



SLOVENSKI STANDARD
kSIST FprEN 50554:2010
01-april-2010

Osnovni standard za terensko ocenjevanje mesta oddajanja v zvezi z izpostavljenostjo ljudi elektromagnetnim sevanjem

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

iTeh Standards
(<https://standards.iteh.ai>)

Ta slovenski standard je istoveten z: FprEN 50554:2010

[SIST EN 50554:2011](https://standards.iteh.ai/catalog/standards/sist/8d77f1c0-57e8-48e0-b09c-8b53c6cdf6c/sist-en-50554-2011)

<https://standards.iteh.ai/catalog/standards/sist/8d77f1c0-57e8-48e0-b09c-8b53c6cdf6c/sist-en-50554-2011>

ICS:

13.280	Varstvo pred sevanjem	Radiation protection
17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities

kSIST FprEN 50554:2010

en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

FINAL DRAFT
FprEN 50554

January 2010

ICS

English version

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

To be completed

To be completed

This draft European Standard is submitted to CENELEC members for Unique Acceptance Procedure.
Deadline for CENELEC: 2010-07-02.

It has been drawn up by CLC/TC 106X.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC 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 Central Secretariat 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

<https://standards.cenelec.eu/> Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard. 2011

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

1

Foreword

2 This draft European Standard was prepared by the Technical Committee CENELEC TC 106X,
3 Electromagnetic fields in the human environment. It is submitted to the Unique Acceptance Procedure.

4 The following dates are proposed:

- latest date by which the existence of the EN
has to be announced at national level (doa) dor + 6 months
- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) dor + 36 months
(to be confirmed or
modified when voting)

5

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

SIST EN 50554:2011

<https://standards.iteh.ai/catalog/standards/sist/8477f1c0-57e8-48e0-b09c-8b53c6cdf6c/sist-en-50554-2011>

6

Contents

7	1	Scope	4
8	2	Normative references	4
9	3	Terms and definitions	4
10	4	Assessment fundamentals	6
11	4.1	Level of protection	6
12	4.2	Worker/public exposure	6
13	4.3	Stakeholders	7
14	4.4	Actions required	7
15	4.5	Simultaneous exposure to fields at different frequencies	8
16	4.6	Area to perform a detailed assessment	8
17	5	Assessment methodology in the relevant domain when the exposure situation	
18		changes	8
19	5.1	Introduction	8
20	5.2	Determination of the Threshold Distance (<i>TD</i>)	8
21	5.3	Area definition	8
22	5.4	Assessment	9
23	5.5	How to take inaccuracy into account	10
24	5.6	Report of the assessment	11
25	Annex A (informative)	Example of a simple method for estimation of the safety distance	
26		from a broadcast site	12
27	Annex B (informative)	Assessment procedure in Germany and in Italy	14
28	B.1	Assessment procedure in Germany	14
29	B.2	Assessment procedure in Italy	15
30	Bibliography		17
31			
32	Figures		
33	Figure 1	– Area definition	9
34	Figure A.1	– Pattern of antennas	12
35	Figure A.2	– Safety distances for two antennas on the left side and one antenna on the right side	13
36			

SIST EN 50554:2011

<https://standards.iteh.ai/catalog/standards/sist/50554-2011>

37 1 Scope

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

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

43 2 Normative references

44 The following referenced documents are indispensable for the application of this document. For dated
45 references, only the edition cited applies. For undated references, the latest edition of the referenced
46 document (including any amendments) applies.

47 EN 50383, *Basic standard for the calculation and measurement of electromagnetic field strength and*
48 *SAR related to human exposure from radio base stations and fixed terminal stations for wireless*
49 *telecommunication systems (110 MHz – 40 GHz)*

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

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

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

56 3 Terms and definitions

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

58 <https://standards.iteh.ai/catalog/standards/sist/5-477f1c0-57e8-48e0-b09c-8b53c6cdf6c/sist-en-50554-2011>

59 3.1 basic restriction

60 restrictions on exposure to time-varying electric, magnetic, and electromagnetic fields that are based
61 directly on established health effects. In the frequency range from 30 MHz to 10 GHz, the physical
62 quantity used is the specific absorption rate. Between 10 GHz and 40 GHz, the physical quantity is the
63 power density

64 3.2

65 broadcasting service

66 radiocommunication services in which the transmissions are intended for direct reception by the
67 general public. This service may include sound transmissions, television transmissions or other types
68 of transmission

69 3.3

70 broadcast site

71 site where one or more broadcast transmitters are operated

72 3.4

73 controlled area

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