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DATA COMMUNICATION NETWORKS

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – COMMON MANAGEMENT INFORMATION PROTOCOL: PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT PROFORMA

Recommendation X.712

Foreword

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the ITU. Some 166 member countries, 68 telecom operating entities, 163 scientific and industrial organizations and 39 international organizations participate in CCITT which is the body which sets world telecommunications standards (Recommendations).

The approval of Recommendations by the members of CCITT is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988). In addition, the Plenary Assembly of CCITT, which meets every four years, approves Recommendations submitted to it and establishes the study programme for the following period.

In some areas of information technology which fall within CCITT's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC. The text of CCITT Recommendation X.712 was approved on 10th of September 1992. The identical text is also published as ISO/IEC International Standard 9596-2.

CCITT NOTE

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

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INFORMATION NOTE

The following table gives a list of X.700-Series Recommendations which were developed in collaboration with the ISO/IEC and are identical to the corresponding International Standard. Cross-references to the corresponding ISO/IEC International Standard number and the short title of the Recommendation | International Standard are provided.

CCITT Recommendation ISO/IEC International Standard	Short title
X.700 | 7498-4 (Note)	Management Framework
X.701 | 10040	Systems Management Overview
X.710 | 9595 (Note)	Common Management Information Service Definition
X.711 | 9596-1 (Note)	Common Management Information Protocol Specification
X.712 | 9596-2	CMIP PICS
X.720 | 10165-1	Management Information Model
X.721 | 10165-2	Definition of Management Information
X.722 | 10165-4	Guidelines for the Definition of Managed Objects
X.730 | 10164-1	Object Management Function
X.731 | 10164-2	State Management Function
X.732 | 10164-3	Attributes for Representing Relationships
X.733 | 10164-4	Alarm Reporting Function
X.734 | 10164-5	Event Report Management Function
X.735 | 10164-6	Log Control Function
X.736 | 10164-7	Security Alarm Reporting Function
X.740 | 10164-8	Security Audit Trail Function
NOTE – This Recommendation and International Standard are not identical, but are technically aligned.	

INTERNATIONAL STANDARD

CCITT RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – COMMON MANAGEMENT INFORMATION PROTOCOL: PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS) PROFORMA

1 Scope

This Recommendation | International Standard provides the Protocol Implementation Conformance Statement (PICS) proforma for the detailed expression of the conformance requirements of CCITT Rec. X.711 | ISO/IEC 9596-1. This PICS proforma is in compliance with the relevant requirements and in accordance with the relevant guidance, given in CCITT Rec. X.291 | ISO/IEC 9646-2.

Annex A contains the PICS proforma for version 2 of CMIP. Annex B contains version 1 of the tables of the kernel functional unit that were amended by version 2. All other tables of the kernel functional unit are the same for both versions 1 and 2 of CMIP.

2 Normative references

The following CCITT Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent editions 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 Recommendations | International Standards equivalent in technical content

– CCITT Recommendation X.219 (1988), *Remote operations: Model, notation and service definition.*

  ISO/IEC 9072-1:1989, *Information processing systems – Text Communication – Remote Operations – Part 1: Model, notation and service definition.*

– CCITT Recommendation X.215 (1988), *Session service definition for Open Systems Interconnection for CCITT applications.*

  ISO 8326:1987, *Information processing systems – Open Systems Interconnection – Basic connection oriented session service definition.*

– CCITT Recommendation X.216 (1988), *Presentation service definition for Open Systems Interconnection for CCITT applications.*

  ISO 8822:1988, *Information processing systems – Open Systems Interconnection – Connection oriented presentation service definition.*

– CCITT Recommendation X.227 (1992), *Association control protocol specification for Open Systems Interconnection for CCITT applications.*

  ISO 8650:1988, *Information processing systems – Open Systems Interconnection – Protocol specification for the Association Control Service Element.*

– CCITT Recommendation X.229 (1988), *Remote operations: Protocol specification.*

  ISO/IEC 9072-2:1989, *Information processing systems – Text Communication – Remote Operations – Part 2: Protocol specification.*

– CCITT Recommendation X.711 (1991), *Common management information protocol specification for CCITT applications.*

ISO/IEC 9596-1:1991, *Information technology – Open Systems Interconnection – Common management information protocol – Part 1: Specification.*

– CCITT Recommendation X.290 (1992), *OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications – General concepts.*

ISO/IEC 9646-1:1991, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 1: General concepts.*

– CCITT Recommendation X.291 (1992), *OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications – Abstract test suite specification.*

ISO/IEC 9646-2:1991, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 2: Abstract test suite specification.*

2.2 Additional references

– ISO 8326/Add.2:1988, *Information processing systems – Open Systems Interconnection – Basic connection oriented session service definition: Addendum 2: Incorporation of unlimited user data.*

3 Definitions

For the purposes of this Recommendation | International Standard, the following definitions apply.

This Recommendation | International Standard makes use of the following terms defined in CCITT Rec. X.290 | ISO/IEC 9646-1:

a) PICS proforma;

b) protocol implementation conformance statement (PICS);

c) system conformance statement.

4 Abbreviations

ACSE	Association Control Service Element
APDU	application protocol data unit
CMIP	Common Management Information Protocol
CMIS	Common Management Information Services
CMISE	Common Management Information Service Element
PDU	protocol data unit
PICS	protocol implementation conformance statement
ROSE	Remote Operations Service Element

5 Conformance

A PICS proforma which conforms to this Recommendation | International Standard shall be textually identical to Annex A, differing only in pagination and page headers. A PICS which conforms to this Recommendation | International Standard shall

– describe an implementation which conforms to CCITT Rec. X.711 | ISO/IEC 9596-1;

– be a conforming PICS proforma which has been completed in accordance with the instructions for completion given in clause 1 of Annex A;

– include the information necessary to uniquely identify both the supplier and the implementation.

The supplier of a protocol implementation which is claimed to conform to CCITT Rec. X.711 | ISO/IEC 9596-1 shall complete a copy of the PICS proforma provided in Annex A as part of the conformance requirements, shall complete a copy of the PICS proforma provided in Annex B if the implementation claims support for version 1 of CMIP, and shall provide the information necessary to identify both the supplier and the implementation.

NOTE – Version 1 of CMIP is specified in ISO/IEC 9596, now superseded by ISO/IEC 9596-1. There is no CCITT equivalent of ISO/IEC 9596.

Annex A
PICS proforma[1)]

(This annex forms an integral part of this Recommendation | International Standard)

A.1 Instructions for completing the PICS proforma

A.1.1 Purpose and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of CCITT Rec. X.711 | ISO/IEC 9596-1 may provide information in a standard form. The PICS proforma is subdivided into clauses for the following categories of information:

- implementation details;
- protocol details;
- overall conformance claim;
- implementation capabilities.

A.1.2 Symbols, abbreviations and terms

The PICS proforma contained in this annex is comprised of information in a tabular form in accordance with the guidelines presented in CCITT Rec. X.291 | ISO/IEC 9646-2. The following abbreviations are used:

ADB	ANY DEFINED BY
Spt	Support
Sts	Status
TVR	Type(s), value(s) and range(s)

The following common notations, defined in CCITT Rec. X.291 | ISO/IEC 9646-2 are used for the status (Sts) column:

m	mandatory
o	optional
o.N	(N is an integer) support of at least one of the choices is required
x	prohibited
–	not applicable

The following requirements are commonly used throughout the PICS proforma:

c1 if A.7.1 then m else –

c2 if A.7.2 then m else –

c3 if A.7.3 then m else –

c4 if A.14.5/1 or A.14.5/2 then o else –

c5 if A.7.5 then m else –

c6 if A.7.1 or A.7.2 or A.7.3 or A.7.4 or A.7.5 then m else o

c7 if A.7.1 then m else o

c8 if A.6.2 then m else o.16

c9 if A.7.2 and (A.14.1/1 or A.14.3/1 or A.14.5/1 or A.14.6/1) then m else –

c10 if A.7.2 and (A.14.1/2 or A.14.3/2 or A.14.5/2 or A.14.6/2) then m else –

c11 if A.1.1/1 then m else –

c12 if A.1.1/2 then m else –

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1) Users of this Recommendation | International Standard 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.

NOTES

1 A.1.1 is support for association initialisation.

2 A.6.2 is support for all of the kernel functional unit.

3 A.7.1 is support for the multiple object selection functional unit.

4 A.7.2 is support for the filter functional unit.

5 A.7.3 is support for the multiple reply functional unit.

6 A.7.4 is support for the extended service functional unit.

7 A.7.5 is support for the cancel get functional unit.

8 A.14.5 is support for protocol for the M-GET service.

The following common notations, defined in CCITT Rec. X.291 | ISO/IEC 9646-2 are used for the support (Spt) column:

N not implemented

Y implemented

– not applicable

Within this PICS proforma, index numbers have been uniquely generated by prefixing the table identifier as the first component of the index. In the conditional predicates specified above, the identification of the referenced items is constructed from the unique index number with the answer column identifier appended, as defined in CCITT Rec. X.291 | ISO/IEC 9646-2. When only one answer column is present for the index, the column identifier has been omitted.

Within this PICS proforma, ASN.1 values specified in the Syntax column of the tables are provided for guidance purposes only. No attempt has been made to specify any IMPLICIT condition or any tag value associated with any parameter. CCITT Rec. X.711 | ISO/IEC 9596-1 contains the definitive specification of the abstract syntax.

Within this PICS proforma, space has been provided for the supplier of the implementation to specify types, values and ranges of all parameters supported. It is recommended that references to additional specifications are included where appropriate (for example, to list the OBJECT IDENTIFIER values and/or ranges supported), and that these additional specifications be appended to the completed PICS proforma.

The parameter names in the tables within this Recommendation | International Standard correspond with those specified in the abstract syntax of CCITT Rec. X.711 | ISO/IEC 9596-1.

A.1.3 Scoping rules

In the Status column of the tables in this Recommendation | International Standard, a mandatory element contained within an optional or conditional constructor parameter is mandatory only if the option or condition is taken.

A.1.4 Instructions for completing the PICS

The supplier of the implementation shall enter an explicit statement in each of the boxes provided using the notation described in A.1.2. Specific instruction is provided in the text which preceeds each table.

A.2 Identification of the implementation

A.2.1 Date of statement

The supplier of the implementation shall enter the date of this statement in the box below. Use the format DD-MM-YYYY.

Date of statement

A.2.2 Identification of the implementation

The supplier of the implementation shall enter information necessary to uniquely identify the implementation and the system(s) in which it may reside, in the box below.

A.2.3 Contact

The supplier of the implementation shall provide information on whom to contact if there are any queries concerning the content of the PICS, in the box below.

A.2.4 Relationship with the system conformance statement

The supplier of the implementation shall provide information which describes the relationship between the PICS and the system conformance statement for the system, in the box below.

A.3 Identification of the protocol

The supplier of the implementation shall enter the title, reference number and date of the publication of the Recommendation | International Standard to which conformance is claimed, in the box below.

Recommendation | International Standard to which conformance is claimed

The supplier of the implementation shall specify support of versions of CMIP, in the box below.

Which version(s) of the CMIP protocol are supported?

The supplier of the implementation shall enter the name of each abstract syntax for CCITT Rec. X.711 | ISO/IEC 9596-1 to which conformance is claimed, and the corresponding transfer syntax name(s) in the box below.

Abstract syntax name	Transfer syntax name(s)

A.3.1 Defect report numbers and amendments implemented

The supplier of the implementation shall enter the reference numbers of implemented defect reports or corresponding amendment documents which modify the specification to CCITT Rec. X.711 | ISO/IEC 9596-1, in the box below.

A.3.2 Addenda implemented

The supplier of the implementation shall state the titles and reference numbers of implemented addenda to CCITT Rec. X.711 | ISO/IEC 9596-1, in the box below.

A.4 Global statement of conformance

The supplier of the implementation shall state whether or not all mandatory capabilities are implemented for CCITT Rec. X.711 | ISO/IEC 9596-1.

Are all mandatory capabilities implemented?

NOTE – Answering NO to this question indicates non-conformance to the protocol standard. Non-supported mandatory capabilities are listed in the PICS below, explaining why the status of the implementation is abnormal.

Capability not implemented	Reason

A.5 Capabilities

A.5.1 Initiator/Responder capability

The supplier of the implementation shall state the capability for initiating and responding to an association request which specifies the use of CMISE, in Table A.1.

Table A.1 – Association initialisation

		Association initiator		Association responder	
Index		Sts	Spt	Sts	Spt
A.1.1	Does the implementation support association initialisation?	o.1		o.1	

The supplier of the implementation shall state the capability for releasing an association, in Table A.2.

Table A.2 – Association release

		Release initiator		Release responder	
Index		Sts	Spt	Sts	Spt
A.2.1	Does the implementation support association release for an association initiated by the implementation?	o.2		o.2	
A.2.2	for an association not initiated by the implementation?	o.3		o.3	

The supplier of the implementation shall state whether or not the CMIPUserInfo and CMIPAbortInfo parameters specified by CCITT Rec. X.711 | ISO/IEC 9596-1 are supported. The supplier shall state the capability for sending and receiving each parameter and the type, value(s) and range(s), in Tables A.3, A.4 and A.5.

Table A.3 – CMIPUserInfo parameter support (in AARQapdu)

		Sender			Receiver		
Index	Parameter name	Sts	Spt	TVR	Sts	Spt	TVR
A.3.1	CMIPUserInfo	c11		—	c12		—
A.3.1.1	protocolVersion	m			m		
A.3.1.2	functionalUnits	c6			m		
A.3.1.3	accessControl	o			m		
A.3.1.4	userInfo	o			m		

Table A.4 – CMIPUserInfo parameter support (in AAREapdu)

		Sender			Receiver		
Index	Parameter name	Sts	Spt	TVR	Sts	Spt	TVR
A.4.1	CMIPUserInfo	c12		—	c11		—
A.4.1.1	protocolVersion	m			m		
A.4.1.2	functionalUnits	c6			m		
A.4.1.3	accessControl	o			m		
A.4.1.4	userInfo	o			m		

Table A.5 – CMIPAbortInfo parameter support

		Sender			Receiver		
Index	Parameter name	Sts	Spt	TVR	Sts	Spt	TVR
A.5.1	CMIPAbortInfo	m		—	m		—
A.5.1.1	abortSource	m			m		
A.5.1.2	userInfo	o			m		

A.5.2 Major capabilities

The supplier of the implementation shall indicate support for protocol that is required to provide the kernel CMIS services, in Table A.6.

Table A.6 – Conformance claim

Index		Sts	Spt
A.6.1	Does the implementation claim to support the protocol that is required to provide some of the kernel CMIS services in the invoker and/or performer roles?	o	
A.6.2	Does the implementation claim to support the protocol that is required to provide all of the kernel CMIS services in both roles?	c13	

c13: if A.6.1 then x else m

The supplier of the implementation shall state whether or not the additional functional units specified by CCITT Rec. X.711 | ISO/IEC 9596-1 are supported, in Table A.7.

Table A.7 – Additional functional unit support

Index	Functional unit	Sts	Spt
A.7.1	Multiple object selection	o	
A.7.2	Filter	o	
A.7.3	Multiple reply	c7	
A.7.4	Extended service	o	
A.7.5	Cancel get	c4	

A.5.3 Protocol parameters

A.5.3.1 System wide parameters

System wide parameters have a single specification applicable for all APDUs in which they occur and the corresponding tables in which they occur contain references to the following declarations.

The supplier of the implementation shall state whether or not the following parameters specified by CCITT Rec. X.711 | ISO/IEC 9596-1 are supported and their type, value(s) and range(s), in Tables A.8 through A.12. The supplier shall indicate the status of support for sending and receiving each parameter.

