



# SLOVENSKI STANDARD

## kSIST FprEN 55022:2010

01-februar-2010

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Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement

Einrichtungen der Informationstechnik - Funkstöreigenschaften - Grenzwerte und Messverfahren

Appareils de traitement de l'information - Caractéristiques des perturbations radioélectriques - Limites et méthodes de mesure

**Ta slovenski standard je istoveten z: FprEN 55022:2009**

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**ICS:**

33.100.10	Emisija	Emission
35.020	Informacijska tehnika in tehnologija na splošno	Information technology (IT) in general

**kSIST FprEN 55022:2010**

**en**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**FprEN 55022**

November 2009

ICS 33.100.10

Will supersede EN 55022:2006 + A1:2007 + FprA2:2009

English version

**Information technology equipment -  
Radio disturbance characteristics -  
Limits and methods of measurement**  
(CISPR 22:2008, modified)

Appareils de traitement de l'information -  
Caractéristiques des perturbations  
radioélectriques -  
Limites et méthodes de mesure  
(CISPR 22:2008, modifiée)

Einrichtungen der Informationstechnik -  
Funkstöreigenschaften -  
Grenzwerte und Messverfahren  
(CISPR 22:2008, modifiziert)

This draft European Standard is submitted to CENELEC members for Unique Acceptance Procedure.  
Deadline for CENELEC: 2010-04-09.

The text of this draft consists of the text of CISPR 22:2008 with common modifications prepared by CLC/TC 210.

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, 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.

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## 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 the International Standard CISPR 22:2008, prepared by CISPR SC 1, Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers, together with the common modifications prepared by the Technical Committee CENELEC TC 210, Electromagnetic compatibility (EMC), is submitted to the CENELEC Unique Acceptance Procedure for acceptance as a European Standard.

This document will supersede EN 55022:2006 + A1:2007 + FprA2:2009.

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)

This draft European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directives 2004/108/EC and 1999/5/EC. See Annex ZZ.

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## Text of FprEN 55022

The text of this draft European Standard consists of the text of the International Standard CISPR 22:2008 with the following common modifications.

### COMMON MODIFICATIONS

#### 4 Classification of ITE

##### 4.2 Class A ITE

*Replace the 1<sup>st</sup> paragraph by:*

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. The following warning shall be included in the instructions for use:

#### 8 General measurement conditions

##### 8.4 Operation of the EUT

*Delete the final sentence in the 1<sup>st</sup> paragraph so that it reads:*

The operational conditions of the EUT shall be determined by the manufacturer according to the typical use of the EUT with respect to the expected highest level of emission. The determined operational mode and the rationale for the conditions shall be stated in the test report.

*Replace the last sentence of original 2<sup>nd</sup> paragraph by:*

Any mechanical activities should be performed.

#### 9 Method of measurement of conducted disturbance at mains terminals and telecommunication ports

##### 9.5 EUT arrangement

###### 9.5.1 General

*Replace the final paragraph with:*

Where alternative test methods are described in the following subclauses, compliance with the requirements of the subclause may be demonstrated by either or any of the methods described. Where there is a need to retest, tests shall be carried out as originally performed.

###### 9.5.2 Tabletop equipment arrangement

*In the last line of item a), add "Figure 4", before "Figure 5".*

###### 9.6.3.1 Voltage measurement at balanced telecommunication ports intended for connection to unshielded balanced pairs

*Add the following paragraph at the end of the subclause:*

Where normal functioning cannot be achieved because of the impact of the ISN on the EUT, the measurement shall be carried out using the method given in 9.6.3.5.

#### Annex G

*Delete Annex G.*

62 **Annex ZA**63 **Update** the references to the following CISPR publications:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CISPR 16-1-1 A1		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 A1	2007 2007
CISPR 16-1-4		Specification for radio disturbance and immunity measuring apparatus and methods Part 1-4: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Radiated disturbances	EN 55016-1-4	2007

64 **Add** the following references:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CISPR 16-2-3 A1	2003 2005	Specification for radio disturbance and immunity measuring apparatus and methods Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements	EN 55016-2-3 A1	2004 2005

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**Annex ZZ**  
(informative)

**Coverage of Essential Requirements of EC Directives**

71 This European Standard has been prepared under a mandate given to CENELEC by the  
72 European Commission and the European Free Trade Association and within its scope the  
73 standard covers essential requirements as given in Annex I Article 1(a) of the EC Directive  
74 2004/108/EC, and essential requirements of Article 3.1(b) (emission only) of the EC Directive  
75 1999/5/EC.

