Anis Oocun

## Audio/video, information and communication technology equipment - Environmentally conscious design

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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ingliskeelset teksti.	standard EN 62075:2008.
Standard on kinnitatud Eesti Standardikeskuse 28.04.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 28.04.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
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Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.
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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# EN 62075

April 2008

ICS 33.160

English version

## Audio/video, information and communication technology equipment -Environmentally conscious design

(IEC 62075:2008)

Equipements relatifs aux technologies de l'audio/vidéo, de l'information et de la communication -Conception éco-environnementale (CEI 62075:2008) Audio/Video, Informations- und Kommunikationstechnikgeräte -Umweltbewusstes Design (IEC 62075:2008)

This European Standard was approved by CENELEC on 2008-02-01. 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: rue de Stassart 35, B - 1050 Brussels

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## Foreword

The text of document 108/266/FDIS, future edition 1 of IEC 62075, prepared by IEC TC 108, Safety of electronic equipment within the field of audio/video, information technology and communication technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62075 on 2008-02-01.

The following dates were fixed:

<ul> <li>latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement</li> </ul>	(dop)	2008-11-01
<ul> <li>latest date by which the national standards conflicting with the EN have to be withdrawn</li> </ul>	(dow)	2011-02-01

NOTE The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

Annex ZA has been added by CENELEC.

## **Endorsement notice**

The text of the International Standard IEC 62075:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60065	NOTE Harmonized as EN 60065:2002 (modified).
IEC 60950-1	NOTE Harmonized as EN 60950-1:2006 (modified).
IEC 62018	NOTE Harmonized as EN 62018:2003 (not modified).
ISO 14001	NOTE Harmonized as EN ISO 14001:2004 (not modified).
ISO 14040	NOTE Harmonized as EN ISO 14040:2006 (not modified).

## 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.

Dublication	Veer	T:41e		Veer
Publication	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
ISO 3741	2	Acoustics - Determination of sound power levels of noise sources using sound pressure Precision methods for reverberation rooms	EN ISO 3741 -	1999 <sup>2)</sup>
ISO 3744	_1)	Acoustics - Determination of sound power levels of noise sources using sound pressure Engineering method in an essentially free field over a reflecting plane		1995 <sup>2)</sup>
ISO 3745	_1)	Acoustics - Determination of sound power levels of noise sources using sound pressure Precision methods for anechoic and hemi- anechoic rooms	-	-
ISO 7779	_1)	Acoustics - Measurement of airborne noise emitted by information technology and telecommunications equipment	EN ISO 7779	2001 <sup>2)</sup>
ISO 9296	_1)	Acoustics - Declared noise emission values o computer and business equipment	f -	-
ISO 11201	_1)	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Engineering method in an essentially free field over a reflecting plane		1995 <sup>2)</sup>
ISO 11469	_1)	Plastics - Generic identification and marking of plastic products	EN ISO 11469	2000 <sup>2)</sup>
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<sup>&</sup>lt;sup>1)</sup> Undated reference.

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

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### INTRODUCTION

Every **product** has an effect on the **environment**, which may occur at any or all stages of its **life cycle** – raw-material acquisition, manufacture, distribution, use, and disposal. These effects may range from low to significant; they may be short-term or long-term; and they may occur at the local, regional or global level (or a combination thereof).

The interest of customers, users, developers and other stakeholders in **environmental aspects** and effects of **products** is increasing.

Anticipating or identifying the **environmental aspects** of a **product** throughout its **life cycle** may be complex. The **environmental aspects** of a **product** have to be balanced against other factors, such as its intended use, performance, safety and health, cost, marketability, quality and regulatory requirements. It is important to consider the **product** functionality within the context of the system where it will be used.

The process of integrating **environmental aspects** into **product** design and development has to be continuous and flexible, promoting creativity and maximizing innovation and opportunities for environmental improvement. Environmental issues should be addressed in the policies and strategies of the **organization** involved.

Early identification and planning enable **organizations** to make effective decisions about **environmental aspects** that they control. This provides a better understanding of how their decisions will affect **environmental aspects** controlled by others, for example, at the raw-material and **parts** acquisition or **end of life** stages.

The purpose of this document is to help **designers** of **products** in the field of audio/video, information technology and communication technology to appropriately manage related environmental issues within the design process.

This sector specific document takes into account the publication of the first edition of IEC Guide 114 (2005), the publication of the second edition of ECMA-341 (2004), recent engineering best practices as well as current market and regulatory environmental **product** requirements.

## AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT – ENVIRONMENTALLY CONSCIOUS DESIGN

## 1 Scope

This International Standard applies to all audio/video, information and communication technology equipment marketed as final **products**, hereafter referred to as **products**.

Although this standard does not explicitly apply to individual components and subassemblies to be incorporated into final **products**, component **manufacturers** also need to consider this standard, to enable **manufacturers** using such components to meet the requirements herein.

Only the intended use of **products** as defined by the **manufacturer** is within the scope of this standard.

This standard specifies requirements and recommendations for the design of environmentally sound **products** regarding

- life cycle thinking aspects,
- material efficiency,
- energy efficiency,
- consumables and batteries,
- chemical and noise emissions,
- extension of product lifetime,
- end of life,
- hazardous substances/preparations, and
- product packaging.

This standard covers only criteria directly related to the environmental performance of the **product**. Criteria such as safety, ergonomics and electromagnetic compatibility (EMC) are outside the scope of this standard and covered by other standards.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. The latest edition of the referenced document (including any amendments) applies.

ISO 3741, Acoustics – Determination of sound power levels of noise sources using sound pressure – Precision methods for reverberation rooms

ISO 3744, Acoustics – Determination of sound power levels of noise sources using sound pressure – Engineering method in an essentially free field over a reflecting plane

ISO 3745, Acoustics – Determination of sound power levels of noise sources using sound pressure – Precision methods for anechoic and hemi-anechoic rooms

ISO 7779, Acoustics – Measurement of airborne noise emitted by information technology and telecommunications equipment

ISO 9296, Acoustics – Declared noise emission values of computer and business equipment

ISO 11201, Acoustics – Noise emitted by machinery and equipment – Measurement of emission sound pressure levels at a work station and at other specified positions – Engineering method in an essentially free field over a reflecting plane

ISO 11469, Plastics – Generic identification and marking of plastics products

## 3 Terms and definitions

For the purpose of this document the following terms and definitions apply.

#### 3.1

#### chemical emissions

chemical substances and particulate matter emitted from a product into the air

#### 3.2

#### consumable

user-replaceable **part** or piece of equipment that **manufacturers** place on the market for direct sale for use in equipment

[IEC Guide 114, definition 3.1]

NOTE **Consumables** include, for example, printer cartridges and photographic film, and not **parts** required for repairs or **product** upgrades.

### 3.3

#### designer

person responsible for the design and development of a product under the supervision of the manufacturer

NOTE See 3.12 for context with manufacturer.

#### 3.4

end of life

life cycle stage of a product starting when it is removed from a use stage

#### 3.5

#### energy efficiency

rational use of energy to achieve an intended application performance

More technically, it is the minimum quantity of energy required to deliver a functional output from a device.

NOTE A more precise definition is not applicable in this context as the output performance largely depends on the specific device.

EXAMPLE For power supplies the **energy efficiency** is defined as the percentage of output power per input power.

### 3.6

#### environment

surroundings in which an **organization** operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation

[ISO 14001:2004, definition 3.5]