

## Second stakeholder comments on Ecodesign Study: Sound and Imaging Equipment (ENTR Lot 3)

### Comments received – General comments

Date received	Task No. and Page No.	Stakeholder Comment	Study Team Action	Action date
		VPR=video players/recorders, P=projectors, GC=game consoles, GR=general remarks		
18/10/2010	GR	<p>We fully agree with the findings of the study on <i>Sound and Imaging Equipment</i>. Especially the fundamental acknowledgement of the specific demands for High End products seems to be acceptable for the specific European industry and the respective importers.</p> <p>While the limitation of the power consumption shown in the Task 7 seem to be suitable for single (or double) chipped low price mass-market devices the limits given are by far too strict for High End products.</p> <p>Supplying a niche market with a market share of less than 1%, the European High End manufacturers and the respective importers have no access to mainstream mass-market highly integrated silicon and such highly integrated silicon is not available to provide the quality for the specific demands of the High End market.</p>	<p>Thanks for the response.</p> <p>No additional action needed.</p>	
18/10/2010	GR	The two sections of the final chapter ('policy options and scenarios') addressing video players and projectors <b>are expressed in an insufficiently rigorous and clear language</b> , leading to ambiguous expressions. The English needs to be proof-checked and clarified, using more precise descriptive terms.	The study team is only able to react to specific remarks.	
18/10/2010	GR	<b>Several proposed requirements are not enough substantiated.</b> It is not always clear why a specific limit value is proposed and how it compares to the least life-cycle cost level (aim of the Ecodesign policy).	The study report discusses least life cycle cost issues in the Task 6 component starting page 136 and in task 7.2.4 (Video Player Recorders), 7.3.4 (Projectors) and 7.4.4 (Games Consoles). .	

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18/10/2010	GR	<p>If the study suggests ecodesign rules on the energy use, the other environmental aspects (toxicity, recyclability, resource efficiency, etc.) <b>are very poorly addressed in the policy options and scenarios.</b></p> <p><b>This is a major disappointment for us and a reason for not supporting the study conclusions.</b></p> <p>The argument used by the study team that it would “<i>seem unsuitable to suggest these types of requirements for some products in isolation</i>” is not an acceptable reason not to work on the subject. One example that the study team should have elaborated on is how recyclability of multimedia products can be improved through requirements on dismantability (especially of scarce metals, not just plastic parts). A few components (such as motherboard, circuitry...) represent a large share of the total impacts in manufacturing phase, and include metals whose primary extraction is very impacting. Dismantability can be made enforceable and verifiable.</p>	<p>These issues are addressed by the study team's views concerning the EU Ecolabel in Task 7 and use of ECMA-370 declarations.</p>	
18/10/2010	GR	<p>We have many doubts on the legal possibilities to <b>exempt so-called ‘high-end products’</b> (quality expensive models) if they have similar functions than mass market products. A sales limitation or exemption sticker would pose some serious issues. Another option of setting specific and limited additional allowances for pre-determined high-end performances could be explored instead.</p>	<p>High end products are developed and manufactured for a niche market. They are innovative products made in relatively small quantities. High efficient silicon is not available in these small quantities. Minimum order is 1 million pieces.</p> <p>Setting specific and limited additional allowances for pre-determined high-end performances would need a detailed study on a product-by-product basis.</p> <p>On the other hand such a procedure would create a serious obstacle for future innovation and would fix the technologies to the existing level. Discussion with stakeholder successful.</p>	03/11/10
18/10/2010	Executive Summary ix  VPR	<p><b>Executive summary</b></p> <p>In our understanding the Executive Summary needs to be revised on page xi to reflect the proposed new limit for recorders, the replacement of the TEC limit and the replacement of the term “Idle”.</p>	<p>The limit for recorders will be changed to 20W and 25W for DVD and Blu-Ray respectively.</p> <p>The Executive Summary does not mention TEC for Recorders on page xi.</p> <p>Reference to Idle will be removed from the Executive Summary.</p>	

## Comments received - Task 1

Date received	Task No. and Page No.	Stakeholder Comment	Study Team Action	Action date
		VPR=video players/recorders, P=projectors, GC=game consoles, GR=general remarks		
18/10/2010	Task 1, (definition) GR	Recommend timeline is included in report for Audio products to be addressed	Audio products are not within the scope of the study.	
08/10/2010	Task 1, p31 GR	Figure 4 in section 1.2.4 on page 31 does not illustrate the loopthrough feature.	The diagram will be updated to show Loop-through.	

## Comments received - Task 4

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		VPR=video players/recorders, P=projectors, GC=game consoles, GR=general remarks		
18/10/2010	Task 4 (base case) VPR/GC	Whilst this zero repair cost assumption is reasonable for low cost VR products, a repair cost should be considered for higher specification game consoles, as manufacturers do offer a repair service for their more expensive products.	<p>For mass market products replacement strategies are more common than a repair of the devices, since production periods of mass market electronic devices vary between 3 an 6 months with usually no spare part storage. Storage and logistics for spare parts are more expensive than replacement.</p> <p>For the more expensive and High End products that cover less than 2% of the market shares a repair service is common, but data are not available, due to the fact that these units are quite small and don't publish such data.</p>	

## Comments received - Task 5

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		VPR=video players/recorders, P=projectors, GC=game consoles, GR=general remarks		
18/10/2010	Task 5 (BAT and BNAT) GR/P	Further justification is required of the projection that APD will increase product lifetime.	Additional wording added to clearly state that projector lamp life is proportional to running hours and thus APD extends that life.	

