

Australian Standard<sup>®</sup>

**Long-term preservation of electronic  
document-based information**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee IT-021, Records Management Systems. It was approved on behalf of the Council of Standards Australia on 29 September 2006.  
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The following are represented on Committee IT-021:

- Australian Society of Archivists
- Department of Defence (Australia)
- Queensland State Archives
- Department of Foreign Affairs and Trade
- Institute for Information Management
- Monash University
- National Archives of Australia
- Public Record Office Victoria
- Records Management Association of Australasia
- State Records (New South Wales)
- The Institute of Internal Auditors - Australia

Additional Interests:

- Enterprise Knowledge
  - BHP Billiton
  - Recordkeeping Systems
  - Sutherland Shire Council
  - The University of Sydney
  - NSW Department of Commerce
  - Information Management Solutions
  - Attorney General's Department
  - AMS Imaging
  - National Archives New Zealand
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This Standard was issued in draft form for comment as DR 06016.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

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**Long-term preservation of electronic  
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## PREFACE

This Standard was prepared by the Standards Australia Committee IT-021, Records Management Systems.

Apart from the addition of this preface this Australian Standard is identical with and has been reproduced from ISO/TR 18492:2005, *Long-term preservation of electronic document-based information*.

The objective of this Standard is to provide guidance on establishing processes and policies to facilitate long term storage of digital records.

Standards Australia wishes to thank the following organizations for their contribution enabling Australia's participation in the development of International Standards in the area of Records Management. International Standards in turn become national standards to be used in Australian industries.

Australian Society of Archivists

National Archives of Australia

Public Record Office Victoria

Records Management Association of Australasia

Record Solutions

State Records NSW

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 Technical Report' should read 'this Australian Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.

The guidance this Standard provides is applicable within the Australian recordkeeping context though some terminology may be different. To enable maximum use of this report for recordkeeping purposes, the note that ends the scope clause needs to be read from a records management perspective. That note states that 'evidence of business transactions that enable entities to support current and future management decisions, satisfy customers, achieve regulatory compliance and protect against adverse litigation' requires retention and preservation of 'document-based information'. This can be read as a reference to records management processes requiring explicit and managed links between the object being managed and the business context of creation, management and use. That object in records management – usually an aggregation of documents such as a *file* or *series* of records – is brought together during the conduct of business and requires continuing management of the linkages to maintain its evidential qualities.

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 Standard</i>
ISO	AS ISO
15489 Information and documentation— Records management	15489 Records management
15489-1 Part 1: General	15489.1 Part 1: General

ISO/TR		AS ISO	
15489	Information and documentation— Records management	15489	Records management
15489-2	Part 2: Guidelines	15489.2	Part 2: Guidelines
ISO/TS		AS ISO	
23081	Information and documentation— Records management processes— Metadata for records	23081	Information and documentation— Records management processes— Metadata for records
23081-1	Part 1: Principles	23081.1	Part 1: Principles

Only international references that have been adopted as Australian Standards have been listed.

The term ‘informative’ has been used in this Standard to define the application of the annexes to which it applies. An ‘informative’ annex is only for information and guidance.

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## INTRODUCTION

Ensuring the long-term preservation of authentic electronic document-based information is a well-documented and identified problem within many fields of expertise, including archival science, document management, e-commerce, e-governance and technology development. As an additional problem, individuals and organizations charged with the responsibility for ensuring long-term access to authentic electronic document-based information have employed a diversity of strategies designed to achieve this goal.

Although there is a clear need to address the problem of long-term access to authentic electronic document-based information, there is a current lack of harmonized international guidance on these issues. This has led to diverse and, sometimes, incompatible approaches that can give rise to potentially mission-critical problems, regarding the accessibility and/or authenticity of the electronic document-based information being retained.

Acknowledging the generic technological obsolescence problem of computer hardware and software as well as the limited life of digital storage media, this Technical Report provides guidance to storage repositories in providing access to and maintaining authentic electronic document-based information that has been retained for future reference.

The purpose of this Technical Report is to provide a clear framework for strategy development and best practices that can be applied to a broad range of public and private sector electronic document-based information to ensure its long-term accessibility and authenticity.

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## AUSTRALIAN STANDARD

# Long-term preservation of electronic document-based information

## 1 Scope

This Technical Report provides practical methodological guidance for the long-term preservation and retrieval of authentic electronic document-based information, when the retention period exceeds the expected life of the technology (hardware and software) used to create and maintain the information.

It takes into account the role of technology neutral information technology standards in supporting long-term access.

This guidance also acknowledges that ensuring the long-term preservation and retrieval of authentic electronic document-based information should involve IT specialists, document managers, records managers and archivists.

It does not cover processes for the creation, capture and classification of authentic electronic document-based information.

This Technical Report applies to all forms of information generated by information systems and saved as evidence of business transactions and activities.

**NOTE** Electronic document-based information constitutes the “business memory” of daily business actions or events and enables entities to later review, analyse or document these actions and events. As such, this electronic document-based information is evidence of business transactions that enable entities to support current and future management decisions, satisfy customers, achieve regulatory compliance and protect against adverse litigation. To achieve this goal, this electronic document-based information should be retained and appropriately preserved.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12651:1999, *Electronic imaging — Vocabulary*

ISO 15489-1, *Information and documentation — Records management — Part 1: General*

ISO/TR 15489-2, *Information and documentation — Records management — Part 2: Guidelines*

ISO/IS 2381-1, *Information and documentation — Records management processes — Metadata for records — Part 1: Principles*