



EUROPEAN COMMISSION  
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL  
Industrial policy and economic reforms  
**Sustainable Industrial Policy**

Brussels, 15 February 2010

## **ECODESIGN PRODUCT GROUP: SOUND AND IMAGING EQUIPMENT**

### **Subject: Stakeholder Questionnaire on Audio Equipment**

Dear Audio Equipment Stakeholder,

Sound and imaging equipment is a product group of the Ecodesign Working Plan 2009-2011<sup>1</sup>. An Ecodesign preparatory study was launched beginning of 2009<sup>2</sup>, analysing whether and which ecodesign requirements should be set for sound and imaging equipment (DVD/video players and recorders, video projectors, video game consoles).

Stakeholder comments are referring to audio equipment, as a potential further product to be considered within the product group of sound and imaging equipment. We invite stakeholders to respond to this questionnaire to analyse the possible environmental impact and improvement potential of audio equipment.

This questionnaire was introduced at the second stakeholder meeting of the above mentioned Ecodesign preparatory study in Brussels on 8 February 2010. It is planned to present the result of the questionnaire at the final stakeholder meeting tentatively scheduled for May 2010. Interested stakeholders may register at the ecomultimedia website.

Please send your questionnaire, a response to specific parts of it, related data or any comment on audio equipment **until latest 15 April 2010**, to: [entr-ecodesign@ec.europa.eu](mailto:entr-ecodesign@ec.europa.eu) with subject line "audio equipment".

Further information on the ecodesign process and sound and imaging equipment is available at [http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/product-groups/sound-imaging/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/product-groups/sound-imaging/index_en.htm)

ENTR Ecodesign Team

*Disclaimer: The views expressed in the enclosed questionnaire are purely those of the ENTR ecodesign team and may not in any circumstances be regarded as stating an official position of the European Commission. The European Commission is not responsible for any use that may be made of the enclosed questionnaire.*

<sup>1</sup> Communication from the Commission to the Council and the European Parliament, Establishment of the working plan for 2009-2011 under the Ecodesign Directive, COM(2008) 660 final. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0660:FIN:EN:PDF>

<sup>2</sup> <http://www.ecomultimedia.org/>

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## 1. Company/Organisation

### Contact details:

Detail	Please enter your details below
<b>Title</b>	
<b>First Name</b>	
<b>Second Name</b>	
<b>Company/Organisation Name</b>	
<b>Type of Organisation<sup>1</sup></b>	
<b>SME?</b>	
<b>Job title/Position</b>	
<b>Address</b>	
<b>Postal Code</b>	
<b>Country</b>	
<b>Telephone Number</b>	
<b>Email</b>	
<b>Web</b>	

<sup>1</sup> Manufacturer, Importer, Distributor, Industry Association, Consumer group, Environmental NGO, Other

## 2. Definition: Audio Equipment

Please provide your definition of audio equipment (or a link to a definition). The definition should preferably cover any audio products and be based on functions:

Please provide any comments on the definition:

Please justify, if any audio product should be exempted from the definition, and provide, if possible, an objective criterion for such an exemption from the definition of audio equipment above:

### 3. First Screening

Please provide input data for a first screening of the volume of sales, environmental impact and potential for improvement of audio equipment as referred to in Article 15 of the Ecodesign Directive 2009/125/EC<sup>3</sup>. Such a first screening to identify significant environmental impacts and potential for improvement was carried out for the other products of sound and imaging equipment, see <http://www.ecomultimedia.org/what-s-new/> If you are not able to provide data, are you able to suggest other data sources?

**You may add further audio products or revise the audio products listed in the tables below.**

#### Volume of sales

Please indicate volumes of sales for all audio equipment placed on the EU market (27 EU Member States). EU-27 stock is the stock of products already in use in 27 EU Member States, also known as installed base. It may be estimated by multiplying the EU-27 sales with the product life time.

EU-27 sales = EU production sold – EU import + EU export

Please enter units (pieces), NOT sales values in €. If you have sales data only available for certain Member States or other years, please indicate.

Audio equipment	EU-27 stock [units in 2009]	EU-27 sales [units in 2009]			EU-27 sales [units in 2014]			EU-27 sales [units in 2020]			Source
		EU Production sold	EU Import	EU Export	EU Production sold	EU Import	EU Export	EU Production sold	EU Import	EU Export	
Amplifier											
Speaker, incl. subwoofer											
Home theatre system											
Audio digital signal processor											
Radio											
Tuner											
Other:											
Other:											

<sup>3</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:285:0010:0035:EN:PDF>

## Environmental impact

Energy is considered as key environmental impact for audio equipment. The calculation of the actual energy consumption per product (kWh/year) should be based on the actual power consumption in the different modes (standby, sleep, idle, on mode) and the average use patterns.

