.1.3.2
A.4.6.1.1.1.3	non-receipt-notice (nm)	O R	M M	[ ] [ ]				8.1.3.2
A.4.6.1.1.2	vm-notification-security	O R	O O	[ ] [ ]				8.1.3.2
A.4.6.1.1.2.1	proof	O R	O M	[ ] [ ]				8.1.3.2
A.4.6.1.1.2.2	non-repudiation	O R	O M	[ ] [ ]				8.1.3.2
A.4.6.1.1.3	vm-reception-security	O R	O O	[ ] [ ]				8.1.3.2
A.4.6.1.1.3.1	proof	O R	O M	[ ] [ ]				8.1.3.2
A.4.6.1.1.3.2	non-repudiation	O R	O M	[ ] [ ]				8.1.3.2
A.4.6.1.1.4	vm-notification-extension-requests	O R	M M	[ ] [ ]				8.1.3.2

A.4.6.1.2 *Recipient Field*

Item	RecipientField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.1.2.1	recipient-name	O R	O M	[ ] [ ]				8.1.3.1
A.4.6.1.2.2	spoken-name	O R	O M	[ ] [ ]				8.1.3.1 and 7.3

A.4.6.1.3 *VN Receiver Field*

Item	VNReceiverField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.1.3.1	vn-receiver-name	O R	M M	[ ] [ ]				8.1.14
A.4.6.1.3.2	original-vm-identifier	O R	O M	[ ] [ ]				8.1.14 and 7.1
A.4.6.1.3.3	first-recipient	O R	O M	[ ] [ ]				8.1.14 and 9.1.3

A.4.6.1.4 *VMGS User Security Elements*

Item	VMGSUserSecurity ElementsField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.1.4.1	vmgs-user-security-element	O R	O M	[ ] [ ]				8.1.1.5
A.4.6.1.4.2	vm-encrypted-primary-bodypart	O R	O M	[ ] [ ]				8.1.1.5
A.4.6.1.4.3	vmgs-user-security-extensions	O R	O M	[ ] [ ]				8.1.1.5

A.4.6.2 *Originator field*

Item	OriginatorField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.2.1	ORDescriptor	O R	M M	[ ] [ ]				7.2 and 8.1.2
A.4.6.2.2	originator-spoke-name	O R	O M	[ ] [ ]				7.3 and 8.1.2

A.4.6.3 *Language*

Item	Language	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.6.3.1	language	O R	O M	[ ]				8.1.11

A.4.7 *Body*

Item	Body	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.1	primary-body-part	O R	M M	[ ]				8
A.4.7.2	additional-body-parts	O R	O M	[ ]				8 and 8.2.3

A.4.7.1 *Primary body part*

Item	PrimaryBodyPart	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.1.1	vm-body-part (VBodyPart)	O R	M M	[ ]				8
A.4.7.1.2	forwarded-VM (VMBodyPart)	O R	C M	[ ]	p2			8 and 8.2.2

A.4.7.2 *V body part*

Item	VBodyPart	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.2.1	voice parameters	O R	M M	[ ]				8.2.1
A.4.7.2.1.1	voice-message-duration	O R	M M	[ ]				8.2.1
A.4.7.2.1.2	voice-encoding-type	O R	O O	[ ]				8.2.1
A.4.7.2.1.3	other-parameters	O R	O M	[ ]				8.2.1
A.4.7.2.1.4	extension-parameters	O R	O O	[ ]				8.2.1
A.4.7.2.2	voice data	O R	O M	[ ]				8.2.1

A.4.7.3 *Forwarded VM body part*

Item	VBodyPart	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.3.1	parameters(MessageParameters)	O R	O M	[ ] [ ]				8.2.2
A.4.7.3.2	data	O R	O M	[ ] [ ]				8.2.2

A.4.7.3.1 *Forwarded message parameters*

Item	MessageParameters	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.3.1.1	delivery-time	O R	M M	[ ] [ ]				8.2.2
A.4.7.3.1.2	delivery-envelope	O R	O M	[ ] [ ]				8.2.2
A.4.7.3.1.3	other-parameters	O R	O M	[ ] [ ]				8.2.2

A.4.7.3.2 *Forwarded message data*

Item	MessageData	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.3.2.1	heading	O R	M M	[ ] [ ]				8.2.2
A.4.7.3.2.2	body	O R	M M	[ ] [ ]				8.2.2

