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## Information processing systems — Open Systems Interconnection — Protocol specification for the Association Control Service Element

**iTeh STANDARD PREVIEW**

*Systemes de traitement de l'information — Interconnexion de systemes ouverts — Specification  
du protocole pour l'element de service de controle d'association*

ISO 8650:1988

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## Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8650 was prepared by Technical Committee ISO/TC 97, *Information processing systems*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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# Information processing systems — Open Systems Interconnection — Protocol specification for the Association Control Service Element

## 0 Introduction

0.1 This International Standard is one of a set of International Standards produced to facilitate the interconnection of information processing systems. It is related to other International Standards in the set as defined by the Reference Model for Open Systems Interconnection (ISO 7498). The Reference Model subdivides the area of standardization for interconnection into a series of layers of specification, each of manageable size.

0.2 The goal of Open Systems Interconnection is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of information processing systems:

- from different manufacturers;
- under different managements;
- of different levels of complexity; and
- of different technologies.

0.3 This International Standard specifies the protocol for the application-service-element for application-association control: the Association Control Service Element (ACSE). The ACSE provides services for establishing and releasing application-associations. These services are intended to be applicable to a wide range of application-process communication requirements.

0.4 This International Standard includes an annex that describes the protocol machine of ACSE in terms of a state table. This protocol machine is referred to as the Association Control Protocol Machine (ACPM).

0.5 The protocol defined in this International Standard is also governed by the use of the presentation-service (ISO 8822) and the session-service (ISO 8326).

0.6 Quality of Services (QOS) is a parameter of the A-AS-SOCIATE service. Work is still in progress to provide an integrated treatment of QOS across all of the layers of the OSI Reference Model and to ensure that the individual treatments in each layer service satisfy overall QOS objectives in a consistent manner. As a consequence, an addendum may be

added to this International Standard at a later time which reflects further QOS developments and integration.

## 1 Scope and field of application

The procedures defined in this International Standard are applicable to instances of communication between systems which wish to interconnect in an open systems interconnection environment.

This International Standard specifies:

- a) procedures for the transfer of information relating to application-association control between application-entities; and
- b) the abstract syntax for the representation of the ACSE APDUs.

The ACSE procedures are defined in terms of:

- a) the interactions between peer ACSE protocol machines through the use of presentation-services; and
- b) the interaction between an ACSE protocol machine and its service-user.

This International Standard also specifies conformance requirements for systems implementing these procedures. It does not contain tests which can be used to demonstrate conformance.

## 2 References

ISO 7498, *Information processing systems - Open Systems Interconnection - Basic Reference Model*.

ISO 7498-3, *Information processing systems - Open Systems Interconnection - Basic Reference Model - Part 3: Naming and Addressing*.<sup>1</sup>

1 At present at the stage of draft, publication anticipated in due course.

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ISO 8326, *Information processing systems - Open Systems Interconnection - Basic connection oriented session service definition.*

ISO 8327, *Information processing systems - Open Systems Interconnection - Basic connection oriented session protocol specification.*

ISO/TR 8509, *Information processing systems - Open Systems Interconnection - Service conventions.*

ISO 8649, *Information processing systems - Open Systems Interconnection - Service definition for the Association Control Service Element.*

ISO 8822, *Information processing systems - Open Systems Interconnection - Connection oriented presentation service definition.*

ISO 8824, *Information processing systems - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1).*

ISO 8825, *Information processing systems - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Notation One (ASN.1).*

CCITT Recommendation X.410: *Message Handling Systems: Remote Operations and Reliable Transfer Server (1984).*

### 3 Definitions

#### 3.1 Reference Model definitions

This International Standard is based on the concepts developed in ISO 7498 and makes use of the following terms defined in it:

- a) Application Layer;
- b) application-process;
- c) application-entity;
- d) application-service-element;
- e) application-protocol-data-unit;
- f) application-protocol-control-information;
- g) presentation-service;
- h) presentation-connection;
- i) session-service;

- j) session-protocol; and
- k) session-connection.

#### 3.2 Naming and addressing definitions

This International Standard makes use of the following terms defined in ISO 7498-3:

- a) application-process title;
- b) application-entity qualifier;
- c) application-entity title<sup>1</sup>;
- d) application-process invocation-identifier;
- e) application-entity invocation-identifier; and
- f) presentation address.

