

INTERNATIONAL
STANDARDIZED
PROFILE

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**Information technology — International
Standardized Profiles — OSI
Management — Common information for
management functions —**

Part 0:

Common definitions for management function
profiles

*Technologies de l'information — Profils normalisés internationaux —
Gestion OSI — Information courante pour fonctions de gestion —
Partie 0: Définitions courantes pour profils de fonction de gestion*



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Contents	Page
Foreword	iii
Introduction	iv
1 Scope	1
1.1 General	1
1.2 Position within the Taxonomy	1
2 Normative references	1
2.1 Identical CCITT/ITU-T Recommendations International Standards	1
2.2 Paired CCITT/ITU-T Recommendations International Standards equivalent in technical content	3
2.3 Additional references	4
3 Definitions	5
4 Abbreviations	5
5 Conventions	6
5.1 Single character notation	6
5.2 Two character notation	6
5.3 Common conditions list conventions	7
5.4 Nesting rules	8
6 Conformance requirements	8
Annex A ISPICS Requirements list (IPRL) for Common definitions for management function profiles	9
A.1 Initiator/Responder	9
A.1.1 Application context	9
A.1.2 Systems management functional unit negotiation support	9
A.2 Common reference for CMIP requirements and underlying standards	11
A.2.1 CMIP PDU subset requirements	11
A.2.2 CMIP User information	12
Annex B MOCS Requirement List and profile specific ICS proforma for System managed object class	13
B.1 System packages support	13
B.2 System attributes support	13
B.3 Name Bindings support for system managed object class	14
Annex C System Managed Object Class MOCS proforma	15
C.1 Introduction	15
C.2 Instructions for completing the MOCS proforma to produce a MOCS	15
C.3 Symbols, abbreviations and terms	15
C.4 System managed object class	16
C.4.1 Statement of conformance to the managed object class	16
C.4.2 Packages	16
C.4.3 Attributes	17
Annex D Name binding support for log objects	18
D.1 Introduction	18
D.2 Statement of conformance to the name binding	18

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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. In addition to developing International Standards, ISO/IEC JTC 1 has created a special group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 12059-0 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- Open Systems Environment Implementors' Workshop (OIW).

ISO/IEC ISP 12059 consists of the following parts, under the general title *Information technology - International Standardized Profiles - OSI Management - Common information for management functions*:

- *Part 0: Common definitions for management function profiles*
- *Part 1: Object management*
- *Part 2: State management*
- *Part 3: Attributes for representing relationships*
- *Part 4: Alarm reporting*
- *Part 5: Event report management*
- *Part 6: Log control*

Annexes A to D form an integral part of this part of ISO/IEC ISP 12059.

Introduction

This part of ISO/IEC ISP 12059 is the first part of one of two multi-part ISPs corresponding to Systems Management functions. ISO/IEC ISP 12059 consists of the following parts:

- ISO/IEC ISP 12059-0 provides the Common definitions for management function profiles.
- ISO/IEC ISP 12059-1 describes the requirements for the Object management function corresponding to ISO/IEC 10164-1
- ISO/IEC ISP 12059-2 describes the requirements for the State management function corresponding to ISO/IEC 10164-2
- ISO/IEC ISP 12059-3 describes the requirements for the Attributes for representing relationship corresponding to ISO/IEC 10164-3
- ISO/IEC ISP 12059-4 describes the requirements for the Alarm reporting function corresponding to ISO/IEC 10164-4
- ISO/IEC ISP 12059-5 describes the requirements for the Event report management function corresponding to ISO/IEC 10164-5
- ISO/IEC ISP 12059-6 describes the requirements for the Log control function corresponding to ISO/IEC 10164-6.

Other ISP parts may be added in the future.

ISO/IEC ISP 12060 is a multi-part ISP defining Systems Management Function profiles identified in ISO/IEC TR10000-2 as:

AOM2nn - OSI Management - Management Functions.

ISO/IEC ISP 12060 consists of the following parts:

- ISO/IEC ISP 12060-1, AOM211, describes the General management capabilities profile
- ISO/IEC ISP 12060-2, AOM212, describes the Alarm reporting and state management capabilities profile
- ISO/IEC ISP 12060-3, AOM213, describes the Alarm reporting capability profile
- ISO/IEC ISP 12060-4, AOM221, describes the General event report management profile
- ISO/IEC ISP 12060-5, AOM231, describes the General log control profile.

