

INTERNATIONAL
STANDARD

ISO/IEC
8649

Second edition
1996-10-15

AMENDMENT 2
1998-09-15

Information technology — Open Systems
Interconnection — Service definition for the
Association Control Service Element

AMENDMENT 2: Fast-associate mechanism

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Définition de service applicable à l'élément de service de contrôle
d'association*

AMENDEMENT 2: Mécanisme d'association rapide



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.

Amendment 2 to ISO/IEC 8649:1996 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 33, *Distributed application services*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.217/Amd.2.

© ISO/IEC 1998

All rights reserved. Unless otherwise specified, 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

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
SERVICE DEFINITION FOR THE ASSOCIATION
CONTROL SERVICE ELEMENT****AMENDMENT 2
Fast-associate mechanism****1) Introduction***Add the following paragraphs:*

The fast-associate mechanism allows a session connection, including its embedded presentation connection and application association, to be established using a compressed form of the information that would otherwise be sent on the S-CONNECT exchange. The compressed form, called the upper-layer context identifier, is a reference to an upper-layer context specification, which is a definition of the fields of the application, ACSE, presentation and session protocols that would be sent on the full-form connect messages. The upper-layer context identifier may be parameterized to include values for the variable fields allowed by the full form protocols for the upper layers.

Within the ACSE service, the only addition is the presence of a conceptual parameter which summarizes the contents of the User information of the A-ASSOCIATE primitives.

2) Subclause 8.2.1*In Table 2, add "User Summary" to the list of parameters for A-ASSOCIATE Service after User Information:***3) Subclause 9.1.1.1***Add a row in Table 3, after User Information:*

Parameter Name	Req	Ind	Rsp	Cnf
User Summary	U	C(=)	U	C(=)

4) New subclause 9.1.1.18 bis*Add a new subclause 9.1.1.18 bis after 9.1.1.18:***9.1.1.18 bis User summary**

User Summary is a parameter that summarizes the semantic content of the User Information, by reference to an upper-layer context specification.

ICS 35.100.70

Descriptors: data processing, information interchange, network interconnection, open systems interconnection, communication procedure, control procedures, application layer.

Price based on 1 page

INTERNATIONAL STANDARD

ISO/IEC 8649

Second edition
1996-10-15

AMENDMENT 1
1997-12-15

Information technology — Open Systems Interconnection — Service definition for the Association Control Service Element

AMENDMENT 1: Support of authentication mechanisms for the connectionless mode

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Définition du service pour l'élément de service de contrôle
d'association*

*AMENDEMENT 1: Support des mécanismes d'authentification pour le mode
sans connexion*

This material is reproduced from ISO documents under International Organization for Standardization (ISO) Copyright License number IHS/ICC/1996. Not for resale. No part of these ISO documents may be reproduced in any form, electronic retrieval system or otherwise, except as allowed in the copyright law of the country of use, or with the prior written consent of ISO (Case postale 56, 1211 Geneva 20, Switzerland, Fax +41 22 734 10 79), IHS or the ISO Licensor's members.



Reference number
ISO/IEC 8649:1996/Amd.1:1997 (E)
AVA Documents
Document Sharing Hub

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.

Amendment 1 to International Standard ISO/IEC 8649:1996 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open systems interconnection, data management and open distributed processing*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.217/Amd.1.

© ISO/IEC 1997

All rights reserved. Unless otherwise specified, 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

Introduction

This amendment to the ACSE service definition defines the use of the authentication functional unit in the connectionless mode.

INTERNATIONAL STANDARD
ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
SERVICE DEFINITION FOR THE ASSOCIATION
CONTROL SERVICE ELEMENT

AMENDMENT 1
Support of authentication mechanisms for the connectionless mode

1) Subclause 7.2

Delete the second paragraph and replace with the following subclause and table.

7.2.1 Functional units

Functional units are used by this Service Definition to identify ACSE user requirements. Two functional units are defined:

- a) Kernel functional unit; and
- b) Authentication functional unit.

The Kernel functional unit is always available.

