INTERNATIONAL STANDARD

ISO/IEC 9834-3

Third edition
2005-05-01

Information technology — Open Systems Interconnection — Procedures for the operation of OSI Registration Authorities: Registration of Object Identifier arcs beneath the top-level arc jointly administered by ISO and ITU-T

Technologies de l'information — Interconnexion de systèmes ouverts (OSI) — Procédures pour le fonctionnement des autorités d'enregistrement OSI: Enregistrement des valeurs d'arc de l'arbre RH-name-tree à l'usage commun de l'ISO et de l'UIT-T

Reference number
ISO/IEC 9834-3:2005(E)



© ISO/IEC 2005

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS

Not for Resale

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

© ISO/IEC 2005 — All rights reserved

CONTENTS

		Page
1	Scope	1
2	Normative references	1
	2.1 Identical Recommendations | International Standards	1
3	Definitions	1
	3.1 ASN.1 terms	1
	3.2 Directory terms	1
	3.3 RH-name-tree and object identifier tree terms	2
	3.4 Additional definitions	2
4	Abbreviations	2
5	General information	2
6	Elements of information of register entries	2
7	Procedures	3
	7.1 Maintenance of the register	3
	7.2 Recording of entries	3
	7.3 Deletion of entries	3
	7.4 Change of entries	3
	7.5 Resolving disputes	3
Annex A – Proforma for registration		5
	A.1 Key to register entries	5
	A.2 An example of a possible registration entry for joint ISO and ITU-T work	5
	A.3 An example of a possible registration entry for an international organization	5

© ISO/IEC 2003 – All rights reserved

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 9834-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems* in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.662.

This third edition cancels and replaces the second edition (ISO/IEC 9834-3:1998), which has been technically revised.

ISO/IEC 9834 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — Procedures for the operation of OSI Registration Authorities:*

— *Part 1: General procedures and top arcs of the ASN.1 Object Identifier tree*

— *Part 2: Registration procedures for OSI document types*

— *Part 3: Registration of Object Identifier arcs beneath the top-level arc jointly administered by ISO and ITU-T*

— *Part 4: Register of VTE Profiles*

— *Part 5: Register of VT Control Object Definitions*

— *Part 6: Registration of application processes and application entities*

— *Part 7: Joint ISO and ITU-T Registration of International Organizations*

— *Part 8: Generation and registration of Universally Unique Identifiers (UUIDs) and their use as ASN.1 Object Identifier components*

© ISO/IEC 2005 — All rights reserved
Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Introduction

ITU-T Rec. X.660 | ISO/IEC 9834-1 defines procedures for registration to meet requirements for assignment of unambiguous names (e.g., object identifiers as specified in ITU-T Rec. X.680 | ISO/IEC 8824-1, or Distinguished Names as specified in ITU-T Rec. X.501 | ISO/IEC 9594-2) to objects (distinguishable entities). These registration procedures are generally applicable to registration independent of the type of object involved. In particular, ITU-T Rec. X.660 | ISO/IEC 9834-1 defines the registration-hierarchical-name-tree, which is a tree whose nodes correspond to objects that are registered and whose non-leaf nodes may be Registration Authorities. ITU-T Rec. X.660 | ISO/IEC 9834-1 also defines procedures for the delegation of authority for the assignment of names in order to ensure that names are unambiguous.

The root of the ASN.1 object identifier tree is ITU-T Rec. X.660 | ISO/IEC 9834-1. There are three top-level arcs:

Primary integer value	Secondary identifier
0	`itu-t`
1	`iso`
2	`joint-iso-itu-t`

NOTE 1 – In accordance with ITU-T Rec. X.680 | ISO/IEC 8824-1, the secondary identifiers `ccitt` and `joint-iso-ccitt` may be used as synonyms for `itu-t` and `joint-iso-itu-t`, respectively.

NOTE 2 – `itu-r` is an additional secondary identifier for top-level arc `0`.

The Registration Authority for the nodes identified by the top-level arcs `itu-t(0)` and `iso(1)` are provided by ITU-T Rec. X.660 | ISO/IEC 9834-1, Annex A. Further discussion is beyond the scope of this Recommendation | International Standard.

The Registration Authority identified by `{joint-iso-itu-t(2)}` is the "International Registration Authority for assignment of values to ASN.1 object identifier arcs beneath the top-level arc jointly administered by ISO and ITU-T". The operations of this Registration Authority[1)] are specified by this Recommendation | International Standard.

This Recommendation | International Standard is concerned with a Registration Authority which performs a purely administrative role as defined in ITU-T Rec. X.660 | ISO/IEC 9834-1.

1) The Registration Authority for the assignment of arcs for joint ISO/IEC and ITU-T work is the American National Standards Institute (ANSI), http://www.ansi.org.

