Organisation: DIGITALEUROPE	Name: Sylvie Feindt	Date: 31 July 2014

#### Study to establish the Ecodesign Working Plan 2015-2017 implementing Directive 2009/125/EC

Document comment relates to: 1 August 2014 - Draft Task 3 Report: In-house networking equipment, mobile phones/smartphones, projectors, printers, amplifiers, base stations & wireless chargers.

Section in document	Page number	Торіс	Comment	Proposed change
Task 3 Report PG16	162-171	In-house networking equipment	<ul> <li>Industry has some concerns regarding the various assumptions in 13.4.1 Improvement potential – Energy consumption"</li> <li>At a very broad level, the JRC assumes that the energy consumption of broadband equipment could be halved thanks to the general principles and actions resulting from the implementation of the Code of Conduct161 (from 50 to 25 TWh per year) – and indeed the CoC designed maximum power consumption targets that Customer Premises Equipment (CPE) should meet.</li> <li>Even if the comment after is somewhere more cautious:</li> <li>"Yet this 50% improvement potential mark is too general and cannot be taken as an estimate for the whole product group. The NRDC study indicates that "the top quartile of small network devices on the market today use one-third less energy than average models". The 50% improvement potential is an old statement taken from an earlier version of the Code of Conduct and dates back to at least 2007. The CoC has had several iterations since this date and therefore energy savings have already been achieved.</li> <li>The basic preliminary assessment conducted by the consultants relies solely on the NRDC study and takes no account of the existing Broadband Equipment CoC that is in place and which has a commitment from no</li> </ul>	<ul> <li>To be convinced, industry needs a realistic study evaluating total energy consumption of various home networking equipment, including</li> <li>A quantitative study of the power consumption of the HGW installed stock in relation to device features and device state (e.g. on state, Idle state) and</li> <li>A quantitative study on home networking device lifetime.</li> <li>Identification of the main use scenarios; they may be significantly different depending on the provided service: e.g. IP TV distribution or not</li> <li>An assessment of the savings due to 801/2013 in 2015 and an estimation of the saving potential due to the 801/2013 regulation at the 2017 horizon.</li> <li>An assessment of the saving potential which may be achieved considering that e.g. the CoC BB compliant HGW are implemented with more or less Best Available Technology.</li> <li>An assessment for the saving potential that an implementing measure could realise beyond the CoCs, network standby, the EEE 162 standard and the single box approach.</li> </ul>

fewer than 19 service providers and manufacturers across the EU27. The JRC stated on the release of the latest version of the CoC dated December 2013 that every effort had been made to make sure that a good proportion of the 2012 reported equipment is already able to meet the 2015-2016 targets and/or is not far from reaching the thresholds. On this basis the projected energy usage across 2013, 2020 and 2030 require recalculating and should use the CoC thresholds rather than NRDC. A duty cycle would also need to be applied as there is a different power usage between a device on full power or idle mode. The NRDC study assumes that there is no difference in power drawn when operating at full data capacity versus idle state. The CoC provides two sets of limits according to on-state and idle-state. It is also unclear where the potential 50% energy savings potential can be identified from the CoC statement when most of the 2015-2016 targets can already be met? Therefore the projected improvement potential is grossly over- estimated. Also, industry considers that NRDC US context is significantly different from EU context where home gateway (HGW) are distributed by operator and service providers and are integrating more and more functionalities such modem, router, Ethernet switch, WiFi 802.11xx Access Point, VoIP, etc. Including for some of them CSTB functionalities: this high integration of functions in one box does not seems to be the rule in US as it is in the EU. If the main objective of the integration is reduce overall equipment's costs, to deliver a very large panel of consistent data services to end user, and to ease box management (e.g. for SW update), this single box integration remains the most efficient way to reduce energy consumption and more generally all other non- energy relative environmental impacts.	
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operators or service providers in EU are requesting	
CoC BB compliant HGWs. All HGW platform targeting	
EU market are de facto designed to be compliant to	
CoC BB. The projected figures for this product group	
suggest increased volumes of the individual functional	
devices. This is questionable given the market trend	
towards integrated functional units such as HGW.	
Moreover, there is potential for even greater savings,	
due to the emerging Energy Efficient Ethernet (EEE)	
standard162. None of the modems or ONTs tested by	
NRDC supported EEE, and only two of the 23 routers	
and gateways. Hence "the opportunity to capture	
additional savings by increasing market penetration of	
these capabilities appears to be large". The first-	
generation EEE devices achieve 5-20% energy	
savings, while next-generation EEEs are expected to	
save up to 80% of system power163.	
If all or nearly all basic models of HGW are	
providing an Ethernet switch and 4xGb Ethernet	
ports, user's as well as services provider's expectation	
is to increase both WAN access and WiFi bandwidth, in	
order to distribute video streaming content over the air	
without any wire. This is why operators and service	
providers are now requesting HGW implementing a	
concurrent Dual Band 2.4 and 5Ghz WiFi Access point.	
However a Gb Ethernet port may be preferred for on-	
line gaming activity, as it provides a better reactivity.	
While the EEE standard can realize benefits in a	
business environment, industry doubts the energy	
saving potential in a home networking context. EEE is	
only efficient when there is traffic, it is not when the link	
is idle that is the case the majority of the time in home	
context.	
Industry would like to recall that HGW and all other	
home networking are already regulated:	
<b>3</b> • • • • • <b>5</b> • • • •	

