
Informatika in dokumentacija - Procesi in funkcionalne zahteve za načrtovanje programske opreme za upravljanje zapisov - 1. del: Funkcionalne zahteve in navodilo za aplikacije, ki upravljajo digitalne zapise

Information and documentation - Processes and functional requirements for software for managing records - Part 1: Functional requirements and associated guidance for any applications that manage digital records

Information et documentation -- Principes et exigences fonctionnelles pour les enregistrements dans les environnements électroniques de bureau -- Partie 1: Aperçu et déclaration de principes

Ta slovenski standard je istoveten z: ISO/DIS 16175-1:2019

ICS:

01.140.20	Informacijske vede	Information sciences
35.080	Programska oprema	Software

oSIST ISO/DIS 16175-1:2019**en,fr,de**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/dd930e9c-164d-4a49-84ca-932d2b3f8901/osist-iso-dis-16175-1-2019>

DRAFT INTERNATIONAL STANDARD

ISO/DIS 16175-1

ISO/TC 46/SC 11

Secretariat: SA

Voting begins on:
2019-01-21Voting terminates on:
2019-04-15

Information and documentation — Processes and functional requirements for software for managing records —

Part 1:

Functional requirements and associated guidance for any applications that manage digital records

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

Partie 1: Aperçu et déclaration de principes

ICS: 01.140.20

!Teh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/dd930e9c-1617-4a49-84ca-932d2b3f8901/osist-iso-dis-16175-1-2019>

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

This document is circulated as received from the committee secretariat.



Reference number
ISO/DIS 16175-1:2019(E)

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/dd930e9c-164d-4a49-84ca-932d2b3f8901/osist-iso-dis-16175-1-2019>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword.....	v
Introduction.....	vi
1 Scope (mandatory).....	1
2 Normative references (mandatory).....	1
3 Terms and definitions (mandatory).....	2
4 Key outcome areas and configuration options.....	2
4.1 Key outcome areas.....	2
4.2 Key outcome areas in detail.....	3
4.2.1 Records capture and classification.....	3
4.2.2 Records retention and disposition.....	3
4.2.3 Records integrity and maintenance.....	3
4.2.4 Records discovery, use and sharing.....	3
4.3 Possible configuration options for managing records created in business applications.....	3
5 Model high-level functional requirements for applications that manage digital records.....	4
5.1 Requirements groupings.....	4
5.2 Obligation levels.....	5
5.3 Requirements in detail.....	5
6 Understanding the model functional requirements.....	9
6.1 General.....	9
6.2 Addressing records requirements in business applications.....	10
6.2.1 The importance of records metadata.....	11
6.2.2 The meaning of 'archiving'.....	11
6.3 Records characteristics that should be enabled by business applications.....	11
6.3.1 Authenticity.....	11
6.3.2 Reliability.....	12
6.3.3 Integrity.....	12
6.3.4 Useability.....	12
6.4 Characteristics of business applications that manage records.....	12
6.4.1 Secure.....	12
6.4.2 Compliant.....	12
6.4.3 Comprehensive.....	12
6.4.4 Systematic.....	12
6.5 Records entities and relationships.....	12
6.5.1 Entity relationship models.....	12
6.5.2 Business classification scheme.....	13
6.5.3 Aggregations of digital records.....	13
6.5.4 Digital records.....	14
6.5.5 Extracts.....	14
6.5.6 Components.....	14
7 Using the model functional requirements.....	15
7.1 General.....	15
7.2 Determining needs for evidence of events, transactions and decisions in business applications (identifying the needs for records).....	15
7.2.1 Identify requirements for evidence of the business.....	16
7.2.2 Analyse the work process.....	16
7.2.3 Identify the content and its associated management information that record the required evidence.....	16
7.2.4 Identify linkages and dependencies.....	19
7.3 Reviewing, assessing and auditing existing business applications.....	20
7.3.1 Undertaking the review process.....	20
7.4 Risk assessment.....	21

ISO/DIS 16175-1:2019(E)

7.5	Determining functional requirements for managing records in an application design specification	22
7.6	Assessing options for deploying functionality in one or more software applications.....	23
Annex A (informative) Example template for functional requirements.....		27
Annex B (informative) Mapping of records principles to model functional requirements.....		31
Bibliography.....		32

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/dd930e9c-164d-4a49-84ca-932d2b3f8901/osist-iso-dis-16175-1-2019>

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 procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee [for Project Committee] ISO/TC 46 Information and documentation Subcommittee SC 11, Archives/records management.

