Stable Implementation Agreements for Open Systems Interconnection Protocols: Part 6 - Registration Authority Procedures for the OSI Implementors Workshop (OIW)

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Foreword

This part of the Stable Implementation Agreements was prepared by the Registration Special Interest Group (RSIG) of the National Institute of Standards and Technology (NIST) Workshop for Implementors of Open Systems Interconnection (OSI).

This part replaces the previously existing chapter on this subject. There is no significant technical change from this text as previously given.

Future changes and additions to this version of these Implementor Agreements will be published as change pages. Deleted and replaced text will be shown as strikeout. New and replacement text will be shown as shaded.

Table of Contents

Part 6 - Registration Authority Procedures for the OSI Implementors Workshop (OIW) 1

0 Introduction 1

1 Scope 1

2 Normative References 2

3 Registered Information Objects 2

4 Registration Procedures for Object Identifiers 4
- 4.1 SIG Registration Authorization 4
- 4.2 SIG Registration Authority Function and Duties 4
- 4.3 Requirements for Information Object Registration 5
  - 4.3.1 Assignment of Object Identifier Component Values 5
  - 4.3.2 Proposal of Object and Identifier to Plenary 5
  - 4.3.3 Completion of Registration Procedure 5
  - 4.3.4 Changes and Revisions to the Information Object Registration 5
- 4.4 Register Index 6

Annex A (normative)

Assignments to Workshop Organizations 7

Annex B (normative)

Status of 1987 and 1988 Ad-hoc Object Identifiers 8

List of Figures

Figure 1 - Structure of Object Identifier for OIW. 3
Figure 2 - Structure of an Object Identifier for an Example Object for the Registration Authority SIG of OIW. 4

List of Tables

Table 1 - Index Entry Example 6
Table 2 - Identifier Assignments 7

Part 6 - Registration Authority Procedures for the OSI Implementors Workshop (OIW)

NOTE - Previous material in this section has been deleted and is no longer applicable.

This chapter establishes the policies and procedures for the registration of technical objects defined by the OSI Implementors Workshop. Procedures for registering operational and administrative objects, such as the MHS ADMD and PRMD names and addresses, are outside the scope of this chapter.

0 Introduction

In order to communicate, it is necessary to identify the objects involved in communication. These objects have names and addresses. A name identifies an object within the domain of a registration authority. An address is a name that is used to specify the physical or logical location of an object.

OSI names and addresses consist of attributes which are hierarchical in nature and which combine to identify or locate an OSI object unambiguously. Since the relationship between the components of a name or address is hierarchical, it follows that the registration authority for names and addresses should also be hierarchical. A governing organization does not always have sufficient knowledge of organizations lower in the hierarchy to assign values within those organizations. Thus, an approach frequently taken is to delegate registration authority to the lower organizations.

Hierarchy implies an inverted tree-like structure where the number of objects increases from the root of the tree to the leaves of the tree. At the root of the tree, there is one designator that has the greatest scope of authority (largest domain). This designator assigns identifier values to objects under its authority. Each of these objects has a smaller scope of authority than the objects immediately above and may create zero, one, or many subauthorities at the next-lower level. The number of levels in such a tree-like structure is arbitrary.

1 Scope

This part defines registration procedures for OSI Implementors Workshop (OIW) information objects and identifies additional registration requirements. These procedures shall be used by the Special Interest Groups (SIGs) of the Workshop to register information objects used in OSI communications according to the OIW Agreements Document.

In this part, the OIW and the SIGs themselves are assigned arcs in the object identifier tree. These arcs are for OIW-specified objects. The SIGs should note that, as national and international registration authorities are established, objects of interest beyond the Workshop are more appropriately registered by a higher level in the hierarchy. This will allow more widespread acceptance of the registered objects.

This part is structured as follows: 6.2 describes the information objects that need to be registered, and 6.3 describes a registration procedures for OIW object identifiers. Annex A lists the object identifier component values assigned to the OIW and the SIGs. Annex B discusses object identifiers used in the 1987 and 1988 Stable Implementation Agreements. The appendices are integral parts of this specification.

2 Normative References

3 Registered Information Objects

If networks are to interoperate as envisioned in the OSI model, there must be a universal open and agreed upon naming schema. There are many information objects that fall under this requirement.

Some of the following objects are registered in the standards, some are registered by OIW and others by other registration authorities. An example list of objects to be registered is:

a) Application-process-titles;

b) Application-entity-titles;

c) Abstract syntaxes;

d) Transfer syntaxes;

e) Application-contexts;

f) MHS;

    1) ADMD names;

    2) PRMD names;

    3) Organization names;

    4) Encoded information types;

    5) Extended body part types;

    6) Extensions;

    7) etc.;

g) Object Identifier values;

h) ASN.1 modules;

i) Directory;

    1) Relative distinguished names;

    2) Attribute types;

    3) Attribute syntaxes;

4) Object classes;

5) Encryption algorithms;

6) etc.;

j) VT;

1) Profiles;

2) Reference information objects;

3) etc.;

k) Network management objects;

l) Network layer addresses;

m) System titles;

n) FTAM;

1) Document types;

2) Constraint sets;

3) etc.;

o) etc.

The OIW Registration Authority shall only administer information objects created by the OIW Agreements Document that are identified by the ASN.1 type OBJECT IDENTIFIER. Figure 1 illustrates the structure of the object identifier component value for OIW.

```
( iso identified-organization  oiw (14) )

  iso(1)

      identified-organization(3)

                                          oiw(14)
```

Figure 1 - Structure of Object Identifier for OIW.