#### 3.3 Service conventions definitions

This International Standard makes use of the following terms defined in ISO/TR 8509:

- a) service-provider;
- b) service-user;
- c) confirmed service;
- d) non-confirmed service;
- e) provider-initiated service;
- f) primitive;
- g) request (primitive);
- h) indication (primitive);
- i) response (primitive); and
- j) confirm (primitive).

#### 3.4 Presentation service definitions

This International Standard makes use of the following terms defined in ISO 8822:

- a) abstract syntax;
- b) abstract syntax name;
- c) default context;

<sup>1</sup> As defined in ISO 7498-3, an application-entity title is composed of an application-process title and an application-entity qualifier. The ACSE protocol provides for the transfer of an application-entity title value by the transfer of its component values.

- d) defined context set;
- e) functional unit [presentation];
- f) normal mode [presentation];
- g) presentation context;
- h) presentation data value; and
- i) X.410-1984 mode [presentation].

### 3.5 ACSE service definitions

This International Standard makes use of the following terms defined in ISO 8649:

- a) application-association; association;
- b) application context;
- c) Association Control Service Element;
- d) ACSE service-user;
- e) ACSE service-provider;
- f) requestor;
- g) acceptor;
- h) association-initiator;
- i) association-responder;
- j) normal mode;
- k) X.410-1984 mode; and
- l) disrupt.

### 3.6 Association Control protocol specification definitions

The following terms are introduced in this International Standard.

**3.6.1 Association Control Protocol Machine:** The protocol machine for the Association Control Service Element specified in this International Standard.

**3.6.2 requesting Association Control Protocol Machine:** The Association Control Protocol Machine whose service-user is the requestor of a particular Association Control Service Element service.

**3.6.3 accepting Association Control Protocol Machine:** The Association Control Protocol Machine whose service-user is the acceptor for a particular Association Control Service Element service.

## 4 Symbols and abbreviations

### 4.1 Data units

APDU application-protocol-data-unit

### 4.2 Types of application-protocol-data-units

The following abbreviations have been given to the application-protocol-data-units defined in this International Standard.

AARQ	A-ASSOCIATE-REQUEST APDU
AARE	A-ASSOCIATE-RESPONSE APDU
RLRQ	A-RELEASE-REQUEST APDU
RLRE	A-RELEASE-RESPONSE APDU
ABRT	A-ABORT APDU

### 4.3 Other abbreviations

The following abbreviations are used in this International Standard.

ACPM	Association Control Protocol Machine
ACSE	Association Control Service Element
AE	application-entity
AP	application-process
APCI	application-protocol-control-information
ASE	application-service-element
ASN.1	Abstract Syntax Notation One
OSI	Open Systems Interconnection
QOS	quality of service

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## 5 Conventions

**5.1** This International Standard employs a tabular presentation of its APDU fields. In clause 7, tables are presented for each ACSE APDU. Each field is summarized using the following notation:

M	presence is mandatory
O	presence is ACPM option
U	presence is ACSE service-user option
req	source is related request primitive
ind	sink is related indication primitive
rsp	source is related response primitive
cnf	sink is related confirm primitive
sp	source or sink is the ACPM

**5.2** The structure of each ACSE APDU is specified in clause 9 using the abstract syntax notation of ASN.1 (ISO 8824).

## 6 Overview of the protocol

### 6.1 Service provision

The protocol specified in this International Standard provides the services defined in ISO 8649. These services are listed in table 1. For a particular association, the ACSE services operate either in the normal mode or in the X.410-1984 mode. The mode of operation is determined by the Mode parameter on the A-ASSOCIATE request primitive.

Table 1 - Service summary

Service	Type
A-ASSOCIATE	Confirmed
A-RELEASE	Confirmed
A-ABORT	Non-confirmed
A-P-ABORT	Provider-initiated

### 6.2 Use of the presentation-service

6.2.1 ACSE's use of the presentation-service is determined by ACSE's mode of operation for an association as specified below.

a) ACSE normal mode: The ACPM uses the normal mode of the presentation-service (ISO 8822). The ACPM uses the presentation-service Kernel functional unit to exchange its APCI and, optionally, ACSE service-user information (i.e., ACSE APDUs) with its peer. The use of additional presentation-service functional units is an ACSE service-user choice. This choice does not affect the operation of the ACPM.

b) ACSE X.410-1984 mode: The ACPM uses the X.410-1984 mode of the presentation-service. Only the Kernel functional unit is available when using the presentation-service X.410-1984 mode. In this mode, the ACPM does not exchange its own APCI with its peer. It simply passes through information supplied to it by the ACSE service-user or by the presentation-service.

