

## **New CENELEC standard for candle flame resistance for TV sets in Europe**

On 22<sup>nd</sup> April 2009, the Technical Board of CENELEC passed the Standard EN 60065 Amendment 11 for adoption under the Low Voltage and Radio and Telecommunications Terminal Equipment Directives. The date of implementation of the standard across the European Union is 1<sup>st</sup> July 2010. This standard contains an element of particular significance for manufacturers of TV sets for the EU market : it will require television sets to be designed in such a way that the chance of ignition and the spread of fire due to an accidental candle flame is minimized.

### **Link between CENELEC standards and European Union Directives**

The “essential requirements” of European Union Directives are mandatory whereas the “harmonized standards” adopted by CENELEC are voluntary. However, there is an important regulatory link between the standards and Directives: if a manufacturer manufactures his equipment in accordance with a harmonized standard, he is deemed to have complied with the essential requirements of the corresponding Directive under which the standard was adopted. This principle is referred to as the “presumption of conformity.”

In this case, if a TV set is manufactured in accordance with the candle flame resistance requirements in the EN 60065 standard, it would be presumed to conform with the essential requirements or safety objectives of the Low Voltage Directive.

The Technical Specification associated with the above Standard (TS 62441) specifies the precise requirements as they apply to a TV set. In essence, the candle accessible area of a TV set (assumed to be combustible), if exceeding 300 grams in weight, should be made of V-1 (**or higher**) class material or should not exhibit flaming characteristics for more than 3 minutes. The “candle accessible area” is defined in TS 62441 as well. V-1 refers to a test specification for plastics flammability of Underwriters Laboratories (UL 94) and represents a high degree of fire protection. V-1 indicates that the material was tested in a vertical position and self extinguished within a specified period after the ignition source was removed.

For further details, please refer to the following documents, available through the CENELEC web store:

- CENELEC EN 60065:2002/A11 : 2008 “Audio, video and similar electronic equipment – Safety requirements”
- CENELEC Technical Specification\*, CLC/TS 62441 : 2007 “Accidentally caused candle flame ignition for audio, video, communication and information technology equipment”

*BSEF is the international organisation of the bromine chemical industry, whose remit is to inform stakeholders and commission science on brominated chemicals such as flame retardants.*



## IEC and CENELEC

	IEC	CENELEC
No: of countries	56 Full Members 20 Associate Members	30 Full Members 9 Affiliate Members
Main standards of interest	IEC 60065 (Audio visual eqpt) IEC 60950 (ICT eqpt) IEC 62368 (New Hazard based standard)	EN 60065 EN 60950 EN 62368
Main Committees of interest	TC 108	TC 108 X
Standards development process	Preparatory stages > Enquiry stage (CD) > Committee stage (CDV) > Approval stage (FDIS) > Publication	Draft stage > Enquiry stage > Voting stage > Publication NOTE : Parallel vote with IEC during FDIS stage
Voting system	Greater than 2/3 of voting countries in favour, Not greater than 25 % of voting countries against	Weighted votes depending on country's stature in EU Majority of National Committees in favour Minimum 71 % of the votes cast are positive
Obligation of members to adopt standards	Voluntary, however implementation by Member Countries facilitates international trade	Voluntary, however can be used by Member States to demonstrate compliance (see above box)

NOTE : Although resolved at the CENELEC level, the issue of candle flame resistance is still under debate at the IEC level. In 2008, the requirement for external ignition was voted down in three standards covering AV and ICT equipment. A Joint Task Force, established under the jurisdiction of TC 108 and comprising the relevant stakeholders, met in March/April 09 to resolve this issue and allow the standard to move ahead. It was decided at this meeting to go forward with the requirement only for TV sets where data is available and indicate a problem. This proposal has been put forward to the Standardization Management Board (SMB), the governing body of the IEC. On endorsement from the SMB, the requirement will be re-introduced in the respective standards and put to the IEC Member Countries for a vote, probably during the course of 2010.

\* It is expected that CLC/TS 62441 will in the future be replaced by an International Standard.

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