

Australian/New Zealand Standard™

**Information technology—Open  
Distributed Processing—Trading  
function**

**Part 3: Provision of Trading Function  
using OSI Director Service**



## **AS/NZS ISO/IEC 13235.3:2006**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT-015, Software and Systems Engineering. It was approved on behalf of the Council of Standards Australia on 27 October 2006 and on behalf of the Council of Standards New Zealand on 10 November 2006.  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-015, Software and Systems Engineering.

The objective of this Standard is to provide organizations with a specification which describes how the Open Distributed Processing (ODP) Trading Function can be realised using information entries and support mechanisms of the Open Systems Interconnection (OSI) Directory. This Specification is to be used in conjunction with the ODP Trading Function Standard (ITU-T Rec. X.950. ISO/IEC 13235-1).

This Standard is identical with, and has been reproduced from ISO/IEC 13235-3:1998, *Information technology—Open Distributed Processing—Trading Function—Part 3: Provision of Trading Function using OSI Directory service*.

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

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this Specification’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian/New Zealand Standard</i>
ISO/IEC	AS/NZS
9594 Information technology—Open Systems Interconnection—The Directory:	4019 Information technology—Open Systems Interconnection—The Directory
9594-1 Part 1: Overview of concepts, models and services	4019.1 Part 1: Overview of concepts, models and services
9594-2 Part 2: Models	4019.2 Part 2: Models
9594-3 Part 3: Abstract service definition	4019.3 Part 3: Abstract service definition
9594-4 Part 4: Procedures for distributed operation	4019.4 Part 4: Procedures for distributed operation
9594-5 Part 5: Protocol specifications	4019.5 Part 5: Protocol specifications
9594-6 Part 6: Selected attribute types	4019.6 Part 6: Selected attribute types
9594-7 Part 7: Selected object classes	4019.7 Part 7: Selected object classes
8824 Information technology—Abstract Syntax Notation One (ASN.1)	8824 Information technology—Abstract syntax notation one
8824-1 Part 1: Specification of basic notation	8824.1 Part 1: Specification of basic notation
8824-2 Part 2: Information object specification	8824.2 Part 2: Information object specification
8824-3 Part 3: Constraint specification	8824.3 Part 3: Constraint specification
8824-4 Part 4: Parameterization of ASN.1	8824.4 Part 4: Parameterization of ASN.1
13235 Information technology—Open Distributed Processing—Trading function	13235 Information technology—Open Distributed Processing—Trading function
13235-1 Part 1: Specification	13235.1 Part 1: Specification

Only the normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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## INTRODUCTION

The ODP Trading Function (see ITU-T Rec. X.950-Series | ISO/IEC 13235) provides the means to offer a service and the means to discover services that have been offered. ITU-T Rec. X.950 | ISO/IEC 13235-1 defines an enterprise Specification, an information Specification and a computational Specification of this Trading Function. No engineering Specification is defined in ITU-T Rec. X.950 | ISO/IEC 13235-1. This Recommendation | International Standard describes how the Specifications of the Trading Function in ITU-T Rec. X.950 | ISO/IEC 13235-1 can be engineered using OSI Directory Service (see ITU-T Rec. X.500 | ISO/IEC 9594-1) to store information and to provide support mechanisms. This Specification does not prescribe that a trader must be engineered by using OSI Directory. But if OSI Directory is used, this Specification defines standardised templates for information entries (e.g. service offer and link information objects) in the Directory DIT.

Clause 5 gives an overview of how the Trading Function is implemented as a combination of X.500 DUA and DSA. The X.500 DSA is used to store the Trader Information Object and a Trader DUA (T-DUA) implements the functionality required by a Trader, which is difficult, or impossible, to implement using OSI Directory services.

Clause 6 defines the standardised templates for information entries of the Trader Information Object, the information known to a particular Trader.

Clause 7 describes mapping of Trading Function operations to appropriate Directory operations.

Clause 8 specifies a minimal Type Repository Function necessary to enable the correct functioning of the X.500 Directory for Trading.

Clause 9 describes the mechanisms used to enable the handling of dynamic properties of a Trader's service offers.

This Specification contains two annexes.

Annex A is a normative schema definition of Trader definitions.

Annex B is an informative schema definition of a sample service description.

## AUSTRALIAN/NEW ZEALAND STANDARD

# Information technology—Open Distributed Processing—Trading function

## Part 3: Provision of Trading Function using OSI Director Service

### 1 Scope and field of application

This Specification describes how the ODP Trading Function can be realised using information entries and support mechanisms of the OSI Directory. This Specification is to be used in conjunction with the ODP Trading Function Standard (ITU-T Rec. X.950 | ISO/IEC 13235-1). If there are any discrepancies between the prescriptive statements in ITU-T Rec. X.950 | ISO/IEC 13235-1 and those in this Specification, the prescriptive statements in ITU-T Rec. X.950 | ISO/IEC 13235-1 take precedence.

The scope of this Specification is:

- standardised templates for Trading Function information objects in the DIT;
- descriptions of mapping of Trading Function operations to appropriate Directory operations;
- description of use of other Directory features to provide the support mechanisms for implementing the ODP Trading Function.

This Specification does not prescribe that a trader must be engineered by using OSI Directory. But if OSI Directory is used, this Specification defines standardised templates for information entries (e.g. service offer and link information objects) in the Directory DIT. This Specification does not put any restrictions on where these entries are placed in the Directory DIT. That is, this Specification does not standardise any structure rules. This Specification does describe a mechanism to provide the Trading Function using OSI Directory.

The field of application of this Specification is for the construction of the ODP Trading Function using the OSI Directory, when required.

### 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.500 (1993) | ISO/IEC 9594-1:1995, *Information technology – Open Systems Interconnection – The Directory: Overview of concepts, models and services.*
- ITU-T Recommendation X.501 (1993) | ISO/IEC 9594-2:1995, *Information technology – Open Systems Interconnection – The Directory: Models.*
- ITU-T Recommendation X.509 (1993) | ISO/IEC 9594-8:1995, *Information technology – Open Systems Interconnection – The Directory: Authentication framework.*
- ITU-T Recommendation X.511 (1993) | ISO/IEC 9594-3:1995, *Information technology – Open Systems Interconnection – The Directory: Abstract service definition.*
- ITU-T Recommendation X.519 (1993) | ISO/IEC 9594-5:1995, *Information technology – Open Systems Interconnection – The Directory: Protocol specifications.*