Table A.8 – Scope parameter support

				Sender			Receiver		
Index	Parameter name	Syntax	Value	Sts	Spt	TVR	Sts	Spt	TVR
A.8	Scope	CHOICE	—	c14			c15		
A.8.1		INTEGER	0 to 2	o.4			m		
A.8.2	individualLevels	INTEGER	—	o.4			m		
A.8.3	baseToNthLevel	INTEGER	—	o.4			m		

c14: if A.7.1 and (A.14.1/1 or A.14.3/1 or A.14.5/1 or A.14.6/1) then m else –

c15: if A.7.1 and (A.14.1/2 or A.14.3/2 or A.14.5/2 or A.14.6/2) then m else –

Table A.9 – FilterItem parameter support (sending)

Index	Parameter name	Syntax	Sts	Spt	TVR
A.9	FilterItem	CHOICE	c9		–
A.9.1	equality	SEQUENCE	o.5		
A.9.1.1	attributeId	CHOICE	m		–
A.9.1.1.1		OBJECT IDENTIFIER	o.6		
A.9.1.1.2		INTEGER	o.6		
A.9.1.2	attributeValue	ADB attributeId	m		
A.9.2	substrings	SEQUENCE OF CHOICE	o.5		
A.9.2.1	initialString	SEQUENCE	m		
A.9.2.1.1	attributeId	CHOICE	m		–
A.9.2.1.1.1		OBJECT IDENTIFIER	o.7		
A.9.2.1.1.2		INTEGER	o.7		
A.9.2.1.2	string	ADB attributeId	m		
A.9.2.2	anyString	SEQUENCE	m		
A.9.2.2.1	attributeId	CHOICE	m		–
A.9.2.2.1.1		OBJECT IDENTIFIER	o.8		
A.9.2.2.1.2		INTEGER	o.8		
A.9.2.2.2	string	ADB attributeId	m		
A.9.2.3	finalString	SEQUENCE	m		
A.9.2.3.1	attributeId	CHOICE	m		–
A.9.2.3.1.1		OBJECT IDENTIFIER	o.9		
A.9.2.3.1.2		INTEGER	o.9		
A.9.2.3.2	string	ADB attributeId	m		
A.9.3	greaterOrEqual	SEQUENCE	o.5		
A.9.3.1	attributeId	CHOICE	m		–
A.9.3.1.1		OBJECT IDENTIFIER	o.10		
A.9.3.1.2		INTEGER	o.10		
A.9.3.2	attributeValue	ADB attributeId	m		
A.9.4	lessOrEqual	SEQUENCE	o.5		
A.9.4.1	attributeId	CHOICE	m		–
A.9.4.1.1		OBJECT IDENTIFIER	o.11		
A.9.4.1.2		INTEGER	o.11		
A.9.4.2	attributeValue	ADB attributeId	m		
A.9.5	present	CHOICE	o.5		–
A.9.5.1		OBJECT IDENTIFIER	o.12		
A.9.5.2		INTEGER	o.12		
A.9.6	subsetOf	SEQUENCE	o.5		
A.9.6.1	attributeId	CHOICE	m		–
A.9.6.1.1		OBJECT IDENTIFIER	o.13		
A.9.6.1.2		INTEGER	o.13		
A.9.6.2	attributeValue	ADB attributeId	m		
A.9.7	supersetOf	SEQUENCE	o.5		
A.9.7.1	attributeId	CHOICE	m		–
A.9.7.1.1		OBJECT IDENTIFIER	o.14		
A.9.7.1.2		INTEGER	o.14		
A.9.7.2	attributeValue	ADB attributeId	m		
A.9.8	nonNullSetIntersection	SEQUENCE	o.5		
A.9.8.1	attributeId	CHOICE	m		–
A.9.8.1.1		OBJECT IDENTIFIER	o.15		
A.9.8.1.2		INTEGER	o.15		
A.9.8.2	attributeValue	ADB attributeId	m		

Table A.10 – FilterItem parameter support (receiving)

Index	Parameter name	Syntax	Sts	Spt	TVR
A.10	FilterItem	CHOICE	c10		–
A.10.1	equality	SEQUENCE	m		
A.10.1.1	attributeId	CHOICE	m		–
A.10.1.1.1		OBJECT IDENTIFIER	m		
A.10.1.1.2		INTEGER	m		
A.10.1.2	attributeValue	ADB attributeId	m		
A.10.2	substrings	SEQUENCE OF CHOICE	m		
A.10.2.1	initialString	SEQUENCE	m		
A.10.2.1.1	attributeId	CHOICE	m		–
A.10.2.1.1.1		OBJECT IDENTIFIER	m		
A.10.2.1.1.2		INTEGER	m		
A.10.2.1.2	string	ADB attributeId	m		
A.10.2.2	anyString	SEQUENCE	m		
A.10.2.2.1	attributeId	CHOICE	m		–
A.10.2.2.1.1		OBJECT IDENTIFIER	m		
A.10.2.2.1.2		INTEGER	m		
A.10.2.2.2	string	ADB attributeId	m		
A.10.2.3	finalString	SEQUENCE	m		
A.10.2.3.1	attributeId	CHOICE	m		–
A.10.2.3.1.1		OBJECT IDENTIFIER	m		
A.10.2.3.1.2		INTEGER	m		
A.10.2.3.2	string	ADB attributeId	m		
A.10.3	greaterOrEqual	SEQUENCE	m		
A.10.3.1	attributeId	CHOICE	m		–
A.10.3.1.1		OBJECT IDENTIFIER	m		
A.10.3.1.2		INTEGER	m		
A.10.3.2	attributeValue	ADB attributeId	m		
A.10.4	lessOrEqual	SEQUENCE	m		
A.10.4.1	attributeId	CHOICE	m		–
A.10.4.1.1		OBJECT IDENTIFIER	m		
A.10.4.1.2		INTEGER	m		
A.10.4.2	attributeValue	ADB attributeId	m		
A.10.5	present	CHOICE	m		–
A.10.5.1		OBJECT IDENTIFIER	m		
A.10.5.2		INTEGER	m		
A.10.6	subsetOf	SEQUENCE	m		
A.10.6.1	attributeId	CHOICE	m		–
A.10.6.1.1		OBJECT IDENTIFIER	m		
A.10.6.1.2		INTEGER	m		
A.10.6.2	attributeValue	ADB attributeId	m		
A.10.7	supersetOf	SEQUENCE	m		
A.10.7.1	attributeId	CHOICE	m		–
A.10.7.1.1		OBJECT IDENTIFIER	m		
A.10.7.1.2		INTEGER	m		
A.10.7.2	attributeValue	ADB attributeId	m		
A.10.8	nonNullSetIntersection	SEQUENCE	m		
A.10.8.1	attributeId	CHOICE	m		–
A.10.8.1.1		OBJECT IDENTIFIER	m		
A.10.8.1.2		INTEGER	m		
A.10.8.2	attributeValue	ADB attributeId	m		

Table A.11 – CMISFilter parameter support

			Sender			Receiver		
Index	Parameter name	Syntax	Sts	Spt	Max no of FilterItems	Sts	Spt	Max no of FilterItems
A.11	CMISFilter	CHOICE	c9		–	c10		–
A.11.1	item	FilterItem	m		–	m		–
A.11.2	and	SET OF CMISFilter	o			m		
A.11.3	or	SET OF CMISFilter	o			m		
A.11.4	not	CMISFilter	o			m		

NOTE – See Tables A.9 and A.10 for FilterItem parameter support.

Table A.12 – CMISFilter complexity limitations

Index	Complexity limitation	Sender	Receiver
A.12.1	Maximum nesting depth of CMISFilter expressions that may occur in an 'AND' (ref A.11.2)		
A.12.2	Maximum nesting depth of CMISFilter expressions that may occur in an 'OR' (ref A.11.3)		
A.12.3	Maximum number of FilterItem parameters in a CMISFilter parameter		

A.5.3.2 Common parameters

Common parameters may have a specification applicable for many APDUs in which they occur. If the supplier of the implementation provides details of the support of any parameter in the tables below, then an index reference to these details may be supplied in the TVR column of any table in A.5.5 instead of repeating the information. The reference should be specified in the form “[see Table A.13.x]”. If the implementation supports a common specification for both the sending and receiving of any parameter, then it is recommended that Table A.13 be used for this purpose; otherwise the specification shall be inserted in the appropriate table(s) in A.5.5.

For example, if an implementation supports a single specification for the invokeID parameter, then the supplier may provide the details in Table A.13 and for each subsequent instance of the requirement to specify support for the parameter, insert a reference to the common specification as “[see Table A.13.1]”.

The supplier of the implementation may state the type(s), value(s) and range(s) of any of the following parameters specified by CCITT Rec. X.711 | ISO/IEC 9596-1, in Table A.13.

Table A.13 – Common parameter support

Index	Parameter name	Syntax	Spt	TVR
A.13.1	invokeID	INTEGER		
A.13.2	linked-ID	INTEGER		
A.13.3	baseManagedObjectClass	CHOICE	–	–
A.13.3.1		OBJECT IDENTIFIER		
A.13.3.2		INTEGER		
A.13.4	baseManagedObjectInstance	CHOICE	–	–
A.13.4.1		DistinguishedName		
A.13.4.2		OCTET STRING		
A.13.4.3		RDNSequence		
A.13.5	accessControl	EXTERNAL		
A.13.6	synchronization	ENUMERATED		
A.13.7	managedObjectClass	CHOICE	–	–
A.13.7.1		OBJECT IDENTIFIER		
A.13.7.2		INTEGER		
A.13.8	managedObjectInstance	CHOICE	–	–
A.13.8.1		DistinguishedName		
A.13.8.2		OCTET STRING		
A.13.8.3		RDNSequence		
A.13.9	currentTime	GeneralizedTime		
A.13.10	actionType	CHOICE	–	–
A.13.10.1		OBJECT IDENTIFIER		
A.13.10.2		INTEGER		
A.13.11	attributeId	CHOICE	–	–
A.13.11.1		OBJECT IDENTIFIER		
A.13.11.2		INTEGER		
A.13.12	eventType	CHOICE	–	–
A.13.12.1		OBJECT IDENTIFIER		
A.13.12.2		INTEGER		

A.5.3.3 Other parameters

Some parameters only occur in a limited number of APDUs. Declaration of the support for these parameters shall be specified in the tables in which they occur.

A.5.4 Protocol data units

The supplier of the implementation shall indicate protocol support for each of the services in the kernel functional unit of CCITT Rec. X.710 | ISO/IEC 9595 in the invoker and performer roles, in Table A.14. If support for a service is claimed, the supplier of the implementation shall also complete the corresponding CMIP PDU table.

Table A.14 – Protocol support for kernel CMIS services

		Invoker role			Performer role		
Index	CMIS service	CMIP PDU table	Sts	Spt	CMIP PDU table	Sts	Spt
A.14.1	M-ACTION	A.15	c8		A.16	c8	
A.14.2	M-CREATE	A.19	c8		A.20	c8	
A.14.3	M-DELETE	A.21	c8		A.22	c8	
A.14.4	M-EVENT-REPORT	A.23	c8		A.24	c8	
A.14.5	M-GET	A.25	c8		A.26	c8	
A.14.6	M-SET	A.27	c8		A.28	c8	

An implementation shall be capable of receiving all of the ROIV APDUs associated with the kernel functional unit. If the correponding service is not provided, the implementation shall issue an RORJ APDU. An implementation shall be capable of receiving an RORJ APDU.

If the supplier of the implementation claims to support M-ACTION in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.15.

Table A.15 – CMIP PDUs required to support M-ACTION in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.15.1	ROIV-m-Action	m	
A.15.2	ROIV-m-Action-Confirmed	m	
A.15.3	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.15.4	RORS-m-Action-Confirmed	m	
A.15.5	ROIV-m-LinkedReply-Action	c3	
A.15.6	ROER-accessDenied	m	
A.15.7	ROER-classInstanceConflict	m	
A.15.8	ROER-complexityLimitation	m	
A.15.9	ROER-invalidArgumentValue	m	
A.15.10	ROER-invalidFilter	c2	
A.15.11	ROER-invalidScope	c1	
A.15.12	ROER-noSuchAction	m	
A.15.13	ROER-noSuchArgument	m	
A.15.14	ROER-noSuchObjectClass	m	
A.15.15	ROER-noSuchObjectInstance	m	
A.15.16	ROER-processingFailure	m	
A.15.17	ROER-syncNotSupported	c1	
A.15.18	RORJ	m	

If the supplier of the implementation claims to support M-ACTION in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.16.

Table A.16 – CMIP PDUs required to support M-ACTION in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.16.1	ROIV-m-Action	m	
A.16.2	ROIV-m-Action-Confirmed	m	
A.16.3	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.16.4	RORS-m-Action-Confirmed	m	
A.16.5	ROIV-m-LinkedReply-Action	c3	
A.16.6	ROER-accessDenied	m	
A.16.7	ROER-classInstanceConflict	m	
A.16.8	ROER-complexityLimitation	m	
A.16.9	ROER-invalidArgumentValue	m	
A.16.10	ROER-invalidFilter	c2	
A.16.11	ROER-invalidScope	c1	
A.16.12	ROER-noSuchAction	m	
A.16.13	ROER-noSuchArgument	m	
A.16.14	ROER-noSuchObjectClass	m	
A.16.15	ROER-noSuchObjectInstance	m	
A.16.16	ROER-processingFailure	m	
A.16.17	ROER-syncNotSupported	c1	
A.16.18	RORJ	m	

If the supplier of the implementation claims to support M-CANCEL-GET in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.17.

Table A.17 – CMIP PDUs required to support M-CANCEL-GET in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.17.1	ROIV-m-Cancel-Get	m	
A.17.2	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.17.3	RORS-m-Cancel-Get	m	
A.17.4	ROER-noSuchInvokeId	m	
A.17.5	ROER-mistypedOperation	m	
A.17.6	ROER-processingFailure	m	
A.17.7	RORJ	m	

If the supplier of the implementation claims to support M-CANCEL-GET in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.18.

Table A.18 – CMIP PDUs required to support M-CANCEL-GET in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.18.1	ROIV-m-Cancel-Get	m	
A.18.2	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.18.3	RORS-m-Cancel-Get	m	
A.18.4	ROER-noSuchInvokeId	m	
A.18.5	ROER-mistypedOperation	m	
A.18.6	ROER-processingFailure	m	
A.18.7	RORJ	m	

If the supplier of the implementation claims to support M-CREATE in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.19.

Table A.19 – CMIP PDUs required to support M-CREATE in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.19.1	ROIV-m-Create	m	
A.19.2	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.19.3	RORS-m-Create	m	
A.19.4	ROER-accessDenied	m	
A.19.5	ROER-classInstanceConflict	m	
A.19.6	ROER-duplicateManagedObjectInstance	m	
A.19.7	ROER-invalidAttributeValue	m	
A.19.8	ROER-invalidObjectInstance	m	
A.19.9	ROER-missingAttributeValue	m	
A.19.10	ROER-noSuchAttribute	m	
A.19.11	ROER-noSuchObjectClass	m	
A.19.12	ROER-noSuchObjectInstance	m	
A.19.13	ROER-noSuchReferenceObject	m	
A.19.14	ROER-processingFailure	m	
A.19.15	RORJ	m	

If the supplier of the implementation claims to support M-CREATE in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.20.

Table A.20 – CMIP PDUs required to support M-CREATE in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.20.1	ROIV-m-Create	m	
A.20.2	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.20.3	RORS-m-Create	m	
A.20.4	ROER-accessDenied	m	
A.20.5	ROER-classInstanceConflict	m	
A.20.6	ROER-duplicateManagedObjectInstance	m	
A.20.7	ROER-invalidAttributeValue	m	
A.20.8	ROER-invalidObjectInstance	m	
A.20.9	ROER-missingAttributeValue	m	
A.20.10	ROER-noSuchAttribute	m	
A.20.11	ROER-noSuchObjectClass	m	
A.20.12	ROER-noSuchObjectInstance	m	
A.20.13	ROER-noSuchReferenceObject	m	
A.20.14	ROER-processingFailure	m	
A.20.15	RORJ	m	

If the supplier of the implementation claims to support M-DELETE in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.21.

Table A.21 – CMIP PDUs required to support M-DELETE in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.21.1	ROIV-m-Delete	m	
A.21.2	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.21.3	RORS-m-Delete	m	
A.21.4	ROIV-m-LinkedReply-Delete	c3	
A.21.5	ROER-accessDenied	m	
A.21.6	ROER-classInstanceConflict	m	
A.21.7	ROER-complexityLimitation	m	
A.21.8	ROER-invalidFilter	c2	
A.21.9	ROER-invalidScope	c1	
A.21.10	ROER-noSuchObjectClass	m	
A.21.11	ROER-noSuchObjectInstance	m	
A.21.12	ROER-processingFailure	m	
A.21.13	ROER-syncNotSupported	c1	
A.21.14	RORJ	m	

If the supplier of the implementation claims to support M-DELETE in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.22.

Table A.22 – CMIP PDUs required to support M-DELETE in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.22.1	ROIV-m-Delete	m	
A.22.2	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.22.3	RORS-m-Delete	m	
A.22.4	ROIV-m-LinkedReply-Delete	c3	
A.22.5	ROER-accessDenied	m	
A.22.6	ROER-classInstanceConflict	m	
A.22.7	ROER-complexityLimitation	m	
A.22.8	ROER-invalidFilter	c2	
A.22.9	ROER-invalidScope	c1	
A.22.10	ROER-noSuchObjectClass	m	
A.22.11	ROER-noSuchObjectInstance	m	
A.22.12	ROER-processingFailure	m	
A.22.13	ROER-syncNotSupported	c1	
A.22.14	RORJ	m	

If the supplier of the implementation claims to support M-EVENT-REPORT in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.23.

Table A.23 – CMIP PDUs required to support M-EVENT-REPORT in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.23.1	ROIV-m-EventReport	m	
A.23.2	ROIV-m-EventReport-Confirmed	m	
A.23.3	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.23.4	RORS-m-EventReport-Confirmed	m	
A.23.5	ROER-invalidArgumentValue	m	
A.23.6	ROER-noSuchArgument	m	
A.23.7	ROER-noSuchEventType	m	
A.23.8	ROER-noSuchObjectClass	m	
A.23.9	ROER-noSuchObjectInstance	m	
A.23.10	ROER-processingFailure	m	
A.23.11	RORJ	m	

If the supplier of the implementation claims to support M-EVENT-REPORT in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.24.

Table A.24 – CMIP PDUs required to support M-EVENT-REPORT in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.24.1	ROIV-m-EventReport	m	
A.24.2	ROIV-m-EventReport-Confirmed	m	
A.24.3	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.24.4	RORS-m-EventReport-Confirmed	m	
A.24.5	ROER-invalidArgumentValue	m	
A.24.6	ROER-noSuchArgument	m	
A.24.7	ROER-noSuchEventType	m	
A.24.8	ROER-noSuchObjectClass	m	
A.24.9	ROER-noSuchObjectInstance	m	
A.24.10	ROER-processingFailure	m	
A.24.11	RORJ	m	

If the supplier of the implementation claims to support M-GET in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.25.

Table A.25 – CMIP PDUs required to support M-GET in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.25.1	ROIV-m-Get	m	
A.25.2	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.25.3	RORS-m-Get	m	
A.25.4	ROIV-m-LinkedReply-Get	c3	
A.25.5	ROER-accessDenied	m	
A.25.6	ROER-classInstanceConflict	m	
A.25.7	ROER-complexityLimitation	m	
A.25.8	ROER-getListError	m	
A.25.9	ROER-invalidFilter	c2	
A.25.10	ROER-invalidScope	c1	
A.25.11	ROER-noSuchObjectClass	m	
A.25.12	ROER-noSuchObjectInstance	m	
A.25.13	ROER-operationCancelled	c5	
A.25.14	ROER-processingFailure	m	
A.25.15	ROER-syncNotSupported	c1	
A.25.16	RORJ	m	

If the supplier of the implementation claims to support M-GET in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.26.

