
Document management - Part 1: Principles and methods (IEC 82045-1:2001)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 82045-1:2002](https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002)
<https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 82045-1:2002

<https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002>

EUROPEAN STANDARD

EN 82045-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2001

ICS 01.110;35.240.01

English version

Document management
Part 1: Principles and methods
(IEC 82045-1:2001)

Gestion de documents
Partie 1: Principes et méthodes
(CEI 82045-1:2001)

Dokumentenmanagement
Teil 1: Prinzipien und Methoden
(IEC 82045-1:2001)

iTeh STANDARD PREVIEW

(standards.iteh.ai)

This European Standard was approved by CENELEC on 2001-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 3B/327/FDIS, future edition 1 of IEC 82045-1, prepared by SC 3B, Documentation, of IEC TC 3, Documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 82045-1 on 2001-11-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2002-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-11-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex ZA is normative and annexes A and B are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 82045-1:2001 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61082-1 + A1 + A2	NOTE	Harmonized as EN 61082-1:1993 + A1:1995 + A2:1996 (not modified).
IEC 61346-2	NOTE	Harmonized as EN 61346-2:2000 (not modified).
IEC 61175	NOTE	Harmonized as EN 61175:1993 (not modified).
IEC 61666	NOTE	Harmonized as EN 61666:1997 (not modified).
IEC 81714-2	NOTE	Harmonized as EN 81714-2:1998 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61346-1	1996	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations Part 1: Basic rules	EN 61346-1	1996
IEC 61355	1997	Classification and designation of documents for plants, systems and equipment	EN 61355	1997
IEC 62023	2000	Structuring of technical information and documentation	EN 62023	2000
ISO/IEC 2382-1	1993	Information technology - Vocabulary Part 1: Fundamental terms	-	-
ISO/IEC 8613-1	1994	Information technology - Open Document Architecture (ODA) and interchange format: Introduction and general principles	-	-
ISO 9000	2000	Quality management systems Fundamentals and vocabulary	EN ISO 9000	2000
ISO 10007	1995	Quality management Guidelines for configuration management	EN ISO 10007	1996
ISO 15226	1999	Technical product documentation Life cycle model and allocation of documents	-	-
ISO 16016	2000	Technical product documentation Protection notices for restricting the use of documents and products	-	-

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 82045-1:2002

<https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002>

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

82045-1

Première édition
First edition
2001-09

Gestion de documents –

**Partie 1:
Principes et méthodes**

iTeh STANDARD PREVIEW
Document management –
(standards.iteh.ai)

**Part 1:
Principles and methods**

<https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002>

© IEC 2001 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission
Telefax: +41 22 919 0300

3, rue de Varembeé Geneva, Switzerland
e-mail: inmail@iec.ch IEC web site <http://www.iec.ch>



CODE PRIX
PRICE CODE

V

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

FOREWORD	5
INTRODUCTION	9
1 Scope	13
2 Normative references	13
3 Definitions	15
3.1 General	15
3.2 Document related issues	17
3.3 Product related issues	19
3.4 Workflow related issues	19
4 Principles of document management	21
4.1 General	21
4.2 Processes supported by metadata	21
4.3 Document concepts	21
4.4 Linked documents	27
4.5 Document versions	27
5 Metadata for documents with relation to their environment	33
5.1 General	33
5.2 Metadata associated with the considered object(s)	35
6 Metadata associated with activities within the life cycle of a document	35
6.1 General	35
6.2 Initiation phase	39
6.3 Preparation phase	43
6.4 Establishment phase	43
6.5 Using phase	47
6.6 Revision phase	49
6.7 Archiving phase	51
6.8 Deletion phase	53
7 Conformance requirements	55
Annex A (informative) Environment of a document management system	57
Annex B (informative) List of used abbreviations	65
Bibliography	67
Figure 1 – Document with associated metadata	23
Figure 2 – Concept of the compound document	25
Figure 3 – Concept of the document aggregation	25
Figure 4 – Concept of the document set	27
Figure 5 – Sequentially effective versus concurrently effective document versions	31
Figure 6 – Maturity concept	33
Figure 7 – Activities along the life cycle of a document	37
Figure A.1 – Environment of document management systems	57

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DOCUMENT MANAGEMENT –**Part 1: Principles and methods**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 82045-1 has been prepared by subcommittee 3B: Documentation, of IEC technical committee 3: Information structures, documentation and graphical symbols, in co-operation with ISO subcommittees SC 1: Basic conventions, SC 8: Construction documentation, of ISO technical committee 10: Technical product documentation.