			<ul> <li>All EPS of HGW are regulated both by the 278/2009 regulation and also by CoC EPS V5 compliancy which is requested by the CoC BB V5;</li> <li>801/2013 is regulating all HINA equipment including HGW. The 12W target in NW standby will be difficult to comply for High end HGW or media GW and the 2017 8W target in NW standby will be really an issue for the majority of middle range Home GW. Industry is considering that the "one size fit all target approach may be an obstacle to the integration of more functionalities in one box.</li> <li>Note: media GW providing the functions of both HGW and CSTB are already regulated by the VIA for CSTB.</li> <li>Conclusion</li> <li>Considering the energy savings to be realised by exiting regulations (278/2009, 1275/2008 and 801/2013), the CoC EPS V5 and CoC BB V5 and the EEE 162 standard, industry is not convinced that a new regulation targeting home networking equipment will bring significant energy saving.</li> </ul>	
Task 3 Report PG19	193-211	Mobile phones/ Smartphones	This product group has been assessed several times such as in the preparatory studies of the first and the current ErP Work Programme 2012-2014. The focus must be on the products where there is major improvement potential (according to the directive itself), not where there is the biggest perceived. Industry was able to show, using also the IPP reports with DG ENVI that the most relevant environmental aspect was the stand-by energy consumption of chargers. Further, Lot 7 EPS also started by saying that mobile phones need to be regulated. In the ongoing review, one issue discussed was that not every phone is	Either terminate the assessment of this product group with a clear recommendation that due to limited improvement potential in energy AND material efficiency, the product group should not be regulated. Or remove the product category from the Ecodesign work plan.

