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Information and documentation — Principles and functional requirements for records in electronic office environments —

Part 3:
Guidelines and functional requirements for records in business systems

Information et documentation — Principes et exigences fonctionnelles pour les enregistrements dans les environnements électroniques de bureau —

Partie 3: Lignes directrices et exigences fonctionnelles pour les enregistrements dans les systèmes d'entreprise

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO 16175-3 was prepared by the International Council on Archives (as International Council on Archives and the Australasian Digital Recordkeeping Initiative *Principles and Functional Requirements for Records in Electronic Office Environments — Module 1: Overview and Statement of Principles*) and was adopted, under a special "fast-track procedure", by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 11, *Archives/records management*, in parallel with its approval by the ISO member bodies.

ISO 16175 consists of the following parts, under the general title *Information and documentation — Principles and functional requirements for records in electronic office environments*:

- *Part 1: Overview and statement of principles*
- *Part 2: Guidelines and functional requirements for records in electronic office environments*
- Part 3: *Guidelines and functional requirements for records in business systems*

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International Council on Archives

Principles and functional requirements for records in digital office environments

Module 3

Guidelines and functional requirements for records in business systems

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1 INTRODUCTION

Organisations implement business systems to automate business activities and transactions. As a result, the digital information generated by a business system increasingly serves as the only evidence or record of the process, despite the system not being designed for this purpose. Without evidence of these activities, organisations are exposed to risk and may be unable to meet legislative, accountability, business and community expectations.

Because of the dynamic and manipulable nature of business systems, the capture of fixed records and the ongoing management of their authenticity, reliability, usability and integrity can be challenging. Organisations are therefore faced with a significant risk of mismanagement, inefficiency and unnecessary expenditure.

While these same organisations may have an electronic records management system (ERMS),[1] it may not capture all records of the organisation. This document is designed to address the records management gap caused by the increasing use of business systems.

It provides guidelines on identifying and addressing the needs for records, and a set of generic requirements for records management functionality within business systems software. It aims to:

- help organizations understand digital records management requirements;
- assist organisations to improve digital records management practices;
- reduce the duplication of effort and associated costs in identifying a minimum level of functionality for records in business systems; and
- establish greater standardisation of records management requirements for software vendors.

The document does not prescribe a specific implementation approach. The intent of these specifications can be realised through interfacing or integrating the business system with an electronic records management system or by building the functionality into the business system.

1.1 Scope and purpose

This document will help organisations to ensure that evidence (records) of business activities transacted through business systems are appropriately identified and managed. Specifically, it will assist organisations to:

- understand processes and requirements for identifying and managing records in business systems;

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[1] An electronic records management system is a type of business system specifically designed to manage records. However, in the interests of clarify and brevity, for the purpose of this document, 'business system' should be taken as excluding an electronic records management system.

- develop requirements for functionality for records to be included in a design specification when building, upgrading or purchasing business system software;
- evaluate the records management capability of proposed customised or commercial off-the-shelf business system software; and
- review the functionality for records or assess compliance of existing business systems.

It does not provide a complete specification but rather outlines a number of key records management requirements, with recommended levels of obligation, which can be used as a starting point for further development. As outlined in the document, organisations will still need to assess, amend and select their requirements based on their business, technical and jurisdictional environments and constraints.

This Module only addresses records management requirements and does not include general system management. Design requirements such as usability, reporting, searching, system administration and performance are beyond the scope of this document. It also assumes a level of knowledge about developing design specifications, procurement and evaluation processes, therefore these related issues are not covered in any detail.

Requirements for the long-term preservation of digital records are not explicitly covered within this document. However, the inclusion of requirements for export supports preservation by allowing the export of records to a system that is capable of long-term preservation activities, or for the ongoing migration of records into new systems.

While the guidance presented in this Module should be applicable to records management in highly integrated software environments based on service-oriented architectures, such scenarios are not explicitly addressed. Similar principles and processes will apply in such environments, but additional analysis will be required to determine what processes and data constitute, across multiple systems, the required evidence or record of any particular transaction.

Use of the term ’system’ in this document refers to a computer or IT system. This is in contrast to the records management understanding of the term that encompasses the broader aspects of people, policies, procedures and practices. Organisations will need to consider these wider aspects, and to ensure that fundamental records management supporting tools such as disposition authorities,[2] information security classifications and a records culture are in place, in order to ensure records from business systems can be appropriately managed.

1.2 Audience

The primary audience for this document is staff responsible for designing, reviewing and/or implementing business systems in organisations, such as business analysts and groups overseeing information and communications technologies procurement or investment decisions.

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[2] A formal instrument that defines the retention periods and consequent actions authorised for classes of records described in the authority.

The audience also includes records professionals who are involved in advising or assisting in such processes and software vendors and developers who wish to incorporate records functionality within their products.

Given the target audience for this document, the use of specific records management terminology has been kept to a minimum. Where the use of such terminology is necessary, definitions can be found in the Glossary at Appendix A. Some key definitions are also provided in Section 1.4: Key definitions.

1.3 Related standards

Under its Electronic Records and Automation Priority Area, the International Council on Archives has developed a suite of guidelines and functional requirements as part of the Principles and Functional Requirements for Records in Digital Office Environments project:

- *Module 1: Overview and Statement of Principles;*
- *Module 2: Guidelines and Functional Requirements for Records in Digital Office Environments; and*
- *Module 3: Guidelines and Functional Requirements for Records in Business Systems.*

This document is Module 3 of the broader project. It has been developed with the support of the Australasian Digital Recordkeeping Initiative.

While this Module may be used as a stand-alone resource, for a broader understanding of the context and principles that have informed its development, readers should also refer to Module 1.

The functional requirements identified in Part 2 are based on the minimum requirements for records functionality as defined in the International Standard for Records Management, ISO 15489.

The reference metadata standard for these requirements is ISO 23081 – 1: 2006*,* Information and documentation – Records management processes – Metadata for records, Part 1 – Principles, and ISO 23081 – 2: 2009*,* Information and documentation – Records management processes – Metadata for records, Part 2 – Conceptual and implementation Issues.

1.4 Terminology

It is recognised that many of the terms used in this document have different meanings for different disciplines. It is therefore important that this document is read in conjunction with the Glossary at Appendix A. A number of the key concepts used in this document are also detailed below:

- **Records** are information created, received and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or