Other Systems Management Function profiles and other ISP parts may be added in the future.

The relationships between different parts of ISO/IEC ISP 12059, ISO/IEC ISP 12060 and ISO/IEC ISP 11183 are illustrated in Figure 1.

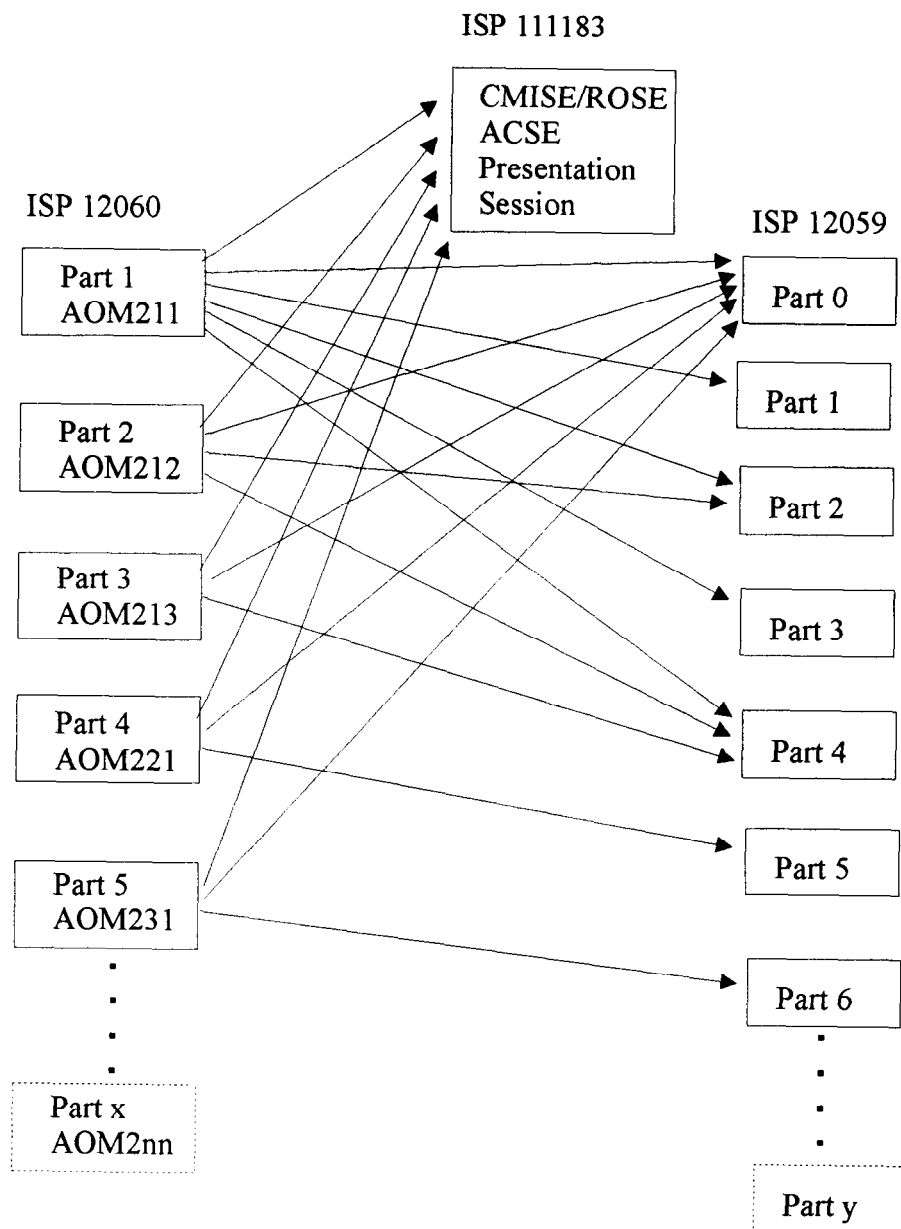


Figure 1 - ISP structure and relationships

Information technology - International Standardized Profiles - OSI Management - Common information for management functions -

Part 0:

Common definitions for management function profiles

1 Scope

1.1 General

This part of ISO/IEC ISP 12059 specifies the common definitions and conventions for management function profiles. This part of ISO/IEC ISP 12059 contains all the common definitions, conventions, references and capability requirements for the management function ISO/IEC ISP 12060 and ISO/IEC ISP 12059 parts.

