

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



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

**Systèmes d'interphone de bâtiment –  
Partie 2: Exigences pour les systèmes d'interphone de bâtiment à sécurité  
avancée (ASBIS)**



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building intercom systems (ASBIS)****FOREWORD**

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International Standard IEC 62820-2 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 |
|-------------|------------------|
| 79/588/FDIS | 79/590/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.

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

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- withdrawn,
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## INTRODUCTION

The IEC 62820 series of standards set out the technical requirements for the composition, functions, performance, test methods of building intercom systems for building entry and application guidelines and consist of five parts:

Part 1-1: System requirements – General;

Part 1-2: System requirements – Building intercom systems using the internet protocol (IP);

Part 2: Requirements for advanced security building intercom systems (ASBIS);

Part 3-1<sup>1</sup>: Application guidelines – General;

Part 3-2<sup>2</sup>: Application guidelines – Advanced security building intercom systems.

IEC 62820-2 specifies higher security requirements, to be used in buildings with advanced security needs that additionally or alternatively apply in respect of those in IEC 62820-1-1 and/or IEC 62820-1-2 which give basic requirements for building intercom systems.

Additional requirements and recommendations are those described in IEC 62820-2, but they are not covered by IEC 62820-1-1 neither IEC 62820-1-2.

Requirements and recommendations described by IEC 62820-2 have precedence, if also described in IEC 62820-1-1 and/or IEC 62820-1-2.

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<sup>1</sup> Under preparation. Stage at the time of publication: IEC/AFDIS 62820-3-1:2017.

<sup>2</sup> Under preparation. Stage at the time of publication: IEC/AFDIS 62820-3-2:2017.

## BUILDING INTERCOM SYSTEMS –

### Part 2: Requirements for advanced security building intercom systems (ASBIS)

#### 1 Scope

This part of IEC 62820 specifies the technical requirements for the composition, function, performance and testing methods of Advanced Security Building Intercom Systems.

This document is applicable for intercom systems used for any advanced security communication in buildings.

Advanced security building intercom systems (ASBIS) are used for rapid emergency and danger messages verification by voice communication, warning of a danger, rapid notification of the responsible emergency services/intervention services and for sending instructions on how to proceed. The requirement for a suitable concept is prior risk assessment and a definition of the protection target.

A Security management unit (SMU) is a necessary part of an ASBIS.

The type of building and the usage of a building have influence on the risk calculation. In this document, the relevant functions and performances are divided into three grades. According to the results of the risk calculation, the security needs will be covered by an individual system profile.

NOTE 1 Examples of typical profiles and each grades are defined in IEC 62820-3-2, where a risk calculation is required.

NOTE 2 The application of this document does not dispense to comply with the public national regulations concerning emergency systems.

NOTE 3 Systems for emergency purposes can be the subject of approval by local authorities.

#### 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.

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

IEC 60417, *Graphical symbols for use on equipment* (available at <http://www.graphical-symbols.info/equipment>)

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

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

IEC 62820-3-2, *Building intercom systems – Part 3-2: Application guidelines – Advanced security building intercom systems*

IEC 62676 (all parts), *Video surveillance systems for use in security applications*

ISO 7010, *Graphical symbols – Safety colours and safety signs – Registered safety signs*

ITU-T G.722, *7 kHz audio-coding within 64 kbit/s*

ITU-T P.79, Annex G, *Telephone transmission quality, telephone installations, local line networks*

ITU-T P.311, *Transmission characteristics for wideband digital handset and headset telephones*

ITU-T P.340, *Transmission characteristics and speech quality parameters of hands-free terminals*

ITU-T P.341, *Transmission characteristics for wideband digital loudspeaking and hands-free telephony terminals*

ITU-T P.800, *Methods for subjective determination of transmission quality*

### 3 Terms, definitions and abbreviated terms

#### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62820-1-1 and IEC 62820-1-2 and the following apply.

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>

##### 3.1.1

##### **intercom unit**

voice communication unit, inherent to the system

EXAMPLE Explosion-proof-unit, clean-room-unit, emergency-call-unit, heavy-duty-unit, school-class-room-unit.

Note 1 to entry: In this document, it includes all types of voice communication units, in addition to those defined in IEC 62820-1-1 (VCU, URU, SMU).

##### 3.1.2

##### **full duplex**

operating method in which transmission is possible simultaneously in both directions of a telecommunication channel

Note 1 to entry: This means that both participants in an established conversation can speak and listen at the same time. It is similar to a natural communication between persons while they are speaking and listening to each other without any technical system between them.

##### 3.1.3

##### **manually controlled half duplex**

<non-simultaneous conversation> operating method in which the communication direction is manually switched by an operator between speaking and listening in an established 2-way communication.

This function needs a push-to-talk-key in those intercom units which have a need for this function.