

SLOVENSKI STANDARD SIST EN IEC 63087-1:2022

01-april-2022

Pomožni slušni aparati in sistemi za aktivno življenje s pomočjo - 1. del: Splošno (IEC 63087-1:2021)

Assistive listening devices and systems for active assisted living - Part 1: General (IEC 63087-1:2021)

Einrichtungen und Systeme für das assistierende Zuhören und für aktives betreutes Wohnen - Teil 1: Allgemeines (IEC 63087-1:2021)

Dispositifs et systèmes d'aide à l'audition pour l'assistance à l'autonomie à domicile -Partie 1: Généralités (IEC 63087-1:2021)

SIST EN IEC 63087-1:2022 Ta slovenski standard je istoveten z: ai/catEN IEC 63087-1:2021 40b-

d23d-4f7f-a831-5a79244f8597/sist-en-iec-63087-1-

2022

ICS:

33.160.30 Avdio sistemi

Audio systems

SIST EN IEC 63087-1:2022

en,fr,de

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 63087-1:2022 https://standards.iteh.ai/catalog/standards/sist/84efc40bd23d-4f7f-a831-5a79244f8597/sist-en-iec-63087-1-2022

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 63087-1

October 2021

ICS 13.180; 33.160.99

English Version

Assistive listening devices and systems for active assisted living - Part 1: General (IEC 63087-1:2021)

Dispositifs et systèmes d'aide à l'audition pour l'assistance à l'autonomie à domicile - Partie 1: Généralités (IEC 63087-1:2021) Einrichtungen und Systeme für das assistierende Zuhören und für aktives betreutes Wohnen - Teil 1: Allgemeines (IEC 63087-1:2021)

This European Standard was approved by CENELEC on 2021-09-30. 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom://standards.iteh.ai/catalog/standards/sist/84efc40b-

d23d-4f7f-a831-5a79244f8597/sist-en-iec-63087-1-

2022



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 100/3601/FDIS, future edition 1 of IEC 63087-1, prepared by TC 100/Technical Area 16 "Active Assisted Living (AAL), wearable electronic devices and technologies, accessibility and user interfaces" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63087-1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022–06–30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024–09–30 document have to be withdrawn

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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Te Endorsement notice RD

PREVIEW

The text of the International Standard IEC 63087-1:2021 was approved by CENELEC as a European Standard without any modification.tancards.iten.al

In the official version, for Bibliography, the following notes have to be added for the standards indicated: $\underline{SIST \ EN \ IEC \ 63087-1:2022}$

https://standards.iteh.ai/catalog/standards/sist/84efc40b-

IEC 60107-1:1997 NOTE Harmonized as EN 60107-1:1997 (not modified) 7-1-

IEC 60107-2 NOTE Harmonized as EN 60107-2

IEC 60118 (series) NOTE Harmonized as EN IEC 60118 (series)

IEC 60118-4:2014 NOTE Harmonized as EN 60118-4:2015 (not modified)

IEC 60268-3 NOTE Harmonized as EN IEC 60268-3

IEC 60268-4 NOTE Harmonized as EN IEC 60268-4

IEC 60315-4 NOTE Harmonized as EN 60315-4

IEC 60601 (series) NOTE Harmonized as EN 60601 (series)

IEC 61606-3:2008 NOTE Harmonized as EN 61606-3:2008 (not modified)

IEC 60914:1988 NOTE Harmonized as HD 549 S1:1989 (not modified)

IEC 61938:2018 NOTE Harmonized as EN IEC 61938:2018 (not modified)

IEC 62489-1:2010 NOTE Harmonized as EN 62489-1:2010 (not modified)

IEC 62777:2016 NOTE Harmonized as EN 62777:2016 (not modified)



IEC 63087-1

Edition 1.0 2021-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

iTeh STANDARD

Assistive listening devices and systems for active assisted living – Part 1: General

(standards.iteh.ai) Dispositifs et systèmes d'aide à l'audition pour l'assistance à l'autonomie à

domicile – <u>SIST EN IEC 63087-1:2022</u> Partie 1: Généralités https://standards.iteh.ai/catalog/standards/sist/84efc40bd23d-4f7f-a831-5a79244f8597/sist-en-iec-63087-1-

2022

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 13.180; 33.160.99

ISBN 978-2-8322-1010-3

Warning! Make sure that you obtained this publication from an authorized distributor. Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

 Registered trademark of the International Electrotechnical Commission Marque déposée de la Commission Electrotechnique Internationale

CONTENTS

FOREWORD	3	
INTRODUCTION	5	
1 Scope		
2 Normative references		
3 Terms and definitions		
4 General	7	
4.1 Assistive listening devices and systems	7	
4.2 Sources of audio for assistive listening	7	
4.3 Dedicated assistive listening systems		
5 Requirements in the context of accessibility and ease of use		
5.1 Requirements for products and systems under the control of the user		
5.1.1 General requirements	8	
5.1.2 Considerations for specific products and systems under the control of the user	9	
5.2 Requirements for products and systems not under the control of the user	9	
5.2.1 General requirements	9	
5.2.2 Considerations for specific products and systems not under the control of the user	0	
6 Claims of conformity	0	
Bibliography1	1	
(standards.iteh.ai)		
Table 1 – Sources of audio for assistive listening		
Table 2 – Dedicated assistive list <u>ening systems63087-1:2022</u>	8	