Table A.26 – CMIP PDUs required to support M-GET in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.26.1	ROIV-m-Get	m	
A.26.2	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.26.3	RORS-m-Get	m	
A.26.4	ROIV-m-LinkedReply-Get	c3	
A.26.5	ROER-accessDenied	m	
A.26.6	ROER-classInstanceConflict	m	
A.26.7	ROER-complexityLimitation	m	
A.26.8	ROER-getListError	m	
A.26.9	ROER-invalidFilter	c2	
A.26.10	ROER-invalidScope	c1	
A.26.11	ROER-noSuchObjectClass	m	
A.26.12	ROER-noSuchObjectInstance	m	
A.26.13	ROER-operationCancelled	c5	
A.26.14	ROER-processingFailure	m	
A.26.15	ROER-syncNotSupported	c1	
A.26.16	RORJ	m	

If the supplier of the implementation claims to support M-SET in the invoker role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.27.

Table A.27 – CMIP PDUs required to support M-SET in the invoker role

Invoker sending			
Index	Protocol data unit	Sts	Spt
A.27.1	ROIV-m-Set	m	
A.27.2	ROIV-m-Set-Confirmed	m	
A.27.3	RORJ	m	
Invoker receiving			
Index	Protocol data unit	Sts	Spt
A.27.4	RORS-m-Set-Confirmed	m	
A.27.5	ROIV-m-LinkedReply-Set	c3	
A.27.6	ROER-accessDenied	m	
A.27.7	ROER-classInstanceConflict	m	
A.27.8	ROER-complexityLimitation	m	
A.27.9	ROER-invalidFilter	c2	
A.27.10	ROER-invalidScope	c1	
A.27.11	ROER-noSuchObjectClass	m	
A.27.12	ROER-noSuchObjectInstance	m	
A.27.13	ROER-processingFailure	m	
A.27.14	ROER-setListError	m	
A.27.15	ROER-syncNotSupported	c1	
A.27.16	RORJ	m	

If the supplier of the implementation claims to support M-SET in the performer role, indication of support for each of the CMIP PDUs shall be supplied, in Table A.28.

Table A.28 – CMIP PDUs required to support M-SET in the performer role

Performer receiving			
Index	Protocol data unit	Sts	Spt
A.28.1	ROIV-m-Set	m	
A.28.2	ROIV-m-Set-Confirmed	m	
A.28.3	RORJ	m	
Performer sending			
Index	Protocol data unit	Sts	Spt
A.28.4	RORS-m-Set-Confirmed	m	
A.28.5	ROIV-m-LinkedReply-Set	c3	
A.28.6	ROER-accessDenied	m	
A.28.7	ROER-classInstanceConflict	m	
A.28.8	ROER-complexityLimitation	m	
A.28.9	ROER-invalidFilter	c2	
A.28.10	ROER-invalidScope	c1	
A.28.11	ROER-noSuchObjectClass	m	
A.28.12	ROER-noSuchObjectInstance	m	
A.28.13	ROER-processingFailure	m	
A.28.14	ROER-setListError	m	
A.28.15	ROER-syncNotSupported	c1	
A.28.16	RORJ	m	

A.5.5 PDU parameters

For each of the protocol data units specified by CCITT Rec. X.711 | ISO/IEC 9596-1, for which the "Sts" or "Spt" columns of Tables A.15 through A.28 indicate either a requirement for support or a claim of support, the supplier shall state whether or not each parameter of the protocol data unit is supported. The supplier shall indicate the type, value(s) and range(s) of each parameter. The supplier shall indicate the status of support for sending and receiving each parameter in each PDU.

Table A.29 – ROIV-m-Action (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.29.1	invokeID	m	INTEGER	–		
A.29.2	linked-ID	x	INTEGER	–		
A.29.3	operation-value	m	INTEGER	6		
A.29.4	ActionArgument	m	SEQUENCE	–		–
A.29.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.29.4.1.1		o.17	OBJECT IDENTIFIER	–		
A.29.4.1.2		o.17	INTEGER	–		
A.29.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.29.4.2.1		o.18	DistinguishedName	–		
A.29.4.2.2		o.18	OCTET STRING	–		
A.29.4.2.3		o.18	RDNSequence	–		
A.29.4.3	accessControl	o	EXTERNAL	–		
A.29.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.29.4.5	scope	c1	Scope	–		[see Table A.8]
A.29.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.29.4.7	ActionInfo	m	SEQUENCE	–		–
A.29.4.7.1	actionType	m	CHOICE	–		–
A.29.4.7.1.1		o.19	OBJECT IDENTIFIER	–		
A.29.4.7.1.2		o.19	INTEGER	–		
A.29.4.7.2	actionInfoArg	o	ADB actionType	–		

Table A.30 – ROIV-m-Action (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.30.1	invokeID	m	INTEGER	–		
A.30.2	linked-ID	x	INTEGER	–		
A.30.3	operation-value	m	INTEGER	6		
A.30.4	ActionArgument	m	SEQUENCE	–		–
A.30.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.30.4.1.1		m	OBJECT IDENTIFIER	–		
A.30.4.1.2		m	INTEGER	–		
A.30.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.30.4.2.1		m	DistinguishedName	–		
A.30.4.2.2		m	OCTET STRING	–		
A.30.4.2.3		m	RDNSequence	–		
A.30.4.3	accessControl	m	EXTERNAL	–		
A.30.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.30.4.5	scope	c1	Scope	–		[see Table A.8]
A.30.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.30.4.7	ActionInfo	m	SEQUENCE	–		–
A.30.4.7.1	actionType	m	CHOICE	–		–
A.30.4.7.1.1		m	OBJECT IDENTIFIER	–		
A.30.4.7.1.2		m	INTEGER	–		
A.30.4.7.2	actionInfoArg	m	ADB actionType	–		

Table A.31 – ROIV-m-Action-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.31.1	invokeID	m	INTEGER	–		
A.31.2	linkedID	x	INTEGER	–		
A.31.3	operation-value	m	INTEGER	7		
A.31.4	ActionArgument	m	SEQUENCE	–		–
A.31.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.31.4.1.1		o.20	OBJECT IDENTIFIER	–		
A.31.4.1.2		o.20	INTEGER	–		
A.31.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.31.4.2.1		o.21	DistinguishedName	–		
A.31.4.2.2		o.21	OCTET STRING	–		
A.31.4.2.3		o.21	RDNSequence	–		
A.31.4.3	accessControl	o	EXTERNAL	–		
A.31.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.31.4.5	scope	c1	Scope	–		[see Table A.8]
A.31.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.31.4.7	ActionInfo	m	SEQUENCE	–		–
A.31.4.7.1	actionType	m	CHOICE	–		–
A.31.4.7.1.1		o.22	OBJECT IDENTIFIER	–		
A.31.4.7.1.2		o.22	INTEGER	–		
A.31.4.7.2	actionInfoArg	o	ADB actionType	–		

Table A.32 – ROIV-m-Action-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.32.1	invokeID	m	INTEGER	–		
A.32.2	linkedID	x	INTEGER	–		
A.32.3	operation-value	m	INTEGER	7		
A.32.4	ActionArgument	m	SEQUENCE	–		–
A.32.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.32.4.1.1		m	OBJECT IDENTIFIER	–		
A.32.4.1.2		m	INTEGER	–		
A.32.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.32.4.2.1		m	DistinguishedName	–		
A.32.4.2.2		m	OCTET STRING	–		
A.32.4.2.3		m	RDNSequence	–		
A.32.4.3	accessControl	m	EXTERNAL	–		
A.32.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.32.4.5	scope	c1	Scope	–		[see Table A.8]
A.32.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.32.4.7	ActionInfo	m	SEQUENCE	–		–
A.32.4.7.1	actionType	m	CHOICE	–		–
A.32.4.7.1.1		m	OBJECT IDENTIFIER	–		
A.32.4.7.1.2		m	INTEGER	–		
A.32.4.7.2	actionInfoArg	m	ADB actionType	–		

Table A.33 – ROIV-m-Cancel-Get (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.33.1	invokeID	m	INTEGER	–		
A.33.2	linked-ID	x	INTEGER	–		
A.33.3	operation-value	m	INTEGER	10		
A.33.4	getInvokeId	m	INTEGER	–		

Table A.34 – ROIV-m-Cancel-Get (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.34.1	invokeID	m	INTEGER	–		
A.34.2	linked-ID	x	INTEGER	–		
A.34.3	operation-value	m	INTEGER	10		
A.34.4	getInvokeId	m	INTEGER	–		

Table A.35 – ROIV-m-Create (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.35.1	invokeID	m	INTEGER	–		
A.35.2	linked-ID	x	INTEGER	–		
A.35.3	operation-value	m	INTEGER	8		
A.35.4	CreateArgument	m	SEQUENCE	–		–
A.35.4.1	managedObjectClass	m	CHOICE	–		–
A.35.4.1.1		o.23	OBJECT IDENTIFIER	–		
A.35.4.1.2		o.23	INTEGER	–		
A.35.4.2		o	CHOICE	–		–
A.35.4.2.1	managedObjectInstance	m	CHOICE	–		–
A.35.4.2.1.1		o.24	DistinguishedName	–		
A.35.4.2.1.2		o.24	OCTET STRING	–		
A.35.4.2.1.3		o.24	RDNSequence	–		
A.35.4.2.2	superiorObjectInstance	m	CHOICE	–		–
A.35.4.2.2.1		o.25	DistinguishedName	–		
A.35.4.2.2.2		o.25	OCTET STRING	–		
A.35.4.2.2.3		o.25	RDNSequence	–		
A.35.4.3	accessControl	o	EXTERNAL	–		
A.35.4.4	referenceObjectInstance	o	CHOICE	–		–
A.35.4.4.1		o.26	DistinguishedName	–		
A.35.4.4.2		o.26	OCTET STRING	–		
A.35.4.4.3		o.26	RDNSequence	–		
A.35.4.5	attributeList	o	SET OF SEQUENCE	–		–
A.35.4.5.1	attributeId	m	CHOICE	–		–
A.35.4.5.1.1		o.27	OBJECT IDENTIFIER	–		
A.35.4.5.1.2		o.27	INTEGER	–		
A.35.4.5.2	attributeValue	m	ADB attributeId	–		

Table A.36 – ROIV-m-Create (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.36.1	invokeID	m	INTEGER	–		
A.36.2	linked-ID	x	INTEGER	–		
A.36.3	operation-value	m	INTEGER	8		
A.36.4	CreateArgument	m	SEQUENCE	–		–
A.36.4.1	managedObjectClass	m	CHOICE	–		–
A.36.4.1.1		m	OBJECT IDENTIFIER	–		
A.36.4.1.2		m	INTEGER	–		
A.36.4.2		m	CHOICE	–		–
A.36.4.2.1	managedObjectInstance	m	CHOICE	–		–
A.36.4.2.1.1		m	DistinguishedName	–		
A.36.4.2.1.2		m	OCTET STRING	–		
A.36.4.2.1.3		m	RDNSequence	–		
A.36.4.2.2	superiorObjectInstance	m	CHOICE	–		–
A.36.4.2.2.1		m	DistinguishedName	–		
A.36.4.2.2.2		m	OCTET STRING	–		
A.36.4.2.2.3		m	RDNSequence	–		
A.36.4.3	accessControl	m	EXTERNAL	–		
A.36.4.4	referenceObjectInstance	m	CHOICE	–		–
A.36.4.4.1		m	DistinguishedName	–		
A.36.4.4.2		m	OCTET STRING	–		
A.36.4.4.3		m	RDNSequence	–		
A.36.4.5	attributeList	m	SET OF SEQUENCE	–		–
A.36.4.5.1	attributeId	m	CHOICE	–		–
A.36.4.5.1.1		m	OBJECT IDENTIFIER	–		
A.36.4.5.1.2		m	INTEGER	–		
A.36.4.5.2	attributeValue	m	ADB attributeId	–		

Table A.37 – ROIV-m-Delete (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.37.1	invokeID	m	INTEGER	–		
A.37.2	linked-ID	x	INTEGER	–		
A.37.3	operation-value	m	INTEGER	9		
A.37.4	DeleteArgument	m	SEQUENCE	–		–
A.37.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.37.4.1.1		o.28	OBJECT IDENTIFIER	–		
A.37.4.1.2		o.28	INTEGER	–		
A.37.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.37.4.2.1		o.29	DistinguishedName	–		
A.37.4.2.2		o.29	OCTET STRING	–		
A.37.4.2.3		o.29	RDNSequence	–		
A.37.4.3	accessControl	o	EXTERNAL	–		
A.37.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.37.4.5	scope	c1	Scope	–		[see Table A.8]
A.37.4.6	filter	c2	CMISFilter	–		[see Table A.11]

Table A.38 – ROIV-m-Delete (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.38.1	invokeID	m	INTEGER	–		
A.38.2	linked-ID	x	INTEGER	–		
A.38.3	operation-value	m	INTEGER	9		
A.38.4	DeleteArgument	m	SEQUENCE	–		–
A.38.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.38.4.1.1		m	OBJECT IDENTIFIER	–		
A.38.4.1.2		m	INTEGER	–		
A.38.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.38.4.2.1		m	DistinguishedName	–		
A.38.4.2.2		m	OCTET STRING	–		
A.38.4.2.3		m	RDNSequence	–		
A.38.4.3	accessControl	m	EXTERNAL	–		
A.38.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.38.4.5	scope	c1	Scope	–		[see Table A.8]
A.38.4.6	filter	c2	CMISFilter	–		[see Table A.11]

Table A.39 – ROIV-m-EventReport (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.39.1	invokeID	m	INTEGER	–		
A.39.2	linked-ID	x	INTEGER	–		
A.39.3	operation-value	m	INTEGER	0		
A.39.4	EventReportArgument	m	SEQUENCE	–		–
A.39.4.1	managedObjectClass	m	CHOICE	–		–
A.39.4.1.1		o.30	OBJECT IDENTIFIER	–		
A.39.4.1.2		o.30	INTEGER	–		
A.39.4.2	managedObjectInstance	m	CHOICE	–		–
A.39.4.2.1		o.31	DistinguishedName	–		
A.39.4.2.2		o.31	OCTET STRING	–		
A.39.4.2.3		o.31	RDNSequence	–		
A.39.4.3	eventTime	o	GeneralizedTime	–		
A.39.4.4	eventType	m	CHOICE	–		–
A.39.4.4.1		o.32	OBJECT IDENTIFIER	–		
A.39.4.4.2		o.32	INTEGER	–		
A.39.4.5	eventInfo	o	ADB eventType	–		

Table A.40 – ROIV-m-EventReport (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.40.1	invokeID	m	INTEGER	–		
A.40.2	linked-ID	x	INTEGER	–		
A.40.3	operation-value	m	INTEGER	0		
A.40.4	EventReportArgument	m	SEQUENCE	–		–
A.40.4.1	managedObjectClass	m	CHOICE	–		–
A.40.4.1.1		m	OBJECT IDENTIFIER	–		
A.40.4.1.2		m	INTEGER	–		
A.40.4.2	managedObjectInstance	m	CHOICE	–		–
A.40.4.2.1		m	DistinguishedName	–		
A.40.4.2.2		m	OCTET STRING	–		
A.40.4.2.3		m	RDNSequence	–		
A.40.4.3	eventTime	m	GeneralizedTime	–		
A.40.4.4	eventType	m	CHOICE	–		–
A.40.4.4.1		m	OBJECT IDENTIFIER	–		
A.40.4.4.2		m	INTEGER	–		
A.40.4.5	eventInfo	m	ADB eventType	–		

Table A.41 – ROIV-m-EventReport-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.41.1	invokeID	m	INTEGER	–		
A.41.2	linked-ID	x	INTEGER	–		
A.41.3	operation-value	m	INTEGER	1		
A.41.4	EventReportArgument	m	SEQUENCE	–		–
A.41.4.1	managedObjectClass	m	CHOICE	–		–
A.41.4.1.1		o.33	OBJECT IDENTIFIER	–		
A.41.4.1.2		o.33	INTEGER	–		
A.41.4.2	managedObjectInstance	m	CHOICE	–		–
A.41.4.2.1		o.34	DistinguishedName	–		
A.41.4.2.2		o.34	OCTET STRING	–		
A.41.4.2.3		o.34	RDNSequence	–		
A.41.4.3	eventTime	o	GeneralizedTime	–		
A.41.4.4	eventType	m	CHOICE	–		–
A.41.4.4.1		o.35	OBJECT IDENTIFIER	–		
A.41.4.4.2		o.35	INTEGER	–		
A.41.4.5	eventInfo	o	ADB eventType	–		

Table A.42 – ROIV-m-EventReport-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.42.1	invokeID	m	INTEGER	–		
A.42.2	linked-ID	x	INTEGER	–		
A.42.3	operation-value	m	INTEGER	1		
A.42.4	EventReportArgument	m	SEQUENCE	–		–
A.42.4.1	managedObjectClass	m	CHOICE	–		–
A.42.4.1.1		m	OBJECT IDENTIFIER	–		
A.42.4.1.2		m	INTEGER	–		
A.42.4.2	managedObjectInstance	m	CHOICE	–		–
A.42.4.2.1		m	DistinguishedName	–		
A.42.4.2.2		m	OCTET STRING	–		
A.42.4.2.3		m	RDNSequence	–		
A.42.4.3	eventTime	m	GeneralizedTime	–		
A.42.4.4	eventType	m	CHOICE	–		–
A.42.4.4.1		m	OBJECT IDENTIFIER	–		
A.42.4.4.2		m	INTEGER	–		
A.42.4.5	eventInfo	m	ADB eventType	–		

Table A.43 – ROIV-m-Get (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.43.1	invokeID	m	INTEGER	–		
A.43.2	linked-ID	x	INTEGER	–		
A.43.3	operation-value	m	INTEGER	3		
A.43.4	GetArgument	m	SEQUENCE	–		–
A.43.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.43.4.1.1		o.36	OBJECT IDENTIFIER	–		
A.43.4.1.2		o.36	INTEGER	–		
A.43.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.43.4.2.1		o.37	DistinguishedName	–		
A.43.4.2.2		o.37	OCTET STRING	–		
A.43.4.2.3		o.37	RDNSequence	–		
A.43.4.3	accessControl	o	EXTERNAL	–		
A.43.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.43.4.5	scope	c1	Scope	–		[see Table A.8]
A.43.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.43.4.7	AttributeIdList	o	SET OF SEQUENCE	–		–
A.43.4.7.1	attributeId	m	CHOICE	–		–
A.43.4.7.1.1		o.38	OBJECT IDENTIFIER	–		
A.43.4.7.1.2		o.38	INTEGER	–		

