

AS 10745—1998  
ISO/IEC 10745:1995

Australian Standard™

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**Information technology—  
Open Systems Interconnection—  
Upper layers security model**

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This Australian Standard was prepared by Committee IT/1, Information Systems—Interconnection. It was approved on behalf of the Council of Standards Australia on 18 March 1998 and published on 5 June 1998.

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT/1, Information Systems—Interconnection. The Standard is the result of a consensus among representatives on the Joint Committee that it be produced as an Australian Standard. It is identical with and has been reproduced from ISO/IEC 10745:1995, *Information technology—Open Systems Interconnection—Upper layers security model*.

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<i>Reference to International Standard or other Publication</i>	<i>Australian/New Zealand Standard</i>
ISO/IEC	AS
9545 Information technology— Open Systems Interconnection— Application layer structure	4021 Information technology— Open Systems Interconnection— Application layer structure
10181 Information technology— Security frameworks in Open Systems	—
10181-2 Part 2: Authentication framework	—
10181-3 Part 3: Access control framework	—

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## AUSTRALIAN STANDARD

**INFORMATION TECHNOLOGY — OPEN SYSTEMS INTERCONNECTION —  
UPPER LAYERS SECURITY MODEL****1 Scope**

**1.1** This Recommendation | International Standard defines an architectural model that provides a basis for:

- a) the development of application-independent services and protocols for security in the upper layers of OSI; and
- b) the utilization of these services and protocols to fulfil the security requirements of a wide variety of applications, so that the need for application-specific ASEs to contain internal security services is minimized.

**1.2** In particular, this Recommendation | International Standard specifies:

- a) the security aspects of communication in the upper layers of OSI;
- b) the support in the upper layers of the security services defined in the OSI Security Architecture and the Security Frameworks for Open Systems;
- c) the positioning of, and relationships among, security services and mechanisms in the upper layers, according to the guidelines of CCITT Rec. X.800 | ISO 7498-2 and ITU-T Rec. X.207 | ISO/IEC 9545.
- d) the interactions among the upper layers, and interactions between the upper layers and the lower layers, in providing and using security services;
- e) the requirement for management of security information in the upper layers.

**1.3** With respect to access control, the scope of this Recommendation | International Standard includes services and mechanisms for controlling access to OSI resources and resources accessible via OSI.

**1.4** This Recommendation | International Standard does not include:

- a) definition of OSI services or specification of OSI protocols;
- b) specification of security techniques and mechanisms, their operation, and their protocol requirements; or
- c) aspects of providing security which are not concerned with OSI communications.

**1.5** This Recommendation | International Standard is neither an implementation specification for systems nor a basis for appraising the conformance of implementations.

NOTE — The scope of this Recommendation | International Standard includes security for connectionless applications and for distributed applications (such as store-and-forward applications, chained applications, and applications acting on behalf of other applications).

**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 entities to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent editions 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.