



**NSAI**  
Standards

Irish Standard  
I.S. EN 50663:2017

Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)

**I.S. EN 50663:2017**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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*This document is based on:*

EN 50663:2017

*Published:*

2017-10-27

*This document was published  
under the authority of the NSAI  
and comes into effect on:*

2017-11-14

ICS number:

NOTE: If blank see CEN/CENELEC cover page

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## National Foreword

I.S. EN 50663:2017 is the adopted Irish version of the European Document EN 50663:2017, Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)

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

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EUROPEAN STANDARD

**EN 50663**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 17.240

English Version

**Generic standard for assessment of low power electronic and  
electrical equipment related to human exposure restrictions for  
electromagnetic fields (10 MHz - 300 GHz)**

Norme de produit pour l'évaluation de la conformité des  
appareils électriques et électroniques de faible puissance  
aux restrictions de base concernant l'exposition des  
personnes aux champs électromagnétiques (10 MHz à 300  
GHz)

Produktnorm für die Beurteilung der Übereinstimmung von  
elektronischen und elektrischen Geräten kleiner Leistung  
mit den Basisgrenzwerten für die Exposition von Personen  
gegenüber elektromagnetischen Feldern (10 MHz bis 300  
GHz)

This European Standard was approved by CENELEC on 2017-08-07. 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**

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## European foreword

This document (EN 50663:2017) has been prepared by the Technical Committee CENELEC/TC 106X “Electromagnetic fields in the human environment”.

The following dates are fixed:

- |  |       |            |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2018-08-07 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2020-08-07 |

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 mandates (M/511 and M/536) given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of the Radio Equipment Directive 2014/53/EU and the Low Voltage Directive 2014/35/EU.

For relationships with EU Directives, see informative Annexes ZZA and ZZB, which are an integral part of this document.

This European Standard is intended to be read in conjunction with EN 62479:2010 “*Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure restrictions for to electromagnetic fields (10 MHz to 300 GHz)*”.

## EN 50663:2017 (E)

## 1 Scope

This European Standard provides simple conformity assessment methods for low-power electronic and electrical equipment operating at frequencies between 10 MHz and 300 GHz to an electromagnetic field (EMF) exposure limit. If such equipment cannot be shown to comply with the applicable EMF exposure requirements using the exposure assessment methods in this standard, then other EMF product standards may be used for conformity assessment.

**NOTE** Other standards can apply to equipment covered by this document. In particular, this document is not designed to evaluate the electromagnetic compatibility with other equipment; nor does it reflect any product safety requirements other than those specifically related to human exposure to electromagnetic fields.

## 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.

EN 62479:2010, *Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)* (IEC 62479:2010)

EN 62311:2008, *Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)* (IEC 62311:2007)

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, L199, of 1999-7-30, p.59-70

Directive 2013/35/EU 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)*. Official Journal, L179, of 2013-6-29, 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

### 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

### 3.3

#### **worker**

person exposed to electromagnetic fields under the conditions defined in Directive 2013/35/EU

## 4 Exposure conditions

Equipment which meets the limits for general public exposure as given in this document (Clause 5) will automatically meet the limits for workers.

Equipment which meets the limits for workers will not necessarily meet the limits for the general public and, unless intended only for workers' use when at work, equipment shall also be tested against general public limits.



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