## Comments received - Task 6

Date received	Task No. and Page No.	Stakeholder Comment	Study Team Action	Action date
		VPR=video players/recorders, P=projectors, GC=game consoles, GR=general remarks		
18/10/2010	Task 6 (improvement potential) GR	Further justification is required regarding why a reduction in product lifetime is assumed due to product lightweighting.	Product lightweighting is a complicated area. The study team has asked stakeholders to clarify the issues so that the study reflects available information. In the absence of that information, the team has necessarily formed assumptions.	

## Comments received - Task 7

Date received	Task No. and Page No.	Stakeholder Comment	Study Team Action	Action date
		VPR=video players/recorders, P=projectors, GC=game consoles, GR=general remarks		
18/10/2010	Task 7 (policy/impact analysis)  VPR	Video players/recorders: The proposed treatment of high specification VR products need to be reassessed. Applying the requirement to a fixed proportion of a manufacturer's output would have a disproportionate effect on companies specialising in high-end products. The issue of a hologram sticker would need to be supported by a transparent set of criteria – which should be proposed in the study. Rather than a % market approach, a technical definition of a “high specification” product is required to clearly define an exemption or higher energy allowance for these products. It is suggested that an information requirement be recommended for these products to ensure that requirements could be tightened in future if there were a risk of excessive energy consumption.	A technical definition of High End products is impossible since there are several technologies used by these manufacturers. Most of manufacturers specialised in High End products are SMEs with a very small output by product category. Discussion with stakeholder : Council for vignette foundation added. Power consumption in on-mode measurement standard EN 60065 added.	08/11.10
18/10/2010	Task 7, p163  VPR	The remark about “ <i>video players/recorders with integrated audio amplifiers which are designed to be connected directly to unpowered speakers...</i> ” is unclear. It could suggest a loophole for hi-fi systems with integrated DVD players. There is no reason why these products should not be compliant with Ecodesign rules. We suggest deleting the bullet point.	“ <i>video players/recorders with integrated audio amplifiers which are designed to be connected directly to unpowered speakers...</i> ” The reason for this bullet point is the fact that the main power consumption of these devices is given by the audio amplifier section. Amplifiers are not in the scope of the study. A separation of the segment for measurement purposes is not possible. Text added.	14/11/10
18/10/2010	Task 7, p165  VPR	The whole paragraph 7.2.2 (energy efficiency requirements) is expressed in an insufficiently rigorous and proof-checked language, leading to ambiguous or unclear expressions. The English needs to be proof-checked and clarified, and the requirements described in more precise descriptive terms.  <b>It would even be better and appropriate to express these requirements in the format of the language of Ecodesign regulations (inspiration may be found in adopted measures). This would better support policy development and facilitate stakeholder discussions.</b>	Thank you for your comments. We will check the English and make editorial changes where these are appropriate.	

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18/10/2010	Task 7, p167 VPR	The justifications of the proposed precise power limits are too brief. Each proposed power limit should be accompanied by an indication of the LLCC and BAT levels, as well as a more exhaustive summary of the technical findings from the previous chapters.	LLCC issues are discussed in the Task 6 and Task 7 sections of the report for all three product types.	
18/10/2010	Task 7, p 167 VPR	<p>The base-case video player is considered to use 8 W in on-mode, and voluntary Energy Star 2.0 specifications are expanding quickly. This leads us to thinking that the proposed power limit of 10 W in 2012 now appears insufficiently stringent. It would have nearly no impact on the market (as base case products already achieve 20% better today) and is probably not at the least-life cycle cost level of today's products.</p> <p><b>Thus, we call for the minimum requirement for standard definition to be limited to 8 W (base case level of 2008).</b></p> <p><b>A 2<sup>nd</sup> tier in 2014 (for instance at 6 W) should be included, to ensure dynamism and clear targets.</b></p>	There is no further development in DVD components. Thus reducing the power consumption of DVD players will create not a significant improvement, since manufacturers will have to shift to BD components, which will increase the power consumption per device to 15 W. Discussion with industry confirmed information. No action needed.	
18/10/2010	Task 7, p167 VPR	<p>It is mentioned that the best available Blu-ray players of today need 13 W in on-mode. As this technology is new and still not mature, a further decrease in energy consumption is foreseeable in the coming years. This means that the proposed 20 W limit for HD playback now also seems insufficient. It would have very limited added-value compared to business-as-usual.</p> <p><b>We request the minimum requirement for high definition to be set at 15 W in 2012, and then a further decrease proposed in a 2<sup>nd</sup> tier in 2014.</b></p>	Reducing the power consumption of BD players to a much lowered level would urge the manufacturers to shift to the growing market of online VOD devices. Some of these devices have no storage possibility available. Thus they could only be used in an online mode creating a significant increase in online traffic and power consumption for the respective infrastructure.	
18/10/2010	Task 7, p168 VPR	The paragraph on 'live pause' is unclear. To which particular devices are the 30 W and then 20 W limits supposed to apply? We are of the opinion that the consumption of live pause modes could be more aggressively decreased.	The limits apply to all recorders irrespective of format.	
18/10/2010	Task 7, p168 VPR	<p>Description of the fast-start mode requirements is missing!</p> <p>These requirements should include the obligation to ship the products with <b>fast start mode disabled by default</b>. The selection menu should include a <b>warning message</b> that fast start considerably increases electricity consumption as compared to normal standby.</p>	The 'fast start disabled point' is discussed on page 168.	
18/10/2010	Task 7, p169 VPR	<p>The APD function should be shipped on and function with any disc and library media. <b>There is no problem for demonstrations and information displays, as the user may simply disable the APD function for these applications.</b></p> <p><b>In order to avoid the risk of users disabling the APD, we suggest the following rules:</b></p>	<p>This point is covered in Task 7.</p> <p>The limits proposed by the stakeholder are less stringent than those proposed</p>	

