# INTERNATIONAL STANDARD

# ISO/IEC 10747

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AMENDMENT 1 1996-07-15

## Information technology — Telecommunications and information exchange between systems — Protocol for exchange of inter-domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs

AMENDMENTAnd 1:1996 https://standards.iteh.ai/catalog/standards/sist/123b79eb-bbe8-44b0-bf59e1d89bmplementation\_conformance statement proformas

> Technologies de l'information — Télécommunications et échange d'information entre systèmes — Protocole pour échange d'information inter-domaine de routage parmi les systèmes intermédiaires supportant la transmission de PDUs de l'ISO 8473

AMENDEMENT 1: Proformes de déclaration de conformité de mise en œuvre



### 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 1 to International Standard ISO/IEC 10747 : 1994 was prepared by Joint Technical Committee ISO/IEC FTC 1, Information technology, Subcommittee SC 6, Telecommunications and information exchange between systems.

<u>ISO/IEC 10747:1994/Amd 1:1996</u> https://standards.iteh.ai/catalog/standards/sist/123b79eb-bbe8-44b0-bf59e1d8969b1d4b/iso-iec-10747-1994-amd-1-1996

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Information technology – Telecommunications and information exchange between systems – Protocol for exchange of inter-domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs

AMENDMENT 1:

Implementation conformance statement proformas

### Page 1

"

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

Annexes L, M, N and O, which are integral parts of this International Standard provide ICS proformas associated with IDRP management information.

Add the following references to clause 2 "Normative References" **PREVIEW** 

ISO/IEC 8825: 1990, Information technology - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN. 1).

ISO/IEC 9646-1: 1994 Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts - 994-and-1-1996

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.

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

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.

### Page 5

Add the following abbreviations to subclause 4.3 "Other Abbreviations":

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MCS	management conformance summary
MICS	management information conformance statement
MOCS	managed object conformance statement
MRCS	managed relationship conformance statement

## Page 74

Add the following after the title "12 Conformance":

#### Conformance for protocol implementation 12.1

This subclause specifies the conformance for protocol implementation of IDRP. The supplier of implementation for protocol implementation shall support the following specification.

NOTE - The conformance for protocol implementation is independent of the conformance for management information implementation specified in subclause 12.2.

## iTeh STANDARD PREVIEW

Replace title number of "12.1", "12.2", "(2212", "12.2.2" (12.2.2" and 12.2.4" with "12.1.1", "12.1.2", "12.1.2.1", "12.1.2.2", "12.1.2.3" and "12.1.2.4", respectively.

Delete "t)" of subclause 12.1.1 "Static conformance for all BISS"/Amd 1:1996

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Add the following after subclause 12.1.2.4.4.

### Conformance for management information implementation 12.2

This subclause specifies the conformance for management information implementation of IDRP. The supplier of implementation for management information implementation shall support the following specification.

NOTE - The conformance for management information implementation is independent of the conformance for protocol implementation specified in subclause 12.1.

#### 12.2.1 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 L.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 L.2 and further tables referenced by Annex L.

If a claim of conformance is made for support in the agent role, the implementation shall support one or more instances of the IDRP config managed object class and the Adjacent BIS managed object class identified in Table L.3 of this International Standard and further tables referenced by Annex L.

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 L.6 of this International Standard for each supported managed object.

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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.

### 12.2.2 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.

## 12.2.2.1 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 L, M, N, and O 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 L 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.

An implementation claming conformance to this International Standard in the agent role as a managed implementation shall: **iTeh STANDARD PREVIEW** 

- support the IDRP config MO and the Adjacent BIS MO. (standards.iteh.ai)

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Add the following Annexes after Annex K.

## Annex L

### (normative)

### MCS proforma<sup>1</sup>)

### L.1 Introduction

### L.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.

### L.1.2 Instructions for completing the MCS proforma to produce an MCS<sup>2</sup>)

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.

### **iTeh STANDARD PREVIEW** L.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: ISO/IEC 10747:1994/Amd 1:1996

- m mandatory; https://standards.iteh.ai/catalog/standards/sist/123b79eb-bbe8-44b0-bf59-
- o optional; e1d8969b1d4b/iso-iec-10747-1994-amd-1-1996
- 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 - 0' 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).

<sup>&</sup>lt;sup>1</sup>) 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.

