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Industrial systems, installations and equipment and industrial products — Classification and designation of information —

Part 1:
Basic rules and classification of information

This draft is submitted to a parallel vote in ISO and in IEC.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INDUSTRIAL SYSTEMS, INSTALLATIONS AND EQUIPMENT AND INDUSTRIAL PRODUCTS – CLASSIFICATION AND DESIGNATION OF INFORMATION –

Part 1: Basic rules and classification of information

FOREWORD

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IEC 81355-1 has been prepared by IEC/TC 3: Documentation, graphical symbols and representations of technical information, in close cooperation with ISO/TC 10: Technical product documentation. It is an international standard.

It is published as a double logo standard and has the status of a horizontal publication in accordance with IEC Guide 108.

This edition cancels and replaces the second edition of IEC 61355-1 published in 2008. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 61355-1:2008:

a) Focusing on classification of information rather that classification of document kinds;
b) Introduced a classification scheme based on inherent content of information;

c) Introduced a distinction between an informatio1n container and a document, the latter being for human perception;

d) Introduction of information kind classification code (ICC), replacing document kind classification code (DCC);

e) Introduced structuring of information containers;

f) Introduced an information model of the concepts dealt with;

g) Introduced a conversion table for merging from the use of DCC to the use of ICC.

The text of this International Standard is based on the following documents:

Draft	Report on voting
3/XX/FDIS	3/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table. In ISO, the standard has been approved by xx members out of xx having cast a vote.

The language used for the development of this International Standard is English.

This document was drafted in accordance with IEC/ISO Directives, Part 2, and developed in accordance with IEC/ISO Directives, Part 1 and IEC/ISO Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

In this document, *italic type* is used as follows:

- terms defined in Clause 3 (applies to the text in Clause 3 only);
- in the description of the EXPRESS model, entity names and attribute identifiers.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

IMPORTANT – The "colour inside" logo on the cover page of this document 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

Information is necessary for all activities during the life cycle of industrial systems, installations, equipment and industrial products. It may be produced in any phase or activity. Information may be received from and delivered to other parties, and different parties may need different information for the same object, depending on what is most suitable for their need.

This document is based on the former IEC 61355-1:2008 and IEC 61355 DB standards but is now a new joint ISO & IEC document. As a new joint document, this document clarifies key concepts related to information and the designation of sets of information exchanged between parties, as represented by the focus on classification of information and the shift in focus from “documents” to “information containers”.

Notably the paper-based presentation of information that was used as a basis for classification in IEC 61355-1:2008 is no longer present in this document. Instead, this document provides “information kind classification codes (ICC)” to be used in the designation of information containers, thereby replacing the previous “document kind class codes (DCC)” of IEC 61355-1:2008.

One aim of this document is to support the unambiguous exchange of information for the purpose of communication and understanding between parties. For this purpose, it is necessary to disregard what the set of information is called in daily life. Instead, the basis of understanding is based on a classification of the kind of information managed and exchanged between parties.

Another aim of this document is to set up rules for a specific method of correlating information and objects, i.e., to indicate to which object a specific set of information relates. For this purpose, a concept for designation of information containers is provided. Also, a concept for relating information containers to one or more objects is provided. By this, support is also provided for the structuring, storage and retrieval of information based on the information content of an information container and the object to which the information relates.

INDUSTRIAL SYSTEMS, INSTALLATIONS AND EQUIPMENT AND INDUSTRIAL PRODUCTS – CLASSIFICATION AND DESIGNATION OF INFORMATION –

Part 1: Basic rules and classification of information

1 Scope

This part of the 81355 International Standard, published jointly by IEC and ISO, provides rules and guidelines for the classification and designation of information containers based on their inherent content. This document is applicable for information used in the life cycle of a system, e.g., industrial plants, construction entities and equipment.

This document defines classes of information and their information kind classification code (ICC). The defined classes and codes provided are used as values associated with metadata, e.g., in information management systems (see IEC 82045-1 and IEC 82045-2).

The rules, guidelines and classes are general and are applicable to all technical areas, for example mechanical engineering, electrical engineering, construction engineering and process engineering. They can be used for systems based on different technologies or for systems combining several technologies.

This document also has the status of a horizontal publication in accordance with IEC Guide 108. It is intended for use by technical committees in preparation of publications related to classification and designation of information.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1
information
intelligence or knowledge capable of being represented in forms suitable for communication, storage or processing

Note 1 to entry: Information may be represented for example by signs, symbols, pictures or sounds.

[SOURCE: IEC 60050-701:1988, 701-01-01]

3.2
object
entity involved in a process of development, implementation, usage, and disposal