BS EN ISO 14823-1:2024

BSI Standards Publication

Intelligent transport systems — Graphic data dictionary

Part 1: Specification

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National foreword

This British Standard is the UK implementation of EN ISO 14823-1:2024. It is identical to ISO 14823-1:2024. It supersedes BS EN ISO 14823:2017, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

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This document (EN ISO 14823-1:2024) 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of an identical text or by endorsement, at the latest by November 2024, and conflicting national standards shall be withdrawn at the latest by November 2024.

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Foreword

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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).

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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.

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Introduction

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.

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Intelligent transport systems — Graphic data dictionary —

Part 1: Specification

1 Scope

This document specifies a graphic data dictionary (GDD), a system of standardized 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 (ITS).

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 code*

ISO 8601-1:2019, *Date and time — Representations for information interchange — Part 1: Basic rules*

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

ISO/IEC 8825-5:2021, *Information technology — ASN.1 encoding rules — Part 5: Mapping W3C XML schema definitions into ASN.1*

ISO/IEC 8859-1, *Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*

ISO/IEC 19505-1, *Information technology — Object Management Group Unified Modeling Language (OMG UML) — Part 1: Infrastructure*

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:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
attribute
coded information which can be associated to a *pictogram* (3.5) in order to clarify the meaning of the pictogram

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3.2
country code
internationally recognized codes

Note 1 to entry: When referring to countries and subdivisions of countries, the description in ISO 3166-1:2020, 3.3 applies.

3.3
graphic data dictionary
catalogue of codes for *pictograms* (3.5) organized systematically

3.4
nature category number
number to identify the nature of the *pictogram category code* (3.7)

3.5
pictogram
graphic or icon on static signs or rendered on a display of an IT system, such as a monitor or a VMS pictogram display, to inform travellers of information such as road conditions, traffic elements, traffic regulations or public facilities

3.6
pictogram code
combination of a *service category code* (3.11) and a *pictogram category code* (3.7) optionally including a *country code* (3.2) in version 1

Note 1 to entry: See 7.1 for an explanation of "version 1".

3.7
pictogram category code
code assigned to a set of *pictograms* (3.5) conveying the same meaning for a given *service category code* (3.11)

3.8
qualifier
parameter for an *attribute* (3.1) used to express the meaning of *pictogram* (3.5) quantitatively

3.9
relative object identifier
value which identifies an object by its position relative to some known object identifier

[SOURCE: ISO/IEC 8824-1:2021, 3.8.63]

3.10
serial number
number to identify the *pictogram* (3.5) belonging to the nature category

3.11
service category code
code assigned to distinguish the service category such as a regulation or public facilities

3.12
specialization
relationship between a more general class (the parent) and a more specific class (the child) that is fully consistent with the general class and that adds additional information

[SOURCE: ISO/IEC 11179-3:2023, 3.1.8, modified — “<metamodel>” preceding the definition has been deleted. Notes to entry have been removed.]

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4 Abbreviated terms

ASN.1	Abstract Syntax Notation One
C-ITS	cooperative intelligent transport systems
HGV	heavy goods vehicle
ITS	intelligent transport systems
IT	information technology
LPG	liquefied petroleum gas
OID	object identifier
UML	unified modeling language
UN	United Nations
VMS	variable message sign

5 Conformance

An implementation is conformant with this document when the following conditions are met.

— The implementation and transmission of graphic data shall conform to the requirements listed in this document.

— The pictogram code shall be selected from the categorized codes listed in this document.

6 Requirements

The intended usage of this document is to support 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 similar purpose from the representation used in one country to the representation used in another country. For illustrative purposes, it is foreseen that this document will be able to be used to encode information concerning a specific pictogram that is then embedded into other information to be exchanged; if needed, on receipt of this information, the receiver will be able to use the contents of this document to decode the information concerning the specific pictogram to support its display across a range of dissemination systems. Examples of these dissemination systems can include: traffic control centre system user interfaces, variable message signs (VMS). public access terminals, mobile personal information systems, and on-board units.