1.2 Position within the Taxonomy

To accommodate for the grouping of systems management functions into profiles and to permit future additions of such profiles, two multi-part ISP structures have been adopted.

The multi-part ISO/IEC ISP 12059 defines building blocks based on the Systems management function standards. The multi-part ISO/IEC ISP 12060 defines systems management functions profiles. Parts within ISO/IEC ISP 12060 are independent and refer to parts within ISO/IEC ISP 12059. A part within ISO/IEC ISP 12059 may refer to other parts within ISO/IEC ISP 12059.

Each of the management function profiles identifies the set of CMIP PDUs that are exchanged, the detailed specification of the PDUs are contained in ISO/IEC ISP 11183. Annex A specifies the reference mechanism for ISO/IEC ISP 12060 parts to select the subset of CMIP PDUs corresponding to the CMIS services required by each profile.

The profiles specify the requirements in terms of manager and agent roles. In this way inter-operating systems in complementary management roles conform to the same profiles.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 12059. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this part of ISO/IEC ISP 12059 are warned against automatically applying any more recent editions of the documents listed below, since the nature of references made by ISPs to such documents is that they may be specific to a particular edition. Members of IEC and ISO maintain registers of currently valid International Standards and ISPs, and ITU-T maintains published editions of its current Recommendations.

2.1 Identical CCITT/ITU-T Recommendations | International Standards

- ITU-T Recommendation X.200 (1994) | ISO/IEC 7498-1:1994, *Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model*.
- ITU-T Recommendation X.216 (1994) | ISO/IEC 8822:1994, *Information technology - Open Systems Interconnection - Presentation service definition*.

- ITU-T Recommendation X.226 (1994) | ISO/IEC 8823-1:1994, *Information technology - Open Systems Interconnection - Connection-oriented presentation protocol: Protocol specification.*
- NOTE — ITU-T Rec. X.216 (1994) | ISO/IEC 8822:1994 and ITU-T Rec. X.226 (1994) | ISO/IEC 8823-1:1994 supersede CCITT Rec. X.216 (1988) | ISO 8822:1988 and CCITT Rec. X.226 (1988) | ISO 8823:1988 respectively. However, when this part of ISO/IEC ISP 12059 was under development, the previous editions were valid and this part of ISO/IEC ISP 12059 is therefore based on these editions, which are listed below.
- CCITT Recommendation X.216 (1988), *Presentation Service Definition for Open Systems Interconnection for CCITT Applications.*
- ISO/IEC 8822:1988, *Information processing systems - Open Systems Interconnection - Connection-oriented presentation service definition.*
- CCITT Recommendation X.226 (1988), *Connection oriented presentation protocol specification.*
- ISO 8823:1988, *Information processing systems - Open Systems Interconnection - Connection-oriented presentation protocol specification.*
- CCITT Recommendation X.701 (1992) | ISO/IEC 10040:1992, *Information technology - Open Systems Interconnection - Systems management overview.*
 - CCITT Recommendation X.712 (1992) | ISO/IEC 9596-2:1993, *Information technology - Open Systems Interconnection - Common management information protocol: Protocol Implementation Conformance Statement (PICS) proforma.*
 - CCITT Recommendation X.720 (1992) | ISO/IEC 10165-1:1993, *Information technology - Open Systems Interconnection - Structure of management information: Management information model.*
 - CCITT Recommendation X.721 (1992) | ISO/IEC 10165-2:1992, *Information technology - Open Systems Interconnection - Structure of management information: Definition of management information.*
 - CCITT Recommendation X.722 (1992) | ISO/IEC 10165-4:1992, *Information technology - Open Systems Interconnection - Structure of management information: Guidelines for the definition of managed objects.*
 - ITU-T Recommendation X.724 (1994)¹⁾ | ISO/IEC 10165-6:1994, *Information technology - Open Systems Interconnection - Structure of management information: Requirements and guidelines for implementation conformance statement proformas associated with OSI management.*
 - CCITT Recommendation X.730 (1992) | ISO/IEC 10164-1:1993, *Information technology - Open Systems Interconnection - Systems Management: Object management function.*
 - CCITT Recommendation X.731 (1992) | ISO/IEC 10164-2:1993, *Information technology - Open Systems Interconnection - Systems Management: State management function.*
 - CCITT Recommendation X.732 (1992) | ISO/IEC 10164-3:1993, *Information technology - Open Systems Interconnection - Systems Management: Attributes for representing relationships.*
 - CCITT Recommendation X.733 (1992) | ISO/IEC 10164-4:1992, *Information technology - Open Systems Interconnection - Systems Management: Alarm reporting function.*
 - CCITT Recommendation X.734 (1992) | ISO/IEC 10164-5:1993, *Information technology - Open Systems Interconnection - Systems Management: Event report management function.*
 - CCITT Recommendation X.735 (1992) | ISO/IEC 10164-6:1993, *Information technology - Open Systems Interconnection - Systems Management: Log control function.*
 - CCITT Recommendation X.736 (1992) | ISO/IEC 10164-7:1992, *Information technology - Open Systems Interconnection - Systems Management: Security alarm reporting function.*
 - CCITT Recommendation X.740 (1992) | ISO/IEC 10164-8:1993, *Information technology - Open Systems Interconnection - Systems Management: Security audit trail function.*
 - CCITT Recommendation X.739 (1993) | ISO/IEC 10164-11:1994, *Information technology - Open Systems Interconnection - Systems Management: Metric objects and attributes.*
 - ITU-T Recommendation X.745 (1993) | ISO/IEC 10164-12:1994, *Information technology - Open Systems Interconnection - Systems Management: Test management function.*
 - ITU-T Recommendation X.738 (1993) | ISO/IEC 10164-13:1994, *Information technology - Open Systems Interconnection - Systems Management: Summarization function.*