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

### L.2 Identification of the implementation

### L.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

### L.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.

### L.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. (standards.iteh.ai)

<u>ISO/IEC 10747:1994/Amd 1:1996</u> https://standards.iteh.ai/catalog/standards/sist/123b79eb-bbe8-44b0-bf59e1d8969b1d4b/iso-iec-10747-1994-amd-1-1996

# L.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

### L.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.

### L.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.

### L.4 Management conformance summary

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

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

### Table L.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 management information in the manager role, in Table L.2

### Table L.2 - Manager role minimum conformance requirement

Index	Item	Status	Support	Additional information
1	Operations on managed objects ISO/IEC 10747:1994/An	<u>nd 1:1996</u>		
2	Communications alarm hotification for IDRP config managed gbjecthdards/sist/	123b79eb-bb	e8-44b0-bf5	9-
3	Communications information for IDRP config managed objecto-iec-10747-19	94-and-1-1	996	
4	Activate action for IDRP config managed object	c1		
5	Deactivate action for IDRP config managed object	c1		
6	Activate action for Adjacent BIS managed object	c1		
7	Deactivate action for Adjacent BIS managed object	c1		

c1: if L.1/1a then 0.2 else -

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

### Table L.3 - Agent role minimum conformance requirement

Index	Item	Status	Support	Additional information
1	IDRP config managed object	m		· · · ·
2	Adjacent BIS managed object	m		

### Table L.4 – Logging of event records

Index		Status	Support	Additional information
1	Does the implementation support logging of event records in agent role?	c2		

c2: if L.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

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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 L.5, L.6, and L.7, 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.

Index	Identification of the document that includes the MOCS proforma	Table numbers of MOCS proforma	Description	Constraints and values	Status	 Table numbers of MOCS	Additional information
1	"ISO/IEC 10747"	Table N.1 - N.7	idrpConfig		m		
2	"ISO/IEC 10747"	Table N.8 - N.13	adjacentBIS	—	m		
3	"ISO/IEC 10737 "		communicationInformation Record		c3		
4	"ISO/IEC 10164-4"	Table C.1 - C.4	alarmRecord	_	c3		

### Table L.5 – MOCS support summary

c3: if L.4/1a then m else -

### Table L.6 – MRCS support summary

Index	Identification of the document that includes the MRCS proforma	Table numbers of MRCS proforma	Description	Constraints and values	Status	 Table numbers of MRCS	Additional information
1	"ISO/IEC 10747"	Table O.1/1	idrpConfig-networkEntity		m		
2	"ISO/IEC 10747"	Table O. 1/2	adjacentBIS-idrpConfig	—	m		
3	"ISO/IEC 10164-6 "	Table D. 1/1	logRecord-log	_	c4		

### c4: if L.4/1a then o else -

## iTeh STANDARD PREVIEW

### (standards.iteh.ai) Table L.7 – MICS support summary

Index	Identification of the document that includes the MICS proforma	Table numbers	Description EC 1 s.iteh.ai/catalog/	Constraints and standyaluessist/12	4	Support bbe8-44b0	Table numbers of	Additional information
1	"ISO/IEC 10747"	Table M.1 to M.3	management operations	-100-10/4/-195		1770		
2	"ISO/IEC 10747"	Table M.4	notifications		c6			
3	"ISO/IEC 10747"	Table M.5	actions		c7			

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

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

c7: if L.2/4a or L.2/5a or L.2/6a or L.2/7a then m else -

## Annex M

### (normative)

## **MICS** proforma<sup>1)</sup>

### M.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.

### M.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.

### M.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 L.1.3. (standards.iteh.ai)

## Statement of conformance to the management information

ISO/IEC 10747:1994/Amd 1:1996

## M.4.1 Attributes https://standards.iteh.ai/catalog/standards/sist/123b79eb-bbe8-44b0-bf59-

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The supplier 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.

**M.4** 

<sup>&</sup>lt;sup>1)</sup> 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.