Table A.44 – ROIV-m-Get (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.44.1	invokeID	m	INTEGER	–		
A.44.2	linked-ID	x	INTEGER	–		
A.44.3	operation-value	m	INTEGER	3		
A.44.4	GetArgument	m	SEQUENCE	–		–
A.44.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.44.4.1.1		m	OBJECT IDENTIFIER	–		
A.44.4.1.2		m	INTEGER	–		
A.44.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.44.4.2.1		m	DistinguishedName	–		
A.44.4.2.2		m	OCTET STRING	–		
A.44.4.2.3		m	RDNSequence	–		
A.44.4.3	accessControl	m	EXTERNAL	–		
A.44.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.44.4.5	scope	c1	Scope	–		[see Table A.8]
A.44.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.44.4.7	AttributeIdList	m	SET OF SEQUENCE	–		–
A.44.4.7.1	attributeId	m	CHOICE	–		–
A.44.4.7.1.1		m	OBJECT IDENTIFIER	–		
A.44.4.7.1.2		m	INTEGER	–		

Table A.45 – ROIV-m-LinkedReply-Action (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.45.1	invokeID	m	INTEGER	–		
A.45.2	linked-ID	m	INTEGER	–		
A.45.3	operation-value	m	INTEGER	2		
A.45.4	LinkedReplyArgument	m	CHOICE	–		–
A.45.4.1	ActionResult	m	SEQUENCE	–		–
A.45.4.1.1	managedObjectClass	m	CHOICE	–		–
A.45.4.1.1.1		o.39	OBJECT IDENTIFIER	–		
A.45.4.1.1.2		o.39	INTEGER	–		
A.45.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.45.4.1.2.1		o.40	DistinguishedName	–		
A.45.4.1.2.2		o.40	OCTET STRING	–		
A.45.4.1.2.3		o.40	RDNSequence	–		
A.45.4.1.3	currentTime	o	GeneralizedTime	–		
A.45.4.1.4	ActionReply	o	SEQUENCE	–		–
A.45.4.1.4.1	actionType	m	CHOICE	–		–
A.45.4.1.4.1.1		o.41	OBJECT IDENTIFIER	–		
A.45.4.1.4.1.2		o.41	INTEGER	–		
A.45.4.1.4.2	actionReplyInfo	m	ADB actionType	–		
A.45.4.2	ProcessingFailure	m	SEQUENCE	–		–
A.45.4.2.1	managedObjectClass	m	CHOICE	–		–
A.45.4.2.1.1		o.42	OBJECT IDENTIFIER	–		
A.45.4.2.1.2		o.42	INTEGER	–		
A.45.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.45.4.2.2.1		o.43	DistinguishedName	–		
A.45.4.2.2.2		o.43	OCTET STRING	–		
A.45.4.2.2.3		o.43	RDNSequence	–		
A.45.4.2.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.45.4.2.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.45.4.2.3.2	errorInfo	m	ADB errorId	–		
A.45.4.3	ActionError	m	SEQUENCE	–		–
A.45.4.3.1	managedObjectClass	m	CHOICE	–		–
A.45.4.3.1.1		o.44	OBJECT IDENTIFIER	–		
A.45.4.3.1.2		o.44	INTEGER	–		
A.45.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.45.4.3.2.1		o.45	DistinguishedName	–		
A.45.4.3.2.2		o.45	OCTET STRING	–		
A.45.4.3.2.3		o.45	RDNSequence	–		
A.45.4.3.3	currentTime	o	GeneralizedTime	–		
A.45.4.3.4	actionErrorInfo	m	SEQUENCE	–		–
A.45.4.3.4.1	errorStatus	m	ENUMERATED	2,9,14,15		
A.45.4.3.4.2	errorInfo	m	CHOICE	–		–
A.45.4.3.4.2.1	actionType	m	CHOICE	–		–
A.45.4.3.4.2.1.1		o.46	OBJECT IDENTIFIER	–		
A.45.4.3.4.2.1.2		o.46	INTEGER	–		
A.45.4.3.4.2.2	actionArgument	m	SEQUENCE	–		–
A.45.4.3.4.2.2.1	managedObjectClass	m	CHOICE	–		–
A.45.4.3.4.2.2.1.1		o.47	OBJECT IDENTIFIER	–		
A.45.4.3.4.2.2.1.2		o.47	INTEGER	–		
A.45.4.3.4.2.2.2	actionType	m	CHOICE	–		–
A.45.4.3.4.2.2.2.1		o.48	OBJECT IDENTIFIER	–		
A.45.4.3.4.2.2.2.2		o.48	INTEGER	–		
A.45.4.3.4.2.3	argumentValue	m	SEQUENCE	–		–
A.45.4.3.4.2.3.1	actionType	m	CHOICE	–		–
A.45.4.3.4.2.3.1.1		o.49	OBJECT IDENTIFIER	–		
A.45.4.3.4.2.3.1.2		o.49	INTEGER	–		
A.45.4.3.4.2.3.2	actionInfoArg	o	ADB actionType	–		

Table A.46 – ROIV-m-LinkedReply-Action (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.46.1	invokeID	m	INTEGER	–		
A.46.2	linked-ID	m	INTEGER	–		
A.46.3	operation-value	m	INTEGER	2		
A.46.4	LinkedReplyArgument	m	CHOICE	–		–
A.46.4.1	ActionResult	m	SEQUENCE	–		–
A.46.4.1.1	managedObjectClass	m	CHOICE	–		–
A.46.4.1.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.1.1.2		m	INTEGER	–		
A.46.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.46.4.1.2.1		m	DistinguishedName	–		
A.46.4.1.2.2		m	OCTET STRING	–		
A.46.4.1.2.3		m	RDNSequence	–		
A.46.4.1.3	currentTime	m	GeneralizedTime	–		
A.46.4.1.4	ActionReply	m	SEQUENCE	–		–
A.46.4.1.4.1	actionType	m	CHOICE	–		–
A.46.4.1.4.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.1.4.1.2		m	INTEGER	–		
A.46.4.1.4.2	actionReplyInfo	m	ADB actionType	–		
A.46.4.2	ProcessingFailure	m	SEQUENCE	–		–
A.46.4.2.1	managedObjectClass	m	CHOICE	–		–
A.46.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.2.1.2		m	INTEGER	–		
A.46.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.46.4.2.2.1		m	DistinguishedName	–		
A.46.4.2.2.2		m	OCTET STRING	–		
A.46.4.2.2.3		m	RDNSequence	–		
A.46.4.2.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.46.4.2.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.46.4.2.3.2	errorInfo	m	ADB errorId	–		
A.46.4.3	ActionError	m	SEQUENCE	–		–
A.46.4.3.1	managedObjectClass	m	CHOICE	–		–
A.46.4.3.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.3.1.2		m	INTEGER	–		
A.46.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.46.4.3.2.1		m	DistinguishedName	–		
A.46.4.3.2.2		m	OCTET STRING	–		
A.46.4.3.2.3		m	RDNSequence	–		
A.46.4.3.3	currentTime	m	GeneralizedTime	–		
A.46.4.3.4	actionErrorInfo	m	SEQUENCE	–		–
A.46.4.3.4.1	errorStatus	m	ENUMERATED	2,9,14,15		
A.46.4.3.4.2	errorInfo	m	CHOICE	–		–
A.46.4.3.4.2.1	actionType	m	CHOICE	–		–
A.46.4.3.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.3.4.2.1.2		m	INTEGER	–		
A.46.4.3.4.2.2	actionArgument	m	SEQUENCE	–		–
A.46.4.3.4.2.2.1	managedObjectClass	m	CHOICE	–		–
A.46.4.3.4.2.2.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.3.4.2.2.1.2		m	INTEGER	–		
A.46.4.3.4.2.2.2	actionType	m	CHOICE	–		–
A.46.4.3.4.2.2.2.1		m	OBJECT IDENTIFIER	–		
A.46.4.3.4.2.2.2.2		m	INTEGER	–		
A.46.4.3.4.2.3	argumentValue	m	SEQUENCE	–		–
A.46.4.3.4.2.3.1	actionType	m	CHOICE	–		–
A.46.4.3.4.2.3.1.1		m	OBJECT IDENTIFIER	–		
A.46.4.3.4.2.3.1.2		m	INTEGER	–		
A.46.4.3.4.2.3.2	actionInfoArg	m	ADB actionType	–		

Table A.47 – ROIV-m-LinkedReply-Delete (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.47.1	invokeID	m	INTEGER	–		
A.47.2	linked-ID	m	INTEGER	–		
A.47.3	operation-value	m	INTEGER	2		
A.47.4	LinkedReplyArgument	m	CHOICE	–		–
A.47.4.1	ProcessingFailure	m	SEQUENCE	–		–
A.47.4.1.1	managedObjectClass	m	CHOICE	–		–
A.47.4.1.1.1		o.50	OBJECT IDENTIFIER	–		
A.47.4.1.1.2		o.50	INTEGER	–		
A.47.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.47.4.1.2.1		o.51	DistinguishedName	–		
A.47.4.1.2.2		o.51	OCTET STRING	–		
A.47.4.1.2.3		o.51	RDNSequence	–		
A.47.4.1.3	SpecificErrorInfo	m	SEQUENCE	–		
A.47.4.1.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.47.4.1.3.2	errorInfo	m	ADB errorId	–		
A.47.4.2	DeleteResult	m	SEQUENCE	–		–
A.47.4.2.1	managedObjectClass	m	CHOICE	–		–
A.47.4.2.1.1		o.52	OBJECT IDENTIFIER	–		
A.47.4.2.1.2		o.52	INTEGER	–		
A.47.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.47.4.2.2.1		o.53	DistinguishedName	–		
A.47.4.2.2.2		o.53	OCTET STRING	–		
A.47.4.2.2.3		o.53	RDNSequence	–		
A.47.4.2.3	currentTime	o	GeneralizedTime	–		–
A.47.4.3	DeleteError	m	SEQUENCE	–		–
A.47.4.3.1	managedObjectClass	m	CHOICE	–		–
A.47.4.3.1.1		o.54	OBJECT IDENTIFIER	–		
A.47.4.3.1.2		o.54	INTEGER	–		
A.47.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.47.4.3.2.1		o.55	DistinguishedName	–		
A.47.4.3.2.2		o.55	OCTET STRING	–		
A.47.4.3.2.3		o.55	RDNSequence	–		
A.47.4.3.3	currentTime	o	GeneralizedTime	–		
A.47.4.3.4	deleteErrorInfo	m	ENUMERATED	2		–

Table A.48 – ROIV-m-LinkedReply-Delete (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.48.1	invokeID	m	INTEGER	–		
A.48.2	linked-ID	m	INTEGER	–		
A.48.3	operation-value	m	INTEGER	2		
A.48.4	LinkedReplyArgument	m	CHOICE	–		–
A.48.4.1	ProcessingFailure	m	SEQUENCE	–		–
A.48.4.1.1	managedObjectClass	m	CHOICE	–		–
A.48.4.1.1.1		m	OBJECT IDENTIFIER	–		
A.48.4.1.1.2		m	INTEGER	–		
A.48.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.48.4.1.2.1		m	DistinguishedName	–		
A.48.4.1.2.2		m	OCTET STRING	–		
A.48.4.1.2.3		m	RDNSequence	–		
A.48.4.1.3	SpecificErrorInfo	m	SEQUENCE	–		
A.48.4.1.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.48.4.1.3.2	errorInfo	m	ADB errorId	–		
A.48.4.2	DeleteResult	m	SEQUENCE	–		–
A.48.4.2.1	managedObjectClass	m	CHOICE	–		–
A.48.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.48.4.2.1.2		m	INTEGER	–		
A.48.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.48.4.2.2.1		m	DistinguishedName	–		
A.48.4.2.2.2		m	OCTET STRING	–		
A.48.4.2.2.3		m	RDNSequence	–		
A.48.4.2.3	currentTime	m	GeneralizedTime	–		–
A.48.4.3	DeleteError	m	SEQUENCE	–		–
A.48.4.3.1	managedObjectClass	m	CHOICE	–		–
A.48.4.3.1.1		m	OBJECT IDENTIFIER	–		
A.48.4.3.1.2		m	INTEGER	–		
A.48.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.48.4.3.2.1		m	DistinguishedName	–		
A.48.4.3.2.2		m	OCTET STRING	–		
A.48.4.3.2.3		m	RDNSequence	–		
A.48.4.3.3	currentTime	m	GeneralizedTime	–		
A.48.4.3.4	deleteErrorInfo	m	ENUMERATED	2		–

Table A.49 – ROIV-m-LinkedReply-Get (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.49.1	invokeID	m	INTEGER	–		
A.49.2	linked-ID	m	INTEGER	–		
A.49.3	operation-value	m	INTEGER	2		
A.49.4	LinkedReplyArgument	m	CHOICE	–		–
A.49.4.1	GetResult	m	SEQUENCE	–		–
A.49.4.1.1	managedObjectClass	m	CHOICE	–		–
A.49.4.1.1.1		o.56	OBJECT IDENTIFIER	–		
A.49.4.1.1.2		o.56	INTEGER	–		
A.49.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.49.4.1.2.1		o.57	DistinguishedName	–		
A.49.4.1.2.2		o.57	OCTET STRING	–		
A.49.4.1.2.3		o.57	RDNSequence	–		
A.49.4.1.3	currentTime	o	GeneralizedTime	–		
A.49.4.1.4	attributeList	m	SET OF SEQUENCE	–		–
A.49.4.1.4.1	attributeId	m	CHOICE	–		–
A.49.4.1.4.1.1		o.58	OBJECT IDENTIFIER	–		
A.49.4.1.4.1.2		o.58	INTEGER	–		
A.49.4.1.4.2	attributeValue	m	ADB attributeId	–		
A.49.4.2	GetListError	m	SEQUENCE	–		–
A.49.4.2.1	managedObjectClass	m	CHOICE	–		–
A.49.4.2.1.1		o.59	OBJECT IDENTIFIER	–		
A.49.4.2.1.2		o.59	INTEGER	–		
A.49.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.49.4.2.2.1		o.60	DistinguishedName	–		
A.49.4.2.2.2		o.60	OCTET STRING	–		
A.49.4.2.2.3		o.60	RDNSequence	–		
A.49.4.2.3	currentTime	o	GeneralizedTime	–		
A.49.4.2.4	getInfoList	m	SET OF CHOICE	–		–
A.49.4.2.4.1	AttributeIdError	m	SEQUENCE	–		–
A.49.4.2.4.1.1	errorStatus	m	ENUMERATED	2,5		
A.49.4.2.4.1.2	attributeId	m	CHOICE	–		–
A.49.4.2.4.1.2.1		o.61	OBJECT IDENTIFIER	–		
A.49.4.2.4.1.2.2		o.61	INTEGER	–		
A.49.4.2.4.2	Attribute	m	SEQUENCE	–		–
A.49.4.2.4.2.1	attributeId	m	CHOICE	–		–
A.49.4.2.4.2.1.1		o.62	OBJECT IDENTIFIER	–		
A.49.4.2.4.2.1.2		o.62	INTEGER	–		
A.49.4.2.4.2.2	attributeValue	m	ADB attributeId	–		–
A.49.4.3	ProcessingFailure	m	SEQUENCE	–		–
A.49.4.3.1	managedObjectClass	m	CHOICE	–		–
A.49.4.3.1.1		o.63	OBJECT IDENTIFIER	–		
A.49.4.3.1.2		o.63	INTEGER	–		
A.49.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.49.4.3.2.1		o.64	DistinguishedName	–		
A.49.4.3.2.2		o.64	OCTET STRING	–		
A.49.4.3.2.3		o.64	RDNSequence	–		
A.49.4.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.49.4.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.49.4.3.3.2	errorInfo	m	ADB errorId	–		

Table A.50 – ROIV-m-LinkedReply-Get (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.50.1	invokeID	m	INTEGER	–		
A.50.2	linked-ID	m	INTEGER	–		
A.50.3	operation-value	m	INTEGER	2		
A.50.4	LinkedReplyArgument	m	CHOICE	–		–
A.50.4.1	GetResult	m	SEQUENCE	–		–
A.50.4.1.1	managedObjectClass	m	CHOICE	–		–
A.50.4.1.1.1		m	OBJECT IDENTIFIER	–		
A.50.4.1.1.2		m	INTEGER	–		
A.50.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.50.4.1.2.1		m	DistinguishedName	–		
A.50.4.1.2.2		m	OCTET STRING	–		
A.50.4.1.2.3		m	RDNSequence	–		
A.50.4.1.3	currentTime	m	GeneralizedTime	–		
A.50.4.1.4	attributeList	m	SET OF SEQUENCE	–		–
A.50.4.1.4.1	attributeId	m	CHOICE	–		–
A.50.4.1.4.1.1		m	OBJECT IDENTIFIER	–		
A.50.4.1.4.1.2		m	INTEGER	–		
A.50.4.1.4.2	attributeValue	m	ADB attributeId	–		
A.50.4.2	GetListError	m	SEQUENCE	–		–
A.50.4.2.1	managedObjectClass	m	CHOICE	–		–
A.50.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.50.4.2.1.2		m	INTEGER	–		
A.50.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.50.4.2.2.1		m	DistinguishedName	–		
A.50.4.2.2.2		m	OCTET STRING	–		
A.50.4.2.2.3		m	RDNSequence	–		
A.50.4.2.3	currentTime	m	GeneralizedTime	–		
A.50.4.2.4	getInfoList	m	SET OF CHOICE	–		–
A.50.4.2.4.1	AttributeIdError	m	SEQUENCE	–		–
A.50.4.2.4.1.1	errorStatus	m	ENUMERATED	2,5		
A.50.4.2.4.1.2	attributeId	m	CHOICE	–		–
A.50.4.2.4.1.2.1		m	OBJECT IDENTIFIER	–		
A.50.4.2.4.1.2.2		m	INTEGER	–		
A.50.4.2.4.2	Attribute	m	SEQUENCE	–		–
A.50.4.2.4.2.1	attributeId	m	CHOICE	–		–
A.50.4.2.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.50.4.2.4.2.1.2		m	INTEGER	–		
A.50.4.2.4.2.2	attributeValue	m	ADB attributeId	–		–
A.50.4.3	ProcessingFailure	m	SEQUENCE	–		–
A.50.4.3.1	managedObjectClass	m	CHOICE	–		–
A.50.4.3.1.1		m	OBJECT IDENTIFIER	–		
A.50.4.3.1.2		m	INTEGER	–		
A.50.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.50.4.3.2.1		m	DistinguishedName	–		
A.50.4.3.2.2		m	OCTET STRING	–		
A.50.4.3.2.3		m	RDNSequence	–		
A.50.4.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.50.4.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.50.4.3.3.2	errorInfo	m	ADB errorId	–		