Task 3 Report PG19	197	Mobil phones – energy saving potential	We agree with the statement "It seem reasonable to achieve further energy consumption improvements in the future. Much of this will likely happen without regulatory intervention as manufacturers have an interest in reducing the need for frequent charging" (S.197) This is reflected in the table on page 158, where savings kick in in 2015, long before a regulation	As regulation will not make a difference with regard to energy consumption improvement the provided assessment speak against regulation. This should be more clearly stated.
Task 3 Report PG19	194ff	Mobile Phones – Market and stock data	Some statistics relate to the global market: - Global mobile phone volumes (2012): 1.7 billion units of which smartphones 712.6 million (https://www.idc.com/getdoc.jsp?containerId=prUS239 16413) - Worldwide mobile phone sales to end users totaled 1.75 billion units in 2012 (http://www.gartner.com/newsroom/id/2335616)	Also consider the <u>EITO, ICT market report 2013-14.</u>
			<ul> <li>delivered with a charger to make material efficiency gains on EPS. The proposed revised EPS measure is yet unknown.</li> <li>Change in future user behavior as a potential effect of the EPG regulation, i.e. charging the phones via the laptops because the charger is not delivered with every device, is jet uncertain, as the regulation has not even been adopted.</li> <li>As discussed at the stakeholder meeting, the <u>wireless charging technology</u> is an emerging technology. It should rather be regulated under the next revision of the next revision of the EPS regulation, when the technology has matured. This is also stated in the working document of the current review (see REVIEW STUDY ON COMMISSION REGULATION (EC) NO. 278/2009 EXTERNAL POWER SUPPLIES, March 2013 and the Commission Staff Working document (report to the Ecodesign Consultation Forum, 18 April 2013) on the Review of Regulation (EC) No 278/2009 regarding External Power Supplies )</li> </ul>	Please see comments on the "wireless charger" product group.

		can be in place. However, industry would caution the energy savings potential of 30% p.a. as of 2015, based on "non yet commercially available technology." (page 197) We would also like to point out that the CO2 emissions due to the energy consumption in the use phase depends on the energy mix of a country and the usage scenario. For example, a Nokia Lumia generates 25% of its CO2 emission use phase in China but only 1% CO2 Emission in the use phase in Norway. In Finland a heavy user generates 16% in the use phase, while a light user only generates 8% of the CO2 in the use phase. These data show the dependence of the impact of a mobile phone on non-design related external factors.	
Task 3 205- Report 207 PG19	Life time extension – mobile phones	The interpretation of press release related to the BITKOM study is wrong. It cannot be used a as a reasoning/ proof short lifetime of smart phones. The study does NOT assess HOW OLD a device is, when is brakes, but rather if a device is exchanged (at any point in time X), what is the reason. We thus don't know from this study if a device brakes after a short time or not. In addition, the study did not look at mobile phones but high-tech devices in general. The study deducts a conclusion on lifetime that was not enquired in the first place. http://www.bitkom.org/de/presse/8477_79147.aspx The ERT report on raw materials in the value chain defines the lifetime of a smart phone (1 <sup>st</sup> , 2 <sup>nd</sup> & 3 <sup>rd</sup> life) to eleven years. The technical lifetime of mobile phones is much longer than the1st commercial lifetime. Contracts incentivise users of early disposal of their phones. This however cannot be altered through Ecodesign. (http://www.ert.eu/node/560) A study commissioned by the EC just (June 2014) found smartphones are not a suitable product group for	Remove all links to the BITKOM study, as the study does no support your argumentation.

			too much driven by "New technology, high rate of innovation" page 33,: <u>http://www.productdurability.eu/assets/Product-</u> <u>Durability-Task-1-Report.pdf</u>	Based on the conclusion of the Commission study we suggest to remove the entire life-time expansion sub-chapter for smartphones.
	206		The increase of memory as a means to prolong the "lifetime" of phones is is highly arguable. Manufacturers are moving to cloud based services and storage, meaning that the physical memory needs are decreasing instead of increasing. With cloud based services the need to processor speed updates and software updates may also decrease, as the device is simply an interface to the cloud. Also a requirement to allow for an alternative OS to be loaded onto the device is questionable. Hardware and software need to work in tandem to perform well and for the hardware to be used with the highest efficiency. Giving out the full specs of electronic devices, with all proprietary information and components, such requirements cannot be implemented and cannot be a legal requirement.	Remove the suggestion "Allow for increase of memory (e.g. through Micro-SD-Cards) and other performance critical components;" from the text as the memory does not make sense and "other performance critical component" is too unspecific. (p.160) Remove the sentence: Possibilities for updating/replacing the software/ operating system to ensure ongoing security, performance (also energy) and usability; availability of alternative operating systems if manufacturer support has ended (availability of specifications to alternative operating systems vendors/communities); (p.160)
	206		Contract matters between the operator and the customer are beyond the control of the regulator should not be regulated under Ecodesign.	Remove the sentence: "Increase attractiveness of SIM-only contracts;" (p.160)
Task 3 Report PG19	207	Use of recycled materials- mobile phones	In principle we have no objection to policies that try to promote and increase the recyclability of plastics used in display equipment, in fact there are already phones in the market using recycled plastics - without making public claims as it is not measurable and can thus not be verified. A market access requirement would need to be verifiable by MSA. A measurement standard is a must in this case.	Remove the sentence : "Hence, increased recycling rates of these (see below) could encourage further uptake of recycled material in phones." A preparatory study is too early and unlikely to lead to a measure. We recommend waiting for the results of the CEN/CENELEC standardisation work.
			To drive the use of recycled plastic DE is involved in a EIP "Raw Material Commitment" project, which is (among many other things) to define target grades of	

