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STANDARD

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AMENDMENT 2
1996-07-15

**Information technology —
Telecommunications and information
exchange between systems — Elements of
Management Information Related to OSI
Transport Layer Standards**

AMENDMENT 2:

Implementation conformance statement proformas

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Éléments d'information de gestion
concernant les normes de la couche Transport OSI*

*AMENDEMENT 2: Proformas de déclaration de conformité de mise en
œuvre*



Reference number
ISO/IEC 10737:1994/Amd.2:1996(E)

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

Amendment 2 to International Standard ISO/IEC 10737 : 1994 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

This Amendment is also published by ITU-T as Rec. X.284/Amd. 2 but not as identical text.

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Information technology – Telecommunications and information exchange between systems – Elements of Management Information Related to OSI Transport Layer standards

AMENDMENT 2:

Implementation conformance statement proformas

Page 1

Add the following as the last paragraph of Clause 1 "Scope".

"

Annexes D, E, F and G, which are integral parts of this International Standard provide ICS proformas associated with Transport layer management information.

"

Add the following reference to subclause 2.1:

"

- ITU-T Recommendation X.724 (1993) | ISO/IEC 10165-6:1994, *Information technology - Open Systems Interconnection - Structure of management information: Requirements and guidelines for implementation conformance statement proformas associated with OSI management*.

"

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Add the following references to subclause 2.2:

"

- CCITT Recommendation X.209 (1988), *Specification of basic encoding rules for abstract syntax notation one (ASN.1)*.
ISO/IEC 8825: 1990, *Information technology - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)*.
- CCITT Recommendation X.290 (1991), *OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications - General concepts*.
ISO/IEC 9646-1: 1994, *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: 1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification*.

NOTE – ISO/IEC 9646-1:1994 and ISO/IEC 9646-2:1994 supersede ISO/IEC 9646-1:1991 and ISO/IEC 9646-2:1991 respectively. However, when this International Standard was under development, the previous editions were valid and this International Standard is therefore based on these editions, which are listed below.

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

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

- ITU-T Recommendation X.296 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications - Implementation Conformance Statements*.

ISO/IEC 9646-7: 1995, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statements.*

"

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Add the following abbreviations to clause 4:

"

MCS	management conformance summary
MICS	management information conformance statement
MOCS	managed object conformance statement
MRCS	managed relationship conformance statement
NCMS	network connection management subprotocol

"

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Replace clause 7 with the following:

"

7 Conformance

Implementations claiming to conform to this International Standard shall comply with the conformance requirements as defined in the following subclauses.

7.1 Conformance requirements to this International Standard**7.1.1 Static conformance**

The implementation shall conform to the requirements of this International Standard in the manager role, the agent role, or both roles. A claim of conformance to at least one role shall be made in Table D.1 of this International Standard.

If a claim of conformance is made for support in the manager role, the implementation shall support at least one management operation or notification or action of the managed objects specified by this International Standard. The conformance requirements in the manager role for those management operations, notifications and actions are identified in Table D.3 and further tables referenced by Annex D.

If a claim of conformance is made for support in the agent role, the implementation shall support one or more instances of the transport subsystem managed object class, the transport entity managed object class and the TSAP managed object class identified in Table D.4 of this International Standard and further tables referenced by Annex D.

If a claim of conformance is made for support in the agent role, the implementation shall support at least one name binding identified in Table D.7 of this International Standard for each supported managed object.

The implementation shall support the transfer syntax derived from the encoding rules specified in CCITT Rec. X.209 | ISO/IEC 8825 named {joint-iso-ccitt asn1(1) basicEncoding(1)} for the abstract data types referenced by the definitions for which support is claimed.

7.1.2 Dynamic conformance

Implementations claiming to conform to this International Standard shall support the elements of procedure and definitions of semantics corresponding to the definitions for which support is claimed.

7.1.3 Management implementation conformance statement requirements

Any MCS proforma, MICS proforma, MOCS proforma, and MRCS proforma which conform to this International Standard shall be technically identical to the proformas specified in Annexes D, E, F, and G preserving table numbering and the index numbers of items, and differing only in pagination and page headers.

The supplier of an implementation which is claimed to conform to this International Standard shall complete a copy of the management conformance summary (MCS) provided in Annex D as part of the conformance requirements together with any other ICS proformas referenced as applicable from that MCS. Any MCS, MICS, MOCS and MRCS which conform to this International Standard shall:

- describe an implementation which conforms to this International Standard;
- have been completed in accordance with the instructions for completion given in ITU-T Rec. X.724 | ISO/IEC 10165-6;
- include the information necessary to uniquely identify both the supplier and the implementation.

7.2 Protocol specific conformance requirements

The supplier of an implementation which is claimed to conform to this International Standard shall support at least one protocol identified in Table D.2 of this International Standard.

7.2.1 Conformance to the ITU-T Recommendation X.224 | ISO/IEC 8073

An implementation claiming conformance to ITU-T Recommendation X.224 | ISO/IEC 8073 in the agent role as a managed implementation shall:

- a) conform to ITU-T Recommendation X.284 | ISO/IEC 10737 as defined in 7.1;
- b) support the comodeTPM MO, the transportConnection MO and transportConnectionIVMO MO;
- c) support the ncmsPM MO, the ncc MO and nccIVMO MO, if the supplier of an implementation support network connection management subprotocol.

7.2.2 Conformance to the ISO 8602

An implementation claiming conformance to ISO 8602 in the agent role as a managed implementation shall:

- a) conform to ITU-T Recommendation X.284 | ISO/IEC 10737 as defined in 7.1;
- b) support the clmodeTPM MO.

"

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Add the following annexes after Annex C.

Annex D
(normative)
MCS proforma¹⁾

D.1 Introduction**D.1.1 Purpose and structure**

The management conformance summary (MCS) is a statement by a supplier that identifies an implementation and provides information on whether the implementation claims conformance to any of the listed set of documents that specify conformance requirements to OSI management.

The MCS proforma is a document, in the form of a questionnaire that when completed by the supplier of an implementation becomes the MCS.

D.1.2 Instructions for completing the MCS proforma to produce an MCS²⁾

The supplier of the implementation shall enter an explicit statement in each of the boxes provided. Specific instruction is provided in the text which precedes each table.

D.1.3 Symbols, abbreviations and terms

For all annexes of this International Standard, the following common notations, defined in CCITT Rec. X.291 | ISO/IEC 9646-2 and ITU-T Rec. X.296 | ISO/IEC 9646-7 are used for the Status column:

- m mandatory;
- o optional;
- c conditional;
- x prohibited;
- not applicable or out of scope.

NOTES

1 – 'c', 'm', and 'o' are prefixed by a 'c' when nested under a conditional or optional item of the same table;

2 – 'o' may be suffixed by 'N' (where N is a unique number) for mutually exclusive or selectable options among a set of status values. Support of at least one of the choices (from the items with the same values of N) is required.

For all annexes of this International Standard, the following common notations, defined in CCITT Rec. X.291 | ISO/IEC 9646-2 and ITU-T Rec. X.296 | ISO/IEC 9646-7 are used for the Support column:

- Y implemented;
- N not implemented;
- no answer required;
- Ig the item is ignored (i.e. processed syntactically but not semantically).

¹⁾ Users of this International Standard may freely reproduce the MCS proforma in this annex so that it can be used for its intended purpose, and may further publish the completed MCS.

²⁾ Instructions for completing the MCS proforma are specified in ITU-T Rec.X.724 | ISO/IEC 10165-6 .

D.2 Identification of the implementation

D.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

D.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.

--

D.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 MCS, in the box below.

--

D.3 Identification of the International Standard in which the management information is defined

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

International Standard to which conformance is claimed
--

D.3.1 Technical corrigenda implemented

The supplier of the implementation shall enter the reference numbers of implemented technical corrigenda which modify the identified International Standard, in the box below.

--

D.3.2 Amendments implemented

The supplier of the implementation shall state the titles and reference numbers of implemented amendments to the identified International Standard, in the box below.

D.4 Management conformance summary

The supplier of implementation shall state the capabilities and features supported and provide summary of conformance claims to Recommendations | International Standards using the tables in this annex.

The supplier of the implementation shall specify the roles that are supported, in Table D.1

Table D.1 – Roles

Index	Roles supported	Status	Support	Additional information
1	Manager role support	o.1		
2	Agent role support	o.1		

The supplier of the implementation shall specify the protocols that are supported, in Table D.2

Table D.2 – Protocol

Index	Protocol supported	Status	Support	Additional information
1	Connection-mode support	o.2		
2	Connectionless-mode support	o.2		

The supplier of the implementation shall specify support for management information in the manager role, in Table D.3

Table D.3 – Manager role minimum conformance requirement

Index	Item	Status	Support	Additional information
1	Operations on managed objects	c1		
2	Object creation notification for Transport entity managed object	c1		
3	Object deletion notification for Transport entity managed object	c1		
4	Communications Alarm notification for Transport entity managed object	c1		
5	Object creation notification for Connectionless-mode transport protocol machine managed object	c2		
6	Object deletion notification for Connectionless-mode transport protocol machine managed object	c2		
7	State change notification for Connectionless-mode transport protocol machine managed object	c2		
8	Communications Alarm notification for Connectionless-mode transport protocol machine managed object	c2		
9	Activate action for Connectionless-mode transport protocol machine managed object	c2		
10	Deactivate action for Connectionless-mode transport protocol machine managed object	c2		
11	Communications information notification for Connection-oriented transport protocol machine managed object	c3		
12	Object creation notification for Connection-oriented transport protocol machine managed object	c3		
13	Object deletion notification for Connection-oriented transport protocol machine managed object	c3		
14	State change notification for Connection-oriented transport protocol machine managed object	c3		
15	Activate action for Connection-oriented transport protocol machine managed object	c3		
16	Deactivate action for Connection-oriented transport protocol machine managed object	c3		
17	Object creation notification for TSAP managed object	c1		
18	Object deletion notification for TSAP managed object	c1		

Table D.3 (concluded) – Manager role minimum conformance requirement

Index	Item	Status	Support	Additional information
19	Communications information notification for Transport connection managed object	c3		
20	Object creation notification for Transport connection managed object	c3		
21	Object deletion notification for Transport connection managed object	c3		
22	Communications information notification for NCMS protocol machine managed object	c4		
23	Object creation notification for NCMS protocol machine managed object	c4		
24	Object deletion notification for NCMS protocol machine managed object	c4		
25	State change notification for NCMS protocol machine managed object	c4		
26	Activate action for NCMS protocol machine managed object	c4		
27	Deactivate action for NCMS protocol machine managed object	c4		
28	Object creation notification for Network connection control managed object	c4		
29	Object deletion notification for Network connection control managed object	c4		

c1: if D.1/1a then o.3 else -

c2: if D.1/1a and D.2/2a then o.3 else -

c3: if D.1/1a and D.2/1a then o.3 else -

c4: if D.1/1a and D.2/1a then o else -

The supplier of the implementation shall specify support for management information in the agent role, in Table D.4

Table D.4 – Agent role minimum conformance requirement

Index	Item	Status	Support	Additional information
1	Transport subsystem managed object	m		
2	Transport entity managed object	m		
3	Connectionless transport protocol machine managed object	c5		
4	Connection oriented transport protocol machine managed object	c6		
5	Transport SAP managed object	m		
6	Transport connection managed object	c6		
7	Transport connection initial values managed object	c6		
8	NCMS protocol machine managed object	c7		
9	Network connection control managed object	c7		
10	Network connection control initial values managed object	c7		

c5: if D.1/2a and D.2/2a then m else -

c6: if D.1/2a and D.2/1a then m else -

c7: if D.1/2a and D.2/1a then o else -

Table D.5 – Logging of event records

Index	Item	Status	Support	Additional information
1	Does the implementation support logging of event records in agent role?	c8		

c8: if D.1/2a then o else -

NOTE – Conformance to this International Standard does not require conformance to CCITT Rec. X.735 | ISO/IEC 10164-6.

The supplier of the implementation shall provide information on claims of conformance to any of the International Standards summarized in the following tables. For each International Standard that the supplier of the implementation claims conformance to, the corresponding conformance statement(s) shall be completed, or referenced by, the MCS. The supplier of the implementation shall complete the Support, Table numbers and Additional information columns.

In tables D.6, D.7 and D.8, the Status column is used to indicate whether the supplier of the implementation is required to complete the referenced tables or referenced items. Conformance requirements are as specified in the referenced tables or referenced items and are not changed by the value of the MCS Status column. Similarly, the Support column is used by the supplier of the implementation to indicate completion of the referenced tables or referenced items.

