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**WORK GROUP:**           **Information Modeling**

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**TITLE:** **Draft - Procedure for Registering Names for SIF Specificat**

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**ABSTRACT:**   **The Information Modeling working group has been charged with defining the procedure for registering names for SIF Specifications. This paper is a draft version defining the procedure under which the SIF Registration Authority will operate to register SIF Specifications.**

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# PROCEDURES FOR REGISTERING NAMES FOR SIF SPECIFICATIONS

## 1 Introduction

### 1.1 Purpose

Standardization within the field of Information Technology is resulting in standardized information objects which must be unambiguously identifiable on a global basis. These information objects may be defined by a variety of organizations, e. g., ISO/IEC, ITU, commercial, and government. The information objects may or may not be OSI objects. Information objects may represent a variety of real objects, e.g., people, information processing systems and applications, and document types. SIF has defined information models which require registration for various items including object classes, attributes, and so forth. It is anticipated that other documents, such as MOCs will require registration in the future.

To meet this requirement, the International Organization for Standardization/ International Electrotechnical Commission Joint Technical Committee One (ISO/IEC JTC1) and the International Telegraph and Telephone Consultative Committee (ITU) have established a hierarchical structure of names (a tree). For example, this structure is illustrated in ISO 4th DP 9834-1, *Information Processing Systems - Open Systems Interconnection - Procedures for the Operation of OSI Registration Authorities*, wherein ISO/IEC is one of the first level nodes and countries (see ISO 3166, Codes for the representation of countries) are of the second level nodes in the tree of names.

Under this structure, information objects are unambiguously identified by constructed names composed of one component from each level of the Registration Authority hierarchy under which the information object is registered. This name is unique since each component along the path through the hierarchy from the root to the registered object is guaranteed to be unique within the scope of the Registration Authority assigning that name component.

The National Body organization, American National Standards Institute (ANSI), is the top level administrative Registration Authority in the U.S. *Procedures for the Registration of Names in the United States of America* identifies the procedures that have been defined for the registration of different types of names allocated from different parts of the name space.

ATIS performing the role of Registration Authority for the SIF branch of the tree of names, will be responsible for the administration of such a branch. This document defines the procedure under which ATIS operates to register SIF Specifications information objects.

### 1.2 Scope

This document specifies the procedure for the operation of the top level SIF Registration Authority. The syntax of the SIF entry in the registration tree is composed of a numeric form assigned by ANSI and an alphanumeric form provided by SIF. Each of these identifiers is unique within the ANSI register. SIF will in turn assign entries in its tree that will be composed of a numeric form and an alphanumeric form. The identifiers are globally unambiguous when added to a sequence of identifiers that precede them in the hierarchy. The preceding identifiers are {1 2 840 *tbd*}. They represent {iso(1) member-body(2) US(840) tbd(*tbd*)} in the hierarchy.

(ED Note: This document will be updated with the appropriate full arc when the node is purchase from ANSI)

These procedures

- a) specify the syntax of names assigned by the SIF Registration Authority;

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**October 15, 1998**

## Procedure for Registering Names for SIF Specifications

- b) limit the role of the SIF Registration Authority to an administrative role;
- c) describe the way in which applications for names for SIF Specifications are handled, including mechanisms for assuring the assigning of unique names at this level in the hierarchy;
- d) provide for the assignment of names to SIF Specifications.
- e) do not specify the construction of names using name components registered by the SIF registration authority.

Appendices B and C are an integral part of these procedures. Appendices A and D are for informational purposes only, and are not an integral part of these procedures.

### **1.3 Overview**

The SIF Registration Authority provides a unique name value in two forms - numeric and alphanumeric. These unique values are generated by the SIF Registration Authority. These two values are tightly associated. Both values shall be bound to the same information object by the applicant.

The appropriate registered value(s) shall be incorporated into the draft proposed SIF Specification at least two months prior to voting at the plenary level, and no later than the general meeting preceding the plenary when the standard is scheduled for voting.

