SVENSK STANDARD SS-EN IEC 62820-3-2

Fastställd	Utgåva	Sida	Ansvarig kommitté
2018-09-12	1	1 (1+61)	SEK TK 79

Kommunikationsanläggningar i byggnader – Del 3-2: Tillämpningsanvisningar – System med höjd säkerhet (ASBIS)

Building intercom systems – Part 3-2: Application guidelines – Advanced security building intercom systems (ASBIS)

Som svensk standard gäller europastandarden EN IEC 62820-3-2:2018. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62820-3-2:2018.

Nationellt förord

Europastandarden EN IEC 62820-3-2:2018

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62820-3-2, First edition, 2018 - Building intercom systems - Part 3-2: Application guidelines - Advanced security building intercom systems (ASBIS)**

utarbetad inom International Electrotechnical Commission, IEC.

EN från CENELEC som är identiska med motsvarande IEC-standarder och som görs tillgängliga för nationalkommittéerna efter den 1 januari 2018 får en beteckning som inleds med EN IEC istället för som tidigare bara EN.

ICS 13.320.00

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62820-3-2

June 2018

ICS 13.320

English Version

Building intercom systems - Part 3-2: Application guidelines - Advanced security building intercom systems (ASBIS) (IEC 62820-3-2:2018)

Systèmes d'interphone de bâtiment - Partie 3-2: Lignes directrices d'application - Systèmes d'interphone de bâtiment à sécurité avancée (ASBIS) (IEC 62820-3-2:2018)

Gebäude-Sprechanlagen - Teil 3-2: Gebäude-Sprechanlagen für erhöhte Sicherheitsanforderungen - Anwendungsrichtlinien (IEC 62820-3-2:2018)

This European Standard was approved by CENELEC on 2018-03-13. 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, 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

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

Ref. No. EN IEC 62820-3-2:2018 E

SEK Svensk Elstandard SS-EN IEC 62820-3-2, utg 1:2018

European foreword

The text of document 79/601/FDIS, future edition 1 of IEC 62820-3-2, prepared by IEC/TC 79 "Alarm and electronic security systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62820-3-2:2018.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2018-12-22
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2021-06-22

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.

Endorsement notice

The text of the International Standard IEC 62820-3-2:2018 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61907:2009	NOTE	Harmonized as EN 61907:2010 (not modified).
IEC 62676 Series	NOTE	Harmonized as EN 62676 Series.
ISO/IEC 17065	NOTE	Harmonized as EN ISO/IEC 17065.
ISO 9000:2005	NOTE	Harmonized as EN ISO 9000:2005[1] (not modified).
ISO 14971:2007	NOTE	Harmonized as EN 14971:2007 (not modified).

[1] Superseded by EN ISO 9000:2015 (ISO 9000:2015).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
-	-	Alarm systems - Social alarm systems - Part 2: Trigger devices	EN 50134-2	2017
-	-	Alarm systems - Social alarm systems - Part 3: Local unit and controller	EN 50134-3	2012
IEC 60268-16	2011	Sound system equipment - Part 16: Objective rating of speech intelligibility by speech transmission index	EN 60268-16	2011
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	-
IEC 60839-5-1	2014	Alarm and electronic security systems - Part 5-1: Alarm transmission systems - General requirements	-	-
IEC 60839-5-2	2016	Alarm and electronic security systems - Part 5-2: Alarm transmission systems - Requirements for supervised premises transceiver (SPT)	-	-
IEC 60839-5-3	2016	Alarm and electronic security systems - Part 5-3: Alarm transmission systems - Requirements for receiving centre transceiver (RCT)	-	-
IEC 60839-7-12	2001	Alarm systems - Part 7-12: Message formats and protocols for serial data interfaces in alarm transmission systems - PTT interfaces for dedicated communications channels using ITU-T Recommendation V.23 signalling	-	-
IEC 61000-6-1	-	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments	EN 61000-6-1	-
IEC 61000-6-3	-	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	EN 61000-6-3	-