Table D.6 – MOCS support summary

Index	Identification of the document that includes the MOCS proforma	Table numbers of MOCS proforma	Description	Constraints and values	Status	Support	Table numbers of MOCS	Additional information
1	"ISO/IEC 10737"	Table F.1 - F.4	transportSubsystem	—	m			
2	"ISO/IEC 10737"	Table F.5 - F.11	transportEntity	—	m			
3	"ISO/IEC 10737"	Table F.12 - F.19	clmodeTPM	—	c9			
4	"ISO/IEC 10737"	Table F.20 - F.27	comodeTPM	—	c10			
5	"ISO/IEC 10737"	Table F.28 - F.32	tSAP	—	m			
6	"ISO/IEC 10737"	Table F.33 - F.39	transportConnection	—	c11			
7	"ISO/IEC 10737"	Table F.40 - F.43	transportConnectionVMO	—	c12			
8	"ISO/IEC 10737"	Table F.44 - F.47	communicationInformationRecord	—	c13			
9	"ISO/IEC 10737"	Table F.48 - F.54	ncmsPM	—	c14			
10	"ISO/IEC 10737"	Table F.55 - F.59	ncc	—	c15			
11	"ISO/IEC 10737"	Table F.60 - F.63	ncclVMO	—	c16			
12	"ISO/IEC 10164-1"	Table C.1 - C.4	objectCreationRecord	—	c17			
13	"ISO/IEC 10164-1"	Table C.5 - C.8	objectDeletionRecord	—	c17			
14	"ISO/IEC 10164-2"	Table C.1 - C.4	stateChangeRecord	—	c17			
15	"ISO/IEC 10164-4"	Table C.1 - C.4	alarmRecord	—	c17			

c9: if D.4/3a then m else -

c10: if D.4/4a then m else -

c11: if D.4/6a then m else -

c12: if D.4/7a then m else -

c13: if (D.4/4a or D.4/6a or D.4/8a) and D.5/1a then m else -

c14: if D.4/8a then m else -

c15: if D.4/9a then m else -

c16: if D.4/10a then m else -

c17: if D.5/1a then m else -

Table D.7 – MRCS support summary

Index	Identification of the document that includes the MRCS proforma	Table numbers of MRCS proforma	Description	Constraints and values	Status	Support	Table numbers of MRCS	Additional information
1	"ISO/IEC 10737"	Table G.1/1	transportSubsystem-system	—	o.4			
2	"ISO/IEC 10737"	Table G.1/2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": subsystem-system	—	o.4			
3	"ISO/IEC 10737"	Table G.1/3	transportEntity-transportSubsystem-Automatic	—	o.5			
4	"ISO/IEC 10737"	Table G.1/4	transportEntity-transportSubsystem-Management	—	o.5			
5	"ISO/IEC 10737"	Table G.1/5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communicationsEntity-sybsystems	—	o.5			
6	"ISO/IEC 10737"	Table G.1/6	clmodeTPM-transportEntity-Automatic	—	c18			
7	"ISO/IEC 10737"	Table G.1/7	clmodeTPM-transportEntity-Management	—	c18			
8	"ISO/IEC 10737"	Table G.1/8	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": clProtocolMachine-entity	—	c18			

Table D.7 (concluded) – MRCS support summary

Index	Identification of the document that includes the MRCS proforma	Table numbers of MRCS proforma	Description	Constraints and values	Status	Support	Table numbers of MRCS	Additional information
9	"ISO/IEC 10737"	Table G. 1/9	comodeTPM-transportEntity-Automatic	—	c19			
10	"ISO/IEC 10737"	Table G. 1/10	comodeTPM-transportEntity-Management	—	c19			
11	"ISO/IEC 10737"	Table G. 1/11	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": coProtocolMachine-entity	—	c19			
12	"ISO/IEC 10737"	Table G. 1/12	tSAP-transportEntity-Automatic	—	o.8			
13	"ISO/IEC 10737"	Table G. 1/13	tSAP-transportEntity-Management	—	o.8			
14	"ISO/IEC 10737"	Table G. 1/14	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": sap1-communicationsEntity	—	o.8			
15	"ISO/IEC 10737"	Table G. 1/15	transportConnection-comodeTPM	—	c20			
16	"ISO/IEC 10737"	Table G. 1/16	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": singlePeerConnection-coProtocolMachine	—	c20			
17	"ISO/IEC 10737"	Table G. 1/17	transportConnectionIVMO-comodeTPM	—	c21			
18	"ISO/IEC 10737"	Table G. 1/18	ncmsPM-transportEntity-Automatic	—	s22			
19	"ISO/IEC 10737"	Table G. 1/19	ncmsPM-transportEntity-Management	—	c22			
20	"ISO/IEC 10737"	Table G. 1/20	ncc-ncmsPM	—	c23			
21	"ISO/IEC 10737"	Table G. 1/21	nccIVMO-ncmsPM	—	c24			
22	"ISO/IEC 10164-6"	Table D. 1/1	logRecord-log	—	c25			

c18: if D.6/3a then o.6 else -

c19: if D.6/4a then o.7 else -

c20: if D.6/6a then o.9 else -

c21: if D.6/7a then m else -

c22: if D.6/8a then o.10 else -

c23: if D.6/9a then m else -

c24: if D.6/10a then m else -

c25: if D.6/8a or D.6/12a or D.6/13a or D.6/14a or D.6/15a then o else -

Table D.8 – MICS support summary

Index	Identification of the document that includes the MICS proforma	Table numbers of MICS proforma	Description	Constraints and values	Status	Support	Table numbers of MICS	Additional information
1	"ISO/IEC 10737"	Table E. 1 to E.23	management operations	—	c26			
2	"ISO/IEC 10737"	Table E.24	notifications	—	c27			
3	"ISO/IEC 10737"	Table E.25	actions	—	c28			

c26: if D.3/1a then m else -

c27: if D.3/2a or D.3/3a or D.3/4a or D.3/5a or D.3/6a or D.3/7a or D.3/8a or D.3/11a or D.3/12a or D.3/13a or D.3/14a or D.3/17a or D.3/18a or D.3/19a or D.3/20a or D.3/21a or D.3/22a or D.3/23a or D.3/24a or D.3/25a or D.3/28a or D.3/29a then m else -

c28: if D.3/9a or D.3/10a or D.3/15a or D.3/16a or D.3/26a or D.3/27a then m else -

Annex E
(normative)

MICS proforma¹⁾

E.1 Introduction

The purpose of this MICS proforma is to provide a mechanism for a supplier of an implementation which claims conformance, in the manager role, to management information specified in this International Standard, to provide conformance information in a standard form.

E.2 Instructions for completing the MICS proforma to produce a MICS

The MICS proforma contained in this annex is comprised of information in tabular form, in accordance with ITU-T Rec. X.724 | ISO/IEC 10165-6. In addition to the general guidance given in ITU-T Rec. X.724 | ISO/IEC 10165-6. The supplier of the implementation shall state which items are supported in tables below and if necessary, provide additional information.

E.3 Symbols, abbreviations and terms

The MICS proforma contained in this Annex is comprised of information in tabular form, in accordance with CCITT Rec. X.291 | ISO/IEC 9646-2.

The notations used in the Status and Support columns are specified in D.1.3.

E.4 Statement of conformance to the management information

E.4.1 Attributes

The specifier of a manager role implementation that claims to support management operations on the attributes specified in this International Standard shall import a copy of the following tables and complete them.

E.4.1.1 The transport subsystem managed object

Table E.1 - transportSubsystem Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992" allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	-		o.11		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992" nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	-		o.11		-		-		-		-		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992" objectClass	{2 9 3 2 7 65}	ObjectClass	-		o.11		-		-		-		-		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992" packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	-		o.11		-		-		-		-		
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994" subsystemId	{2 9 3 5 7 11}	GraphicString	-		o.11		-		-		-		-		

¹⁾ Users of this 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.

E.4.1.2 The transport entity managed object

Table E.2 – transportEntity Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	actualNSAP	{2 14 0 7 4}	SET OF other	-		o.11		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c1		o.11		-		-		-		-		
3	checksumErrorsDetected	{2 14 0 7 6}	INTEGER	-		o.11		-		-		-		-		
4	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communicationsEntityId	{2 9 3 5 7 0}	GraphicString	c1		o.11		-		-		-		-		
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": localSapNames	{2 9 3 5 7 6}	SET OF ObjectInstance	-		o.11		-		-		-		-		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c1		o.11		-		-		-		-		
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c1		o.11		-		-		-		-		
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 35}	ENUMERATED	-		o.11		-		-		-		-		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c1		o.11		-		-		-		-		
10	protocolErrors	{2 14 0 7 7}	INTEGER	-		o.11		-		-		-		-		
11	targetNSAP	{2 14 0 7 3}	SET OF other	c1		o.11		o.11		o.11		o.11		-		
12	undecodedNSDUs	{2 14 0 7 5}	INTEGER	-		o.11		-		-		-		-		

c1: if E.16/1a then o.11 else -

E.4.1.3 The connectionless-mode transport protocol machine managed object

Table E.3 – clmodeTPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort			
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState	{2 9 3 2 7 31}	ENUMERATED	c2		o.11		o.11		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c2		o.11		-		-		-		-		
3	clChecksumOption	{2 14 0 7 9}	BOOLEAN	c2		o.11		o.11		-		-		o.11		
4	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": clProtocolMachineId	{2 9 3 5 7 2}	GraphicString	c2		o.11		-		-		-		-		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c2		o.11		-		-		-		-		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c2		o.11		-		-		-		-		

Table E.3 (concluded) – clmodeTPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter	{2 9 3 2 7 78}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter	{2 9 3 2 7 80}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 35}	ENUMERATED	-	o.11	-	-	-	-	-	-	-	-	-	-	
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c2	o.11	-	-	-	-	-	-	-	-	-	-	
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter	{2 9 3 2 7 86}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter	{2 9 3 2 7 88}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
13	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": totalRemoteSAPs	{2 9 3 5 7 13}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
14	undeliverablePDUsCounter	{2 14 0 7 10}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	

c2: if E.17/1a then o.11 else -

E.4.1.4 The connection-oriented transport protocol machine managed object

Table E.4 – comodeTPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState	{2 9 3 2 7 31}	ENUMERATED	c3	o.11	o.11	-	-	-	-	-	-	-	-	-	
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c3	o.11	-	-	-	-	-	-	-	-	-	-	
3	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": coProtocolMachineId	{2 9 3 5 7 3}	GraphicString	c3	o.11	-	-	-	-	-	-	-	-	-	-	
4	localErrorDisconnects	{2 14 0 7 18}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
5	localSuccessfulConnections	{2 14 0 7 14}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
6	localUnsuccessfulConnections	{2 14 0 7 16}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
7	maxConnections	{2 14 0 7 13}	INTEGER	c3	o.11	o.11	-	-	-	-	-	-	-	o.11	-	
8	maxOpenConnections	{2 14 0 7 21}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	o.11	-	
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c3	o.11	-	-	-	-	-	-	-	-	-	-	
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c3	o.11	-	-	-	-	-	-	-	-	-	-	
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter	{2 9 3 2 7 78}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter	{2 9 3 2 7 80}	INTEGER	-	o.11	-	-	-	-	-	-	-	-	-	-	

Table E.4 (concluded) – comodeTPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
13	openConnections	{2 14 0 7 12}	INTEGER	-		o.11		-		-		-		-		
14	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 35}	ENUMERATED	-		o.11		-		-		-		-		
15	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
16	remoteErrorDisconnects	{2 14 0 7 19}	INTEGER	-		o.11		-		-		-		-		
17	remoteSuccessfulConnections	{2 14 0 7 15}	INTEGER	-		o.11		-		-		-		-		
18	remoteUnsuccessfulConnections	{2 14 0 7 17}	INTEGER	-		o.11		-		-		-		-		
19	unassociatedTPDUs	{2 14 0 7 20}	INTEGER	-		o.11		-		-		-		-		

c3: if E.18/1a then o.11 else -

E.4.1.5 The TSAP managed object

Table E.5 – tSAP Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c4		o.11		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c4		o.11		-		-		-		-		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c4		o.11		-		-		-		-		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c4		o.11		-		-		-		-		
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": sap1Address	{2 9 3 5 7 8}	INTEGER	-		o.11		-		-		-		-		
6	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": sapId	{2 9 3 5 7 10}	GraphicString	c4		o.11		-		-		-		-		
7	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": userEntityNames	{2 9 3 5 7 15}	SET OF ObjectInstance	-		o.11		-		-		-		-		

