

Australian/New Zealand Standard™

**Information technology—Open  
distributed processing—Reference  
model—Enterprise language**

### **AS/NZS ISO/IEC 15414:2003**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT-015, Software Engineering. It was approved on behalf of the Council of Standards Australia on 1 May 2003 and on behalf of the Council of Standards New Zealand on 22 April 2003. It was published on 16 June 2003.

---

The following are represented on Committee IT-015:

Australian Computer Society  
Australian Information Industry Association  
Australian Society for Technical Communication (NSW)  
Australian Software Metrics Association  
Griffith University  
New Zealand Organisation for Quality  
Quality Society of Australasia  
Software Engineering Australia (QLD)  
Software Quality Association (ACT)  
Software Quality Association (NSW)  
Software Verification Research Centre  
Sydney SPIN Group (Software Process Improvement Network)  
Systems Engineering Society of Australia  
University of New South Wales  
University of South Australia  
University of Technology, Sydney

---

#### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at [www.standards.com.au](http://www.standards.com.au) or Standards New Zealand web site at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

---

# Australian/New Zealand Standard™

## **Information technology—Open distributed processing—Reference model—Enterprise language**

First published as AS/NZS ISO/IEC 15414:2003.

### **COPYRIGHT**

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 5278 0

## PREFACE

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

This Standard is identical with, and has been reproduced from ISO/IEC 15414:2002, *Information technology—Open distributed processing—Reference model—Enterprise language*.

The objective of this Standard is to provide a language (the enterprise language) comprising concepts, structures and rules for developing, representing, and reasoning about a specification of an ODP system from the enterprise viewpoint. It also provides rules which establish correspondences between the enterprise language and the other viewpoint languages to ensure the overall consistency of a specification.

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 International Standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

## CONTENTS

Page

1	Scope .....	1
2	Normative references.....	1
3	Definitions .....	1
	3.1 Definitions from ODP standards .....	1
	3.2 Definitions from ODP standards extended in this specification .....	3
4	Abbreviations.....	3
5	Conventions .....	3
6	Concepts .....	3
	6.1 System concepts .....	4
	6.2 Community concepts .....	4
	6.3 Behaviour concepts .....	4
	6.4 Policy concepts.....	4
	6.5 Accountability concepts .....	5
7	Structuring rules .....	5
	7.1 Overall structure of an enterprise specification .....	5
	7.2 Contents of an enterprise specification.....	6
	7.3 Community rules .....	7
	7.4 Enterprise object rules .....	8
	7.5 Common community types.....	9
	7.6 Lifecycle of a community.....	9
	7.7 Objective rules.....	10
	7.8 Behaviour rules.....	10
	7.9 Policy rules .....	12
	7.10 Accountability rules.....	14
8	Compliance, completeness and field of application.....	15
	8.1 Compliance.....	15
	8.2 Completeness.....	15
	8.3 Field of application.....	15
9	Enterprise language compliance .....	16
10	Conformance and reference points .....	16
11	Consistency rules .....	16
	11.1 Viewpoint correspondences.....	16
	11.2 Enterprise and information specification correspondences .....	17
	11.3 Enterprise and computational specification correspondences .....	18
	11.4 Enterprise and engineering specification correspondences .....	18
Index	.....	20



## AUSTRALIAN/NEW ZEALAND STANDARD

# Information technology – Open distributed processing – Reference model – Enterprise language

## 1 Scope

This Recommendation | International Standard provides:

- a) a language (the enterprise language) comprising concepts, structures, and rules for developing, representing, and reasoning about a specification of an ODP system from the enterprise viewpoint (as defined in ITU-T Rec. X.903 | ISO/IEC 10746-3);
- b) rules which establish correspondences between the enterprise language and the other viewpoint languages (defined in ITU-T Rec. X.903 | ISO/IEC 10746-3) to ensure the overall consistency of a specification.

The language is specified to a level of detail sufficient to enable the determination of the compliance of any modelling language to this Recommendation | International Standard and to establish requirements for new specification techniques.

This Recommendation | International Standard is a refinement and extension of ITU-T Rec. X.903 | ISO/IEC 10746-3, clauses 5 and 10, but does not replace them.

This Recommendation | International Standard is intended for use in preparing enterprise viewpoint specifications of ODP systems, and in developing notations and tools to support such specifications.

As specified in clause 5 of ITU-T Rec. X.903 | ISO/IEC 10746-3, an enterprise viewpoint specification defines the purpose, scope and policies of an ODP system. [see also 3-5.0]

## 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 the currently valid ITU-T Recommendations.

### Identical ITU-T Recommendations | International Standards

- ITU-T Recommendation X.902 (1995) | ISO/IEC 10746-2:1996, *Information technology – Open Distributed Processing – Reference Model: Foundations.*
- ITU-T Recommendation X.903 (1995) | ISO/IEC 10746-3:1996, *Information technology – Open Distributed Processing – Reference Model: Architecture.*
- ITU-T Recommendation X.904 (1997) | ISO/IEC 10746-4:1998, *Information technology – Open Distributed Processing – Reference Model: Architectural semantics.*

## 3 Definitions

### 3.1 Definitions from ODP standards

#### 3.1.1 Modelling concept definitions

This Recommendation | International Standard makes use of the following terms as defined in ITU-T Rec. X.902 | ISO/IEC 10746-2.

- action;
- behaviour (of an object);