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AMENDMENT 1
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Information technology — Open Systems Interconnection — Systems Management: State Management Function

AMENDMENT 1: Implementation conformance statement proformas

Technologies de l'information — Interconnexion de systèmes ouverts (OSI) — Gestion-systèmes: Fonction de gestion d'états

AMENDEMENT 1: Proformes ICS

Reference number
ISO/IEC 10164-2:1993/Amd.1:1996(E)

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Foreword

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Amendment 1 to International Standard ISO/IEC 10164-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open systems interconnection, data management and open distributed processing*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.731/Amd.1.

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Introduction

This amendment includes tables, which document the mandatory and optional management information specific to the State Management Function. This amendment will be used by Profile specifiers, for example, those developing International Standardized Profiles (ISPs), to specify an explicit subset of capability, which will afford interoperability between implementations. The tables also include a column for equipment vendors to state the capability of their products in terms of the Profiles or base specification. The table structures comply with the Guidelines for Implementation Conformance Statement Proformas specified in ITU-T Rec. X.724 | ISO/IEC 10165-6.

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INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – SYSTEMS MANAGEMENT: STATE MANAGEMENT FUNCTION

AMENDMENT 1
(to Rec. X.731 | ISO/IEC 10164-2)

IMPLEMENTATION CONFORMANCE STATEMENT PROFORMAS

1) *Add the following footnote to the first list item in 2.1:*

"[1] As amended by ITU-T Rec. X.701/Cor.2 | ISO/IEC 10040/Cor.2"

2) *Add the following reference to 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.*

3) *Add the following references to 2.2:*

– 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.*

– ITU-T Recommendation X.296[2], *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.*

And then add the following footnote:

[2] Presently at the stage of draft.

4) *Apply the following changes to 3.4:*

Add the following items to the list

"Management Information Conformance Statement (MICS)"

"Managed Object Conformance Statement (MOCS)"

"MICS proforma"

"MOCS proforma".

Delete item c) and d), *re-label the list and re-arrange the list in alphabetic order.*

5) *Apply the following change to 3.7:*

Replace "system conformance statement" *with the following*:

"a) PICS proforma;

b) protocol implementation conformance statement;

c) system conformance statement."

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6) *Renumber 3.8 as 3.9 and insert the following new subclause:*

"3.8 Implementation conformance statement proforma definitions

This Recommendation | International Standard makes use of the following terms defined in ITU-T Rec. X.724 | ISO/IEC 10165-6:

a) Managed Relationship Conformance Statement (MRCS);

b) Management Conformance Summary (MCS);

c) MCS proforma;

d) MRCS proforma."

7) *Add the following abbreviations to clause 4:*

"ICS Implementation Conformance Statement

MCS Management Conformance Summary

MICS Management Information Conformance Statement

MIDS Management Information Definition Statement

MOCS Managed Object Conformance Statement

MRCS Managed Relationship Conformance Statement

PICS Protocol Implementation Conformance Statement"

8) *Replace clause 13 with the following:*

"13 Conformance

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

13.1 Static conformance

The implementation shall conform to the requirements of this Recommendation | 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 A.1.

If a claim of conformance is made for support in the manager role, the implementation shall support at least the notification or one of the management operations specified in this Recommendation | International Standard. The conformance requirements in the manager role for those management operations and notification are specified in Table A.3 and further tables referenced by Annex A.

If a claim of conformance is made for support in the agent role, the implementation shall support at least one of the attributes, attribute group, notification identified in Table A.4. The conformance requirements in the agent role are specified in Annex A and further tables referenced by Annex A.

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.

NOTE – Prior to the publication of this amendment, this Recommendation | International Standard identified general and dependent conformance classes. A claim of conformance similar to general conformance class can be made by stating support in the manager role, the agent role, or both roles, for object events functional unit in Table A.2. A claim of conformance similar to dependent conformance class can be made by stating support for at least one of the items in Tables A.3 or A.4.

13.2 Dynamic conformance

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

13.3 Management implementation conformance statement requirements

Any MCS proforma, MICS proforma, and MOCS proforma which conforms to this Recommendation | International Standard shall be technically identical to the proformas specified in Annexes A, B, and C preserving table numbering and the index numbers of items, and differing only in pagination and page headers.

