

Australian/New Zealand Standard™

**Information technology—Open  
distributed processing—Type repository  
function**

### **AS/NZS ISO/IEC 14769:2003**

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 4 June 2003.

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distributed processing—Type repository  
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## 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 14769:2001, *Information technology—Open distributed processing—Type repository function*.

The objective of this Standard is to provide a method of accessing type description used within open distributed processing systems, where the type descriptions can be in various concrete syntaxes and type languages used in these distributed processing systems.

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<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
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10027	Information technology—Information resource dictionary system (IRDS) framework	4101	Information technology—Information resource dictionary system framework
14750	Information technology—Open distributed processing—Interface definition language	ISO/IEC 14750	Information technology—Open distributed processing—Interface definition language
14753	Information technology—Open distributed processing—Interface references and binding	ISO/IEC 14753	Information technology—Open distributed processing—Interface references and binding
14771	Information technology—Open distributed processing—Naming framework	ISO/IEC 14771	Information technology—Open distributed processing—Naming framework

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## AUSTRALIAN/NEW ZEALAND STANDARD

# INFORMATION TECHNOLOGY – OPEN DISTRIBUTED PROCESSING – TYPE REPOSITORY FUNCTION

## 1 Scope

The concept of "type" is fundamental to ODP systems; the interaction model of ODP-RM involves strongly-typed interactions.

This Recommendation | International Standard:

- defines a framework for describing types of interest in ODP systems by determining what entities need to be typed and what needs to be said about the identified types. The primary focus of this work is the computational interface type system;
- identifies and characterizes type languages sufficient to describe the types identified above in an informative annex;
- provides enterprise, information, and computational specifications of a generic type repository function within the type description framework which can be specialized to select a specific type system or type notation. The type repository function provides:
  - storage and retrieval of type descriptions;
  - management of type descriptions;
  - management of the relationship between types including matching of types;
  - naming of types (in a manner consistent with ODP Naming Framework);
  - interworking and federation of different type repositories.

This Recommendation | International Standard provides a standard method of accessing type descriptions used within open distributed processing systems, where the type descriptions can be in various concrete syntaxes and type languages used in these open distributed processing systems. This Recommendation | International Standard also facilitates the dynamic matching of types for interactions, binding and trading purposes.

## 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 Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of ITU maintains a list of the currently valid ITU-T Recommendations.

### 2.1 Identical Recommendations | International Standards

- ITU-T Recommendations X.680-series (1997) | ISO/IEC 8824 (all parts):1998, *Information technology – Abstract Syntax Notation One (ASN.1)*.
- ITU-T Recommendation X.725 (1995) | ISO/IEC 10165-7:1996, *Information technology – Open Systems Interconnection – Structure of management information: General relationship model*.