ITU

INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

X.485
(09/92)

DATA COMMUNICATION NETWORKS

MESSAGE HANDLING SYSTEMS: VOICE MESSAGING SYSTEM PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS) PROFORMA

Recommendation X.485

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.485 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.

CONTENTS

INTRODUCTION

This Recommendation defines the VM Protocol Implementation Conformance Statement (PICS) proforma that shall be used when claiming support for an OSI Message Handling System (MHS) protocol that is intended to be used in the exchange of voice encoded messages in a store-and-forward manner as specified in Recommendation F.440.

The PICS proforma in this Recommendation is a adjunct to other MHS specifications as defined in the CCITT X.400-Series Recommendations or in International Standard 10021.

Recommendation X.485

MESSAGE HANDLING SYSTEMS: VOICE MESSAGING SYSTEM PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS) PROFORMA

(1992)

1   Scope

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 provides the PICS proforma for the VMG protocol in Recommendation X.440 and Recommendation F.440.

2   Normative references

The following CCITT Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication the editions indicated were valid. All Recommendations | Standards are subject to revision, and parties to agreements based on this Recommendation are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The CCITT Secretariat maintains a list of currently valid CCITT Recommendations.

2.1   *Paired CCITT Recommendations / International Standards equivalent in technical content*

–   CCITT Recommendation X.400 (1988), *Message Handling System and Service Overview.*

ISO/IEC 10021-1:1990, *Information Technology – Text Communication – Message Oriented Text Interchange System – Part 1: Service Overview.*

–   CCITT Recommendation X.402 (1988), *Message Handling Systems: Overall Architecture.*

ISO/IEC 10021-2:1990, *Information Technology – Text Communication – Message Oriented Text Interchange System – Part 2: Overall Architecture.*

–   CCITT Recommendation X.407 (1988), *Message Handling Systems: Abstract Service Definition and Conventions.*

ISO/IEC 10021-3:1990, *Information Technology – Text Communication – Message Oriented Text Interchange System – Part 3: Abstract Service Definition and Conventions.*

–   CCITT Recommendation X.411 (1988), *Message Handling Systems: Message Transfer System: Abstract Service Definition and Procedures.*

ISO/IEC 10021-4:1990, *Information Tecnology – Text Communication – Message Oriented Text Interchange System – Part 4: Message Transfer Systems, Abstract Service Definition and Procedures.*

–   CCITT Recommendation X.413 (1988), *Message Store: Abstract Service Operation.*

ISO/IEC 10021-5:1990, *Information Technology – Text Communication – Message Oriented Text Interchange System – Part 5: Message Store: Abstract Service Operation.*

–   CCITT Recommendation X.419 (1988), *Message Handling Systems: Protocol Specifications.*

ISO/IEC 10021-6:1990, *Information Technology – Text Communication – Message Oriented Text Interchange System – Part 6: Protocol Specification.*

–   CCITT Recommendation X.290 (1991), *OSI Conformance Testing Methodology and Framework: General Concepts.*

ISO/IEC 9646-1:1991, *Information Technology – OSI Conformance Testing Methodology and Framework – Part 1: General Concepts.*

–   CCITT Recommendation X.291 (1991), *OSI Conformance Testing Methodology and Framework: Abstract Test Suite Specification.*

ISO/IEC 9646-2:1991, *Information Technology – OSI Conformance Testing Methodology and Framework – Part 2: Abstract Test Suite Specification.*

2.2   *Additional references*

–   CCITT Recommendation F.440 (1992), *The Voice Messaging Service*.

–   CCITT Recommendation X.440 (1992), *Message Handling Systems: Voice Messaging System.*

3   Definitions

This Recommendation uses the terms defined in Recommendation X.440.

4   Abbreviations

This Recommendation uses the abbreviations defined in the CCITT Rec. X.440 | ISO/IEC 10021.

5   Conventions

The PICS proforma is defined as an annex to this Recommendation.

6   Conformance clause

The supplier of a protocol implementation which is claimed to conform with Recommendation X.440 is required to complete a copy of the PICS proforma provided in Annex A and is required to provide information necessary to identify both the supplier and the implementation.

(to Recommendation X.485)

PICS proforma for the VMG protocol in X.440 (1992)

(This annex forms an integral part of this Recommendation)

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 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:

Copyright release for PICS proformas

User of this Recommendation 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.1.5   *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 inluded as a means of uniquely identifying au 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:

F.440	*PICS*
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:

Predicate	*Item*
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)

pl0   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 a) M	[ ] [ ]				7.2
A.4.3.2	free-fom-name (text)	O R	O a) M	[ ] [ ]				7.2
A.4.3.3	telephone-number (text)	O R	O a) 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 codesfrom a TSAU*

Item	NRNTSAUReasonCodeField	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   *P1 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	[ ] [ ]				

-- END VM PICS-proforma