c4: if E.19/1a then o.11 else -

E.4.1.6 The transport connection managed object

Table E.6 – transportConnection Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Sup port	Stat us	Sup port	Stat us	Sup port	Stat us	Sup port	Stat us	Sup port	Stat us	Sup port	
1	acknowledgeTime	{2 14 0 7 47}	SEQUENCE	-		o.11		-	-	-	-	-	-	-	-	
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	-		o.11		-	-	-	-	-	-	-	-	
3	calledNSAPAddress	{2 14 0 7 58}	OCTET STRING	-		o.11		-	-	-	-	-	-	-	-	
4	calledTSelector	{2 14 0 7 56}	OCTET STRING	-		o.11		-	-	-	-	-	-	-	-	
5	callingNSAPAddress	{2 14 0 7 57}	OCTET STRING	-		o.11		-	-	-	-	-	-	-	-	
6	callingTSelector	{2 14 0 7 55}	OCTET STRING	-		o.11		-	-	-	-	-	-	-	-	
7	checksumNonuse	{2 14 0 7 43}	BOOLEAN	-		o.11		-	-	-	-	-	-	-	-	
8	connectionDirection	{2 14 0 7 60}	ENUMERATED	-		o.11		-	-	-	-	-	-	-	-	
9	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": connectionId	{2 9 3 5 7 1}	GraphicString	-		o.11		-	-	-	-	-	-	-	-	
10	explicitFlowControl	{2 14 0 7 45}	BOOLEAN	-		o.11		-	-	-	-	-	-	-	-	
11	extendedFormat	{2 14 0 7 41}	BOOLEAN	-		o.11		-	-	-	-	-	-	-	-	
12	inactivityTime	{2 14 0 7 46}	SEQUENCE	-		o.11		-	-	-	-	-	-	-	-	
13	localReference	{2 14 0 7 53}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
14	maxTPDUSize	{2 14 0 7 51}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
15	maxTransmissions	{2 14 0 7 52}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
16	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	-		o.11		-	-	-	-	-	-	-	-	
17	networkConnectionIds	{2 14 0 7 61}	SET OF other	-		o.11		-	-	-	-	-	-	-	-	
18	networkExpeditedData	{2 14 0 7 42}	BOOLEAN	-		o.11		-	-	-	-	-	-	-	-	
19	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	-		o.11		-	-	-	-	-	-	-	-	
20	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter	{2 9 3 2 7 78}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
21	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter	{2 9 3 2 7 80}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
22	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	-		o.11		-	-	-	-	-	-	-	-	
23	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter	{2 9 3 2 7 86}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
24	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusRetransmittedErrorCounter	{2 9 3 2 7 87}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
25	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter	{2 9 3 2 7 88}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
26	protocolClass	{2 14 0 7 40}	ENUMERATED	-		o.11		-	-	-	-	-	-	-	-	
27	protocolErrors	{2 14 0 7 7}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
28	reassignmentTime	{2 14 0 7 48}	SEQUENCE	-		o.11		-	-	-	-	-	-	-	-	
29	reassignmentsAfterFailure	{2 14 0 7 62}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
30	receiptConfirmation	{2 14 0 7 44}	BOOLEAN	-		o.11		-	-	-	-	-	-	-	-	
31	relatingNCCMONames	{2 14 0 7 66}	SET OF other	-		o.11		-	-	-	-	-	-	-	-	
32	remoteReference	{2 14 0 7 54}	INTEGER	-		o.11		-	-	-	-	-	-	-	-	
33	respondingNSAPAddress	{2 14 0 7 59}	OCTET STRING	-		o.11		-	-	-	-	-	-	-	-	
34	retransmissionTime	{2 14 0 7 49}	SEQUENCE	-		o.11		-	-	-	-	-	-	-	-	
35	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": supportedConnectionNames	{2 9 3 5 7 12}	SET OF ObjectInstance	-		o.11		-	-	-	-	-	-	-	-	
36	transportExpeditedService	{2 14 0 7 65}	BOOLEAN	-		o.11		-	-	-	-	-	-	-	-	
37	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": underlyingConnectionNames	{2 9 3 5 7 14}	SET OF ObjectInstance	-		o.11		-	-	-	-	-	-	-	-	
38	windowTimer	{2 14 0 7 50}	SEQUENCE	-		o.11		-	-	-	-	-	-	-	-	

E.4.1.7 The transport connection IVMO

Table E.7 – transportConnectionIVMO Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	o.11		o.11		-		-		-		-		
2	checksumNonuse	{2 14 0 7 43}	BOOLEAN	o.11		o.11		o.11		-		-		o.11		
3	explicitFlowControl	{2 14 0 7 45}	BOOLEAN	o.11		o.11		o.11		-		-		o.11		
4	extendedFormat	{2 14 0 7 41}	BOOLEAN	o.11		o.11		o.11		-		-		o.11		
5	inactivityTime	{2 14 0 7 46}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		
6	maxTPDUSize	{2 14 0 7 51}	INTEGER	o.11		o.11		o.11		-		-		o.11		
7	maxTransmissions	{2 14 0 7 52}	INTEGER	o.11		o.11		o.11		-		-		o.11		
8	maximumWindow	{2 14 0 7 36}	INTEGER	o.11		o.11		o.11		-		-		o.11		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
10	networkExpeditedData	{2 14 0 7 42}	BOOLEAN	o.11		o.11		o.11		-		-		o.11		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	o.11		o.11		-		-		-		-		
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
13	protocolClasses	{2 14 0 7 26}	SET OF ENUMERATED	o.11		o.11		o.11		-		-		o.11		
14	reassignmentTime	{2 14 0 7 48}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		
15	receiptConfirmation	{2 14 0 7 44}	BOOLEAN	o.11		o.11		o.11		-		-		o.11		
16	retransmissionTime	{2 14 0 7 49}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		
17	transportConnectionIVMOId	{2 14 0 7 25}	GraphicString	-		o.11		-		-		-		-		
18	transportExpeditedService	{2 14 0 7 65}	BOOLEAN	o.11		o.11		o.11		-		-		o.11		
19	windowTimer	{2 14 0 7 50}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		

E.4.1.8 The communication information record managed object ["ISO/IEC 10165-5 : 1994"]

Table E.8 – communicationInformationRecord Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	-		o.11		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	-		o.11		-		-		-		-		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	-		o.11		-		-		-		-		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	-		o.11		-		-		-		-		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": logRecordId	{2 9 3 2 7 3}		-		o.11		-		-		-		-		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": loggingTime	{2 9 3 2 7 59}		-		o.11		-		-		-		-		

Table E.8 (concluded) – communicationInformationRecord Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": managedObjectClass	{2 9 3 2 7 60}		-		o.11		-		-		-		-		
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": managedObjectInstance	{2 9 3 2 7 61}		-		o.11		-		-		-		-		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": eventType	{2 9 3 2 7 14}		-		o.11		-		-		-		-		
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": eventTime	{2 9 3 2 7 13}		-		o.11		-		-		-		-		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": notificationIdentifier	{2 9 3 2 7 16}		-		o.11		-		-		-		-		
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": correlatedNotifications	{2 9 3 2 7 12}		-		o.11		-		-		-		-		
13	"Rec. X.721 ISO/IEC 10165-2 : 1992": additionalText	{2 9 3 2 7 7}		-		o.11		-		-		-		-		
14	"Rec. X.721 ISO/IEC 10165-2 : 1992": additionalInformation	{2 9 3 2 7 6}		-		o.11		-		-		-		-		
15	informationType	{2 14 0 7 43}		-		o.11		-		-		-		-		
16	informationData	{2 14 0 7 45}		-		o.11		-		-		-		-		

E.4.1.9 The NCMS Protocol Machine managed object

Table E.9 – ncmsPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraint(s) and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState	{2 9 3 2 7 31}	ENUMERATED	c5		o.11		o.11		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c5		o.11		-		-		-		-		
3	ncmsPMId	{2 14 0 7 67}	GraphicString	c5		o.11		-		-		-		-		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c5		o.11		-		-		-		-		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c5		o.11		-		-		-		-		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 35}	ENUMERATED	-		o.11		-		-		-		-		
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c5		o.11		-		-		-		-		

c5: if E.21/1a then o.11 else -

E.4.1.10 The Network Connection Control Managed Object

Table E.10 – ncc Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	o.11		o.11		-		-		-		-		
2	ncclid	{2 14 0 7 68}	GraphicString	o.11		o.11		-		-		-		-		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
4	nc-COL	{2 14 0 7 70}	ENUMERATED	-		o.11		-		-		-		-		
5	nc-REC	{2 14 0 7 72}	ENUMERATED	-		o.11		-		-		-		-		
6	nc-REF	{2 14 0 7 73}	INTEGER	-		o.11		-		-		-		-		
7	nc-PREF	{2 14 0 7 71}	ENUMERATED	-		o.11		-		-		-		-		
8	nc-Right	{2 14 0 7 75}	ENUMERATED	-		o.11		-		-		-		-		
9	ncRecoveries	{2 14 0 7 74}	INTEGER	-		o.11		-		-		-		-		
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	o.11		o.11		-		-		-		-		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
12	ttrNCTime	{2 14 0 7 79}	SEQUENCE	-		o.11		-		-		-		-		
13	tpdNCTime	{2 14 0 7 78}	SEQUENCE	-		o.11		-		-		-		-		
14	tfrNCTime	{2 14 0 7 77}	SEQUENCE	-		o.11		-		-		-		-		
15	sourceOfAllocation	{2 14 0 7 76}	ENUMERATED	-		o.11		-		-		-		-		
16	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": underlyingConnectionNames	{2 9 3 5 7 14}	SET OF ObjectInstance	-		o.11		-		-		-		-		

E.4.1.11 The Network Connection Control Initial Value Managed Object

Table E.11 – nccIVMO Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	o.11		o.11		-		-		-		-		
2	ncclVMOld	{2 14 0 7 69}	GraphicString	o.11		o.11		-		-		-		-		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
4	nc-COL	{2 14 0 7 70}	ENUMERATED	o.11		o.11		o.11		-		-		o.11		
5	nc-REC	{2 14 0 7 72}	ENUMERATED	o.11		o.11		o.11		-		-		o.11		
6	nc-PREF	{2 14 0 7 71}	ENUMERATED	o.11		o.11		o.11		-		-		o.11		
7	nc-Right	{2 14 0 7 75}	ENUMERATED	o.11		o.11		o.11		-		-		o.11		
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	o.11		o.11		-		-		-		-		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	o.11		o.11		-		-		-		-		
10	ttrNCTime	{2 14 0 7 79}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		
11	tpdNCTime	{2 14 0 7 78}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		
12	tfrNCTime	{2 14 0 7 77}	SEQUENCE	o.11		o.11		o.11		-		-		o.11		

E.4.2 Attribute groups

The specifier of a manager role implementation that claims to support management operations on the attribute groups specified in this International Standard shall import a copy of the following tables and complete them.

E.4.2.1 The transport entity managed object

Table E.12 – transportEntity Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	checksumErrorsDetected protocolErrors undecodedNSDUs	o.11		-		

E.4.2.2 The connectionless-mode transport protocol machine managed object

Table E.13 – clmodeTPM Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter undeliverablePDUsCounter	o.11		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": state	{2 9 3 2 8 1}	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState "Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	o.11		-		

E.4.2.3 The connection-oriented transport protocol machine managed object

Table E.14 – comodeTPM Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	localErrorDisconnects localSuccessfulConnections localUnsuccessfulConnections maxOpenConnections "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter openConnections remoteErrorDisconnects remoteSuccessfulConnections remoteUnsuccessfulConnections unassociatedTPDUs	o.11		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": state	{2 9 3 2 8 1}	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState "Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	o.11		-		

E.4.2.4 The transport connection managed object

Table E.15 – transportConnection Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusRetransmittedErrorCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter protocolErrors	o.11		-		

E.4.3 Create and delete management operations

The specifier of a manager role implementation that claims to support the create or delete management operations on the managed objects specified in this International Standard shall import a copy of the following tables and complete them.

E.4.3.1 The transport entity managed object

Table E.16 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	transportEntity MO	o		
1.1	Create with reference object	—	—		
2	Delete support	transportEntity MO	o		

E.4.3.2 The connectionless-mode transport protocol machine managed object

Table E.17 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	clmodeTPM MO	o		
1.1	Create with reference object	—	—		
2	Delete support	clmodeTPM MO	o		

E.4.3.3 The connection-oriented transport protocol machine managed object

Table E.18 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	comodeTPM MO	o		
1.1	Create with reference object	—	—		
2	Delete support	comodeTPM MO	o		

E.4.3.4 The TSAP managed object

Table E.19 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	tSAP MO	o		
1.1	Create with reference object	—	—		
2	Delete support	tSAP MO	o		

E.4.3.5 The transport connection IVMO

Table E.20 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	transportConnection IVMO	o.11		
1.1	Create with reference object	—	o.11		
2	Delete support	transportConnection IVMO	o.11		

E.4.3.6 The NCMS Protocol Machine managed object

Table E.21 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	ncmsPM MO	o		
1.1	Create with reference object	—	—		
2	Delete support	ncmsPM MO	o		

E.4.3.7 The Network Connection Control Managed Object

Table E.22 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	ncc MO	o.11		
1.1	Create with reference object	—	o.11		
2	Delete support	ncc MO	o.11		

E.4.3.8 The Network Connection Control Initial Value Managed Object

Table E.23 — Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	ncc IVMO MO	o.11		
1.1	Create with reference object	—	o.11		
2	Delete support	ncc IVMO MO	o.11		

E.4.4 Notifications

The specifier of a manager role implementation that claims to support the notifications specified in this International Standard shall import a copy of this table and complete it.

Table E.24 – Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": communicationsAlarm	{2 9 3 2 10 2}		c6				1.1	AlarmInfo		Information Syntax SEQUENCE	c6		
								1.1.1	probableCause	{2 9 3 2 7 18}	CHOICE	c.m		
								1.1.1.1	globalValue	-	OBJECT IDENTIFIER	c.m		
								1.1.1.2	localValue	-	INTEGER	c.m		
								1.1.2	specificProblems	{2 9 3 2 7 27}	SET OF CHOICE	c.m		
								1.1.2.1	OBJECT IDENTIFIER		OBJECT IDENTIFIER	c.m		
								1.1.2.2	INTEGER	-	INTEGER	c.m		
								1.1.3	perceivedSeverity	{2 9 3 2 7 17}	ENUMERATED	c.m		
								1.1.4	backedUpStatus	{7 9 3 2 7 11}	BOOLEAN	c.m		
								1.1.5	backUpObject	{2 9 3 2 7 40}	ObjectInstance	c.m		
								1.1.6	trendIndication	{2 9 3 2 7 30}	ENUMERATED	c.m		
								1.1.7	thresholdInfo	{2 9 3 2 7 29}	SEQUENCE	c.m		
								1.1.7.1	triggeredThreshold	-	AttributeId	c.m		
								1.1.7.2	observedValue	-	CHOICE	c.m		
								1.1.7.2.1	integer	-	INTEGER	c.m		
								1.1.7.2.2	real	-	REAL	c.m		
								1.1.7.3	thresholdLevel	-	CHOICE	c.m		
								1.1.7.3.1	up	-	SEQUENCE	c.m		
								1.1.7.3.1.1	high	-	CHOICE	c.m		
								1.1.7.3.1.1.1	integer	-	INTEGER	c.m		
								1.1.7.3.1.1.2	real	-	REAL	c.m		
								1.1.7.3.1.2	low	-	CHOICE	c.m		
								1.1.7.3.1.2.1	integer	-	INTEGER	c.m		
								1.1.7.3.1.2.2	real	-	REAL	c.m		
								1.1.7.3.2	down	-	SEQUENCE	c.m		
								1.1.7.3.2.1	high	-	CHOICE	c.m		
								1.1.7.3.2.1.1	integer	-	INTEGER	c.m		
								1.1.7.3.2.1.2	real	-	REAL	c.m		
								1.1.7.3.2.2	low	-	CHOICE	c.m		
								1.1.7.3.2.2.1	integer	-	INTEGER	c.m		
			1.1.7.3.2.2.2	real	-	REAL	c.m							
			1.1.7.4	armTime	-	GeneralizedTime	c.m							
			1.1.8	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	c.m							

