Intelligent transport systems - ESafety - ECall minimum set of data (MSD)

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15722:2011 sisaldab Euroopa standardi EN 15722:2011 ingliskeelset teksti.	This Estonian standard EVS-EN 15722:2011 consists of the English text of the European standard EN 15722:2011.
Standard on kinnitatud Eesti Standardikeskuse 29.07.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 29.07.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.06.2011.	Date of Availability of the European standard text 15.06.2011.
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Supersedes CEN/TS 15722:2009

English Version

Intelligent transport systems - eSafety - eCall minimum set of data (MSD)

Télématique de la circulation et du transport routier - ESafety - Ensemble minimal de données (MSD) pour l'eCall

Straßenverkehrstelematik - eSicherheit - Minimaler Datensatz für den elektronischen Notruf

This European Standard was approved by CEN on 11 May 2011.

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.

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Foreword

This document (EN 15722:2011) has been prepared by 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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

This document supersedes CEN/TS 15722:2009.

The main changes compared to the previous edition are:

— change of ISO 6709 reference into WGS84;

— minor corrections to the ASN.1 scripts;

— change of deliverable from Technical Specification into European Standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The scale of death and injury on roads in Europe needs to be fully comprehended to understand the need for "Emergency Call" (eCall). In 2008 there were 38 900 fatalities in EU-27. The provisional figure for 2009 is around 34 500 fatalities. The trend 2001-2008 is around 5 % reduction annually. Road accident injuries are in the region of 1,7 million (2007). Roads remain unsafe, and further efforts are needed. The pan-European in-vehicle emergency call, 'eCall', is estimated to have the potential to save up to 2 500 fatalities annually in EU-27 when fully deployed, and furthermore to reduce the severity of injuries, to bring significant savings to the society in and to reduce human suffering.

Emergency calls made from vehicles or mobile telephones using wireless technologies, can assist with the objectives of significantly reducing road deaths and injuries, but drivers often have poor (imprecise) location-awareness, especially on interurban roads or abroad. Additionally, in many situations the car occupants may not be in a position to call using a normal mobile phone.

The situation is worse for those travelling abroad. A high (and increasing) number of vehicles travelling outside their home country is thus also contributing to the need for automated emergency call system in vehicles. In EU there are over 100 million trips to another EU country per year (EU-15), 65 % of the people feel less protected while abroad and most do not know which number to call in an emergency (in some countries over 60 %). Language problems are pertinent and may render proper communication difficult .Yet, in the most crucial cases, the victim(s) may not be able to call because they have been injured/trapped, do not know the local number to call, and in many cases, particularly in rural situations and late at night, there may be no witnesses who happen to have a mobile phone and a sense of community.

eCall, in the context of "Road Traffic and Transport Telematics" (otherwise known as "Intelligent Transport Systems" or "ITS"), can be described as a "user instigated or automatic system to provide notification to public safety answering points, by means of wireless communications, that a vehicle has crashed, and to provide coordinates and a defined minimum set of data, and where possible a voice link to the PSAP.

The objective of implementing the pan-European in-vehicle emergency call system (eCall) is to automate the notification of a traffic accident, wherever in the European Union and associated countries, with the same technical standards and the same Quality of Services objectives of other emergency (TS12) services.

This European Standard specifies the "Minimum Set of Data" (MSD) to be transferred by such an in-vehicle eCall system in the event of a crash or emergency.

NOTE The communications media and means of transferring the eCall MSD are not defined in this European Standard.

The European Committee for Standardization (CEN) draws attention to the fact that it is claimed that compliance with this European Standard may involve the use of a patent concerning eCall given in this European Standard.

CEN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured to CEN that he/she is willing to negotiate licenses under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with CEN. Information may be obtained from:

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

1 Scope

This European Standard specifies the standard data concepts that comprise the "Minimum Set of Data" (MSD) to be transferred from a vehicle to a 'Public Safety Answering Point' (PSAP) in the event of a crash or emergency via an 'eCall' communication session.

NOTE 1 The communications media protocols and methods for the transmission of the eCall message are not specified in this European Standard.

NOTE 2 Additional data concepts may also be transferred, it is recommended any such data concepts should be registered using a data registry as defined in EN ISO 24978.

2 Normative reference

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/IEC 8825-2, *Information technology — ASN.1 encoding rules: Specification of Packed Encoding Rules (PER)*

prEN 16062, *Intelligent transport systems — eSafety — eCall high level application requirements (HLAP)*

prEN 16072, *Intelligent transport systems — eSafety — Pan-European eCall operating requirements*

prEN 16102, *Intelligent transport systems — eCall — Operating requirements for third party support*

3 Conformance

In order to claim conformance with this European Standard, communication shall be established using accepted wireless communication standards, and it shall be able to demonstrate that the minimum set of data (MSD) transferred together with any standardised optional data elements defined herein comply with the specifications of this European Standard, to the extent that such data is available from the vehicle.

4 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

4.1
eCall
emergency call generated either automatically via activation of in-vehicle sensors or manually by the vehicle occupants; when activated it provides notification and relevant location information to the most appropriate 'Public Safety Answering Point', by means of mobile wireless communications networks, carries a defined standardised Minimum Set of Data notifying that there has been an incident that requires response from the emergency services, and establishes an audio channel between the occupants of the vehicle and the most appropriate 'Public Safety Answering Point'