

SAFEGUARDS

SGS CONSUMER TESTING SERVICES

ELECTRICAL & ELECTRONICS

NO. 057/11 MARCH 2011

NEW SOUND LEVEL SAFETY STANDARDS FOR PERSONAL MUSIC DEVICES

The publication at the beginning of 2011 of the amended versions of the 'Safety of information technology equipment' standard (EN 60950-1:2006) and "Safety of audio, video and similar electronic apparatus" standard (EN 60065:2002), means manufacturers now have to ensure their personal music devices comply with the newly prescribed sound level limits.



On October 13, 2008, the EU Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) published the finding that permanent hearing damage can be caused by regularly listening to personal music players at a high volume over a sustained period of time. In response to this, the European Commission set a mandate for the development of health and safety standards ensuring that personal listening devices would be inherently safe under conditions that could be considered reasonably foreseeable. This mandate, set in September 2009 and accepted by CENELEC, was for the creation of a standard applicable to personal music players and mobile phones with a music playing function.

CENELEC's execution of the mandate resulted in a standard based on an 85 dBA sound level limit. While this is considered a safe level for sustained listening under foreseeable conditions of use, the standard does allow for devices to include a function to override this limit to allow listening up to 100 dBA. The standard specifies that volume increases over 85 dBA can only be activated after a user has been provided with a warning about the risks of high volume listening. This warning must then be repeated every 20 hours that the device remains in a high volume mode. For equipment that is specifically designed to be used by young children, a limit of 80 dBA will be applicable.

SGS

For the purposes of the standard, personal music players include those devices that are designed to allow a user to listen to recorded or broadcast sound or video, primarily using headphones or earphones, in a way that allows the user to walk around while the device is in use. The standard will not be applicable to such devices when headphones are not connected, such as when devices are plugged in to an external speaker or amplifier. The requirements furthermore do not apply to hearing aids or to professional equipment sold through specialist channels. Analogue players lacking any kind of digital sound signal processing will be exempted from the standard up until the end of 2015.

The specifications were formulated by a working group composed of experts and representatives from a range of bodies, including certification bodies and manufacturers, consumer interest organizations, research institutes and market surveillance authorities. The working group, convened and overseen by CENELEC Technical Committee 108X on 'Safety of electronic equipment within the fields of Audio/video, Information Technology and Communication Technology', delivered the resulting specification in the form of amendments to two existing product safety standards. This was followed, late in 2010, with a formal vote by the National Standardization Committees concluding the amendment of 'Safety of information technology equipment (EN 60950-1:2006)' and 'Safety of audio, video and similar electronic apparatus' (EN 60065:2002).

Following publication of these amendments at the start of 2011, work on stage 2 of the EC mandate is now under way. This work will oversee the development of standards for personal music devices featuring 'smart' hearing protection, a technology allowing devices to protect users against excessive sound pressure levels by actively monitoring the sound dose that the user is receiving.



Meanwhile, the initial standards amendments will be phased in over a 24 month period. It is expected that by the end of this period, industry will have started to apply the standard to products sold within the EU. Implementation will be facilitated over this period by the publication of the two amendments as national standards within EU member states.

The SGS global team of product safety experts and our network of consumer electronics labs can support you with the knowledge and testing required to ensure your products fulfill all relevant market requirements around the world.

FOR ENQUIRIES:

Global Competence Support Centre: gccsc@sgs.com

FI—Tom Torn, Tel: +358 9 6963475 or Tom.Torn@sgs.com

Asia – Hong Kong. Tel: +852 2334 4481 Fax: +852 2144 7001 mktg.hk@sgs.com

Australasia – Perth. Tel: +61 (0) 3 9790 3418 Fax: +61 (0) 3 9701 0988 au.cts@sgs.com

Europe – London —UK. Tel: +44(0) 20 8991 3410 Fax: +44 (0) 20 8991 3417 gb.cts.sales@sgs.com

Africa & Middle East – Turkey. Tel: +90 212 368 40 00 Fax: +90 212 296 47 82 sgs.turkey@sgs.com

Americas – USA. Tel: +1 973 575 5252 Fax: +1 973 575 7175 uscts.inquiries@sgs.com

www.sgs.com/cts Global Competences Support Centre: gccsc@sgs.com

If you wish to unsubscribe to this technical bulletin, go here: [Unsubscribe](#)

© 2011 SGS SA. All rights reserved. This is a publication of SGS, except for 3rd parties' contents submitted or licensed for use by SGS. SGS neither endorses nor disapproves said 3rd parties contents. This publication is intended to provide technical information and shall not be considered an exhaustive treatment of any subject treated. It is strictly educational and does not replace any legal requirements or applicable regulations. It is not intended to constitute consulting or professional advice. The information contained herein is provided "as is" and SGS does not warrant that it will be error-free or will meet any particular criteria of performance or quality. Do not quote or refer any information herein without SGS's prior written consent.