recycled plastics to facilitate the procurement and usage of these by manufacturers. Technical, quality (smell, flexibility, degradability, haptics, etc.) and quantity issues, consumer acceptability, the economic structure of the recycled plastics market have to be solved before any market access requirements makes sense.	
DIGITALEUROPE objects the methods promoted by parts of the Commission /JRC in the TV regulation. They are completely inappropriate and will create serious market access problems and hamper further innovation. The proposal from the EU Commission for a mandatory threshold for plastics is based on IEC TR 62635. The TR is a Technical Report and not a normative standard but contains several informative potential recycling scenarios' and related recyclability rates for plastic and additives. Depending on the selected scenario a product could achieve an 80% or a 40% recyclability rate for the plastics. The IEC working group provided input to the EU Commission that the TR is not intended to be used as a mandatory product design policy.	
The CENELEC safety standard EN 60065:2002/A11:2008 requires a V1 flammability classification for display enclosure materials. As a result, pure polymers like ABS, HIPS or PP (HB classification) can no longer be used and forces manufacturers to use flame retardant alternatives. Scenario's in the TR show a recyclability rate of 0% for automated recycling of plastic containing flame retardants. In order to meet a minimum threshold industry would either be forced to change to e.g. metals for enclosure materials or be non-compliant with the safety standard.	
Also this ignores the possibility that a new polymer may actually be as recyclable as one of the listed materials, but because there is no allowance for demonstrating or adapting the RCR%, it would effectively either kill the	

			development of the technology, or simply exclude European buyers from access to it.	
Task 3 Report PG19	162/163	Collection rate	We recognize that the collection rate is an issue that needs improvement. Its biggest obstacles include high mobility of consumer products, generally low consumer awareness about the loss of these limited resources, illegal scrap exports and a lack of economic recycling incentives. Improving the overall collection rates of consumer products can be encouraged through many different initiatives ranging from increased consumer information to a variety of economic and legal incentives for returning products. These improvements would allow the recycling value chain to gain scale and would justify investments in larger, more streamlined collection facilities. This needs to be complemented with more semi-automated treatment systems to pre- sort metal materials and selected components prior to recycling.	As collection rates of smart phones cannot simply be improved by an Ecodesign measure such links in argumentation need to be removed from the text.
			DIGITALEUROPE has therefore engaged into the WEEE2020 project proposal that has been recognized by the EIP.	
			However we seriously doubt that an Ecodesign measure requiring the easy manual retrieval and erasure of personal data (services are already available today) will increase collection rate of mobile phones.	
Task 3 Report PG19	208	Marking of plastic and other components (mobile phones)	Plastic marking needs a minimum dimension for legible text for complex polymer type marking. Plastic parts in mobile phones might not be large enough. In addition marking requirements of optical parts of the display module made from plastics that would need a marking exclusion as any marking (embossing, surface printing, etc.) even in the non-visible margin under the frame edge may cause interference or shadows in the visible screen image, and some displays do not even have an edge frame at all.	Remove the suggestion for marking of plastics and other components in mobile phones as parts are not large enough and the impact of such a measure is more than doubtful.