Table E.24(continued) – Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information								
					Confirmed	Nonconfirmed																
1								1.1.9	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	c:m										
								1.1.9.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m										
								1.1.9.2	sourceObjectInst	-	ObjectInstance	c:m										
								1.1.10	stateChangeDefinition	{2 9 3 2 7 28}	SET OF SEQUENCE	c:m										
								1.1.10.1	attributeID	-	AttributeID	c:m										
								1.1.10.2	oldAttributeValue	-	ANY DEFINED BY attributeID	c:m										
								1.1.10.3	newAttributeValue	-	ANY DEFINED BY attributeID	c:m										
								1.1.11	monitoredAttributes	{2 9 3 2 7 15}	SET OF Attribute	c:m										
								1.1.12	proposedRepairActions	{2 9 3 2 7 19}	SET OF CHOICE	c:m										
								1.1.12.1	OBJECT IDENTIFIER	-	OBJECT IDENTIFIER	c:m										
								1.1.12.2	INTEGER	-	INTEGER	c:m										
								1.1.13	additionalText	{2 9 3 2 7 7}	GraphicString	c:m										
								1.1.14	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	c:m										
								1.1.14.1	identifier	-	OBJECT IDENTIFIER	c:m										
								1.1.14.2	significance	-	BOOLEAN	c:m										
								1.1.14.3	information	-	ANY DEFINED BY identifier	c:m										
								2	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectCreation	{2 9 3 2 7 10 6}		c7			2.1	ObjectInfo		Information Syntax SEQUENCE	c7			
																2.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	c:m		
																2.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	c:m		
								2.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	c:m										
								2.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	c:m										
								2.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m										
								2.1.4.2	sourceObjectInst	-	ObjectInstance	c:m										
								2.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	c:m										
								2.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	c:m										
								2.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m										
								2.1.6.2	significance	-	BOOLEAN	c:m										
								2.1.6.3	information	-	ANY DEFINED BY identifier	c:m										



Table E.24(continued) – Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information								
					Confirmed	Nonconfirmed																
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectDeletion	{2 9 3 2 10 7}		c8				3.1	ObjectInfo		Information Syntax SEQUENCE	c8										
								3.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	c:m										
								3.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	c:m										
								3.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	c:m										
								3.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	c:m										
								3.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m										
								3.1.4.2	sourceObjectInstance		ObjectInstance	c:m										
								3.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	c:m										
								3.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	c:m										
								3.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m										
								3.1.6.2	significance	-	BOOLEAN	c:m										
								3.1.6.3	information	-	ANY DEFINED BY identifier	c:m										
								4	"Rec. X.721 ISO/IEC 10165-2 : 1992": stateChange	{2 9 3 2 10 14}		c9				4.1	StateChangeInfo		Information Syntax SEQUENCE	c9		
																4.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	c:m		
4.1.2	attributeIdentifierList	{2 9 3 2 7 8}	SET OF AttributeId	c:m																		
4.1.3	stateChangeDefinition	{2 9 3 2 7 28}	SET OF SEQUENCE	c:m																		
4.1.3.1	attributeID	-	AttributeId	c:m																		
4.1.3.2	oldAttributeValue	-	ANY DEFINED BY attributeID	c:m																		
4.1.3.3	newAttributeValue	-	ANY DEFINED BY attributeID	c:m																		
4.1.4	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	c:m																		
4.1.5	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	c:m																		
4.1.5.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m																		
4.1.5.2	sourceObjectInstance	-	ObjectInstance	c:m																		
4.1.6	additionalText	{2 9 3 2 7 7}	GraphicString	c:m																		
4.1.7	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	c:m																		
4.1.7.1	identifier	-	OBJECT IDENTIFIER	c:m																		
4.1.7.2	significance	-	BOOLEAN	c:m																		
4.1.7.3	information	-	ANY DEFINED BY identifier	c:m																		

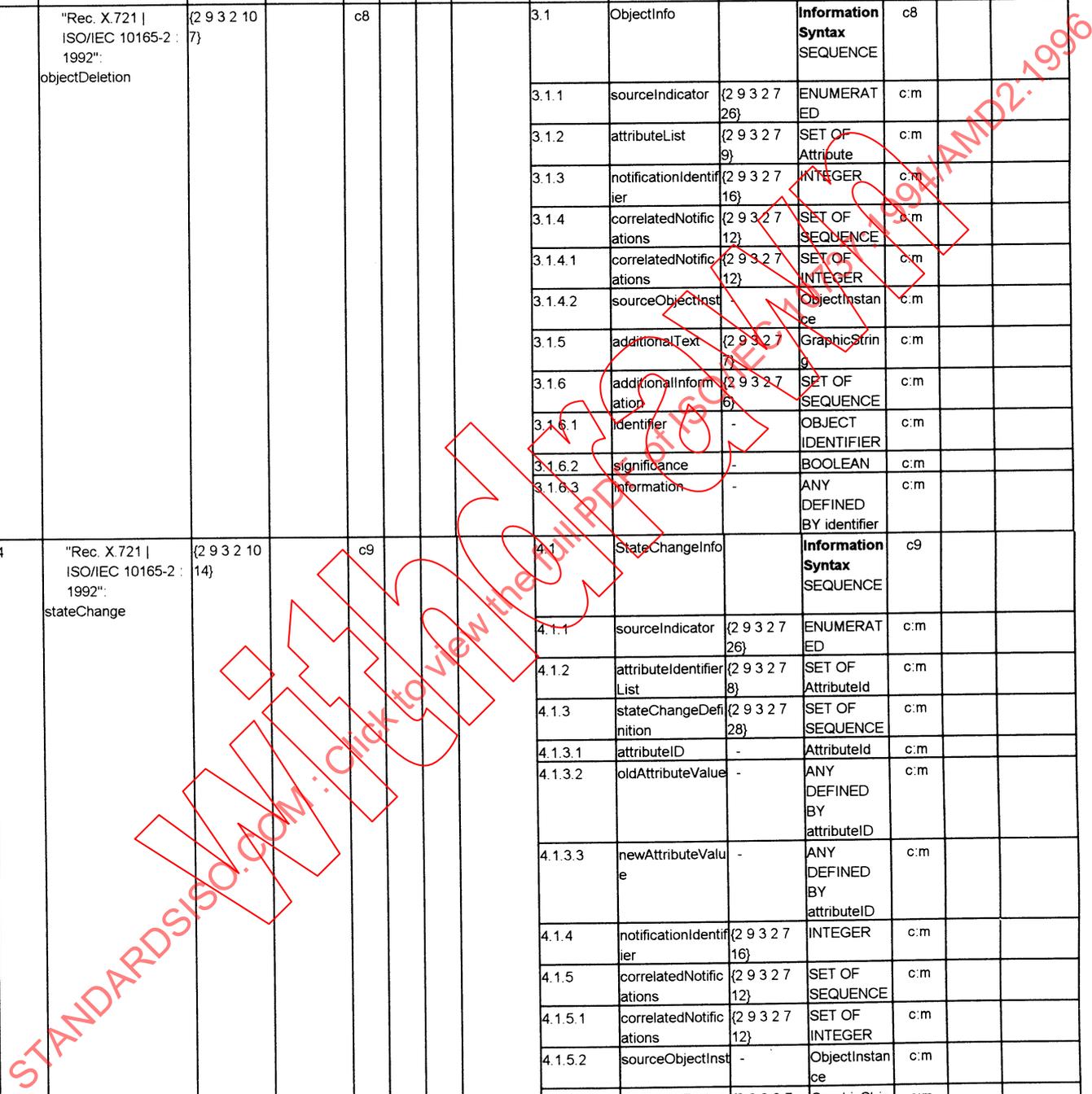


Table E.24(concluded) – Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Not confirmed								
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communications information	(2 9 3 5 10 0)		c10				5.1	Communications Information		Information Syntax SEQUENCE	c10		
								5.1.1	informationType	(2 9 3 5 7 5)	OBJECT IDENTIFIER	c:m		
								5.1.2	informationData	(2 9 3 5 7 4)	SET OF SEQUENCE	c:m		
								5.1.2.1	identifier	-	OBJECT IDENTIFIER	c:m		
								5.1.2.2	significance	-	BOOLEAN	c:m		
								5.1.2.3	information	-	ANY DEFINED BY identifier	c:m		

c6: if D.3/4a or D.3/8a then m else -

c7: if D.3/2a or D.3/5a or D.3/12a or D.3/17a or D.3/20a or D.3/23a or D.3/28a then m else -

c8: if D.3/3a or D.3/6a or D.3/13a or D.3/18a or D.3/21a or D.3/24a or D.3/29a then m else -

c9 if D.3/7a or D.3/14a or D.3/25a then m else -

c10: if D.3/11 or D.3/19 or D.3/22a then m else -

E.4.5 Actions

The specifier of a manager role implementation that claims to support the actions specified in this International Standard shall import a copy of this table and complete it.

Table E.25 – Action support

Index	Action type template label	Value of object identifier for action type	Constraints and values	Status	Support	Additional information	Subindex	Action field name label	Constraints and values	Status	Support	Additional information							
													1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": activate	(2 9 3 5 9 0)		c11		
1.1.1	identifier	OBJECT IDENTIFIER	c:m																
1.1.2	significance	BOOLEAN	c:o																
1.1.3	information	ANY DEFINED BY identifier	c:m																
1.2	ActionReply	Reply Syntax SET OF SEQUENCE	c:m																
1.2.1	identifier	OBJECT IDENTIFIER	c:m																
1.2.2	significance	BOOLEAN	c:m																
1.2.3	information	ANY DEFINED BY identifier	c:m																
2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": deactivate	(2 9 3 5 9 1)		c12			2.1	ActionInfo	Information Syntax SET OF SEQUENCE	c12									
							2.1.1	identifier	OBJECT IDENTIFIER	c:m									
							2.1.2	significance	BOOLEAN	c:o									
							2.1.3	information	ANY DEFINED BY identifier	c:m									
							2.2	ActionReply	Reply Syntax SET OF SEQUENCE	c:m									
							2.2.1	identifier	OBJECT IDENTIFIER	c:m									
							2.2.2	significance	BOOLEAN	c:m									
2.2.3	information	ANY DEFINED BY identifier	c:m																

c11: if D.3/9a or D.3/15a or D.3/26a then m else -

c12: if D.3/10a or D.3/16a or D.3/27a then m else -

E.4.6 Parameters

The specifier of a manager role implementation that claims to support the parameters specified in this International Standard shall import a copy of this table and complete it.

Table E.26 – Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
1	tEProtocolErrorPDUHeader	{2 14 0 5 1}	EVENT-INFO communicationsAlarm	c13		
2	tEProtocolErrorReasonCode	{2 14 0 5 3}	EVENT-INFO communicationsAlarm	c13		
3	tEProtocolErrorSourceAddress	{2 14 0 5 2}	EVENT-INFO communicationsAlarm	c13		
4	clPMPDUHeader	{2 14 0 5 4}	EVENT-INFO communicationsAlarm	c14		
5	clPMSourceAddress	{2 14 0 5 5}	EVENT-INFO communicationsAlarm	c14		
6	calledNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	c15		
7	calledTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	c15		
8	callingNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	c15		
9	callingTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	c15		
10	networkConnectionIDs-PAR	(not registered)	EVENT-INFO communicationsInformation	c15		
11	rejectionCause	{2 14 0 5 7}	EVENT-INFO communicationsInformation	c15		
12	calledNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
13	calledTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
14	callingNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
15	callingTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
16	networkConnectionIDs-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
17	connectionDirection-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
18	maxTPDUSize-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
19	protocolClass-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		
20	respondingNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	c16		

Table E.26 (concluded) – Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
21	transportConnectionName	(not registered)	EVENT-INFO communicationsInformation	c16		
22	calledNSAPAddress-PAR	(not registered)	EVENT-INFO objectCreation	c17		
23	calledTSelector-PAR	(not registered)	EVENT-INFO objectCreation	c17		
24	callingNSAPAddress-PAR	(not registered)	EVENT-INFO objectCreation	c17		
25	callingTSelector-PAR	(not registered)	EVENT-INFO objectCreation	c17		
26	connectionDirection-PAR	(not registered)	EVENT-INFO objectCreation	c17		
27	maxTPDUSize-PAR	(not registered)	EVENT-INFO objectCreation	c17		
28	networkConnectionIDs-PAR	(not registered)	EVENT-INFO objectCreation	c17		
29	protocolClass-PAR	(not registered)	EVENT-INFO objectCreation	c17		
30	respondingNSAPAddress-PAR	(not registered)	EVENT-INFO objectCreation	c17		
31	transportConnectionName	(not registered)	EVENT-INFO objectCreation	c18		
32	calledNSAPAddress-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
33	calledTSelector-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
34	callingNSAPAddress-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
35	callingTSelector-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
36	connectionDirection-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
37	maxTPDUSize-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
38	networkConnectionIDs-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
39	objectDeletionCause	{2 14 0 5 6}	EVENT-INFO objectDeletion	c18		
40	protocolClass-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
41	respondingNSAPAddress-PAR	(not registered)	EVENT-INFO objectDeletion	c18		
42	transportConnectionName	(not registered)	EVENT-INFO objectDeletion	c18		
43	ncmsPMPDUHeader	(not registered)	EVENT-INFO communicationsInformation	c19		
44	ncmsPMSourceAddress	(not registered)	EVENT-INFO communicationsInformation	c19		

c13: if D.3/4a then m else -

c14: if D.3/8a then m else -

c15: if D.3/11a then m else -

c16: if D.3/19a then m else -

c17: if D.3/20a then m else -

c18: if D.3/21a then m else -

c19: if D.3/22a then m else -

Annex F
(normative)

MOCS proforma¹⁾

F.1 Introduction

The purpose of this MOCS proforma is to provide a mechanism for a supplier of an implementation of a International Standard which claims conformance to a managed object class, to provide conformance information in a standard form.

