



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

X.734

DATA COMMUNICATION NETWORKS

**INFORMATION TECHNOLOGY –
OPEN SYSTEMS INTERCONNECTION –
SYSTEMS MANAGEMENT: EVENT
REPORT MANAGEMENT FUNCTION**



Recommendation X.734

Foreword

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the ITU. Some 166 member countries, 68 telecom operating entities, 163 scientific and industrial organizations and 39 international organizations participate in CCITT which is the body which sets world telecommunications standards (Recommendations).

The approval of Recommendations by the members of CCITT is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988). In addition, the Plenary Assembly of CCITT, which meets every four years, approves Recommendations submitted to it and establishes the study programme for the following period.

In some areas of information technology which fall within CCITT's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC. The text of CCITT Recommendation X.734 was approved on 10th of September 1992. The identical text is also published as ISO/IEC International Standard 10164-5.

CCITT NOTE

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

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INFORMATION NOTE

The following table gives a list of X.700 Series Recommendations which were developed in collaboration with the ISO/IEC and are identical to the corresponding International Standard. Cross-references to the corresponding ISO/IEC International Standard number and the short title of the Recommendation | International Standard are provided.

CCITT Recommendation ISO/IEC International Standard	Short Title
X.700 7498-4 (Note)	Management Framework
X.701 10040	System Management Overview
X.710 9595 (Note)	Common Management Information Service Definition
X.711 9596-1 (Note)	Common Management Information Protocol Specification
X.712 9596-2	CMIP PICS
X.720 10165-1	Management Information Model
X.721 10165-2	Definition of Management Information
X.722 10165-4	Guidelines for the Definition of Managed Objects
X.730 10164-1	Object Management Function
X.731 10164-2	State Management Function
X.732 10164-3	Attributes for Representing Relationships
X.733 10164-4	Alarm Reporting Function
X.734 10164-5	Event Management Function
X.735 10164-6	Log Control Function
X.736 10164-7	Security Alarm Reporting Function
X.740 10164-8	Security Audit Trail Function
NOTE – This Recommendation and International Standard are not identical, but are technically aligned.	

INTERNATIONAL STANDARD**CCITT RECOMMENDATION****INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
SYSTEMS MANAGEMENT: EVENT REPORT MANAGEMENT FUNCTION****1 Scope**

This Recommendation | International Standard defines a Systems Management Function which may be used by an application process in a centralized or decentralized management environment to interact for the purpose of systems management, as defined by CCITT Rec. X.700 | ISO/IEC 7498-4. This Recommendation | International Standard defines the Event report management function and consists of services and two functional units. This function is positioned in the application layer of CCITT Rec. X.200 | ISO 7498 and is defined according to the model provided by ISO/IEC 9545. The role of systems management functions is described in CCITT Rec. X.701 | ISO/IEC 10040.

This Recommendation | International Standard

- establishes user requirements for the event report management function;
- establishes models that relate the services provided by the function to user requirements;
- defines the services provided by the function;
- specifies the protocol that is necessary in order to provide the services;
- defines the relationship between the services and SMI operations and notifications;
- defines relationships with other systems management functions;
- specifies conformance requirements.

This Recommendation | International Standard does not

- define the nature of any implementation intended to provide the event report management function;
- specify the manner in which management is accomplished by the user of the event report management function;
- define the nature of any interactions which result in the use of the event report management function;
- specify the services necessary for the establishment, normal and abnormal release of a management association;
- specify the authorization requirements for the use of the event report management function or for any associated activity;
- define the managed objects related to the management of particular protocol machines.

2 Normative references

The following CCITT Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The CCITT Secretariat maintains a list of the currently valid CCITT Recommendations.

2.1 Identical Recommendations | International Standards

- CCITT Recommendation X.701 (1992) | ISO/IEC 10040:1992, *Information technology – Open Systems Interconnection – Systems management overview*.

ISO/IEC 10164-5 : 1993 (E)

- CCITT Recommendation X.721 (1992) | ISO/IEC 10165-2:1992, *Information technology – Open Systems Interconnection – Structure of management information – Part 2: Definition of management Information.*
- CCITT Recommendation X.730 (1992) | ISO/IEC 10164-1:1993, *Information technology – Open Systems Interconnection – Systems Management – Part 1: Object management function.*
- CCITT Recommendation X.731 (1992) | ISO/IEC 10164-2:1993, *Information technology – Open Systems Interconnection – Systems Management – Part 2: State management function.*

2.2 Paired Recommendations | International Standards equivalent in technical content

- CCITT Recommendation X.200 (1988), *Reference Model of Open Systems Interconnection for CCITT Applications.*
ISO 7498:1984, *Information processing systems – Open Systems Interconnection – Basic Reference Model.*
- CCITT Recommendation X.210 (1988), *Open Systems Interconnection Layer Service Definition Conventions.*
ISO/TR 8509:1987, *Information processing systems – Open Systems Interconnection – Service conventions.*
- CCITT Recommendation X.700 (1988), *Management Framework Definition for Open Systems Interconnection (OSI) for CCITT Applications.*
ISO/IEC 7498-4:1989, *Information processing systems – Open Systems Interconnection – Basic Reference Model – Part 4: Management framework.*
- CCITT Recommendation X.208 (1988), *Specification of Abstract Syntax Notation One (ASN.1). X.208, ITU, Geneva 1989.*
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.710 (1992), *Common Management Information Service Definition for CCITT Applications.*
ISO/IEC 9595:1991, *Information technology – Open Systems Interconnection – Common management information service definition.*
- CCITT Recommendation X.290 (1992), *OSI Conformance Testing Methodology and Framework for protocol Recommendations for CCITT applications – General Concepts.*
ISO/IEC 9646-1:1991, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 1: General concepts.*

2.3 Additional references

- ISO/IEC 9545:1989, *Information technology – Open Systems Interconnection – Application Layer structure.*

3 Definitions

For the purposes of this Recommendation | International Standard, the following definitions apply.

2 CCITT Rec. X.734 (1992 E)

3.1 Basic reference model definitions

This Recommendation | International Standard makes use of the following terms defined in CCITT Rec. X.200 | ISO 7498.

- a) open system;
- b) systems management.

3.2 Service convention definitions

This Recommendation | International Standard makes use of the following term defined in CCITT Rec. X.210 | ISO/TR 8509.

primitive

3.3 Management framework definitions

This Recommendation | International Standard makes use of the following terms as defined in CCITT Rec. X.700 | ISO/IEC 7498-4:

- a) Management information;
- b) Managed object;
- c) systems-management-application-entity.

3.4 Systems management overview definitions

This Recommendation | International Standard makes use of the following terms defined in CCITT Rec. X.701 | ISO/IEC 10040:

- a) agent role;
- b) dependent conformance;
- c) general conformance;
- d) management support object;
- e) manager role;
- f) notification;
- g) systems management functional unit;
- h) systems management operation.

3.5 Common management information service definitions

This Recommendation | International Standard makes use of the following terms defined in CCITT Rec. X. 710 | ISO/IEC 9595:

- a) attribute;
- b) common management information services;
- c) common management Information service element.

3.6 OSI conformance testing definitions

This Recommendation | International Standard makes use of the following term defined in CCITT Rec. X.290 | ISO/IEC 9646-1.

system conformance statement

3.7 Additional definitions

The following terms are defined in this Recommendation | International Standard.

3.7.1 discriminator: A management support object that allows a system to select management operations and event reports relating to other managed objects.