Task 3 Report PG19	<b>D9</b> Potential for reduced perspective) – mobile phonesLooking at the fur marking informati for WEEE recyclin <b>D9</b> Potential for reduced perspective) – mobile phonesLooking at the fur 	ost display makers currently mark <b>&gt;100 gram</b> following the ISO 1043- nd ISO 1043-4 (FR code) on a From communications with recyclers ey do not see an added value in the s, as recycling technology oving towards high speed processes hated detection and segregation of al. While older manual recycling still be in use, it is expected that they obsolete and unable to compete with eatment plants responsible for the processing within the ten years a build take to become WEEE. Detailed on is therefore not used or necessary g purposes. (DE comment on TVs) ctionalities offered by a smartphone, actice can replace products such as s, digital music players, gaming mapshot digital photo camera, alarm by many more. This is supported by nat indicates significant decline in , Mp3 players <sup>2</sup> , standalone s <sup>3</sup> and portable game consoles. <sup>4</sup> one market has been growing faster ecline of the aforementioned e assumed that statistically, ar did not replace these products hers however take advantage of the ies of their smartphones and abstain the aforementioned individual	There are some, yet difficult to quantify, material efficiency gain through the substitution of various electronic devices by smartphones, which the study correctly point out.

<sup>&</sup>lt;sup>1</sup> According to an Allensbach study, more than 50% use the built in camera for taking pictures and videos with their cell phone.

<sup>&</sup>lt;sup>2</sup> Statistical data from the German market shows a significant decline in sales of mp3 players from about 8 million units in 2007 to about 4. Mio in 2012.

<sup>&</sup>lt;sup>3</sup> Sales decreased from about 4 million units in 2008 to about 2,5 million in 2012. Market research revealed that 83% of those, who own a car and a smartphone use the smartphone for navigation.

<sup>&</sup>lt;sup>4</sup> From a peak in 2008 of 40 million units, worldwide sales have declined to 25 million units in 2012. Recent IDC gaming report concludes that consumer spending on games for iOS App Store & Google Play combined rose to 4x that of gaming-optimized handhelds (although software for portable gaming consoles is on average more expensive than for smartphones and tablets).

		<ul> <li>products, the resource savings of not having to produce, transport and use these separately can be substantial.</li> <li>"While dematerialization is an important avenue to resource efficiency, this will affect the economics of recycling materials from complex products.</li> <li>Furthermore, the move to nano-technology as an extreme case of dematerialization will irrecoverably dissipate valuable materials, although it can be argued that these are small amounts that will have no effect on the overall materials balance." <u>UNEP</u>, <u>Metal</u> <u>Recycling</u>. Opportunities, Limits, Infrastructures, 2013, p. 63.</li> </ul>	
Task 3 Report PG19	7-209 Mobile phone material efficiency	The report recognizes that a large share of the material can be recovered. In particular the copper, gold, silver and platinum are currently recovered. The basic assumption of recycling is that the value of the recovered (and other materials) has to pay for all collection, dismantling, sorting and other recycling activities. The economics of such recycling is based on estimating the true value of recyclates from the best recovery of refined metals, alloys and compounds. () Recycling is thus driven by the value of the recovered metal (and material). In any case, all metallurgical plants always try to recover all valuable elements. If there is an economic incentive, recovery will happen." (UNEP, Metal Recycling. Opportunities, Limits, Infrastructures, 2013, p.25) Industry representatives have discussed the issue of raw materials in mobile phones at length also in the EIP on raw materials as well as the European Rare Earths Competency Network (ERECON) steering committee and also the WG2 of ERECON has come to the conclusion that mobile phones are NOT a relevant product group when looking at critical raw material	Due to the very small quantities of raw material (e.g. technical metals) any the complex structures of phones industry doubts ant a meaningful requirement with environmental impacts can be developed. We suggest to draw on the results of recent and on-going work rather than launching a new study.

