NSAI
Standards

Irish Standard
I.S. EN ISO 14819-3:2021

Intelligent transport systems - Traffic and travel information messages via traffic message coding - Part 3: Location referencing for Radio Data System - Traffic Message Channel (RDS-TMC) using ALERT-C (ISO 14819-3:2021)

I.S. EN ISO 14819-3:2021

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Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN ISO 14819-3:2021 is the adopted Irish version of the European Document EN ISO 14819-3:2021, Intelligent transport systems - Traffic and travel information messages via traffic message coding - Part 3: Location referencing for Radio Data System - Traffic Message Channel (RDS-TMC) using ALERT-C (ISO 14819-3:2021)

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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I.S. EN ISO 14819-3:2021

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 14819-3

February 2021

ICS 03.220.20; 35.240.60

Supersedes EN ISO 14819-3:2013

English Version

Intelligent transport systems - Traffic and travel information messages via traffic message coding - Part 3: Location referencing for Radio Data System - Traffic Message Channel (RDS-TMC) using ALERT-C (ISO 14819-3:2021)

Systèmes de transport intelligents - Informations sur le trafic et les déplacements via le codage de messages sur le trafic - Partie 3 : Références de localisants pour le système de radiodiffusion de données - canal de messages d'informations sur le trafic (RDS-TMC) avec Alert-C (ISO 14819-3:2021)

Intelligente Verkehrssysteme - Verkehrs- und Reiseinformationen über Verkehrsmeldungskodierung - Teil 3: Ortsreferenzierung für Radiodatensysteme - Verkehrsmeldungskanal (RDS-TMC) unter Nutzung von ALERT-C (ISO 14819-3:2021)

This European Standard was approved by CEN on 30 July 2020.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 14819-3:2021) 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 August 2021, and conflicting national standards shall be withdrawn at the latest by August 2021.

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

This document supersedes EN ISO 14819-3:2013.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 14819-3:2021 has been approved by CEN as EN ISO 14819-3:2021 without any modification.

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INTERNATIONAL STANDARD

ISO
14819-3

Third edition
2021-02

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

Part 3:
Location referencing for Radio Data System-Traffic Message Channel (RDS-TMC) using ALERT-C

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

Partie 3: Références de localisants pour le système de radiodiffusion de données (RDS) — Canal de messages d'informations sur le trafic (RDS-TMC) avec ALERT-C

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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 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 14819-3:2013), which has been technically revised.

The main changes compared to the previous edition are as follows:

The following TISA specifications were integrated:

— Location Table Exchange Format 24.

— Reuse-of-location-codes.

— Roads-and-Junction-number-translation.

— Coding of isolated areas.

— Language identifiers.

— Backward compatibility.

— Coding of name translations and languages in TMC tables.

— DLR methods for locations in TMC Location.

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 primarily addresses the needs of RDS-TMC ALERT-C messages which are in widespread worldwide use. The modular approach used here is intended to facilitate future extension of the location referencing rules to other traffic and travel messaging systems.

This document sets out ways of specifying places and positions in traffic and travel information messages, including RDS-TMC messages (the Radio Data System-Traffic Message Channel).

It defines the structure and semantics of location tables for Traffic Information Centres (TICs) and receivers.

a) Traffic and travel messages:

   1) Traffic and travel information is created and updated in an originating database, by human operators or automated systems. Information is transferred to one or more remote systems by means of messages.

   2) In this context, a message is a collection of data which is exchanged to convey information for an agreed purpose between two or more parties. Traffic and travel messages are digitally-coded sets of data exchanged by interested parties, which convey information about traffic, travel and/or transport networks. Digital coding may be alphanumeric, as in EDIFACT, or binary, as in RDS-TMC.

   3) The traffic and travel messages developed in programmes of the European Union are open, non-proprietary proposals for standards intended to serve the public interest by facilitating interconnection and interoperability of the relevant information systems.

b) Location referencing.

Location references provide the means of saying *where* in traffic and travel messages.

The location referencing component of a traffic and travel message enables a service provider to indicate the physical location of the event being described. The management of TMC location databases requires on-going maintenance. It is necessary to both manage location database ID allocation for countries implementing TMC services and to validate new and updated location databases when ground features change. These activities are led by service providers who also need to ensure that their end-users are kept up-to-date. The Traveller Information Services Association (www.tisa.org) manages the ID allocation on a worldwide basis. TISA provides location database validation for service providers who generally arrange location database updates on a bi-annual cycle. This certification procedure extends the basic rules mentioned in this standard and also applies a best-practice validation. TISA grants a stamp of quality to those location tables that pass a set of tests.

INTERNATIONAL STANDARD ISO 14819-3:2021(E)

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

Part 3:
Location referencing for Radio Data System-Traffic Message Channel (RDS-TMC) using ALERT-C

1 Scope

This document specifies location referencing rules to address the specific requirements of Traffic Message Channel (TMC) systems, which use abbreviated coding formats to provide traffic and travel information (TTI) messages over mobile bearers (e.g. GMS, DAB) or via exchange protocols like DATEX II. In particular, the rules address the Radio Data System-Traffic Message Channel (RDS-TMC), a means of providing digitally-coded TTI to travellers using a silent data channel on FM radio stations, based on the ALERT-C protocol.

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 639-1, *Codes for the representation of names of languages — Part 1: Alpha-2 code*

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*

ISO 15924, *Information and documentation — Codes for the representation of names of scripts*

3 Terms, definitions and abbreviated terms

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/

For the purposes of this document, the following abbreviated terms apply:

ALERT-C	Advice and Problem Location for European Road Traffic, Version C
ASCII	American Standard Code for Information Interchange
CCD	country code
CID	country identifier
CLST	code of location subtype
CNAME	country name
ECC	extended country code
EDIFACT	Electronic data interchange for administration commerce and transport

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