

This is a preview - [click here to buy the full publication](#)

INTERNATIONAL STANDARD

ISO/IEC 10164-5

First edition
1993-06-15

Information technology — Open Systems Interconnection — Systems Management: Event Report Management Function

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Gestion-systèmes: Fonction de gestion de rapport événementiel*



Reference number
ISO/IEC 10164-5:1993(E)

Contents	Page
1 Scope	1
2 Normative references	1
2.1 Identical Recommendations International Standards	1
2.2 Paired Recommendations International Standards equivalent in technical content	2
2.3 Additional references	2
3 Definitions	2
3.1 Basic reference model definitions	3
3.2 Service convention definitions	3
3.3 Management framework definitions	3
3.4 Systems management overview definitions	3
3.5 Common management information service definitions	3
3.6 OSI conformance testing definitions	3
3.7 Additional definitions	3
4 Abbreviations	4
5 Conventions	4
6 Requirements	4
7 Model for the event report management function	5
7.1 General	5
7.2 Event report management model	5
8 Generic definitions	6
8.1 Managed objects	6
8.2 Imported generic definitions	11
9 Service definitions	11
9.1 Introduction	11
9.2 Initiation of event report forwarding	11
9.3 Termination of event report forwarding	12
9.4 Event forwarding discriminator modification, suspension and resumption	12
9.5 Retrieval of event forwarding discriminator attributes	12

© ISO/IEC 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

10	Functional units	12
11	Protocol	13
11.1	Elements of procedure	13
11.2	Abstract syntax	13
11.3	Negotiation of functional units	14
12	Relationship with other functions	14
13	Conformance	14
13.1	General conformance class requirements	15
13.2	Dependent conformance class requirements	15
13.3	Conformance to support managed object definitions	15
Annex A	Example value notation for the discriminator construct	16
Annex B	Event forwarding using local mechanism	17
Annex C	Considerations for system implementation conformance statement	18

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. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 10164-5 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in collaboration with the CCITT. The identical text is published as CCITT Recommendation X.734.

ISO/IEC 10164 consists of the following parts, under the general title *Information technology – Open Systems Interconnection – Systems Management*:

- *Part 1 : Object Management Function*
- *Part 2 : State Management Function*
- *Part 3 : Attributes for representing relationships*
- *Part 4 : Alarm reporting function*
- *Part 5 : Event report management function*
- *Part 6: Log control function*
- *Part 7: Security alarm reporting function*
- *Part 8: Security audit trail function*
- *Part 9: Objects and attributes for access control*
- *Part 10: Accounting meter function*
- *Part 11: Workload monitoring function*
- *Part 12: Test management function*
- *Part 13: Summarization function*
- *Part 14: Confidence and diagnostic test categories*

Introduction

ISO/IEC 10164 is a multipart Standard developed according to ISO 7498 and ISO/IEC 7498-4. ISO/IEC 10164 is related to the following International Standards:

ISO/IEC 9595:1990, *Information technology – Open Systems Interconnection – Common management information service definition*;

ISO/IEC 9596:1990, *Information technology – Open Systems Interconnection – Common management information protocol*;

ISO/IEC 10040:1992, *Information technology – Open Systems Interconnection – Systems management overview*;

ISO/IEC 10165:1992, *Information technology – Open Systems Interconnection – Structure of management information*.

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*.

- 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.*