Requirements for ITS applications which utilize the GDD are as follows.

— Graphic data shall consist of a version number, relative object identifier or country code and optionally an attribute indicator.

— The pictogram code shall be decided based on Table 1.

— The danger warning pictogram code shall be selected from Table 3.

— The regulatory pictogram code shall be selected from Table 4.

— The informative pictogram code shall be selected from Table 5.

— The public facilities pictogram code shall be selected from Table 6.

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— The supplementary panel and additional panel pictogram code shall be selected from Table 9.

— The integer value which indicates the direction shall be determined based on Table B.3 or Table F.3.

— If attribute indicator is on, graphic data shall include attributes listed in Table B.1 or Table F.1.

— When transmitting graphic data, it shall be coded based on the ASN.1 module specified in Annex A (version 2) or on the ASN.1 module specified in Annex E (version 1).

NOTE For transmission efficiency purposes, compression can be considered. This is outside the scope of this document.

7 Structure of pictogram code

7.1 General

The GDD provides a taxonomy of all registered sign types by assigning each sign type with a globally unique pictogram code. This pictogram code allows the meaning of virtually any sign used for surface transport to be adequately conveyed in a language-independent manner with a very short identifier coupled with optional attributes.

There are two "versions" available for determining the structure of the pictogram code.

The first version (referred to collectively as “version 1”) uses the sequence of the country code (see 7.4) and pictogram code (see 7.5) as specified by the GDD structure in Annex E.

Version 1 is expected to be used mainly when expanding or maintaining the existing C-ITS applications which presently use GDD (i.e. ISO 14823:2017).

The second version (referred to collectively as “version 2”) uses the object identifier of the pictogram code by using the ASN.1 relative object identifier specified in 7.3. This mechanism has been introduced to cope with a global identification of pictogram codes and a flexibility when adding new pictogram codes.

Version 2 allows to the inclusion of up to 4 pictograms in the GDD.

In addition, some elements have been harmonized with DATEX II to be used in VMS signs.

It is up to each application or service to determine how to use these versions.

However, for reasons of facilitating implementations, it is recommended to avoid mixing versions in the same application or service.

Version 1 and version 2 are maintained independently by introducing the notion of “revision” in complement of the notion of “version”. Both the version and the revision are identified in the object identifier (OID) that identifies the respective ASN.1 module.

Details of version 2 can be found in Annexes A, B, C and D while details of version 1 can be found in Annexes E, F and G.

7.2 Current and deprecated signs

There are a number of signs in ISO 14823:2017 that are deprecated (no longer relevant or duplicated). Each pictogram code of the GDD in this document (ISO 14823-1:2023) is labelled “current” or “deprecated” together with a date of revision. Using this labelling enables legacy applications to continue to use these deprecated sign codes but signals to new users that it is wise to use only current labelled codes. To ensure backward compatibility, no code is reused, so that if a deprecated code is transmitted and the receiver does not recognize it, no action is taken. In the future it is possible that some codes might be set to “obsolete”.

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The following are examples of deprecated signs and reasons for deprecation.

— Signs listed in Table 7 and Table 8 have been deprecated and moved to Table 3 as these signs should be used in dangerous situations.

— Signs listed in Table 4 (from pictogram category no. 631 to no. 637) have been deprecated as these signs should be presented using attributes.

— Signs listed in Table 4 (from pictogram category no. 365 to no. 368) have been deprecated as these signs are replaced by signs listed in Table 4 (from pictogram category no. 361 to no. 364).

7.3 Relative object identifier

The international object identifier tree as defined in ISO/IEC 9834-1 is a tree whose root corresponds to this document and whose nodes correspond to Registration Authorities responsible for allocating arcs from a parent node.

The pictogram codes are registered on the international object identifier tree under the arc {joint-iso-itu-t(2) its(28) gdd(5) }. The first three sub-arcs follow the numbering structure:

— the two-digit service category of the sign,

— the one-digit nature category of the sign,

— the two-digit serial number of the sign.

