

**Basic standard for the in-situ assessment of a
broadcast site related to general public exposure to
radio frequency electromagnetic fields**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50554:2010 sisaldab Euroopa standardi EN 50554:2010 ingliskeelset teksti.

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**Basic standard for the in-situ assessment of a broadcast site related to
general public exposure to radio frequency electromagnetic fields**

Norme de base pour l'évaluation in-situ de
l'exposition du public aux champs
électromagnétiques de radiofréquence
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 2010-11-01. 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.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 106X, Electromagnetic fields in the human environment.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50554 on 2010-11-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were 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) 2011-11-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2013-11-01

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1 Scope

This basic standard specifies the method for assessing overall exposure from all fixed radio frequency sources at a broadcast site. This assessment may be applied at any time but must be carried out when the exposure situation changes in or around this site.

It plays an essential role in the coordination of different stakeholders, with respect to ensuring EMF exposure compliance in and around a broadcast site especially for equipment installed within the site.

2 Normative references

The following referenced documents are indispensable for the application 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 50383, *Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz – 40 GHz)*

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

EN 50492, *Basic standard for the in-situ measurement of electromagnetic field strength related to human exposure in the vicinity of base stations*

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

3 Terms and definitions

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

3.1

basic restriction

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

NOTE In the frequency range from 30 MHz to 10 GHz, the physical quantity used is the specific absorption rate. Between 10 GHz and 40 GHz, the physical quantity is the power density.

3.2

broadcasting service

radiocommunication services in which the transmissions are intended for direct reception by the general public

NOTE 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 in which the operator may decide who is permitted to enter or remain or an area which, due to actual circumstances, the public is prohibited from entering