Task 3 Report	241-249	Projectors	The product group was assessed as part of the ENTER Lot 3 home audio-video equipment <u>The impact</u> assessment of 2013 state on page 51: "there appears	We question the usefulness to reopen this product group as the saving potential and the market development remains
Task 3 Report PG19	211	Classification: conflict minerals	Table on page 165: "Conflict minerals" is not a material category but a denomination for the 3Tg minerals from conflict areas such a d DRK fuelling armed conflicts. Tin, Gold & tantalum can be easily sourced from no-conflict areas. There is other regulation such as Dodd Franc in the US Commission proposition (DG Trade) very much based on the OECD guidelines	Remove the denomination "conflict minerals".
			Also the mass of Rare Earth Metals (REM) per smartphone is very limited (0.10-0.25 grams) It represents on average 0.2% of the total product weight. Based on 2009 figures the REM use in Mobile Phones corresponds to 0.25% of yearly REM production	
			A diversification of supply of these metals is needed through the extraction of new resources across different regions, increasing the return of technology metals from recycled electronic waste to the supply stream, and further R&D to continue to reduce materials needed for the same or better performance. <u>http://www.ert.eu/node/560</u>	
			Today's smartphones contain about 50 different metals but in extremely small quantities. They provide the user with additional functionalities with a comparatively low weight and small volume. Demand for these technology metals will continue to increase, while the possibility to substitute these metal minerals is limited. This raises concerns regarding the continuous supply and potential price increases of these metals, especially as the resources and production are concentrated in a few countries.	
			recommend the sharing of report the WG2 report, which is unfortunately not public yet.	

PG24			to be little benefit from moving towards regulation or labelling for projectors as the margins are negligible.	unchanged since the impact assessment in 2013.
			It is worth noting that the regulatory scenario for projectors is assumed to be very close to the BAU scenario, so there are minimal energy savings achieved."	Remove the product group from the work plan.
			And on page 54: "The analysis shows that there is little environmental benefit from any of the policy options, which gives no weight to the argument of pursuing anything other than the BAU scenario. Furthermore, as this product group is expected to experience a dying market, plus the large anticipated costs to manufacturers of any regulation, adopting the BAU approach appears the most proportionate option."	
			Lot3 Impact Assessment: http://ec.europa.eu/enterprise/policies/sustainable- business/ecodesign/product-groups/sound- imaging/files/eco-sound-study-ricardo-aea_en.pdf	
Task 3 Report PG24	241-249	Projectors	The market data used in the Ricardo/ERA study was provided by industry and is more accurate than the PRODCOM data. Please find latest market data on projectors from both Futuresource Consulting Ltd. and PMA Research in the Annex of this position paper.	Remove the product group from the work plan, because actual sales forecasts confirm the conclusions of Ricardo/ERA study.
			We cannot confirm the figure of 1.6m projectors which the report claims have been <b>produced</b> in the EU in the years 2011 and 2012 respectively (Table 184: Market data from Prodcom for video projectors). The actual EU based manufacturing of projectors is rather a niche market, while the vast majority of projectors sold in EU are manufactured in Asia. The PRODCOM data imply a growth rate of about ~26600% (!) for EU based <b>production</b> of video projectors within two years, (from	
			2009 to 2011 an increase from 6.000 to 1.6m units), which Digital Europe members do not recognize. Maybe a new product category (maybe a component	

