Basic standard for the in-situ assessment of exposure to radio frequency electromagnetic fields in the vicinity of a broadcast site

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50554:2021 sisaldab Euroopa standardi EN 50554:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 50554:2021 consists of the English text of the European standard EN 50554:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.05.2021.	Date of Availability of the European standard is 21.05.2021.
Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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Supersedes EN 50554:2010 and all of its amendments and corrigenda (if any)

English Version

Basic standard for the in-situ assessment of exposure to radio frequency electromagnetic fields in the vicinity of a broadcast site

Norme de base pour l'évaluation in-situ de l'exposition du public aux champs électromagnétiques de radiofréquence aux environs d'un site de radiodiffusion

Grundnorm für die Bewertung eines Rundfunkstandorts vor Ort in Bezug auf die Exposition der Allgemeinbevölkerung gegenüber hochfrequenten elektromagnetischen Feldern

This European Standard was approved by CENELEC on 2021-04-26. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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

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European foreword

This document (EN 50554:2021) 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 implemented at national level by publication of an identical national standard or by endorsement	2022–04–26	2022–04–26
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2024–04–26

This document supersedes EN 50554:2010 and all of its amendments and corrigenda (if any).

EN 50554:2021 includes the following significant technical changes with respect to EN 50554:2010:

— consideration of the new Directive 2013/35 /EU related to workers exposure;

— update of referenced standards;

— provision of a method to determine the relevant domain.

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.

1 Scope

This document specifies the method for assessing overall exposure from all fixed radio frequency sources at a broadcast site. This assessment can be applied at any time but is carried out when the exposure situation changes in or around the aforementioned site.

This document can play an essential role in the coordination of different stakeholders, with respect to ensuring EMF exposure compliance in the vicinity of a broadcast site especially for equipment installed within the site.

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 50496, *Determination of workers' exposure to electromagnetic fields and assessment of risk at a broadcast site*

EN 50413, *Basic standard on measurement and calculation procedures for human exposure to electric, magnetic and electromagnetic fields (0 Hz - 300 GHz)*

EN 62232:2017, *Determination of RF field strength, power density and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure (IEC 62232:2017)*

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*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

3.1
basic restriction
restriction on exposure to static and time-varying electric, magnetic, and electromagnetic fields that is based directly on established health effects

3.2
broadcasting service
radiocommunication service in which the transmissions are intended for direct reception by the general public

Note 1 to entry: This service may include sound transmissions, television transmissions or other types of transmission.

3.3
broadcast site
site where one or more broadcast transmitters are operated

3.4
controlled area
area where access is controlled by the operator and is not accessible to the public