© ISO/IEC 2003 – All rights reserved

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

--`,,`,,`-`-`,,`,,`,`,,`---

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS

Not for Resale

INTERNATIONAL STANDARD
ITU-T RECOMMENDATION

Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: Registration of object identifier arcs beneath the top-level arc jointly administered by ISO and ITU-T

1 Scope

This Recommendation | International Standard specifies the procedures for operating the International Registration Authority for assignment of values to ASN.1 object identifier arcs beneath the top-level arc jointly administered by ISO and ITU-T.

2 Normative references

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

2.1 Identical Recommendations | International Standards

- ITU-T Recommendation X.501 (2001) | ISO/IEC 9594-2:2001, *Information technology – Open Systems Interconnection – The Directory: Models.*
- ITU-T Recommendation X.660 (2004) | ISO/IEC 9834-1:2004, *Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: General procedures.*
- ITU-T Recommendation X.680 (2002) | ISO/IEC 8824-1:2002, *Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation.*

3 Definitions

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

3.1 ASN.1 terms

This Recommendation | International Standard uses the following terms defined in ITU-T Rec. X.680 | ISO/IEC 8824-1:

a) object;

b) object identifier.

3.2 Directory terms

This Recommendation | International Standard uses the following terms defined in ITU-T Rec. X.501 | ISO/IEC 9594-2:

a) Directory name;

b) relative distinguished name.

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

3.3 RH-name-tree and object identifier tree terms

This Recommendation | International Standard uses the following terms defined in ITU-T Rec. X.660 | ISO/IEC 9834-1:

a) additional secondary identifier;

b) primary integer value;

c) Registration Authority;

d) Registration-hierarchical-name (RH-name);

e) Registration-hierarchical-name-tree (RH-name-tree);

f) secondary value.

3.4 Additional definitions

3.4.1 **register**: The collection of all the entries registered by the registrar.

3.4.2 **RH-name-tree node name**: A type of RH-name that identifies a node in the RH-name-tree.

4 Abbreviations

For the purposes of this Recommendation | International Standard, the following abbreviations apply:

ASN.1	Abstract Syntax Notation One
RH-name-tree	Registration-hierarchical-name-tree

5 General information

5.1 The Registration Authority performs a purely administrative role in recording decisions made by the appropriate ITU-T Study Group | ISO/IEC Subcommittee or ISO Technical Committee on the addition of an entry to the register.

5.2 Where an allocation is made to an international organization or to an area of joint work, the responsible officers shall ensure that an appropriate tree of Registration Authorities be established in order to record all subsequent allocations.

6 Elements of information of register entries

6.1 The elements of information of a register entry shall be:

a) the name of a node in the RH-name-tree, composed of a primary integer value and (optionally) a secondary value (a secondary identifier) drawn from the character set specified for an "identifier" in ITU-T Rec. X.680 | ISO/IEC 8824-1, 11.3 (together forming an instance of the "NameAndNumberForm" for "ObjIdComponent" – see ITU-T Rec. X.680 | ISO/IEC 8824-1, 31.3), each primary integer value of which shall be unique within a register;

NOTE – ITU-T Rec. X.680 | ISO/IEC 8824-1, 11.3, specifies that an "identifier" shall consist of an arbitrary number (one or more) of letters, digits and hyphens and that the initial character shall be a lower-case letter and that the last character shall not be a hyphen and that a hyphen shall not be immediately followed by a hyphen.

b) either:

1) an area of joint ISO/IEC and ITU-T work in which the value is to be applied, specified by the ISO work item number and number of the International Standard in which the RH-name-tree node is specified, and the ITU-T Study Group, Study Period, and Question, and the number of the ITU-T (or CCITT) Recommendation in which the RH-name-tree node is specified, and a brief title; or

2) an international organization producing open standards;

EXAMPLE – The Universal Postal Union (UPU) or the Organization for the Advancement of Structured Information Standards (OASIS) are examples of such international organizations.

c) status of the entry indicating whether the entry is "active" or "deleted"; and

d) either:

1) a "Responsible Officer" nominated by ISO/IEC and a "Responsible Officer" nominated by ITU-T, who will jointly agree on the assignment of RH-name-tree nodes within the area of work; or

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

2) a "Responsible Officer" in the international organization to which the subordinate node(s) are being assigned.

6.2 The registration entry shall be identified by the object identifier derived from the RH-name-tree node name, as specified in ITU-T Rec. X.660 | ISO/IEC 9834-1, Annex A.

7 Procedures

7.1 Maintenance of the register

A register is to be maintained, recording for each entry the information required by clause 6.

7.2 Recording of entries

7.2.1 The register is to have new entries added as the result of simple resolutions by the appropriate ISO/IEC Subcommittee or ISO Technical Committee, ratified by decisions of the appropriate ITU-T Study Group, or as the result of decisions by the appropriate ITU-T Study Group, ratified by simple resolutions by the appropriate ISO/IEC Subcommittee or ISO Technical Committee.