Table A.51 – ROIV-m-LinkedReply-Set (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.51.1	invokeID	m	INTEGER	–		
A.51.2	linked-ID	m	INTEGER	–		
A.51.3	operation-value	m	INTEGER	2		
A.51.4	LinkedReplyArgument	m	CHOICE	–		–
A.51.4.1	SetResult	m	SEQUENCE	–		–
A.51.4.1.1	managedObjectClass	m	CHOICE	–		–
A.51.4.1.1.1		o.65	OBJECT IDENTIFIER	–		
A.51.4.1.1.2		o.65	INTEGER	–		
A.51.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.51.4.1.2.1		o.66	DistinguishedName	–		
A.51.4.1.2.2		o.66	OCTET STRING	–		
A.51.4.1.2.3		o.66	RDNSequence	–		
A.51.4.1.3	currentTime	o	GeneralizedTime	–		
A.51.4.1.4	attributeList	o	SET OF SEQUENCE	–		–
A.51.4.1.4.1	attributeId	m	CHOICE	–		–
A.51.4.1.4.1.1		o.67	OBJECT IDENTIFIER	–		
A.51.4.1.4.1.2		o.67	INTEGER	–		
A.51.4.1.4.2	attributeValue	m	ADB attributeId	–		
A.51.4.2	SetListError	m	SEQUENCE	–		–
A.51.4.2.1	managedObjectClass	m	CHOICE	–		–
A.51.4.2.1.1		o.68	OBJECT IDENTIFIER	–		
A.51.4.2.1.2		o.68	INTEGER	–		
A.51.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.51.4.2.2.1		o.69	DistinguishedName	–		
A.51.4.2.2.2		o.69	OCTET STRING	–		
A.51.4.2.2.3		o.69	RDNSequence	–		
A.51.4.2.3	currentTime	o	GeneralizedTime	–		
A.51.4.2.4	setInfoList	m	SET OF CHOICE	–		–
A.51.4.2.4.1	AttributeError	m	SEQUENCE	–		–
A.51.4.2.4.1.1	errorStatus	m	ENUMERATED	2,5,6,24,25		
A.51.4.2.4.1.2	modifyoperator	m	INTEGER	0 to 3		
A.51.4.2.4.1.3	attributeId	m	CHOICE	–		–
A.51.4.2.4.1.3.1		o.70	OBJECT IDENTIFIER	–		
A.51.4.2.4.1.3.2		o.70	INTEGER	–		
A.51.4.2.4.1.4	attributeValue	m	ADB attributeId	–		–
A.51.4.2.4.2	Attribute	m	SEQUENCE	–		–
A.51.4.2.4.2.1	attributeId	m	CHOICE	–		–
A.51.4.2.4.2.1.1		o.71	OBJECT IDENTIFIER	–		
A.51.4.2.4.2.1.2		o.71	INTEGER	–		
A.51.4.2.4.2.2	attributeValue	m	ADB attributeId	–		–
A.51.4.3	ProcessingFailure	m	SEQUENCE	–		–
A.51.4.3.1	managedObjectClass	m	CHOICE	–		–
A.51.4.3.1.1		o.72	OBJECT IDENTIFIER	–		
A.51.4.3.1.2		o.72	INTEGER	–		
A.51.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.51.4.3.2.1		o.73	DistinguishedName	–		
A.51.4.3.2.2		o.73	OCTET STRING	–		
A.51.4.3.2.3		o.73	RDNSequence	–		
A.51.4.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.51.4.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.51.4.3.3.2	errorInfo	m	ADB errorId	–		

Table A.52 – ROIV-m-LinkedReply-Set (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.52.1	invokeID	m	INTEGER	–		
A.52.2	linked-ID	m	INTEGER	–		
A.52.3	operation-value	m	INTEGER	2		
A.52.4	LinkedReplyArgument	m	CHOICE	–		–
A.52.4.1	SetResult	m	SEQUENCE	–		–
A.52.4.1.1	managedObjectClass	m	CHOICE	–		–
A.52.4.1.1.1		m	OBJECT IDENTIFIER	–		
A.52.4.1.1.2		m	INTEGER	–		
A.52.4.1.2	managedObjectInstance	m	CHOICE	–		–
A.52.4.1.2.1		m	DistinguishedName	–		
A.52.4.1.2.2		m	OCTET STRING	–		
A.52.4.1.2.3		m	RDNSequence	–		
A.52.4.1.3	currentTime	m	GeneralizedTime	–		
A.52.4.1.4	attributeList	m	SET OF SEQUENCE	–		–
A.52.4.1.4.1	attributeId	m	CHOICE	–		–
A.52.4.1.4.1.1		m	OBJECT IDENTIFIER	–		
A.52.4.1.4.1.2		m	INTEGER	–		
A.52.4.1.4.2	attributeValue	m	ADB attributeId	–		
A.52.4.2	SetListError	m	SEQUENCE	–		–
A.52.4.2.1	managedObjectClass	m	CHOICE	–		–
A.52.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.52.4.2.1.2		m	INTEGER	–		
A.52.4.2.2	managedObjectInstance	m	CHOICE	–		–
A.52.4.2.2.1		m	DistinguishedName	–		
A.52.4.2.2.2		m	OCTET STRING	–		
A.52.4.2.2.3		m	RDNSequence	–		
A.52.4.2.3	currentTime	m	GeneralizedTime	–		
A.52.4.2.4	setInfoList	m	SET OF CHOICE	–		–
A.52.4.2.4.1	AttributeError	m	SEQUENCE	–		–
A.52.4.2.4.1.1	errorStatus	m	ENUMERATED	2,5,6,24,25		
A.52.4.2.4.1.2	modifyoperator	m	INTEGER	0 to 3		
A.52.4.2.4.1.3	attributeId	m	CHOICE	–		–
A.52.4.2.4.1.3.1		m	OBJECT IDENTIFIER	–		
A.52.4.2.4.1.3.2		m	INTEGER	–		
A.52.4.2.4.1.4	attributeValue	m	ADB attributeId	–		–
A.52.4.2.4.2	Attribute	m	SEQUENCE	–		–
A.52.4.2.4.2.1	attributeId	m	CHOICE	–		–
A.52.4.2.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.52.4.2.4.2.1.2		m	INTEGER	–		
A.52.4.2.4.2.2	attributeValue	m	ADB attributeId	–		–
A.52.4.3	ProcessingFailure	m	SEQUENCE	–		–
A.52.4.3.1	managedObjectClass	m	CHOICE	–		–
A.52.4.3.1.1		m	OBJECT IDENTIFIER	–		
A.52.4.3.1.2		m	INTEGER	–		
A.52.4.3.2	managedObjectInstance	m	CHOICE	–		–
A.52.4.3.2.1		m	DistinguishedName	–		
A.52.4.3.2.2		m	OCTET STRING	–		
A.52.4.3.2.3		m	RDNSequence	–		
A.52.4.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.52.4.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.52.4.3.3.2	errorInfo	m	ADB errorId	–		

Table A.53 – ROIV-m-Set (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.53.1	invokeID	m	INTEGER	–		
A.53.2	linked-ID	x	INTEGER	–		
A.53.3	operation-value	m	INTEGER	4		
A.53.4	SetArgument	m	SEQUENCE	–		–
A.53.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.53.4.1.1		o.74	OBJECT IDENTIFIER	–		
A.53.4.1.2		o.74	INTEGER	–		
A.53.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.53.4.2.1		o.75	DistinguishedName	–		
A.53.4.2.2		o.75	OCTET STRING	–		
A.53.4.2.3		o.75	RDNSequence	–		
A.53.4.3	accessControl	o	EXTERNAL	–		
A.53.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.53.4.5	scope	c1	Scope	–		[see Table A.8]
A.53.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.53.4.7	modificationList	m	SET OF SEQUENCE	–		–
A.53.4.7.1	modifyOperator	o	INTEGER	0 to 3		
A.53.4.7.2	attributeId	m	CHOICE	–		–
A.53.4.7.2.1		o.76	OBJECT IDENTIFIER	–		
A.53.4.7.2.2		o.76	INTEGER	–		
A.53.4.7.3	attributeValue	m	ADB attributeId	–		

Table A.54 – ROIV-m-Set (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.54.1	invokeID	m	INTEGER	–		
A.54.2	linked-ID	x	INTEGER	–		
A.54.3	operation-value	m	INTEGER	4		
A.54.4	SetArgument	m	SEQUENCE	–		–
A.54.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.54.4.1.1		m	OBJECT IDENTIFIER	–		
A.54.4.1.2		m	INTEGER	–		
A.54.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.54.4.2.1		m	DistinguishedName	–		
A.54.4.2.2		m	OCTET STRING	–		
A.54.4.2.3		m	RDNSequence	–		
A.54.4.3	accessControl	m	EXTERNAL	–		
A.54.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.54.4.5	scope	c1	Scope	–		[see Table A.8]
A.54.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.54.4.7	modificationList	m	SET OF SEQUENCE	–		–
A.54.4.7.1	modifyOperator	m	INTEGER	0 to 3		
A.54.4.7.2	attributeId	m	CHOICE	–		–
A.54.4.7.2.1		m	OBJECT IDENTIFIER	–		
A.54.4.7.2.2		m	INTEGER	–		
A.54.4.7.3	attributeValue	m	ADB attributeId	–		

Table A.55 – ROIV-m-Set-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.55.1	invokeID	m	INTEGER	–		
A.55.2	linked-ID	x	INTEGER	–		
A.55.3	operation-value	m	INTEGER	5		
A.55.4	SetArgument	m	SEQUENCE	–		–
A.55.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.55.4.1.1		o.77	OBJECT IDENTIFIER	–		
A.55.4.1.2		o.77	INTEGER	–		
A.55.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.55.4.2.1		o.78	DistinguishedName	–		
A.55.4.2.2		o.78	OCTET STRING	–		
A.55.4.2.3		o.78	RDNSequence	–		
A.55.4.3	accessControl	o	EXTERNAL	–		
A.55.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.55.4.5	scope	c1	Scope	–		[see Table A.8]
A.55.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.55.4.7	modificationList	m	SET OF SEQUENCE	–		–
A.55.4.7.1	modifyOperator	o	INTEGER	0 to 3		
A.55.4.7.2	attributeId	m	CHOICE	–		–
A.55.4.7.2.1		o.79	OBJECT IDENTIFIER	–		
A.55.4.7.2.2		o.79	INTEGER	–		
A.55.4.7.3	attributeValue	m	ADB attributeId	–		

Table A.56 – ROIV-m-Set-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.56.1	invokeID	m	INTEGER	–		
A.56.2	linked-ID	x	INTEGER	–		
A.56.3	operation-value	m	INTEGER	5		
A.56.4	SetArgument	m	SEQUENCE	–		–
A.56.4.1	baseManagedObjectClass	m	CHOICE	–		–
A.56.4.1.1		m	OBJECT IDENTIFIER	–		
A.56.4.1.2		m	INTEGER	–		
A.56.4.2	baseManagedObjectInstance	m	CHOICE	–		–
A.56.4.2.1		m	DistinguishedName	–		
A.56.4.2.2		m	OCTET STRING	–		
A.56.4.2.3		m	RDNSequence	–		
A.56.4.3	accessControl	m	EXTERNAL	–		
A.56.4.4	synchronization	c1	ENUMERATED	0 to 1		
A.56.4.5	scope	c1	Scope	–		[see Table A.8]
A.56.4.6	filter	c2	CMISFilter	–		[see Table A.11]
A.56.4.7	modificationList	m	SET OF SEQUENCE	–		–
A.56.4.7.1	modifyOperator	m	INTEGER	0 to 3		
A.56.4.7.2	attributeId	m	CHOICE	–		–
A.56.4.7.2.1		m	OBJECT IDENTIFIER	–		
A.56.4.7.2.2		m	INTEGER	–		
A.56.4.7.3	attributeValue	m	ADB attributeId	–		

Table A.57 – RORS-m-Action-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.57.1	invokeID	m	INTEGER	–		
A.57.2	operation-value	c16	INTEGER	7		
A.57.3	ActionResult	o	SEQUENCE	–		–
A.57.3.1	managedObjectClass	o	CHOICE	–		–
A.57.3.1.1		o.80	OBJECT IDENTIFIER	–		
A.57.3.1.2		o.80	INTEGER	–		
A.57.3.2	managedObjectInstance	o	CHOICE	–		–
A.57.3.2.1		o.81	DistinguishedName	–		
A.57.3.2.2		o.81	OCTET STRING	–		
A.57.3.2.3		o.81	RDNSequence	–		
A.57.3.3	currentTime	o	GeneralizedTime	–		
A.57.3.4	ActionReply	o	SEQUENCE	–		–
A.57.3.4.1	actionType	m	CHOICE	–		–
A.57.3.4.1.1		o.82	OBJECT IDENTIFIER	–		
A.57.3.4.1.2		o.82	INTEGER	–		
A.57.3.4.2	actionReplyInfo	m	ADB actionType	–		

c16: if A.57.3 then m else –

Table A.58 – RORS-m-Action-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.58.1	invokeID	m	INTEGER	–		
A.58.2	operation-value	m	INTEGER	7		
A.58.3	ActionResult	m	SEQUENCE	–		–
A.58.3.1	managedObjectClass	m	CHOICE	–		–
A.58.3.1.1		m	OBJECT IDENTIFIER	–		
A.58.3.1.2		m	INTEGER	–		
A.58.3.2	managedObjectInstance	m	CHOICE	–		–
A.58.3.2.1		m	DistinguishedName	–		
A.58.3.2.2		m	OCTET STRING	–		
A.58.3.2.3		m	RDNSequence	–		
A.58.3.3	currentTime	m	GeneralizedTime	–		
A.58.3.4	ActionReply	m	SEQUENCE	–		–
A.58.3.4.1	actionType	m	CHOICE	–		–
A.58.3.4.1.1		m	OBJECT IDENTIFIER	–		
A.58.3.4.1.2		m	INTEGER	–		
A.58.3.4.2	actionReplyInfo	m	ADB actionType	–		

Table A.59 – RORS-m-Cancel-Get (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.59.1	invokeID	m	INTEGER	–		

Table A.60 – RORS-m-Cancel-Get (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.60.1	invokeID	m	INTEGER	–		

Table A.61 – RORS-m-Create (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.61.1	invokeID	m	INTEGER	–		
A.61.2	operation-value	m	INTEGER	8		
A.61.3	CreateResult	m	SEQUENCE	–		–
A.61.3.1	managedObjectClass	o	CHOICE	–		–
A.61.3.1.1		o.83	OBJECT IDENTIFIER	–		
A.61.3.1.2		o.83	INTEGER	–		
A.61.3.2	managedObjectInstance	m	CHOICE	–		–
A.61.3.2.1		o.84	DistinguishedName	–		
A.61.3.2.2		o.84	OCTET STRING	–		
A.61.3.2.3		o.84	RDNSequence	–		
A.61.3.3	currentTime	o	GeneralizedTime	–		
A.61.3.4	attributeList	o	SET OF SEQUENCE	–		–
A.61.3.4.1	attributeId	m	CHOICE	–		–
A.61.3.4.1.1		o.85	OBJECT IDENTIFIER	–		
A.61.3.4.1.2		o.85	INTEGER	–		
A.61.3.4.2	attributeValue	m	ADB attributeId	–		

Table A.62 – RORS-m-Create (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.62.1	invokeID	m	INTEGER	–		
A.62.2	operation-value	m	INTEGER	8		
A.62.3	CreateResult	m	SEQUENCE	–		–
A.62.3.1	managedObjectClass	m	CHOICE	–		–
A.62.3.1.1		m	OBJECT IDENTIFIER	–		
A.62.3.1.2		m	INTEGER	–		
A.62.3.2	managedObjectInstance	m	CHOICE	–		–
A.62.3.2.1		m	DistinguishedName	–		
A.62.3.2.2		m	OCTET STRING	–		
A.62.3.2.3		m	RDNSequence	–		
A.62.3.3	currentTime	m	GeneralizedTime	–		
A.62.3.4	attributeList	m	SET OF SEQUENCE	–		–
A.62.3.4.1	attributeId	m	CHOICE	–		–
A.62.3.4.1.1		m	OBJECT IDENTIFIER	–		
A.62.3.4.1.2		m	INTEGER	–		
A.62.3.4.2	attributeValue	m	ADB attributeId	–		