			<ul> <li>product unknown to Digital Europe members) has been classified as "video projectors" under PRODCOM, while not representing a "video projector" as defined by the Ricardo/ERA study.</li> <li>With regards to actual and anticipated sales of video projectors in the EU area recent data obtained from independent data providers Futuresource Consulting and PMA Research show a flat or even declining EU market for video projectors, like earlier anticipated in the Ricardo/ERA study for video projectors, Both sets of data, from Futuresource and PMA, are in clear contrast to the statement made in the Working Plan draft Task 3 report about an apparent doubling of EU projector sales (3.2 million units in 2012):for 2012</li> <li>Futuresource is reporting sales of 1.46m units in EU, PMA is reporting 1.55m units for the same time.</li> <li>The forecast data provided by Futuresource and PMA do differ slightly in that Futuresource is reporting a decline in sales from 2012 to 2013 while PMA is indicating a more or less flat market. However, the bottom line is that both sources are in line with the conclusion drawn by the Ricardo/ERA study about a downward trend in the EU sales market for projectors: both Futuresource and PMA are showing the same trend of volume peaking in 2010 and then declining to flat going forward.</li> </ul>	
Task 3 Report PG27	256-267	Printers	IE is covered by regulation 801/2013 and the VA on IE endorsed by the commission. There is no need for a new Lot.	Remove the product group from the work plan.
Task 3 Report PG 15	149-161	Wireless chargers	<ul> <li>After the stakeholder meeting a product group "wireless chargers" has been added. This makes no sense as:</li> <li>Wireless power for both charging and direct power is not mature, standards and technology are still being developed, it's too early to set requirements.</li> <li>Market potential certainly exists but still very</li> </ul>	Abstain from creating new product groups when products groups are already covered by a regulation. Remove the product group from the work plan.

			limited at this moment and only for a few applications. Wireless charging could be addressed under a future revision of EPS regulation. As stated above, this is also stated in the working document of the current Lot 7 review (see REVIEW STUDY ON COMMISSION REGULATION (EC) NO. 278/2009 EXTERNAL POWER SUPPLIES, March 2013 and the Commission Staff Working document (report to the Ecodesign Consultation Forum, 18 April 2013) on the Review of Regulation (EC) No 278/2009 regarding External Power Supplies. The current revision should focus on transatlantic set of requirements for so-called class A EPS. Further harmonization and potentially wireless charging might be something to consider in future. Also USA DoE has not regulated it in their final rule published in 2013. Information on EPS can be found in the Digitaleurope Website.	
Task 3 Report PG21	217-221	Sound Amplifiers	General comments In the preliminary analysis of sound amplifiers there is a mix of terminology and data which makes it hard to understand what the actual scope is of the product group (PA systems, theatrical and concert sound reinforcement systems, instrument amplifiers, AV receivers,). By consequence it is unclear	It is essential that the product scope and the collected data are further clarified in this preliminary analysis. Without such improvements it is not possible for industry to make valuable contributions.
			<ul> <li>to which stakeholders this product group is particularly relevant</li> <li>which products can be replaced by products with similar features</li> <li>how data/calculations can be assumed to be representative for the product group</li> </ul>	
			24.1 Product group description	
			The product group description itself refers to 2 specific	

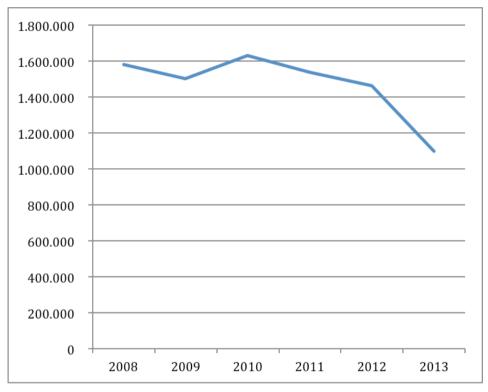
Prodcom codes, whereas the data used on energy	
does not correspond with the specified product group	
as AV receivers in general are not covered by the listed	
Prodcom codes.	
Troucom codes.	
The analysis around description lists a number of sound	
The product group description lists a number of sound	
amplifier applications including professional and	
commercial systems. This contradicts the pre-	
screening of sound amplifiers (p.18) where it stated	
that small markets such as professional equipment are	
excluded.	
24.2 Market and stock data	
The qualitative discussion of the preliminary results	
(p.15) indicates that a preliminary review of sales and	
trade data suggested that sound amplifiers are a	
product group with very significant and rising sales.	
This is however not confirmed by the Prodcom	
statistics, therefore raising the question on which basis	
the assumption of rising sales was being made.	
24.3 Resource consumption	
There is no detailed information on the data of	
"Stiftung Warentest" (e.g. scope definition,	
measurement standards, timing of publication,),	
making it impossible to draw appropriate conclusions	
and to comment accordingly.	
Also it seems the calculated power consumptions do	
not consider existing EU legislation. For example	
"Table 156: Power consumption individual product	
level" is referring to a maximum of 35 W for "Input	
power standby" which according to paragraph 24.3.1 is	
about "standby with Wake on Lan (WoL)".	
WOL is a network technology and as such covered by	
Commission Regulation (EU) No 801/2013 amending	