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		<ul style="list-style-type: none"> <li>➤ <u>For players and recorders which do not provide a fast start mode:</u></li> <li>- The APD is activated after 30 min for players unless in play mode</li> <li>- The APD is activated after 4 hours for players in play mode and recorders not in record mode</li> <li>➤ <u>For players and recorders which provide a fast start mode:</u></li> <li>- The APD is activated after 30 min for players unless in play mode or fast start mode</li> <li>- The APD is activated after 2 hours for players in fast start mode</li> <li>- The APD is activated after 4 hours for players in play mode and recorders not in record mode</li> <li>➤ Activation of APD is preceded by a warning message enabling the user to select a temporary postponement of the APD</li> <li>➤ The APD user menu shall allow the user to change the default activation timings to a preferred option (with a maximum ceiling of doubling the previous values).</li> </ul>	by the study team.	
18/10/2010	Task 7, p170  VPR	<p>We doubt that the proposed solutions for high-end products will be workable, for several legal reasons.</p> <p>Option a (limitation of number of products put on the market) could be easily challenged by manufacturers as a barrier to trade. It would apply to all manufacturers irrespective of the environmental impact of these devices, thus being inconsistent with the objective of the Ecodesign directive to improve the ecological performance of products put on the market.</p> <p>Option b (sticker delivered by a European foundation) proposes to exempt products from Ecodesign limits based on ad-hoc case-by-case rules and criteria. This is contrary to the political process of setting Ecodesign implementing regulations, where the definition of the scope (and therefore exemptions) has to be decided by EU decision-makers assisted by the Consultation Forum (unless the whole measure takes the form of a voluntary initiative, which is not recommended here). It would not be practical for EU decision-makers and the Forum to review every request for exemption from particular manufacturers.</p> <p>Besides, this system is equivalent to paying a tax to avoid regulatory constraints, whereas the objective of the directive is to create a level-playing field for products providing similar functionalities.</p> <p>Our opinion is that high-end products, as they are more expensive and based on more quality components, are excellent candidates for smarter and more energy efficient innovative design. Therefore, it would be contradictory to give them a free ride.</p> <p><b>We suggest leaving high-end products in the scope, with an eventual additional allowance for 2 or 3 very specific higher performance criteria (e.g. high noise reduction, specific video formats, very high quality</b></p>	<p>The proposed solutions for high-end products should not create legal trouble since they would not create a trade barrier and would comply with WTO rules. Market surveillance asked for comment was not reluctant to agree with the vignette solution as far as the whole procedure is open and transparent.</p> <p>Industry agreed as well and suggested as an option to add a CO2-reduction component to the fee for the vignette. This payment would be invested in existing carbon reduction schemes.</p> <p>The energy consumption of High End devices is higher due to their usage of high quality components.</p> <p>Every additional component needs additional power. The higher the integration the lower the power consumption.</p>	03/11/10

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		<p>decoding performance...). These allowances would be reviewed at each revision of the measure (some of them removed if the technology becomes too mainstream, and some new potentially added to allow R&amp;D developments).</p>	<p>On the other hand side devices with a restricted quality could be designed to low power consumption.</p> <p>A technical definition of additional allowances for High End products is quite impossible since there are several technologies used by these manufacturers. Most of manufacturers specialised in High End products are SMEs with a very small output by product category.</p> <p>A case-by-case study for each product would be needed and the risk of long and costly procedures including legal conflicts is bigger than the requested benefits for the environment. Discussion with stakeholder for explanation successful.</p>	
18/10/2010	Task 7, p172  VPR	<p>The power assumptions for the "Policy IM Tier 1" and "Policy IM Tier 2" cases show that the proposed requirements on the play modes <b>will have nearly no impact on the market</b>:</p> <ul style="list-style-type: none"> <li>- The base case 8 W consumption of DVD players is assumed not to decrease from 2008 to 2020</li> <li>- The base case 20 W consumption of DVD recorders is assumed not to decrease till 2020</li> <li>- The base case consumption of Blu-ray players is supposed to decrease by 16% from 2008 to 2020, which is very similar to a business-as-usual trend.</li> <li>- The base case consumption of Blu-ray recorders is supposed to decrease by 20% from 2008 to 2020, which is very similar to a business-as-usual trend.</li> <li>- The fast start mode consumption of Blu-rays is not decreasing till 2020</li> </ul> <p><b>This clearly demonstrates that most of the proposed energy efficiency requirements are not aggressive enough. The requirements for the on-mode and fast start modes need to be more stringent and include</b></p>	<p>There is no further development in DVD components. Thus reducing the power consumption of DVD players will create not a significant improvement, since manufacturers will have to shift to BD components, which will increase the power consumption per device to 15 W. Background cross checked and confirmed.</p> <p>Reducing the power consumption of BD players to a much lowered level would urge the manufacturers to shift to the growing market of online VOD devices. Some of these devices have no storage possibility available. Thus they could only be used in an online mode creating</p>	

