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OF ITU

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SERIES X: DATA NETWORKS AND OPEN SYSTEM
COMMUNICATION

OSI networking and system aspects – Naming,
Addressing and Registration

**Procedures for the operation of OSI registration
authorities: Registration procedures for the itu-t
subordinate arcs**

ITU-T Recommendation X.669

(Previously CCITT Recommendation)

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FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation X.669, was prepared by ITU-T Study Group 7 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 5th of October 1996.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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SUMMARY

This Recommendation specifies registration procedures for the itu-t(0) subordinate arcs. In particular it specifies registration procedures for the {itu-t(0) identified-organization(4)} arc.

**PROCEDURES FOR THE OPERATION
OF OSI REGISTRATION AUTHORITIES:
REGISTRATION PROCEDURES FOR THE itu-t
SUBORDINATE ARCS**

(Geneva, 1996)

1 Scope

This Recommendation:

- a) specifies requirements for the operation of the registration authority that registers arcs immediately below the {itu-t(0)} arc, in particular, registration procedures for the Registration Authority of identified organization names; and
- b) identifies the Registration Authority of this arc.

Once a new arc is registered under the {itu-t(0)} arc and the designated registration authority is identified, the designated registration authority is delegated the authority to register names for that particular type.

NOTE – Other Recommendations may specify additional requirements for registration below the {itu-t(0)} arc.

2 References

The following Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision: all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of Recommendations and other references listed below. A list of currently valid ITU-T Recommendations is regularly published.

2.1 Identical Recommendations | International Standards

- CCITT Recommendation X.660 (1992) | ISO/IEC 9834-1:1992, *Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: General procedures.*
- ITU-T Recommendation X.680 (1994) | ISO/IEC 8824-1:1995, *Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation.*

2.2 Additional references

- ITU-T Recommendation X.666 (1995), *Procedures for registration of international and multinational organization names.*

3 Definitions

3.1 For the purposes of this Recommendation, the following terms used in this Recommendation are incorporated by reference from CCITT Rec. X.660 | ISO/IEC 9834-1:

- a) administrative role;
- b) registration-hierarchical-name-tree (RH-name-tree).

3.2 For the purposes of this Recommendation, the following terms used in this Recommendation are incorporated by reference from ITU-T Rec. X.680 | ISO/IEC 8824-1:

- a) NumberForm;
- b) NameForm.

4 Abbreviations

For the purposes of this Recommendation, the following abbreviations apply:

ASN.1	Abstract Syntax Notation One
CCITT	International Telegraph and Telephone Consultative Committee
IEC	International Electrotechnical Commission
ITU	International Telecommunication Union
ISO	International Organization for Standardization
JTC1	Joint Technical Committee 1
Q	Question
ITU-T	International Telecommunication Union – Telecommunications Sector

5 General

5.1 CCITT Rec. X.660 | ISO/IEC 9834-1 defines general procedures for registration that are independent of the object involved. It allows for other Recommendations or International Standards to define procedures that are specific to objects of a particular type.

This Recommendation specifies registration procedures for registration of various types of names for ITU-T use.

5.2 Arcs registered below the {itu-t(0)} arcs are listed in CCITT Rec. X.660 | ISO/IEC 9834-1¹⁾.

6 Registration of new arcs

6.1 The Registration Authority for the {itu-t(0)} arc is defined in CCITT Rec. X.660 | ISO/IEC 9834-1.

6.2 CCITT Rec. X.660 | ISO/IEC 9834-1 shall be used for the purpose of registration of new arcs below the {itu-t(0)} arc.

6.3 If a new arc is established in CCITT Rec. X.660 | ISO/IEC 9834-1 below the {itu-t(0)} arc, the registration procedures to register values below the new arc shall be added to this Recommendation.

6.4 Registration procedures for the following four arcs below the {itu-t(0)} arc are specified in ITU-T Rec. X.680 | ISO/IEC 8824-1²⁾.

6.4.1 recommendation (0)

6.4.2 question (1)

6.4.3 administration (2)

6.4.4 network-operator (3)

7 Registration procedures for identified organization names

7.1 Scope

This clause specifies registration procedures for the Registration Authority of identified organization names. An identified organization name comprises a numeric organization component and an alphanumeric organization component. Each of these components, the numeric and the alphanumeric, are unique within their naming domain.

¹⁾ It is the intention to add in 1997 the {identified-organization (4)} arc to this list.

²⁾ It is the intention to move in 1997 this text and authority from ITU-T Rec. X.680 | ISO/IEC 8824-1 to CCITT Rec. X.660 | ISO/IEC 9834-1.

The identified organization name is used to form object identifiers as specified in ITU-T Rec. X.680 | ISO/IEC 8824-1.

