Intelligent transport systems - Graphic data dictionary (ISO 14823:2017)



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 14823:2017 sisaldab Euroopa standardi EN ISO 14823:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 14823:2017 consists of the English text of the European standard EN ISO 14823:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 24.05.2017.	Date of Availability of the European standard is 24.05.2017.
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#### ICS 35.240.60, 43.040.15

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# EUROPEAN STANDARD

# **EN ISO 14823**

# NORME EUROPÉENNE EUROPÄISCHE NORM

May 2017

ICS 35.240.60; 43.040.15

Supersedes CEN ISO/TS 14823:2008

#### **English Version**

# Intelligent transport systems - Graphic data dictionary (ISO 14823:2017)

Systèmes de transport intelligents - Dictionnaire de données graphiques (ISO 14823:2017)

Intelligente Verkehrsysteme - Graphisches Verzeichnis (ISO 14823:2017)

This European Standard was approved by CEN on 17 January 2017.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

## **European foreword**

This document (EN ISO 14823:2017) has been prepared by Technical Committee ISO/TC 204 "Intelligent transport systems" in collaboration with Technical Committee CEN/TC 278 "Intelligent transport systems" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

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

This document supersedes CEN ISO/TS 14823:2008.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 14823:2017 has been approved by CEN as EN ISO 14823:2017 without any modification.

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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

This first edition cancels and replaces ISO/TS 14823:2008, which has been technically revised.

## Introduction

This document specifies a Graphic Data Dictionary (GDD) that has been developed with the intent of creating a common basis for transmitting encoded information for existing road traffic signs and pictograms. The coding system has been developed to be language independent, such that data that can be interpreted, irrespective of language or regional differences. It supports Intelligent Transport System (ITS) application such as in-vehicle signage or in-vehicle information.

#### This document supports

- the efficient IT-centric encoding for ITS messaging to represent specific road traffic signs and pictograms, and
- the consistent decoding of encoded road traffic signs and pictogram data for display in ITS.

y to t. This document can support the translation of signs and pictograms with a similar purpose from the representation used in one country to the representation used in another country.

# Intelligent transport systems — Graphic data dictionary

#### 1 Scope

This document specifies a graphic data dictionary, a system of standardised codes for existing road traffic signs and pictograms used to deliver Traffic and Traveller Information (TTI). The coding system can be used in the formation of messages within intelligent transport systems.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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

ISO 8601, Data elements and interchange formats — Information interchange — Representation of dates and times

ISO/IEC 8824-1, Abstract Syntax Notation One (ASN.1): Specification of basic notation

#### 3 Terms and definitions

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

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

- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>

#### 3.1

#### attribute

code attached to the *pictogram* (3.4) in order to clarify the meaning of pictogram

#### 3.2

## country code

internationally recognised codes stipulated by ISO 3166-1 when referring to countries and subdivisions of countries

#### 3.3

#### graphic data dictionary

catalogue of codes for *pictograms* (3.4) organised systematically

#### 3.4

#### pictogram

sign or icon rendered on a display of IT system such as computer or VMS to inform travellers of information such as traffic regulations or public facilities

#### 3.5

#### pictogram category code

codes assigned to the more detailed category of a pictogram (3.4) type under the service category

#### 3.6

#### qualifier

parameter for an attribute (3.1) used to express the meaning of pictogram (3.4) quantitatively