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		several tiers, if they are to have a significant impact on market trends.	a significant increase in online traffic and power consumption for the respective infrastructure.	
18/10/2010	Task 7, p173  VPR	<p>The proposed policy Tier 2 is nearly identical to the Tier 1 except for one single value (on-play mode of blu-ray recorders).</p> <p>It is strange to propose a 2<sup>nd</sup> tier limited to changing a single limit value among 30. <b>The 2<sup>nd</sup> Tier needs to be deeply revised and improved, with more ambitious values (closer to LLCC levels) in all possible areas where potential for improvement is feasible.</b></p>	<p>See above</p> <p>The study team is unable to predict what products will look like in future years.</p>	
18/10/2010	Task 7, p174  VPR	<p><b>The short paragraph about other environmental impacts is very insufficient and disappointing. We had already complained about this in previous stakeholder meetings, and no improvement has been made. This is a major failure in the study and a reason for us not to support its conclusions.</b></p> <p>As we had already stated, the comments in this paragraph contradicts chapter 7 of the study, where several improvement potentials have been highlighted and where the conclusion is that the LLCC option occurs for a combination of APD figure, <u>product lightweighting and reusable components</u>.</p> <p><b>This means that the study chapter 7 is expected to provide policy options and scenarios to improve product lightweighting and reusable components (at the very least). Requirements on recyclability, dismantability, use of recycled materials, resource efficiency, etc. could be proposed and elaborated.</b></p> <p>The argument that it would “seem unsuitable to suggest these types of requirements for video players in isolation” is to us an inappropriate remark. Whether to cover video players in isolation or in a more horizontal instrument is a legal/procedural issue which does not clear the consultants from elaborating technical proposals and discussing how to develop such requirements for video players ( which is the very purpose of the study).</p> <p>On top of that, the remark on the bottom of page 174 that “the design and material choices are considered a product function” is not credible and unsubstantiated. We request the deletion of this sentence (which is notably inconsistent with the product definition and functionalities in chapter 1).</p>	<p><i>Thank you for your comments An annex is now provided with an ECMA template. This includes a requirement on product lightweighting, dismantling, product recyclability, scarce metals and reusable components</i></p> <p><i>(Action note to the team: Check cross – referencing of text in GC text to VPR. Extract from GC and put into VPR – then ref to GC.)</i></p>	
18/10/2010	Task 7, p174  VPR	<p>One example among others of how the section on other environmental impacts could be improved relates to <b>product recyclability</b>. Chapter 6 of the study considers in the business-as-usual trends the full achievement of legal obligations under the WEEE directive. However, the study fails to mention that the WEEE targets only apply to electronic products collected separately and so far the separated collection target is only 4 kg/inhab./year. Therefore, <b>the impact of improved recyclability of the products on collection rates is not appropriately highlighted</b>. If appliances are easier to recycle, their end of life value increases and so do the incentives to collect more.</p> <p>Moreover, recyclability is not just related to plastic parts. Increased collection and recycling of <b>scarce metals</b> is</p>	See previous action above	

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		<p>much more effective on decreasing the overall embedded energy (see for example The UNEP study on e-waste recycling from July 2009). A few components (such as motherboard, circuitry, etc) represent a large share of the total environmental impacts in the manufacturing phase, and include metals whose primary extraction is very impacting. In order to grasp this potential and achieve the goal of the Ecodesign directive, particular attention needs to be devoted to improving the <b>design for dismantling</b> for all products covered by the study (e.g. ensuring that scarce metals can be manually recovered and redirected to recycling cycles, instead of mechanical shredding). Dismantability will both help reusing components and increasing recycling of scarce metals and is enforceable and verifiable.</p>		
18/10/2010	Task 7, p175 VPR	<p>We recommend deletion of the first sentence of the page: “The minimum requirements set are already very ambitious...” As mentioned previously, limit values that are set so close to the current base case level and less stringent than the LLCC level can not be qualified as “very ambitious”. Besides, the APD/auto-power down requirement (which is the proposition providing the largest saving potential) is a simple and inexpensive design option, certainly not to be qualified as “very ambitious”.</p>	Sentence is deleted.	14/11/10
18/10/2010	Task 7, p175 VPR	<p><b>The concept of an energy labelling with a scale based on absolute energy consumption is very interesting and in line with how we would like the EU energy labelling to evolve.</b> We do not agree with the comment that “this label is unlikely to produce short to medium term improvements”.</p> <p><b>However, in order to make this label proposal appealing, the consultants need to provide more than two brief paragraphs. We invite them to beef-up this part by describing how the label could look like, which parameters would be displayed on it and how current products on the market would be distributed among classes.</b></p>	An energy labelling with classes that differ only by 1 or 2 watts would be contra productive, since it would not help customers with their decision between similar video products.	
18/10/2010	Task 7, p175 VPR	<p>The remark “product procurement of consumer electronics is relatively low” is questionable. Besides, it is not limited to healthcare and education sectors as mentioned.</p> <p>The remark “eco-labelling for the consumer market is generally not considered to be effective for small, relatively low powered consumer electronics” is also not substantiated (and the meaning of “effective” is not clear).</p> <p><u>We generally invite the consultants to substantiate each statement they make (with sources, references to studies, etc.).</u></p>	As most of the VPR devices are in a price segment below 150 Euros most of them are purchased by chance and no procurement process would be implemented by consumers.	
18/10/2010	Task 7, p175 VPR	<p>The sentence “However, it could be more useful and effective if it was integrated into a voluntary agreement and marketed by manufacturers to help expose free riders” is unclear. What “voluntary agreement” is this referring to? In what way would a voluntary label marketed by manufacturers help expose free riders? It is exactly the opposite: a voluntary eco-label defined, controlled and marketed by the industry provides the highest risk of greenwashing and free riding.</p> <p>So, we suggest deleting this sentence.</p>	Sentence is deleted.	14/11/10