A.4.7.4 *Body segment*

Item	BodySegment	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.7.4.1	primary-body-par	O R	M M	[ ] [ ]				8
A.4.7.4.2	additional-body-parts	O R	O O	[ ] [ ]				8
A.4.7.4.2.1	VM-ExternallyDefinedBodyPart	O R	O O	[ ] [ ]				8 and 8.2.3

A.4.8 *Voice Messaging notification protocol*

Item	VN	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.1	receipt-notification	O R	M M	[ ] [ ]				9 and 9.2
A.4.8.2	service-notification	O R	M M	[ ] [ ]				9 and 9.3
A.4.8.3	non-receipt-notification	O R	M M	[ ] [ ]				9 and 9.4

A.4.8.1 *VN common fields*

Item	CommonFields	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.1.1	subject-vm	O R	M M	[ ] [ ]				9.1.1
A.4.8.1.2	vn-originator	O R	M M	[ ] [ ]				9.1.2
A.4.8.1.3	conversion-indication	O R	O M	[ ] [ ]				9.1.3
A.4.8.1.4	notice-creation-time	O R	M M	[ ] [ ]				9.1.4
A.4.8.1.5	notification-security-elements	O R	O O	[ ] [ ]				9.1.7
A.4.8.1.6	orig-vm-spoken-subject	O R	O M	[ ] [ ]				9.1.8
A.4.8.1.7	subject-vm-other-recipients	O R	M M	[ ] [ ]				9.1.9
A.4.8.1.8	vn-supplementary-info	O R	O O	[ ] [ ]				9.1.10
A.4.8.1.9	vn-voice-encoding-type	O R	M M	[ ] [ ]				9.1.5
A.4.8.1.9.1	id-bp-g721-32k-adpcm	O R	M M	[ ] [ ]				8.1.12 and Annex A
A.4.8.1.9.2	id-bp-private-octet	O R	O O	[ ] [ ]				8.1.12 and Annex A
A.4.8.1.9.3	id-bp-undefined-octet	O R	O O	[ ] [ ]				8.1.12 and Annex A
A.4.8.1.10	first-recipient	O R	O M	[ ] [ ]				9.1.3
A.4.8.1.11	notifications-extensions	O R	O M	[ ] [ ]				9.1.11

A.4.8.1.1 *Security elements field*

Item	SecurityElementsField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.1.1.1	original-content	O R	O M	[ ] [ ]				9.1.7 and 17.1.2
A.4.8.1.1.2	original-content-integrity-check	O R	O M	[ ] [ ]				9.1.7 and 17.1.2
A.4.8.1.1.3	vmgs-user-security-elements	O R	O M	[ ] [ ]				9.1.7 and 17.1.2
A.4.8.1.1.4	security-extensions	O R	O M	[ ] [ ]				9.1.7 and 17.1.2

A.4.8.1.2 *VN originator field*

Item	VNOriginatorField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.1.2.1	originator-name	O R	M M	[ ] [ ]				9.1.2
A.4.8.1.2.2	vn-initiator	O R	O M	[ ] [ ]				9.1.2

A.4.8.2 *Receipt notification fields*

Item	ReceiptNotificationFields	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.2.1	rn-common-fields	O R	M M	[ ] [ ]				9.1 and 9.2.1
A.4.8.2.2	rn-extensions	O R	O M	[ ] [ ]				9.2.2

A.4.8.3 *Service notification fields*

Item	ServiceNotificationFields	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.3.1	sn-common-fields	O R	M M	[ ] [ ]				9.3.1
A.4.8.3.2	sn-reason-code	O R	M M	[ ] [ ]				9.3.2
A.4.8.3.3	sn-extensions	O R	O M	[ ] [ ]				9.3.3

A.4.8.3.1 *Service notification reason codes*

Item	SNReasonCode	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.3.1.1	sn-reason-code	O R	M M	[ ] [ ]				9.3.2
A.4.8.3.1.2	sn-diagnostic	O R	O M	[ ] [ ]				9.3.2

A.4.8.3.2 *Non-receipt notification fields*

Item	Non-Receipt Notification Fields	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.3.2.1	nrn-common-fields	O R	M M	[ ] [ ]				9.4 and 9.4.1
A.4.8.3.2.2	nrn-reason-codes	O R	M M	[ ] [ ]				9.4 and 9.4.2
A.4.8.3.2.3	nrn-extensions	O R	O O	[ ] [ ]				9.4 and 9.4.3

