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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

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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 14819-3:2013)**

Systèmes intelligents de transport - 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 (ISO 14819-3:2013)

Intelligente Transportsysteme - Verkehrs- und Reiseinformationen über Verkehrsmeldungskodierung - Teil 3: Ortsreferenzierung für den digitalen Radio für Verkehrsmeldungen (RDS-TMC) unter Nutzung von ALERT-C (ISO 14819-3:2013)

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

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

This document (EN ISO 14819-3:2013) 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of an identical text or by endorsement, at the latest by June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.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.

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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 14819-3:2013 has been approved by CEN as EN ISO 14819-3:2013 without any modification.

## Contents

	Page
<b>Foreword .....</b>	<b>v</b>
<b>Introduction.....</b>	<b>vii</b>
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Abbreviated terms .....</b>	<b>1</b>
<b>4 Location coding.....</b>	<b>2</b>
<b>4.1 General .....</b>	<b>2</b>
<b>4.2 Location tables .....</b>	<b>3</b>
<b>4.2.1 General .....</b>	<b>3</b>
<b>4.2.2 Versions and versioning of location tables .....</b>	<b>3</b>
<b>4.2.3 Exchanging location tables.....</b>	<b>4</b>
<b>4.2.4 Hierarchical structure .....</b>	<b>4</b>
<b>4.2.5 Offsets .....</b>	<b>5</b>
<b>4.2.6 Location types .....</b>	<b>6</b>
<b>4.2.7 Direction of the road .....</b>	<b>6</b>
<b>4.2.8 Country codes and location table numbers .....</b>	<b>6</b>
<b>4.2.9 Constraints.....</b>	<b>7</b>
<b>4.3 TMC Location categories, types and subtypes.....</b>	<b>7</b>
<b>4.4 Location table content .....</b>	<b>7</b>
<b>4.4.1 General .....</b>	<b>7</b>
<b>4.4.2 Nominal record content .....</b>	<b>7</b>
<b>4.4.3 Road descriptions .....</b>	<b>12</b>
<b>4.4.4 Names .....</b>	<b>12</b>
<b>4.4.5 Upward references .....</b>	<b>12</b>
<b>4.4.6 Offsets .....</b>	<b>13</b>
<b>4.4.7 Urban .....</b>	<b>13</b>
<b>4.4.8 Intersection reference .....</b>	<b>13</b>
<b>4.4.9 WGS 84 co-ordinates .....</b>	<b>13</b>
<b>4.4.10 InterruptsRoad.....</b>	<b>13</b>
<b>4.5 Detailed junction referencing.....</b>	<b>14</b>
<b>4.5.1 Conventional junctions .....</b>	<b>14</b>
<b>4.5.2 Complex junctions .....</b>	<b>14</b>
<b>4.5.3 Detailed coding of link roads .....</b>	<b>14</b>
<b>4.6 Detailed situation locations.....</b>	<b>15</b>
<b>4.6.1 Normal location referencing.....</b>	<b>15</b>
<b>4.6.2 Detailed location referencing .....</b>	<b>15</b>
<b>4.6.3 Precise location referencing .....</b>	<b>15</b>
<b>4.7 One and two way locations .....</b>	<b>15</b>
<b>4.7.1 Basic principles .....</b>	<b>15</b>
<b>4.7.2 Junctions.....</b>	<b>15</b>
<b>4.7.3 Locations having only an exit or entry and locations occurring on one side only .....</b>	<b>15</b>
<b>Annex A (normative) TMC Location categories, types and subtypes.....</b>	<b>18</b>
<b>A.1 General .....</b>	<b>18</b>
<b>A.2 Area locations .....</b>	<b>18</b>
<b>A.3 Linear locations .....</b>	<b>20</b>
<b>A.4 Point locations .....</b>	<b>22</b>
<b>Annex B (normative) Location table numbers .....</b>	<b>28</b>
<b>Annex C (normative) Detailed methods for the usage of location tables .....</b>	<b>31</b>

<b>C.1</b>	<b>Methods for referencing affected road sections .....</b>	<b>31</b>
C.1.1	General.....	31
C.1.2	Pre-defined primary location + extent .....	31
C.1.3	Pre-defined primary and secondary locations .....	32
C.1.4	Distance markers (primary location + extent).....	32
C.1.5	Distance markers (primary + secondary location).....	33
C.1.6	Primary and secondary locations using pre-defined location, extent and distances .....	33
C.1.7	Primary and secondary locations using pre-defined locations + distances .....	34
C.1.8	Describing the extent of an event in ALERT-C .....	34
C.1.9	Co-ordinates (primary + secondary locations).....	36
C.1.10	Proprietary referencing systems, e.g. GDF .....	36
C.1.11	Text location naming .....	36
C.1.12	Precise location referencing.....	36
<b>C.2</b>	<b>Methods for referencing specific features .....</b>	<b>40</b>
C.2.1	Parking facilities .....	40
C.2.2	Other isolated POIs .....	42
C.2.3	Parallel Roads .....	43
C.2.4	Interrupted Roads .....	45
<b>C.3</b>	<b>Methods for identifying and exchanging location tables .....</b>	<b>46</b>
C.3.1	Identifying versions of a location table .....	46
C.3.2	Exchanging location tables – the Location Table Exchange Format.....	46
<b>Annex D (informative) Background information .....</b>	<b>66</b>	
D.1	Overall approach.....	66
D.1.1	General.....	66
D.1.2	Pre-defined locations .....	66
D.1.3	GDF features .....	67
<b>Bibliography .....</b>	Error! Bookmark not defined.	

## Introduction

This part of ISO 14819 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 can 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.

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 ongoing 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](http://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.

# 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 part of ISO 14819 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 primarily addresses the needs of RDS-TMC ALERT-C messages which are already being implemented. However, the modular approach used here is intended to facilitate future extension of the location referencing rules to other traffic and travel messaging systems.

The location referencing rules defined in this part of ISO 14819 address the specific requirements of Traffic Message Channel (TMC) systems, which use abbreviated coding formats to provide TTI messages. In particular, the rules address the Radio Data System - Traffic Message Channel (RDS-TMC), a means of providing digitally-coded traffic and travel information to travellers using a silent data channel (RDS) on FM radio stations, based on the ALERT-C protocol.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 8859-15:1999, *Information technology — 8-bit single-byte coded graphic character sets — Part 15: Latin alphabet No. 9*

ISO/IEC 10646:2012, *Information technology — Universal Coded Character Set (UCS)*

ISO 14819-1:2013, *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 14825:2011, *Intelligent transport systems — Geographic Data Files (GDF) — GDF5.0*

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*

NIMA Technical Report TR8350.2, US Department of Defense

### 3 Abbreviated terms

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