INTERNATIONAL STANDARD

ISO 14819-2

Third edition 2021-02

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

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

Partie 2: Codes d'évènements et d'informations pour le système de radiodiffusion de données - canal de messages d'informations sur le trafic (RDS-TMC) avec Alert-C





© ISO 2021

nentation, no part c'ical, including p'i-vuested from All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org

Website: www.iso.org Published in Switzerland

| Contents | | | Page |
|----------|---|---|----------|
| Fore | word | | iv |
| Intro | ductio | on | v |
| 1 | Scor | oe | 1 |
| 2 | $\sim 0^{\circ}$ | native references | |
| 3 | | ns and definitions | |
| 4 | Event and Information codes for Traffic Message Channel | | |
| • | 4.1 | Event List | 1 |
| | | 4.1.1 Explanatory notes 4.1.2 List of quantifiers | |
| | | 4.1.3 Event list | 5 |
| | 4.2 | Supplementary information | 48 |
| | | 4.2.1 Explanatory notes 4.2.2 Supplementary information list | |
| | 4.3 | Forecast event list | |
| | | 4.3.1 Explanatory notes 4.3.2 Forecast event list | |
| A | A (: | | |
| | | formative) GB-English with non-metric units - List of quantifiers formative) GB-English with non-metric units - Event List | |
| | | formative) GB-English - Supplementary information list | |
| | | | |
| | | nformative) GB-English - Forecast event list | |
| | | | 5 |
| | | | |

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 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 (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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 third edition cancels and replaces the second edition (ISO 14819-2:2013) which has been technically revised. The main changes compared to the previous edition are as follows:

- in the Event List, the column "P" for 'phased-out codes' has been added;
- a small number of additional events have been added to the Event List;
- a small number of additional events have been added to the Supplementary List;
- wording has been improved for greater clarity;
- several minor typographical errors have been corrected.

A list of all parts in the ISO 14819 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.

Introduction

This document is the second part of the ISO 14819 series of standards, covering the 'ALERT-C' protocol which describes how traffic messages are coded for transmission as an 'Open Data Application' over the Radio Data System (RDS), a sub-carrier on FM radio transmissions. A complete understanding of RDS-TMC is only possible by reading this document (Part 2) together with the other parts of the ISO 14819 series of standards, which are:

- ISO 14819-1, which describes the ALERT-C protocol concept and relationship with the RDS standards, IEC 62106 (all parts);
- ISO 14819-3, which describes ways in which position and places are coded using ALERT-C; and
- ISO 14819-6, which describes how messages may be optionally encrypted for conditional access.

This document contains the special meta-language which technical experts agreed would be the sole source for all coded descriptions used in RDS-TMC. This methodology has allowed agreement over important details for the many hundreds of event phrases so included, even though subtle linguistic differences were perceived and allowed for in terms of end-user presentation. e.

A Drough School of the Sch

This document is a previous generated by tills

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 document specifies the 'Events List' to be used in coding those messages.

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 14819-1, 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

IEC 62106 (all parts), Specification of the Radio Data System (RDS) for VHF/FM sound broadcasting in the frequency range from 64,0 to 108,0 MHz

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

4 Event and Information codes for Traffic Message Channel

4.1 Event List

4.1.1 Explanatory notes

- a) 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 ISO 14819-1:2021, 6.1. The event list is shown in the format of a database.
 - NOTE The first column of the Event list in <u>4.1.3</u> (<u>Table 2</u>) shows line numbers to assist reading and use of the database.
- b) The second column gives a 'technical language' (so-called CEN-English) description of the event code, the code of which is shown in the third field. Appropriate authorities of each country have been responsible for the exact descriptions in other languages, in conformity with the definitions