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The supplier of an implementation which is claimed to conform to this Recommendation | International Standard shall complete a copy of the management conformance summary (MCS) provided in Annex A as part of the conformance requirements together with any other ICS proformas referenced as applicable from that MCS. An ICS which conforms to this Recommendation | International Standard shall:

- describe an implementation which conforms to this Recommendation | 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.

Claims of conformance to the management information defined in this Recommendation | International Standard in managed object classes defined elsewhere shall include the requirements of the MIDS proforma, as specified in Annex D, in the MOCS for the managed object class. "

9) *Apply the following change to 11.1.1.1:*

In the last sentence, replace "11.1.1.1.2" *by* "11.1.1.2"

10) *Apply the following change to 11.1.2.1:*

In the last sentence, replace "11.1.1.2.2" *by* "11.1.2.2"

11) *Apply the following changes to Figure 4:*

Move the incoming arrow head from the left line at the top of the "Busy" block within the "ENABLED" and "UNLOCKED" blocks and place it on the centre line (i.e. the arrow will then show transition from "Idle" to "Busy").

Move the incoming arrow head from the right line at the tope of the "Active" block within the "ENABLED" and "SHUTTING DOWN" blocks and place it on the left line.

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12) *Add the following annexes:*

Annex A

MCS proforma[3)]

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

A.1 Introduction

A.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.

A.1.2 Instructions for completing the MCS proforma to produce an MCS

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.

A.1.3 Symbols, abbreviations and terms

For all annexes of this Recommendation I International Standard, the following common notations, defined in CCITT Rec. X.291 I ISO/IEC 9646-2 and ITU-T Rec. X.296 I 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 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 Recommendation I International Standard, the following common notations, defined in CCITT Rec. X.291 I ISO/IEC 9646-2 and ITU-T Rec. X.296 I 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)

A.1.4 Table format

Some of the tables in this Recommendation I International Standard have been split because the information is too wide to fit on the page. Where this occurs, the index number of the first block of columns are the index numbers of the corresponding rows of the remaining blocks of columns. A complete table reconstructed from the constituent parts should have the following layout:

Index	First block of columns	Second block of columns	Etc.

3) Users of this Recommendation I 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. Instructions for MCS proforma are specified in ITU-T Rec. X.724 I ISO/IEC 10165-6.

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In this Recommendation | International Standard the constituent parts of the table appear consecutively, starting with the first block of columns.

When a table with sub-rows is too wide to fit on a page, the continuation tables(s) have been constructed with index numbers identical to the index numbers in the corresponding rows of the first table, and with sub-index numbers corresponding to the sub-rows within each indexed row. For example, if Table X.1 has 2 rows and the continuation of Table X.1 has 2 sub-rows for each row, the tables are presented as follows:

Table X.1 – Title

					Support		
Index	A	B	C	D	E	F	G
1	a	b	–				
2	a	b	–				

Table X.1 (*concluded*) – Title

Index	Sub-index	H	I	J	K	L
1	1.1	h	i	j		
	1.2	h	i	j		
2	2.1	h	i	j		
	2.2	h	i	j		

A complete table reconstructed from the constituent parts should have the following layout:

					Support								
Index	A	B	C	D	E	F	G	Sub-index	H	I	J	K	L
1	a	b	–					1.1	h	i	j		
								1.2	h	i	j		
2	a	b	–					2.1	h	i	j		
								2.2	h	i	j		

References made to cells within tables shall be interpreted as references within reconstructed tabled. In the example, above, the reference X.1/1d corresponds to the blank cell in the column G for row with Index 1, and X.1/1.2b corresponds to the blank cell in column L for row with Sub-index 1.2

A.2 Identification of the implementation

A.2.1 Date of statement

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

Date of statement

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A.2.2 Identification of the implementation

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

A.2.3 Contact

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

A.3 Identification of the Recommendation | 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 Recommendation | International Standard which specifies the management information to which conformance is claimed, in the box below.

Recommendation	International Standard to which conformance is claimed

A.3.1 Technical corrigenda implemented

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

A.3.2 Amendments implemented

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

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A.4 Management conformance summary

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

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

Table A.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 support for the systems management functional units in Table A.2.