6.2.2 This International Standard assumes that the ACPM is the sole user of the P-CONNECT, P-RELEASE, P-U-ABORT, and P-P-ABORT services. The ACSE neither uses nor constrains the use of any other presentation service.

6.2.3 When supported by version 1 of the session-protocol (ISO 8327), the presentation-service is subject to length restrictions for its user-data parameters. This International Standard assumes that a local mechanism detects violations of these constraints and makes the ACSE service-user aware of them. An encoding optimization is specified for A-ABORT to mitigate this problem (see 7.3.3.1).

### 6.3 Relationship to the session-service

6.3.1 The session functional units required for the session-connection that supports the presentation-connection (that in turn supports the association) are determined by the A-ASSOCIATE service requestor and acceptor. They ac-

complish this using the Session Requirements parameter on the A-ASSOCIATE primitives. The session functional units are described in ISO 8326.

6.3.2 The rules of the session-service affect the operation of the ACPM and its service-user. The ACSE service-user must be aware of these constraints. This International Standard assumes that a local mechanism enforces them. Some examples of session-service constraints that affect the ACSE service-user are:

- a) the availability of negotiated release; and
- b) the possibility of release collisions.

### 6.4 Model

6.4.1 The Association control Protocol Machine (ACPM) is modeled as a finite state machine whose specification is given in this International Standard. The ACPM communicates with its service-user by means of the ACSE service primitives defined in ISO 8649. The ACPM communicates with its presentation service-provider by means of the presentation services defined in ISO 8822.

6.4.2 The ACPM is driven by the receipt of input events from its ACSE service-user and from its presentation service-provider for the underlying presentation-connection that supports the association. The input events from the ACSE service-user are ACSE request and response primitives. The input events from its presentation service-provider are presentation indication and confirm primitives.

6.4.3 The ACPM responds to input events by issuing output events to its presentation service-provider and to its ACSE service-user. The output events to its presentation service-provider are presentation request and response primitives. The output events to its ACSE service-user are ACSE indication and confirm primitives.

6.4.4 The receipt of an input event, the generation of dependent actions, and the resultant output event are considered to be an indivisible action.

6.4.5 During the establishment of an association between two AEs, the existence of invocations of both the requesting and responding AEs is presumed. How they are created is outside of the scope of this International Standard.

6.4.6 A new invocation of an ACPM is employed upon the receipt of an A-ASSOCIATE request primitive or a P-CONNECT indication primitive. Each such invocation controls exactly one association.

NOTE — Each association may be identified in an end system by a local mechanism so that the ACSE service-user and the ACPM can refer to the association.

6.4.7 The ACPM is modeled to operate in either one of two modes for a given association: the normal mode; and the X.410-1984 mode as specified below.

- a) When operating in the normal mode, an ACPM communicates with its peer ACPM in support of an association by transferring ACSE application protocol data units



(APDUs) defined in clause 9. <sup>1</sup> An ACSE APDU is transferred as a presentation data value in the User Data parameter of the presentation primitive used on the underlying presentation-connection.

b) When operating in the X.410-1984 mode, an ACPM does not transfer ACSE APDUs with its peer. In this situation, the sending and receiving of presentation primitives are in themselves significant protocol events.

**7 Elements of procedure**

The ACSE protocol consists of the following procedures:

- a) association establishment;
- b) normal release of an association; and
- c) abnormal release of an association.

In this clause, a summary of each of these elements of procedure is presented. This consists of a summary of the relevant APDUs, and a high-level overview of the relation-

ship between the ACSE services, the APDUs involved, and the presentation service that is used. Clause 8 describes how the parameters of the presentation primitives are used. In clause 9, a detailed specification of the ACSE APDUs is given using the notation of ASN.1 (ISO 8824). Annex A presents the state table for the ACPM.

**7.1 Association establishment**

**7.1.1 Purpose**

The association establishment procedure is used to establish an association between two AEs. It supports the A-ASSOCIATE service.