1) To be published.

2.2 Paired CCITT/ITU-T Recommendations | International Standards equivalent in technical content

- CCITT Recommendation X.208 (1988), *Specification of abstract syntax notation one (ASN.1)*.
ISO/IEC 8824:1990, *Information technology - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1)*.
- CCITT Recommendation X.209 (1988), *Specification of basic encoding rules for abstract syntax notation one (ASN.1)*.
ISO/IEC 8825:1990, *Information technology - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)*.
- CCITT Recommendation X.215 (1988), *Session service definition for Open Systems Interconnection for CCITT applications*.
ISO 8326:1987, *Information processing systems - Open Systems Interconnection - Basic connection oriented session service definition*.
- CCITT Recommendation X.217 (1988), *Association Control Service Definition for Open Systems Interconnection for CCITT Applications*.
ISO 8649:1988, *Information processing systems - Open Systems Interconnection - Service Definition for the Association Control Service Element*.
- CCITT Recommendation X.219 (1988), *Remote Operations: model, notation and service definition..*
ISO/IEC 9072-1:1989, *Information processing systems - Text communication - Remote Operations - Part 1: Model, notation and service definition*.
- CCITT Recommendation X.225 (1988), *Session protocol specification for Open Systems Interconnection for CCITT applications*.
ISO 8327:1987, *Information processing systems - Open Systems Interconnection - Basic connection oriented session protocol specification*.
- CCITT Recommendation X.227 (1988), *Association Control Protocol Specification for Open Systems Interconnection for CCITT Applications*.
ISO 8650:1988, *Information processing systems - Open Systems Interconnection - Protocol specification for the Association Control Service Element*.
- CCITT Recommendation X.229 (1988), *Remote Operations: Protocol specification*.
ISO/IEC 9072-2:1989, *Information processing systems - Text communication - Remote Operations - Part 2: Protocol specification*.
- CCITT Recommendation X.290 (1992), *OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications - General concepts*.
ISO/IEC 9646-1:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts*.
- CCITT Recommendation X.291 (1992), *OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications - Abstract test suite specification*.
ISO/IEC 9646-2:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification*.
- ITU-T Recommendation X.296²⁾, *OSI conformance testing methodology and framework - Implementation Conformance Statements*.
ISO/IEC 9646-7:1995, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements*.
- CCITT Recommendation X.700 (1992), *Management Framework Definition for Open Systems Interconnection for CCITT applications*.
ISO/IEC 7498-4:1989, *Information processing systems - Open Systems Interconnection - Basic Reference Model - Part 4: Management framework*.
- CCITT Recommendation X.710 (1991), *Common management information service definition for CCITT applications*.
ISO/IEC 9595:1991, *Information technology - Open Systems Interconnection - Common management information service definition*.

2) Currently at the stage of Draft Recommendation.