the existing ErP Standby regulation (EC) No 1275/2008 by incorporating requirements on networked standby, such as WOL. The requirements will become applicable as of Jan 1 <sup>st</sup> , 2015, limiting the power consumption of typical audio products in networked standby condition to 6W maximum. This is far below the 35W stated in table 156. Therefore the calculations shown in both "Table 157: Energy consumption individual product level" and "Table 158: Aggregate EU energy consumption (TWh) – constant sales") do not represent what will be legally required as of Jan 1 <sup>st</sup> , 2015. We would also like to remark that in our experience AV receivers are typically not equipped with a video tuner.	
<ul> <li>24.4 Improvement potential</li> <li>Data provided by a single manufacturer for a specific product type should not be considered representative for a whole product group. Furthermore with regard to energy efficiency the difference between amplifier classifications, such as a Class D amplifier, should be properly considered.</li> <li>It is suggested that improvement can be achieved for example through auto power down functions. In this respect we would like to learn if and how the</li> </ul>	

## Annex: Market size trend for video projectors in EU

### EU26 market size trend for video projectors (data source from Future Source)

		FY					
		2008	2009	2010	2011	2012	2013
1	Austria	27.795	27.282	26.307	24.056	26.422	19.155
2	Belgium	34.810	31.851	34.879	33.382	34.491	23.317
3	Bulgaria	6.981	3.696	5.335	5.169	6.802	5.133
4	Croatia	8.108	7.402	5.309	5.811	5.720	4.654
5	Czech Republic	24.037	29.167	28.583	30.295	30.879	27.878
6	Denmark	33.079	30.810	33.969	33.472	31.810	22.391
7	Estonia	2.140	1.706	2.210	3.752	3.330	1.593
8	Finland	29.532	27.478	28.109	25.622	24.994	16.686
9	France	240.792	270.392	266.973	271.076	253.936	203.895
10	Germany	343.518	331.879	401.060	351.749	353.105	260.660
11	Greece	18.539	19.086	19.936	12.437	10.787	11.886
12	Hungary	15.717	14.311	21.365	21.893	13.808	9.777
13	Ireland	8.934	8.319	10.238	6.800	2.932	2.701
14	Italy	90.372	94.272	97.870	102.587	98.972	68.619
15	Latvia	2.058	860	1.932	2.266	2.566	1.768
16	Lithuania	6.463	5.631	7.585	7.273	5.879	4.357
17	Luxembourg	1.056	618	589	698	1.011	1.094
18	Netherlands	88.319	75.186	70.501	62.254	56.082	39.739
19	Poland	55.748	48.577	63.633	62.189	59.852	49.096
20	Portugal	60.845	23.756	24.622	14.909	15.430	11.191
21	Romania	18.026	9.347	13.002	13.929	13.379	10.853
22	Slovakia	6.251	12.968	5.707	6.285	6.018	9.833
23	Slovenia	5.524	4.915	5.686	3.062	3.457	2.765
24	Spain	126.529	118.158	149.060	143.889	100.300	80.888
25	Sweden	60.495	53.717	68.450	59.240	52.321	42.162
26	United Kingdom	263.436	248.911	239.117	234.013	247.433	167.906
	Totals	1.579.104	1.500.295	1.632.027	1.538.108	1.461.716	1.099.997



## Total EU trend

# Trend by country