Table A.63 – RORS-m-Delete (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.63.1	invokeID	m	INTEGER	–		
A.63.2	operation-value	c17	INTEGER	9		
A.63.3	DeleteResult	o	SEQUENCE	–		–
A.63.3.1	managedObjectClass	o	CHOICE	–		–
A.63.3.1.1		o.86	OBJECT IDENTIFIER	–		
A.63.3.1.2		o.86	INTEGER	–		
A.63.3.2	managedObjectInstance	o	CHOICE	–		–
A.63.3.2.1		o.87	DistinguishedName	–		
A.63.3.2.2		o.87	OCTET STRING	–		
A.63.3.2.3		o.87	RDNSequence	–		
A.63.3.3	currentTime	o	GeneralizedTime	–		

c17: if A.63.3 then m else –

Table A.64 – RORS-m-Delete (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.64.1	invokeID	m	INTEGER	–		
A.64.2	operation-value	m	INTEGER	9		
A.64.3	DeleteResult	m	SEQUENCE	–		–
A.64.3.1	managedObjectClass	m	CHOICE	–		–
A.64.3.1.1		m	OBJECT IDENTIFIER	–		
A.64.3.1.2		m	INTEGER	–		
A.64.3.2	managedObjectInstance	m	CHOICE	–		–
A.64.3.2.1		m	DistinguishedName	–		
A.64.3.2.2		m	OCTET STRING	–		
A.64.3.2.3		m	RDNSequence	–		
A.64.3.3	currentTime	m	GeneralizedTime	–		

Table A.65 – RORS-m-EventReport-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.65.1	invokeID	m	INTEGER	–		
A.65.2	operation-value	c18	INTEGER	1		
A.65.3	EventReportResult	o	SEQUENCE	–		–
A.65.3.1	managedObjectClass	o	CHOICE	–		–
A.65.3.1.1		o.88	OBJECT IDENTIFIER	–		
A.65.3.1.2		o.88	INTEGER	–		
A.65.3.2	managedObjectInstance	o	CHOICE	–		–
A.65.3.2.1		o.89	DistinguishedName	–		
A.65.3.2.2		o.89	OCTET STRING	–		
A.65.3.2.3		o.89	RDNSequence	–		
A.65.3.3	currentTime	o	GeneralizedTime	–		
A.65.3.4	EventReply	o	SEQUENCE	–		–
A.65.3.4.1	eventType	m	CHOICE	–		–
A.65.3.4.1.1		o.90	OBJECT IDENTIFIER	–		
A.65.3.4.1.2		o.90	INTEGER	–		
A.65.3.4.2	eventReplyInfo	o	ADB eventType	–		

c18: if A.65.3 then m else –

Table A.66 – RORS-m-EventReport-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.66.1	invokeID	m	INTEGER	–		
A.66.2	operation-value	m	INTEGER	1		
A.66.3	EventReportResult	m	SEQUENCE	–		–
A.66.3.1	managedObjectClass	m	CHOICE	–		–
A.66.3.1.1		m	OBJECT IDENTIFIER	–		
A.66.3.1.2		m	INTEGER	–		
A.66.3.2	managedObjectInstance	m	CHOICE	–		–
A.66.3.2.1		m	DistinguishedName	–		
A.66.3.2.2		m	OCTET STRING	–		
A.66.3.2.3		m	RDNSequence	–		
A.66.3.3	currentTime	m	GeneralizedTime	–		
A.66.3.4	EventReply	m	SEQUENCE	–		–
A.66.3.4.1	eventType	m	CHOICE	–		–
A.66.3.4.1.1		m	OBJECT IDENTIFIER	–		
A.66.3.4.1.2		m	INTEGER	–		
A.66.3.4.2	eventReplyInfo	m	ADB eventType	–		

Table A.67 – RORS-m-Get (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.67.1	invokeID	m	INTEGER	–		
A.67.2	operation-value	m	INTEGER	3		
A.67.3	GetResult	m	SEQUENCE	–		–
A.67.3.1	managedObjectClass	o	CHOICE	–		–
A.67.3.1.1		o.91	OBJECT IDENTIFIER	–		
A.67.3.1.2		o.91	INTEGER	–		
A.67.3.2	managedObjectInstance	o	CHOICE	–		–
A.67.3.2.1		o.92	DistinguishedName	–		
A.67.3.2.2		o.92	OCTET STRING	–		
A.67.3.2.3		o.92	RDNSequence	–		
A.67.3.3	currentTime	o	GeneralizedTime	–		
A.67.3.4	attributeList	m	SET OF SEQUENCE	–		–
A.67.3.4.1	attributeId	m	CHOICE	–		–
A.67.3.4.1.1		o.93	OBJECT IDENTIFIER	–		
A.67.3.4.1.2		o.93	INTEGER	–		
A.67.3.4.2	attributeValue	m	ADB attributeId	–		

Table A.68 – RORS-m-Get (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.68.1	invokeID	m	INTEGER	–		
A.68.2	operation-value	m	INTEGER	3		
A.68.3	GetResult	m	SEQUENCE	–		–
A.68.3.1	managedObjectClass	m	CHOICE	–		–
A.68.3.1.1		m	OBJECT IDENTIFIER	–		
A.68.3.1.2		m	INTEGER	–		
A.68.3.2	managedObjectInstance	m	CHOICE	–		–
A.68.3.2.1		m	DistinguishedName	–		
A.68.3.2.2		m	OCTET STRING	–		
A.68.3.2.3		m	RDNSequence	–		
A.68.3.3	currentTime	m	GeneralizedTime	–		
A.68.3.4	attributeList	m	SET OF SEQUENCE	–		–
A.68.3.4.1	attributeId	m	CHOICE	–		–
A.68.3.4.1.1		m	OBJECT IDENTIFIER	–		
A.68.3.4.1.2		m	INTEGER	–		
A.68.3.4.2	attributeValue	m	ADB attributeId	–		

Table A.69 – RORS-m-Set-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.69.1	invokeID	m	INTEGER	–		
A.69.2	operation-value	c19	INTEGER	5		
A.69.3	SetResult	o	SEQUENCE	–		–
A.69.3.1	managedObjectClass	o	CHOICE	–		–
A.69.3.1.1		o.94	OBJECT IDENTIFIER	–		
A.69.3.1.2		o.94	INTEGER	–		
A.69.3.2	managedObjectInstance	o	CHOICE	–		–
A.69.3.2.1		o.95	DistinguishedName	–		
A.69.3.2.2		o.95	OCTET STRING	–		
A.69.3.2.3		o.95	RDNSequence	–		
A.69.3.3	currentTime	o	GeneralizedTime	–		
A.69.3.4	attributeList	o	SET OF SEQUENCE	–		–
A.69.3.4.1	attributeId	m	CHOICE	–		–
A.69.3.4.1.1		o.96	OBJECT IDENTIFIER	–		
A.69.3.4.1.2		o.96	INTEGER	–		
A.69.3.4.2	attributeValue	m	ADB attributeId	–		

c19: if A.69.3 then m else –

Table A.70 – RORS-m-Set-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.70.1	invokeID	m	INTEGER	–		
A.70.2	operation-value	m	INTEGER	5		
A.70.3	SetResult	m	SEQUENCE	–		–
A.70.3.1	managedObjectClass	m	CHOICE	–		–
A.70.3.1.1		m	OBJECT IDENTIFIER	–		
A.70.3.1.2		m	INTEGER	–		
A.70.3.2	managedObjectInstance	m	CHOICE	–		–
A.70.3.2.1		m	DistinguishedName	–		
A.70.3.2.2		m	OCTET STRING	–		
A.70.3.2.3		m	RDNSequence	–		
A.70.3.3	currentTime	m	GeneralizedTime	–		
A.70.3.4	attributeList	m	SET OF SEQUENCE	–		–
A.70.3.4.1	attributeId	m	CHOICE	–		–
A.70.3.4.1.1		m	OBJECT IDENTIFIER	–		
A.70.3.4.1.2		m	INTEGER	–		
A.70.3.4.2	attributeValue	m	ADB attributeId	–		

Table A.71 – ROER-accessDenied (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.71.1	invokeID	m	INTEGER	–		
A.71.2	error-value	m	INTEGER	2		

Table A.72 – ROER-accessDenied (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.72.1	invokeID	m	INTEGER	–		
A.72.2	error-value	m	INTEGER	2		

Table A.73 – ROER-classInstanceConflict (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.73.1	invokeID	m	INTEGER	–		
A.73.2	error-value	m	INTEGER	19		
A.73.3	BaseManagedObjectId	m	SEQUENCE	–		–
A.73.3.1	baseManagedObjectClass	m	CHOICE	–		–
A.73.3.1.1		o.97	OBJECT IDENTIFIER	–		
A.73.3.1.2		o.97	INTEGER	–		
A.73.3.2	baseManagedObjectInstance	m	CHOICE	–		–
A.73.3.2.1		o.98	DistinguishedName	–		
A.73.3.2.2		o.98	OCTET STRING	–		
A.73.3.2.3		o.98	RDNSequence	–		

Table A.74 – ROER-classInstanceConflict (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.74.1	invokeID	m	INTEGER	–		
A.74.2	error-value	m	INTEGER	19		
A.74.3	BaseManagedObjectId	m	SEQUENCE	–		–
A.74.3.1	baseManagedObjectClass	m	CHOICE	–		–
A.74.3.1.1		m	OBJECT IDENTIFIER	–		
A.74.3.1.2		m	INTEGER	–		
A.74.3.2	baseManagedObjectInstance	m	CHOICE	–		–
A.74.3.2.1		m	DistinguishedName	–		
A.74.3.2.2		m	OCTET STRING	–		
A.74.3.2.3		m	RDNSequence	–		

Table A.75 – ROER-complexityLimitation (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.75.1	invokeID	m	INTEGER	–		
A.75.2	error-value	m	INTEGER	20		
A.75.3	ComplexityLimitation	o	SET	–		–
A.75.3.1	scope	o	Scope	–		[see Table A.8]
A.75.3.2	filter	o	CMISFilter	–		[see Table A.11]
A.75.3.3	sync	o	ENUMERATED	0 to 1		

Table A.76 – ROER-complexityLimitation (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.76.1	invokeID	m	INTEGER	–		
A.76.2	error-value	m	INTEGER	20		
A.76.3	ComplexityLimitation	m	SET	–		–
A.76.3.1	scope	m	Scope	–		[see Table A.8]
A.76.3.2	filter	m	CMISFilter	–		[see Table A.11]
A.76.3.3	sync	m	ENUMERATED	0 to 1		

Table A.77 – ROER-duplicateManagedObjectInstance (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.77.1	invokeID	m	INTEGER	–		
A.77.2	error-value	m	INTEGER	11		
A.77.3	managedObjectInstance	m	CHOICE	–		–
A.77.3.1		o.99	DistinguishedName	–		
A.77.3.2		o.99	OCTET STRING	–		
A.77.3.3		o.99	RDNSequence	–		

Table A.78 – ROER-duplicateManagedObjectInstance (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.78.1	invokeID	m	INTEGER	–		
A.78.2	error-value	m	INTEGER	11		
A.78.3	managedObjectInstance	m	CHOICE	–		–
A.78.3.1		m	DistinguishedName	–		
A.78.3.2		m	OCTET STRING	–		
A.78.3.3		m	RDNSequence	–		

Table A.79 – ROER-getListError (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.79.1	invokeID	m	INTEGER	–		
A.79.2	error-value	m	INTEGER	7		
A.79.3	GetListError	m	SEQUENCE	–		–
A.79.3.1	managedObjectClass	o	CHOICE	–		–
A.79.3.1.1		o.100	OBJECT IDENTIFIER	–		
A.79.3.1.2		o.100	INTEGER	–		
A.79.3.2	managedObjectInstance	o	CHOICE	–		–
A.79.3.2.1		o.101	DistinguishedName	–		
A.79.3.2.2		o.101	OCTET STRING	–		
A.79.3.2.3		o.101	RDNSequence	–		
A.79.3.3	currentTime	o	GeneralizedTime	–		
A.79.3.4	getInfoList	m	SET OF CHOICE	–		–
A.79.3.4.1	AttributeIdError	m	SEQUENCE			–
A.79.3.4.1.1	errorStatus	m	ENUMERATED	2,5		
A.79.3.4.1.2	attributeId	m	CHOICE	–		–
A.79.3.4.1.2.1		o.102	OBJECT IDENTIFIER	–		
A.79.3.4.1.2.2		o.102	INTEGER	–		
A.79.3.4.2	Attribute	m	SEQUENCE	–		–
A.79.3.4.2.1	attributeId	m	CHOICE	–		–
A.79.3.4.2.1.1		o.103	OBJECT IDENTIFIER	–		
A.79.3.4.2.1.2		o.103	INTEGER	–		
A.79.3.4.2.2	attributeValue	m	ADB attributeId	–		

Table A.80 – ROER-getListError (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.80.1	invokeID	m	INTEGER	–		
A.80.2	error-value	m	INTEGER	7		
A.80.3	GetListError	m	SEQUENCE	–		–
A.80.3.1	managedObjectClass	m	CHOICE	–		–
A.80.3.1.1		m	OBJECT IDENTIFIER	–		
A.80.3.1.2		m	INTEGER	–		
A.80.3.2	managedObjectInstance	m	CHOICE	–		–
A.80.3.2.1		m	DistinguishedName	–		
A.80.3.2.2		m	OCTET STRING	–		
A.80.3.2.3		m	RDNSequence	–		
A.80.3.3	currentTime	m	GeneralizedTime	–		
A.80.3.4	getInfoList	m	SET OF CHOICE	–		–
A.80.3.4.1	AttributeIdError	m	SEQUENCE			–
A.80.3.4.1.1	errorStatus	m	ENUMERATED	2,5		
A.80.3.4.1.2	attributeId	m	CHOICE	–		–
A.80.3.4.1.2.1		m	OBJECT IDENTIFIER	–		
A.80.3.4.1.2.2		m	INTEGER	–		
A.80.3.4.2	Attribute	m	SEQUENCE	–		–
A.80.3.4.2.1	attributeId	m	CHOICE	–		–
A.80.3.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.80.3.4.2.1.2		m	INTEGER	–		
A.80.3.4.2.2	attributeValue	m	ADB attributeId	–		

Table A.81 – ROER-invalidArgumentValue (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.81.1	invokeID	m	INTEGER	–		
A.81.2	error-value	m	INTEGER	15		
A.81.3	InvalidArgumentValue	m	CHOICE	–		–
A.81.3.1	actionValue	m	SEQUENCE	–		–
A.81.3.1.1	actionType	m	CHOICE	–		–
A.81.3.1.1.1		o.104	OBJECT IDENTIFIER	–		
A.81.3.1.1.2		o.104	INTEGER	–		
A.81.3.1.2	actionInfoArg	o	ADB actionType	–		
A.81.3.2	eventValue	m	SEQUENCE	–		–
A.81.3.2.1	eventType	m	CHOICE	–		–
A.81.3.2.1.1		o.105	OBJECT IDENTIFIER	–		
A.81.3.2.1.2		o.105	INTEGER	–		
A.81.3.2.2	eventInfo	o	ADB eventType	–		

Table A.82 – ROER-invalidArgumentValue (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.82.1	invokeID	m	INTEGER	–		
A.82.2	error-value	m	INTEGER	15		
A.82.3	InvalidArgumentValue	m	CHOICE	–		–
A.82.3.1	actionValue	m	SEQUENCE	–		–
A.82.3.1.1	actionType	m	CHOICE	–		–
A.82.3.1.1.1		m	OBJECT IDENTIFIER	–		
A.82.3.1.1.2		m	INTEGER	–		
A.82.3.1.2	actionInfoArg	m	ADB actionType	–		
A.82.3.2	eventValue	m	SEQUENCE	–		–
A.82.3.2.1	eventType	m	CHOICE	–		–
A.82.3.2.1.1		m	OBJECT IDENTIFIER	–		
A.82.3.2.1.2		m	INTEGER	–		
A.82.3.2.2	eventInfo	m	ADB eventType	–		

Table A.83 – ROER-invalidAttributeValue (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.83.1	invokeID	m	INTEGER	–		
A.83.2	error-value	m	INTEGER	6		
A.83.3	Attribute	m	SEQUENCE	–		–
A.83.3.1	attributeId	m	CHOICE	–		–
A.83.3.1.1		o.106	OBJECT IDENTIFIER	–		
A.83.3.1.2		o.106	INTEGER	–		
A.83.3.2	attributeValue	m	ADB attributeId	–		

Table A.84 – ROER-invalidAttributeValue (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.84.1	invokeID	m	INTEGER	–		
A.84.2	error-value	m	INTEGER	6		
A.84.3	Attribute	m	SEQUENCE	–		–
A.84.3.1	attributeId	m	CHOICE	–		–
A.84.3.1.1		m	OBJECT IDENTIFIER	–		
A.84.3.1.2		m	INTEGER	–		
A.84.3.2	attributeValue	m	ADB attributeId	–		

Table A.85 – ROER-invalidFilter (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.85.1	invokeID	m	INTEGER	–		
A.85.2	error-value	m	INTEGER	4		
A.85.3	filter	m	CMISFilter	–		[see Table A.11]

Table A.86 – ROER-invalidFilter (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.86.1	invokeID	m	INTEGER	–		
A.86.2	error-value	m	INTEGER	4		
A.86.3	filter	m	CMISFilter	–		[see Table A.11]

Table A.87 – ROER-invalidObjectInstance (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.87.1	invokeID	m	INTEGER	–		
A.87.2	error-value	m	INTEGER	17		
A.87.3	managedObjectInstance	m	CHOICE	–		–
A.87.3.1		o.107	DistinguishedName	–		
A.87.3.2		o.107	OCTET STRING	–		
A.87.3.3		o.107	RDNSequence	–		

Table A.88 – ROER-invalidObjectInstance (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.88.1	invokeID	m	INTEGER	–		
A.88.2	error-value	m	INTEGER	17		
A.88.3	managedObjectInstance	m	CHOICE	–		–
A.88.3.1		m	DistinguishedName	–		
A.88.3.2		m	OCTET STRING	–		
A.88.3.3		m	RDNSequence	–		

Table A.89 – ROER-invalidScope (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.89.1	invokeID	m	INTEGER	–		
A.89.2	error-value	m	INTEGER	16		
A.89.3	scope	m	Scope	–		[see Table A.8]

