

Irish Standard I.S. EN 16062:2015

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

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#### I.S. EN 16062:2015

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#### **English Version**

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

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 - Allgemeine eCall Anforderungen (HLAP) unter Verwendung von geschalteten GSM/UTMS Netzwerken

This European Standard was approved by CEN on 1 February 2015.

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Cont	<b>Contents</b> Page					
Forewo	ord	4				
Introdu	ıction	5				
1	Scope	7				
2	Normative references	7				
3	Terms and definitions	8				
•	Symbols and abbreviations					
4	•					
5	Conformance					
6	General overview of the eCall transaction for Pan European eCall	. 13				
7	Requirements	. 17				
7.1	Procedures following power-up of the in-vehicle system					
7.1.1 7.1.2	General Enabled IVS					
7.1.2	Enabled PSAP					
7.1.4	IVS configured only for eCall					
7.1.5	Self-test					
7.1.6	Standby mode applicable to IVS configured for eCall only					
7.2	Activation					
7.2.1	Activation of pan-European eCall					
7.2.2	Activation of a test eCall					
7.3	Call set-up					
7.3.1	General					
7.3.2 7.3.3	IVS network access device (NAD) already registered on PLMN					
7.3.3 7.3.4	eCall in progress  Network selection and registration					
7.3.4	Authentication of the subscriber					
7.3.6	eCall establishment					
7.3.7	Cell localisation (by network)					
7.3.8	Manual termination of eCall by vehicle occupants before trigger confirmation					
7.4	MSD transfer					
7.4.1	General	21				
7.4.2	Send initiation signal from IVS eCall modem to PSAP	. 22				
7.4.3	eCall modem synchronization					
7.4.4	Request MSD by PSAP eCall modem to IVS eCall modem					
7.4.5	Send MSD from vehicle IVS to PSAP eCall modem					
7.4.6	Link layer error check					
7.4.7	Link layer ACK from PSAP eCall modem to IVS eCall modem					
7.5	Application layer acknowledgement (AL- ACK)					
7.5.1 7.5.2	Following transmission of the MSD to the eCall PSAP application					
7.5.2 7.5.3	PSAP acknowledges the MSD					
7.5.3 7.5.4	No receipt of application layer ACKForm of presentation of the AL-ACK					
7.5. <del>4</del> 7.6	PSAP request "SEND MSD"					
7.6.1	General					
7.6.2	Before call clear-down					
7.6.3	After call clear-down					
7.7	PSAP application features					
7.7.1	General requirements					

7.7.2	MSD display to the PSAP operator	29
7.7.3	PSAP operator user interface	
7.8	Audio link to vehicle occupants	
7.9	eCall clear-down	
7.10	PSAP call back	
7.11	Rerouting to another PSAP/emergency control centre	
7.12	Handling non equipped situations / error cases	
7.12.1	MSD not transmitted correctly	
7.12.2	Network registration fails	
	Call failure before the MSD is sent and acknowledged	
	PSAP network/ICT failure	
	PSAP application failure	
	No response if line engaged	
	MSD not sent	
	MSD not received	
	Audio link not established	
	Audio link established but subsequently fails	
	Re-attempt in case of interrupted call	
	Automatic repeat attempts	
	IVS NAD does not receive call clear-down	
8	Third party services supported eCall (TPS-eCall)	
8.1	Overview	34
9	Defences against attack (Security provisions)	35
10	Quality of service requirements	35
11	Test and conformance requirements	35
12	Marking, labelling and packaging	35
13	Declaration of patents and intellectual property	35
Annex	A (normative) Table of timings	36
Annex	B (informative) Summary abstracts of normative referenced documents	38
B.1	Objective	38
B.2	Summary abstracts	38
Annex	C (informative) Test system strategies	50
C.1	General	50
C.2	Vehicle and PSAP equipment life cycle	50
C.3	Laboratory environment	51
C.4	OEM or third party test systems	51
Bibliog	raphy	52

#### **Foreword**

This document (EN 16062:2015) has been prepared by 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 October 2015, and conflicting national standards shall be withdrawn at the latest by October 2015.

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.

This document supersedes EN 16062:2011.

The following changes have been introduced in this revision:

- Improvements in the precision of technical description and update of references;
- 7.4.2 (initiation sequence) has been revised to enable faster connections;
- Timer values have been changed;
- Some Notes have been removed;
- Grammar/presentation has been improved;
- An optional network echo cancellation suppression tone has been added;
- SIM and SIM/USIM have been replaced by USIM throughout for consistency with ETSI eCall standards deliverables;
- IVS has been replaced by 'IVS responsible for the eCall system' for clarity, throughout;
- 7.3.8, 7.4.2, 7.5.4, 7.6.1 reworded for clarity and some rearrangement between 7.5.4 and 7.6.1;
- 7.9 Cleardown clarified:
- Table of timings revised;
- Annex C truncated as CEN/TS 16454 (eCall Conformance Tests) now exists.

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.

### 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 assured 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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## 1 Scope

In respect of pan-European *eCall* (operating requirements defined in EN 16072), this European Standard 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 HLAP 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, 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.

EN 15722:2011, Intelligent transport systems — eSafety — eCall minimum set of data (MSD)

EN 16072:2011, Intelligent transport systems — eSafety — Pan-European eCall operating requirements

EN 16102:2011, Intelligent transport systems — eCall — Operating requirements for third party support

CEN/TS 16454:2013, 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]



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