Public-address-general-emergency-alarm-system, communication-system for marine applications

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50695:2021 sisaldab Euroopa standardi EN 50695:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 50695:2021 consists of the English text of the European standard EN 50695:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.05.2021.	Date of Availability of the European standard is 21.05.2021.
Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.320, 47.020.70

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50695

May 2021

ICS 13.320; 47.020.70

English Version

Public-address-general-emergency-alarm-system, communication-system for marine applications

Dispositifs de communication avec le public et systèmes d'alarme générale en cas de situation critique pour applications maritimes

Lautsprecher-Durchsage-System-General-Notfallalarm-System, Kommunikations-System für Marine-Anwendungen

This European Standard was approved by CENELEC on 2021-04-26. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50695:2021) has been prepared by CLC/BTTF 157-1 “Public address and general emergency alarm systems”.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2022–04–26
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2024–04–26

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

The EU-Commission has received requests from stakeholders for the development of standards for public address and general emergency alarm systems (entry A.2/1.5 in Annex A.2 of Directive 96/98/EC as amended by Commission Directive (EU) 2015/559) and therefore requests the European standardization organisations start the development of the respective standards.

The development of standards for public address and general emergency alarm systems is necessary because these systems are very important for safety on board and they are exposed to specific conditions (e.g. moisture, salt) which do not occur in other circumstances. The legislative provisions will detail the modalities for assessing that equipment.

The availability of testing standards will allow these products to be included in the scope of Directive 2014/90/EU, which in turn will allow them to be conformity assessed by a notified body and to affix the wheel mark.

Introduction

Public address and general emergency alarm systems have the primary purpose to inform persons on board of ships of emergency situations, and to enable the ship's officers relay voice messages to persons on board those ships in emergency situations.

EN 50695 has been written in pursuit of a request of the European Commission for a standard on equipment for public address and general emergency alarm systems (PA, GA and PAGA systems). The European Commission issued this request with the intention of taking this standard on board the Implementing Regulations belonging to the Marine Equipment Directive (MED), with the aim to enable and require MED certification for equipment for public address and general emergency alarm systems (PA, GA and PAGA systems). This will ensure that such equipment complies with all applicable requirements to that equipment set by the International Maritime Organization (IMO) in SOLAS 1974 and the LSA-code, before it is installed on board a ship.

Equipment compliant with this standard, certified according to the Marine Equipment Directive, can thus be used to engineer and install a public address and general emergency alarm system on board a ship flying the flag of an EU member state.

EN 50695 has been designed to make use of existing standards where possible, and specifies clarifications of requirements in other standards, additional requirements and methods of test and required test results where necessary to satisfy the IMO requirements.

Equipment based on EN 54 could be used as basis for PA and PAGA systems when additionally, compliant with this document.

1 Scope

This document describes operational and performance requirements, methods of testing and required test results for components of public address systems (PA), general emergency alarm systems (GA) and public address general emergency alarm systems (PAGA) for marine applications as in Table 1 in support of the requirements of IMO for such systems, while it is up to the manufacturer to define the components to be type approved together or separately, to build up a system.

NOTE 1 This document does not include system engineering for installation on board nor installation requirements.

This document refers as much as possible to relevant established standards. Where relevant standards do not exist or are not precise enough, this document will describe additionally own operational and performance requirements, methods of testing and required test results.

NOTE 2 All text of this document, whose wording is identical to that of IMO circular MSC.808 or to SOLAS convention requirements, is printed in italics, and the resolution and associated paragraph numbers are indicated in brackets.

Table 1 describes the applicable IMO requirements for each combination of ship category and type of system.

Table 1 — Product-ship type matrix

	GA	PA	PAGA
Cargo ship	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2.1 Res. A.1021(26) 5.10	LSA Code 7.2.2	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2 Res. A.1021(26) 5.8
Passenger ship (not SRtP)	SOLAS reg.II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2.1 Res. A.1021(26) 5.10	SOLAS reg. II-2/12 .1 and .3 SOLAS reg. III/6.5 LSA Code 7.2.2 MSC/Circ.808	SOLAS reg. II-2/12 .1, .2 and .3 SOLAS reg. III/6.4, 6.5 LSA Code 7.2 A.1021(26) 5.8 MSC/Circ.808.
Passenger ship (SRtP)	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2.1 Res. A.1021(26) 5.10	SOLAS reg. II-2/12 .1 and .3 SOLAS reg. III/6.5 LSA Code 7.2.2 MSC/Circ.808 SOLAS reg. II-2/21&22 MSC.1/Circ.1369/Add.1	SOLAS reg. II-2/12 .1, .2 and .3 SOLAS reg. III/6.4, 6.5 LSA Code 7.2 Res. A.1021(26) 5.8 MSC/Circ.808 SOLAS reg. II-2/21&22 MSC.1/Circ.1369/Add.1

Unless this document explicitly states otherwise, each section in this document applies to all ship types.

This document indicates for each section if that section is applicable to PA, GA and/or PAGA systems.

Where this document makes sections applicable to “passenger ships”, these sections apply to both “Passenger ship (not SRtP)” and “Passenger ship (SRtP)”.

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 IEC 60268-4:2018, *Sound system equipment - Part 4: Microphones*

EN 60945:2002, *Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results (IEC 60945:2002)*

EN 61162-1, *Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners (IEC 61162 1)*

EN 61162-2, *Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 2: Single talker and multiple listeners, high-speed transmission (IEC 61162 2)*

EN IEC 61162-450, *Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection (IEC 61162 450)*

EN 62288, *Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results (IEC 62288)*

EN IEC 62923-1, *Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 1: Operational and performance requirements, methods of testing and required test results*

EN IEC 62923-2, *Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 2: Alert and cluster identifiers and other additional features*

IEC 60268-1, *Sound system equipment - Part 1: General (IEC 60268-1)*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1.1
alarm
high-priority alert
(MSC 302/A) *Condition requiring immediate attention and action by the bridge team, to maintain the safe navigation and safe operation of the ship*

3.1.2
alert
(MSC 302/A) *announcement of abnormal situations and conditions requiring attention*

Note 1 to entry: Alerts are divided in four priorities: emergency alarms, alarms, warnings and cautions. An alert provides information about a defined state change in connection with information about how to announce this event in a defined way to the system and the operator.