A.4.8.4 *Non-Receipt reason code*

Item	NRNReasonCodeField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.4.1	nrn-ua-ms-reason-code	O R	M M	[ ] [ ]				9.4.2
A.4.8.4.2	nrn-user-reason-code	O R	O M	[ ] [ ]				9.4.2
A.4.8.4.3	nrn-tsau-reason-code	O R	O M	[ ] [ ]				9.4.2

A.4.8.4.1 *Non-receipt notification reason codes from an VM-UA or VM-MS*

Item	NRNUAMSReasonCodeField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.4.1.1	nrn-ua-ms-basic-codes	O R	M M	[ ] [ ]				9.4.2
A.4.8.4.1.2	nrn-ua-ms-diagnostics	O R	O M	[ ] [ ]				9.4.2

A.4.8.4.2 *Non-receipt notification reason codes from a VMG-user*

Item	NRNUserReasonCodeField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.4.2.1	nrn-user-basic-codes	O R	O M	[ ] [ ]				9.4.2
A.4.8.4.2.2	nrn-user-diagnostics	O R	O M	[ ] [ ]				9.4.2

A.4.8.4.3 *Non-receipt notification reason codes from a TSAU*

Item	NRNTSAURReasonCodeField	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.4.8.4.3.1	nrn-tsau-basic-codes	O R	O M	[ ] [ ]				9.4.2
A.4.8.4.3.2	nrn-tsau-diagnostics	O R	O M	[ ] [ ]				9.4.2

A.5 *Message Store Attributes*

Item	Message Store Attributes	S/M	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.5.1	body	S	M	[ ]				18.6.4.1
A.5.2	conversion-indication	S	M	[ ]				18.6.5.1
A.5.3	expiry-time	S	O	[ ]				18.6.3.2
A.5.4	externally-defined-body-part-types	M	O	[ ]				18.6.4.4
A.5.5	first-recipient	S	O	[ ]				18.6.5.1
A.5.6	heading	S	M	[ ]				18.6.3.1
A.5.7	heading-extensions	M	M	[ ]				18.6.3.2
A.5.8	importance	S	O	[ ]				18.6.3.2
A.5.9	language	M	O	[ ]				18.6.3.2
A.5.10	message-data	S	O	[ ]				18.6.4.3
A.5.11	message-parameters	S	O	[ ]				18.6.4.3
A.5.12	notification-security-elements	S	O	[ ]				18.6.5.1
A.5.13	notification-creation-time	S	O	[ ]				18.6.5.1
A.5.14	notification-extensions	M	O	[ ]				18.6.5.1
A.5.15	nrn-extensions	M	O	[ ]				18.6.5.4

Item	Message Store Attributes	S/M	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.5.16	nrn-tsau-reason-codes	M	O	[ ]				18.6.5.4
A.5.17	nrn-ua-ms-reason-codes	M	O	[ ]				18.6.5.4
A.5.18	nrn-user-reason-codes	M	O	[ ]				18.6.5.4
A.5.19	obsoleted-vm	S	O	[ ]				18.6.3.2
A.5.20	originator	S	O	[ ]				18.6.3.2
A.5.21	orig-vm-spoken-subject	S	O	[ ]				18.6.5.1
A.5.22	recipient-extensions-for-this-recipient	M	O	[ ]				18.6.3.3
A.5.23	m-extensions	M	O	[ ]				18.6.5.2
A.5.24	sensitivity	S	O	[ ]				18.6.3.2
A.5.25	sn-extensions	M	O	[ ]				18.6.5.3
A.5.26	sn-reason-code	S	O	[ ]				18.6.5.3
A.5.27	subject-vm	S	M	[ ]				18.6.5.1
A.5.28	subject-vm-other-recipients	M	O	[ ]				18.6.5.1
A.5.29	this-vm	S	M	[ ]				18.6.3.2
A.5.30	this-recipient	S	O	[ ]				18.6.3.3
A.5.31	v-body-message-length	S	M	[ ]				18.6.4.2
A.5.32	v-body-part	S	M	[ ]				18.6.4.3
A.5.33	vm-body-part-sequence-number	S	M	[ ]				18.6.4.3
A.5.34	vm-creation-time	S	M	[ ]				18.6.3.2
A.5.35	vm-entry-type	S	M	[ ]				18.6.1.1
A.5.36	vm-forwarded-indication	S	M	[ ]				18.6.3.2
A.5.37	vm-forwarding-permitted	S	O	[ ]				18.6.3.2
A.5.38	vm-notification-indicator	S	O	[ ]				18.6.2
A.5.39	vm-notification-extension-requests for-this-recipient	M	M	[ ]				18.6.3.3
A.5.40	vm-notification-requests-for-this-recipient	S	M	[ ]				18.6.3.3
A.5.41	vm-notification-security-requests-for-this-recipient	S	O	[ ]				18.6.3.3
A.5.42	vm-originator-spoken-name	S	O	[ ]				18.6.3.2
A.5.43	vm-reception-security-requests-for-this-recipient	S	O	[ ]				18.6.3.3
A.5.44	vm-spoken-subject	S	O	[ ]				18.6.3.2
A.5.45	vm-synopsis	S	O	[ ]				18.6.1.2
A.5.46	vm-this-recipient-spoken-name	S	O	[ ]				18.6.3.2
A.5.47	vmgs-user-security-element	S	O	[ ]				18.6.3.2