As an example figure 2 shows the object identifier component value for an example object.

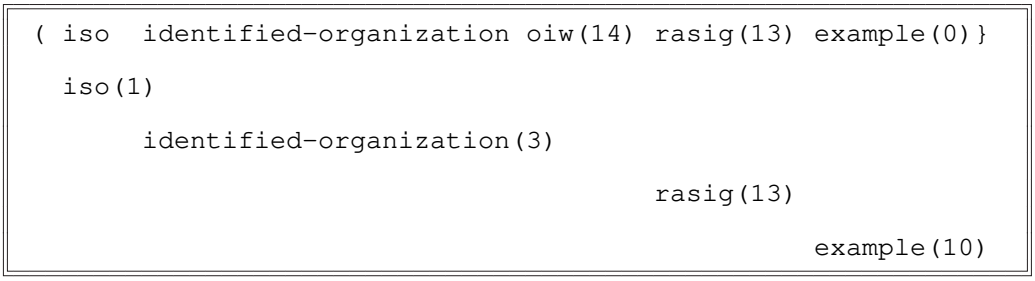

Figure 2 - Structure of an Object Identifier for an Example Object for the Registration Authority SIG of OIW.

The ISO 6523 Registration Authority has assigned an International Code Designator (ICD) value of 14 to OIW, and OIW has assigned a unique object identifier component value to each SIG. The assigned object ID values for the OIW and for each SIG are in Annex A. The assignment of values below each SIG in the object identifier tree is the responsibility of that SIG.

4 Registration Procedures for Object Identifiers

This clause specifies the responsibilities of each SIG and the procedures to be followed for the registration of information objects, and submission to the OIW Plenary.

When an OIW SIG defines an information object the SIG shall register the object identifier. The registered value shall be incorporated into the appropriate OIW Agreements Document as a result of a positive ballot response of the OIW Plenary.

4.1 SIG Registration Authorization

An OIW SIG is authorized by its charter and the scope of its work to submit a registration request to the OIW Plenary.

4.2 SIG Registration Authority Function and Duties

The SIG Chair is responsible for the assignment, recording and maintenance of the SIG's registered objects. The SIG Chair may appoint a specific person to carry out the SIG duties and responsibilities.

4.3 Requirements for Information Object Registration

4.3.1 Assignment of Object Identifier Component Values

Each SIG shall register an object identifier component value for each object's technical definition. The NameAndNumberForm of the ObjIdComponent specified in ISO 8824/CCITT X.208 is used exclusively. This form comprises an ASN.1 identifier and, significantly, a NumberForm.

It is suggested that the SIG assign a monotonically increasing integer to the NumberForm at any given level. To the significant root the SIG shall add a assigned object identifier component value that shall be unique. An example of an object identifier created by the RASIG is shown as follows:

{iso(1)identified-organization(3) oiw(14) rasig(13) example(0)}

Here rasig is the SIG identifier and 13 is the NumberForm assigned by the OIW Registration Authority (see Annex A); example is the identifier and 0 is the NumberForm assigned by the RASIG.

4.3.2 Proposal of Object and Identifier to Plenary

Registration of an object identifier and its definition is proposed by inclusion of the object identifier and its definition in the OIW "Working Implementation Agreements" document.

4.3.3 Completion of Registration Procedure

Registration of an object identifier and its definition is completed upon Plenary vote to move "Working Implementation Agreements" text which contains the object identifier and its definition to the "Stable Implementation Agreements" document.

4.3.4 Changes and Revisions to the Information Object Registration

Neither the technical definition nor the object identifier shall be changed or modified after registration i.e., after the definitions and their identifiers have been voted into the "Stable Implementation Agreements" document.

4.4 Register Index

Each SIG shall maintain an index of object identifiers that point to the technical definitions of the respective objects in the OIW Agreements Document. The index shall appear in the appropriate part annexes of the OIW Agreements Document.

Table 1 - Index Entry Example

Object Identifier	Reference
iso identified-organization	4.3.1
oiw(14) rasig(13) example(0)	

Annex A (normative)

Assignments to Workshop Organizations

Table 2 - Identifier Assignments

Identifier	Value	Assigned To	Assigned By
oiw	14	OIW	ISO 6523 RA
llsig	1	SIG	OIW
nmsig	2	SIG	OIW
secsig	3	SIG	OIW
tpsig	4	SIG	OIW
ftamsig	5	SIG	OIW
mhsig	6	SIG	OIW
dssig	7	SIG	OIW
ulsig	8	SIG	OIW
rdasig	9	SIG	OIW
mmssig	10	SIG	OIW
odasig	11	SIG	OIW
vtsig	12	SIG	OIW
rasig	13	SIG	OIW

Annex B (normative)

Status of 1987 and 1988 Ad-hoc Object Identifiers

In the 1987 and 1988 versions of the Stable Implementation Agreements, a number of OIW-specified information objects are assigned object identifiers.

OSI requires names and addresses, e.g., object identifiers, be globally unambiguous. This chapter specifies object identifier component values which are globally unambiguous. Other chapters in this document specify the correct object identifiers to be used when referencing OIW-specified information objects.

The use of the 1987 and 1988 OIW-specified object identifiers is deprecated. Newly defined objects shall use the new OIW Identifier.