The taxonomy specified by the GDD allows maximum interoperability among implementations that might differ in their level of support of GDD details. In other words, while the GDD has been designed to support numerous potential use cases that require various levels of detail and virtually all sign types that might be encountered within surface transport, the GDD has also been designed to accommodate applications (especially receiving applications) that might not support the full scope of the GDD. Specifically, the taxonomic structure of the GDD allows a sender to provide a very detailed pictogram code; if the receiver does not understand the complete taxonomic sequence, it should still be able to classify the sign under a parent category (or understand that it is safe to ignore).

For example, if a receiving application is notified of a sign with an object identifier of {joint(2) its(28) gdd(5) warning(11) warning3(3) wildAnimal(63) unspecified(0) au(36) kangaroo(x) }), it might be able to display the intended Australian-specific kangaroo crossing warning sign to the driver. Another application might generalize all object identifiers starting with {joint(2) its(28) gdd(5) warning(11) warning3(3) wildAnimal(63) } sign to a generic wild animal crossing sign. Another application might generalize all object identifiers starting with {joint(2) its(28) gdd(5) warning(11) } to be a generic warning sign. The level of detail supported by an application is dependent upon the purpose of the receiving application and is beyond the scope of the GDD.

To ensure that all signs described by the GDD are placed into this taxonomy, the GDD conveys the object identifier of the pictogram code by using the ASN.1 relative object identifier type with a root node of {joint(2) its(28) gdd(5) }. This allows a more efficient encoding of the object identifier while also ensuring that all codes can be generalized according to the specified taxonomy. This structure still allows for further regional specializations of the pictogram code specified within this standard according to the process specified Annex D.

7.4 Country code

ISO 3166-1 shall be used to encode the countryCode in GddStructure.pictogramCode using two-letter codes in upper case in accordance with ISO/IEC 8859-1 encoding. For example, if the on-board unit has multiple countries' pictograms, it can render a pictogram on the display in accordance to each county code when the traveller is driving through adjacent countries.

If present, the component countryCode in GddStructure.pictogramCode (version 1) shall contain a two-letter country code that shall conform to ISO 3166-1, in upper case.

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7.5 Pictogram code and object identifier (OID) node information

The structure of the pictogram code including the relative object identifier is presented in Table 1. The service category has following four types of categories.

1) Traffic signs: are officially established pictograms in each country to control traffic using a warning, regulatory or informative sign.

2) Public facilities: indicate the existence of certain public facilities and their service details (e.g. toilets, restaurants, first aid facilities, etc.).

3) Ambient conditions: indicate weather condition on the road (e.g. rainfall, flood, fog, etc.) and road conditions (traffic congestion, accident, etc.) which can potentially affect the traffic flow.

4) Supplemental panels: are attached to the main signs to provide supplemental information using text or numbers.

NOTE Users of version 2 are encouraged to use attributes instead of supplemental panels where it is possible.

Each pictogram category code has a nature category number and a serial number.

Pictograms to be used for information display may vary from country to country, political jurisdiction to political jurisdiction, or system operator to system operator.

Pictogram codes and OID node information are described in Annex J.

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Table 1 — Pictogram code (for version 1 omitting country code) and relative object identifier

