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English Version

Intelligent transport systems - ESafety - eCall high level  
application requirements (HLAP) using GSM/UMTS circuit  
switched networks (2020)

Systèmes de transport intelligents - ESafety -  
Exigences de protocole d'application de haut niveau  
(HLAP) relatives à l'eCall via des réseaux commutés de  
circuits GSM/UMTS

Intelligente Transportsysteme - ESicherheit -  
Anforderungen an High-Level-Anwendungsprotokolle  
für eCall (HLAP) unter Verwendung von geschalteten  
GSM/UTMS-Netzwerken

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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## **European foreword**

This document (prEN 16062:2020) has been prepared by Technical Committee CEN/TC 278 “Intelligent transport systems”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16062:2015.

The following changes have been introduced in this revision:

- Improvements in the precision of technical description and update of references;

## Introduction

An *eCall* is an emergency call generated either automatically via activation of in-vehicle sensors or manually by the vehicle occupants; when activated, to provide notification and relevant location information to the most appropriate Public Safety Answering Points (PSAP), by means of mobile wireless communications networks and carries a defined standardized 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 PSAP.

EN 15722 specifies a standardized MSD for *eCall*, and EN 16072 specifies pan-European *eCall* operating requirements. (For third-party systems, EN 16102 specifies third-party services supporting *eCall* operating requirements. See EC Communication on *eCall* Implementation 2009 [COM(2009) 434 final] and Official Journal *eCall* Recommendation C\_2011\_6269, for more information).

The operating requirements for pan-European *eCall* are made using Public Land Mobile Networks (PLMN) (such as GSM and 3G), as specified in a number of ETSI standards and technical specifications.

In order to provide the *eCall* service across a wireless network, high level application protocols are required as an important essential element to effect this service provision. This European Standard specifies the protocols to put into effect the pan-European *eCall* operating requirements using PLMNs, and also identifies common elements that can be used in the link between third-party services supporting *eCall* and PSAPs.

**NOTE** The term PSAP, which is most widely used in the *eCall* documentation, European Commission documents etc., is used throughout this document and equates to the term emergency call response centre used in the ITS Implementation Directive.

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 patents concerning *eCall* given in this European Standard.

The patents held may refer to the implementation of *eCall* in general using the specifications in this European Standard, but do not specifically directly refer to specifications of any of the clauses defined herein.

CEN takes no position concerning the evidence, validity and scope of these patent rights.

The holder of these patent rights has ensured to CEN that they are 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 these patent rights 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

In respect of pan-European *eCall* (operating requirements defined in EN 16072), this document defines the high-level application protocols, procedures and processes required to provide the *eCall service* using a TS12 emergency call over a mobile communications network.

NOTE 1 The objective of implementing the pan-European in-vehicle emergency call system (*eCall*) is to automate the notification of a traffic accident, wherever in Europe, with the same technical standards and the same quality of services objectives by using a PLMN (such as ETSI prime medium) which supports the European harmonized 112/E112 emergency number (TS12 ETSI/TS 122 003) and to provide a means of manually triggering the notification of an emergency incident.

NOTE 2 HLA requirements for third-party services supporting *eCall* can be found in EN 16102, and have been developed in conjunction with the development of this work item, and is consistent in respect of the interface to the PSAP. This deliverable makes reference to those provisions but does not duplicate them.

## 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.

EN 15722:2020, *Intelligent transport systems — eSafety — eCall minimum set of data (MSD)*

EN 16072:2020, *Intelligent transport systems — eSafety — Pan-European eCall operating requirements*

EN 16102:2020, *Intelligent transport systems — eCall — Operating requirements for third party support*

CEN/TS 16454:2020, *Intelligent transport systems — ESafety — ECall end to end conformance testing*

ETSI/TS 122 101, *Universal Mobile Telecommunications System (UMTS); LTE; Service aspects; Service principles (3GPP TS 22.101 [Release 8 or later])*

ETSI/TS 124 008, *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Mobile radio interface Layer 3 specification; Core network protocols; Stage 3 [Release 8 or later]*

ETSI/TS 126 267, *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); eCall data transfer; In-band modem solution; General description [Release 8 or later]*

ETSI/TS 126 268, *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); eCall data transfer; In-band modem solution; ANSI-C reference code [Release 8 or later]*

ETSI/TS 126 269, *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); eCall data transfer; In-band modem solution; Conformance testing [Release 8 or later]*

ETSI/TS 122 003, *Digital cellular communications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Circuit Teleservices supported by a Public Land Mobile Network (PLMN) (Teleservice 12/TC12) /E12 [Release 8 or later]*

ETSI/TS 122 011, *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Service accessibility [Release 8 or later]*