The Authentication functional unit supports peer entity authentication. This functional unit does not include additional services. It adds parameters to the A-UNIT-DATA service.

Table 2 bis shows the services and parameters associated with the ACSE functional units for the connectionless mode of communication.

Table 2 bis – Functional unit services and their parameters (connectionless mode)

Functional Unit	Service	Parameter
Kernel	A-UNIT-DATA	Application Context Name Calling AP Title Calling AE Qualifier Calling AP Invocation-identifier Calling AE Invocation-identifier Called AP Title Called AE Qualifier Called AP Invocation-identifier Called AE Invocation-identifier User Information Calling Presentation Address Called Presentation Address Presentation Context Definition List Quality of Service
Authentication	A-UNIT-DATA	Authentication-mechanism Name Authentication-value ACSE Requirements

2) Subclause 9.5.1.14

Add the following new subclauses after subclause 9.5.1.14:

9.5.1.15 ACSE Requirements

This parameter is used by the requestor to indicate the functional units requested for the transfer of the data unit. If it is not present, only the Kernel functional unit is requested.

This parameter takes on the following symbolic value:

- authentication.

9.5.1.16 Authentication-mechanism Name

This parameter shall only be used if the ACSE Requirements parameter includes the Authentication functional unit. If present, the value of this parameter identifies the authentication-mechanism in use. If not present, the communicating AEIs must implicitly know the mechanism in use (e.g. by prior understanding).

9.5.1.17 Authentication value

This parameter shall only be used if the ACSE Requirements parameter includes the Authentication functional unit.

If present, this parameter contains an authentication-value generated by the authentication-function in the AEI that issued the service primitive. It is intended for the peer’s authentication-function.

3) Subclause 9.5.1, Table 7

Add the following rows to the end of Table 7:

ACSE Requirements	U	C
Authentication-mechanism Name	U	C(=)
Authentication value	U	C(=)

ISO/IEC 8649:1996/Amd.1:1997(E)

© ISO/IEC

ICS 35.100.70

Descriptors: data processing, information interchange, network interconnection, open systems interconnection, application layer, data transmission, services, definitions.

Price based on 2 pages

INTERNATIONAL STANDARD

ISO/IEC
8649

Second edition
1996-10-15

Information technology — Open Systems Interconnection — Service definition for the Association Control Service Element

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Définition du service pour l'élément de service de contrôle
d'association*

This material is reproduced from ISO documents under International Organization for Standardization (ISO) Copyright License number IHS/ICC/1996. Not for resale. No part of these ISO documents may be reproduced in any form, electronic retrieval system or otherwise, except as allowed in the copyright law of the country of use, or with the prior written consent of ISO (Case postale 56, 1211 Geneva 20, Switzerland, Fax +41 22 734 10 79), IHS or the ISO Licensor's members.



Reference number
ISO/IEC 8649:1996(E)

AVA Documents
Document Sharing Hub

Contents

	<i>Page</i>
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 Reference model definitions	2
3.1.1 Basic Reference Model definitions	2
3.1.2 Security architecture definitions	3
3.1.3 Naming and addressing definitions	3
3.2 Service conventions definitions	3
3.3 Presentation service definitions	3
3.4 Application Layer Structure definitions	4
3.5 ACSE service definitions	4
4 Abbreviations	4
5 Conventions	5
6 Basic concepts	5
6.1 General	5
6.2 Authentication	6
6.2.1 Authentication concepts	6
6.2.2 ACSE authentication facilities	6
7 Service overview	7
7.1 Connection-oriented mode	7
7.1.1 ACSE services	7
7.1.2 Functional units	8
7.2 Connectionless mode	8
8 Relationship with other ASEs and lower layer services	8
8.1 Other application-service-elements	8
8.2 Presentation-service	8
8.2.1 Connection-oriented mode	8
8.2.2 Connectionless mode	10
8.3 Session-service	10
8.3.1 Connection-oriented mode	10
8.3.2 Connectionless mode	10

© ISO/IEC 1996

All rights reserved. Unless otherwise specified, 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