



International

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**ISO 14823-1**

**Intelligent transport systems —  
Graphic data dictionary —**

**Part 1:  
Specification**

*Systèmes de transport intelligents — Dictionnaire de données  
graphiques —*

*Partie 1: Spécification*

**First  
edition  
2024-05**

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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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 278, *Intelligent transport systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition cancels and replaces the first edition (ISO 14823:2017), which has been technically revised.

The main changes are as follows:

- the mechanism of "relative object identifier" has been specified ([7.3](#));
- the inclusion of up to 4 pictograms in the graphic data dictionary (GDD) has been allowed;
- redundant pictogram codes have been deleted;
- new pictogram codes requested by certain countries have been added;
- new attributes to comply with new signs have been added;
- redundant attributes have been deleted;
- existing attributes have been changed to be more flexible and to be harmonized with existing International Standards.

A list of all parts in the ISO 14823 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## 0.1 Design principle

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. The GDD 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.

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.

Existing road traffic signs and pictograms from various countries are listed in [Annex I](#).

## 0.2 Background of revision

The first edition of this document (ISO 14823:2017) used the country codes stipulated by ISO 3166-1 to distinguish the country where the GDD is provided and used the following numbering structure to identify the pictogram codes stipulated in [Clause 8](#).

- The two-digit category of the sign.
- The one-digit nature of the sign.
- The two-digit serial number of the sign.

However, this mechanism lacked a global identification of pictogram codes and a flexibility when adding new pictogram codes.

To cope with these issues, the present document, ISO 14823-1:2023, has been developed.

## 0.3 Backward compatibility

This document has been developed to be backward compatible with ISO 14823:2017 to assist in transitions from earlier implementations, while not hindering spreads of ISO 14823:2017 and being able to support many new features.

Specifically, the GDD allows the selection of two versions described in [7.1](#). The GDD allows the use of the ASN.1 description specified in [Annex A](#) or [Annex E](#), and allows the use of the attributes specified in [Annex B](#) or [Annex F](#).