F.1.1 Instructions for completing the MOCS proforma to produce a MOCS²⁾

The MOCS proforma contained in this annex is comprised of information in tabular form, in accordance with ITU-T Rec X.724 | ISO/IEC 10165-6. The supplier of the implementation shall state which items are supported in tables below and if necessary provide additional information.

F.1.2 Symbols, abbreviations and terms

The MOCS proforma contained in this Annex is comprised of information in tabular form, in accordance with CCITT Rec. X.291 | ISO/IEC 9646-2.

The notations used in the Status and Support columns are specified in D.1.3.

F.2 The transport subsystem managed object

F.2.1 Statement of conformance to the managed object class

Table F.1 – transportSubsystem Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	transportSubsystem	{2 14 0 3 1}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.2 – transportSubsystem Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

¹⁾ Users of this 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.

²⁾ Instructions for MOCS proforma are specified in ITU-T Rec. X.724 | ISO/IEC 10165-6.

F.2.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.3.

Table F.3 – transportSubsystem Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphy"	c1		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c2		
3	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": subsystemP1		Mandatory	m		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		
5	transportSubsystem-P		Mandatory	m		

c1: if F.1/1b then - else m

c2: if F.3/1a then m else -

F.2.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.4. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.4 – transportSubsystem Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c3		c4		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	x		m		x		-		-		x		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	x		m		x		-		-		x		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c5		c6		c5		c5		c5		c5		
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": subsystemid	{2 9 3 5 7 11}	GraphicString	x		m		x		-		-		x		

c3: if F.3/1a then x else .

c4: if F.3/1a then m else -

c5: if F.3/2a then x else -

c6: if F.3/2a then m else -

F.3 The transport entity managed object

F.3.1 Statement of conformance to the managed object class

Table F.5 – transportEntity Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	transportEntity	{2 14 0 3 2}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.6 – transportEntity Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.3.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.7.

Table F.7 – transportEntity Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphy"	c7		
2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communicationsEntityP1		Mandatory	m		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c8		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		
5	transportEntity.P		Mandatory	m		

c7: if F.5/1b then - else m

c8: if F.7/1a then m else -

F.3.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.8. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.8 – transportEntity Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	actualNSAP	{2 14 0 7 4}	SET OF other	c9		m		c10		c10		c10		c10		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c11		c12		-		-		-		-		
3	checksumErrorsDetected	{2 14 0 7 6}	INTEGER	c9		m		c10		-		-		c10		
4	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communicationsEntityId	{2 9 3 5 7 0}	GraphicString	c13		m		x		-		-		x		
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": localSapNames	{2 9 3 5 7 6}	SET OF ObjectInstance	c9		m		c10		c10		c10		c10		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c13		m		x		-		-		x		
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c14		m		x		-		-		x		
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 35}	ENUMERATED	x		m		x		-		-		x		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c15		c16		c17		c17		c17		c17		
10	protocolErrors	{2 14 0 7 7}	INTEGER	c9		m		c10		-		-		c10		
11	targetNSAP	{2 14 0 7 3}	SET OF other	c14		m		m		m		m		c10		
12	undecodedNSDUs	{2 14 0 7 5}	INTEGER	c9		m		c10		-		-		c10		

- c9: if F.5/1b or G.1/3a or G.1/4a then x else -
- c10: if F.5/1b then x else -
- c11: if F.7/1a then (if G.1/4a then o else x) else -
- c12: if F.7/1a then m else -
- c13: if G.1/4a then o else x
- c14: if G.1/4a then m else x
- c15: if F.7/3a then (if G.1/4a then o else x) else -
- c16: if F.7/3a then m else -
- c17: if F.7/3a then x else -

F.3.4 Attribute group

Table F.9 – transportEntity Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	checksumErrorsDetected protocolErrors undecodedNSDUs	m		c10		

F.3.5 Notifications

Table F.10 – transportEntity Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information	
					Confirmed	Nonconfirmed									
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": communicationsAlarm	{2 9 3 2 10 2}		m			tEProtocolErrorPDUHeader tEProtocolErrorReasonCode tEProtocolErrorSourceAddress	1.1	AlarmInfo		Information Syntax SEQUENCE	m			
								1.1.1	probableCause	{2 9 3 2 7 18}	CHOICE	m			
								1.1.1.1	globalValue	-	OBJECT IDENTIFIER	o.1			
								1.1.1.2	localValue	-	INTEGER	o.1			
								1.1.2	specificProblems	{2 9 3 2 7 27}	SET OF CHOICE	o			
								1.1.2.1	OBJECT IDENTIFIER	-	OBJECT IDENTIFIER	c:o.2			
								1.1.2.2	INTEGER	-	INTEGER	c:o.2			
								1.1.3	perceivedSeverity	{2 9 3 2 7 17}	ENUMERATED	m			
								1.1.4	backedUpStatus	{2 9 3 2 7 11}	BOOLEAN	o			
								1.1.5	backUpObject	{2 9 3 2 7 40}	ObjectInstance	o			
								1.1.6	trendIndication	{2 9 3 2 7 30}	ENUMERATED	o			
								1.1.7	thresholdInfo	{2 9 3 2 7 29}	SEQUENCE	o			
								1.1.7.1	triggeredThreshold	-	Attributeld	c:m			
								1.1.7.2	observedValue	-	CHOICE	c:m			
								1.1.7.2.1	integer	-	INTEGER	c:o.3			
								1.1.7.2.2	real	-	REAL	c:o.3			
								1.1.7.3	thresholdLevel	-	CHOICE	c:o			
								1.1.7.3.1	up	-	SEQUENCE	c:o.4			
								1.1.7.3.1.1	high	-	CHOICE	c:m			
								1.1.7.3.1.1.1	integer	-	INTEGER	c:o.5			
								1.1.7.3.1.1.2	real	-	REAL	c:o.5			
1.1.7.3.1.2	low	-	CHOICE	c:o											
1.1.7.3.1.2.1	integer	-	INTEGER	c:o.6											

Table F.10 (continued) – transportEntity Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
								1.1.7.3.1.2.2	real	-	REAL	c.o.6		
								1.1.7.3.2	down	-	SEQUENCE	c.o.4		
								1.1.7.3.2.1	high	-	CHOICE	c.m		
								1.1.7.3.2.1.1	integer	-	INTEGER	c.o.7		
								1.1.7.3.2.1.2	real	-	REAL	c.o.7		
								1.1.7.3.2.2	low	-	CHOICE	c.m		
								1.1.7.3.2.2.1	integer	-	INTEGER	c.o.8		
								1.1.7.3.2.2.2	real	-	REAL	c.o.8		
								1.1.7.4	armTime	-	GeneralizedTime	c.o		
								1.1.8	notificationIdentifier	(2 9 3 2 7 16)	INTEGER	o		
								1.1.9	correlatedNotifications	(2 9 3 2 7 12)	SET OF SEQUENCE	o		
								1.1.9.1	correlatedNotifications	(2 9 3 2 7 12)	SET OF INTEGER	c.m		
								1.1.9.2	sourceObjectInst	-	ObjectInstance	c.o		
								1.1.10	stateChangeDefinition	(2 9 3 2 7 28)	SET OF SEQUENCE	o		
								1.1.10.1	attributeID	-	AttributeID	c.m		
								1.1.10.2	oldAttributeValue	-	ANY DEFINED BY attributeID	c.o		
								1.1.10.3	newAttributeValue	-	ANY DEFINED BY attributeID	c.m		
								1.1.11	monitoredAttributes	(2 9 3 2 7 15)	SET OF Attribute	o		
								1.1.12	proposedRepairActions	(2 9 3 2 7 19)	SET OF CHOICE	o		
								1.1.12.1	OBJECT IDENTIFIER	-	OBJECT IDENTIFIER	c.o.9		
								1.1.12.2	INTEGER	-	INTEGER	c.o.9		
								1.1.13	additionalText	(2 9 3 2 7 7)	GraphicString	o		
								1.1.14	additionalInformation	(2 9 3 2 7 6)	SET OF SEQUENCE	o		
1.1.14.1	identifier	-	OBJECT IDENTIFIER	c.m										
1.1.14.2	significance	-	BOOLEAN	c.o										
1.1.14.3	information	-	ANY DEFINED BY identifier	c.m										
2	"Rec. X.721 ISO/IEC 10165-2:1992": objectCreation	(2 9 3 2 10 6)		m				2.1	ObjectInfo		Information Syntax SEQUENCE	m		
								2.1.1	sourceIndicator	(2 9 3 2 7 26)	ENUMERATED	o		
								2.1.2	attributeList	(2 9 3 2 7 9)	SET OF Attribute	o		
								2.1.3	notificationIdentifier	(2 9 3 2 7 16)	INTEGER	o		
								2.1.4	correlatedNotifications	(2 9 3 2 7 12)	SET OF SEQUENCE	o		
								2.1.4.1	correlatedNotifications	(2 9 3 2 7 12)	SET OF INTEGER	c.m		
								2.1.4.2	sourceObjectInst	-	ObjectInstance	c.o		
								2.1.5	additionalText	(2 9 3 2 7 7)	GraphicString	o		

Table F.10 (concluded) – transportEntity Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
3	"Rec. X.721 ISO/IEC 10165-2 : 1992". objectDeletion	{2 9 3 2 10 7}		m				2.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o		
								2.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m		
								2.1.6.2	significance	-	BOOLEAN	c:o		
								2.1.6.3	information	-	ANY DEFINED BY identifier	c:m		
								3.1	ObjectInfo		Information Syntax SEQUENCE	m		
								3.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		
								3.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o		
								3.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o		
								3.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o		
								3.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m		
								3.1.4.2	sourceObjectInstance	-	ObjectInstance	c:o		
								3.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o		
								3.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o		
3.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m										
3.1.6.2	significance	-	BOOLEAN	c:o										
3.1.6.3	information	-	ANY DEFINED BY identifier	c:m										

F.3.6 Parameters

Table F.11 – transportEntity Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
1	tEProtocolErrorPDUHeader	{2 14 0 5 7}	EVENT-INFO communicationsAlarm	m		
2	tEProtocolErrorReasonCode	{2 14 0 5 3}	EVENT-INFO communicationsAlarm	m		
3	tEProtocolErrorSourceAddress	{2 14 0 5 2}	EVENT-INFO communicationsAlarm	m		

F.4 The connectionless-mode transport protocol machine managed object

F.4.1 Statement of conformance to the managed object class

Table F.12 – clmodeTPM Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	clmodeTPM	{2 14 0 3 3}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.13 – clmodeTPM Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.4.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.14.

Table F.14 – clmodeTPM Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphism"	c18		
2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": clProtocolMachineP1		Mandatory	m		
3	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": clProtocolMachineP2	{2 9 3 5 4 1}	"there is a requirement to keep statistics concerning remote connectionless protocol machines that this protocol machine communicates with"	o		
4	clmodeTPM-P		Mandatory	m		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c19		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		

c18: if F.12/1b then - else m

c19: if F.14/1a or F.14/3a then m else -

F.4.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.15. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.15 – clmodeTPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState	{2 9 3 2 7 31}	ENUMERATED	c20		m		m		-		-		c21		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c22		c23		-		-		-		-		
3	ciChecksumOption	{2 14 0 7 9}	BOOLEAN	c20		m		m		-		-		m		
4	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": ciProtocolMachinelid	{2 9 3 5 7 2}	GraphicString	c24		m		x						x		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c24		m		x						x		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c20		m		x						x		
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter	{2 9 3 2 7 78}	INTEGER	c25		m		c21		-		-		c21		
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter	{2 9 3 2 7 80}	INTEGER	c25		m		c21		-		-		c21		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 85}	ENUMERATED	x		m		x		-		-		x		
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c26		c27		c28		c28		c28		c28		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter	{2 9 3 2 7 86}	INTEGER	c25		m		c21		-		-		c21		
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter	{2 9 3 2 7 88}	INTEGER	c25		m		c21		-		-		c21		
13	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": totalRemoteSAPs	{2 9 3 5 7 13}	INTEGER	c29		c30		c21		-		-		c21		
14	undeliverablePDUsCounter	{2 14 0 7 10}	INTEGER	c25		m		c21		-		-		c21		

c20: if G.1/7a then m else x

c21: if F.12/1b then x else -

c22: if F.14/1a then (if G.1/7a then o else x) else -

c23: if F.14/1a then m else -

c24: if G.1/7a then o else x

c25: if F.12/1b or G.1/6a or G.1/8a then x else -

c26: if F.14/5a then (if G.1/7a then o else x) else -

c27: if F.14/5a then m else -

c28: if F.14/5a then x else -

c29: if F.14/3a and (F.12/1b or G.1/6a or G.1/8a) then x else -

c30: if F.14/3a then m else -

F.4.4 Attribute groups

Table F.16 – clmodeTPM Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter undeliverablePDUsCounter	m		c21		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": state	{2 9 3 2 8 1}	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState "Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	m		c21		