### **2 References**

- 2.1 ISO 3166-1988. Codes for the Representation of Names of Countries.
- 2.2 ISO 7498-3-1988, Information Processing Systems - OSI Reference Model - Part 3: Naming and Addressing.
- 2.3 ISO 4th DP 9834-1-1988, Information Processing Systems - Open Systems Interconnection - Procedures for the Operation of OSI Registration Authorities Part 1: General Procedures.
- 2.4 ISO 9594-6, Information Processing Systems - Open Systems Interconnection - The Directory.
- 2.5 Procedures for Registering Names in the United States of America. 1989.
- 2.6 Procedures for Registering Names For American National Standards. 1991.
- 2.7 Procedures for Registering Organization Names in the United States of America Under the Joint ISO-CCITT ARC, 1993

### **3 Definitions and Abbreviations**

#### **3.1 Definitions**

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October 15, 1998

## Procedure for Registering Names for SIF Specifications

The following terms are defined in ISO 7498-3.

- a) name

The following terms are defined in ISO 8824.

- a) information object

**Registration Authority** - An entity such as an organization, a standard or an automated facility that performs registration of one or more types of objects. ATIS will perform the function of Registration Authority for SIF. The SIF Registration Authority refers to ATIS in its role as Registration Authority for SIF.

**Responsible Officer** - An SIF working group leader who may apply for registration of a name for a SIF Specification from the SIF Registration Authority.

### 3.2 Abbreviations

ANS	American National Standard
ANSI	American National Standards Institute
ASD	Accredited Standards Developer
ASN.1	Abstract Syntax Notation One
ATIS	Alliance for Telecommunication Industry Solution
CCITT	International Telegraph and Telephone Consultative Committee
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
JTC 1	Joint Technical Committee 1
SIF	SONET Interoperability Forum
WG	Working Group

### 4 SIF Registration Authority

The SIF Registration Authority for these procedures is identified in Appendix A.

### 5 Who is Eligible to Register Names?

Any SIF approved Working Group (WG) leader, the Responsible Officer, may request the SIF Registration Authority to register a name for a SIF Specification. The SIF Specification shall have been a project included in SIF's coordination activities and status reports. The applying Responsible Officer shall have been charged with the responsibility for the development of the SIF Specification.

### 6 Procedures

This section specifies the SIF Registration Authority procedures for the processing of requests. These procedures are designed to assure openness and due process in the registration of names for SIF Specifications.

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## **6.1 Application for Registration**

### **6.1.1 Procedure**

6.1.1.1 To request registration of a name for a SIF Specification, the Responsible Officer (a SIF Working Group Leader) must submit an application form to the SIF Registration Authority. The content of the application form is described in Appendix B.1.

6.1.1.2 The registered name for a SIF Specification is recorded as two values - numeric and alphanumeric. The numeric value is created by the SIF Registration Authority. The alphanumeric value is created by the Responsible Officer and submitted to the SIF Registration Authority for approval.

### **6.1.2 Information Elements**

The content of the Request for Registration form is described in Appendix B.1.

## **6.2 Review of Application**

### **6.2.1 Procedure**

An application for registration must be submitted specifying the appropriate information as described in Appendix B.1. Each application shall be reviewed as follows.

6.2.1.1 If the application does not contain the minimum information specified in Appendix B.1, the application shall be rejected specifying this section as the reason for rejection.

6.2.1.2 If the requesting organization is not an SIF approved Working Group as specified in section 5, the application shall be rejected specifying this section as the reason for rejection.

6.2.1.3 If the proposed SIF Specification was not developed as a project included in SIF's coordination activities and status reports, as specified in section 5, the application shall be rejected specifying this section as the reason for rejection.

### **6.2.2 Response Time**

Each application received is treated separately. Review of the application under the procedures of section 6.2.1 will be completed within 10 working days from the receipt of the application, to the extent practical.

### **6.2.3 Rejection of Unprocessable Applications**

If the application is rejected for reasons specified in section 6.2.1, the Responsible Officer shall be notified using the form described in Appendix B.2.

