



Brussels, 28 September 2009  
**M/452 EN**

**STANDARDISATION MANDATE TO CEN, CENELEC AND ETSI IN THE FIELD OF  
DIRECTIVES 1999/5/EC, 2006/95/EC AND 2001/95/EC FOR HEALTH AND SAFETY  
ASPECTS OF PERSONAL MUSIC PLAYERS AND MOBILE PHONES WITH A MUSIC PLAYING  
FUNCTION**

## **1. PURPOSE**

To develop standards satisfying the safety and health requirements of EU product legislation covering personal music players and mobile phones with a music playing function (for the music playing function), including the performance of earphones and headphones that are intended to be used with personal music players.

## **2. RATIONALE**

The regulatory framework governing the safety of this equipment is as follows:

- (1) The Radio and Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC<sup>1</sup> governs the health and safety aspects of radio equipment, including mobile phones. An increasing amount of handheld equipment is integrating communication functions, which brings them within the scope of this Directive; and
- (2) The Low Voltage Directive (LVD) 2006/95/EC<sup>2</sup> governing the health and safety of electrical equipment within certain voltage ranges lists the standards referred to below for other types of equipment. Most portable sound generating devices are outside the scope of the voltage ranges of this Directive. It however applies to devices using mains voltages.
- (3) The General Product Safety Directive (GPSD) 2001/95/EC<sup>3</sup> seeks to ensure that all consumer products are safe where this aspect is not regulated in any

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<sup>1</sup> OJEU L91, 7.4.1999, p. 10; [http://ec.europa.eu/enterprise/rtte/index\\_en.htm](http://ec.europa.eu/enterprise/rtte/index_en.htm)

<sup>2</sup> OJEU L374, 27.12.2006, p. 10; [http://ec.europa.eu/enterprise/electr\\_equipment/lv/index.htm](http://ec.europa.eu/enterprise/electr_equipment/lv/index.htm)

<sup>3</sup> OJEU L 11, 15.1.2002, p. 4,  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0095:EN:NOT>

specific Community harmonisation legislation. It thus applies to personal music players that are not covered by the R&TTE or LVD Directives, e.g. MP3 players without communications function.

European Standard EN 60065:2002 "Audio, video and similar electronic apparatus - Safety requirements" provides a presumption of conformity with the relevant essential requirements of the R&TTE and LVD Directives. This standard provides the technical detail to ensure the safety of users of personal music players with headphones or earphones. Giving the fading borderline between consumer electronics and information technology equipment, this standard is intended to merge with EN 60950 "Information technology equipment - Safety -- Part 1: General requirements" into a new standard (EN 62368). None of the standards currently prescribe any maximum pressure limit nor require any specific labelling in respect of noise emissions but require that a statement be put in the instruction manual to warn against adverse effects of exposure to excessive sound pressure. At least one Member State has introduced a maximum limit of 100 dB(A).

The Commission requested the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR)<sup>4</sup> to assess whether the health of citizens is appropriately protected by the current requirements of the above-mentioned Community Directives and the relevant European standards. SCENIHR concluded that personal music player (PMP) listeners risk both hearing and non-hearing problems, such as cardiovascular effects, cognition and masking effects. The most worrying is the conclusion that there is a risk of permanent hearing loss, if listening for more than one hour per day each week at high volume (exceeding 89 decibels) for at least 5 years<sup>5</sup>. Such usage patterns have become quite common, especially with youngsters. The maximum sound levels of personal music players on the market range between 80-115 dB(A) across different devices, and different earphones may increase sound level by up to 7-9 dB(A).

For the purposes of Article 4 of the General Product Safety Directive (GPSD), the safety requirement for personal music players, which constitutes the basis of this Mandate, was defined in the Commission Decision 2009/490/EC of 23 June 2009.

### **3. DESCRIPTION OF THE MANDATED WORK**

The Commission requests CEN, CENELEC and ETSI to prepare new standards or to review the existing standards to meet the requirements set out in this mandate.

Particular requirements for personal music players and mobile phones with a music playing function (for the music playing function) shall be specified taking full account of the scientific opinion referred to above. The safety requirement laid down in the above-mentioned Decision is that the standard(s) must ensure that under reasonably foreseeable conditions of use, such devices must be inherently safe and must not cause hearing damage.

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<sup>4</sup> Background on SCENIHR:  
[http://ec.europa.eu/health/ph\\_risk/committees/04\\_scenih/04\\_scenih\\_en.htm](http://ec.europa.eu/health/ph_risk/committees/04_scenih/04_scenih_en.htm)

<sup>5</sup> Text of the Opinion:  
[http://ec.europa.eu/health/ph\\_risk/committees/04\\_scenih/docs/scenih\\_o\\_018.pdf](http://ec.europa.eu/health/ph_risk/committees/04_scenih/docs/scenih_o_018.pdf)

Account should be taken of technical features that can improve the safety of use of personal music players such as earphone design, noise cancelling features, automatic sound level reduction and parental controls.

In particular, as set out in the Decision, the following aspects are to be dealt with in a satisfactory manner with respect to all relevant types of personal music players, including the performance of earphones and headphones that are intended to be used with personal music players :

- (1) Exposure to sound levels shall be limited to avoid hearing damage. At 80 dB(A) exposure shall be limited to 40 hours/week, whereas at 89 dB(A) exposure shall be limited to 5 hours/week. For other exposure levels a linear intra- and extrapolation applies. Account shall be taken of the dynamic range of sound and the reasonably foreseeable use of these devices; and
- (2) Adequate warnings on the risks involved in using the device and to the ways of avoiding them and information to users in cases exposure poses a risk of hearing damage. Information should also be provided when the original set of earphones is replaced with another type and this causes higher unsafe sound levels.

The safe exposure levels defined above shall be the default settings on products. Higher exposure levels can be permitted provided that they have been intentionally selected by the user and the product incorporates a reliable means to inform the user of the risks.

#### **4. PROPOSED SCHEDULE**

2 months after acceptance	Time schedule for the execution of the mandate
8 months after acceptance	Presentation of a full work programme of standards to be developed
24 months after acceptance	Adoption of standards for listing in the Official Journal of the European Union

#### **5. ALIGNMENT WITH OTHER INTERNATIONAL WORK**

Where appropriate, alignment with equivalent activities in the ITU and in ISO/IEC should be ensured. Due account should be taken of regulations and draft regulations adopted in other economies so as to ensure a global market for equipment.

#### **6. STANDSTILL**

Acceptance of this mandate by the responsible standardisation organisation starts the standstill period referred to in Article 7 of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998

#### **7. PUBLICATION IN THE OFFICIAL JOURNAL**

The titles of the standards developed shall be forwarded to the Commission in the official languages of the European Union.

## **8. BODIES TO BE ASSOCIATED**

The industry representatives, such as DIGITALEUROPE, as well as consumer and user representatives, such as ANEC (European association for the co-ordination of consumer representation in standardisation) and RNID (the Royal National Institute for Deaf People), should be invited to take part in the mandated work.