## TECHNICAL REPORT



Second edition 2009-10-15

## Document management — Information stored electronically — Recommendations for trustworthiness and reliability

Images électroniques — Stockage électronique d'informations — Recommandations pour les informations de valeur et leur fiabilité



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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 Maison 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is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.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 15801 was prepared by Technical Committee SO/TC 171, *Document management applications*, Subcommittee SC 3, *General issues*.

This second edition cancels and replaces the first edition (ISCTR 15801:2004) which has been technically revised.

TR 15801:2004) WING.

## Introduction

This Technical Report defines recommended practices for electronic storage of business or other information in an electronic form. As such, complying with its recommendations is of value to organizations even when the trustworthiness of the stored information is not being challenged.

Information, in the form of digital objects, originates from many sources. This Technical Report covers digital objects in any form from the traditional scanned images, word processed documents and spreadsheets to the more "modern" forms which include e-mail, web content, instant messages, CAD drawing files, blogs, wikis, etc.

Users of this Technical Report should be aware that the implementation of these recommendations does not automatically ensure acceptability of the evidence encapsulated by the information. Where stored electronic information might be required to court, implementers of this Technical Report are advised to seek legal advice to ascertain the precise situation within their relevant legal environment.

This Technical Report describes means by which it can be demonstrated, at any time, that the contents of a specific electronic object created or existing within a computer system have not changed since it was created within the system or imported into it.

Regardless of the original format, it will possible to demonstrate that information stored in a trustworthy system can be reliably reproduced in a consistent manner and accurately reflects what was originally stored without any material modification.

Other versions of the information might legitimately develop, e.g. revision of a contract. In these cases the new versions are treated as new electronic objects. The same principle can be applied when a significant change is made to a document in a workflow environment.

Document management systems can store, in an electronic form, both documents and records (as defined in ISO 15489-1). This Technical Report describes means for storing all types of electronic information in a trustworthy and reliable manner. Where records are stored, the requirements of this Technical Report can be used in conjunction with those specified in ISO 15489-1 to ensure that the policies and procedures described in this Technical Report work in conjunction with those specified b 15O 15489-1.

Readers are advised to use this Technical Report in conjunction with other local sources, particularly with relevance to governmental and legal requirements in their respective jurisdictions.



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# Document management — Information stored electronically — Recommendations for trustworthiness and reliability

## 1 Scope

This Technical Report describes the implementation and operation of document management systems that can be considered to store electronic information in a trustworthy and reliable manner.

This Technical Report is for use by any organization that uses a document management system to store authentic, reliable and usable readable electronic information over time. Such systems incorporate policies, procedures, technology and authentic requirements that ensure that the integrity of the electronic information is maintained during storage.

This Technical Report does not cover processes used to evaluate whether information can be considered to be authentic prior to it being stored or imported into the system. However, it can be used to demonstrate that, once the information is stored, output from the system will be a true and accurate reproduction of the original.

Where, in this Technical Report, the term "system" is used, it should be taken as meaning the document management system that is being reviewed, unless otherwise stated.

## 2 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12651 and the following apply.

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### 2.1

information type

groups of related documents

NOTE In specific applications, "groups" can be identified as "sets", "first" collections" or other similar terms.

EXAMPLES Invoices, financial documents, data sheets, correspondence.

### 2.2

### trusted system

(document management) system used to store electronic information accurate, reliable and usable/readable manner, ensuring integrity over time

## 3 Document management policy

### 3.1 General

Information is one of the most important assets that any organization has at its disposal. Everything an organization does involves using information in some way. The quantity of information can be vast, and there are many different ways of representing and storing it. The value of information used and the manner in which it is applied and moved within and between organizations can determine the success or failure of those organizations.

Information, like any other asset, needs to be classified, structured, validated, valued, secured, monitored, measured and managed efficiently and effectively.