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18/10/2010	Task 7, p175  VPR	<p>The last paragraph on EPEAT specifications should be much more developed. We expect the consultants to describe in more details which EPEAT specifications could be applied to video players/recorders, how they could progressively be included in an Ecodesign measure, what barriers would need to be overcome, what potential would this deliver, etc.</p> <p><b>We are disappointed to see that (again) some interesting policy options are just very briefly mentioned, while the objective of study should be precisely to develop these ideas in details and provide the necessary guidance to implement them.</b></p>	<p>Thank you – the text will be updated to clarify the point.</p> <p>For the EPEAT specifications a separate mail will be provided.</p>	
18/10/2010	Task 7, p176  VPR	<p>The discussion on potential self-regulation is very brief, and does not address all the criteria from Annex VII of the Ecodesign directive. We encourage the consultants to include a discussion on each of these criteria, and indicate the challenges and pros and cons in each case (i.e. market coverage, added value, reporting, etc.) This would give better guidance to decision-makers if they need to assess a proposal for self-regulation.</p>	<p>Self regulation is hardly possible due to the rapid changing markets.</p> <p>New products with new features are coming to the market and existing products are fading away. A growing segment of devices are only manufactured in one single lot, with a production period of 6 to 12 weeks. Sales are only available as long as warehouse stock lasts. A similar product could be made in a following lot under a different brand for a different region. Classification of these products and defining the market share of these products is difficult and shifting fast. Providing a mandatory frame for all manufacturers of these goods is more promising.</p>	
18/10/2010	Task 7, p177  VPR	<p>The bullet point “- Use of BFRs etc” is very laconic. <b>Please develop this point and indicate in details the way of reporting on all significant environmental aspects (measurement method, unit, etc.)</b></p> <p>This has been done for other adopted Ecodesign measures (example: lead and mercury for televisions).</p>	<p>“included main halogenated materials” added.</p>	14/11/10
18/10/2010	Task 7, p177  VPR	<p>The first two rows of the tables are misleading.</p> <p>The APD requirement is not well described.</p> <p>The study should more clearly indicate a proposed revision date for the Ecodesign measure and explain which critical points should be explored and discussed during the revision.</p>	<p>It is not clear to the study team what is unclear with the first two rows of tables and the APD requirement.</p> <p>First two rows are clarified to identify SD and HD more clearly</p>	14/11/10

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18/10/2010	Task 7, p178  VPR	The impact analysis on consumers should discuss whether disabling the fast start mode and enabling APD creates a risk of some consumers being annoyed and changing the settings. Based on this discussion, a sensibility analysis should be developed on the savings potential, and practical solutions should be proposed to reduce this risk.	The impact analysis states that APD will be acceptable for the user	
08/10/2010	Task 7, p167  VPR	<p><u>Passthrough of broadcast signal on video recorder</u></p> <p>In section 7.2.2 (page 167) of the report you have inserted new text as follows:</p> <p><i>“The Commission Regulation No 642/2009 on televisions requires that off mode is reduced to 0.3W unless a hard-off switch is provided, in which case the requirement is 0.5W. This is suitable for video players and recorders, which have generally already achieved this. A device providing passthrough for a video or broadcast signal is currently not considered a standby mode, and could present a possible loophole. However, since there is no evidence that devices are not meeting standby requirements, there is no benefit expected from changing this.”</i></p> <p>There are 2 main methods of providing this RF loop through.</p> <p>One involves using only passive components. No external power is needed but the passed-through signal gets attenuated which means that downstream equipment will receive a weaker signal. This may be insufficient for the downstream equipment to function properly in marginal reception areas and/or when the signal is passed through more than one item e.g. a set top box followed by a DVD recorder followed by a TV.</p> <p>The other solution uses an active RF booster to amplify the signal so that the downstream equipment always receives a good signal; this circuitry does need power even during standby as described by a previous feedback provider on page 81/82 in your Task 1-7 log. This solution tends to be used by manufacturers concerned with quality of user experience and means that consumers should not experience problems when connecting a new recorder into their existing apparatus or having several pieces of equipment cascaded.</p> <p>A video recorder that employs the passive component solution is able to meet the proposed 0.3W standby target. Those having active RF passthrough circuitry will in our experience not be able to meet this limit by a considerably margin. A limit of 1.3W for video recorders that provide lossless passthrough seems appropriate.</p> <p>Would it not be better to regulate the consumption of recorders specifically employing active loop through circuitry at a realistic level, say 1.3W? Otherwise the imposition of a 0.3W limit could preclude active passthrough designs. Please could you confirm whether through path attenuation figures for the video recorders that you state as having already achieved 0.3W standby?</p>	No active pass-through requirements are set. Therefore no changes needed.	

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08/10/2010	Task 7, p169  VPR	<p>Section 7.2.2 on page 169: includes the following statement</p> <p><i>“Furthermore, the Commission Regulation No 1275/2008 only states that a product should ‘offer a power management function or a similar function’. It is neither specified that the power management function should be enabled by default when shipped nor that the APD should be activated after a given time.”</i></p> <p>I believe this is incorrect because 1275/2008 <u>does</u> state that APD should be “activated before delivery” (which presumably means set as default), albeit in a poorly structured way:</p> <p><i>“When equipment is not providing the main function, or when other energy-using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into:</i></p> <ul style="list-style-type: none"> <li><i>o standby mode, or</i></li> <li><i>o off mode, or</i></li> <li><i>o another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source. <b>The power management function shall be activated before delivery.</b>”</i></li> </ul>	Interpretation accepted and report corrected.	14/11/10
18/10/2010	Task 7, p153  VPR	<p><b>Scope Definition – a comment on the term “An Industry Agreed Format”</b></p> <p>We would like to make a comment regarding the footnote 71 on page 162 of the final draft report which explains the term “standard library format”, which is part of the definition of video players/recorders as below:</p> <p>“An industry agreed format defining file structure, media encoding and physical format which provides media compatibility across products.”</p> <p>We think the above explanation is basically correct, while the reference to terms like “industry agreed format” necessarily involves some ambiguity, because the specific meaning of what an “industry agreed format” is will naturally change over time and such formats might include de facto standards but also de jure standards at any given point in time.</p> <p>Referring today to an “industry agreed format” in this regard, excludes in our understanding formats like SD-card, USB memory card and USB connected HDD.</p> <p>We propose to review the understanding regarding what is vs. what is not an industry agreed format before a draft Implementing Measure will be prepared and also when an Implementing Measure will be due for a review.</p>	Thank you for your comments. No action needed.	