**7.1.2 APDUs used**

The association establishment procedure uses the A-ASSOCIATE-REQUEST (AARQ) and the A-ASSOCIATE-RESPONSE (AARE) APDUs. The fields of the AARQ APDU are listed in table 2. The fields of the AARE APDU are listed in table 3.

**Table 2 - AARQ APDU fields**

Field name	Presence	Source	Sink
Protocol Version	O	sp	sp
Application Context Name	M	req	ind
Calling AP Title	U	req	ind
Calling AE Qualifier	U	req	ind
Calling AP Invocation-identifier	U	req	ind
Calling AE Invocation-identifier	U	req	ind
Called AP Title	U	req	ind
Called AE Qualifier	U	req	ind
Called AP Invocation-identifier	U	req	ind
Called AE Invocation-identifier	U	req	ind
Implementation Information	O	sp	sp
User Information	U	req	ind

**Table 3 - AARE APDU fields**

Field name	Presence	Source	Sink
Protocol Version	O	sp	sp
Application Context Name	M	rsp	cnf
Responding AP Title	U	rsp	cnf
Responding AE Qualifier	U	rsp	cnf
Responding AP Invocation-identifier	U	rsp	cnf
Responding AE Invocation-identifier	U	rsp	cnf
Result	M	rsp/sp	cnf
Result Source - Diagnostic	M	rsp/sp	cnf
Implementation Information	O	sp	sp
User Information	U	rsp	cnf

<sup>1</sup> This is true with one exception. If the association is supported by version 1 of the session-protocol (ISO 8327), the requesting ACPM does not pass ACSE APCI as user data on a P-U-ABORT request primitive. The absence of ACSE APCI in this situation does not imply that the association is operating in the X.410-1984 mode (see 6.4.6 and 7.3.3.1).

**7.1.3 Association establishment procedure**

This procedure is driven by the following events:

- a) an A-ASSOCIATE request primitive from the requestor;
- b) an AARQ APDU as user data on a P-CONNECT indication primitive;
- c) an A-ASSOCIATE response primitive from the acceptor; and
- d) a P-CONNECT confirm primitive (that may or may not contain an AARE APDU).

**7.1.3.1 A-ASSOCIATE request primitive**

**7.1.3.1.1** The requesting ACPM forms an AARQ APDU from parameter values of the A-ASSOCIATE request primitive and optionally, the Protocol Version and implementation information. It issues a P-CONNECT request primitive also using information from the A-ASSOCIATE request primitive. The User Data parameter of the P-CONNECT request primitive contains the AARQ APDU.

**7.1.3.1.2** The requesting ACPM waits for a primitive from the presentation service-provider and does not accept any other primitive from the requestor other than an A-ABORT request primitive.

**7.1.3.2 AARQ APDU**

**7.1.3.2.1** The accepting ACPM receives an AARQ APDU from its peer as user data on a P-CONNECT indication primitive.

**7.1.3.2.2** The ACPM determines if the AARQ APDU is acceptable based on the rules for extensibility (see 7.4). If the AARQ APDU is not acceptable, a protocol error results (see 7.3.3.4). The association establishment procedure is disrupted. An A-ASSOCIATE indication primitive is not issued. The association is not established.

**7.1.3.2.3** The ACPM next inspects the value of the Protocol Version field<sup>1</sup> of the AARQ APDU. If the ACPM does not support a common protocol version, it forms an AARE APDU with the following assigned fields:

- a) Protocol Version field (optional) with the value that indicates the protocol version(s) that it could support (see 7.1.5.1);
- b) Application Context Name field with the same value as on the AARQ APDU;
- c) Result field with the value "rejected(permanent)"; and

- d) Result Source - Diagnostic field with the values "ACSE service-provider" and "no common ACSE version."

In this case, the ACPM sends the AARE APDU as user data on a P-CONNECT response primitive with a Result parameter that has the value "user rejection." The ACPM does not issue an A-ASSOCIATE indication primitive. The association is not established.

**7.1.3.2.4** If the P-CONNECT indication primitive and its AARQ APDU are acceptable, the ACPM issues an A-ASSOCIATE indication primitive to the acceptor. The A-ASSOCIATE indication primitive parameters are derived from the AARQ APDU and the P-CONNECT indication primitive. The ACPM waits for a primitive from the acceptor.

