



BSI Standards Publication

Product standard to demonstrate the compliance of wireless communication devices, with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 300 MHz to 6 GHz: devices used next to the ear

National foreword

This British Standard is the UK implementation of EN 50360:2017. It supersedes BS EN 50360:2001+A1:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/106, Human exposure to low frequency and high frequency electromagnetic radiation.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017
Published by BSI Standards Limited 2017

ISBN 978 0 580 96858 7

ICS 33.100.01; 33.060.01; 33.070.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 October 2017.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

EUROPEAN STANDARD

EN 50360

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 33.070.01

Supersedes EN 50360:2001

English Version

Product standard to demonstrate the compliance of wireless communication devices, with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 300 MHz to 6 GHz: devices used next to the ear

Norme de produit pour démontrer la conformité des dispositifs de communication sans fil aux restrictions de base et aux valeurs limites d'exposition relatives à l'exposition des personnes aux champs électromagnétiques dans la plage de fréquences de 300 MHz à 6 GHz: dispositifs utilisés à proximité de l'oreille

Produktnorm zum Nachweis der Übereinstimmung von schnurlosen Kommunikationsgeräten mit den Basisgrenzwerten und Expositionsgrenzwerten für die Exposition von Personen gegenüber elektromagnetischen Feldern im Frequenzbereich von 300 MHz bis 6 GHz: Geräte, die in enger Nachbarschaft zum Ohr benutzt werden

This European Standard was approved by CENELEC on 2017-07-24. 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: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Exposure conditions	5
5 Normative limits	5
6 Evaluation of compliance	5
7 Assessment uncertainty	6
8 Documentation	6
9 Assessment of compliance	6
Annex ZZ (informative) Relationship between this European Standard and the essential requirements of Directive 2014/53/EU [2014 OJ L153] aimed to be covered	7
Bibliography	8

European foreword

This document (EN 50360:2017) has been prepared by CLC/TC 106X “Electromagnetic fields in the human environment”.

The following dates are fixed:

- latest date by which this document has to be (dop) 2018-07-24 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2020-07-24 with this document have to be withdrawn

This document supersedes EN 50360:2001.

EN 50360:2017 includes the following significant technical changes with respect to EN 50360:2001:

- 1) the standard requires that the assessment has to take into account all reasonably foreseeable operating conditions (Clause 4);
- 2) the standard covers equipment intended for use only by workers as well as equipment intended for use by the general public and different limits are given for each case (Clause 5).

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.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

1 Scope

This product standard applies to wireless communication devices used in close proximity to the human ear (e.g. mobile phones, wireless headsets). The applicable frequency range is from 300 MHz to 6 GHz.

The objective of this standard is to demonstrate the compliance of such devices with the basic restrictions and exposure limit values related to human exposure to radio frequency electromagnetic fields.

For devices used next to the body or in front of the face the applicable product standard is EN 50566:2017.

For low power devices the applicable product standard is EN 50663:2017.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 62209-1:2016, *Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz) (IEC 62209 1:2016)*

Council Recommendation 1999/519/EC of 12 July 1999 *on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) (Official Journal L 199, 30.6.1999, p. 59-70)*

Directive 2013/35/EU of the European Parliament and of the Council of 26 June 2013 *on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (20th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) and repealing Directive 2004/40/EC (Official Journal L 179, 29.6.2013, p. 1–21)*

3 Terms and definitions

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

3.1

basic restrictions

restrictions on exposure of the general public to electric, magnetic, and electromagnetic fields that are based directly on established health effects and biological considerations

Note 1 to entry: Concerning the frequency range of this standard, the physical quantity used is the Specific Absorption Rate (SAR)

3.2

exposure limit values

restrictions on exposure of workers to electric, magnetic and electromagnetic fields that are based directly on established health effects and biological considerations

Note 1 to entry: Concerning the frequency range of this standard, the physical quantity used is the Specific Absorption Rate (SAR).