

EUROPEAN COMMISSION

ENTERPRISE DIRECTORATE-GENERAL

Single Market: regulatory environment, standardisation and New Approach Mechanical and electrical engineering, and radio and telecom terminal equipment industries

> Brussels, 03 February 2004 ENTR G3/GH D(2004)

M 346 EN

Mandate in the field of the Low Voltage Directive 73/23/EEC

1 Title

Standardisation mandate addressed to the European Standards body CENELEC with respect to surface temperatures of accessible non-functional surfaces of electrical equipment included in the scope of the Low Voltage Directive 73/23/EEC (LVD)¹.

2 Purpose

- To Provide a European harmonised standard or a guidance document defining basic requirements for the protection of people against risks associated with excessive temperatures of surfaces that are likely to be touched and where such temperatures are not necessary for the intended functioning of the equipment. The standard should take into account the different temperature limits for different material, and different reaction times for different types of persons (e.g. children and elderly persons). The proposed harmonised standard relates to electrical equipment that is covered by Directive 73/23/EEC. Once developed as a harmonised standard it will provide for a presumption of conformity to the relevant requirements covered by Article 2 of Directive 73/23/EEC.
- To review and amend all European harmonised standards under the LVD regarding risks associated with excessive temperatures of non-working functional surfaces that are likely to be touched.

3 Rationale

A number of types of electrical equipment present risks regarding excessive temperatures of surfaces, in particular surfaces which are not functional surfaces (for the purpose of this mandate called "non-functional surfaces"). Touching these surfaces may lead to serious skin burn.

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¹ Council Directive of 19 February 1973 on the harmonisation of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits 73/23/EEC (OJ No L77, 26.3.1973) as amended by Directive 93/68/EEC, OJ No L220, 30.8.1993, p. 1.

Where necessary, manufacturers have to address the risks with respect to excessive temperatures of accessible non-functional surfaces, when establishing compliance of electrical equipment with the Low Voltage Directive. In the absence of a European harmonised standard, which addresses these risks, manufacturers need to perform a risk analysis and carry out a risk assessment in order to ensure that equipment is designed and manufactured in such a way as to preferably avoid or otherwise to minimise, as far as is reasonably possible, the above mentioned risks.

CENELEC has prepared European standards for many types of electrical equipment. In these standards, surface temperature limit values vary considerably, including some cases where this aspect has not been considered. The surface temperature, which may cause skin burn, depends mainly on the material and the texture of the surface and on the period of contact of the skin with the hot surface. Therefore, it is desirable to harmonise the approach to surface temperature limit values in all European harmonised standards providing a presumption of conformity to the LVD. This can only be achieved if horizontal standards exist, which are referred to and are used when preparing or amending product standards.

4 Description of the mandate

- 1. The Commission requests CENELEC to develop a European harmonised standard or a guidance document to assist product standardisation committees and manufacturers to assess the risks associated with excessive temperatures of surfaces that are likely to be touched. In particular, limit values for these surfaces shall define or referred to based on scientifically approved ergonomics data. Moreover, the standard or the guidance document should describe a procedure for risk assessment which takes into account the necessary information to be gathered, including measurement of the surface temperature, selection of the burn threshold and evaluation of the risks.
- 2. The Commission requests CENELEC to review and amend as necessary the existing harmonised standards listed under the LVD with respect to the risks associated with excessive temperatures of non-functional surfaces.

Where possible the above tasks can be done simultaneously.

The committees assigned for the above tasks shall duly take into account the work already done within CEN and ISO (EN 563, EN 13202 and ISO/AWI 13732-1) in order to avoid contradiction and confusion for users of standards. The committees will take account of scientifically approved ergonomics data.

5 Execution of the mandate

In carrying out the mandate, appropriate co-ordination and liaison with relevant activities and organisations shall be established at international, national and regional level (CEN, CENELEC, IEC, ISO) to ensure coherence. As a minimum this shall include the work carried out in the technical committees ISO/TC 159 and CEN/TC 122.

Within three months after the date of acceptance of this mandate, CENELEC shall present the time schedule envisaged for its execution to the Commission.

6 Bodies to be associated

Relevant industry and business associations, market surveillance authorities and the European association for the co-ordination of consumer representation in standardisation (ANEC).