



**EUROPEAN COMMISSION**  
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Sustainable Growth and EU 2020  
Sustainable Industrial Policy and Construction

Brussels, 4 October 2012  
ENTR/B1/

## **WORKING DOCUMENT FOR THE ECODSIGN CONSULTATION FORUM ON SOUND AND IMAGING EQUIPMENT (ENTR LOT 3), 9 NOVEMBER 2012**

This Working Document is not a Draft Ecodesign Regulation for the product group "Sound and Imaging Equipment" (video players and recorders, projectors, game consoles). Rather, it is a discussion note: (1) explaining the state of play; and (2) introducing voluntary courses of action for games console by the industry sector.

### **1. STATE OF PLAY**

Background: The Ecodesign Directive 2009/125/EC establishes the framework for the setting of ecodesign requirements for energy-related products. The first Working Plan of the Ecodesign Directive adopted on 21 October 2008 lists the product groups which have been considered as a priority for implementing measures in 2009-2011. This list includes 'sound and imaging equipment'. A preparatory study for this product group was launched in January 2009. The final report of the study was published in December 2010, on the dedicated Project Webpage: <http://www.ecomultimedia.org/>. The study concluded that sound and imaging equipment meets the criteria of Article 15 of the Ecodesign directive, i.e., that the product group presents a significant volume of sales on the market, has a significant environmental impact and energy consumption, and presents a significant potential for improvements. The preparatory study identified at that time an estimated energy saving potential of around 15 TWh/year in 2020.

Since the finalisation of the preparatory study, the Commission has followed the developments in the market for consumer electronics in general. The experience with other products like televisions has shown that both the technological development and market developments and consumer behaviour have been quite different from what was expected in preparatory studies. Technological developments are occurring often at such a fast pace that many products from the leading producers would have met the projected energy efficiency levels even in the absence of Ecodesign requirements.

Recently, the Commission has launched an Impact Assessment Study to support the preparation of its Impact Assessment, which is mandatory for all Commission proposals. One task of this study is also to reassess and update the forecasts of the preparatory study. The work is ongoing, and includes a public stakeholder consultation. The first preliminary results of the Impact Assessment Study give the following picture:

- Video Players and Recorders: A re-assessment of the analysis of the preparatory study completed in 2010, which estimated a highest saving potential of up to 10.6 TWh/year in 2020, has concluded that the market for video players and recorders is in more rapid decline than previously thought. There is a shift from disc-based systems to internet-connected and other systems, from hard disk drive to USB-powered solutions, and also a shift toward media streaming, removing the need for a hard disk altogether. **Already in the mid-term by 2025**, it is forecast that there will be no new sales of video recorder/player products, except for small volumes of niche, high-end products.
- Projectors: The market for projectors with a saving potential of 0.6 TWh/year is also in more rapid decline than was previously thought. Indications are that projectors in many applications will continue to be replaced by widescreen televisions, which can now be as bright as projectors. It is considered likely that sales of projectors will continue to decrease until there are no new sales of projector products other than those required for large auditoriums and e-cinemas by 2025. The improvement potential for the main component, i.e., the lamp, is furthermore limited. Ultra high-pressure (UHP) discharge lamps have little scope for cost-effective step changes in efficiency levels, and the efficiency developments for solid state lamp (SSL) systems using light-emitting diodes (LED) are slower than predicted.
- Video game consoles: The energy saving potential was estimated in the preparatory study as up to 3.7 TWh/year. Although recently a decrease in sales of the current generation of game consoles has been observed, it has been concluded from present data that the market for game consoles is continuing to grow, with more products held in stock, with increasing functionalities, such as motion-detecting peripheral devices, expanding the potential audience for game consoles. Game consoles were identified as one of the largest category of energy use in households (besides the TV) in the home entertainment area. Sales of the next generation of consoles, anticipated to be on the market in around 2014, are expected to exhibit similar sales patterns and volumes as witnessed for the current generation of high definition game consoles.

The Impact Assessment Study will refine the preliminary findings, and will include a public stakeholder consultation, starting in October 2012. The questionnaire will be available on CIRCA, and the DG ENTR website link to the online questionnaire will be: [http://ec.europa.eu/enterprise/policies/sustainable-business/ecodesign/product-groups/sound-imaging/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sustainable-business/ecodesign/product-groups/sound-imaging/index_en.htm). The study will run until the end of 2012, and will support the Commission's subsequent Impact Assessment.

Subject to the result of this Impact Assessment, and further opinion exchange, the preliminary results suggest to pursue ecodesign parameters for game consoles only.

***Members of the Consultation Forum are invited to comment on the state of play for this product group. They are also invited to contribute to the Impact Assessment study.***

## 2. INTRODUCTION INDUSTRY PROPOSAL

Background: The Ecodesign Directive gives priority to alternative courses of action, such as self-regulation, by the industry sector(s) concerned (recital 18). As a basic condition, such action needs a high level of environmental ambition, and needs to demonstrate that it is likely to deliver the policy objectives faster, or in a less costly manner, than mandatory requirements. Proposals for voluntary agreements (self-regulation) are recognised as a valid alternative to regulation if their assessment against the criteria of Annex VIII is deemed satisfactory (Article 17), taking into account the feedback from the Consultation Forum.