### **6.3 Assignment of Name**

In submitting an application, the Responsible Officer is requesting the registration of both numeric and alphanumeric forms for a SIF Specification. When assigned, these values shall be recorded in the registration database.

#### **6.3.1 Procedure for the Numeric Name Form**

6.3.1.1 The SIF working group leader shall not submit a numeric value for registration. Instead, the SIF Registration Authority shall assign a number in the syntax described in 6.3.1.2. This value shall be unique and shall not be assigned to any other applicant.

6.3.1.2 The numeric value shall be a positive integer greater than 0 and less than 16,000,000.

6.3.1.3 This number shall be assigned sequentially beginning at 1.

NOTE - No numeric values are reserved, deleted or reassigned.

#### **6.3.2 Procedure for the Alphanumeric Name Form**

6.3.2.1 The working group leader shall submit an alphanumeric value for registration using the syntax described in section 6.3.2.2. This value shall be unique and shall not be assigned to any other applicant.

6.3.2.2 The unique name assigned to all SIF Specifications shall be in the form: sifwg.x-y where wg is the abbreviated name for the SIF working group which developed the standard, x is the numeric value used by SIF to distinguish between the SIF working groups's numerous standards, and y is the year the SIF Specification is approved by SIF. For example, the Information Model for Configuration Management and Fault Management at the NMS/EMS Interface is assigned the value SIFIM.014-1997. This unique name form shall be used for the alphanumeric value by the SIF Registration Authority.

6.3.2.3 For revisions of a SIF Specification, an application for the revised standard must be submitted if the revised specification requires a new registration to distinguish its contents from those of the previous version or if it contains material which has not been registered earlier. A new numeric and alphanumeric assignment will be made, using the syntax specified in section 6.3.2.2. If the SIF Specification was previously registered, no change or deletion shall be made to either the previously registered numeric or alphanumeric value.

6.3.2.4 The supplied alphanumeric value should be compared against all other alphanumeric values recorded in the registration database. If a the value is a duplicate (see matching rules in 6.3.2.3.5), the request will be rejected specifying the reason for rejection using the form described in Appendix B.2. The supplied alphanumeric value should be compared against all other alphanumeric values recorded in the registration database. If the value is a duplicate (see matching rules in 6.3.2.3.5), the request will be rejected specifying the reason for rejection using the form described in Appendix B.2.

6.3.2.5 When comparing for matching entries in the register, no spaces may be used and the comparison will not be case sensitive.

### **6.4 Response to Responsible Officer**

The SIF Registration Authority will record the registered values. The registered values (numeric and

alphanumeric) of the SIF Specification, along with the information supplied on the application for registration, shall be recorded in the registration database and reported to the Responsible Officer within 10 working days, to the extent practical.

## **7 Maintenance of Register**

7.1 The SIF Registration Authority shall keep a database which contains all registered names for SIF Specifications together with the data elements described in Appendix C.

7.2 The SIF Registration Authority is responsible for defining its own internal procedures for handling the duties of the SIF Registration Authority. These procedures will include:

- a) mechanisms for maintaining the integrity of the registration database including adequate backup. The records of the registered names will be maintained as deemed appropriate by the SIF Registration Authority. A simple flat file of all registered names may be used until such time as an automated database is justified by the number of entries. If and when it is determined that an automated database is needed, the design of the registration database is the responsibility of the SIF Registration Authority
- b) appropriate forms (paper, electronic, or a combination of both), containing the data elements specified in Appendix B.
- c) appropriate procedures for inspection of the registration database by any SIF member.