The text of this standard is based on the following documents:

FDIS	Report on voting
3B/327/FDIS	3B/343/RVD

Full information on the voting for the approval of this part of this standard can be found in the reports on voting indicated in the above table.

Annexes A and B are for information only.

In order to collect all requirements concerning the metadata on documents within one numerical series, ISO technical committee 10 and subcommittee 3B of IEC technical committee 3 agreed to publish all parts of this International Standard within the 82045 series.

International Standard 82045 consists of the following parts under the general title *Document Management*:

Part 1: 2001 Principles and methods (*published by IEC*)

Part 2 Reference collection of metadata and reference models (*published by IEC*)¹

Further parts specific to individual application field requirements are under consideration and should be prepared either by ISO or by IEC.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 82045-1:2002

<https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002>

¹ In preparation

INTRODUCTION

During the last decades, industry has undergone a thorough transition from manual practice to computer support for the creation and exchange of information. However, the manual practices and standards for handling documentation have not undergone a corresponding process. The situation is that the well-documented manual methods for design co-operation and co-ordination – a system for process quality assurance common to the industry – is being replaced by procedures specific to projects and companies. The result is that, although every single actor strives to assure the quality of his own products and services, the process may fail in achieving overall product and process quality. The information, interfaces and networking become industry key factors.

On the other hand, electronic document management technologies are well-suited to handle large amounts of documents occurring in engineering, manufacturing, operation and maintenance processes, together with the connected metadata. Cost reductions and quality improvements are immediate incentives.

The potential benefits include

- efficient search and retrieval of specific documents;
- quick and direct propagation of changes;
- automatic workflow procedures;
- providing document collections about related information;
- reduced administration through integration of document production and management;
- retrieval of knowledge from previous projects and common industry sources;
- supporting the exchange and sharing of data;
- supporting collaborative engineering.

As document management by nature is an instrument for the exchange of information, the need for standardisation is evident.

ISO TC 10 and IEC SC 3B have identified metadata for technical documents as being a field where all industry disciplines immediately will benefit from standardisation, and where no standards are available.

The Technical Management Board of ISO and the Committee of Action of IEC have decided that, for each part of this series, one organization shall be responsible. The technical committees involved have agreed not to change any part of International Standard 82045 without mutual agreement.

This standard defines the document concept covering not only traditional **paper-based** documents, but also, more generally, **computer-based** information that is identified, structured, processed, controlled and interchanged/communicated *as a unit* (a closed container of information). It deals with fixed sets of information with associated metadata and with multiple presentations of these sets of information.

It introduces the concept of maturity in document management systems, allowing a purpose-driven approach for concurrent and collaborative engineering. This standard covers also the document management systems using sequential engineering.

Management data are data about the content of a document, necessary to manage it in an Electronic Document Management System (EDMS) or Product Data Management System (PDMS) or any other relevant system.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 82045-1:2002

<https://standards.iteh.ai/catalog/standards/sist/f45b7eb1-7719-431e-8f50-1449e3389a1f/sist-en-82045-1-2002>

DOCUMENT MANAGEMENT –

Part 1: Principles and methods

1 Scope

This part of International Standard 82045 specifies principles and methods to define metadata for the management of documents associated with objects throughout their life cycle; This cycle generally covers a range from the conceptual idea of a document to its deletion. The established principles and methods are basic for all document management systems.

This part is intended as a general basic standard in all application fields and provides the framework applicable for part 2.

International Standard 82045 is primarily intended as a resource for the use in computerised systems such as Electronic Document Management Systems (EDMS) or Product Data Management Systems (PDMS) for the management, retrieval, storage and selection and archiving of documents, and as a basis for the exchange of documents.

NOTE – Part 2 of International Standard 82045 provides the collection of data element types associated with an information reference model, which may be used in conjunction with the presentation of metadata on documents.

2 Normative references (standards.iteh.ai)

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

IEC 61346-1:1996, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 1: Basic rules*

IEC 61355:1997, *Classification and designation of documents for plants, systems and equipment*

IEC 62023:2000, *Structuring of technical information and documentation*

ISO/IEC 2382-1:1993, *Information technology – Vocabulary – Part 1: Fundamental terms*

ISO/IEC 8613-1:1994, *Information technology – Office Document Architecture (ODA) and interchange format: Introduction and general principles*

ISO 9000:2000, *Quality management systems – Fundamentals and vocabulary*