This second edition cancels and replaces the first edition (ISO 16175-2:2011 and ISO 16175-3:2010), which has been technically revised.

A list of all parts in the ISO ##### series can be found on the ISO website.

ISO/DIS 16175-1:2019(E)

Introduction

1.1 The case for management of records

Good management of records and information is fundamental to a well-functioning organization. It supports business activity and provides a basis for efficient service delivery. It also provides the mechanism for organizations to retain evidence of their decisions and actions for future reference and to support business continuity. Good records practice is simply good business practice.

Managing records facilitates:

- a) efficiency, by making information readily available when needed for decision-making and operational purposes and to support information reuse and innovation;
- b) sound use of financial resources, by allowing timely disposition of non-current records;
- c) accountability, by enabling the creation of complete and authoritative records of activities;
- d) compliance, by demonstrating that legal requirements have been met; and
- e) risk mitigation, by managing the risks associated with unlawful loss or destruction of records, and from inappropriate or unauthorised access to records.

Today in most organizations business is transacted and enabled by a variety of software applications. If organizations are to capture and manage reliable records of their business activities it is vital that their line-of-business applications incorporate good records functionality as part of their design. Making and keeping records should be an organic and natural part of business processes.

1.2 Purpose of this document

This document provides model, high-level functional requirements, with associated explanatory information and usage guidance, for any software applications that are intended to manage digital records. Part 2 (the companion document to this Part) provides process guidance on how to select/ design, implement and maintain software for managing records within organizations.

For the purpose of presenting model functional requirements, this document makes no distinction between software applications that are used for any business purpose and those applications specifically intended and designed to manage records. Examples of the former include Enterprise Content Management Systems and applications which create records as one part of their functionality such as Contracts Management Systems, Case Management Systems or transactional systems. The term used throughout is therefore "Business application", which is intended to encapsulate the totality of applications that manage records as part of their usual functioning. It is assumed that almost all business applications will generate data that will need to serve as evidence of business activity for future reference and as such will, *inter alia*, need to create, store and manage records. The purpose of this document is to assist the developers and implementers of those applications to identify and deploy functional requirements that will help ensure that the data generated and held in such applications can serve as adequate records of business activity.

Many business applications generate and store data that may be subject to constant updating (dynamic), able to be transformed (manipulable) and only contain current data (non-redundant). While business requirements for dynamic, manipulable and non-redundant data may be entirely legitimate, if records are to serve as reliable evidence of business activity they need to be fixed and inviolable. That is, systems and processes need to be able to guarantee the reliability and authenticity of the records as evidence of past business activity.

Organizations deploy software applications to automate business activities and transactions. The digital information generated by an application may serve as the only evidence or record of the process or transaction, despite the application not being designed specifically for the purpose of managing records. Without evidence of these activities, organizations are exposed to risk and may be unable to meet legislative, accountability, business and community expectations. Because of the dynamic

and manipulable nature of the data in business applications, the capture of records and the ongoing management of their fixity, authenticity, reliability, integrity and useability can be challenging.

The functional requirements presented in this document do not necessarily all need to be met by a single software application. It may be more cost effective for the requirements to be satisfied by multiple software applications that collectively work together within an organization, or across multiple organizations, to enable the conduct of business. Guidance on these issues can be found in Clause 8.5. In addition, some requirements could be satisfied outside applications through processes and procedures.