7.3 Once registered, numeric values are not deleted or reassigned.

## **APPENDIX A - IDENTITY OF SIF REGISTRATION AUTHORITY**

The SIF Registration Authority for names for SIF Specifications is:

Alliance for Telecommunications Industry Solutions  
1200 G street, N.W.  
Suite 500  
Washington, D.C. 20005

Nancy Pierce  
ATIS Director  
Voice: 202-434-8824  
Fax: 202-393-5453  
email: npierce@atis.org

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## **APPENDIX B - CONTENT OF FORMS**

This appendix defines the information content for all forms used by the SIF Registration Authority to conduct its business- This appendix does not mandate the physical layout of the forms. Such layout shall be the responsibility of the SIF Registration Authority who can vary the form structure as appropriate (e.g., paper or electronic mail).

### ***B.1 Request for Registration***

This form should contain or point to information that will guide the WG Leader in determining its requirements and eligibility for registration, and to guide it in supplying the required information.

The WG Leader must supply the following information:

- a) name of the requesting WG
- b) name, postal/electronic mail address, and telephone/facsimile number of the Responsible Officer within the WG
- c) title and number of SIF-approved project
- d) title and number of proposed SIF Specification
- e) statement of the need for registration of a name for the SIF Specification

### ***B.2 Rejection***

This form will contain the following information:

- a) name of the requesting WG
- b) name, title, postal/electronic mail address, and telephone/facsimile number of the Responsible Officer within the WG
- c) title and number of SIF-approved project
- d) title and number of proposed SIF Specification
- e) stated reason for rejection

### ***B.3 Registration Announcement***

This announcement shall contain the following information:

- a) name of the requesting WG

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**October 15, 1998**

## Procedure for Registering Names for SIF Specifications

- b) name, title, postal/electronic mail address, and telephone/facsimile number of the Responsible Officer within the WG
- c) title and number of SIF -approved project
- d) title and number of proposed SIF Specification
- e) assigned numeric value for the SIF Specification
- f) assigned alphanumeric value for the SIF Specification

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**October 15, 1998**

- 10 -

## **APPENDIX C - CONTENT OF DATABASE ENTRIES**

This appendix defines the required information content of each entry of the Registration database. This appendix does not mandate the physical or logical structure of the database. The choice of structure is the responsibility of the SIF Registration Authority .

- a) name of the initial requesting WG (will not change)
- b) address of the initial requesting WG (will not change)
- c) name and title of the initial responsible officer (will not change)
- d) date of registration (will not change)
- e) name, postal/electronic mail address, and telephone/facsimile number of the contact point within currently responsible WG
- f) registered alphanumeric value
- g) registered numeric value (will not change)

## APPENDIX D - CONSTRUCTION OF NAMES USING NAME COMPONENTS REGISTERED BY THE U.S. REGISTRATION AUTHORITY

This appendix describes the use of name values for American National Standards, registered by these procedures and unambiguous within the scope of the entity described in section 1.2, to construct globally unambiguous names.

The registered value shall be incorporated into the draft proposed SIF Specification prior to voting at the plenary level of SIF ..

NOTE - This procedure is required only for all American National Standards defining objects which are referenced in information transfer.

### ***D.1 Use of the Numeric Name Form***

This section describes the construction of a name using the ASN.1 primitive data type, OBJECT IDENTIFIER, as defined in ISO 8824. The numeric values assigned by this Registration Authority shall be used as the fourth component of the name.

iso	member-body	US	SONET-Interop-Forum	standard-name
1	2	840	x	n
{ Iso	member-body	US(840)	SONET-Interop-Forum(x)	standard-name(n) }

(ED Note: This document will be updated with the appropriate full arc when the node is purchase from ANSI)

The creation of additional components for names of information objects defined in a SIF Specification is not constrained by these procedures.

### ***D.2 Use of the Alphanumeric Name Form***

This section describes the construction of an AttributeValueAssertion (AVA), as defined in CCITT X.501/ISO 9594-2. The AVA can be used to construct a Directory Name as defined in CCITT X.501/ISO 9594-2.

This type may be used only with values created by the Procedures for Registering Names for SIF Specifications . The value of the OBJECT IDENTIFIER for this type is defined in ISO 9834-1.

```
{ countryName = US,organization = SONET-Interop-Forum,standard = y }
```

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