Publication	Year	Title	EN/HD	Year
IEC 62262	2002	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	2002
IEC 62599-1	2010	Alarm systems - Part 1: Environmental test methods	-	-
IEC 62599-2	-	Alarm systems - Part 2: Electromagnetic compatibility - Immunity requirements for components of fire and security alarm systems	-	-
IEC 62642-1	2010	Alarm systems - Intrusion and hold-up systems - Part 1: System requirements	-	-
IEC 62820-1-1	2016	Building intercom systems - Part 1-1: System requirements - General	EN 62820-1-1	2016
IEC 62820-1-2	2017	Building intercom systems - Part 1-2: System requirements - Building intercom systems using the internet protocol (IP)	EN 62820-1-2	2017
IEC 62820-2	-	Building intercom systems - Part 2: Requirements for advanced security building intercom systems (ASBIS)	EN IEC 62820-2	-
IEC 62820-3-1	-	Building intercom systems - Part 3-1: Application guidelines - General	EN 62820-3-1	-
IEC 62851-2	-	Alarm and electronic security systems - Social alarm systems - Part 2: Trigger devices	-	-
IEC 62851-3	-	Alarm and electronic security systems - Social alarm systems - Part 3: Local unit and controller	-	-
ISO/IEC 17065	-	Conformity assessment - Requirements for bodies certifying products, processes and services	EN ISO/IEC 17065	-
ISO 31000	-	Risk management - Principles and guidelines	-	-
IEC/ISO 31010	-	Risk management - Risk assessment techniques	-	-
ISO 7240-11	2011	Fire detection and alarm systems - Part 11: Manual call points	-	-
ITU-T P.800	-	TELEPHONE TRANSMISSION QUALITY - Methods for subjective determination of transmission quality	-	-
DIN VDE 0833-1	2009	Alarm systems for fire, intrusion and hold-up - Part 1: General provisions	-	-

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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BUILDING INTERCOM SYSTEMS –

Part 3-2: Application guidelines – Advanced security building intercom systems (ASBIS)

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.
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International Standard IEC 62820-3-2 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

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

FDIS	Report on voting
79/601/FDIS	79/605/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62820 series, published under the general title *Building intercom systems*, can be found on the IEC website.

This International Standard is to be used in conjunction with IEC 62820-3-1.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This document has become necessary because

– Both the application fields and importance of Advanced Security Building Intercom Systems (ASBIS) have increased;

– different events, emergencies, dangers and hazards needs various responses and reactions, which have to be verified by voice communication in advance;

– a detailed guide is needed for companies and operators with no previous knowledge of ASBIS.

In particular, this document is targeted at police, insurance companies, planners, architects, manufacturers and specialist security system companies, construction clients, owners, operators, ASBIS-users and residents of all kind of buildings.

This document covers applications for higher risks such as accidents, emergencies, dangers, mass attack, terror, school shootings, terrorist attacks, bombs threats, earthquakes, floods, etc.

An ASBIS is used to receive advanced access communication events (visitor-calls, user-receiver-calls, security-management-calls) as well other events (emergency, danger and hazard alarms), forward them to a technical receiver and present them appropriately at a support agency (e.g. Security Management Unit). On acknowledging receipt, the support agency assumes responsibility for verifying and initiating measures defined in accordance with the Technical Risk Management file. The acknowledgement is displayed at the point where action is initiated.

A daily use of other ASBIS applications (e.g. Annex B) is suggested for ASBIS-users training as well as system availability in grade 1 of IEC 62820-3-2. The frequency of daily use is a kind of system check to indicate the system availability.

BUILDING INTERCOM SYSTEMS –

Part 3-2: Application guidelines – Advanced security building intercom systems (ASBIS)

1 Scope

This part of IEC 62820 describes the basic application requirements for Advanced Security Building Intercom Systems (ASBIS) in public and private buildings with advanced safety and security needs. ASBIS are also used to meet the requirements of the Local Regulations of Workplace Safety and/or other relevant local regulations, in particular, protecting the life and limb of employees and all persons in the building, taking into account the inclusion of people with disabilities (e.g to achieve barrier-free access or calls for help) where required by local applicable law.

This document applies for planning, installation, commissioning, handover, operation and maintenance of ASBIS, for the transmission of emergency, danger and hazard audio messages and/or other operational indications to an assisting authority for remote assessment and for implementing suitable intervention-, protection- and rescue measures. Additional information can also be transmitted and the system can be used in day-to-day work for all communication needs. ASBIS also feature in high availability for end unit monitoring and system monitoring.

Advanced Security Building Intercom Systems (ASBIS) are used for rapid emergency, danger and hazard calls, verification by voice communication, warning of a danger, rapid notification of the responsible emergency / intervention services and for sending voice instructions and/or other operational indications on how to proceed. Requirements for a suitable concept are a prior risk assessment and a definition of the protection target. The Technical-Risk Management (TRM) and Organizational Risk-Management (ORM) have to work out a common workflow strategy in conjunction with the corresponding system requirements, to achieve the residual risks. This document provides requirements for the technical risk-management as well as comments and recommendations for the organizational risk-management.

The present application document for an ASBIS describes among others, the technological processes and responsibilities involved in supporting all processes, from detecting an event (visitor-call, emergency, danger, hazard) until that event is finally dealt with. It includes TRM, the defining protection goals and organizational procedures, and the necessary requirements for a TRM file. This document defines three different safety/security grades, with the product requirements for each. Selecting products which can be deployed as technical resources as part of an ASBIS is the responsibility of the TRM to be employed.