Table A.2 – Systems management functional unit

Index	Capability	Manager		Agent		Additional information
		Status	Support	Status	Support	
1	state change reporting functional unit	c1		c2		
c1: if A.1/1a then o else –. c2: if A.1/2a then o else –.						

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

Table A.3 – Manager role minimum conformance requirement

Index	Item	Status	Support	Additional information
1	Operations on generic state attributes and attribute group	c3		
2	State change notification	c4		
3	Operations on managed objects	c3		
c3: if A.2/1a then o else (if A.1/1a then o.2 else –). c4: if A.2/1a then m else (if A.1/1a then o.2 else –).				

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

Table A.4 – Agent role minimum conformance requirement

Index	Item	Status	Support	Table reference	Additional information
1	operationalState attribute	c5			
2	usageState attribute	c5			
3	administrativeState attribute	c5			
4	alarmStatus attribute	c5			
5	proceduralStatus attribute	c5			
6	availabilityStatus attribute	c5			
7	controlStatus attribute	c5			
8	standbyStatus attribute	c5			
9	unknownStatus attribute	c5			
10	state attribute group	c5			
11	State change notification	c6			
12	state change record managed object class	c7		–	

c5: if A.2/1b then o else (if A.1/2a then o.3 else –).

c6: if A.2/1b then m else (if A.1/2a then o.3 else –).

c7: if A.4/11a and A.5/1a then m else –.

NOTE – The Table reference column in this table is the notification, attributes, or attribute group table reference of the MOCS supplied by the supplier of the managed object which claims to import the notification or attribute from this Recommendation | International Standard.

Table A.5 – Logging of event records

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

c8: if A.1/2a then o else –.

NOTE 1 – Conformance to this Recommendation | 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 Recommendation | International Standards summarized in Tables A.6 to A.9. For each Recommendation | 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 A.6 to A.9 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.

NOTE 2 – Conformance to the MAPDUs defined in this Recommendation | International Standard can be claimed by completing the corresponding tables in the MICS and MOCS annexes of the referenced Recommendations | International Standards.

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Table A.6 – PICS support summary

Index	Identification of the document that includes the PICS proforma	Table numbers of PICS proforma	Description	Constraints and values	Status	Support	Table numbers of PICS	Additional information
1	CCITT Rec. X.730 | ISO/IEC, 10164-1	Annex E all tables	SM application context	Object Identifier	m			

Table A.7 – 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	CCITT Rec. X.731 | ISO/IEC 10164-2	Annex C all tables	stateChange Record	–	c9			
c9: if A.4/12a then m else –.								

Table A.8 – 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	CCITT Rec. X.735 | ISO/IEC 10164-6	Item D.1/1	logRecord-log name binding	–	c10			
c10: if A.5/1a then o else –.								

Table A.9 – 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	CCITT Rec. X.731 | ISO/IEC 10164-2	Tables B.1 and B.2	operations on generic state attributes and attribute group	–	c11			
2	CCITT Rec. X.731 | ISO/IEC 10164-2	Table B.3	notifications	–	c12			
3	CCITT Rec. X.731 | ISO/IEC 10164-2	Tables B.4 and B.5	management oprations	–	c13			
c11: if A.3/1a then m else –. c12: if A.3/2a then m else –. c13: if A.3/3a then m else –.								

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Annex B

MICS proforma[4)]

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

B.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 Recommendation | International Standard, to provide conformance information in a standard form.

B.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 Additional information column shall be used to identify the object classes for which the management operations are supported. The supplier of the implementation shall state which items are supported in tables below and if necessary, provide additional information.

B.3 Symbols, abbreviations and terms

The following abbreviations are used throughout the MICS proforma:

dmi-att	joint-iso-ccitt ms(9) smi(3) part2(2) attribute(7)
dmi-not	joint-iso-ccitt ms(9) smi(3) part2(2) notification(10)

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

B.4 Statement of conformance to the management information

B.4.1 Generic state attributes and attribute group

The specifier of a managed object class that claims to support the state attributes specified by CCITT Rec. X.731 | ISO/IEC 10164-2 shall import a copy of Table B.1 and complete it.