In addition to providing model high-level functional requirements for records in business applications, this document provides guidance on identifying and addressing the needs for records. It aims to:

- help organizations understand requirements for managing digital records as they relate to software applications used by organizations;
- assist IT and business specialists to include records considerations in applications design and/or procurement; and
- assess the capabilities of existing business applications to manage records, including helping to identify gaps or areas of risk in the current functionality of those applications.

This document is part of a suite of records system implementation guidance that supports the core international records management standard, ISO 15489-1:2016. The utility and characteristics of records systems are explained in that standard.

1.3 Audience

The primary audience for this document is professionals responsible for designing, developing, procuring, reviewing and/or implementing software applications, such as business analysts, applications developers, solution architects and IT procurement decision-makers. The audience also includes records professionals who are involved in advising or assisting in such processes.

Role	Purpose
Solution architects/designers	Ensure IT applications infrastructure supports the RM requirements.
IT Procurement decision-makers	Ensure procurement process meets these requirements
Developers	Build application and support system tester during functional specification development and test phase. Includes software vendors and developers who wish to incorporate records functionality within their products, both commercial or open source
Business Analysts	Develop technical specifications; initiate/collate feedback and walkthrough. Submit specification for sign-off and pass over to developer. Update any changes to specification after sign-off (e.g. changes that are agreed during test phase), if required.
Application testers	Develop test plans, test conditions/cases and execute tests. Analyse test results, log any failures and retest once fix has been applied and built to test environment.
Business owners	For solution-specific requirements. Review and confirm application requirements meet business objectives. Provide the business rules/processes/requirements to the business analyst during the software specification development and test phases.
Records management professionals	Advising and assisting the business in the processes of defining RM requirements

Given the target audience for this document, the use of terminology that is specific to records professionals has been minimised as far as possible. Where the use of such terminology is unavoidable it is explained and/or defined (in [clause 4](#) below).

ISO/DIS 16175-1:2019(E)

1.4 Structure of this document

[Sections 1-4](#) (Introduction; Scope; Normative References; Terms and Definitions) are standard ISO sections. Key concepts and requirements are set out in Sections 5 and 6, while Sections 7 and 8 provide more context and information on how the requirements might be used. Annex A provides a template for developing requirements for use in an implementation context in an organization.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/dd930e9c-164d-4a49-84ca-932d2b3f8901/osist-iso-dis-16175-1-2019>

Information and documentation — Processes and functional requirements for software for managing records —

Part 1:

Functional requirements and associated guidance for any applications that manage digital records

1 Scope (*mandatory*)

This document provides model, high-level functional requirements and associated guidance for software applications that are intended to manage digital records (including digital copies of analogue source records), either as the main purpose of the application or as a part of an application that is primarily intended to enable other business activities.

It does not include:

- functional requirements for applications that manage analogue records
- generic design requirements such as reporting, application administration and performance
- requirements for the long-term preservation of digital records in a dedicated preservation environment. It should be noted, however, that the model requirements are intended to encourage the deployment of applications that do not hinder long-term preservation of records. As such, some of the requirements support long-term digital preservation outcomes.
- implementation guidance for applications that will capture and/or manage records. Such guidance can be found in Part 2 of ISO 16175.

Assumption:

The requirements in this standard assume that the organization has undertaken or will undertake precursor business analysis as outlined in *Section 8.1 Determining needs for evidence of events, transactions and decisions in business applications*. Not all information contained in a business application will necessarily be required to be recorded as evidence. Before reviewing, designing, building or purchasing business applications, it is necessary to determine the organization's needs for records in order to develop and deploy appropriate strategies.

