

Structuring of technical information and documentation

The European Standard EN 62023:2000 has the status of a British Standard.

ICS 01.110; 29.020

National foreword

This British Standard is the official English language version of EN 62023:2000. It is identical with IEC 62023:2000.

The UK participation in its preparation was entrusted to Technical Committee GEL/3, Documentation and graphical symbols, which has the responsibility to:

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Summary of pages

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Structuring of technical information and documentation
(IEC 62023:2000)

Structuration des informations et de la
documentation techniques
(CEI 62023:2000)

Strukturierung technischer Information
und Dokumentation
(IEC 62023:2000)

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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, 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

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Foreword

The text of document 3B/291/FDIS, future edition 1 of IEC 62023, 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 62023 on 2000-08-01.

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) 2001-05-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-08-01

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 annex A is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62023:2000 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61346-2 NOTE: Harmonized as EN 61346-2:2000 (not modified).

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INTRODUCTION

IEC 62023 can be seen as a bridge between system structuring principles and documentation structuring principles, in that it provides

- standardization of common practice in manufacturing industry with regard to the organization of information/documentation according to the product structure by means of a main document;
- further detailing and formalization of guidance already given in IEC 61355, clause 6, by the general establishment of the main document concept with explicit referencing to complementary documents in a document set for a technical object; and
- application of the object concept from the structuring principles of IEC 61346-1 in the area of document structuring. It goes beyond the existing publications in that it shows how objects with several aspects can be kept together in a systematic way.

In Product Data Management (PDM) systems the "objects" in the product structure, which are configuration controlled information objects, correspond logically to main documents. However, although they fulfil all the requirements necessary to be documents, they are sometimes not considered as documents.

STRUCTURING OF TECHNICAL INFORMATION AND DOCUMENTATION

1 Scope

This International Standard provides rules for the structuring of technical information and documentation, based on the use of a main document (leading document) for the keeping together of information for each object.

NOTE For the definition of a main document, see 3.3.1.

2 Normative references

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 61082-1:1991, *Preparation of documents used in electrotechnology – Part 1: General requirements*

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

IEC 61346-4:1998, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designation – Part 4: Discussion of concepts*

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

IEC 61360-4:1997, *Standard data element types with associated classification scheme for electric components – Part 4: IEC reference collection of standard data element types, component classes and terms*

IEC 62027:2000, *Preparation of parts lists*

ISO/DIS 7200-1, —, *Technical product documentation – Document headers and title blocks – Part 1: General structure and content* ¹⁾

3 Definitions

For the purpose of this International Standard, the following terms and definitions apply. In the definitions, terms that are defined elsewhere in this clause are shown in *italics*.

1) To be published.

3.1 General terms, related to structuring

3.1.1

object

entity treated in the process of design, engineering, realization, operation, maintenance, and demolition

NOTE 1 The entity may refer to a physical or non-physical "thing" or to a set of information associated with it.

NOTE 2 Depending on its purpose, an object may be viewed in different ways called "aspects".

[IEC 61346-1, definition 3.1]

3.1.2

system

set of interrelated *objects*

NOTE 1 Examples of a system: a drive system, a water supply system, a stereo system, a computer.

NOTE 2 When a system is part of another system, it may be considered as an object.

[IEC 61346-1, definition 3.2]

3.1.3

plant

assembly of different *systems* on a specific site

[IEC 61355, definition 3.9]

3.1.4

type

class of things having common characteristics

3.1.5

aspect

specific way of selecting information on or describing a *system* or an *object* of a *system*

NOTE Such ways may be:

- what the system or object is doing (function viewpoint);
- how the system or object is constructed (product viewpoint);
- where the system or object is located (location viewpoint).

[IEC 61346-1, definition 3.3]

3.1.6

structure

organization of relations among *objects* of a *system* describing constituency-relations (consist of/is a part of)

[IEC 61346-1, definition 3.6]

3.1.7

reference designation

identifier of a specific *object* with respect to the *system* of which the *object* is a constituent, based on one or more *aspects* of that *system*

[IEC 61346-1, definition 3.7]