---

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Table B.1 – Generic state attributes support

Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Set by create		Get		Replace	
				Status	Support	Status	Support	Status	Support
1	operationalState	{dmi-att 35}	–	–		o.4		–	
2	usageState	{dmi-att 39}	–	–		o.4		–	
3	administrativeState	{dmi-att 31}	–	o.4		o.4		o.4	
4	alarmStatus	{dmi-att 32}	–	o.4		o.4		o.4	
5	proceduralStatus	{dmi-att 36}	–	–		o.4		–	
6	availabilityStatus	{dmi-att 33}	–	–		o.4		–	
7	controlStatus	{dmi-att 34}	–	o.4		o.4		o.4	
8	standbyStatus	{dmi-att 37}	–	–		o.4		–	
9	unknownStatus	{dmi-att 38}	–	–		o.4		–	

Table B.1 (*concluded*) – Generic state attributes support

Index	Add		Remove		Set to default		Additional information
	Status	Support	Status	Support	Status	Support	
1	–		–		–		
2	–		–		–		
3	–		–		–		
4	o.4		o.4		–		
5	–		–		–		
6	–		–		–		
7	o.4		o.4		–		
8	–		–		–		
9	–		–		–		

The specifier of a managed object class that claims to support the state attribute group specified by CCITT Rec. X.731 | ISO/IEC 10164-2 shall import a copy of Table B.2 and complete it.

Table B.2 – State attribute group

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	state	{dmi-att 1}	–	o.4		–		

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B.4.2 Notifications

The specifier of a manager role implementation that claims to support the notification specified in this Recommendation | International Standard shall import a copy of Table B.3 and complete it.

Table B.3 – Notification support

Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Support		Additional information
					Confirmed	Non-confirmed	
1	stateChange	{dmi-not 14}	–	c1			
c1: if A.3/2a then m else –.							

Table B.3 (*concluded*) – Notification support

Index	Sub-index	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
1	1.1	sourceIndicator	{dmi-att 26}	0 to 3	m		
	1.2	attributeIdentifierList	{dmi-att 8}	–	m		
	1.3	stateChangeDefinition	{dmi-att 28}	–	m		
	1.3.1	attributeId	–	–	m		
	1.3.2	oldAttributeValue	–	–	m		
	1.3.3	newAttributeValue	–	–	m		
	1.4	notificationIdentifier	{dmi-att 16}	INTEGER	m		
	1.5	correlatedNotifications	{dmi-att 12}	–	m		
	1.4.1	correlatedNotifications	–	–	m		
	1.4.2	sourceObjectInst	–	–	m		
	1.4.2.1	distinguishedName	–	–	m		
	1.4.2.2	nonSpecificForm	–	–	m		
	1.4.2.3	localDistinguishedName	–	–	m		
	1.6	additionalText	{dmi-att 7}	–	m		
	1.7	additionalInformation	{dmi-att 6}	–	m		

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B.4.2 Attributes

The specifier of a manager role implementation that claims to support management operations on the attributes specified in this Recommendation | International Standard shall import a copy of Table B.4 and complete it.

Table B.4 – Attribute support

				Set by create		Get		Replace	
Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Status	Support	Status	Support	Status	Support
1	objectClass	{dmi-att 65}	–	–		o.5		–	
2	nameBinding	{dmi-att 63}	–	–		o.5		–	
3	packages	{dmi-att 66}	–	–		o.5		–	
4	allomorphs	{dmi-att 50}	–	–		o.5		–	
5	log recordId	{dmi-att 3}	–	–		o.5		–	
6	loggingTime	{dmi-att 59}	–	–		o.5		–	
7	managedObjectClass	{dmi-att 60}	–	–		o.5		–	
8	managedObjectInstance	{dmi-att 61}	–	–		o.5		–	
9	eventType	{dmi-att 14}	–	–		o.5		–	
10	eventTime	{dmi-att 13}	–	–		o.5		–	
11	notificationIdentifier	{dmi-att 16}	–	–		o.5		–	
12	correlatedNotifications	{dmi-att 12}	–	–		o.5		–	
13	additionalText	{dmi-att 7}	–	–		o.5		–	
14	additionalInformation	{dmi-att 6}	–	–		o.5		–	
15	stateChangeDefinition	{dmi-att 28}	–	–		o.5		–	
16	sourceIndicator	{dmi-att 26}	–	–		o.5		–	
17	attributeIdentifierList	{dmi-att 8}	–	–		o.5		–	