Table A.90 – ROER-invalidScope (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.90.1	invokeID	m	INTEGER	–		
A.90.2	error-value	m	INTEGER	16		
A.90.3	scope	m	Scope	–		[see Table A.8]

Table A.91 – ROER-missingAttributeValue (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.91.1	invokeID	m	INTEGER	–		
A.91.2	error-value	m	INTEGER	18		
A.91.3	attributeId	m	CHOICE	–		–
A.91.3.1		o.108	OBJECT IDENTIFIER	–		
A.91.3.2		o.108	INTEGER	–		

Table A.92 – ROER-missingAttributeValue (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.92.1	invokeID	m	INTEGER	–		
A.92.2	error-value	m	INTEGER	18		
A.92.3	attributeId	m	CHOICE	–		–
A.92.3.1		m	OBJECT IDENTIFIER	–		
A.92.3.2		m	INTEGER	–		

Table A.93 – ROER-mistypedOperation (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.93.1	invokeID	m	INTEGER	–		
A.93.2	error-value	m	INTEGER	21		

Table A.94 – ROER-mistypedOperation (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.94.1	invokeID	m	INTEGER	–		
A.94.2	error-value	m	INTEGER	21		

Table A.95 – ROER-noSuchAction (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.95.1	invokeID	m	INTEGER	–		
A.95.2	error-value	m	INTEGER	9		
A.95.3	NoSuchAction	m	SEQUENCE	–		–
A.95.3.1	managedObjectClass	m	CHOICE	–		–
A.95.3.1.1		o.109	OBJECT IDENTIFIER	–		
A.95.3.1.2		o.109	INTEGER	–		
A.95.3.2	actionType	m	CHOICE	–		–
A.95.3.2.1		o.110	OBJECT IDENTIFIER	–		
A.95.3.2.2		o.110	INTEGER	–		

Table A.96 – ROER-noSuchAction (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.96.1	invokeID	m	INTEGER	–		
A.96.2	error-value	m	INTEGER	9		
A.96.3	NoSuchAction	m	SEQUENCE	–		–
A.96.3.1	managedObjectClass	m	CHOICE	–		–
A.96.3.1.1		m	OBJECT IDENTIFIER	–		
A.96.3.1.2		m	INTEGER	–		
A.96.3.2	actionType	m	CHOICE	–		–
A.96.3.2.1		m	OBJECT IDENTIFIER	–		
A.96.3.2.2		m	INTEGER	–		

Table A.97 – ROER-noSuchArgument (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.97.1	invokeID	m	INTEGER	–		
A.97.2	error-value	m	INTEGER	14		
A.97.3	NoSuchArgument	m	CHOICE	–		–
A.97.3.1	actionId	m	SEQUENCE	–		–
A.97.3.1.1	managedObjectClass	o	CHOICE	–		–
A.97.3.1.1.1		o.111	OBJECT IDENTIFIER	–		
A.97.3.1.1.2		o.111	INTEGER	–		
A.97.3.1.2	actionType	m	–	–		–
A.97.3.1.2.1		o.112	OBJECT IDENTIFIER	–		
A.97.3.1.2.2		o.112	INTEGER	–		
A.97.3.2	eventId	m	SEQUENCE	–		–
A.97.3.2.1	managedObjectClass	o	CHOICE	–		–
A.97.3.2.1.1		o.113	OBJECT IDENTIFIER	–		
A.97.3.2.1.2		o.113	INTEGER	–		
A.97.3.2.2	eventType	m	CHOICE	–		–
A.97.3.2.2.1		o.114	OBJECT IDENTIFIER	–		
A.97.3.2.2.2		o.114	INTEGER	–		

Table A.98 – ROER-noSuchArgument (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.98.1	invokeID	m	INTEGER	–		
A.98.2	error-value	m	INTEGER	14		
A.98.3	NoSuchArgument	m	CHOICE	–		–
A.98.3.1	actionId	m	SEQUENCE	–		–
A.98.3.1.1	managedObjectClass	o	CHOICE	–		–
A.98.3.1.1.1		m	OBJECT IDENTIFIER	–		
A.98.3.1.1.2		m	INTEGER	–		
A.98.3.1.2	actionType	m	CHOICE	–		–
A.98.3.1.2.1		m	OBJECT IDENTIFIER	–		
A.98.3.1.2.2		m	INTEGER	–		
A.98.3.2	eventId	m	SEQUENCE	–		–
A.98.3.2.1	managedObjectClass	o	CHOICE	–		–
A.98.3.2.1.1		m	OBJECT IDENTIFIER	–		
A.98.3.2.1.2		m	INTEGER	–		
A.98.3.2.2	eventType	m	CHOICE	–		–
A.98.3.2.2.1		m	OBJECT IDENTIFIER	–		
A.98.3.2.2.2		m	INTEGER	–		

Table A.99 – ROER-noSuchAttribute (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.99.1	invokeID	m	INTEGER	–		
A.99.2	error-value	m	INTEGER	5		
A.99.3	attributeId	m	CHOICE	–		–
A.99.3.1		o.115	OBJECT IDENTIFIER	–		
A.99.3.2		o.115	INTEGER	–		

Table A.100 – ROER-noSuchAttribute (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.100.1	invokeID	m	INTEGER	–		
A.100.2	error-value	m	INTEGER	5		
A.100.3	attributeId	m	CHOICE	–		–
A.100.3.1		m	OBJECT IDENTIFIER	–		
A.100.3.2		m	INTEGER	–		

Table A.101 – ROER-noSuchEventType (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.101.1	invokeID	m	INTEGER	–		
A.101.2	error-value	m	INTEGER	13		
A.101.3	NoSuchEventType	m	SEQUENCE	–		–
A.101.3.1	managedObjectClass	m	CHOICE	–		–
A.101.3.1.1		o.116	OBJECT IDENTIFIER	–		
A.101.3.1.2		o.116	INTEGER	–		
A.101.3.2	eventType	m	CHOICE	–		–
A.101.3.2.1		o.117	OBJECT IDENTIFIER	–		
A.101.3.2.2		o.117	INTEGER	–		

Table A.102 – ROER-noSuchEventType (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.102.1	invokeID	m	INTEGER	–		
A.102.2	error-value	m	INTEGER	13		
A.102.3	NoSuchEventType	m	SEQUENCE	–		–
A.102.3.1	managedObjectClass	m	CHOICE	–		–
A.102.3.1.1		m	OBJECT IDENTIFIER	–		
A.102.3.1.2		m	INTEGER	–		
A.102.3.2	eventType	m	CHOICE	–		–
A.102.3.2.1		m	OBJECT IDENTIFIER	–		
A.102.3.2.2		m	INTEGER	–		

Table A.103 – ROER-noSuchInvokeId (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.103.1	invokeID	m	INTEGER	–		
A.103.2	error-value	m	INTEGER	22		
A.103.3	invokeId	m	INTEGER	–		

Table A.104 – ROER-noSuchInvokeId (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.104.1	invokeID	m	INTEGER	–		
A.104.2	error-value	m	INTEGER	22		
A.104.3	invokeId	m	INTEGER	–		

Table A.105 – ROER-noSuchObjectClass (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.105.1	invokeID	m	INTEGER	–		
A.105.2	error-value	m	INTEGER	0		
A.105.2	managedObjectClass	m	CHOICE	–		–
A.105.2.1		o.118	OBJECT IDENTIFIER	–		
A.105.2.2		o.118	INTEGER	–		

Table A.106 – ROER-noSuchObjectClass (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.106.1	invokeID	m	INTEGER	–		
A.106.2	error-value	m	INTEGER	0		
A.106.2	managedObjectClass	m	CHOICE	–		–
A.106.2.1		m	OBJECT IDENTIFIER	–		
A.106.2.2		m	INTEGER	–		

Table A.107 – ROER-noSuchObjectInstance (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.107.1	invokeID	m	INTEGER	–		
A.107.2	error-value	m	INTEGER	1		
A.107.3	managedObjectInstance	m	CHOICE	–		–
A.107.3.1		o.119	DistinguishedName	–		
A.107.3.2		o.119	OCTET STRING	–		
A.107.3.3		o.119	RDNSequence	–		

Table A.108 – ROER-noSuchObjectInstance (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.108.1	invokeID	m	INTEGER	–		
A.108.2	error-value	m	INTEGER	1		
A.108.3	managedObjectInstance	m	CHOICE	–		–
A.108.3.1		m	DistinguishedName	–		
A.108.3.2		m	OCTET STRING	–		
A.108.3.3		m	RDNSequence	–		

Table A.109 – ROER-noSuchReferenceObject (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.109.1	invokeID	m	INTEGER	–		
A.109.2	error-value	m	INTEGER	12		
A.109.3	referenceObjectInstance	m	CHOICE	–		–
A.109.3.1		o.120	DistinguishedName	–		
A.109.3.2		o.120	OCTET STRING	–		
A.109.3.3		o.120	RDNSequence	–		

Table A.110 – ROER-noSuchReferenceObject (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.110.1	invokeID	m	INTEGER	–		
A.110.2	error-value	m	INTEGER	12		
A.110.3	referenceObjectInstance	m	CHOICE	–		–
A.110.3.1		m	DistinguishedName	–		
A.110.3.2		m	OCTET STRING	–		
A.110.3.3		m	RDNSequence	–		

Table A.111 – ROER-operationCancelled (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.111.1	invokeID	m	INTEGER	–		
A.111.2	error-value	m	INTEGER	23		

Table A.112 – ROER-operationCancelled (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.112.1	invokeID	m	INTEGER	–		
A.112.2	error-value	m	INTEGER	23		

Table A.113 – ROER-processingFailure (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.113.1	invokeID	m	INTEGER	–		
A.113.2	error-value	m	INTEGER	10		
A.113.3	ProcessingFailure	o	SEQUENCE	–		–
A.113.3.1	managedObjectClass	m	CHOICE	–		–
A.113.3.1.1		o.121	OBJECT IDENTIFIER	–		
A.113.3.1.2		o.121	INTEGER	–		
A.113.3.2	managedObjectInstance	o	CHOICE	–		–
A.113.3.2.1		o.122	DistinguishedName	–		
A.113.3.2.2		o.122	OCTET STRING	–		
A.113.3.2.3		o.122	RDNSequence	–		
A.113.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.113.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.113.3.3.2	errorInfo	m	ADB errorId	–		

Table A.114 – ROER-processingFailure (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.114.1	invokeID	m	INTEGER	–		
A.114.2	error-value	m	INTEGER	10		
A.114.3	ProcessingFailure	m	SEQUENCE	–		–
A.114.3.1	managedObjectClass	m	CHOICE	–		–
A.114.3.1.1		m	OBJECT IDENTIFIER	–		
A.114.3.1.2		m	INTEGER	–		
A.114.3.2	managedObjectInstance	m	CHOICE	–		–
A.114.3.2.1		m	DistinguishedName	–		
A.114.3.2.2		m	OCTET STRING	–		
A.114.3.2.3		m	RDNSequence	–		
A.114.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
A.114.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
A.114.3.3.2	errorInfo	m	ADB errorId	–		

Table A.115 – ROER-setListError (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.115.1	invokeID	m	INTEGER	–		
A.115.2	error-value	m	INTEGER	8		
A.115.3	SetListError	m	SEQUENCE	–		–
A.115.3.1	managedObjectClass	o	CHOICE	–		–
A.115.3.1.1		o.123	OBJECT IDENTIFIER	–		
A.115.3.1.2		o.123	INTEGER	–		
A.115.3.2	managedObjectInstance	o	CHOICE	–		–
A.115.3.2.1		o.124	DistinguishedName	–		
A.115.3.2.2		o.124	OCTET STRING	–		
A.115.3.2.3		o.124	RDNSequence	–		
A.115.3.3	currentTime	o	GeneralizedTime	–		
A.115.3.4	setInfoList	m	SET OF CHOICE	–		–
A.115.3.4.1	AttributeError	m	SEQUENCE			–
A.115.3.4.1.1	errorStatus	m	ENUMERATED	2,5,6,24,25		
A.115.3.4.1.2	modifyOperator	m	INTEGER	–		
A.115.3.4.1.3	attributeId	m	CHOICE	–		–
A.115.3.4.1.3.1		o.125	OBJECT IDENTIFIER	–		
A.115.3.4.1.3.2		o.125	INTEGER	–		
A.115.3.4.1.4	attributeValue	m	ADB attributeId	–		
A.115.3.4.2	Attribute	m	SEQUENCE	–		–
A.115.3.4.2.1	attributeId	m	CHOICE	–		–
A.115.3.4.2.1.1		o.126	OBJECT IDENTIFIER	–		
A.115.3.4.2.1.2		o.126	INTEGER	–		
A.115.3.4.2.2	attributeValue	m	ADB attributeId	–		

Table A.116 – ROER-setListError (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.116.1	invokeID	m	INTEGER	–		
A.116.2	error-value	m	INTEGER	8		
A.116.3	SetListError	m	SEQUENCE	–		–
A.116.3.1	managedObjectClass	m	CHOICE	–		–
A.116.3.1.1		m	OBJECT IDENTIFIER	–		
A.116.3.1.2		m	INTEGER	–		
A.116.3.2	managedObjectInstance	m	CHOICE	–		–
A.116.3.2.1		m	DistinguishedName	–		
A.116.3.2.2		m	OCTET STRING	–		
A.116.3.2.3		m	RDNSequence	–		
A.116.3.3	currentTime	m	GeneralizedTime	–		
A.116.3.4	setInfoList	m	SET OF CHOICE	–		–
A.116.3.4.1	AttributeError	m	SEQUENCE			–
A.116.3.4.1.1	errorStatus	m	ENUMERATED	2,5,6,24,25		
A.116.3.4.1.2	modifyOperator	m	INTEGER	–		
A.116.3.4.1.3	attributeId	m	CHOICE	–		–
A.116.3.4.1.3.1		m	OBJECT IDENTIFIER	–		
A.116.3.4.1.3.2		m	INTEGER	–		
A.116.3.4.1.4	attributeValue	m	ADB attributeId	–		
A.116.3.4.2	Attribute	m	SEQUENCE	–		–
A.116.3.4.2.1	attributeId	m	CHOICE	–		–
A.116.3.4.2.1.1		m	OBJECT IDENTIFIER	–		
A.116.3.4.2.1.2		m	INTEGER	–		
A.116.3.4.2.2	attributeValue	m	ADB attributeId	–		

Table A.117 – ROER-syncNotSupported (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.117.1	invokeID	m	INTEGER	–		
A.117.2	error-value	m	INTEGER	3		
A.117.3	sync	m	ENUMERATED	0 to 1		

Table A.118 – ROER-syncNotSupported (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.118.1	invokeID	m	INTEGER	–		
A.118.2	error-value	m	INTEGER	3		
A.118.3	sync	m	ENUMERATED	0 to 1		

Table A.119 – RORJ (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.119.1	invokeID	m	CHOICE	–		–
A.119.1.1		o.127	INTEGER	–		
A.119.1.2		o.127	NULL	–		
A.119.2	problem	m	CHOICE	–		–
A.119.2.1	generalProblem	o	INTEGER	0 to 2		
A.119.2.2	invokeProblem	m	INTEGER	0 to 3		
A.119.2.3	returnResultProblem	o	INTEGER	0 to 2		
A.119.2.4	returnErrorProblem	o	INTEGER	0 to 4		

Table A.120 – RORJ (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
A.120.1	invokeID	m	CHOICE	–		
A.120.1.1		m	INTEGER	–		
A.120.1.2		m	NULL	–		
A.120.2	problem	m	CHOICE	–		–
A.120.2.1	generalProblem	m	INTEGER	0 to 2		
A.120.2.2	invokeProblem	m	INTEGER	0 to 7		
A.120.2.3	returnResultProblem	m	INTEGER	0 to 2		
A.120.2.4	returnErrorProblem	m	INTEGER	0 to 4		

A.5.6 Negotiation capabilities

The supplier of the implementation shall indicate support for negotiation capabilities in Table A.121.

Table A.121 – Negotiation capabilities

Index		
A.121.1	Does the implementation support CMIP protocol version negotiation?	
A.121.2	Does the implementation support CMIS functional unit negotiation?	

A.5.7 Protocol error handling

The supplier of the implementation shall indicate the conditions that result in the detection of a CMIP protocol error, in the box below. For each condition, the supplier shall indicate whether the resulting action is an A-ABORT or an RORJ. For each RORJ, the supplier shall specify the RORJ problem type and error code.

Conditions	A-ABORT or RORJ	RORJ problem type & error code

A.5.8 Multi-layer dependencies

The supplier of the implementation shall state whether or not the association and operation classes defined by CCITT Rec. X.219 | ISO/IEC 9072-1 are supported, in Table A.122.

Table A.122 – ROSE association and operation class support

Index		Sts	Spt
A.122.1	Does the implementation support ROSE association class 3?	m	
A.122.2	Does the implementation support ROSE operation class 1?	o.128	
A.122.3	Does the implementation support ROSE operation class 2?	o.128	
A.122.4	Does the implementation support ROSE operation class 5?	m	

The supplier of the implementation shall state whether or not the the functional units specified by CCITT Rec. X.216 | ISO 8822 are supported, in Table A.123.

Table A.123 – Presentation functional unit support

Index	Functional unit	Sts	Spt
A.123.1	Kernel	m	
A.123.2	Context management	o	
A.123.3	Context restoration	o	

The supplier of the implementation shall state whether or not the the functional units specified by CCITT Rec. X.215 | ISO 8326 are supported, in Table A.124.

NOTE – The A-ABORT feature of CCITT Rec. X.227 | ISO 8650 mandates the use of the unlimited user data facility of ISO/IEC 8326/Add.2.

