

ICS 35.100.01

CCS L 79



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17969.1-2015

**Information technology -- Open systems interconnection -- Procedures
for the operation of OSI registration authorities -- Part 1: General
procedures and top arcs of the International Object Identifier tree
(English Translation)**

Issued on: December 10, 2015

Implemented on: August 1, 2016

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of PRC**

Table of Contents

Foreword...	3
1 Scope...	5
2 Normative references...	5
3 Terms and definitions...	6
4 Abbreviations...	11
5 Registration...	12
6 Registration-hierarchical-name...	13
7 Registration procedures for specific types of objects...	18
Appendix A (Normative) Top-level arcs of the OID tree...	21
Appendix B (Normative) Derivation of directory names...	32
Appendix C (Normative) Directory names based on object identifiers...	35
Appendix D (Informative) National Registration Center for OID...	37
References...	38

1 Scope

This part of GB/T 17969 specifies the concept of registration, and also specifies the registration-hierarchical-name-tree, the content of the registration procedures for specific types of objects, the top arc of the International Object Identifier tree, the derivation of directory names and directory names based on object identifiers.

This standard applies to the registration, development and maintenance of object identifiers.

2 Normative references

The following documents are essential for the application of this document. For any referenced document with a date, only the version with the date applies to this document.

For any referenced document without a date, the latest version (including all amendments) applies to this document.

GB/T 9387.3 Information technology - Open systems interconnection - Basic reference model - Part 3: Naming and addressing (GB/T 9387.3-2008, ISO/IEC

7498-3:1997, IDT)

GB 13000 Information technology - Universal multiple-octet coded character set (UCS) (GB

13000-2010, ISO/IEC 10646:2003, IDT)

GB/T 16264.1 Information technology - Open systems interconnection - The directory - Part 1: Overview of concepts, models and services (GB/T 16264.1-2008,

ISO/IEC 9594-1:2005, IDT)

GB/T 16264.2 Information technology - Open systems interconnection - The directory - Part 2: Models (GB/T 16264.2-2008, ISO/IEC 9594-2:2005, IDT)

ISO 3166-1 Codes for the representation of names of countries and their subdivisions - Part 1: Country codes

Secondary identifiers for top-level arcs of the International Object Identifier tree, which are assigned by decision of the relevant ITU-T study group and the relevant ISO/IEC

JTC subcommittee (see A.6.4).

3.6.2 additional Unicode label

The Unicode labels for the top-level arcs of the International Object Identifier tree, which are assigned by decision of the relevant ITU-T study group and the relevant

ISO/IEC JTC subcommittee (see A.6.4).

3.6.3 administrative role (of a Registration Authority)

The role assigning unambiguous names and making them valid according to procedures defined by a Registration Authority.

3.6.4 integer-valued Unicode label

The Unicode label for an arc, which is the character representation of the primary integer value of the arc (without a leading 0).

NOTE: Arcs of the International Object Identifier tree must not have Unicode labels represented by other integer-valued characters (with or without a leading 0) (see 6.2.4).

3.6.5 International Object Identifier tree

A specific form of RH name tree whose root corresponds to this part and whose nodes correspond to the registration authorities responsible for allocating arcs from superior nodes.

3.6.6 Joint ITU-T | ISO/IEC JTC 1 Collaborative Team for object identifiers

A group established in accordance with relevant ITU-T recommendations and ISO/IEC JTC 1 guidelines to promote the joint standardization work related to object identifiers (OIDs).

3.6.7 long arc

A Unicode label from a superior node in the International Object Identifier tree that identifies a node that is not immediately beneath the superior node.

NOTE 1: Long arcs (other than normal arcs) are subject to the unambiguity requirement for all arcs from the superior node (see 6.2.8).

NOTE 2: The only content of a long arc is its Unicode label. A long arc has no primary integer value or secondary identifier. A long arc is essentially a shortcut for a series of arcs, each of which has a primary integer value and its own Unicode label.

NOTE 3: A long arc cannot be used to define the value of an (ASN.1) object identifier type. It can only be used in OID internationalized resource identifiers.

3.6.8 object (of interest)

Anything in the world, usually the world of communications and information processing, that has the following properties:

- a) identifiable (capable of being named);
- b) registrable.

NOTE: Examples of objects are ASN.1 modules (see ISO/IEC 8824-1), information objects (see ISO/IEC 8824-2), XML namespaces (see W3C XML Namespaces), and any other object that can be identified by an OID, URI or IRI.

3.6.9 object identifier

An ordered sequence from the root of the International Object Identifier tree to the primary integer value of a node, which unambiguously identifies the node (see 6.2.8).

3.6.10 OID internationalized resource identifier

An IRI/URI value constrained to the "oid" IRI/URI scheme.

NOTE 1: Semantically, this is an ordered sequence of Unicode labels starting from the root of the International Object Identifier tree that unambiguously identifies nodes for a resource (see 6.2.8).

NOTE 2: The ASN.1 OID-IRI type (see ISO/IEC 8824-1) is the set of all OID internationalized resource identifier values and provides value notations for all OID international resource identifiers based on the

International Object Identifier tree. The corresponding encoding is specified in ISO/IEC 8825.

3.6.11 primary integer value

A primary value of integer type used to unambiguously identify an arc of the International Object Identifier tree.

NOTE: An arc of the International Object Identifier tree has exactly one primary integer value, except for long arcs (which have only Unicode labels).

3.6.12 primary value

A value of a particular type assigned to an RH name tree arc, which unambiguously identifies that arc in the set of arcs that begin at its superior node.

3.6.13 properties of an arc

Assigned primary integer value, Unicode label, and secondary identifier to an arc.

5.2.2 The Registration Authority responsible for a given naming domain shall assign names to that portion of the naming domain administered by subordinate authorities.

The names assigned shall be globally unambiguous and shall be concatenated as prefixes to the names assigned by the subordinate authority. This process, applied repeatedly by various levels of Registration Agents, ensures the generation of unambiguous names. The generation of registered names is further specified in Chapter

6.

NOTE: An organization, a recommended standard or an automated facility can be a registration authority for more than one naming domain partition.

5.3 Operation

5.3.1

Registration Authorities may be concerned with the allocation of unambiguous names (administrative role) and may also be concerned with the definition of registered objects to verify that these definitions are consistent with the standards that define them (technical role).

5.3.2

The criteria for registering objects may vary between registration authorities. Each authority is responsible for establishing these criteria. A Registration Authority may also define criteria for use by any of its subordinate authorities.

NOTE: The criteria considered in registering an object are the level at which the registration is appropriate. For example, the definition of an object registered by a particular Registration Authority may find wider use beyond the scope of that Registration Authority. Although the assigned name is globally unambiguous and usable outside that Registration Authority, it may be desirable to redefine it in a manner that is acceptable to a wider range of people. If so, the redefinition shall be registered with a