Pictogram code				Relative object identifier
Service category code		Pictogram category code		
Main category	Sub-category	Nature category number	Serial number	
trafficSign (1)	dangerWarning (1)	warning1 (1)	xx	{11 1 xx}
		warning2 (2)	xx	{11 2 xx}
		warning3 (3)	xx	{11 3 xx}
		warning4 (4)	xx	{11 4 xx}
		warning5 (5)	xx	{11 5 xx}
		warning6 (6)	xx	{11 6 xx}
		warning7 (7)	xx	{11 7 xx}
		warning8 (8)	xx	{11 8 xx}
		warning9 (9)	xx	{11 9 xx}
	regulatory (2)	priority1 (1)	xx	{12 1 xx}
		priority2 (2)	xx	{12 2 xx}
		priority3 (3)	xx	{12 3 xx}
		prohibitionOrRestriction (4)	xx	{12 4 xx}
		prohibitionOrRestriction (5)	xx	{12 5 xx}
		prohibitionOrRestriction (6)	xx	{12 6 xx}
		mandatory (7)	xx	{12 7 xx}
		mandatory (8)	xx	{12 8 xx}
		mandatory (9)	xx	{12 9 xx}
	Informative [3]	advanceDirection1 [1]	xx	{13 1 xx}
		advanceDirection1 [2]	xx	{13 2 xx}
		advanceDirection1 [3]	xx	{13 3 xx}
		Instruction [1]	xx	{13 4 xx}
		Notification [1]	xx	{13 5 xx}
		laneGuidance [1]	xx	{13 6 xx}
		alert	xx	{13 7 xx}
		roadOrPlaceIdentification1 [1]	xx	{13 8 xx}
		roadOrPlaceIdentification2 [2]	xx	{13 9 xx}
publicFacilities [2]	publicFacilities [1]	publicFacilitiesAndServices1 [1]	xx	{21 1 xx}
		publicFacilitiesAndServices1 [2]	xx	{21 2 xx}
ambientConditions [3]	ambientConditions [1]	ambientConditions1 [1]	xx	{31 1 xx}
		ambientConditions1 [2]	xx	{31 2 xx}
	roadConditions [1]	roadConditions [1]	xx	{32 1 xx}
supplementaryPanel [4]	supplementaryPanel [1]	supplementaryPanel [1]	xx	{41 1 xx}

An additional (or supplementary) panel is a device placed below (sometimes above) a road sign to make the meaning of the sign or symbol more explicit or to limit the application of the sign to certain periods. It can also be used to show the distance from the sign to the beginning of the dangerous section of road or of the zone to which the regulation applies, or to show the length of the dangerous section of road or of the zone to which the regulation applies.

If regulatory signs are to be restricted to certain road users or if certain road users are to be exempt from the regulation, this is done through the same device.

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8 Numbering of pictogram codes

8.1 General

The GDD specifies the pictogram code and the rule for generating a mnemonic associated with each pictogram code.

In the following tables starting from 2 pictograms codes may also be given a country code in version 1 according to the specifications of this document.

The status of pictograms code is labelled “C” (=current) or "D” (=deprecated) in the following tables.

8.2 Mnemonic of the pictogram code

A mnemonic of the pictogram code can be generated by transforming each pictogram code name specified in the following subclauses in accordance with the following rules.

— In lower CamelCase notation

— The ASN.1 rules which shall be in accordance with ISO/IEC 8824-1 (e.g. no spaces, no parenthesis)

— No articles (the, a, an)

Table 2 — Examples of mnemonic

Pictogram code		Pictogram code name	Mnemonic
Service category code	Pictogram category code		
11	111	Intersection where the priority is prescribed by the general priority rule (Crossroads)	intersectionWherePriorityIsPrescribedByGeneralPriorityRuleCrossroads
	114	Forked (off to upper right) intersection where the priority is prescribed by the general priority rule	forkedOffToUpperRightIntersectionWherePriorityIsPrescribedByGeneralPriorityRule
	116	Intersection where the priority is prescribed by the general priority rule (T junction)	intersectionWherePriorityIsPrescribedByGeneralPriorityRuleTJunction)

8.3 Pictogram code (without country code) no. 11111 to no. 11999: Traffic sign pictograms (danger warning)

Pictograms falling under this category shall be used to give the road users advance warning for an adverse road condition, any hazards to safe driving, or any other conditions for which they should take notice.

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Table 3 — List of traffic sign pictograms (danger warning)

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	**Pictogram category code**			
11	**111**	Intersection where the priority is prescribed by the general priority rule (Crossroads)	Warning of the existence of a cross-shaped intersection ahead.	C
	112	Intersection where the priority is prescribed by the general priority rule (Side road right)	Warning of the existence of a side road ahead.	C
	113	Intersection where the priority is prescribed by the general priority rule (Side road left)	Warning of a side road ahead (reverse type of code no. 112).	C
	114	Forked (off to upper right) intersection where the priority is prescribed by the general priority rule	Warning of the existence of a side road. Fork (off to upper right) type of code no. 112.	C
	115	Forked (off to upper left) intersection where the priority is prescribed by the general priority rule	Warning of the existence of a side road. Fork (off to upper left) type of code no. 113.	C
	116	Intersection where the priority is prescribed by the general priority rule (T junction)	Warning of a T-shaped level junction at the end of the road	C
	117	Intersection where the priority is prescribed by the general priority rule (Y intersection)	Warning of a Y-shaped level intersection ahead.	C
	118	Intersection where the priority is prescribed by the general priority rule (Staggered intersection from left)	Warning of a staggered level intersection from left ahead.	C

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Table 3 *(continued)*

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	Pictogram category code			
	119	Junction on bend ahead	Warning of a junction unseen on bend ahead.	C
	120	Intersection where the priority is prescribed by the general priority rule (Staggered intersection from right)	Warning of a staggered level intersection from right ahead.	C
	121~131	Reserved for future use		
	132	Intersection with a road, the users of which must give way	Warning of a priority road at intersection.	C
	133	Intersection with a road, the users of which must give way (T-shaped crossing left)	Warning of a priority road at T-shaped intersection where traffic joining from the left must give way.	C
	134	Intersection with a road the users of which must give way T-shaped crossing right	Warning of a priority road at T-shaped intersection where traffic joining from the right must give way.	C
	135	Intersection with a road, the users of which must give way (T-shaped crossing of fork type lower left)	Warning of a priority road at T-shaped forked intersection where the joining traffic from the left must give way.	C
	136	Intersection with a road, the users of which must give way (T-shaped crossing of fork type lower right)	Warning of a priority road at reversed T-shaped forked intersection where the joining traffic from the right must give way.	C
	137~147	Reserved for future use		
	148	Warning of roundabout (Clockwise)	Warning of a clockwise roundabout ahead.	D
	149	Warning of roundabout	Warning of a roundabout ahead.	C
	150~160	Reserved for future use		

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Table 3 *(continued)*

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	Pictogram category code			
	161	Bend to right	Warning of a dangerous single curve to the right ahead.	C
	162	Bend to left	Warning of a dangerous single curve to the left ahead.	C
	163~173	Reserved for future use		
	174	Right turn	Warning of a single sharp curve (turn) to the right. A turn is differentiated from a curve by combining all elements of speed, radius of curve, road rate of incline, intersection angle and visible distance.	C
	175	Left turn	Notice of a single sharp curve (turn) to the left. A turn is differentiated from a curve by combining all elements of speed, radius of curve, road rate of incline, intersection angle and visible distance.	C
	176~186	Reserved for future use		
	187	Reverse curve (right and left)	Warning of a combination of two curves (right and left) ahead (S-bend).	C
	188	Reverse curve (left and right)	Warning of a combination of two curves (left and right) ahead (S-bend).	C
	189~210	Reserved for future use		
	211	Double bend, first to right	Warning of dangerous double or multiple bends which start with a right curve.	C
	212	Double bend, first to left	Warning of dangerous double or multiple bends which start with a left curve.	C
	213~223	Reserved for future use		
	224	Winding road (first to the right)	Warning of a winding section, which starts with a right curve.	D
	225	Winding road (first to the left)	Warning of a winding section, which starts with a left curve.	D
	226~235	Reserved for future use		
	236	Level crossing with gate or barrier	Warning of the existence of a level railway crossing with gates or barrier ahead.	C
	237	Level crossing without gate or barrier	Warning of a level railroad crossing point without gate or barrier ahead.	C
	238	Intersection with a tramway line	Warning of an intersection with a tramway line ahead.	C
	239	School crossing ahead	Warning of an area where children can exit from a school or playground, frequently pass by and cross the road from the right side.	D
	240	Reserved for future use		
	241	Pedestrian crossing	Warning of an area where pedestrians frequently pass by and cross the road.	C

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Table 3 *(continued)*

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	Pictogram category code			
	242	Vulnerable pedestrians likely to cross road ahead	Warning of an area where vulnerable pedestrians are likely to pass by and cross the road ahead.	C
	243	Reserved for future use		
	244	Children	Warning of children.	C
	245	Pedestrians crossing	Warning of a crosswalk where pedestrians frequently pass by and cross the road.	D
	246	Pedestrian crossing ahead	Warning of a crosswalk where pedestrians frequently pass by and cross the road.	D
	247	Pedestrian crossing ahead	Warning of a crosswalk where pedestrians frequently pass by and cross the road.	C
	248	People on the road	Warning that people are on the road.	C
	249~252	Reserved for future use		
	253	Light signals	Warning of a section of road on which traffic is regulated by three-colour light signals, because road users would not expect such a section.	C
	254	Slippery road	Warning that the section of road ahead may be particularly slippery.	C
	255	Falling rocks	Warning of the possibility of falling rocks or the presence of fallen rocks on road surface.	C
	256	Loose gravel	Warning of a section of road on which gravel can be thrown up.	C
	257	Dangerous shoulders	Warning of a dangerous road shoulder.	C
	258	Falling rocks	Warning of the possibility of falling rocks or the presence of fallen rocks on road surface.	D
	259	Rainfall	Warning of rainfall.	C
	260	Reserved for future use		
	261	Slippery section of road ahead because of ice or snow	Warning of slippery section of road ahead because of ice or snow.	C
	262	Fog	Warning of fog.	C
	263	Reduced visibility – fog, rain or snow	Warning of reduced visibility – fog, rain or snow.	C
	264	Flood	Warning of flood.	C
	265~267	Reserved for future use		
	268	Uneven road	Warning of a bumpy section ahead that can hinder travelling at normal speeds.	C
	269	Uneven road (hump bridge)	Warning of a road humps or series of road humps on road surface ahead that can hinder travelling at normal speeds.	C

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Table 3 *(continued)*

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	Pictogram category code			
	270	Reserved for future use		
	271	Uneven road (dip)	Warning of a section with a large single dip on road surface ahead that can hinder travelling at normal speeds.	C
	272~282	Reserved for future use		
	283	Traffic merging from the right	Warning of a merge of an inflow lane from the right into through traffic.	C
	284	Reserved for future use		
	285	Traffic merging from left	Warning of a merge of an inflow lane from the left into through traffic.	C
	286~295	Reserved for future use		
	296	Carriageway narrows from the right	Warning that the number of lanes is reduced from the right.	C
	297	Carriageway narrows from the left	Warning that the number of lanes is reduced from the left.	C
	298	Narrow lanes ahead	Warning of narrow lanes ahead.	C
	299~318	Reserved for future use		
	319	Carriageway narrows	Warning that the width of the carriageway is reduced.	C
	320~331	Reserved for future use		
	332	Two-way traffic	Warning of a section of road temporarily or permanently carrying two-way traffic on the same carriageway when, on the previous section, traffic was carried on a one-way road or on a road comprising several one-way traffic carriageways.	C
	333~345	Reserved for future use		
	346	Steep ascent	Warning that there is a steep hill upwards with the indicated rate of incline (%).	C
	347	Dangerous descent	Warning that there is a steep dangerous hill downwards with the indicated rate of incline (%).	C
	348	Road works	Warning that there is a section where work is in progress.	C
	349~360	Reserved for future use		
	361	Cross-wind	Warning of the possibility of sudden side wind that may hinder travelling at normal speeds.	C
	362	Airfield	Warning of the existence of low flying aircraft or sudden aircraft noise.	C

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Table 3 *(continued)*

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	Pictogram category code			
	363	Wild animal crossing	Warning of the possibility of wild animals crossing the road.	C
	364	Domestic animal crossing	Warning of the possibility of domestic animal crossing the road.	C
	365	Cross-wind	Warning of the possibility of cross-wind.	D
	366	Airfield	Warning of a section of road likely to be flown over at low altitude by aircraft taking off from or landing on an airfield.	D
	367	Wild animal crossing	Warning of the possibility of wild animals, crossing from the left side.	D
	368	Domestic animal crossing	Warning of the possibility of domestic animal crossing.	D
	369-377	Reserved for future use		
	378	Swing bridge	Warning of an opening of swing bridge ahead.	C
	379	Road leads to quayside or river bank	Warning of a quayside or river bank ahead.	C
	380	Reserved for future use		C
	381	Cyclist entering or crossing	Warning of a cycle route.	C
	382	Cyclist entering or crossing	Warning of a cycle route.	D
	383~394	Reserved for future use		
	395	A crossing where drivers must give way to traffic on the road ahead	Warning of a crossing where drivers must give way to traffic on the road ahead	D
	396	Give way at specified distance ahead	Warning of a crossing where drivers must give way the right-of-way to the road at a specified distance ahead. A distance to the crossing from the sign is suffixed to this information.	D
	397	Warning for an automatically rising bollard	Warning of an automatically deployed bollard that can rise from the road surface.	C
	398	Warning for wrong-way driving	Warning that a wrong-way-driving vehicle is present on the road and can be encountered.	C
	399	Stop ahead	Warning of a crossing where drivers must stop ahead.	C
	400~410	Reserved for future use		
	411	Level-crossings position	Warning of an immediate vicinity of level-crossings.	D
	412	Level-crossings (horizontally long)	Warning of a horizontally long level-crossing ahead.	C

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Table 3 *(continued)*

Pictogram code (without country code)		Pictogram code name	Definition	Status
Service category code	Pictogram category code			
	413	Level-crossings Two or more tracks	Warning of a vertically long level-crossing for two or more tracks ahead.	D
	414	Level-crossings Two or more tracks (horizontally long)	Warning of a horizontally long level-crossing for two or more tracks ahead.	C
	415	Additional signs at an approach to a level-crossing or swing bridge	Warning of an additional sign at an approach to a level-crossing or swing bridge.	D
	416~420	Reserved for future use		
	421	Traffic congestion	Warning of traffic congestion.	C
	422	Accident	Warning of accident.	C
	423	Vehicle on fire	Warning of vehicle on fire.	C
	424	Shed loads(s)	Warning of shed loads(s).	C
	425	Slow moving maintenance vehicle	Warning of slow-moving maintenance vehicle.	C
	426	Breakdown vehicle	Warning of broken-down vehicle.	C
	427	Tunnel closed	Warning that tunnel is closed.	C
	428	Danger of fire	Warning of danger of fire.	C
	429	Bridge closed	Warning of bridge closed	C
	430~997	Reserved for future use		
	998	Caution	Indicates auxiliary sign to alert.	C
	999	Other dangers	Warning of some possible danger. This sign is used in cases where no other warning signs are applicable.	C

8.4 Pictogram code (without country code) no. 12111 to no. 12999: Traffic sign pictograms (regulatory)

Pictograms falling under this category shall be used to inform the road users of special obligations, restrictions or prohibitions. They are subdivided into the following:

a) priority signs (Pictogram category no. 111 to no. 399);

b) prohibition or restriction signs (Pictogram category no. 411 to no. 699);

c) mandatory signs (Pictogram category no. 711 to no. 999).

