

**Identification systems enabling unambiguous
information interchange - Requirements - Part 1:
Principles and methods**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 62507-1:2011 sisaldab Euroopa standardi EN 62507-1:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 04.02.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

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This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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**Identification systems enabling unambiguous information interchange -
Requirements -**

**Part 1: Principles and methods
(IEC 62507-1:2010)**

Systèmes d'identification permettant
l'échange non ambigu de l'information -
Exigences -
Partie 1: Principes et méthodes
(CEI 62507-1:2010)

Anforderungen an Identifikationssysteme
zur Unterstützung eines eindeutigen
Informationsaustauschs -
Teil 1: Grundsätze und Methodik
(IEC 62507-1:2010)

This European Standard was approved by CENELEC on 2011-01-02. 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.

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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 3/1007/FDIS, future edition 1 of IEC 62507-1, prepared by IEC TC 3, Information structures, documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62507-1 on 2011-01-02.

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

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) 2011-10-02
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-01-02

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62507-1:2010 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 81346-1	NOTE	Harmonized as EN 81346-1.
ISO 9000:2005	NOTE	Harmonized as EN ISO 9000:2005 (not modified).

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61360-1	-	Standard data elements types with associated classification scheme for electric items - Part 1: Definitions - Principles and methods	EN 61360-1	-
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 82045-1	-	Document management - Part 1: Principles and methods	EN 82045-1	-
IEC 82045-2	-	Document management - Part 2: Metadata elements and information reference model	EN 82045-2	-
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 6523-1	-	Information technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization identification schemes	-	-
ISO/IEC 15418	-	Information technology - Automatic identification and data capture techniques - GS1 Application Identifiers and ASC MH10 Data Identifiers and maintenance	-	-
ISO/IEC 15434	-	Information technology - Syntax for high-capacity automatic data capture (ADC) media	-	-
ISO/IEC 15459-1	-	Information technology - Unique identification of transport units - Part 1: General	-	-
ISO/IEC 15459-2	-	Information technology - Unique identifiers - Part 2: Registration procedures	-	-
ISO/IEC 15459-4	-	Information technology - Unique identifiers - Part 4: Individual items	-	-
ISO/IEC 7064	-	Information technology - Security techniques - Check character systems	-	-
ISO 3166-1	-	Codes for the representation of names of countries and their subdivisions - Part 1: Country codes	EN ISO 3166-1	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 10303-11	-	Industrial automation systems and integration - Product data representation and exchange - Part 11: Description methods: The EXPRESS language reference manual	-	-

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IDENTIFICATION SYSTEMS ENABLING UNAMBIGUOUS INFORMATION INTERCHANGE – REQUIREMENTS –

Part 1: Principles and methods

1 Scope

This part of IEC 62507 specifies basic requirements for systems for the identification of objects (such as products, “items”, documents, etc., excluding human individuals). It focuses on assigning identifiers to an object for referencing purposes.

The classification of objects for any and whatever reason and the verification that an object is really the object it claims to be, are excluded.

This standard includes recommendations for the human readable presentation of identifiers and its machine readable representation, to be considered when constructing the identifiers and identification numbers.

The standard includes also requirements for the application of identifiers in a computer sensible form in accordance with such systems, and requirements for their interchange.

The specification of the physical file or transfer format (syntax) for a machine to machine information interchange is not included, nor is the specification and transfer formats for the implementation by a physical medium, e.g. file, bar code, Radio Frequency Identification (RFID), used for information interchange and the identification labelling on an object included.

2 Normative references

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.

IEC 61360-1, *Standard data element types with associated classification scheme for electric components – Part 1: Definitions – Principles and methods*

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*

IEC 82045-1, *Document management – Part 1: Principles and methods*

IEC 82045-2, *Document management – Part 2: Metadata elements and information reference model*

ISO/IEC 646:1991, *Information technology – ISO 7-bit coded character set for information interchange*

ISO/IEC 6523-1, *Information technology – Structure for the identification of organizations and organization parts –Part 1: Identification of organization identification schemes*

ISO/IEC 15418, *Information technology – Automatic identification and data capture techniques – GS1 Application identifiers and ASC MH 10 data identifiers and maintenance*

ISO/IEC 15434, *Information technology – Automatic identification and data capture techniques – Syntax for high-capacity ADC media*

ISO/IEC 15459-1, *Information technology – Unique identifiers – Part 1: Unique identifiers for transport units*

ISO/IEC 15459-2, *Information technology – Unique identifiers – Part 2: Registration procedures*

ISO/IEC 15459-4, *Information technology – Unique identifiers – Part 4: Individual items*

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions – Part 1: Country codes*

ISO 7064, *Information technology – Security techniques – Check character systems*

ISO 10303-11, *Industrial automation systems and integration – Product data representation and exchange – Part 11: Description methods: The EXPRESS language reference manual*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

batch number

lot number

identification number assigned to a group of specimens considered as one *object* to identify the specimens that are manufactured together under assumed identical conditions and in a limited time interval

NOTE The *batch number* / *lot number* is normally assigned at the manufacturing of the *object*.

3.2

domain

distinguished part of an abstract or physical space where something exists

NOTE A *domain* can be e.g. an *organization* or a country or a part of it.

3.3

domain number

domain ID

identification number assigned to a *domain*

NOTE The assigned *domain number* can coincide with the *organization number*.

[IEC 82045-2 derived]

3.4

identification [activity]

act of associating *identification numbers* to an *object*

3.5

identification number

ID

string of characters representing the value of the *identifier*

NOTE 1 It is practice that although the term says “number” the string can contain other types of characters as well.

NOTE 2 Note that the term “*identifier*” as being an attribute and the term “*identification number*” as being the value of that attribute are here considered different things, but they are often mixed in existing definitions.