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## M.4.1.1 IDRP config managed object

					t by	G	Get		Replace		dd	Ren	nove	Set to		
					ate									def	ault	
Index	Attribute template label	Value of object identifier for attribute	Constraints and values	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us	Supp ort	Stat us		Additional information
1	"Rec. X.721   ISO/IEC 10165-2 : 1992": allomorphs	{2 9 3 2 7 50}	SET OF ObjectClass	c1		o.2		-		-		-		-		
2	authenticationTypeCode	{2 13 0 3 7 1}	ENUMERATED	c1		0.2		-		-		-		-		
3	capacity	{2 13 0 3 7 7}	INTEGER	-		0.2		-		-		-		-		
4	externalBISNeighbor	{2 13 0 3 7 9}	SET OF OCTET STRING	c1		o.2		o.2		-		-		-		
5	holdTime	{2 13 0 3 7 10}	INTEGER	-		o.2		-		-		-		-		
6	idrpConfigID	{2 13 0 3 7 50}	OCTET STRING	c1		o.2		-		-		-		-		
7	internalBIS	{2 13 0 3 7 12}	SET OF OCTET STRING	c1		0.2		o.2		-		-		-		
8	internalSystems	{2 13 0 3 7 13}	SEQUENCE	c1		o.2		o.2		-		-		-		
9	intralS	{2 13 0 3 7 14}	SET OF OCTET STRING	c1		o.2		o.2		-		-		-		
10	locE-pense	{2 13 0 3 7 24}	INTEGER	-		o.2		-		-		-		-		
11	localRDI	{2 13 0 3 7 22}	OCTET STRING	c1		o.2		o.2		-		-		-		
12	localSNPA	{2 13 0 3 7 23}	SET OF SET OF OCTET STRING	c1		o.2		0.2		-		-		-		
13	maxCPUOverloadTimer	{2 13 0 3 7 25}	SEQUENCE	-		o.2		-		-		-		-		
14	maxPDULocal	{2 13 0 3 7 26}	INTEGER			0.2	P	R	F	V	R	X	t	-		
15	maxRIBIntegrityCheck	{2 13 0 3 7 28}	INTEGER	-		0.2				<b>•</b> - <b>•</b>		•_•		-		
16	maxRIBIntegrityTimer	{2 13 0 3 7 29}	SEQUENCE	aı	d	0.2	to	h	ai	· -		-		-		
17	minRDOriginationTimer	{2 13 0 3 7 30}	SEQUÉNCE			0.2		-	<b>,</b>	-		-		-		
18	multiExit	{2 13 0 3 7 32}	BOOLEAN	c1		0.2		0.2		-		-		-		
19	"Rec721   ISO/IEC 10165-2 : 1992": ht	{2 9 3 2 7 63} tps://standards	OBJECT/IEC 1	<u>074</u> /star	<u>7:19</u> dard	9 <u>4/2</u> ls/sis	<u>md</u> t/12.	<u>1:19</u> 3b79	<u>96</u> eb-1	- bbe8	8-441	- 90-b	659-	-		
	nameBinding	e1d	8969b1d4b/ise	iec	107	47_	994	l-an	<del>d-1</del> -	199	6					
20	"Rec721   ISO/IEC 10165-2 : 1992":	{2 9 3 2 7 65}	ObjectClass	c1		0.2		-		-		-		-		
21	objectClass "Rec721   ISO/IEC 10165-2 : 1992":	{2 9 3 2 7 66}	SET OF OBJECT	c1		o.2		-		-		-		-		
	packages	{2 13 0 3 7 34}	INTEGER	-		o.2		<u> </u>	1	-		-	†	<u> </u>	<u> </u>	
22 23	priority rdLRE	{2 13 0 3 7 34} {2 13 0 3 7 36}	INTEGER	-	+	0.2		-	1	1.		<u> </u>		1 -		
23	rdTransitDelay	{2 13 0 3 7 30} {2 13 0 3 7 37}	INTEGER	<u> </u>	+	0.2		-	t	1.		<u> </u>	1	1.	<u> </u>	
24 25	rdcConfig	{2 13 0 3 7 35}	SET OF	c1	1	0.2		0.2		-	$\uparrow$	-		-		
26	retransmissionTime	{2 13 0 3 7 38}	INTEGER	1.		0.2	1	-	1	-		-		-		
27	ribAttsSet	{2 13 0 3 7 39}	SEQUENCE	-		0.2		-		-		-		-		
28	routeServer	{2 13 0 3 7 40}	BOOLEAN	c1		0.2		o.2		-		-		-		
29	version	{2 13 0 3 7 46}	INTEGER	-		0.2		-		-		-		-		

### Table M.1 – idrpConfig Attribute support

c1: if M.4/1a then 0.2 else -