F.4.5 Notifications

Table F.17 – clmodeTPM Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Confirmed	Non-confirmed	Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": communicationsAlarm	{2 9 3 2 10 2}		m			ciPMPDUHeader ciPMSourceAddress	1.1	AlarmInfo		Information Syntax SEQUENCE	m		
								1.1.1	probableCause	{2 9 3 2 7 18}	CHOICE	m		
								1.1.1.1	globalValue	-	OBJECT IDENTIFIER	o.1		
								1.1.1.2	localValue	-	INTEGER	o.1		
								1.1.2	specificProblems	{2 9 3 2 7 27}	SET OF CHOICE	o		
								1.1.2.1	OBJECT IDENTIFIER	-	OBJECT IDENTIFIER	c:o.2		
								1.1.2.2	INTEGER	-	INTEGER	c:o.2		
								1.1.3	perceivedSeverity	{2 9 3 2 7 17}	ENUMERATED	m		
								1.1.4	backedUpStatus	{2 9 3 2 7 11}	BOOLEAN	o		
								1.1.5	backUpObject	{2 9 3 2 7 40}	ObjectInstance	o		
								1.1.6	trendIndication	{2 9 3 2 7 30}	ENUMERATED	o		
								1.1.7	thresholdInfo	{2 9 3 2 7 29}	SEQUENCE	o		
								1.1.7.1	triggeredThreshold	-	Attributeld	c:m		
								1.1.7.2	observedValue	-	CHOICE	c:m		
								1.1.7.2.1	integer	-	INTEGER	c:o.3		
1.1.7.2.2	real	-	REAL	c:o.3										
1.1.7.3	thresholdLevel	-	CHOICE	c:o										
1.1.7.3.1	up	-	SEQUENCE	c:o.4										
1.1.7.3.1.1	high	-	CHOICE	c:m										
1.1.7.3.1.1	integer	-	INTEGER	c:o.5										

Table F.17 (continued) – clmodeTPM Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
								1.1.7.3.1.1.2	real	-	REAL	c.o.5		
								1.1.7.3.1.2	low	-	CHOICE	c.o.		
								1.1.7.3.1.2.1	integer	-	INTEGER	c.o.6		
								1.1.7.3.1.2.2	real	-	REAL	c.o.6		
								1.1.7.3.2	down	-	SEQUENCE	c.o.4		
								1.1.7.3.2.1	high	-	CHOICE	c.m		
								1.1.7.3.2.1.1	integer	-	INTEGER	c.o.7		
								1.1.7.3.2.1.2	real	-	REAL	c.o.7		
								1.1.7.3.2.2	low	-	CHOICE	c.m		
								1.1.7.3.2.2.1	integer	-	INTEGER	c.o.8		
								1.1.7.3.2.2.2	real	-	REAL	c.o.8		
								1.1.7.4	armTime	-	GeneralizedTime	c.o		
								1.1.8	notificationIdentifier	(2 9 3 2 7 16)	INTEGER	o		
								1.1.9	correlatedNotifications	(2 9 3 2 7 12)	SET OF SEQUENCE	o		
								1.1.9.1	correlatedNotifications	(2 9 3 2 7 12)	SET OF INTEGER	c.m		
								1.1.9.2	sourceObjectInst	-	ObjectInstance	c.o		
								1.1.10	stateChangeDefinition	(2 9 3 2 7 28)	SET OF SEQUENCE	o		
								1.1.10.1	attributeID	-	AttributeID	c.m		
								1.1.10.2	oldAttributeValue	-	ANY DEFINED BY attributeID	c.o		
								1.1.10.3	newAttributeValue	-	ANY DEFINED BY attributeID	c.m		
								1.1.11	monitoredAttributes	(2 9 3 2 7 15)	SET OF Attribute	o		
								1.1.12	proposedRepairActions	(2 9 3 2 7 19)	SET OF CHOICE	o		
								1.1.12.1	OBJECT IDENTIFIER	-	OBJECT IDENTIFIER	c.o.9		
								1.1.12.2	INTEGER	-	INTEGER	c.o.9		
								1.1.13	additionalText	(2 9 3 2 7 7)	GraphicString	o		
								1.1.14	additionalInformation	(2 9 3 2 7 6)	SET OF SEQUENCE	o		
								1.1.14.1	identifier	-	OBJECT IDENTIFIER	c.m		
								1.1.14.2	significance	-	BOOLEAN	c.o		
								1.1.14.3	information	-	ANY DEFINED BY identifier	c.m		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectCreation	(2 9 3 2 10 6)		m				2.1	ObjectInfo		Information Syntax SEQUENCE	m		
								2.1.1	sourceIndicator	(2 9 3 2 7 26)	ENUMERATED	o		
								2.1.2	attributeList	(2 9 3 2 7 9)	SET OF Attribute	o		
								2.1.3	notificationIdentifier	(2 9 3 2 7 16)	INTEGER	o		
								2.1.4	correlatedNotifications	(2 9 3 2 7 12)	SET OF SEQUENCE	o		
								2.1.4.1	correlatedNotifications	(2 9 3 2 7 12)	SET OF INTEGER	c.m		
								2.1.4.2	sourceObjectInst	-	ObjectInstance	c.o		

Table F.17 (concluded) – clmodeTPM Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectDeletion	{2 9 3 2 10 7}		m										
								2.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o		
								2.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o		
								2.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m		
								2.1.6.2	significance	-	BOOLEAN	c:o		
								2.1.6.3	information	-	ANY DEFINED BY identifier	c:m		
								3.1	ObjectInfo		Information Syntax SEQUENCE	m		
								3.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		
								3.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o		
								3.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o		
								3.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o		
								3.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m		
								3.1.4.2	sourceObjectInst	-	ObjectInstance	c:o		
3.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o										
3.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o										
3.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m										
3.1.6.2	significance	-	BOOLEAN	c:o										
3.1.6.3	information	-	ANY DEFINED BY identifier	c:m										
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": stateChange	{2 9 3 2 10 14}		m				4.1	StateChangeInfo		Information Syntax SEQUENCE	m		
								4.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		
								4.1.2	attributeIdentifierList	{2 9 3 2 7 8}	SET OF AttributeId	o		
								4.1.3	stateChangeDefinition	{2 9 3 2 7 28}	SET OF SEQUENCE	m		
								4.1.3.1	attributeID	-	AttributeId	m		
								4.1.3.2	oldAttributeValue	-	ANY DEFINED BY attributeID	o		
								4.1.3.3	newAttributeValue	-	ANY DEFINED BY attributeID	m		
								4.1.4	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o		
								4.1.5	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o		
								4.1.5.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m		
								4.1.5.2	sourceObjectInst	-	ObjectInstance	c:o		
								4.1.6	additionalText	{2 9 3 2 7 7}	GraphicString	o		
								4.1.7	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o		
								4.1.7.1	identifier	-	OBJECT IDENTIFIER	c:m		
								4.1.7.2	significance	-	BOOLEAN	c:o		
								4.1.7.3	information	-	ANY DEFINED BY identifier	c:m		



F.4.6 Actions

Table F.18 – clmodeTPM Action support

Index	Action type template label	Value of object identifier for action type	Constraints and values	Status	Support	Additional information	Subindex	Action field name label	Constraints and values	Status	Support	Additional information	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": activate	{2 9 3 5 9 0}		m			1.1	ActionInfo	Information Syntax SET OF SEQUENCE	m			
							1.1.1	identifier	OBJECT IDENTIFIER	m			
							1.1.2	significance	BOOLEAN	o			
							1.1.3	information	ANY DEFINED BY identifier	m			
							1.2	ActionReply	Reply Syntax SET OF SEQUENCE	m			
							1.2.1	identifier	OBJECT IDENTIFIER	m			
							1.2.2	significance	BOOLEAN	o			
							1.2.3	information	ANY DEFINED BY identifier	m			
							2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": deactivate	{2 9 3 5 9 1}		m		
2.1.1	identifier	OBJECT IDENTIFIER	m										
2.1.2	significance	BOOLEAN	o										
2.1.3	information	ANY DEFINED BY identifier	m										
2.2	ActionReply	Reply Syntax SET OF SEQUENCE	m										
2.2.1	identifier	OBJECT IDENTIFIER	m										
2.2.2	significance	BOOLEAN	o										
2.2.3	information	ANY DEFINED BY identifier	m										

F.4.7 Parameters

Table F.19 – clmodeTPM Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
1	clPMPDUHeader	{2 14 0 5 4}	EVENT-INFO communicationsAlarm	m		
2	clPMSourceAddress	{2 14 0 5 5}	EVENT-INFO communicationsAlarm	m		

F.5 The connection-oriented transport protocol machine managed object

F.5.1 Statement of conformance to the managed object class

Table F.20 – comodeTPM Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	comodeTPM	{2 14 0 3 4}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.21 – comodeTPM Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.5.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.22.

Table F.22 – comodeTPM Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorhism "	c31		
2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": coProtocolMachineP1		Mandatory	m		
3	comodeTPM-P		Mandatory	m		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c32		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		

c31: if F.20/1b then - else m

c32: if F.22/1a then m else -

F.5.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.23. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.23 – comodeTPM Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState	{2 9 3 2 7 31}	ENUMERATED	c33		m		m		-		-		c34		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c35		c36		-		-		-		-		
3	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": coProtocolMachineld	{2 9 3 5 7 3}	GraphicString	c37		m		x		-		-		-		
4	localErrorDisconnects	{2 14 0 7 18}	INTEGER	c38		m		c34		-		-		c34		
5	localSuccessfulConnections	{2 14 0 7 14}	INTEGER	c38		m		c34		-		-		c34		
6	localUnsuccessfulConnections	{2 14 0 7 16}	INTEGER	c38		m		c34		-		-		c34		
7	maxConnections	{2 14 0 7 13}	INTEGER	c33		m		m		-		-		m		
8	maxOpenConnections	{2 14 0 7 21}	INTEGER	c33		m		c34		-		-		m		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c37		m		x		-		-		x		
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c33		m		x		-		-		x		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter	{2 9 3 2 7 78}	INTEGER	c38		m		c34		-		-		c34		
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter	{2 9 3 2 7 80}	INTEGER	c38		m		c34		-		-		c34		
13	openConnections	{2 14 0 7 12}	INTEGER	c38		m		c34		-		-		c34		
14	"Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	{2 9 3 2 7 35}	ENUMERATED	x		m		x		-		-		x		
15	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c39		c40		c41		c41		c41		c41		
16	remoteErrorDisconnects	{2 14 0 7 19}	INTEGER	c38		m		c34		-		-		c34		
17	remoteSuccessfulConnections	{2 14 0 7 15}	INTEGER	c38		m		c34		-		-		c34		
18	remoteUnsuccessfulConnections	{2 14 0 7 17}	INTEGER	c38		m		c34		-		-		c34		
19	unassociatedTPDUs	{2 14 0 7 20}	INTEGER	c38		m		c34		-		-		c34		

c33: if G.1/10a then m else x

c34: if F.20/1b then x else -

c35: if F.22/1a then (if G.1/10a then o else x) else -

c36: if F.22/1a then m else -

c37: if G.1/10a then o else x

c38: if F.20/1b or G.1/9a or G.1/11a then x else -

c39: if F.22/4a then (if G.1/10a then o else x) else -

c40: if F.22/4a then m else -

c41: if F.22/4a then x else -

F.5.4 Attribute group

Table F.24 – comodeTPM Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	localErrorDisconnects localSuccessfulConnections localUnsuccessfulConnections maxOpenConnections "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter openConnections remoteErrorDisconnects remoteSuccessfulConnections remoteUnsuccessfulConnections unassociatedTPDUs	m		c34		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": state	{2 9 3 2 8 1}	"Rec. X.721 ISO/IEC 10165-2 : 1992": administrativeState "Rec. X.721 ISO/IEC 10165-2 : 1992": operationalState	m		c34		

F.5.5 Notifications

Table F.25 – comodeTPM Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Confir med	Non med	Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communicationsInformation	{2 9 3 5 10 0}		m			calledNSAPAddress-PAR calledTSelector-PAR callingNSAPAddress-PAR callingTSelector-PAR networkConnectionIDs-PAR rejectionCause	1.1	CommunicationsInformation		Information Syntax SEQUENCE	m		
								1.1.1	informationType	{2 9 3 5 7 5}	OBJECT IDENTIFIER	m		
								1.1.2	informationData	{2 9 3 5 7 4}	SET OF SEQUENCE	o		
								1.1.2.1	identifier	-	OBJECT IDENTIFIER	c:m		
								1.1.2.2	significance	-	BOOLEAN	c:o		
								1.1.2.3	information	-	ANY DEFINED BY identifier	c:m		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectCreation	{2 9 3 2 10 6}		m				2.1	ObjectInfo		Information Syntax SEQUENCE	m		
								2.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		