7.2.2 The secondary identifier of the arc beneath top-level arc 2 shall be requested by the Responsible Officers of ISO/IEC and ITU-T or of the international organization. If the secondary identifier is already assigned within the register, or otherwise deemed inappropriate by the Registration Authority, the request shall be rejected by the Registration Authority. Otherwise the secondary identifier shall be assigned.

7.2.3 The primary integer value of the arc shall be assigned by the International Registration Authority. This value shall normally be increased sequentially by the positive integer one, i.e., +1, above the last assigned primary integer value in the register.

7.3 Deletion of entries

7.3.1 The status entry shall be updated upon activation or deletion of an entry.

7.3.2 Entries shall be marked as deleted (but still retained) as the result of simple resolutions by the appropriate ISO/IEC Subcommittee or ISO Technical Committee, ratified by decisions of the appropriate ITU-T Study Group, or as the result of decisions by the appropriate ITU-T Study Group, ratified by simple resolutions by the appropriate ISO/IEC Subcommittee or ISO Technical Committee, when no further assignments of object identifiers are expected in the area of work. The primary integer values (and the secondary identifiers) of arcs marked as deleted shall never be reused for a new arc.

7.4 Change of entries

7.4.1 Entries shall not be changed except to replace the ISO/IEC "Responsible Officer" or project number, or the ITU-T "Responsible Officer" or Question identification.

7.4.2 The former changes shall require a simple resolution of the ISO/IEC Subcommittee or ISO Technical Committee involved in the work, notified in writing to the International Registration Authority.

7.4.3 The latter changes shall require a decision of the ITU-T Study Group involved in the work, notified in writing to the International Registration Authority.

7.5 Resolving disputes

7.5.1 It may come to pass that a dispute in the operation of the register may arise. For example, a secondary identifier may be requested which has already been assigned in the register. Disputes shall be resolved in the following manner.

7.5.2 The international registrar shall inform the ISO/IEC Responsible Officer and the ITU-T Responsible Officer that a dispute has occurred and requires resolution.

7.5.3 The Responsible Officers shall attempt to expedite the resolution of the dispute.

7.5.4 If the Responsible Officers are unable to resolve the dispute, the Convenor of the concerned ISO/IEC Working Group and the Chairman of the concerned ITU-T Working Party shall attempt to expedite the resolution of the dispute.

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

7.5.5 In the event that the Convenor and the Chairman are unable to resolve the dispute, an arc leading to a joint ISO/IEC and ITU-T RH-name-tree node shall not be assigned by the International Registration Authority that assigns values to RH-name-tree arcs beneath arc 2.

Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Annex A

Proforma for registration

(This annex does not form an integral part of this Recommendation | International Standard)

A.1 Key to register entries

i) Primary integer and secondary identifier values allocated to the arc leading to an RH-name-tree node beneath arc 2.

(Multiple values can be allocated to the same organization or area of joint work in a single register entry, by providing a list of identifiers and arc numbers in entry i).)

ii) Brief title and area of work.

iii) ISO Work Item number, if applicable.

iv) ISO Standard number and date, if applicable.

v) ITU-T Question identification, if applicable.

vi) ITU-T Recommendation number and date, if applicable.

vii) ISO "Responsible Officer" or the "Responsible Officer" in the international organization.

viii) ITU-T "Responsible Officer" or the "Responsible Officer" in the international organization.

ix) Status – active/deleted.

A.2 An example of a possible registration entry for joint ISO and ITU-T work

i) `asn1(1)`	ii) ASN.1	ix) active
iii) 97.21.17.3-4	v) (85-88) Q. 40/VII (now Q.12/17)	
iv) ISO/IEC 8824:1987 [now ISO/IEC 8824-1 (2002)]	vi) X.208:1988 (now ITU-T Rec. X.680:2002)	
vii) ISO ASN.1 Rapporteur	viii) ITU-T ASN.1 Rapporteur	

A.3 An example of a possible registration entry for an international organization

i)
`tcs(400)`
`org-x-admin(401)`
`org-x-projects(402)`
`org-x-other(403)`
	ii)
	org-x
		ix)
		active

iii) N/A	v) N/A	
iv) N/A	vi) N/A	
vii) Standards liaison officer in org-x	viii) Standards liaison officer in org-x	

NOTE – It is likely that if this example register entry were approved, then org-x would be approved as an additional secondary identifier for **`joint-iso-itu-t`** (see ITU-T Rec. X.660 | ISO/IEC 9834-1, A.5).

--`,,`,,`-`-`,,`,,`,`,,`---
Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

ICS 35.100.01

Price based on 5 pages

© ISO/IEC 2005 – All rights reserved
Copyright International Organization for Standardization
Reproduced by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale