

## SLOVENSKI STANDARD SIST EN ISO 14819-2:2014

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Nadomešča: SIST EN ISO 14819-2:2003

Inteligentni transportni sistemi - Sporočila prometnih in potovalnih informacij prek kodiranih prometnih sporočil - 2. del: Kode za dogodke in informacije za radijski podatkovni sistem (RDS) - Prometni informacijski kanal (RDS-TMC), ki uporablja sistem ALERT-C (ISO 14819-2:2013)

Intelligent transport systems - Traffic and travel information messages via traffic message coding - Part 2: Event and information codes for Radio Data System - Traffic Message Channel (RDS-TMC) using ALERT-C (ISO 14819-2:2013)

### (standards.iteh.ai)

Verkehrs- und Reiseinformationen (TTI) - TTI-Meldungen über Verkehrsmeldungscodierung - Teil 2: Ereignis- und Informationscodes für den digitalen Radio-Verkehrsnachrichtenkanal (RDS-TMC) (ISO 14819-2:2013)

Systèmes intelligents de transport - Informations sur le trafic et le tourisme via le codage de messages sur le trafic - Partie 2: Codes d'événements et d'informations pour le système de radiodiffusion de données (RDS) - Canal de messages d'informations sur le trafic (RDS-TMC) avec ALERT-C (ISO 14819-2:2013)

Ta slovenski standard je istoveten z: EN ISO 14819-2:2013

### <u>ICS:</u>

03.220.20	Cestni transport
35.240.60	Uporabniške rešitve IT v
	transportu in trgovini

Road transport IT applications in transport and trade

SIST EN ISO 14819-2:2014

en,fr,de

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#### SIST EN ISO 14819-2:2014

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN ISO 14819-2

December 2013

ICS 03.220.20; 35.240.60

Supersedes EN ISO 14819-2:2003

**English Version** 

### Intelligent transport systems - Traffic and travel information messages via traffic message coding - Part 2: Event and information codes for Radio Data System - Traffic Message Channel (RDS-TMC) using ALERT-C (ISO 14819-2:2013)

Systèmes intelligents de transport - Informations sur le trafic et le tourisme via le codage de messages sur le trafic -Partie 2: Codes d'événements et d'informations pour le système de radiodiffusion de données (RDS) - Canal de messages d'informations sur le trafic (RDS-TMC) avec ALERT-C(ISO 14819-2:2013) Intelligente Transportsysteme - Verkehrs- und Reiseinformationen über Verkehrsmeldungskodierung - Teil 2: Ereignis- und Informationscodes für den digitalen Radiokanal für Verkehrsmeldungen (RDS-TMC) unter Nutzung von ALERT-C (ISO 14819-2:2013)

This European Standard was approved by CEN on 26 October 2013.

CEN 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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the same status as the official versions of the centre has the centre has the same status as the official versions of the centre has the centre

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

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Ref. No. EN ISO 14819-2:2013 E

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### Foreword

This document (EN ISO 14819-2:2013) has been prepared by Technical Committee ISO/TC 204 "Intelligent transport systems" in collaboration with Technical Committee CEN/TC 278 "Road transport and traffic telematics" 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 June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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 EN ISO 14819-2:2003.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**Endorsement notice** 

The text of ISO 14819-2:2013 has been approved by CEN as EN ISO 14819-2:2013 without any modification. (standards.iteh.ai)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

## INTERNATIONAL STANDARD

Second edition 2013-12-01

Intelligent transport systems — Traffic and travel information messages via traffic message coding —

Part 2:

Event and information codes for Radio Data System — Traffic Message Channel iTeh ST(RDS-TMC) using ALERT-C

### (standards.iteh.ai)

Systèmes intelligents de transport — Informations sur le trafic et le tourisme via le codage de messages sur le trafic —

https://standards.iteh.**Rartie**2/s**Codes**:d'événements et d'informations pour le système de 7477**radiodiffusion de données**(**RDS**) — Canal de messages d'informations sur le trafic (RDS-TMC) avec ALERT-C



Reference number ISO 14819-2:2013(E)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 14819-2:2014</u> https://standards.iteh.ai/catalog/standards/sist/08a383ac-f66f-4b81-820a-74771fca54e2/sist-en-iso-14819-2-2014



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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. www.iso.org/directives

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. www.iso.org/patents

Any trade name used in this document is information given for the convenience of users and does not iTeh STANDARD PREVIEW

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: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 204, *Intelligent transport systems*. 74771fca54e2/sist-en-iso-14819-2-2014

This second edition cancels and replaces the first edition (ISO 14819-2-2003), which has been technically revised.

ISO 14819 consists of the following parts, under the general title *Intelligent transport systems* — *Traffic and travel information messages via traffic message coding:* 

- Part 1: Coding protocol for Radio Data System Traffic Message Channel (RDS-TMC) using ALERT-C
- Part 2: Event and information codes for Radio Data System Traffic Message Channel (RDS-TMC) using ALERT-C
- Part 3: Location referencing for Radio Data System Traffic message Channel (RDS-TMC) using ALERT-C
- Part 6: Encryption and conditional access for the Radio Data System Traffic Message Channel ALERT C coding

Compared to previous releases, this version includes the following additions:

- Precise location referencing
- Tendencies of Traffic Queue Lengths (TTQL)
- Coding of parking POIs
- Coding of interrupted roads

- Coding of other isolated POIs (except parking POIs)
- Coding of parallel roads
- Version identification of TMC location tables
- Location Table Exchange Format
- North American Safety Events in TMC
- Explicit Location Table Country Code transmission in TMC
- Guidelines for Service Providers and Terminal Manufacturers for Implementation of explicit Location Table Country Code transmission
- Coding of link roads
- GB-English List of Quantifiers
- Additional Event Codes identified by Germany
- Additional TMC Events from Danish proposal
- Additional TMC Supplementary Information: Unconfirmed Report
- RDS-TMC delivery of IVR Telephone Number (standards.iteh.ai)
- Coding of link roads

### Introduction

ISO 14819-2 is the second part of the ISO 14819 series of standards, covering the so-called 'ALERT-C' protocol encoded for transmission into the RDS-TMC feature. Therefore, this part of ISO 14819 is intended to uniquely and solely be considered together with ISO 14819-1, for a complete understanding.

ISO 14819-1 fully describes the ALERT-C protocol concept and relationship with the RDS standard, IEC 62106.

In this version of ISO 14819-2, the content and the structure of the 'Events List' have not been altered, but recent work from the FORCE/ECORTIS Projects regarding translations and a number of improved formatting ideas suggested by the EPISODE Project, have been introduced. Additionally, mention is made of suggested 'Event List' sub-sets.

In particular, this part of ISO 14819 contains the special meta-language, in the so-called 'CEN-English', which the technical experts of CEN TC 278 agreed would be the only and sole source for all coded descriptions used in RDS-TMC. This methodology has allowed agreement in important details for the many hundreds of event phrases, so included, even though subtle linguistic differences were perceived and need to be allowed for in terms of end-user presentation. Thus, the French and German language editions of this series have the same form as this English language edition. All three language editions have exactly the same sections 3.1.3 Event List, 3.2.2 Supplementary Information List and 3.3.2 Forecast Event List written in 'CEN-English'. Each language edition comprises informative annexes providing those lists again in three or four column format showing the 'CEN-English' description and the 'transformed' language (not necessarily a direct literal translation, but a comprehensible transformation of the specific intent of the 'CEN-English') description in their respective languages.

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Translations into other languages, based upon the normatives CEN English thave been produced and are available from the Traveller Information Services Association (www.ltisa.org).

# Intelligent transport systems — Traffic and travel information messages via traffic message coding —

### Part 2: Event and information codes for Radio Data System — Traffic Message Channel (RDS-TMC) using ALERT-C

#### 1 Scope

ISO 14819-1 describes the ALERT-C protocol concept and message structure used to achieve densely coded messages to be carried in the RDS-TMC feature. This part of ISO 14819 defines the 'Events List' to be used in coding those messages.

### 2 Normative references STANDARD PREVIEW

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.

ISO 14819-1, Intelligent transport systems of Traffic and travel information messages via traffic message coding — Part 1: Coding protocol for Radio Data System 2 Traffic Message Channel (RDS-TMC) using ALERT-C

IEC 62106:2009, Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 to 108,0 MHz

#### 3 Event and Information codes for Traffic Message Channel

#### 3.1 Event list

#### 3.1.1 Explanatory notes

1) The event list is divided into update classes, indicated by the various sections. These update classes are used for terminal message management, as indicated in Section 6.1 of ISO 14819-1. The event list is shown in the format of a database.

NOTE The first column of the Event list in 3.1.3, Table 2 shows line numbers to assist reading and use of the database.

2) The second column gives a 'technical language' (so-called CEN-English) description of the event code, of which the code is shown in the third field. Appropriate authorities of each country have been responsible for the exact descriptions in other languages.

This will ensure precise definitions and use of the event codes in the transmission layer. Individual terminal implementations may handle these (translated) descriptions with some flexibility. To allow a more effective presentation however without altering the meaning.

- 3) The third column gives the decimal equivalent of the actual binary event code to be transmitted (see Section 5.3.2 of ISO 14819-1). These codes are purely internal to the RDS-TMC system and should not be used for referencing events or composing messages in other operator systems. Undefined codes are reserved for future system additions.
- 4) The fourth column, headed "N", is the nature of the event. The general meaning of the codes is as follows:
  - (blank) information
  - F forecast S - silent: no
    - silent: no message shall be presented to the end-user
- 5) The fifth column, "Q", is the optional quantifier field, containing the reference numbers of quantifiers listed in the table at the end of the event list. The position of the optional quantifier in the event, plus in some cases some accompanying words, is shown by (...Q...) within the text. Use of these optional quantifiers is described in Section 5.5.6 of ISO 14819-1.
- 6) The sixth column "T" is the duration type. "D" indicates "dynamic" events of short duration and "L" indicates longer-lasting events (see Section 5.4.10 of ISO 14819-1). If this code is bracketed (), <u>or</u> if the time-of-day quantifier (no.7) is actually used in the message, no duration shall be presented to the user. In these cases, the duration indicates persistence, used for message management only.
- 7) The seventh column "D" is the default directionality of the event. "1" indicates that one direction, and "2" that both directions of traffic are normally affected by the event. TMC terminals can use this field to help determine which events to present to the driver and how.
- 8) The eighth column "U" is the default terminal urgency, with values "X" for extremely urgent, "U" for urgent, and blank for normal events (see Section 5.4.5 of ISO 14819-1).
- 9) The ninth column, "C", gives a numerical representation of the update class the event belongs to. Only update classes 1 - 31 can be found in 3.1. Some update classes (classes 32-39 in the present list), which are exclusively for events with nature F and duration type L or (L), can be found in Section 3.2. They contain no events of another type (except S).
- 10) The final column, "R", gives phrase codes (references) for use by TMC operators. An event may be a single phrase event, or a combination of two or more phrases. Each phrase is allocated a phrase code consisting at least of a single code letter (A Z) and a code number (1 999). Single phrase events are indicated by a single code letter and number of one or two digits (e.g. A1 A99); expected events are indicated by the normal phrase code followed by "E" (e.g. A1E), and dangerous events by a following "D" (e.g. G6D); events with quantifiers can have three digits (e.g. A101). Longer lasting forecasts are indicated by the letter F.
- 11) Not all the messages have to be used by a Service Provider but it is the Service Provider's prerogative to choose the most suitable ones for the service being provided. However a Service provider would be well advised to take account and match the sub-set of messages with the messages able to be presented in the terminal.

The Event List also contains several predefined combinations of single phrase events to make better use of the available channel capacity. These combined events are indicated by the combined codes of the constituent phrases (e.g. B11.C1).

NOTE The phrases used in combined events are not always word for word identical to the corresponding phrases used in the single events. Binding words or small changes to the wording are necessary.

The code letters are not related to the update classes, but have the following meaning:

- A: Level of Service
- **B:** Incidents/Accidents
- C: Closures
- D: Lane Restrictions
- E: Roadworks
- F: Obstruction Hazards
- G: Road Conditions
- H: Weather
- J: Winds
- L: Environment
- M: Temperature
- P: Activities
- Q: Delays/Cancellations
- R: Dangerous Vehicles
- S: Exceptional Loads
- T: Traffic Equipment Status
- U: Traffic Regulations
- X: Parking
- Y: Information

The code letter Z is used to indicate phrases from the List of Supplementary Information (see Section 3.2).

The phrase codes are not normative, but are only given as additional information about the contents of a given event and should be helpful when implementing software. **PREVIEW** 

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