Table F.25 (continued) – comodeTPM Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information							
					Confirmed	Nonconfirmed															
								2.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o									
								2.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o									
								2.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o									
								2.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m									
								2.1.4.2	sourceObjectInst	-	ObjectInstance	c:o									
								2.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o									
								2.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o									
								2.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m									
								2.1.6.2	significance	-	BOOLEAN	c:o									
								2.1.6.3	information	-	ANY DEFINED BY identifier	c:m									
								3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectDeletion	{2 9 3 2 10 7}		m			3.1	ObjectInfo		Information Syntax SEQUENCE	m		
															3.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		
															3.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o		
							3.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o										
							3.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o										
							3.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m										
							3.1.4.2	sourceObjectInst	-	ObjectInstance	c:o										
							3.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o										
							3.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o										
							3.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m										
							3.1.6.2	significance	-	BOOLEAN	c:o										
							3.1.6.3	information	-	ANY DEFINED BY identifier	c:m										
4	"Rec. X.721 ISO/IEC 10165-14 : 1992": stateChange	{2 9 3 2 10 14}		m			4.1	StateChangeInfo		Information Syntax SEQUENCE	m										
							4.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o										
							4.1.2	attributeIdentifierList	{2 9 3 2 7 8}	SET OF AttributeId	o										
							4.1.3	stateChangeDefinition	{2 9 3 2 7 28}	SET OF SEQUENCE	m										
							4.1.3.1	attributeID	-	AttributeId	m										
							4.1.3.2	oldAttributeValue	-	ANY DEFINED BY attributeID	o										
							4.1.3.3	newAttributeValue	-	ANY DEFINED BY attributeID	m										
							4.1.4	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o										
							4.1.5	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o										
							4.1.5.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m										
							4.1.5.2	sourceObjectInst	-	ObjectInstance	c:o										
							4.1.6	additionalText	{2 9 3 2 7 7}	GraphicString	o										
							4.1.7	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o										

Table F.25 (concluded) – comodeTPM Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
								4.1.7.1	identifier	-	OBJECT IDENTIFIER	c:m		
								4.1.7.2	significance	-	BOOLEAN	c:o		
								4.1.7.3	information	-	ANY DEFINED BY identifier	c:m		

F.5.6 Actions

Table F.26 – comodeTPM Action support

Index	Action type template label	Value of object identifier for action type	Constraints and values	Status	Support	Additional information	Subindex	Action field name label	Constraints and values	Status	Support	Additional information
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": activate	{2 9 3 5 9 0}		m			1.1	ActionInfo	Information Syntax SET OF SEQUENCE	m		
							1.1.1	identifier	OBJECT IDENTIFIER	m		
							1.1.2	significance	BOOLEAN	o		
							1.1.3	information	ANY DEFINED BY identifier	m		
							1.2	ActionReply	Reply Syntax SET OF SEQUENCE	m		
							1.2.1	identifier	OBJECT IDENTIFIER	m		
							1.2.2	significance	BOOLEAN	o		
2	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": deactivate	{2 9 3 5 9 1}		m			2.1	ActionInfo	Information Syntax SET OF SEQUENCE	m		
							2.1.1	identifier	OBJECT IDENTIFIER	m		
							2.1.2	significance	BOOLEAN	o		
							2.1.3	information	ANY DEFINED BY identifier	m		
							2.2	ActionReply	Reply Syntax SET OF SEQUENCE	m		
							2.2.1	identifier	OBJECT IDENTIFIER	m		
							2.2.2	significance	BOOLEAN	o		
2.2.3	information	ANY DEFINED BY identifier	m									

F.5.7 Parameters

Table F.27 – comodeTPM Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
1	calledNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
2	calledTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
3	callingNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
4	callingTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
5	networkConnectionIDs-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
6	rejectionCause	{2 14 0 5 7}	EVENT-INFO communicationsInformation	m		

F.6 The TSAP managed object

F.6.1 Statement of conformance to the managed object class

Table F.28 – tSAP Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	tSAP	{2 14 0 3 5}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.29 – tSAP Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.6.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.30.

Table F.30 – tSAP Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphy"	c42		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c43		
3	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": sap1P1		Mandatory	m		
4	tSAP-P		Mandatory	m		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		

c42: if F.28/1b then - else m

c43: if F.30/1a then m else -

F.6.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.31. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.31 – tSAP Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c44		c45		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	c46		m		x		-		-		x		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	c47		m		x		-		-				
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c48		c49		c50		c50		c50		c50		
5	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": sap1Address	{2 9 3 5 7 8}	INTEGER	c51		m		c52				-		c52		
6	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": sapId	{2 9 3 5 7 10}	GraphicString	c46		m		x		-		-		x		
7	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": userEntityNames	{2 9 3 5 7 15}	SET OF ObjectInstance	c51		m		c52		c52		c52		c52		

c44: if F.30/1a then (if G.1/13a then o else x) else -

c45: if F.30/1a then m else -

c46: if G.1/13a then o else x

c47: if G.1/13a then m else x

c48: if F.30/2a then (if G.1/13a then o else x) else -

c49: if F.30/2a then m else -

c50: if F.30/2a then x else -

c51: if F.28/1b or G.1/12a or G.1/14a then x else -

c52: if F.28/1b then x else -

F.6.4 Notifications

Table F.32 – tSAP Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectCreation	{2 9 3 2 10 6}		m				1.1	ObjectInfo		Information Syntax SEQUENCE	m		
								1.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		
								1.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o		
								1.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o		
								1.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o		
								1.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m		
								1.1.4.2	sourceObjectInst	-	ObjectInstance	c:o		
								1.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o		
								1.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o		
								1.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m		
								1.1.6.2	significance	-	BOOLEAN	c:o		
								1.1.6.3	information	-	ANY DEFINED BY identifier	c:m		
								2	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectDeletion	{2 9 3 2 10 7}		m		
2.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o										
2.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o										
2.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o										
2.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o										
2.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m										
2.1.4.2	sourceObjectInst	-	ObjectInstance	c:o										
2.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o										
2.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o										
2.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m										
2.1.6.2	significance	-	BOOLEAN	c:o										
2.1.6.3	information	-	ANY DEFINED BY identifier	c:m										

F.7 The transport connection managed object

F.7.1 Statement of conformance to the managed object class

Table F.33 – transportConnection Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	transportConnection	{2 14 0 3 7}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.34 – transportConnection Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.7.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.35.

Table F.35 – transportConnection Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphy"	c53		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c54		
3	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": singlePeerConnectionP1		Mandatory	m		
4	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": singlePeerConnectionP2	{2 9 3 5 4 2}	"The names of the connections supported by this connection can be provided"	o		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		
6	transportConnection-P		Mandatory	m		
7	transportConnectionClass1-P	{2 14 0 4 5}	"At the initiating side, present if class 1 is requested or can be accepted following class negotiation procedures. At the responding side, present if class 1 is chosen"	o		
8	transportConnectionClass2-P	{2 14 0 4 6}	"At the initiating side, present if class 2 is requested or can be accepted following class negotiation procedures. At the responding side, present if class 2 is chosen"	o		
9	transportConnectionClass3-P	{2 14 0 4 7}	"At the initiating side, present if class 3 is requested or can be accepted following class negotiation procedures. At the responding side, present if class 3 is chosen"	o		
10	transportConnectionClass4-P	{2 14 0 4 8}	"At the initiating side, present if class 4 is requested or can be accepted following class negotiation procedures. At the responding side, present if class 4 is chosen"	o		
11	transportConnectionNCMS-P	{2 14 0 4 9}	"NCMS is implemented"	o		

c53: if F.33/1b then - else m

c54: if F.35/1a or F.35/2a or F.35/4a or F.35/7a or F.35/8a or F.35/9a or F.35/10a or F.35/11a then m else -

F.7.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.36. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.36 – transportConnection Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	acknowledgeTime	{2 14 0 7 47}	SEQUENCE	c55		c56		c57		-		-		c57		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c58		c59		-		-		-		-		
3	calledNSAPAddress	{2 14 0 7 58}	OCTET STRING	x		m		c60		-		-		c60		
4	calledTSelector	{2 14 0 7 56}	OCTET STRING	x		m		c60		-		-		c60		
5	callingNSAPAddress	{2 14 0 7 57}	OCTET STRING	x		m		c60		-		-		c60		
6	callingTSelector	{2 14 0 7 55}	OCTET STRING	x		m		c60		-		-		c60		
7	checksumNonuse	{2 14 0 7 43}	BOOLEAN	c55		c56		c57		-		-		c57		
8	connectionDirection	{2 14 0 7 60}	ENUMERATED	x		m		c60		-		-		c60		
9	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": connectionId	{2 9 3 5 7 1}	GraphicString	x		m		x		-		-		x		
10	explicitFlowControl	{2 14 0 7 45}	BOOLEAN	c61		c62		c63		-		-		c63		
11	extendedFormat	{2 14 0 7 41}	BOOLEAN	c55		c56		c57		-		-		c57		
12	inactivityTime	{2 14 0 7 46}	SEQUENCE	c55		c56		c57		-		-		c57		
13	localReference	{2 14 0 7 53}	INTEGER	x		m		c60		-		-		c60		
14	maxTPDUSize	{2 14 0 7 51}	INTEGER	x		m		c60		-		-		c60		
15	maxTransmissions	{2 14 0 7 52}	INTEGER	c55		c56		c57		-		-		c57		
16	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	x		m		x		-		-		x		
17	networkConnectionIDs	{2 14 0 7 61}	SET OF other	x		m		c60		c60		c60		c60		
18	networkExpeditedData	{2 14 0 7 42}	BOOLEAN	c64		c65		c66		-		-		c66		
19	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	x		m		x		-		-		x		
20	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter	{2 9 3 2 7 78}	INTEGER	x		m		c60		-		-		c60		
21	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter	{2 9 3 2 7 80}	INTEGER	x		m		c60		-		-		c60		
22	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c67		c68		c67		c67		c67		c67		
23	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter	{2 9 3 2 7 86}	INTEGER	x		m		c60		-		-		c60		
24	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusRetransmittedErrorCounter	{2 9 3 2 7 87}	INTEGER	x		m		c60		-		-		c60		
25	"Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter	{2 9 3 2 7 88}	INTEGER	x		m		c60		-		-		c60		
26	protocolClass	{2 14 0 7 40}	ENUMERATED	x		m		c60		-		-		c60		
27	protocolErrors	{2 14 0 7 7}	INTEGER	x		m		c60		-		-		c60		
28	reassignmentTime	{2 14 0 7 48}	SEQUENCE	c69		c70		c71		-		-		c71		
29	reassignmentsAfterFailure	{2 14 0 7 62}	INTEGER	c69		c70		c71		-		-		c71		
30	receiptConfirmation	{2 14 0 7 44}	BOOLEAN	c64		c65		c66		-		-		c66		
31	relatingNCCMONames	{2 14 0 7 66}	SET OF other	c72		c73		c74		c74		c74		c74		
32	remoteReference	{2 14 0 7 54}	INTEGER	x		m		c60		-		-		c60		
33	respondingNSAPAddress	{2 14 0 7 59}	OCTET STRING	x		m		c60		-		-		c60		
34	retransmissionTime	{2 14 0 7 49}	SEQUENCE	c55		c56		c57		-		-		c57		

Table F.36 (concluded) – transportConnection Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Status	Support	Status	Support	Status	Support	Status	Support	Status	Support	Status	Support	
35	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": supportedConnectionNames	{2 9 3 5 7 12}	SET OF ObjectInstance	c75		c76		c77		c77		c77		c77		
36	transportExpeditedService	{2 14 0 7 65}	BOOLEAN	c55		c56		c57		-		-		c57		
37	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": underlyingConnectionNames	{2 9 3 5 7 14}	SET OF ObjectInstance	x		m		c60		c60		c60		c60		
38	windowTimer	{2 14 0 7 50}	SEQUENCE	c61		c62		c63		-		-		c63		

- c55: if F.35/10a then x else -
- c56: if F.35/10a then m else -
- c57: if F.33/1b and F.35/10a then x else -
- c58: if F.35/1a then x else -
- c59: if F.35/1a then m else -
- c60: if F.33/1b then x else -
- c61: if F.35/8a then x else -
- c62: if F.35/8a then m else -
- c63: if F.33/1b and F.35/8a then x else -
- c64: if F.35/7a then x else -
- c65: if F.35/7a then m else -
- c66: if F.33/1b and F.35/7a then x else -
- c67: if F.35/2a then x else -
- c68: if F.35/2a then m else -
- c69: if F.35/9a then x else -
- c70: if F.35/9a then m else -
- c71: if F.33/1b and F.35/9a then x else -
- c72: if F.35/11a then x else -
- c73: if F.35/11a then m else -
- c74: if F.33/1b and F.35/11a then x else -
- c75: if F.35/4a then x else -
- c76: if F.35/4a then m else -
- c77: if F.33/1b and F.35/4a then x else -

F.7.4 Attribute group

Table F.37 – transportConnection Attribute group support

Index	Attribute group template label	Value of object identifier for attribute group	Constraints and values	Get		Set to default		Additional information
				Status	Support	Status	Support	
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": counters	{2 9 3 5 8 0}	"Rec. X.721 ISO/IEC 10165-2 : 1992": octetsReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": octetsSentCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusReceivedCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusRetransmittedErrorCounter "Rec. X.721 ISO/IEC 10165-2 : 1992": pdusSentCounter protocolErrors	m		c60		

F.7.5 Notifications

Table F.38 – transportConnection Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information						
					Configured	Non-configured														
1	"CCITT Rec. X.723 (1993) ISO/IEC 10165-5 : 1994": communicationsInformation	{2 9 3 5 10 0}		m				1.1	CommunicationsInformation		Information Syntax SEQUENCE	m								
															1.1.1	informationType	{2 9 3 5 7 5}	OBJECT IDENTIFIER	m	
															1.1.2	informationData	{2 9 3 5 7 4}	SET OF SEQUENCE	o	
															1.1.2.1	identifier	-	OBJECT IDENTIFIER	c:m	
															1.1.2.2	significance	-	BOOLEAN	c:o	
															1.1.2.3	information	-	ANY DEFINED BY identifier	c:m	