**7.1.3.3 ASSOCIATE response primitive**

**7.1.3.3.1** When the accepting ACPM receives the A-ASSOCIATE response primitive, the Result parameter specifies whether the service-user has accepted or rejected the association. The ACPM forms an AARE APDU using the A-ASSOCIATE response primitive parameters. The ACPM sets the Result Source - Diagnostic field to "ACSE service-user" and the value derived from the Diagnostic parameter of the response primitive. The AARE APDU is sent as the User Data parameter on the P-CONNECT response primitive.

**7.1.3.3.2** If the acceptor accepted the association request, the Result parameter on the related P-CONNECT response primitive specifies "acceptance", and the Result field of the outgoing AARE APDU specifies "accepted." The association is established.

**7.1.3.3.3** If the acceptor rejected the association request, the Result parameter on the related P-CONNECT response primitive specifies "user-rejection", and the Result field of the AARE APDU contains the appropriate rejection value. The association is not established.

**7.1.3.4 P-CONNECT confirm primitive**

**7.1.3.4.1** The requesting ACPM receives a P-CONNECT confirm primitive. The following situations are possible:

- a) the association has been accepted;
- b) the accepting ACPM or the acceptor has rejected the association; or
- c) the presentation service-provider has rejected the related presentation connection.

**7.1.3.4.2** If the association was accepted, the P-CONNECT confirm primitive Result parameter specifies "acceptance." The User Data parameter contains an AARE APDU. The Result field of the AARE APDU specifies "accepted." The requesting ACPM issues an A-ASSOCIATE confirm primitive

<sup>1</sup> If the Protocol Version field is not present in the AARQ APDU, version 1 is assumed.

to the requestor derived from parameters from the P-CONNECT confirm primitive and the AARE APDU. The A-ASSOCIATE confirm primitive Result parameter specifies "accepted." The association is established.

**7.1.3.4.3** If the association was rejected by either the accepting ACPM or by the acceptor, the related P-CONNECT confirm primitive Result parameter specifies "user-rejection." The User Data parameter contains an AARE APDU.

**7.1.3.4.4** The requesting ACPM issues an A-ASSOCIATE confirm primitive to the requestor derived from parameters from the P-CONNECT confirm primitive and the AARE APDU. The A-ASSOCIATE confirm primitive Result parameter indicates "rejected(transient)" or "rejected(permanent)." The Result Source parameter indicates "ACSE service-user" or "ACSE service-provider." The association is not established.

**7.1.3.4.5** If the presentation-connection was rejected by the presentation service-provider, the P-CONNECT confirm primitive Result parameter specifies "provider-rejection." In this situation, the User Data field is not used. The requesting ACPM issues an A-ASSOCIATE confirm primitive with the Result parameter indicating "rejected(permanent)." The Result Source parameter indicates "presentation service-provider."<sup>1</sup> The association is not established.

#### 7.1.4 Use of the AARQ APDU fields

The AARQ APDU fields are used by the requesting and accepting ACPMs as specified below.

##### 7.1.4.1 Protocol Version

For the requesting ACPM: The value assigned to this field is determined within the implementation of the ACPM. It is a 16-bit string where each bit that is set to one indicates the version of ACSE protocol that this ACPM supports. Bit 0 represents version 1; bit 1 represents version 2; etc. Multiple bits may be set indicating support of multiple versions. No trailing bits higher than the highest version of this International Standard that the requesting ACPM supports are included. That is, the last bit of the string is set to one.

For the accepting ACPM: The ACPM ignores trailing bits of this field that are higher than the one indicating the latest version of this International Standard that it supports.

##### 7.1.4.2 Application Context Name

For the requesting ACPM: This value is determined by the value of the Application Context Name parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Application Context Name parameter of the A-ASSOCIATE indication primitive, if issued.

##### 7.1.4.3 Calling AP Title

For the requesting ACPM: This value is determined by the value of the Calling AP Title parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Calling AP Title parameter of the A-ASSOCIATE indication primitive, if issued.

##### 7.1.4.4 Calling AE Qualifier

For the requesting ACPM: This value is determined by the value of the Calling AE Qualifier parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Calling AE Qualifier parameter of the A-ASSOCIATE indication primitive, if issued.

##### 7.1.4.5 Calling AP Invocation-identifier

For the requesting ACPM: This value is determined by the value of the Calling AP Invocation-identifier parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to derive the value of the Calling AP Invocation-identifier parameter of the A-ASSOCIATE indication primitive, if issued.