Item	Message Store Attributes	S/M	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.5.48	vmgs-user-security-extentions	M	O	[ ]				18.6.3.2
A.5.49	vn-initiator	S	O	[ ]				18.6.5.1
A.5.50	vn-originator-text	S	O	[ ]				18.6.5.1
A.5.51	vn-originator-spoken-name	M	O	[ ]				18.6.5.1
A.5.52	vn-receiver-field	S	O	[ ]				18.6.3.2
A.5.53	vn-supplementary-information	S	O	[ ]				18.6.5.1
A.5.54	vn-voice-encoding-type	S	M	[ ]				18.6.5.1
A.5.55	voice-encoding-type	S	M	[ ]				18.6.3.2
A.5.56	voice-message-duration	S	M	[ ]				18.6.4.2
A.5.57	voice-message-other-parms	S	M	[ ]				18.6.4.2

## A.6 Message Store Auto-Actions

Item	VM Auto Actions	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.0.1	vm-auto-forward-actions	UA MS	C C	[ ] [ ]	p4,p8 p5			18.4
A.6.0.1.1	VMAutoForward RegistrationParameter	UA MS	M M	[ ] [ ]				18.4
A.6.0.2	vn-auto-sn-action	UA MS	C C	[ ] [ ]	p4,p8 p5			18.4
A.6.0.2.1	VNSNActionRegistration Parameter	UA MS	M M	[ ] [ ]				18.5

### A.6.1 Message Store Auto Action (Forwarding) registration parameter

Item	VM Action Registration Parameter	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.1.1	filter	UA MS	M M	[ ] [ ]				18.4
A.6.1.2	vm-supplementary-info	UA MS	O O	[ ] [ ]				18.4
A.6.1.3	delete-after-forwarding	UA MS	O O	[ ] [ ]				18.4
A.6.1.4	vm-action-mode	UA MS	C M	[ ] [ ]	p8			18.4

A.6.1.1 *VM Forwarding action mode*

Item	vm-action-mode	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.1.1.1	forwarding-with-message-not-accepted	UA MS	O M	[ ] [ ]				18.4
A.6.1.1.2	forwarding-with-responsibility-accepted	UA MS	O M	[ ] [ ]				18.4
A.6.1.1.3	forwarding-with-no-VNs	UA MS	C M	[ ] [ ]				18.4

A.6.2 *Auto action registration parameters for forwarding with responsibility not accepted*

Item	ForwardWithRespNotAccepted	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.2.1	PerMessageAutoForwardFields	UA MS	O M	[ ] [ ]				18.4.1 d)
A.6.2.1.1	OriginatorName	UA MS	C M	[ ] [ ]	p10			
A.6.2.1.2	ContentIdentifier	UA MS	C M	[ ] [ ]	p10			
A.6.2.1.3	Priority	UA MS	C M	[ ] [ ]	p10			
A.6.2.1.4	PerMessageIndicators	UA MS	C M	[ ] [ ]	p10			
A.6.2.1.5	DeferredDeliveryTime	UA MS	C M	[ ] [ ]	p10			
A.6.2.1.6	PerMessageSubmissionExtensions	UA MS	C O	[ ] [ ]	p10			
A.6.2.2	per-recipient-no-accept-arguments	UA MS	C C	[ ] [ ]	p4 p5			18.4.1 e) 17.3.3.1
A.6.2.2.1	per-recipients-field	UA MS	M M	[ ] [ ]				18.4.2 e)
A.6.2.2.1.1	OriginatorReportRequest	UA MS	C M	[ ] [ ]	p10			
A.6.2.2.1.2	ExplicitConversion	UA MS	C M	[ ] [ ]	p10			
A.6.2.2.1.3	PerRecipientMessageSubmission Extensions	UA MS	O M	[ ] [ ]				
A.6.2.2.2	heading-fields	UA MS	O M	[ ] [ ]				18.4.2 g)
A.6.2.2.2.1	next-recipient	UA MS	O M	[ ] [ ]				18.6
A.6.2.2.2.2	next-recipient-vn-requests-field	UA MS	O M	[ ] [ ]				18.6