76  
77 Compliance with this standard provides one means of conformity with the specified essential  
78 requirements of the Directives concerned.

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80 **WARNING:** Other requirements and other EC Directives may be applicable to the products  
81 falling within the scope of this standard.

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Draft







CISPR 22

Edition 6.0 2008-09

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE  
COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

**Information technology equipment – Radio disturbance characteristics –  
Limits and methods of measurement**

**Appareils de traitement de l'information – Caractéristiques des perturbations  
radioélectriques – Limites et méthodes de mesure**

<https://standards.iteh.ai/catalog/standards/sist/f9555291-49c4-4ffb-9366-9bebc114e688/sist-en-55022-2011>

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE **XC**  
CODE PRIX

ICS 33.100.10

ISBN 2-8318-9960-5

SC CIS/I/Publication CISPR 22 (2008), Sixth edition/I-SH 01

**INFORMATION TECHNOLOGY EQUIPMENT –  
RADIO DISTURBANCE CHARACTERISTICS –  
LIMITS AND METHODS OF MEASUREMENT**

**INTERPRETATION SHEET 1**

This interpretation sheet has been prepared by CISPR subcommittee I: Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers, of IEC technical committee CISPR: International special committee on radio interference.

The text of this interpretation sheet is based on the following documents:

ISH	Report on voting
CISPR/I/299/ISH	CISPR/I/312/RVD

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

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**Introduction:**

SIST EN 55022:2011

At the CISPR SC I plenary, held on the 27<sup>th</sup> October 2007, a decision was taken to set the maintenance date for CISPR 22, Edition 6 to 2012. As a result the work identified within CISPR/I/279/MCR will not be started for the time being. At the subsequent meeting of CISPR SC I WG3 it was decided that certain items within the MCR would benefit now from further clarification and an interpretation sheet would be helpful to users of the standard, with the intent of including this information in a future amendment to the standard.

This information does not change the standard; it serves only to clarify the points noted.

CISPR SC I WG3 hopes that these clarifications will be of use to users and especially laboratories testing to CISPR 22, Edition 6.0. The document is based on the comments received on CISPR/I/290/DC.

**Interpretation:**

**1. Selection of Average detector**

CISPR 22 defines limits for radiated emissions at frequencies between 1 GHz and 6 GHz with respect to both average and peak detectors. CISPR 16-1-1 defines two types of Average detector for use above 1 GHz. For the limits given in CISPR 22 the appropriate average detector is the linear average detector defined in 6.4.1 of CISPR 16-1-1:2006 with its Amendments 1:2006 and 2:2007.

## 2. Measurement of conducted emissions on cabinets containing multiple items of equipment

Where the EUT is a cabinet or rack that contains multiple items of equipment that are powered from an AC power distribution strip and where the AC power distribution strip is an integral part of the EUT as declared by the manufacturer, the AC power line conducted emissions should be measured on the input cable of power distribution strip that leaves the cabinet or rack, not the power cables from the individual items of equipment. This is consistent with the requirements in 9.5.1 paragraph 1 and sub paragraph c).

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INTERNATIONAL ELECTROTECHNICAL COMMISSION  
INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

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**INFORMATION TECHNOLOGY EQUIPMENT –  
RADIO DISTURBANCE CHARACTERISTICS –  
LIMITS AND METHODS OF MEASUREMENT**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard CISPR 22 has been prepared by CISPR subcommittee 1: Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers.

This sixth edition of CISPR 22 cancels and replaces the fifth edition published in 2005, its Amendment 1 (2005) and Amendment 2 (2006). This edition constitutes a minor revision.

The document CISPR/1/265/FDIS, circulated to the National Committees as Amendment 3, led to the publication of the new edition.