2 Normative references (*mandatory*)

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 15489-1:2016, *Information and documentation — Records management — Part 1: Concepts and principles*

ISO/TR 21946:2019, *Information and documentation — Records management – Appraisal for records*

ISO 23081-1:2017, *Information and documentation — Records management processes — Metadata for records — Part 1: Principles*

ISO/DIS 16175-1:2019(E)

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

ISO 30300, *Information and documentation — Management systems for records — Fundamentals and vocabulary*[Note: this publication is in the process of being revised and updated]

3 Terms and definitions (*mandatory*)

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform : available at <http://www.iso.org/obp>
- IEC Electropedia : available at <http://www.electropedia.org>

4 Key outcome areas and configuration options

4.1 Key outcome areas

The functional requirements in this standard focus on the **outcomes** required to ensure records are managed appropriately. How to achieve the outcomes will depend on the type of application being used.

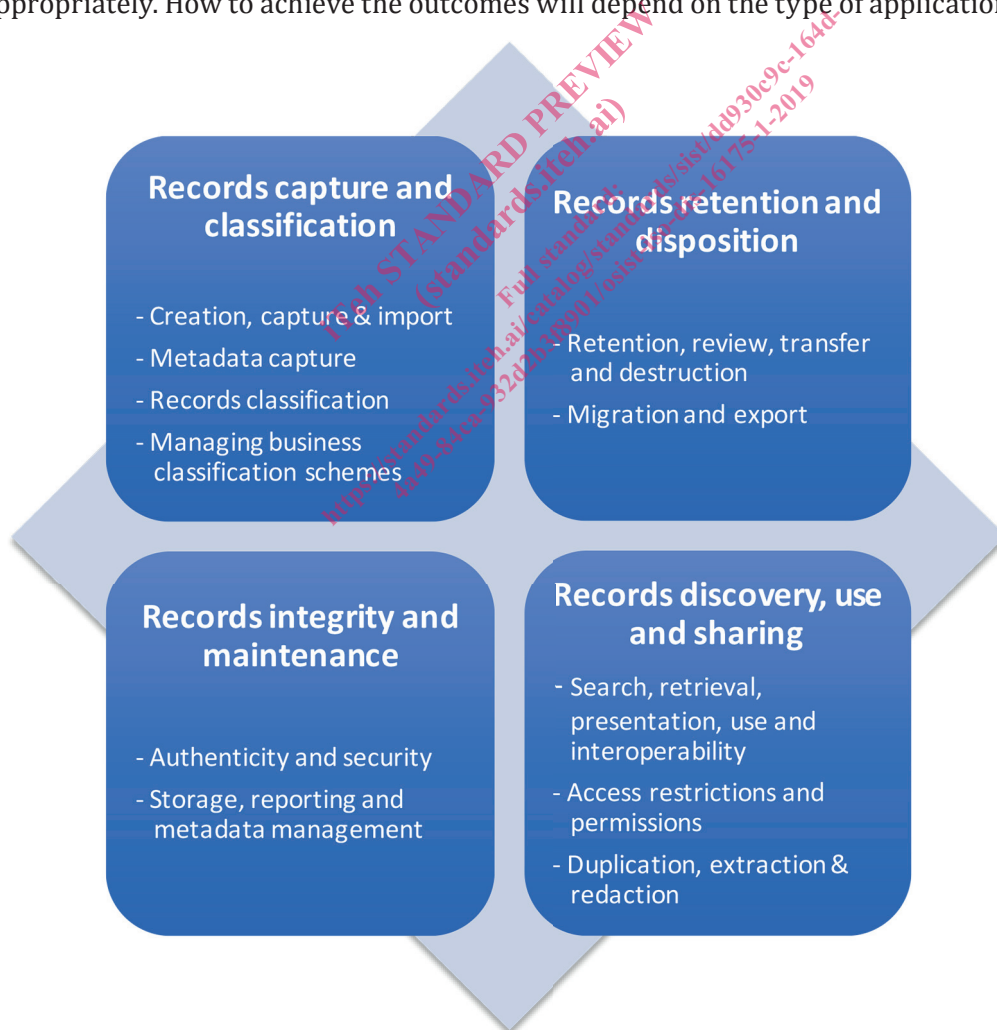


Figure 1 — Key outcome areas