IEC 63087-1:2021 © IEC 2021

- 3 -

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ASSISTIVE LISTENING DEVICES AND SYSTEMS FOR ACTIVE ASSISTED LIVING –

Part 1: General

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies g/standards/sist/84efc40b-
- 6) All users should ensure that they have the latest edition of this publication 63087-1-
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 63087-1 has been prepared by Technical Area 16: Active Assisted Living (AAL), wearable electronic devices and technologies, accessibility and user interfaces of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is an International Standard.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
100/3601/FDIS	100/3623/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

– 4 –

IEC 63087-1:2021 © IEC 2021

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 63087-1:2022 https://standards.iteh.ai/catalog/standards/sist/84efc40bd23d-4f7f-a831-5a79244f8597/sist-en-iec-63087-1-2022 IEC 63087-1:2021 © IEC 2021

- 5 -

INTRODUCTION

AAL (Active Assisted Living) aims to improve the quality of users lives. The user is any person of any age who uses or benefits from AAL products, services and systems. IEC has created the Systems Committee AAL which is tasked to develop systems standards taking into account the following: products, services and systems, safety, security and privacy.

The TC 100 title items, audio, video and multimedia devices and systems provide various services to users; however, some of users may have difficulties of hearing, viewing and sensing because of their age or some other reasons. As the number of such users is increasing, IEC meets these needs with the philosophy of AAL.

The legacy standardization work focuses on providing quality and functions to the ordinary user; this document specifies the requirement for providing audio quality and functionalities to the users who have some difficulties with hearing and listening.

Personal listening systems are used to improve the perception and audibility of a range of sound sources when listening in non-ideal situations. Examples of these include listening to a television when not seated close to it, following a discussion in a meeting, engaging in a oneto one conversation, or in other applications where programme material is available such as transport, theatre or education environments where provision for access enables users to overcome the presence of competing background noise. IIEN SIANDA

Personal listening systems are widely used by those with normal hearing, but in some instances by those who have a mild hearing loss, but either do not consider that they need a hearing aid, or do not meet health-care criteria for hearing aid provision.

Unlike hearing aids, which are classified as medical devices and require an appropriately trained and competent hearing aid professional to assess an individual's hearing and select and fit a suitable device, personal listening systems (are not) provided for by current regulatory requirements. Requirements for hearing aid sperformance are appecified within the IEC 60118 series and aspects relating to hearing aid safety are specified in the relevant parts of the IEC 60601 series.

2022

Changes in regulatory restrictions on the marketing of devices intended to assist hearing lead to the need to create an electroacoustic performance standard (including the related methods of measurement) for personal listening systems. This document specifies basic requirement for personal listening systems, establishes a control on their maximum sound pressure level output and establishes defines recommended performance in other respects, including frequency response, distortion and internally generated noise.

This document only makes provision for the electroacoustic performance of personal listening systems which relate to their input and output. Products which physically resemble modern hearing aids and which are entirely worn on or in the ear are also excluded from the scope of this document.

This document is intended to co-ordinate with IEC TC 100 activity on the accessibility of audio sources.

- 6 -

IEC 63087-1:2021 © IEC 2021

ASSISTIVE LISTENING DEVICES AND SYSTEMS FOR ACTIVE ASSISTED LIVING –

Part 1: General

1 Scope

This part of IEC 63087 specifies requirements, and the associated methods of measurement, for the electroacoustic performance of personal listening systems.

This document specifies requirements for the provision of assistive listening in audio, video and multimedia systems and equipment. The requirements are of different kinds, because of the diversity of the hardware concerned. Existing IEC standards for methods of measurement are normatively referenced if they exist. Methods of measurement and performance requirements are specified in IEC 63087-2¹.

This document does not apply to hearing aids. Also excluded are devices entirely worn on or in the ear, which cannot be measured independently.

2 Normative references **PREVIE**

There are no normative references in this document iteh.ai)

3 Terms and definitions

SIST EN IEC 63087-1:2022

For the purposes of this document, the following terms and definitions apply. d23d-4f7f-a831-5a79244f8597/sist-en-iec-63087-1-

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1

product

piece of equipment, possibly comprising several objects that work together, which is typically acquired by a member of the general public as a single purchase

EXAMPLE 1 A television receiver.

EXAMPLE 2 A radio headphone kit, comprising headphones, transmitter and power supply.

Note 1 to entry: The term 'product' is used to improve clarity, as the term 'equipment' is considered to be rather 'technical'.

¹ Under preparation.