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18/10/2010	Task 7, p153  VPR	<p><b>Scope Definition – reference to EN 50130-4: 1995 Vs. 1996</b></p> <p>We welcome that EN 50130-4 (for alarm systems) is now included as one of three EMC standards which are meant to identify professional video players/recorders in order to exempt them from a regulation. The final report does refer to a version from 1996, whereas our previous paper referred to a version from 1995, which we think is the correct year.</p> <p>We propose to refer to the standard including its amendments as follows EN 50130-4:1995 + A1:1998 + A2:2003. The standard name can be checked at the CENELEC website:  <a href="http://www.cenelec.eu/Cenelec/Code/Frameset.aspx">http://www.cenelec.eu/Cenelec/Code/Frameset.aspx</a></p>	<p>We will name the document as proposed in the report.</p> <p>"EN 50130-4:1995 + A1:1998 + A2:2003. + Corr. 2003" is the correct name of the document. The report is corrected.</p>	13/11/10
18/10/2010	Task 7, p156  VPR	<p><b>Mode definitions - [Video player/recorder operational modes]</b></p> <p><u>Editorial comment 1</u></p> <p>We note that the low power modes and on modes listed on pages 165-166 of the final report are structured along numbered bullet points ranging from 1 to 7, but the numbered bullet point 6 has been deleted. Therefore we understand the full list should end with bullet point number 6, not with 7. Corresponding to this also the reference made in the first sentence of chapter 7.2.2 to "seven operational modes" needs to be adjusted to "six operational modes" in our understanding.</p> <p><u>Editorial comment 2</u></p> <p>We assume that the wording "Using video recorder tuner to provide TV with video signal (no live pause)" was meant to be a separate entry under the operational mode "On-play" (p. 165). Currently the above wording is directly attached to the entry "3-D decoding" which in our understanding is not intended.</p> <ul style="list-style-type: none"> <li>• <b>ActiveOn modes</b></li> <li>4. Background Secondary/supporting functions including: <ul style="list-style-type: none"> <li><del>a) EPG updates (only if the device is equipped with a tuner), firmware updates</del></li> <li><del>b) Content navigation</del></li> <li><del>c) Internet access</del></li> <li><del>d) Video upscaling</del></li> <li><del>e) High definition decoding (vertical image resolution of 720 or higher)</del></li> <li><del>f) 3-D decoding Using videorecorder tuner to provide TV with video signal (no live -- pause)</del></li> </ul> </li> </ul>	<p>Thank you.</p> <p><u>Editorial comment 1</u></p> <p>The list will be corrected to 6 bullet points.</p> <p>The first sentence of chapter 7.2.2 to "seven operational modes" will be adjusted to "six operational modes"</p> <p><u>Editorial comment 2</u></p> <p>The list will be corrected to:</p> <ul style="list-style-type: none"> <li>a) EPG updates (only if the device is equipped with a tuner), firmware updates</li> <li>b) Content navigation</li> <li>c) Internet access</li> <li>d) Video upscaling</li> <li>e) High definition decoding (vertical image resolution of 720 or higher)</li> </ul>	13/11/10

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			f) 3-D decoding g) Using video recorder tuner to provide TV with video signal (no live pause)	
18/10/2010	Task 7, p165  VPR	<b>Mode definitions - 3-D Decoding</b> We note that "3-D decoding" is listed as a "Background Secondary/supporting function" (page 165). Therefore it is our understanding that 3D should not be activated during the power consumption measurements. We think our understanding on this matter is further confirmed by the policy scenarios (page 177), where 3D is not specified at all for players as well as recorders.	Correct. No changes required	
18/10/2010	Task 7, p165  VPR	<b>Mode definitions - Adjusting (hardware) settings of the player/recorder</b> In our recent position paper, submitted on June 28 <sup>th</sup> , 2010, we proposed to add the below active mode to the list of on modes to reflect the full range of available modes: <i>Adjusting (hardware) settings of the player/recorder</i> In the final draft report we cannot find any reference to this item (adjusting hardware settings), though the ENTR Lot 3 feedback states "Mode definitions have been updated according to comments." <a href="http://www.ecomultimedia.org/assets/Uploads/Task-Reports-and-work-docs/FeedbacklogLot-3-Internal-Comments-and-Org-names-removedv1.pdf">http://www.ecomultimedia.org/assets/Uploads/Task-Reports-and-work-docs/FeedbacklogLot-3-Internal-Comments-and-Org-names-removedv1.pdf</a> (p. 77)  In our understanding "Adjusting (hardware) settings of the player/recorder" belongs to "4. Background Secondary/supporting functions" (page 165)	Correct. No changes required	
18/10/2010	Task 7, p177  VPR	<b>Mode definitions - Live Pause</b> We welcome that "Live Pause" has been moved to "Recording". At the same time we are confused to see "Live Pause" being listed in the policy scenario table on page 177 as an operating mode of video recorders that should be regulated, while the report states on page 167 that "no recording power limit is set". In our understanding only the "On-play mode – video playback" was meant to be regulated for both video players and recorders. Therefore we think it will be consistent to delete "Live Pause" from the table on page 177. We would appreciate to see a clear definition of the term "Live Pause" being provided in the final report, to ensure that all stakeholders share the same understanding. In chapter 5.3 "Definition of BNAT, A) Video players/recorders (VRs)" there is the following explanation on the term "Live Pause": "live pause buffers the programme being watched and enables the viewer to stop a programme e.g. for coffee breaks." (p. 125). We think this explanation might be the basis for a definition.	Thank you. We will adopt suggested definition of live pause.  Power consumption during recording – always higher than during playback, as it involves more internal processes - depends on the specific layout of the recorder (e.g. the size of the HDD) and would raise the need for adders to reflect such differences. Live Pause is a recording function, which is typically applied only for very short time – as indicated in the study	

