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INFORMATION PROCESSING SYSTEMS— OPEN SYSTEMS INTERCONNECTION— BASIC CONNECTION ORIENTED SESSION PROTOCOL SPECIFICATION

This Australian Standard was prepared by Committee IS/1, Information Processing Systems. It was approved on behalf of the Council of the Standards Association of Australia on 8 September 1988 and published on 12 December 1988.

The following interests are represented on Committee IS/1:

Australian Association of Permanent Building Societies
Australian Bankers' Association
Australian Bureau of Statistics
Australian Computer Equipment Manufacturers Association
Australian Computer Services Association
Australian Computer Society
Australian Computer Users Association
Australian Information Industry Association
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AUSTRALIAN STANDARD

INFORMATION PROCESSING SYSTEMS— OPEN SYSTEMS INTERCONNECTION— BASIC CONNECTION ORIENTED SESSION PROTOCOL SPECIFICATION

AS 3592—1988

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PREFACE

This Standard was prepared by the Association's Committee on Information Processing Systems. It is identical with, and has been reproduced from, International Standard ISO 8327:1987, drawn up by ISO TC 97, Information Processing Systems.

This Standard specifies—

(a) procedures for a single protocol for the transfer of data and control information from one session entity to a peer session entity;

(b) the means of selecting the functional units to be used by the session entities;

(c) the structure and encoding of the session protocol data units used for the transfer of data and control information.

The procedures are defined in terms of—

(a) the interactions between peer session entities through the exchange of session protocol data units;

(b) the interactions between a session entity and the session service user in the same system through the exchange of session service primitives;

(c) the interactions between a session entity and the transport service provider through the exchange of transport service primitives.

These procedures are applicable to instances of communication between systems which support the Session Layer of the OSI Reference Model and which wish to interconnect in an open systems environment.

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

The Standard is one of a series of Open Systems Interconnection (OSI) Standards which are currently under development. Since OSI Standards are developmental, there may be some minor difficulties encountered in their implementation. For this reason, SAA will be providing a limited interpretation service to coordinate and disseminate information concerning difficulties which are identified in using this Standard.

For the purpose of this Australian Standard, the text of the ISO Standard given herein should be modified as follows:

(a) *Terminology.* The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.

(b) *Cross-references.* The references to International Standards should be replaced by references to Australian Standards as follows:

Reference to International Standard		*Appropriate Australian Standard*	
ISO 7498	Information processing systems—Open Systems Interconnection—Basic reference model	AS 2777	Information processing systems—Open Systems Interconnection—Basic reference model
ISO 7498/Add.3	Information processing systems—Open Systems Interconnection—Basic reference model—Addendum 3: Naming and addressing	—	
ISO 8072	Information processing systems—Open Systems Interconnection—Transport service definition	AS 2911	Information processing systems—Open Systems Interconnection—Transport service definitions (ISO 8072)
ISO 8326	Information processing systems—Open Systems Interconnection—Basic connection oriented session service definition	AS 3591	Information processing systems—Open Systems Interconnection—Basic connection oriented session service definition
CCITT	Recommendation T.62, Control Procedures for the teletex and Group 4 facsimile service	—	

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Information processing systems — Open Systems Interconnection — Basic connection oriented session protocol specification

0 Introduction

This International Standard is one of a set of International Standards produced to facilitate the interconnection of computer systems. The set of International Standards covers the services and protocols required to achieve such interconnection.

This International Standard 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. It is most closely related to and lies within the field of application of the Session Service Definition (ISO 8326). It also uses and references the Transport Service Definition (ISO 8072), whose provisions it assumes in order to accomplish the aims of the session protocol. The interrelationship of these International Standards is illustrated in figure 1.

This International Standard specifies a single protocol with a common encoding.

It is intended that the session protocol should be general enough to cater for the total range of session service users without restricting future extensions.

The protocol is structured so that subsets of protocol can be defined.

The primary aim of this International Standard is to provide a set of rules for communication expressed in terms of the procedures to be carried out by peer session entities at the time of communication. These rules for communication are intended to provide a sound basis for development in order to serve a variety of purposes :

a) as a guide for implementors and designers;

b) for use in the testing and procurement of equipment;

c) as part of an agreement for the admittance of systems into the open systems environment;

d) as a refinement to the understanding of OSI.

As it is expected that the initial users of this International Standard will be designers and implementors of equipment this International Standard contains, in notes or in annexes, guidance on the implementation of the procedures defined herein.

It should be noted that, as the number of valid protocol sequences is very large, it is not possible with current technology to verify that an implementation will operate the protocol defined in this International Standard correctly under all circumstances. It is possible by means of testing to establish confidence that an implementation correctly operates the protocol in a representative sample of circumstances. It is, however, intended that this International Standard can be used in circumstances where two implementations fail to communicate in order to determine whether one or both have failed to operate the protocol correctly.

The variations and options available within this International Standard are essential as they enable a session service to be provided for a wide variety of applications. Thus, a minimally conforming implementation will not be suitable for use in all possible circumstances. It is important, therefore, to qualify all references to this International Standard with statements of the options provided or required or with statements of the intended purpose of provision or use.

This International Standard contains the following annexes :

a) annex A — State tables;

b) annex B — Relationship to CCITT Recommendation T.62 encoding;

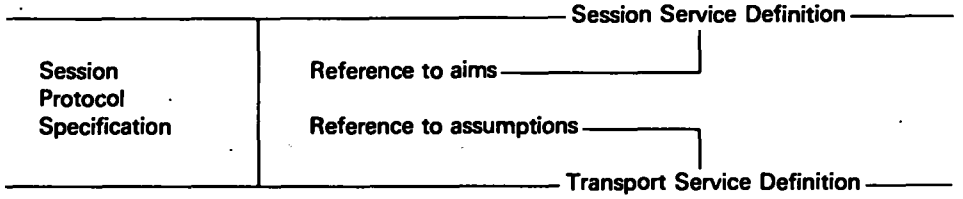

Figure 1 — Relationship between the session protocol and adjacent services