Table A.124 – Session functional unit support

Index	Functional unit	Sts	Spt
A.124.1	Kernel	m	
A.124.2	Negotiated release	o	
A.124.3	Duplex	m	
A.124.4	Half-duplex	x	
A.124.5	Expedited data	o	
A.124.6	Types data	o	
A.124.7	Capability data exchange	o	
A.124.8	Minor synchronize	o	
A.124.9	Major synchronize	o	
A.124.10	Resynchronize	o	
A.124.11	Exceptions	o	
A.124.12	Activity management	o	

Annex B
PICS proforma for protocol version 1

(This annex forms an integral part of this Recommendation | International Standard)

B.1 Introduction

If the supplier of an implementation of CCITT Rec. X.711 | ISO/IEC 9596-1 also claims to support either the dependent or general conformance class for CMIP version 1 as specified in ISO/IEC 9596, then a copy of the tables contained in this annex shall be completed, in addition to a copy of the tables in Annex A.

NOTE – ISO/IEC 9596:1990, *Information technology – Open Systems Interconnection – Common management information protocol specification* has been withdrawn and superceded by ISO/IEC 9596-1. There is no CCITT equivalent of ISO/IEC 9596.

The instructions for completing the PICS are contained in A.1.

B.2 PDU parameters

The supplier of the implementation shall state whether or not each parameter for each of the protocol data units specified by ISO/IEC 9596 are supported. The supplier shall indicate the type, value(s) and range(s) of each parameter. The supplier shall indicate the status of support for sending and receiving each parameter in each PDU.

Table B.1 is the CMIP version 1 of Table A.51. AttributeError was amended in CMIP version 2.

Table B.1 – ROIV-m-LinkedReply-Set (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.1.1	invokeID	m	INTEGER	–		
B.1.2	linked-ID	m	INTEGER	–		
B.1.3	operation-value	m	INTEGER	2		
B.1.4	LinkedReplyArgument	m	CHOICE	–		–
B.1.4.1	SetResult	m	SEQUENCE	–		–
B.1.4.1.1	managedObjectClass	m	CHOICE	–		–
B.1.4.1.1.1		o.129	OBJECT IDENTIFIER	–		
B.1.4.1.1.2		o.129	INTEGER	–		
B.1.4.1.2	managedObjectInstance	m	CHOICE	–		–
B.1.4.1.2.1		o.130	DistinguishedName	–		
B.1.4.1.2.2		o.130	OCTET STRING	–		
B.1.4.1.2.3		o.130	RDNSequence	–		
B.1.4.1.3	currentTime	o	GeneralizedTime	–		
B.1.4.1.4	attributeList	m	SET OF SEQUENCE	–		–
B.1.4.1.4.1	attributeId	m	CHOICE	–		–
B.1.4.1.4.1.1		o.131	OBJECT IDENTIFIER	–		
B.1.4.1.4.1.2		o.131	INTEGER	–		
B.1.4.1.4.2	attributeValue	m	ADB attributeId	–		
B.1.4.2	SetListError	m	SEQUENCE	–		–
B.1.4.2.1	managedObjectClass	m	CHOICE	–		–
B.1.4.2.1.1		o.132	OBJECT IDENTIFIER	–		
B.1.4.2.1.2		o.132	INTEGER	–		
B.1.4.2.2	managedObjectInstance	m	CHOICE	–		–
B.1.4.2.2.1		o.133	DistinguishedName	–		
B.1.4.2.2.2		o.133	OCTET STRING	–		
B.1.4.2.2.3		o.133	RDNSequence	–		
B.1.4.2.3	currentTime	o	GeneralizedTime	–		
B.1.4.2.4	setInfoList	m	SET OF CHOICE	–		–
B.1.4.2.4.1	AttributeError	m	SEQUENCE	–		–
B.1.4.2.4.1.1	errorStatus	m	ENUMERATED	2,5,6		
B.1.4.2.4.1.2	attributeId	m	CHOICE	–		–
B.1.4.2.4.1.2.1		o.134	OBJECT IDENTIFIER	–		
B.1.4.2.4.1.2.2		o.134	INTEGER	–		
B.1.4.2.4.1.3	attributeValue	m	ADB attributeId	–		–
B.1.4.2.4.2	Attribute	m	SEQUENCE	–		–
B.1.4.2.4.2.1	attributeId	m	CHOICE	–		–
B.1.4.2.4.2.1.1		o.135	OBJECT IDENTIFIER	–		
B.1.4.2.4.2.1.2		o.135	INTEGER	–		
B.1.4.2.4.2.2	attributeValue	m	ADB attributeId	–		–
B.1.4.3	ProcessingFailure	m	SEQUENCE	–		–
B.1.4.3.1	managedObjectClass	m	CHOICE	–		–
B.1.4.3.1.1		o.136	OBJECT IDENTIFIER	–		
B.1.4.3.1.2		o.136	INTEGER	–		
B.1.4.3.2	managedObjectInstance	m	CHOICE	–		–
B.1.4.3.2.1		o.137	DistinguishedName	–		
B.1.4.3.2.2		o.137	OCTET STRING	–		
B.1.4.3.2.3		o.137	RDNSequence	–		
B.1.4.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
B.1.4.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
B.1.4.3.3.2	errorInfo	m	ADB errorId	–		

Table B.2 is the CMIP version 1 of Table A.52. AttributeError was amended in CMIP version 2.

Table B.2 – ROIV-m-LinkedReply-Set (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.2.1	invokeID	m	INTEGER	–		
B.2.2	linked-ID	m	INTEGER	–		
B.2.3	operation-value	m	INTEGER	2		
B.2.4	LinkedReplyArgument	m	CHOICE	–		–
B.2.4.1	SetResult	m	SEQUENCE	–		–
B.2.4.1.1	managedObjectClass	m	CHOICE	–		–
B.2.4.1.1.1		m	OBJECT IDENTIFIER	–		
B.2.4.1.1.2		m	INTEGER	–		
B.2.4.1.2	managedObjectInstance	m	CHOICE	–		–
B.2.4.1.2.1		m	DistinguishedName	–		
B.2.4.1.2.2		m	OCTET STRING	–		
B.2.4.1.2.3		m	RDNSequence	–		
B.2.4.1.3	currentTime	m	GeneralizedTime	–		
B.2.4.1.4	attributeList	m	SET OF SEQUENCE	–		–
B.2.4.1.4.1	attributeId	m	CHOICE	–		–
B.2.4.1.4.1.1		m	OBJECT IDENTIFIER	–		
B.2.4.1.4.1.2		m	INTEGER	–		
B.2.4.1.4.2	attributeValue	m	ADB attributeId	–		
B.2.4.2	SetListError	m	SEQUENCE	–		–
B.2.4.2.1	managedObjectClass	m	CHOICE	–		–
B.2.4.2.1.1		m	OBJECT IDENTIFIER	–		
B.2.4.2.1.2		m	INTEGER	–		
B.2.4.2.2	managedObjectInstance	m	CHOICE	–		–
B.2.4.2.2.1		m	DistinguishedName	–		
B.2.4.2.2.2		m	OCTET STRING	–		
B.2.4.2.2.3		m	RDNSequence	–		
B.2.4.2.3	currentTime	m	GeneralizedTime	–		
B.2.4.2.4	setInfoList	m	SET OF CHOICE	–		–
B.2.4.2.4.1	AttributeError	m	SEQUENCE	–		–
B.2.4.2.4.1.1	errorStatus	m	ENUMERATED	2,5,6		
B.2.4.2.4.1.2	attributeId	m	CHOICE	–		–
B.2.4.2.4.1.2.1		m	OBJECT IDENTIFIER	–		
B.2.4.2.4.1.2.2		m	INTEGER	–		
B.2.4.2.4.1.3	attributeValue	m	ADB attributeId	–		–
B.2.4.2.4.2	Attribute	m	SEQUENCE	–		–
B.2.4.2.4.2.1	attributeId	m	CHOICE	–		–
B.2.4.2.4.2.1.1		m	OBJECT IDENTIFIER	–		
B.2.4.2.4.2.1.2		m	INTEGER	–		
B.2.4.2.4.2.2	attributeValue	m	ADB attributeId	–		–
B.2.4.3	ProcessingFailure	m	SEQUENCE	–		–
B.2.4.3.1	managedObjectClass	m	CHOICE	–		–
B.2.4.3.1.1		m	OBJECT IDENTIFIER	–		
B.2.4.3.1.2		m	INTEGER	–		
B.2.4.3.2	managedObjectInstance	m	CHOICE	–		–
B.2.4.3.2.1		m	DistinguishedName	–		
B.2.4.3.2.2		m	OCTET STRING	–		
B.2.4.3.2.3		m	RDNSequence	–		
B.2.4.3.3	SpecificErrorInfo	m	SEQUENCE	–		–
B.2.4.3.3.1	errorId	m	OBJECT IDENTIFIER	–		
B.2.4.3.3.2	errorInfo	m	ADB errorId	–		

Table B.3 is the CMIP version 1 of Table A.53. AttributeList was replaced by ModificationList in CMIP version 2.

Table B.3 – ROIV-m-Set (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.3.1	invokeID	m	INTEGER	–		
B.3.2	linked-ID	x	INTEGER	–		
B.3.3	operation-value	m	INTEGER	4		
B.3.4	SetArgument	m	SEQUENCE	–		–
B.3.4.1	baseManagedObjectClass	m	CHOICE	–		–
B.3.4.1.1		o.138	OBJECT IDENTIFIER	–		
B.3.4.1.2		o.138	INTEGER	–		
B.3.4.2	baseManagedObjectInstance	m	CHOICE	–		–
B.3.4.2.1		o.139	DistinguishedName	–		
B.3.4.2.2		o.139	OCTET STRING	–		
B.3.4.2.3		o.139	RDNSequence	–		
B.3.4.3	accessControl	o	EXTERNAL	–		
B.3.4.4	synchronization	c1	ENUMERATED	0 to 1		
B.3.4.5	scope	c1	Scope	–		[see Table A.8]
B.3.4.6	filter	c2	CMISFilter	–		[see Table A.11]
B.3.4.7	attributeList	m	SET OF SEQUENCE	–		–
B.3.4.7.1	attributeId	m	CHOICE	–		–
B.3.4.7.1.1		o.140	OBJECT IDENTIFIER	–		
B.3.4.7.1.2		o.140	INTEGER	–		
B.3.4.7.2	attributeValue	m	ADB attributeId	–		

Table B.4 is the CMIP version 1 of Table A.54. AttributeList was replaced by ModificationList in CMIP version 2.

Table B.4 – ROIV-m-Set (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.4.1	invokeID	m	INTEGER	–		
B.4.2	linked-ID	x	INTEGER	–		
B.4.3	operation-value	m	INTEGER	4		
B.4.4	SetArgument	m	SEQUENCE	–		–
B.4.4.1	baseManagedObjectClass	m	CHOICE	–		–
B.4.4.1.1		m	OBJECT IDENTIFIER	–		
B.4.4.1.2		m	INTEGER	–		
B.4.4.2	baseManagedObjectInstance	m	CHOICE	–		–
B.4.4.2.1		m	DistinguishedName	–		
B.4.4.2.2		m	OCTET STRING	–		
B.4.4.2.3		m	RDNSequence	–		
B.4.4.3	accessControl	m	EXTERNAL	–		
B.4.4.4	synchronization	c1	ENUMERATED	0 to 1		
B.4.4.5	scope	c1	Scope	–		[see Table A.8]
B.4.4.6	filter	c2	CMISFilter	–		[see Table A.11]
B.4.4.7	attributeList	m	SET OF SEQUENCE	–		–
B.4.4.7.1	attributeId	m	CHOICE	–		–
B.4.4.7.1.1		m	OBJECT IDENTIFIER	–		
B.4.4.7.1.2		m	INTEGER	–		
B.4.4.7.2	attributeValue	m	ADB attributeId	–		

Table B.5 is the CMIP version 1 of Table A.55. AttributeList was replaced by ModificationList in CMIP version 2.

Table B.5 – ROIV-m-Set-Confirmed (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.5.1	invokeID	m	INTEGER	–		
B.5.2	linked-ID	x	INTEGER	–		
B.5.3	operation-value	m	INTEGER	5		
B.5.4	SetArgument	m	SEQUENCE	–		–
B.5.4.1	baseManagedObjectClass	m	CHOICE	–		–
B.5.4.1.1		o.141	OBJECT IDENTIFIER	–		
B.5.4.1.2		o.141	INTEGER	–		
B.5.4.2	baseManagedObjectInstance	m	CHOICE	–		–
B.5.4.2.1		o.142	DistinguishedName	–		
B.5.4.2.2		o.142	OCTET STRING	–		
B.5.4.2.3		o.142	RDNSequence	–		
B.5.4.3	accessControl	o	EXTERNAL	–		
B.5.4.4	synchronization	c1	ENUMERATED	0 to 1		
B.5.4.5	scope	c1	Scope	–		[see Table A.8]
B.5.4.6	filter	c2	CMISFilter	–		[see Table A.11]
B.5.4.7	attributeList	m	SET OF SEQUENCE	–		–
B.5.4.7.1	attributeId	m	CHOICE	–		–
B.5.4.7.1.1		o.143	OBJECT IDENTIFIER	–		
B.5.4.7.1.2		o.143	INTEGER	–		
B.5.4.7.2	attributeValue	m	ADB attributeId	–		

Table B.6 is the CMIP version 1 of Table A.56. AttributeList was replaced by ModificationList in CMIP version 2.

Table B.6 – ROIV-m-Set-Confirmed (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.6.1	invokeID	m	INTEGER	–		
B.6.2	linked-ID	x	INTEGER	–		
B.6.3	operation-value	m	INTEGER	5		
B.6.4	SetArgument	m	SEQUENCE	–		–
B.6.4.1	baseManagedObjectClass	m	CHOICE	–		–
B.6.4.1.1		m	OBJECT IDENTIFIER	–		
B.6.4.1.2		m	INTEGER	–		
B.6.4.2	baseManagedObjectInstance	m	CHOICE	–		–
B.6.4.2.1		m	DistinguishedName	–		
B.6.4.2.2		m	OCTET STRING	–		
B.6.4.2.3		m	RDNSequence	–		
B.6.4.3	accessControl	m	EXTERNAL	–		
B.6.4.4	synchronization	c1	ENUMERATED	0 to 1		
B.6.4.5	scope	c1	Scope	–		[see Table A.8]
B.6.4.6	filter	c2	CMISFilter	–		[see Table A.11]
B.6.4.7	attributeList	m	SET OF SEQUENCE	–		–
B.6.4.7.1	attributeId	m	CHOICE	–		–
B.6.4.7.1.1		m	OBJECT IDENTIFIER	–		
B.6.4.7.1.2		m	INTEGER	–		
B.6.4.7.2	attributeValue	m	ADB attributeId	–		

Table B.7 is the CMIP version 1 of Table A.115. AttributeError was amended in CMIP version 2.

Table B.7 – ROER-setListError (sending)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.7.1	invokeID	m	INTEGER	–		
B.7.2	error-value	m	INTEGER	8		
B.7.3	SetListError	m	SEQUENCE	–		–
B.7.3.1	managedObjectClass	o	CHOICE	–		–
B.7.3.1.1		o.144	OBJECT IDENTIFIER	–		
B.7.3.1.2		o.144	INTEGER	–		
B.7.3.2	managedObjectInstance	o	CHOICE	–		–
B.7.3.2.1		o.145	DistinguishedName	–		
B.7.3.2.2		o.145	OCTET STRING	–		
B.7.3.2.3		o.145	RDNSequence	–		
B.7.3.3	currentTime	o	GeneralizedTime	–		
B.7.3.4	setInfoList	m	SET OF CHOICE	–		–
B.7.3.4.1	AttributeError	m	SEQUENCE			–
B.7.3.4.1.1	errorStatus	m	ENUMERATED	2,5,6		
B.7.3.4.1.2	attributeId	m	CHOICE	–		–
B.7.3.4.1.2.1		o.146	OBJECT IDENTIFIER	–		
B.7.3.4.1.2.2		o.146	INTEGER	–		
B.7.3.4.1.3	attributeValue	m	ADB attributeId	–		
B.7.3.4.2	Attribute	m	SEQUENCE	–		–
B.7.3.4.2.1	attributeId	m	CHOICE	–		–
B.7.3.4.2.1.1		o.147	OBJECT IDENTIFIER	–		
B.7.3.4.2.1.2		o.147	INTEGER	–		
B.7.3.4.2.2	attributeValue	m	ADB attributeId	–		

Table B.8 is the CMIP version 1 of Table A.116. AttributeError was amended in CMIP version 2.

Table B.8 – ROER-setListError (receiving)

Index	Parameter name	Sts	Syntax	Value	Spt	TVR
B.8.1	invokeID	m	INTEGER	–		
B.8.2	error-value	m	INTEGER	8		
B.8.3	SetListError	m	SEQUENCE	–		–
B.8.3.1	managedObjectClass	m	CHOICE	–		–
B.8.3.1.1		m	OBJECT IDENTIFIER	–		
B.8.3.1.2		m	INTEGER	–		
B.8.3.2	managedObjectInstance	m	CHOICE	–		–
B.8.3.2.1		m	DistinguishedName	–		
B.8.3.2.2		m	OCTET STRING	–		
B.8.3.2.3		m	RDNSequence	–		
B.8.3.3	currentTime	m	GeneralizedTime	–		
B.8.3.4	setInfoList	m	SET OF CHOICE	–		–
B.8.3.4.1	AttributeError	m	SEQUENCE			–
B.8.3.4.1.1	errorStatus	m	ENUMERATED	2,5,6		
B.8.3.4.1.2	attributeId	m	CHOICE	–		–
B.8.3.4.1.2.1		m	OBJECT IDENTIFIER	–		
B.8.3.4.1.2.2		m	INTEGER	–		
B.8.3.4.1.3	attributeValue	m	ADB attributeId	–		
B.8.3.4.2	Attribute	m	SEQUENCE	–		–
B.8.3.4.2.1	attributeId	m	CHOICE	–		–
B.8.3.4.2.1.1		m	OBJECT IDENTIFIER	–		
B.8.3.4.2.1.2		m	INTEGER	–		
B.8.3.4.2.2	attributeValue	m	ADB attributeId	–		