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			(e.g. for coffee breaks).	
18/10/2010	Task 7, p170  VPR	<p><b>High Performance video player/recorder</b></p> <p>We welcome that the report gives specific consideration to the complex issue of high performance video player/recorders (pages 170-171). We believe the proposed "hologram sticker or vignette proposal" is an interesting approach which deserves further exploring, not to create loopholes for the players/recorders in the mainstream market but to rightfully acknowledge the role high performance products play in driving technical improvements and innovation. We would like to offer our support and expertise to the Commission in further establishing a workable and practical system.</p>	No action needed.	
18/10/2010	Task 7, p169  VPR	<p><b>Auto-Power Down (APD)</b></p> <p>On page 169 the report specifies the operating modes during which APD could be enabled:</p> <ul style="list-style-type: none"> <li>• fast start</li> <li>• content navigation</li> <li>• live pause</li> <li>• And any other condition not providing playback or recording</li> </ul> <p>Regarding the item "<b>content navigation</b>" we welcome that the final draft report responds to our previous input on disc specifications and potential conflicts with a mandatory APD requirement if APD needs to be enabled during content navigation (in the default setting) as below:</p> <p>"Therefore, a separate policy should be initiated to work with the BDA and disk publishers to ensure that all published discs will allow APD to activate once playback of the disc content has finished where appropriate." (p. 169). We also recommend contacting the DVD disc specification holders to inform them officially about the process at ENTR Lot 3.</p> <p>A contact possibility is provided at: <a href="http://www.dvdfllc.co.jp/contact/inquiryform.htm?100">http://www.dvdfllc.co.jp/contact/inquiryform.htm?100</a>.</p> <p>The main issue we see here is that some of the currently available discs might allow video player/ recorders to distinguish between the actual disc content and the disc content navigation, while other discs might not allow such a distinction.</p> <p>Hardware manufacturers have no control over the disc specifications, but we will support the clarification as much as possible from hardware maker's perspective.</p> <p>We do not understand why "<b>live pause</b>" is mentioned in the above list of operational modes, because "Live Pause" has been moved to "Recording" (please see p. 166 of the final draft report) and in our understanding the inclusion of "live pause" in the above list of operational modes conflicts with the last bullet point of that list "And</p>	<p>No action by study team regarding disk publishers</p> <p>Live Pause is a Recording function and for this reason the list on page 169 where the report specifies the operating modes during which APD could be enabled:</p> <p>Will be changed to:</p> <ul style="list-style-type: none"> <li>• fast start</li> <li>• content navigation</li> <li>• And any other condition not providing playback or recording</li> </ul>	

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		any other condition not providing playback or recording”, as “Live Pause” involves recording.		
18/10/2010	Task 7, p169  VPR	<p><b>Multiple APD signals (Video Player/Recorder vs. TV)</b></p> <p>In our recent position paper, submitted on June 28<sup>th</sup>, 2010, we stated the need to assess potential conflicts arising from video players/recorders being connected to another device (e.g. a TV) while both devices have their own APD time settings. The report makes the following statement in this regard:</p> <p>“Since multiple APD signals can be sent from the timer and HDMI, it is expected that the device can use some logic to apply APD. At its most basic, the first APD signal should cause the device to power down to standby. However, e.g., if the device is switched on by HDMI, it is reasonable for a video recorder to wait for an HDMI signal to power down to standby. The procedure used by the device must be described in the manual.” (p. 169)</p> <p>We would like to mention that a specific use of HDMI cannot be regulated by mandatory requirements, because it is not possible for any manufacturer to control or guarantee how its products will interact with products from other manufacturers regarding implementation of HDMI specifications. Manufacturers can make statements about HDMI functionality only for their own range of products.</p>	No action needed	
18/10/2010	Task 7, p168  VPR	<p><b>Requirements proposed – Policy scenarios for Video players/recorders</b></p> <p><b>Recorders</b></p> <p>We welcome that our input on recorders has been reflected, resulting in increased on-play limits for video recorders of 30W. We are not sure, though, whether 30W is feasible for all video recorders. Considering the time that will pass before the Implementing Measure can be expected to be enforced, we think it might be feasible.</p>	No action needed	
18/10/2010	Task 7, p168  VPR	<p><b>Requirements proposed – Policy scenarios for Video players/recorders</b></p> <p><b>Fast start</b></p> <p>We welcome that the TEC limit [kWh/year] has been replaced by an operational mode limit of 8W for “Fast Start”.</p>	No action needed	
18/10/2010	Task 7, p177  VPR	<p><b>Requirements proposed – Policy scenarios for Video players/recorders</b></p> <p><b>Off mode</b></p> <p>We are surprised and concerned that OFF mode requirements are proposed in the final report (page 177), although neither the previous study nor the stakeholder meetings did indicate such a plan.</p> <p>So far our understanding was the Commission Regulation No 1275/2008 on standby and off mode would be</p>	VPRs do not provide an off-mode. It doesn't exist for Players and Recorders.	

