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Standards

Irish Standard  
I.S. EN IEC 63044-6:2021

Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 6:  
Requirements for planning and installation

**I.S. EN IEC 63044-6:2021**

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
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## National Foreword

I.S. EN IEC 63044-6:2021 is the adopted Irish version of the European Document EN IEC 63044-6:2021, Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 6: Requirements for planning and installation

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EUROPEAN STANDARD

**EN IEC 63044-6**

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2021

ICS 29.120.01; 29.120.99

Supersedes EN 50491-6-1:2014 and all of its  
amendments and corrigenda (if any)

English Version

**Home and building electronic systems (HBES) and building  
automation and control systems (BACS) - Part 6: Requirements  
for planning and installation  
(IEC 63044-6:2021)**

Systèmes électroniques pour les foyers domestiques et les  
bâtiments (HBES) et systèmes de gestion technique du  
bâtiment (SGTB) - Partie 6: Exigences de planification et  
d'installation  
(IEC 63044-6:2021)

Allgemeine Anforderungen an die Elektrische  
Systemtechnik für Heim und Gebäude (ESHG) und an  
Systeme der Gebäudeautomation (GA) - Teil 6:  
Anforderungen für Planung und Installation  
(IEC 63044-6:2021)

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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.

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## **EN IEC 63044-6:2021 (E)**

### **European foreword**

The text of document 23/972/FDIS, future edition 1 of IEC 63044-6, prepared by IEC/TC 23 “Electrical accessories” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63044-6:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-05-03 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-08-03 document have to be withdrawn

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

IEC 60364-5-52 NOTE Harmonized as HD 60364-5-52

IEC 60364-7-716<sup>1</sup> NOTE Harmonized as HD 60364-7-716<sup>2</sup>

IEC 60670-1 NOTE Harmonized as EN IEC 60670-1

IEC 60715 NOTE Harmonized as EN 60715

IEC 63044-5-1 NOTE Harmonized as EN IEC 63044-5-1

IEC 63044-5-2 NOTE Harmonized as EN IEC 63044-5-2

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<sup>1</sup> To be published. Stage at the time of publication: IEC CDV 60364-7-716:2021.

<sup>2</sup> To be published. Stage at the time of publication: prHD 60364-7-716:2020.

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-4-41	-	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41	-
IEC 60364-4-44	-	Low-voltage electrical installations - Part 4-44: Protection for safety - Protection against voltage disturbances and electromagnetic disturbances	HD 60364-4-442	-
IEC 60364-5-54	-	Low-voltage electrical installations - Part 5-54: Selection and erection of electrical equipment - Earthing arrangements and protective conductors	HD 60364-5-54	-
IEC 61386-24	-	Conduit systems for cable management - Part 24: Particular requirements - Conduit systems buried underground	EN 61386-24	-
IEC 63044-1	-	Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 1: General requirements	EN 63044-1	-
IEC 63044-3	-	Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 3: Electrical safety requirements	EN IEC 63044-3	-
IEC 63044-4	-	Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 4: General functional safety requirements for products intended to be integrated in HBES and BACS	-EN IEC 63044-4	-
IEC 63044-5	series	Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5: EMC requirements	EN IEC 63044-5	series

**EN IEC 63044-6:2021 (E)**

ISO/IEC 11801-1	-	Information technology - Generic cabling for customer premises - Part 1: General requirements	-	-
ISO/IEC 14763-2	-	Information technology - Implementation and operation of customer premises cabling - Part 2: Planning and installation	-	-





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Edition 1.0 2021-06

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**



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**Home and building electronic systems (HBES) and building automation and control systems (BACS) –  
Part 6: Requirements for planning and installation**

**Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES) et systèmes de gestion technique du bâtiment (SGTB) –  
Partie 6: Exigences de planification et d'installation**





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IEC Central Office  
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CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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**IEC 63044-6**

Edition 1.0 2021-06

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**Home and building electronic systems (HBES) and building automation and control systems (BACS) –  
Part 6: Requirements for planning and installation**

**Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES) et systèmes de gestion technique du bâtiment (SGTB) –  
Partie 6: Exigences de planification et d'installation**

INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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BUILDING AUTOMATION AND CONTROL SYSTEMS (BACS) –**
**Part 6: Requirements for planning and installation****FOREWORD**

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

FDIS	Report on voting
23/972/FDIS	23/974/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.

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

A list of all parts in the IEC 63044 series, published under the general title *Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)*, can be found on the IEC website.

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## INTRODUCTION

A HBES/BACS network is part of the home/building network, which includes cabling for information and communication technology (ICT) and broadcast communication technology (BCT) applications. ISO/IEC 14763-2 is the specific standard for ICT and BCT cabling installation and planning.

This document covers installation and planning requirements specific to a HBES/BACS network in addition to safety requirements for electrical installations included in the IEC 60364 series.

Installation and planning specific requirements include:

- infrastructures for cabling,
- coexistence with electric wiring,
- hints for sensors.

Wireless systems are also considered. Planning the cabled backbone for wireless systems is less complex compared to a full cabled network pathway, power supply cabling. Additional provisions are provided to guarantee coverage and reliability.



# **HOME AND BUILDING ELECTRONIC SYSTEMS (HBES) AND BUILDING AUTOMATION AND CONTROL SYSTEMS (BACS) –**

## **Part 6: Requirements for planning and installation**

### **1 Scope**

This document specifies the requirements for planning and installation of HBES/BACS and the supporting infrastructure.

Radio frequency (RF) HBES/BACS are also considered.

Safety requirements are covered by IEC 60364 (all parts).

Information and communication technology (ICT) and broadcasting and communication technology (BCT) network installations are typically interfaced with HBES/BACS.

The requirements for ICT and BCT network installations are covered by ISO/IEC 14763-2.

This document does not cover HBES/BACS implementation with:

- optical fibre,
- power lines,
- power over Ethernet (PoE).

### **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 60364-4-41, *Low-voltage electrical installations – Part 4-41: Protection for safety – Protection against electric shock*

IEC 60364-4-44, *Low-voltage electrical installations – Part 4-44: Protection for safety – Protection against voltage disturbances and electromagnetic disturbances*

IEC 60364-5-54, *Low-voltage electrical installations – Part 5-54: Selection and erection of electrical equipment – Earthing arrangements and protective conductors*

IEC 63044-1, *Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) – Part 1: General requirements*

IEC 63044-3, *Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) – Part 3: Electrical safety requirements*

IEC 63044-4, *Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) – Part 4: General functional safety requirements for products intended to be integrated in HBES and BACS*

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