This document, taken together with an ASBIS, also defines the associated tasks, responsibilities, and activities. These are elements of a holistic TRM process to meet the protection goals for personnel safety/security, efficiency and effectiveness, data- and system security. This document does not specify any risk levels. In particular, it does not define any acceptable residual risks. The TRM and ORM are of equal importance in the overall risk management (see Annex C).

This document defines the technical requirement profiles for ASBIS for three safety/security grades. It is the TRM responsibility to determine the grade involved, based on their risk assessment, selecting whichever grade best matches the risk identified, allowing for an acceptable residual risk. The annexes to this document will assist in assessing risks.

This document also describes the process for creating, maintaining and updating a TRM file. The risks are listed, assessed and residual risks are defined in this document. The analysed results define the extent and the structure of the ASBIS. An ASBIS is a part of a whole solution for managing certain events, such as emergencies or crises.

The structure and operation of an ASBIS demands TRM over the entire life cycle of the ASBIS. The monitoring of an ASBIS over its life cycle is a part of the TRM file.

This document is intended to aid implementation of legal and miscellaneous requirements.

Depending on the requirements of the Local Disabilities Act, or the relevant regulation for people with disabilities, an ASBIS can be used for the implementation of such local regulations, which means, communication in two different formats such as light and sound (two-meaning principle).

This document applies in its entire scope for other remote signalling and information technology systems if they include the functions of Advanced Security Building Intercom Systems (ASBIS).

This document does not replace any relevant standards for safety/security systems or other relevant systems. Such systems can however be integrated within an ASBIS taking these standards into account.

If the regulations in standards for such systems contradict this document, the TRM weighs up the regulations with each other, assesses them, and documents them in the decision as a deviation from the standard in the TRM file.

The recommendations and requirements of IEC 62820-3-1 are mandatory for this document. Exceptions are to be decided by the TRM and to be documented in the TRM file.

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.

NOTE The following standards are named as known. If standards in the following list are not named IEC or ISO, the relevant relevant IEC/ISO standards are unknown; use available local standards instead.

IEC 60268-16:2011, *Sound system equipment – Part 16: Objective rating of speech intelligibility by speech transmission index*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60839-5-1:2014, *Alarm and electronic security systems – Part 5-1: Alarm transmission systems – General requirements*

IEC 60839-5-2:2016, *Alarm and electronic security systems – Part 5-2: Alarm transmission systems – Requirements for supervised premises transceiver (SPT)*

IEC 60839-5-3:2016, *Alarm and electronic security systems – Part 5-3: Alarm transmission systems – Requirements for receiving centre transceiver (RCT)*

IEC 60839-7-12:2001, *Alarm systems – Part 7-12: Message formats and protocols for serial data interfaces in alarm transmission systems – PTT interfaces for dedicated communications channels using ITU-T Recommendation V.23 signalling*

IEC 61000-6-1, *Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity for residential, commercial and light-industrial environments*

IEC 61000-6-3, *Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments*

IEC 62262:2002, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

IEC 62599-1:2010, *Alarm systems – Part 1: Environmental test methods*

IEC 62599-2, *Alarm systems – Part 2: Electromagnetic compatibility – Immunity requirements for components of fire and security alarm systems*

IEC 62642-1:2010, *Alarm systems – Intrusion and hold-up systems – Part 1: System requirements*

IEC 62820-1-1:2016, *Building intercom systems – Part 1-1: System requirements – General*

IEC 62820-1-2:2017, *Building intercom systems – Part 1-2: System requirements – Building intercom systems using the internet protocol (IP)*

IEC 62820-2, *Building intercom systems – Part 2: Requirements for advanced security building intercom systems (ASBIS)*

IEC 62820-3-1, *Building intercom systems – Part 3-1: Application guidelines – General*

IEC 62851-2, *Alarm and electronic security systems – Social alarm systems – Part 2: Trigger devices*

IEC 62851-3, *Alarm and electronic security systems – Social alarm systems – Part 3: Local unit and controller*

ISO/IEC 17065, *Conformity assessment – Requirements for bodies certifying products, processes and services*

ISO 31000, *Risk management – Principles and guidelines*

ISO/IEC 31010, *Risk management – Risk assessment techniques*

ISO 7240-11:2011, *Fire detection and alarm systems – Part 11: Manual call points*

ITU-T P.800, *TELEPHONE TRANSMISSION QUALITY: Methods for objective and subjective assessment of quality*

EN 50134-2:2016, *Alarm systems. Social alarm systems. Part 2: Trigger devices (*or equivalent IEC standard)

EN 50134-3:2012, *Alarm systems – Social alarm systems – Part 3: Local unit and controller (*or equivalent IEC standard)

DIN VDE 0833-1 (VDE 0833-1):2009-09, *Alarm systems for fire, intrusion and hold-up – Part 1: General provisions* (or equivalent IEC standard)