(continued)

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Table B.4 (*concluded*) – Attribute support

	Add		Remove		Set to default		
Index	Status	Support	Status	Support	Status	Support	Additional information
1	–		–		–		
2	–		–		–		
3	–		–		–		
4	–		–		–		
5	–		–		–		
6	–		–		–		
7	–		–		–		
8	–		–		–		
9	–		–		–		
10	–		–		–		
11	–		–		–		
12	–		–		–		
13	–		–		–		
14	–		–		–		
15	–		–		–		
16	–		–		–		
17	–		–		–		

B.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 managed objects specified in this Recommendation | International Standard shall import a copy of Table B.5 and complete it. The Additional information column shall be used to indicate any restrictions in the claim to support the create or delete management operations.

Table B.5 – Create and delete support

Index	Operation	Constraints and values	Status	Support	Additional information
1	Create support	–	x		
1.1	Create with reference object	–	–		
2	Delete support	stateChangeRecord managed object	o.5		

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Annex C

MOCS proforma[5)]

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

C.1 Introduction

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

C.2 Instructions for completing the MOCS proforma to produce a MOCS

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.

C.3 Symbols, abbreviations and terms

The following abbreviations are used throughout the proformas:

dmi-att joint-iso-ccitt ms(9) smi(3) part2(2) attribute(7)

dmi-moc joint-iso-ccitt ms(9) smi(3) part2(2) managedObjectClass(3)

dmi-not joint-iso-ccitt ms(9) smi(3) part2(2) notification(10)

dmi-pkg joint-iso-ccitt ms(9) smi(3) part2(2) package(4)

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

The following requirement is commonly used throughout this MOCS proforma:

c1: if C.3/3a or C.3/6a or C.3/7a or C.3/8a or C.3/9a or C.3/10a or C.3/12a or C.3/13a then m else –.

c2: if C.1/1b then – else m.

C.4 State change record managed object class

C.4.1 Statement of conformance to the managed object class

See Table C.1.

Table C.1 – 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	StateChangeRecord	{dmi-moc 12}		

5) Users of this Recommendation | International Standard may freely reproduce the MOCS proforma in this annex so that it can be used for its intended purpose, and may further publish the completed MOCS. Instructions for completing the MOCS proforma are specified in ITU-T Rec. X.724 | ISO/IEC 10165-6.

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If the answer to the actual class question in the managed object class support table is "N", the supplier of the implementation shall supply the actual class support details, in Table C.2.

Table C.2 – Actual class support

Index	Actual managed object class template label	Value of object identifier for managed object class	Additional information
1			

C.4.2 State change record packages

See Table C.3.

Table C.3 – State change record packages

Index	Package name	Value of object identifier	Constraints and values	Status	Support	Additional information
1	topPackage	–	–	m		
2	packagesPackage	{dmi-pkg 16}	–	c1		
3	allomorphicPackage	{dmi-pkg 17}	–	c2		
4	logRecordPackage	–	–	m		
5	eventLogRecordPackage	–	–	m		
6	eventTimePackage	{dmi-pkg 11}	–	o		
7	notificationIdentifierPackage	{dmi-pkg 24}	–	o		
8	correlatedNotificationPackage	{dmi-pkg 23}	–	o		
9	additionalTextPackage	{dmi-pkg 19}	–	o		
10	additionalInformationPackage	{dmi-pkg 18}	–	o		
11	stateChangeRecordPackage	–	–	m		
12	sourceIndicatorPackage	{dmi-pkg 28}	–	o		
13	attributeIdentifierListPackage	{dmi-pkg 20}	–	o		

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C.4.3 Attributes

See Table C.4.

