Raadiohäiringute ja häiringukindluse mõõtmise aparatuuri ja meetodite spetsifikatsioon. Osa 2-1:Häiringute ja häiringukindluse mõõtemeetodid. Juhtivuslikult levivate häiringute mõõtmine

Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements



#### FESTI STANDARDI FESSÕNA

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 55016-2-1:2009 sisaldab Euroopa standardi EN 55016-2-1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 29.05.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 25.03.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 55016-2-1:2009 consists of the English text of the European standard EN 55016-2-1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 29.05.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 25.03.2009.

The standard is available from Estonian standardisation organisation.

ICS 33.100.10, 33.100.20

Võtmesõnad:

# Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

#### **EUROPEAN STANDARD**

#### EN 55016-2-1

## NORME EUROPÉENNE EUROPÄISCHE NORM

March 2009

ICS 33.100.10; 33.100.20

Supersedes EN 55016-2-1:2004 + A1:2005

English version

# Specification for radio disturbance and immunity measuring apparatus and methods Part 2-1: Methods of measurement of disturbances and immunity Conducted disturbance measurements

(CISPR 16-2-1:2008)

Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Partie 2-1: Méthodes de mesure des perturbations et de l'immunité - Mesures des perturbations conduites (CISPR 16-2-1:2008)

Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit - Teil 2-1: Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit - Messung der leitungsgeführten Störaussendung (CISPR 16-2-1:2008)

This European Standard was approved by CENELEC on 2009-03-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, 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.

### **CENELEC**

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

Central Secretariat: avenue Marnix 17, B - 1000 Brussels

#### **Foreword**

The text of document CISPR/A/798/FDIS, future edition 2 of CISPR 16-2-1, prepared by CISPR SC A, Radio-interference measurements and statistical methods, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 55016-2-1 on 2009-03-01.

This European Standard supersedes EN 55016-2-1:2004 + A1:2005.

EN 55016-2-1:2009 includes significant technical changes with respect to EN 55016-2-1:2004. In general, EN 55016-2-1:2009 aims at reducing compliance uncertainty in correspondence with findings in CISPR 16-4-1. Guidelines are given on:

- resonance-free connection of the AMN to reference ground,
- avoidance of ground loops, and
- avoidance of ambiguities of the test setup of EUT and AMN with respect to the reference ground plane.

In addition, terms are clarified, a new type of ancillary equipment (CVP) is applied, and a clarification for the use of the AAN and AMN on the same EUT is provided.

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) 2009-12-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2012-03-01

Annex ZA has been added by CENELEC.

#### **Endorsement notice**

The text of the International Standard CISPR 16-2-1:2008 was approved by CENELEC as a European Standard without any modification.

#### **Annex ZA** (normative)

#### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60364-4 (mod)	Series	Low-voltage electrical installations - Part 4: Protection for safety	HD 60364-4/ HD 384-4	Series
CISPR 14-1	_1)	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2006 <sup>2)</sup>
CISPR 16-1-1	_1)	Specification for radio disturbance and immunity measuring apparatus and methods Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	EN 55016-1-1 -	2007 <sup>2)</sup>
CISPR 16-1-2	_1)	Specification for radio disturbance and immunity measuring apparatus and methods Part 1-2: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Conducted disturbances	EN 55016-1-2 -	2004 <sup>2)</sup>
CISPR/TR 16-3 A1 A2	2003 2005 2006	Specification for radio disturbance and immunity measuring apparatus and methods Part 3: CISPR technical reports	- -	-
			`	5
1) Undated reference. 2) Valid edition at date of				

<sup>1)</sup> Undated reference.

<sup>&</sup>lt;sup>2)</sup> Valid edition at date of issue.

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# SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

# Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements

#### 1 Scope

This part of CISPR 16 is designated a basic standard, which specifies the methods of measurement of disturbance phenomena in general in the frequency range 9 kHz to 18 GHz and especially of conducted disturbance phenomena in the frequency range 9 kHz to 30 MHz.

#### 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.

IEC 60364-4 (all parts), Electrical installations of buildings – Part 4: Protection for safety

CISPR 14-1, Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission

CISPR 16-1-1, Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus

CISPR 16-1-2, Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Conducted disturbances

CISPR/TR 16-3:2003, Specification for radio disturbance and immunity measuring apparatus and methods – Part 3: CISPR technical reports

Amendment 1:2005 Amendment 2:2006