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**Information technology — Open Systems  
Interconnection — Generic upper layers  
security: Security Exchange Service  
Element (SESE) service definition**

*Technologies de l'information — Interconnexion de systèmes ouverts  
(OSI) — Sécurité des couches supérieures génériques: Définition du  
service pour l'élément de service d'échange de sécurité (SESE)*

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## 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 11586-2 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 Recommendation X.831.

ISO/IEC 11586 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — Generic upper layers security*:

- *Part 1: Overview, models and notation*
- *Part 2: Security Exchange Service Element (SESE) service definition*
- *Part 3: Security Exchange Service Element (SESE) protocol specification*
- *Part 4: Protecting transfer syntax specification*
- *Part 5: Security Exchange Service Element Protocol Implementation Conformance Statement (PICS) proforma*
- *Part 6: Protecting transfer syntax Protocol Implementation Conformance Statement (PICS) proforma*

## Introduction

This Recommendation | International Standard forms part of a series of Recommendations | multi-part International Standards, which provide(s) a set of facilities to aid the construction of Upper Layers protocols which support the provision of security services. The parts are as follows:

- Part 1: Overview, Models and Notation;
- Part 2: Security Exchange Service Element Service Definition;
- Part 3: Security Exchange Service Element Protocol Specification;
- Part 4: Protecting Transfer Syntax Specification;
- Part 5: Security Exchange Service Element PICS Proforma;
- Part 6: Protecting Transfer Syntax PICS Proforma.

This Recommendation | International Standard constitutes Part 2 of this series.

## INTERNATIONAL STANDARD

## ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –  
GENERIC UPPER LAYERS SECURITY: SECURITY EXCHANGE  
SERVICE ELEMENT (SESE) SERVICE DEFINITION**

**1 Scope**

**1.1** This series of Recommendations | International Standards defines a set of generic facilities to assist in the provision of security services in application layer protocols. These include:

- a) a set of notational tools to support the specification of selective field protection requirements in an abstract syntax specification, and to support the specification of security exchanges and security transformations;
- b) a service definition, protocol specification and PICS proforma for an application-service-element (ASE) to support the provision of security services within the Application Layer;
- c) a specification and PICS proforma for a security transfer syntax, associated with Presentation Layer support for security services in the Application Layer.

**1.2** This Recommendation | International Standard defines the service provided by the Security Exchange Service Element (SESE). The SESE is an ASE which allows the communication of security information to support the provision of security services within the Application Layer.

**2 Normative references**

The following 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 Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

**2.1 Identical Recommendations | International Standards**

- ITU-T Recommendation X.200 (1994) | ISO/IEC 7498-1:1994, *Information technology – Open Systems Interconnection – Basic Reference Model: The Basic Model*.
- ITU-T Recommendation X.803 (1994) | ISO/IEC 10745:1995, *Information technology – Open Systems Interconnection – Upper layers security model*.