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Australian/New Zealand Standard™

Information technology—
Open Systems Interconnection—
Network service definition

Standards Australia

STANDARDS NEW ZEALAND

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT/1, Information Systems—Interconnection. It was approved on behalf of the Council of Standards Australia on 3 December 1999 and on behalf of the Council of Standards New Zealand on 3 December 1999. It was published on 7 March 2000.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT/1, Information Systems—Interconnection. This Standard is identical with and has been reproduced from ISO/IEC 8348:1996. and its Amendment 1:1998, *Addition of the Internet protocol address format identifier*, which is bound at the back of this Standard. This Standard supersedes AS/NZS 2994:1994.

The objective of this Standard is to provide designers of OSI systems with the specification of the network service.

As this Standard is reproduced from an International Standard, the following applies:

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7498	Information technology—Open Systems Interconnection—Basic Reference Model	2777	Information processing systems—Open Systems Interconnection—Basic reference model
7498-1	Part 1: The Basic Model	2777.1	Part 1: The basic model
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CCITT		AS/NZS
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Rec.E.164	Numbering plan for the ISDN era	—
Rec.F.69	Plan for telex destination codes	—
Rec.T.50	International Reference Alphabet (IRA)—Information technology—7-bit coded character set for information interchange	—
Rec.X.121	International numbering plan for public data networks	—
Rec.X.300	General principles for interworking between public networks and between public networks and other networks for the provision of data transmission services	—

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AUSTRALIAN/NEW ZEALAND STANDARD

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – NETWORK SERVICE DEFINITION

SECTION 1 – GENERAL

1 Scope

This Recommendation | International Standard defines the OSI Network Service in terms of:

a) the primitive actions and events of the Service;

b) the parameters associated with each primitive action and event, and the form which they take;

c) the interrelationship between, and the valid sequences of, these actions and events.

The principal objectives of this Recommendation | International Standard are

1) To specify the characteristics of a conceptual Network Service and thus, supplement the Reference Model in guiding the development of Network Layer protocols.

2) To encourage convergence of the capabilities offered by providers of subnetworks.

3) To provide a basis for the individual enhancement of existing heterogeneous subnetworks to a common subnetwork-independent Network Service to enable them to be concatenated for the purpose of providing global communication. (Such concatenation may involve optional additional functions which are not defined in this Recommendation | International Standard.) A definition of the quality of service is an important element of this Recommendation | International Standard.

4) To provide a basis for the development and implementation of subnetwork-independent Transport Layer protocols decoupled from the variability of underlying public and private subnetworks and their specific interface requirements.

This Recommendation | International Standard does not specify individual implementations or products nor does it constrain the implementation of entities and interfaces within a system.

There is no conformance of equipment to this Recommendation | International Standard. Instead, conformance is achieved through implementation of conforming OSI Network protocols which fulfill the Network Service defined in this Recommendation | International Standard.

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 International 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 International Standards listed below. Members of the 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.210 (1993) | ISO/IEC 10731:1994, *Information technology – Open Systems Interconnection – Basic Reference Model: Conventions for the definition of OSI services.*