##### 7.1.4.6 Calling AE Invocation-identifier

For the requesting ACPM: This value is determined by the value of the Calling AE Invocation-identifier parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to derive the value of the Calling AE Invocation-identifier parameter of the A-ASSOCIATE indication primitive, if issued.

##### 7.1.4.7 Called AP Title

For the requesting ACPM: This value is determined by the value of the Called AP Title parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Called AP Title parameter of the A-ASSOCIATE indication primitive, if issued.

<sup>1</sup> The presentation-service (ISO 8822) currently does not define a Diagnostic parameter on the P-CONNECT response. However, work is still in progress to provide an integrated treatment of the "result" related parameters across all layers of the OSI Reference Model. As a consequence, an addendum may be added to this International Standard at a later time that reflects further developments and integration.

**7.1.4.8 Called AE Qualifier**

For the requesting ACPM: This value is determined by the value of the Called AE Qualifier parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Called AE Qualifier parameter of the A-ASSOCIATE indication primitive, if issued.

**7.1.4.9 Called AP Invocation-identifier**

For the requesting ACPM: This value is determined by the value of the Called AP Invocation-identifier parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Called AP Invocation-identifier parameter of the A-ASSOCIATE indication primitive, if issued.

**7.1.4.10 Called AE Invocation-identifier**

For the requesting ACPM: This value is determined by the value of the Called AE Invocation-identifier parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the Called AE Invocation-identifier parameter of the A-ASSOCIATE indication primitive, if issued.

**7.1.4.11 Implementation Information**

For the requesting ACPM: The value assigned to this field is determined within the implementation of the ACPM. It contains information specific to the individual implementation of that ACPM. It is not used in negotiation.

For the accepting ACPM: This field does not affect the operation of the ACPM. Any use depends on a common understanding between the requesting and accepting ACPMs.

**7.1.4.12 User Information**

For the requesting ACPM: This value is determined by the value of the User Information parameter of the A-ASSOCIATE request primitive.

For the accepting ACPM: This value is used to determine the value of the User Information parameter of the A-ASSOCIATE indication primitive, if issued.

**7.1.5 Use of the AARE APDU fields**

The AARE APDU fields are used by the accepting and requesting ACPMs as specified below.

**7.1.5.1 Protocol Version**

For the accepting ACPM: The value of this field assigned by the ACPM depends on whether the association request is accepted or rejected by the ACPM and the acceptor, as specified below.

a) If the association is accepted, the value assigned by the ACPM is a variable length bit string that indicates the protocol version selected by the ACPM from those proposed in the AARQ APDU. Only the bit indicating the version selected is set to one. That bit is the last bit in the string.

b) If the association is rejected, the value assigned by the ACPM is a variable length bit string that indicates the protocol version(s) of this International Standard that could be supported by the ACPM.

For the requesting ACPM: The use of the value in this field depends on whether the association request is accepted or rejected.

a) If the association is accepted, this value defines the protocol version of this International Standard to be used for this association.

b) If the association is rejected, the use of this value is a local option.

**7.1.5.2 Application Context Name**

For the accepting ACPM: This value is determined by the value of the Application Context Name parameter of the A-ASSOCIATE response primitive.

For the requesting ACPM: This value is used to determine the value of the Application Context Name parameter of the A-ASSOCIATE confirm primitive.

**7.1.5.3 Responding AP Title**

For the accepting ACPM: This value is determined by the value of the Responding AP Title parameter of the A-ASSOCIATE response primitive.

For the requesting ACPM: This value is used to determine the value of the Responding AP Title parameter of the A-ASSOCIATE confirm primitive, if issued.

**7.1.5.4 Responding AE Qualifier**

For the accepting ACPM: This value is determined by the value of the Responding AE Qualifier parameter of the A-ASSOCIATE response primitive.

For the requesting ACPM: This value is used to determine the value of the Responding AE Qualifier parameter of the A-ASSOCIATE confirm primitive, if issued.

**7.1.5.5 Responding AP Invocation-identifier**

For the accepting ACPM: This value is determined by the value of the Responding AP Invocation-identifier parameter of the A-ASSOCIATE response primitive.

For the requesting ACPM: This value is used to determine the value of the Responding AP Invocation-identifier parameter of the A-ASSOCIATE confirm primitive, if issued.