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Oprema za informacijsko tehnologijo - Karakteristike občutljivosti za radijske motnje - Mejne vrednosti in merilne metode

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

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

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

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December 2010

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Supersedes EN 55022:2006 + A1:2007 + A2:2010

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)

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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.

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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

The text of the International Standard CISPR 22:2008, prepared by CISPR SC I, "Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers", together with common modifications prepared by the Technical Committee CENELEC TC 210, "Electromagnetic compatibility (EMC)", was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 55022 on 2010-12-01.

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.

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

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) 2011-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-12-01

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This 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.

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard CISPR 22:2008 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

4 Classification of ITE

4.2 Class A ITE

Replace the 1st 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 1st 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 2nd 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 this standard gives options for testing particular requirements with a choice of test methods, compliance can be shown against any of the test methods using the appropriate limit.

NOTE In any situation where the equipment is re-tested, the test method originally chosen should be used in order to seek consistency of the results.

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.

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Annex G

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Delete Annex G.

Annex ZA

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

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

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

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

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

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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

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**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:

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At the CISPR SC I plenary, held on the 27th 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

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

FOREWORD

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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.