



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**X.217**

**Amendment 1**  
(10/96)

SERIES X: DATA NETWORKS AND OPEN SYSTEM  
COMMUNICATION

Open System Interconnection – Service definitions

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Information technology – Open Systems  
Interconnection – Service definition for the  
association control service element

**Amendment 1: Support of authentication  
mechanisms for the connectionless mode**

ITU-T Recommendation X.217 – Amendment 1

(Previously CCITT Recommendation)

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*For further details, please refer to ITU-T List of Recommendations.*

## FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. Some 179 member countries, 84 telecom operating entities, 145 scientific and industrial organizations and 38 international organizations participate in ITU-T which is the body which sets world telecommunications standards (Recommendations).

The approval of Recommendations by the Members of ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, 1993). In addition, the World Telecommunication Standardization Conference (WTSC), 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 ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC. The text of ITU-T Recommendation X.217, Amendment 1, was approved on 5th of October 1996. The identical text is also published as ISO/IEC International Standard 8649.

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### NOTE

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

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## **Summary**

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 AEs 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(=)

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