Table C.4 – State change record attribute support

				Set by create		Get		Replace	
Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Status	Support	Status	Support	Status	Support
1	objectClass	{dmi-att 65}	–	x		m		x	
2	nameBinding	{dmi-att 63}	–	x		m		x	
3	packages	{dmi-att 66}	–	x		c1		x	
4	allomorphs	{dmi-att 50}	–	x		c2		x	
5	log recordId	{dmi-att 3}	–	x		m		x	
6	loggingTime	{dmi-att 59}	–	x		m		x	
7	managedObjectClass	{dmi-att 60}	–	x		m		x	
8	managedObjectInstance	{dmi-att 61}	–	x		m		x	
9	eventType	{dmi-att 14}	–	x		m		x	
10	eventTime	{dmi-att 13}	–	x		c3		x	
11	notificationIdentifier	{dmi-att 16}	–	x		c4		x	
12	correlatedNotifications	{dmi-att 12}	–	x		c5		x	
13	additionalText	{dmi-att 7}	–	x		c6		x	
14	additionalInformation	{dmi-att 6}	–	x		c7		x	
15	stateChangeDefinition	{dmi-att 28}	–	x		m		x	
16	sourceIndicator	{dmi-att 26}	–	x		c8		x	
17	attributeIidentifierList	{dmi-att 8}	–	x		c9		x	

c3 If C.3/6a then m else –.
c4 If C.3/7a then m else –.
c5 If C.3/8a then m else –.
c6 If C.3/9a then m else –.
c7 If C.3/10a then m else –.
c8 If C.3/12a then m else –.
c9 If C.3/13a then m else –.

(continued)

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Table C.4 (*concluded*) – State change record attribute support

	Add		Remove		Set to default		
Index	Status	Support	Status	Support	Status	Support	Additional information
1	–		–		–		
2	–		–		–		
3	x		x		–		
4	x		x		–		
5	–		–		–		
6	–		–		–		
7	–		–		–		
8	–		–		–		
9	–		–		–		
10	–		–		–		
11	–		–		–		
12	x		x		–		
13	–		–		–		
14	x		x		–		
15	x		x		–		
16	–		–		–		
17	x		x		–		

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Annex D

MIDS proforma[6)]

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

D.1 Symbols, abbreviations and terms

The following abbreviations are used throughout the proformas:

dmi-att joint-iso-ccitt ms(9) smi(3) part2(2) attribute(7)

dmi-not joint-iso-ccitt ms(9) smi(3) part2(2) notification(10)

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

D.2 Notification

The specifier of a managed object class that claims to support the notification specified by CCITT Rec. X.731 I ISO/IEC 10164-2 shall import a copy of Table D.1 and complete it according to the instructions specified in ITU-T Rec. X.724 I ISO/IEC 10165-6.

Table D.1 – Notification support

					Support		
Index	Notification type template label	Value of object identifier for notification type	Constraints and values	Status	Confirmed	Non-confirmed	Additional information
1	stateChange	{dmi-not 14}	–				

(continued)

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Table D.1 (*concluded*) – Notification support

Index	Sub-index	Notification field name label	Value of object identifier of attribute type associated with field	Constraints and values	Status	Support	Additional information
1	1.1	sourceIndicator	{dmi-att 26}	0 to 3	o		
	1.2	attributeIdentifierList	{dmi-att 8}	–	o		
	1.3	stateChangeDefinition	{dmi-att 28}	–	m		
	1.3.1	attributeId	–	–	m		
	1.3.2	oldAttributeValue	–	–	o		
	1.3.3	newAttributeValue	–	–	m		
	1.4	notificationIdentifier	{dmi-att 16}	INTEGER	c3		
	1.5	correlatedNotifications	{dmi-att 12}	–	o		
	1.4.1	correlatedNotifications	–	–	c:m		
	1.4.2	sourceObjectInst	–	–	c:o		
	1.4.2.1	distinguishedName	–	–	c:o.6		
	1.4.2.2	nonSpecificForm	–	–	c:o.6		
	1.4.2.3	localDistinguishedName	–	–	c:o.6		
	1.6	additionalText	{dmi-att 7}	–	o		
	1.7	additionalInformation	{dmi-att 6}	–	o		

c1: if D.1/1.4a then m else o.
c2: if D.1/2.4a then m else o.
c3: if D.1/3.5a then m else o.

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