TECHNICAL REPORT

ISO/TR 13028

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Information and documentation — Implementation guidelines for digitization of records

Information et documentation — Mise en œuvre des lignes directrices pour la numérisation des enregistrements

Contents

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 13028 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 11, *Archives/records management*.

This Technical Report was based on Archives New Zealand's *Recordkeeping Standard S6: Digitisation Standard*, published in January 2006.

Introduction

With the shift to managing records in digital systems, many organizations are digitizing paper and/or other non-digital records. To manage themselves effectively, organizations need to create full and accurate records of their activities and maintain these records over time for subsequent reference. These considerations are valid regardless of the records' storage media.

Digitization is the process of converting hard-copy, or other non-digital, records into a digital format, such as taking digital photographs of non-digital source records or imaging non-digital source records (also known as scanning).

When converting records into digital objects, they are commonly:

a) captured as static pictures (raster image) represented by pixels;

b) processed by optical character recognition technology which converts the pixels into digital representations which are searchable, editable and manipulable; or

c) captured into both formats.

Digitization can broadly be categorized into two types:

— business-process digitization: ongoing, routine digitization as part of daily business processes;

— digitization projects: project-based bulk digitization of legacy records.

Information and documentation — Implementation guidelines for digitization of records

1 Scope

This Technical Report:

— establishes guidelines for creating and maintaining records in digital format only, where the original paper, or other non-digital source record, has been copied by digitizing;

— establishes best practice guidelines for digitization to ensure the trustworthiness and reliability of records and enable consideration of disposal of the non-digital source records;

— establishes best practice guidelines for the trustworthiness of the digitized records which may impact on the legal admissibility and evidential weight of such records;

— establishes best practice guidelines for the accessibility of digitized records for as long as they are required;

— specifies strategies to assist in creating digitized records fit for long-term retention;

— establishes best practice guidelines for the management of non-digital source records following digitization.

This Technical Report is applicable for use in the design and conduct of responsible digitization by all organizations undertaking digitization, either business process digitization or back capture digitization projects for records management purposes, as outlined in ISO 15489-1:2001 and ISO/TR 15801:2009.

This Technical Report is not applicable to:

a) capture and management of born-digital records;

b) technical specifications for the digital capture of records;

c) procedures for making decisions about records' eventual disposition;

d) technical specifications for the long-term preservation of digital records;

e) digitization of existing archival holdings for preservation purposes.

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 15489-1:2001, *Information and documentation — Records management — Part 1: General*

ISO/TR 15801:2009, *Document management — Information stored electronically — Recommendations for trustworthiness and reliability*

ISO 23081-1:2006, *Information and documentation — Records management processes — Metadata for records — Part 1: Principles*

ISO 23081-2:2009, *Information and documentation — Managing metadata for records — Part 2: Conceptual and implementation issues*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15489-1:2001, ISO/TR 15801:2009, ISO 23081-1:2006 and ISO 23081-2:2009 and the following apply.

3.1
born digital records
records which are created in digital form, without a non-digital equivalent

NOTE 1   This term is used to differentiate born digital records from:

— digital materials which might have been created as a result of converting non-digital source material;

— non-digital materials which might have originated from a digital source but have been printed to paper or otherwise converted into analogue form.

NOTE 2   Adapted from Reference [21].

3.2
business information system
automated systems that create or manage data about an organization's activities

NOTE 1   Business information systems are (often multiple or related) applications whose primary purpose is to facilitate transactions between an organizational unit and its customers, e.g. an e-commerce system, client-relationship management system, purpose-built or customized database, and finance or human resources systems. Business information systems typically contain dynamic data that are commonly subject to constant updates, able to be transformed (manipulated) and hold current data. For the purposes of this Technical Report, the term business information system includes electronic records management systems. A business information system will create records, but might or might not manage them according to records management requirements. An electronic document and records management system is a specific type of business information system with the dedicated functionality of managing an organization's records and information resources.

NOTE 2   Adapted from Reference [11].

3.3
business-process digitization
routine digitization of records and incorporation into business information systems where future actions take place on the digitized record, rather than on the non-digital source record

NOTE 1   For the purposes of ongoing management of authoritative records, the version of the record on which the business action took place, or which evidences the business action, is the version that needs to be managed as the official record. In all cases, organizations need to analyse their business processes to identify and manage the record that evidences the business action. Therefore:

— where the digitized record is the record the business relied on in undertaking its business actions, or which evidences the action, the digitized version needs to be regarded as the official record for management purposes;

— where the action has been completed on a non-digital record prior to the digitization process, the non-digital record is the one on which the action has been taken and which evidences the action and the digital record is the copy;