The product group 'game consoles' is unusual, in that none of the manufacturers is based in Europe, and that only three manufacturers represent this entire product sector. Therefore, the approach described in this paper is also unique. The manufacturers of game consoles presented a draft proposal for a voluntary course of action in August 2012, and they confirmed that it could be circulated publicly forthwith, and could form part of the official consultation process. In a nutshell, the industry proposal is detailed, and contains defined energy performance requirements, including test procedures, measurements and verification test methods. The proposed main requirements are two tiers of power caps for two operational modes, (a) the media playback and (b) the navigation mode. The proposed thresholds for both modes are 90W for 2013 and 70W for 2017. The proposal is enclosed with this note.

***In accordance with Article 18 of the Ecodesign Directive, it is a task of the Consultation Forum to assess voluntary agreements and other self-regulation measures. Members of the Consultation Forum are therefore invited to assess the 'Draft Outline proposal to further improve the energy consumption of Game consoles'.***

The Commission would like to make some additional remarks to be taken into account when assessing the initiative:

General and procedural:

- 1) The Commission had several meetings with the three manufacturers in the industry sector concerned, namely Nintendo, Microsoft, and Sony. The industry sector believes that an implementing ecodesign measure is not justified, and considers a voluntary self-commitment to be the best way to achieve energy savings for game consoles. The latest version of the industry proposal is silent on its purpose as to whether or not it comprises a self-regulation, within the meaning of Article 17 and Annex VIII of the Ecodesign Directive.
- 2) At this stage, the industry proposal, with the heading "draft outline proposal", is not considered by the Commission as a 'Voluntary Agreement' ready for immediate recognition. However, the Commission considers it as a draft sufficient to commence the evaluation of the admissibility of this initiative as an alternative to an implementing measure, and has decided to submit it to the Consultation Forum.
- 3) All self-regulations must be assessed at least on the basis of the criteria in Annex VIII to the Directive. The parties of the Consultation Forum need to contribute to this assessment using these criteria as their reference.
- 4) One contested question is if this product group really meets all the criteria specified in Article 15 of the Ecodesign Directive, notably whether or not game consoles have a significant environmental impact, and improvement potential. Where a product meets the criteria, it must

be covered either by legislation or via self-regulation to the same extent, which therefore excludes a 'no action' option.

- 5) The Commission will consider the industry proposal as an option in the already-commenced Impact Assessment process, and has asked the external consultants to take it into account in the Impact Assessment study. The industry proposal is also included in the public stakeholder consultation.

#### Technical:

- 1) The manufacturers disagreed with some findings of the preparatory study. The manufacturers provided data comprising a corrected analysis, and their own assumptions, including their estimation of an energy savings potential of some 30% less, at about 2.6 TWh/year (see also the Annex to the proposal: "Energy Savings").
- 2) The manufacturers argue that the energy efficiency of the main operating status of a console, i.e., the operational game play mode cannot be regulated, due to the particular console architecture. The manufacturers also argue that approaches suitable for computers, such as 'TEC' (Total Energy Consumption) allowances are also not applicable, and that energy consumption restrictions of the game play mode would compromise the important high and progressive user performance. Instead, the manufacturers propose to regulate other modes than the game play mode, considering that game consoles are a multi-function media device.
- 3) The level of ambition of the proposed self-commitment has to be assessed. The main questions for this assessment are: (i) whether the overall energy performance of the product can be represented by the proposed operational modes; (ii) if the proposed power caps and its timing are adequate; and (iii) whether other significant environmental aspects need to be considered.

#### International:

- 1) No specific regulations on the performance of game consoles in other countries or regions are known. The United States is discussing a draft test method and performance requirements for EnergyStar, and in Australia a possible voluntary agreement is being considered, with the same industry representatives. All discussions came down in 2012 to the same approach with requirements on the two operational modes media playback/streaming and the navigation mode, as proposed to the Commission. However, discussions regarding the power cap levels for these two modes are ongoing.
- 2) As none of the manufacturers are based in Europe, new ways could also be pioneered to trigger action during the design phase. For example, mechanisms with improved transparency could be specified, which would allow the monitoring of continuous improvements of products, i.e. by making publicly available the power consumption of all models in the relevant modes.
- 3) The potential for an international agreement on game console energy efficiency is being explored, possibly brokered by the Australian Department of Climate Change and Energy Efficiency (DCCEE) under the International Energy Agency banner within the 4E - Efficient Electrical End-Use Equipment Implementing Agreement. An international agreement could involve as a minimum, for example, the European Commission, the Australian DCEEE and the Californian Energy Commission, which are currently involved in the discussion.