BS EN 16062:2023

BSI Standards Publication

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

National foreword

This British Standard is the UK implementation of EN 16062:2023. It supersedes BS EN 16062:2015, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

Published by BSI Standards Limited 2023

ISBN 978 0 539 13611 1

ICS 03.220.20; 13.200; 35.240.60

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 August 2023.

Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16062

August 2023

ICS 03.220.20; 13.200; 35.240.60

Supersedes EN 16062:2015

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

This European Standard was approved by CEN on 24 July 2022.

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, Türkiye 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

Contents

Page

European foreword

This document (EN 16062:2023) 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 February 2024, and conflicting national standards shall be withdrawn at the latest by February 2024.

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 16062:2015.

The following changes have been introduced in this revision:

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

— Improvements in (the readability of) certain figures, notably Figures 3 and 6;

— Contents in clause 7.7 was generic and was moved to EN 16072;

— Annex B had been voided, as it served no purpose.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Türkiye 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 document specifies the protocols to put into effect the pan-European *eCall* operating requirements using GSM/UMTS circuit switched 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 document may involve the use of patents concerning *eCall* given in this document.

The patents held may refer to the implementation of *eCall* in general using the specifications in this document, 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:

Mr. Thomas R. Rouse VP QTL Patent Counsel QUALCOMM Incorporated

5775 Morehouse Drive

San Diego, California 92121. USA

Phone: +1-858-587-1121

Fax: +1-858-658-2503

Email: trouse@qualcomm.com

URL: www.qualcomm.com

and:

Mr. Thomas W. Davis Jr. General Council AIRBIQUITY Incorporated

1011 Western Avenue, Suite 600

Seattle, Washington 98104. USA

Phone: +1.206.219.2700

Fax: +1.206.842.9259
Toll-Free:+1.888.334.7741
Email: tdavis@airbiquity.com
URL: www.airbiquity.com

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 circuit-switched 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 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*

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

EN 16102, *Intelligent transport systems - eCall - Operating requirements for third party support*

EN 16454, *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]*