7.2 ITU-T and ISO requirements

7.2.1 ITU-T Rec. X.680 | ISO/IEC 8824-1

Object identifiers are used in many OSI applications to identify open systems objects. ITU-T Rec. X.680 | ISO/IEC 8824-1 specifies the object identifier name type as an ordered list of object identifier components values. The numeric organization code value assigned by the Registration Authority can be used for the “NumberForm”, and the alphanumeric organization code value can be used for the “NameForm”, both specified in the ITU-T Rec. X.680 | ISO/IEC 8824-1.

The alphanumeric organization code value shall use only the character set comprising:

- a) the letters a to z, lower case only;
- b) the digits 0 to 9; and
- c) hyphen.

The numeric organization code value shall use only integer numbers.

7.2.2 CCITT Rec. X.660 | ISO/IEC 9834-1

CCITT Rec. X.660 | ISO/IEC 9834-1 specifies the hierarchical structure within which objects in the OSI environment are registered. In this structure, the registration authority that registers identified organization names is identified as follows:

{itu-t(0) identified-organization(4)}

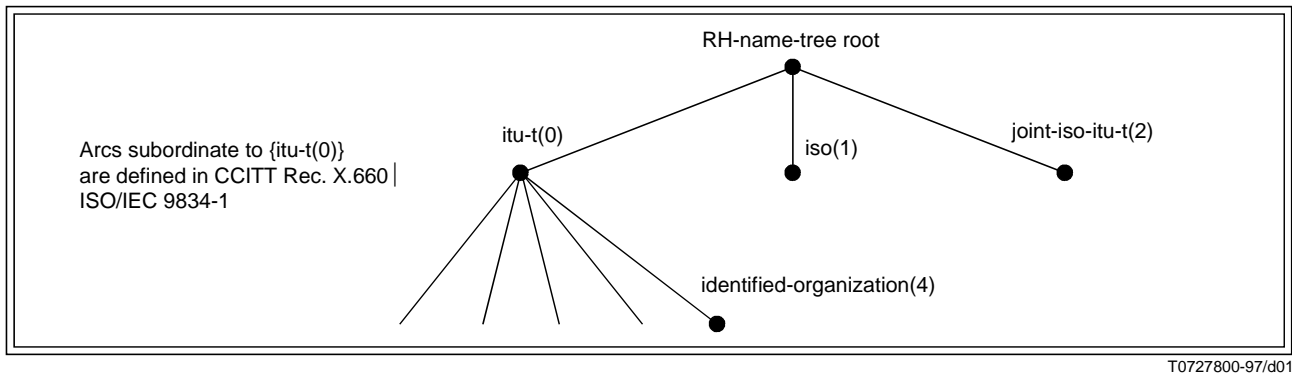


FIGURE 1/X.669
RH-name-tree

7.3 Register of identified organization names

Identified organization names are registered immediately below the following arc:

{itu-t(0) identified organization(4)}

The applicant provides the alphanumeric name value to be registered as described in this subclause.

The content of the register may be published or made available on request.

7.4 Registration authority

The Registration Authority³⁾ performs an administrative role as specified in CCITT Rec. X.660 | ISO/IEC 9834-1.

7.5 Application submission

An application to register a new identified organization name can be submitted only by an ITU member. Only ITU members may register name values under the {itu-t(0) identified-organization(4)} arc.

7.6 Application information

The application to register a new numeric value must include the following information:

- name of the ITU member submitting the application;
- name, postal address, telephone number/facsimile number for a contact point of the ITU member applying for registration;
- the NameForm value (alphanumeric value) that the applicant wishes to register.

7.7 Registrar's decision

The Registration Authority reviews the applications and:

- 1) approves the application;
- 2) asks for more information from the applicant; or
- 3) rejects the application.

7.8 Value assignments

Unique NumberForm values are assigned by the Registration Authority to each entry in the {itu-t(0) identified-organization(4)} naming domain. The value assigned is an integer. The assigned integer shall be increased sequentially by the positive integer one, i.e. +1, above the last assigned numeric value. The NameForm, i.e. the alphanumeric value submitted by the applicant, will be registered as requested.

NOTE – The NameForm is associated with the NumberForm and its value does not have to be unique. Only the NumberForm is used to unambiguously identify an object. However, if the requested NameForm already exists in the register, the applicant shall be advised of this so that the applicant may resubmit a new value for the NameForm.

7.9 Registered information maintenance

For each entry in the register, the registration authority maintains the information specified above for the application, and in addition the:

- identity and reach information of the owner of the name;
- name values assigned;
- date of issuing the approval.

7.10 Registrar's responsibilities

The following are the responsibilities of the registration authority:

- receive, consider, and approve or reject applications;
- inform the applicant of the decision made regarding the applicant's application;
- delegate the authority to register names of arcs subordinate to the assigned arc;
- promulgate information on the new registered arc.

³⁾ The identity of the registration authority will be announced by a TSB circular letter when the registration service is established.

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