Item	ForwardWithRespNotAccepted	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.2.2.2.3	next-message-forwarding-permitted	UA MS	O C	[ ] [ ]	p8			18.6
A.6.2.3	notification-argument	UA MS	C M	[ ] [ ]	p7			18.4.1 f)
A.6.2.3.1	PerMessageAutoForwardFields	UA MS	C M	[ ] [ ]	p10			18.6
A.6.2.3.1.1	OriginatorName	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.1.2	ContentIdentifier	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.1.3	Priority	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.1.4	PerMessageIndicators	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.1.5	DeferredDeliveryTime	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.1.6	PerMessagesubmissionExtensions	UA MS	O O	[ ] [ ]				
A.6.2.3.2	per-recipients-field	UA MS	M M	[ ] [ ]				18.4.2 e)
A.6.2.3.2.1	RecipientName	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.2.2	OriginatorReportRequest	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.2.3	ExplicitConversion	UA MS	C M	[ ] [ ]	p10			
A.6.2.3.2.4	PerRecipientMessageSubmission Extensions	UA MS	O M	[ ] [ ]				

### A.6.3 Auto action registration parameters for forwarding with responsibility accepted

Item	ForwardWithRespAccepted	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.3.1	PerMessageAutoForwardFields	UA MS	M M	[ ] [ ]				18.4.2. d)
A.6.3.1.1	OriginatorName	UA MS	C M	[ ] [ ]	p10			
A.6.3.1.2	ContentIdentifier	UA MS	C M	[ ] [ ]	p10			
A.6.3.1.3	Priority	UA MS	C M	[ ] [ ]	p10			

Item	ForwardWithRespAccepted	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.3.1.4	PerMessageIndicators	UA MS	C M	[ ] [ ]	p10			
A.6.3.1.5	DeferredDeliveryTime	UA MS	C M	[ ] [ ]	p10			
A.6.3.1.6	PerMessageSubmissionExtensions	UA MS	C O	[ ] [ ]	p10			
A.6.3.2	notification-argument	UA MS	M M	[ ] [ ]				18.4.2 f) 5.1.2 (H)
A.6.3.2.1	PerMessageAutoForwardFields	UA MS	O C	[ ] [ ]	p8			18.6
A.6.3.2.1.1	OriginatorName	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.1.2	ContentIdentifier	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.1.3	Priority	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.1.4	PerMessageIndicators	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.1.5	DeferredDeliveryTime	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.1.6	PerMessageSubmissionExtensions	UA MS	O O	[ ] [ ]				
A.6.3.2.2	per-recipients-field	UA MS	M M	[ ] [ ]				18.4.2 e)
A.6.3.2.2.1	OriginatorReportRequest	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.2.2	ExplicitConversion	UA MS	C M	[ ] [ ]	p10			
A.6.3.2.2.3	PerRecipientMessageSubmission Extensions	UA MS	O M	[ ] [ ]				
A.6.3.3	per-recipient-arguments	UA MS	M M	[ ] [ ]				18.4.2 f) 5.1.2 (H)
A.6.3.3.1	per-recipients-field	UA MS	M M	[ ] [ ]				18.4.2 e)
A.6.3.3.1.1	RecipientName	UA MS	C M	[ ] [ ]	p10			
A.6.3.3.1.2	OriginatorReportRequest	UA MS	C M	[ ] [ ]	p10			
A.6.3.3.1.3	ExplicitConversion	UA MS	C M	[ ] [ ]	p10			
A.6.3.3.1.4	PerRecipientMessageSubmission Extensions	UA MS	C M	[ ] [ ]	p10			
A.6.3.3.2	heading-fields	UA MS	O M	[ ] [ ]				18.4.2 g)