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Table 4 — List of traffic sign pictograms (regulatory)

Pictogram code (without country code)		Description		Status
Service category code	**Pictogram category code**	**Pictogram code name**	**Definition**	
12	**111**	Priority for oncoming traffic	Notice that drivers must give way to oncoming traffic on a narrow section ahead.	C
	112	STOP	Notice of a point on the road where progressing without stopping is prohibited.	C
	113	Stop specified distance ahead	Notice of a point of the road where progressing without stopping is prohibited at specified distance ahead. A distance to the crossing from the sign is suffixed to this information.	D
	114	Assigned lane for light vehicles or motorcycles	Notice that a certain lane has been assigned for the use of light vehicles and motorcycles.	C
	115	Assigned lane for truck	Notice that specific goods vehicles (trucks) must use this lane.	C
	116	Assigned lane on motorway for trailers	Notice that specific goods vehicles (trailers) must use this lane on the motorway.	C
	117	Give way	Notice of an intersection where drivers must give way to traffic on the road ahead.	C
	118	A crossing where drivers must give way to traffic on the road ahead	Notice of an intersection where drivers must give way to traffic on the road ahead.	D
	119	Priority over oncoming traffic	Notice that oncoming traffic must give way on a narrow section ahead.	C
	120~126	Reserved for future use		
	127	Assigned lane for trailers	Notice that vehicles with trailers must use this lane.	C
	128	Assigned lane for buses and cycles	Notice of assigned lane for buses and cycles.	C
	129	Exclusive lane for buses	Notice that a certain lane has been assigned for the exclusive use of buses.	C
	130	Reserved for future use		
	131	Priority lane for route buses and pedal cycles only	Notice that a certain lane has been assigned for the priority use of fixed-route buses and pedal cycles.	C
	132	Priority lane for route bus	Notice that a certain lane has been assigned for the priority use of fixed-route buses.	C
	133	Vehicles weighing over the displayed weight are not permitted	Notice that vehicles weighing over the displayed weight are not permitted.	C
	134	High occupancy vehicle lane	Notice that only high occupancy vehicles are permitted in this lane.	C
	135~153	Reserved for future use		
	154	Dual carriageway ahead	Notice of dual carriageway ahead.	C

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Table 4 *(continued)*

Pictogram code (without country code)		Description		Status
Service category code	Pictogram category code	Pictogram code name	Definition	
	155	Turning restriction on a multi-lane approach to an intersection	Notice of layout ahead to facilitate lane selection.	C
	156	Stop line	Notice of the point to stop.	C
	157	Two-step right turn for mopeds	Notice that mopeds (under 50cc) must dismount for right turn.	C
	158	Do not make two-step right turn for mopeds	Notice that mopeds (under 50cc) are prohibited from making two-step right turn.	C
	159	Two-step left turn for mopeds	Notice that mopeds (under 50cc) must dismount for left turn.	C
	160	Do not make two-step left turn for mopeds	Notice that mopeds (under 50cc) are prohibited from making two-step left turn.	C
	161~175	Reserved for future use		
	176	Slow down	Notice that any vehicles must reduce their speed in this zone.	C
	177	Yield right of way	Notice that any vehicles must reduce their speed in this zone. A distance to the crossing from the sign is suffixed to this information.	D
	178	Priority road	Notice that drivers on this road have priority to go through a crossroads which they are approaching.	C
	179	End of priority	Notice of the end of priority road.	C
	180	Distance to end of priority	Notice of the end of priority with distance to it.	C
	181	Priority for oncoming traffic	Notice of priority for oncoming traffic.	D
	182~410	Reserved for future use		
	411	No entry for all vehicles, mopeds, cycles, pedestrians	Notice that all vehicles/mopeds, cycles/pedestrians are prohibited from entering the road.	C
	412	No entry	Notice that all vehicles are prohibited from entering the road.	C
	413	No entry into the designated direction of the road	Notice that motor vehicles are prohibited from entering in the designated direction of the road.	C
	414	No vehicles crossing (except for vehicles turning left to enter or exit a facility off the road)	Notice that vehicles crossing except for vehicles turning left are prohibited from entering or exit a facility off the road.	C
	415	Closed to all vehicles in both directions	Notice that all vehicles are prohibited from passing through the designated section of the road.	C
	416	No motor vehicles except solo motorcycles	Notice that motor vehicles except two wheeled motorcycles without a side-car are prohibited from passing through the designated section of the road.	C

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