Table F.38 (continued) – transportConnection Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectCreation	{2 9 3 2 10 6}		m			calledNSAPAddress-PAR calledTSelector-PAR callingNSAPAddress-PAR callingTSelector-PAR connectionDirection-PAR maxTPDUSize-PAR networkConnectionIDs-PAR protocolClasses-PAR respondingNSAPAddress-PAR transportConnectionName	2.1	ObjectInfo		Information Syntax SEQUENCE	m		
								2.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o		
								2.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o		
								2.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o		
								2.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o		
								2.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m		
								2.1.4.2	sourceObjectInst	-	ObjectInstance	c:o		
								2.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o		
								2.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	o		
								2.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m		
								2.1.6.2	significance	-	BOOLEAN	c:o		
								2.1.6.3	information	-	ANY DEFINED BY identifier	c:m		
								3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectDeletion	{2 9 3 2 10 7}		m		calledNSAPAddress-PAR calledTSelector-PAR callingNSAPAddress-PAR callingTSelector-PAR connectionDirection-PAR maxTPDUSize-PAR networkConnectionIDs-PAR objectDeletionCause protocolClasses-PAR respondingNSAPAddress-PAR transportConnectionName
3.1.1	sourceIndicator	{2 9 3 2 7 26}	ENUMERATED	o										



Table F.38 (concluded) – transportConnection Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information	Subindex	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
					Confirmed	Nonconfirmed								
								3.1.2	attributeList	{2 9 3 2 7 9}	SET OF Attribute	o		
								3.1.3	notificationIdentifier	{2 9 3 2 7 16}	INTEGER	o		
								3.1.4	correlatedNotifications	{2 9 3 2 7 12}	SET OF SEQUENCE	o		
								3.1.4.1	correlatedNotifications	{2 9 3 2 7 12}	SET OF INTEGER	c:m		
								3.1.4.2	sourceObjectInst	-	ObjectInstance	c:o		
								3.1.5	additionalText	{2 9 3 2 7 7}	GraphicString	o		
								3.1.6	additionalInformation	{2 9 3 2 7 6}	SET OF SEQUENCE	a		
								3.1.6.1	identifier	-	OBJECT IDENTIFIER	c:m		
								3.1.6.2	significance	-	BOOLEAN	c:o		
								3.1.6.3	information	-	ANY DEFINED BY identifier	c:m		

F.7.6 Parameters

Table F.39 – transportConnection Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
1	calledNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
2	calledTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
3	callingNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
4	callingTSelector-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
5	connectionDirection-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
6	maxTPDUSize-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
7	networkConnectionDs-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
8	protocolClass-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
9	respondingNSAPAddress-PAR	(not registered)	EVENT-INFO communicationsInformation	m		
10	transportConnectionName	(not registered)	EVENT-INFO communicationsInformation	m		
11	calledNSAPAddress-PAR	(not registered)	EVENT-INFO objectCreation	m		
12	calledTSelector-PAR	(not registered)	EVENT-INFO objectCreation	m		
13	callingNSAPAddress-PAR	(not registered)	EVENT-INFO objectCreation	m		

Table F.39 (concluded) – transportConnection Parameter support

Index	Parameter template label	Value of object identifier for parameter	Constraints and values	Status	Support	Additional information
14	callingTSelector-PAR	(not registered)	EVENT-INFO objectCreation	m		
15	connectionDirection-PAR	(not registered)	EVENT-INFO objectCreation	m		
16	maxTPDUSize-PAR	(not registered)	EVENT-INFO objectCreation	m		
17	networkConnectionIDs-PAR	(not registered)	EVENT-INFO objectCreation	m		
18	protocolClass-PAR	(not registered)	EVENT-INFO objectCreation	m		
19	respondingNSAPAddress-PAR	(not registered)	EVENT-INFO objectCreation	m		
20	transportConnectionName	(not registered)	EVENT-INFO objectCreation	m		
21	calledNSAPAddress-PAR	(not registered)	EVENT-INFO objectDeletion	m		
22	calledTSelector-PAR	(not registered)	EVENT-INFO objectDeletion	m		
23	callingNSAPAddress-PAR	(not registered)	EVENT-INFO objectDeletion	m		
24	callingTSelector-PAR	(not registered)	EVENT-INFO objectDeletion	m		
25	connectionDirection-PAR	(not registered)	EVENT-INFO objectDeletion	m		
26	maxTPDUSize-PAR	(not registered)	EVENT-INFO objectDeletion	m		
27	networkConnectionIDs-PAR	(not registered)	EVENT-INFO objectDeletion	m		
28	objectDeletionCause	{2 14 0 5 6}	EVENT-INFO objectDeletion	m		
29	protocolClass-PAR	(not registered)	EVENT-INFO objectDeletion	m		
30	respondingNSAPAddress-PAR	(not registered)	EVENT-INFO objectDeletion	m		
31	transportConnectionName	(not registered)	EVENT-INFO objectDeletion	m		

F.8 The transport connection IVMO

F.8.1 Statement of conformance to the managed object class

Table F.40 – transportConnectionIVMO Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	transportConnectionIVMO	{2 14 0 3 6}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.41 – transportConnectionIVMO Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.8.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.42.

Table F.42 – transportConnectionIVMO Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphy"	c78		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c79		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		
4	transportConnectionIVMO-P		Mandatory	m		
5	transportConnectionIVMOClass1-P	{2 14 0 4 1}	"Transport Class 1 is implemented"	c80		
6	transportConnectionIVMOCClass2-P	{2 14 0 4 2}	"Transport Class 2 is implemented"	c81		
7	transportConnectionIVMOCClass3-P	{2 14 0 4 3}	"Transport Class 3 is implemented"	c82		
8	transportConnectionIVMOCClass4-P	{2 14 0 4 4}	"Transport Class 4 is implemented"	c83		

c78: if F.40/1b then - else m

c79: if F.42/1a or F.42/5a or F.42/6a or F.42/7a or F.42/8a then m else -

c80: if F.35/7a then m else o

c81: if F.35/8a then m else o

c82: if F.35/9a then m else o

c83: if F.35/10a then m else o

F.8.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.43. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.43 – transportConnectionIVMO Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c84		c85		-		-		-		-		
2	checksumNonuse	{2 14 0 7 43}	BOOLEAN	c86		c86		c86		-		-		c86		
3	explicitFlowControl	{2 14 0 7 45}	BOOLEAN	c87		c87		c87		-		-		c87		
4	extendedFormat	{2 14 0 7 41}	BOOLEAN	c86		c86		c86		-		-		c86		
5	inactivityTime	{2 14 0 7 46}	SEQUENCE	c86		c86		c86		-		-		c86		
6	maxTPDUSize	{2 14 0 7 51}	INTEGER	m		m		m		-		-		m		
7	maxTransmissions	{2 14 0 7 52}	INTEGER	c86		c86		c86		-		-		c86		
8	maximumWindow	{2 14 0 7 36}	INTEGER	c86		c86		c86		-		-		c86		

Table F.43 (concluded) – transportConnectionVMO Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	o		m		x		-		-		x		
10	networkExpeditedData	{2 14 0 7 42}	BOOLEAN	c88		c88		c88		-		-		c88		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	m		m		x		-		-		x		
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c89		c90		c91		c91		c91		c91		
13	protocolClasses	{2 14 0 7 26}	SET OF ENUMERATED	m		m		m		c92		c92		m		
14	reassignmentTime	{2 14 0 7 48}	SEQUENCE	c93		c93		c93		-		-		c93		
15	receiptConfirmation	{2 14 0 7 44}	BOOLEAN	c88		c88		c88		-		-		c88		
16	retransmissionTime	{2 14 0 7 49}	SEQUENCE	c86		c86		c86		-		-		c86		
17	transportConnectionVMOld	{2 14 0 7 25}	GraphicString	o		m		x		-		-		x		
18	transportExpeditedService	{2 14 0 7 65}	BOOLEAN	c86		c86		c86		-		-		c86		
19	windowTimer	{2 14 0 7 50}	SEQUENCE	c86		c86		c86		-		-		c86		

c84: if F.42/1a then o else -

c85: if F.42/1a then m else -

c86: if F.42/8a then m else -

c87: if F.42/6a then m else -

c88: if F.42/5a then m else -

c89: if F.42/2a then o else -

c90: if F.42/2a then m else -

c91: if F.42/2a then x else -

c92: if F.40/1b then x else -

c93: if F.42/7a then m else -

F.9 The communication information record managed object ["ISO/IEC 10165-5 : 1994"]

F.9.1 Statement of conformance to the managed object class

Table F.44 – communicationInformationRecord Managed object class support

Index	Managed object class template label	Value of object identifier for class	Support of all mandatory features? (Y/N)	Is the actual class the same as the managed object class to which conformance is claimed? (Y/N)
1	communicationInformationRecord	{2 9 3 5 4 0}		

If the answer to the actual class question in the managed object class support table is no, the supplier of the implementation shall fill in the actual class support table below.

Table F.45 – communicationInformationRecord Actual class support

Index	Managed object class template for actual class	Value of object identifier for managed object class definition of actual class	Additional information

F.9.2 Packages

The supplier of the implementation shall state whether or not the packages specified by this managed object of this class are supported, in Table F.46.

Table F.46 – communicationInformationRecord Package support

Index	Package template label	Value of object identifier for package	Constraints and values	Status	Support	Additional information
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphicPackage	{2 9 3 2 4 17}	"if an object supports allomorphism"	c94		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": packagesPackage	{2 9 3 2 4 16}	"any registered package, other than this package has been instantiated"	c95		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": topPackage		Mandatory	m		
4	logRecordPackage		Mandatory	m		
5	eventLogRecordPackage		Mandatory	m		
6	eventTimePackage	{2 9 3 2 4 11}	"the event time parameter was present in the received event report"	o		
7	notificationIdentifierPackage	{2 9 3 2 4 24}	"the notification identifier parameter is present in the notification or event report corresponding to the instance of an event record or an instance of its subclasses"	o		
8	correlatedNotificationsPackage	{2 9 3 2 4 23}	"the correlatedNotifications parameter is present in the notification or event report corresponding to the instance of an event record or an instance of its subclasses"	o		
9	additionalTextPackage	{2 9 3 2 4 19}	"the Additional text parameter is present in the notification or report corresponding the instance of event record or an instance of its subclasses"	o		
10	additionalInformationPackage	{2 9 3 2 4 18}	"the Additional information parameter is present in the notification or report corresponding to the instance of event record or an instance of its subclasses"	o		
11	communicationInformationRecordP1		Mandatory	m		
12	informationDataPackage	{2 1 0 4 1}	"The informationData parameter is present in the communicationsInformation event report corresponding to the instance of communicationsInformationRecord"	o		

c94: if F.44/1b then - else m

c95: if F.46/2a or F.46/6a or F.46/7a or F.46/8a or F.46/9a or F.46/10a or F.46/12a then m else -

F.9.3 Attributes

The supplier of the implementation shall state whether or not the attributes specified by all of the packages instantiated in a managed object of this class are supported, in the Support and Additional information columns of Table F.40. The supplier of the implementation shall indicate support for each of the operations for each attribute supported.

Table F.47 – communicationInformationRecord Attribute support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace		Add		Remove		Set to default		Additional information
				Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	
1	"Rec. X.721 ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c96		c97		-		-		-		-		
2	"Rec. X.721 ISO/IEC 10165-2 : 1992": nameBinding	{2 9 3 2 7 63}	OBJECT IDENTIFIER	x		m		x		-		-		-		
3	"Rec. X.721 ISO/IEC 10165-2 : 1992": objectClass	{2 9 3 2 7 65}	ObjectClass	x		m		x		-		-		-		
4	"Rec. X.721 ISO/IEC 10165-2 : 1992": packages	{2 9 3 2 7 66}	SET OF OBJECT IDENTIFIER	c98		c99		c98		c98		c98		-		
5	"Rec. X.721 ISO/IEC 10165-2 : 1992": logRecordId	{2 9 3 2 7 3}		x		m		x		-		-		-		
6	"Rec. X.721 ISO/IEC 10165-2 : 1992": loggingTime	{2 9 3 2 7 59}		x		m		x		-		-		-		
7	"Rec. X.721 ISO/IEC 10165-2 : 1992": managedObjectClass	{2 9 3 2 7 60}		x		m		x		-		-		-		
8	"Rec. X.721 ISO/IEC 10165-2 : 1992": managedObjectInstance	{2 9 3 2 7 61}		x		m		x		-		-		-		
9	"Rec. X.721 ISO/IEC 10165-2 : 1992": eventType	{2 9 3 2 7 14}		x		m		x		-		-		-		
10	"Rec. X.721 ISO/IEC 10165-2 : 1992": eventTime	{2 9 3 2 7 13}		c100		c101		c100		-		-		-		
11	"Rec. X.721 ISO/IEC 10165-2 : 1992": notificationIdentifier	{2 9 3 2 7 16}		c102		c103		c102		-		-		-		
12	"Rec. X.721 ISO/IEC 10165-2 : 1992": correlatedNotifications	{2 9 3 2 7 12}		c104		c105		c104		-		-		-		
13	"Rec. X.721 ISO/IEC 10165-2 : 1992": additionalText	{2 9 3 2 7 7}		c106		c107		c106		-		-		-		
14	"Rec. X.721 ISO/IEC 10165-2 : 1992": additionalInformation	{2 9 3 2 7 6}		c108		c109		c108		-		-		-		
15	informationType	{2 14 0 7 43}		x		m		x		-		-		-		
16	informationData	{2 14 0 7 45}		c110		c111		c110		c110		c110		-		

c96: if F.46/1a then x else -

c97: if F.46/1a then m else -

c98: if F.46/2a then x else -

c99: if F.46/2a then m else -

c100: if F.46/6a then m else -

c101: if F.46/6a then x else -

c102: if F.46/7a then m else -