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Irish Standard I.S. EN 62027:2012

# Preparation of object lists, including parts lists (IEC 62027:2011 (EQV))

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### EUROPEAN STANDARD

### EN 62027

### NORME EUROPÉENNE EUROPÄISCHE NORM

January 2012

ICS 29.020

Supersedes EN 62027:2000

English version

# Preparation of object lists, including parts lists (IEC 62027:2011)

Etablissement des listes d'objet, y compris des nomenclatures de composants (CEI 62027:2011) Erstellung von Objektlisten, einschließlich Teilelisten (IEC 62027:2011)

This European Standard was approved by CENELEC on 2011-11-16. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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## 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 3/1049/FDIS, future edition 2 of IEC 62027, prepared by IEC TC 3 "Information structures, documentation and graphical symbols" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62027:2012.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national	(dop)	2012-08-16
	standard or by endorsement		
•	latest date by which the national standards conflicting with the	(dow)	2014-11-16

This document supersedes EN 62027:2000.

document have to be withdrawn

EN 62027:2011 includes the following significant technical changes with respect to EN 62027:2000:

- the terminology used in the publication has been adapted to the one used in EN 81346-1:2009, EN 62507-1:2011 and IEC/PAS 62569-1:2009;
- the term "object list" has been introduced as the generic term, and "parts list" used as a specific term for object lists associated with the product structure;
- Annex A of the previous edition has been taken away and partly replaced by 6.2 and a reference to IEC 61355 DB;
- a new Annex A providing guidance on the presentation of subsets of characteristic properties has been introduced;
- a new Annex B providing source definitions and references to used data element types has been introduced;
- the examples in the annexes C, D and E (corresponding to B, C and D in the previous edition) have been provided with comments;

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

### **Endorsement notice**

The text of the International Standard IEC 62027:2011 was approved by CENELEC as a European Standard without any modification.

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

IEC 61360-1:2009NOTEHarmonized as EN 61360-1:2010 (not modified).IEC 82045-1:2001NOTEHarmonized as EN 82045-1:2001 (not modified).IEC 82045-2:2004NOTEHarmonized as EN 82045-2:2005 (not modified).ISO 80000 seriesNOTEHarmonized in EN ISO 80000 series.ISO 10303-44:1994NOTEHarmonized as ENV ISO 10303-44:1995 (not modified).

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### Annex ZA

### (normative)

# Normative references to international publications with their corresponding European publications

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.

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

Publication	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	Year
IEC 61082-1	2006	Preparation of documents used in electrotechnology - Part 1: Rules	EN 61082-1	2006
IEC 61355	2008	IEC Collection of standardized and established document kinds	-	-
IEC 61355-1	2008	Classification and designation of documents for plants, systems and equipment - Part 1: Rules and classification tables	EN 61355-1	2008
IEC 61360	-	Component data dictionary (CDD)	-	-
IEC 62023	201X <sup>1)</sup>	Structuring of technical information and documentation	EN 62023	201X <sup>1)</sup>
IEC 62507-1	2010	Identification systems enabling unambiguous information interchange - Requirements - Part 1: Principles and methods	EN 62507-1	2011
IEC 81346-1	2009	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1: Basic rules	EN 81346-1	2009
IEC 81346-2	-	Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2: Classification of objects and codes for classes	EN 81346-2	-
IEC 82045-2	2004	Document management - Part 2: Metadata elements and information reference model	EN 82045-2	2005
IEC/PAS 62569-1	2009	Generic specification of information on products - Part 1: Principles and methods	-	-
ISO 639-1	-	Codes for the representation of names of languages - Part 1: Alpha-2 code	-	-
ISO 6433	-	Technical drawings - Item references	EN ISO 6433	-
ISO 7200	-	Technical product documentation - Data fields in title blocks and document headers	SEN ISO 7200	-

<sup>1)</sup> At draft stage.

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Publication	<u>Year</u>	Title	<u>EN/HD</u>	<u>Year</u>
ISO 13584-42	2010	Industrial automation systems and integration - Parts library - Part 42: Description methodology: Methodology for structuring parts families	-	-

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### PREPARATION OF OBJECT LISTS, INCLUDING PARTS LISTS

### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62027 has been prepared by IEC technical committee 3: Information structures, documentation and graphical symbols.

This second edition cancels and replaces the first edition published in 2000. This edition constitutes a technical revision.

This edition includes the following substantial changes with respect to the previous edition:

- the terminology used in the publication has been adapted to the one used in IEC 81346-1:2009:2009, IEC 62507-1:2010:2010 and IEC/PAS 62569-1:2009;
- the term "object list" has been introduced as the generic term, and "parts list" used as a specific term for object lists associated with the product structure;
- Annex A of the previous edition has been taken away and partly replaced by 6.2 and a reference to IEC 61355 DB;
- a new Annex A providing guidance on the presentation of subsets of characteristic properties has been introduced;

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- a new Annex B providing source definitions and references to used data element types has been introduced;
- the examples in the annexes C, D and E (corresponding to B, C and D in the previous edition) have been provided with comments;

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

FDIS	Report on voting
3/1049/FDIS	3/1070/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

### INTRODUCTION

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An object list is primarily used to list and specify the constituent objects (components) of the overall object or system to which the object list applies.

It is generally recognized that information on products, installations and systems can be organized on the basis of tree-like, hierarchical, structures. The structure represents the way in which an industrial system or a product is divided into sub-systems or components, designated by the general term "constituent objects". In the context of this International Standard, "object" refers to any entity treated in a process of development, implementation, usage and disposal of a plant, installation, system, equipment, etc., or part thereof, in accordance with the definition in 3.1.1.

NOTE In the context of other standards, the term "item" is sometimes used with the same meaning as "object".

Depending on the "aspect" different structures can be recognized, for example a "productoriented structure", a "function-oriented structure" or a "location-oriented structure". A specific constituent object may be of relevance in one structure only, or in more than one. For further information on structures and structuring (see IEC 81346-1:2009).

An object list is implicitly or explicitly associated with such a structure. The object list concept described in this International Standard is therefore applicable in all structures defined in accordance with IEC 81346-1:2009.

Object lists relevant to the manufacturing and assembly of a product, associated with the product-oriented structure, and generally named parts lists, usually cover only one assembly level each, and the main assembly is normally described by a system of single-level parts lists. An example of a system of single-level parts lists is shown in Figure 1.

Object lists are often generated as reports from a database containing information on the entire structure.



NOTE A is the main assembly; B, C, D and E are sub-assemblies; 1, 2, 3, etc. are parts. A, B, C, D and E are defined by single level parts lists, the content of each indicated by means of dashed lines.

### Figure 1 – Illustration of the organization of object lists (in one aspect)



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