Item	ForwardWithRespAccepted	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.3.3.2.1	next-recipient	UA MS	O M	[ ] [ ]				18.6
A.6.3.3.2.2	next-recipient-vn-requests-field	UA MS	O M	[ ] [ ]				18.6
A.6.3.3.2.3	next-message-forwarding-permitted	UA MS	O C	[ ] [ ]	p8			18.6
A.6.3.3.3	new-vn-receiver-name	UA MS	M M	[ ] [ ]				18.6

#### A.6.4 Auto action registration parameters for forwarding without generating VNs

Item	ForwardWithNoVNs	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.4.1	PerMessageAutoForwardFields	UA MS	M M	[ ] [ ]				18.4.2
A.6.4.1.1	OriginatorName	UA MS	C M	[ ] [ ]	p10			
A.6.4.1.2	ContentIdentifier	UA MS	C M	[ ] [ ]	p10			
A.6.4.1.3	Priority	UA MS	C M	[ ] [ ]	p10			
A.6.4.1.4	PerMessageIndicators	UA MS	C M	[ ] [ ]	p10			
A.6.4.1.5	DeferredDeliveryTime	UA MS	C M	[ ] [ ]	p10			
A.6.4.1.6	PerMessageSubmissionExtensions	UA MS	O O	[ ] [ ]				
A.6.4.2	per-recipient-arguments	UA MS	M M	[ ] [ ]				18.4.2
A.6.4.2.1	per-recipients-p1-info (PerRecipientAutoForwardFields)	UA MS	M M	[ ] [ ]				18.4.2
A.6.4.2.1.1	RecipientName	UA MS	C M	[ ] [ ]	p10			
A.6.4.2.1.2	OriginatorReportRequest	UA MS	C M	[ ] [ ]	p10			
A.6.4.2.1.3	ExplicitConversion	UA MS	C M	[ ] [ ]	p10			
A.6.4.2.1.4	PerRecipientMessageSubmission Extensions	UA MS	O M	[ ] [ ]				
A.6.4.2.2	vm-heading-fields	UA MS	O M	[ ] [ ]				18.4.2

Item	ForwardWithNoVNs	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.4.2.2.1	next-recipient	UA MS	O M	[ ] [ ]				18.6
A.6.4.2.2.2	next-recipient-vn-requests-field	UA MS	O M	[ ] [ ]				18.6
A.6.4.2.2.3	next-message-forwarding-permitted	UA MS	O C	[ ] [ ]	p8			18.6
A.6.4.2.3	new-vn-receiver-name	UA MS	M M	[ ] [ ]				18.4.2

### A.6.5 VM Auto SN Action

Item	VNSNAction RegistrationParameter	AE	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.6.5.1	filter	UA MS	M M	[ ] [ ]				18.5
A.6.5.2	vn-service-notice-info	UA MS	M M	[ ] [ ]				18.5
A.6.5.2.1	notification-argument (SNReasonCode)	UA MS	M M	[ ] [ ]				18.5
A.6.5.2.2	sn-supplementary-info	UA MS	O O	[ ] [ ]				18.5
A.6.5.2.3	extensions	UA MS	O O	[ ] [ ]				18.5

### A.7 PI Support

#### A.7.1 Content type support

Item	Content type	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.7.1.1	id-mct-pvm	O R	C C	[ ] [ ]	p7 p11			19.2
A.7.1.2	Integer 40	O R	M M	[ ] [ ]				19.2

A.7.2 *Encoded information type (EIT) support*

Item	EITs	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.7.2.1	id-bp-g721-32k-adpcm	O R	M M	[ ] [ ]				19.4
A.7.2.2	id-bp-private-octet	O R	O O	[ ] [ ]				19.4
A.7.2.3	id-bp-undefined-octet	O R	O O	[ ] [ ]				19.4

A.7.3 *Per message parameter bits*

Item	PerMessageParameters	O/R	D	I	Note	Range of values	Values supported	Reference to Rec. X.440 (§)
A.7.3.1	RN Indicator (Notification Type 1)	O R	O M	[ ] [ ]				19.4
A.7.3.2	NRN Indicator (Notification Type 2)	O R	O M	[ ] [ ]				
A.7.3.3	SN Indicator (Notification Type 3)	O R	O M	[ ] [ ]				

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