EU Commissioner for Environment
Mr. Janez Potočnik
European Commission
B – 1049 Brussel
België

Arnhem, 8 April 2011

Our ref: EERA – FR – 2011

Dear Mr. Potočnik,

The European Electronics Recyclers Association (EERA) is a non-profit organization that promotes the interest of recycling companies who are treating waste electrical and electronic equipment (WEEE) in Europe. EERA members include the largest electronics recyclers in Europe who, together process over 1.8 million tons of WEEE. EERA is directly concerned by the ongoing developments of the revision of the WEEE Directive and EERA has made several constructive proposals for this revision. EERA is also interested in the debates around the revision of the Directive for Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS). More information about EERA can be found on the website: www.eera-recyclers.com.

With this letter we wish to draw your attention to a new standard published by CENELEC. Unfortunately EERA was only informed about this new standard after it has been implemented.

The following text is taken from the CENELEC brochure publishing this new standard:
On 22nd 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 1st 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.

The press-release of CENELEC explains the link between this standard and EU Directives as follows:

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.

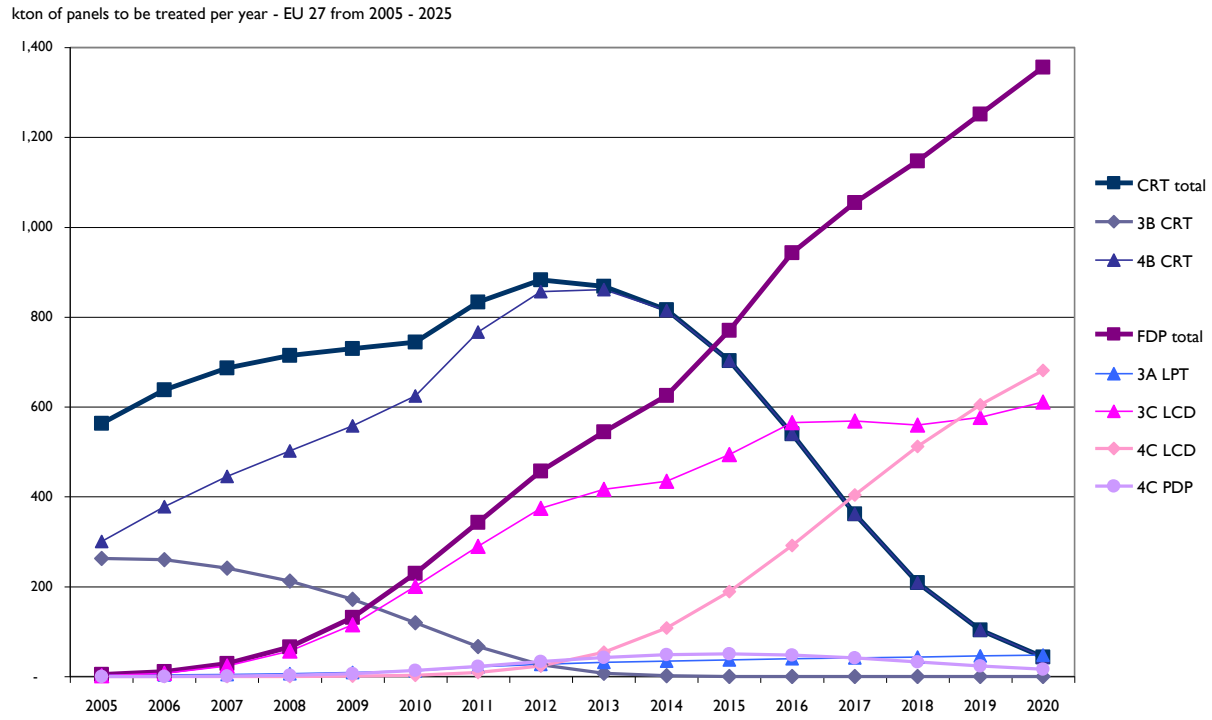
And the document of CENELEC continues by stating:

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"*

EERA understands perfectly why a standard for flame retardancy may be required for the housing of Cathode Ray Tubes (CRT screens) as these screens have internal heat sources. Apart from the business objectives of the flame retardant industry, who have chaired the committee for this standard, we fail to see why Flat Displays Panel – FDP screens, which do not have internal heat sources, require flame retarded housing, particularly as this will prevent the recycling of these plastics coming from WEEE for re-use into high tech applications. This standard will thus have an impact on the recycling targets of the WEEE Directive.

The current estimation of the end-of-life treatment of CRT and FDP screens is shown in the graph below (source EERA: Environmental analysis of CRT-glass processing options 2008):



By 2020 it is estimated that the EU end-of-life treatment of FDP screens will amount to close to 1400 thousand MT's and this will involve over 250 thousand MT's of plastics (see graph above).

If these plastics could be recycled for use in new E&E equipment, this would represent annual CO2 savings equivalent to a medium sized European city of some 75 000 people (a reduction of some 3 MT's of Carbon Dioxide emission per MT of plastics recycled).

Although the flame retardant industry have started an initiative to investigate the recyclability of plastics with flame retardants (after this standard was implemented), it is practically certain that these plastics cannot be recycled for re-use (Cradle-to-Cradle) in new electronic appliances. It is highly questionable that closed-loop recycling of these flame retarded plastics will be possible at all, particularly as many OEM's change over to phosphorous based flame retardants under the pressures from NGO's and changing legislations such as RoHS and these plastics are less recyclable according to recycling studies and even statements from the additive suppliers themselves. Furthermore, most plastics from CRT recycling with (brominated) flame retardants are mainly traded and exported to countries where treatment in line with the Annex II of the WEEE Directive cannot be proven because they contain the FR additives. If flat panel displays did not require FR additives they would more likely be recycled in a compliant way.

Perhaps, most importantly, this standard will drive manufacturers to using much more expensive and complicated materials (PC-ABS with phosphorous based FR additives). This is against the growing trend towards "green chemistry" and other standards such as Blue Angel, EPEAT, TCO, Green Screen, etc. that encourage the use of simpler, less toxic and more recyclable materials such as standard HB FR grade ABS and HIPS, which is used in flat panel displays in most other parts of the world. Forcing manufacturers in Europe to use these FR additives will make them less green and less competitive.

Have the environmental and safety trade-offs between the likelihood of candles igniting a flat screen display versus the certain use of these more complicated chemicals been assessed? For example, the recycling industry was never consulted before releasing this standard. And are there similar standards for wood furniture, window coverings, lamps and other objects even more likely to come into contact with candle flames?

This is a huge loss of potential raw materials for the electronics industry and EERA is of the opinion that the business and safety aspects of this new CENELEC standard are in no relation with environmental damage that will be the consequence of these plastics not being recycled and the use of plastics requiring a complicated additive, which must also be manufactured and disposed of at end-of-life.

We therefore request you to review this standard from an environmental perspective in order to balance the interests of business objectives and safety with those of the carbon footprint and the environment, as we believe that this new CENELEC standard will lead to more harm than good.

We look forward to hear from you.

Regards,

Norbert Zonneveld
Executive Secretary of EERA