Audio equipment	Standby Power Consumption [Watt]	Average use pattern – standby [hours/day* days/year]	Sleep Mode Power Consumption [Watt]	Average use pattern – sleep mode [hours/day* days/year]	Idle Mode Power Consumption [Watt]	Average use pattern – idle mode [hours/day* days/year]	On Mode Power Consumption [Watt]	Average use pattern – on mode [hours/day* days/year]	Energy consumption [kWh/year]
Amplifier									
Speaker, incl. subwoofer									
Home theatre system									
Audio digital signal processor									
Radio									
Tuner									
Other:									
Other:									

Please comment on the different power modes (definition and consideration of standby, sleep, idle and on mode for audio equipment). We welcome also any comment on the auto power down (APD) function, including an appropriate timing, the concept of total energy consumption (TEC) compared to a module approach or any other comment on the table above:

Please indicate any other significant environmental impact to be considered for audio equipment:

## Potential for improvement

Please indicate if there is an energy saving potential or other improvement potential per audio product. It is the intention that 2014 reflects short to mid-term savings and 2020 long-term savings.

Audio equipment	Estimated energy saving potential until 2014 [% or TWh/year]	Estimated energy saving potential until 2020 [% or TWh/year]	Other environmental improvement potential through product design	Comments
Amplifier				
Speaker, incl. subwoofer				
Home theatre system				
Audio digital signal processor				
Radio				
Tuner				
Other:				
Other:				

Please provide any comment on potential for improvement, including any excessive costs:

## 4. Standards

Please note that this section refers to standards in terms of "norms" developed by Standardisation Organisations such as IEC, CENELEC or DIN.

### Measurement standards

The current international measurement standard for the power requirement aspects of AV products is IEC 62087, Edition 2, 2008-10: Methods of measurement for the power consumption of audio video and related equipment.

Please provide information on any other international, EU or national measurement standard or testing methodology, relevant to audio equipment. This information will be of particular value where the sources you identify cover product definition, mode definition, product set-up for testing and test conditions.

Measurement standard (e.g. IEC, CENELEC, DIN) or other testing methodology	Product Scope	Comments
<i>Example: IEC 62087, Edition 2, 2008-10: Methods of measurement for the power consumption of audio, video and related equipment</i>	<i>Audio, video and related equipment</i>	<i>International measurement standard</i>

If you have any test data or reports covering the power requirement of audio equipment, in standby, sleep, idle or on modes, it would be appreciated. Please reference the data source (or send the data separately to [entr-ecodesign@ec.europa.eu](mailto:entr-ecodesign@ec.europa.eu), marked as public or confidential):

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### Other standards

Other standards may cover international, EU or national standards on performance levels or generic requirements regarding energy efficiency, other environmental parameters or ecodesign indicators (total energy consumption, design for recycling, waste, hazardous substances, etc.). Safety standards may also be of relevance, as providing definition or other technical details.

Other standard (e.g. IEC, CENELEC, DIN)	Product Scope	Type of standard or other comment

## 5. Legislation

It is important to identify existing national, EU and international mandatory and voluntary measures that already impact on the environmental performance of audio equipment. Any ecodesign implementing measure should build on such measures, creating a level playing field, taking into account other relevant EU legislation and assessing self-regulation measures presented as alternatives to implementing measures.

Please indicate in the following table any mandatory or voluntary legislation at national, EU or international level respectively any voluntary agreements or other self-regulation measures in industry that you think are relevant for audio equipment.

Measure (international, EU, national)	Product Scope	Type of measure - ML, VL, VA, OSM <sup>1</sup>	Comments
<i>Example: Energy Star Program Requirements for Audio/Video, Version 2.0 (U.S.)</i>	<i>AV Product, Dedicated Audio DSP Device</i>	<i>VL</i>	<i>Audio Amplifier Efficiency Requirements</i>

<sup>1</sup> ML = Mandatory Legislation, VL = Voluntary Legislation, VA = Voluntary Agreement, OSM = Other Self-regulation Measure

Several stakeholders to the product group "sound and imaging equipment" of the Ecodesign Working Plan 2009-2011 pointed out the importance of the U.S. Energy Star Program Requirements for Audio/Video, Version 2.0<sup>4</sup>. Please provide any comments on this specification:

Please provide any comments on other international, EU or national legislation or self-regulation:

<sup>4</sup> [http://www.energystar.gov/ia/partners/product\\_specs/program\\_reqs/audio\\_dvd\\_prog\\_req.pdf](http://www.energystar.gov/ia/partners/product_specs/program_reqs/audio_dvd_prog_req.pdf)

## 6. Improvement Potential

### BAT

Please provide a short technical description of Best Available Technology (BAT) for audio equipment. BAT entails the best available technology on the market for audio equipment, expected to have a major market share within 2-3 years:

### BNAT

Please provide a short technical description of Best Not yet Available Technology (BNAT) for audio equipment. BNAT summarises the state-of-the-art in research and development for audio equipment, indicating the long-term market possibilities:

### Improvement options

Please indicate possible environmental improvement options for audio equipment, based on the environmental performance of BAT and BNAT:

## 7. Other information

Is there any other relevant information on audio equipment that you can provide? If yes, please could you email this to:

[entr-ecodesign@ec.europa.eu](mailto:entr-ecodesign@ec.europa.eu)

Thank you for your time in providing us with information.