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		<p>confirmed for video players/recorders. The Regulation 1275/2008 gives flexibility to manufacturers as it does not require an off mode but allows implementing standby <b>and/or</b> off mode <b>and/or</b> another condition which does not exceed the applicable power consumption requirements for off mode <b>and/or</b> standby mode.</p> <p>Video players/recorders usually do not provide an off mode as defined by Regulation 1275/2008 (= "off mode" means a condition in which the equipment is connected to the mains power source and is not providing any function;"), because usually a display is provided for video player/recorder, which shows a clock while the product is in standby; the display of a video recorder also indicates whether a record timer has been set.</p> <p>We respectfully ask the consultants to reconsider the proposed off mode requirement as it does not correspond to the established design and functionality of video players/recorders.</p>	Text in the study is from Regulation text. "or off-mode" does not say there is an off-mode.	
18/10/2010	Task 7, p165  VPR	<p><b>On-play mode / example use cases for on-play mode</b></p> <p>The report refers to various example use cases for on-play mode, as shown below (p. 165):</p> <p>5. <u>On-play/</u> Video playback – conversion of encoded video into a standardised video signal including:</p> <ul style="list-style-type: none"> <li><del>a) a)</del> From directly attached, device powered media interfaces</li> <li><del>b) b)</del> From external, network attached or independently powered media</li> <li><del>c) c)</del> Live pause of TV (includes Video on demand (can include simultaneous recording for buffering))</li> </ul> <p>Regarding the wording "directly attached" used in 5-a) we do not know whether this is meant to address the standard disc drive of video players/recorders.</p> <p>Regarding the differentiation of uses cases 5-b) vs. 5-c) we might understand that 5-b) is meant to represent usage scenarios where a video player/recorder and some external device are connected while physically located close to each other. We would appreciate to see a clarification (definitions and examples) on the terminology used in the above use cases. We think such clarification is useful for the below terms:  "directly attached, device powered media interfaces"  "network attached"  "independently powered media"</p> <p>We would also appreciate to see alignment of the terminology used in chapters 7.2.2 and 7.2.4: currently chapter 7.2.2 is referring to "directly <i>attached</i>" interfaces in bullet point 5-a) on page 165, while the table shown in chapter 7.2.4 on page 177 is referring to "directly <i>connected</i>" interfaces in the column "Operating mode".</p>	<p>The respective section will be changed to:</p> <p>5. On-play/ Video playback – conversion of encoded video into a standardised video signal including:</p> <ul style="list-style-type: none"> <li>a) From directly attached, device powered media interfaces (USB-OTG for example)</li> <li>b) From external, network attached or independently powered media</li> <li>c) Video on demand</li> </ul> <p>The term will be changed to "directly attached"</p>	13/11/10

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18/10/2010	Task 7, p165  VPR	<p><b>(Alternative) Energy Efficiency Label for video player/recorder</b></p> <p>We support the conclusion provided in the final report that the EU Energy Efficiency label (A-G label) is not suitable for video players/recorders because the differences in power consumption are too small among the mainstream products for arriving at a meaningful energy classes differentiation that could possibly guide consumers.</p> <p>We do not support the idea to introduce a new, alternative energy efficiency label, just for this product category. We firmly believe that such a label would not deliver any positive results in the marketplace, but would rather put the success of the existing A-G label (forthcoming also for TV) at risk. Introducing a label that would be similar to the existing A-G label, but delivering a totally different message (= all DVD will be „A“ class, all blu-ray „B“ class, all DVD recorders „C“, all Blu-ray recorders „D“, all high end „D,E,F,G“), would leave consumers in total confusion in the shops. We think no information campaign could ever avoid such a result.</p>	No action needed	
18/10/2010	Task 7, p176  VPR	<p><b>Product information and reporting</b></p> <p>We would like to make two comments regarding the proposed list of product information and reporting items (p. 176-177):</p> <ul style="list-style-type: none"> <li>- Regarding the item "APD time (hr) and behaviour when used with eg HDMI-CEC":</li> </ul> <p>We would like to emphasize again that a specific use of HDMI cannot be regulated, because it is not possible for any manufacturer to control or guarantee how its products will interact with products from other manufacturers regarding implementation of HDMI specifications. Therefore manufacturers can make statements about HDMI functionality only for their own range of products.</p> <ul style="list-style-type: none"> <li>- Regarding the item "Use of BFRs etc":</li> </ul> <p>We would like to see a clarification in the final report on the meaning of the word "etc" in this context.</p>	No action needed on hdmi, Use of BFRs will be detailed.	
18/10/2010	Task 7, p163  VPR	<p><b>Definition of High performance video player/recorders:</b></p> <p>Chapter 7.2.1, Page 163 provides a short description of high performance video players/recorders without defining this product category precisely.</p> <p>→ It is suggested to <b>draft an appropriate definition based on technical parameters of high performance video players/recorders</b>, in order to make informed decisions related to keeping this product category in or out of the scope of the ecodesign measure. <b>We would recommend to keep this product group within the scope of this study.</b></p> <p>Two approaches have been proposed to limit the impact of high performance devices:</p>	<p>An exact definition of High performance video player/recorders by technical parameters is hardly possible since the technologies used by different manufacturers vary.</p> <p>Discussion with respective stakeholder lead to agreement with the study team.</p>	27/10/10

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		<ul style="list-style-type: none"> <li>▪ Limiting the number of high performance devices per manufacture</li> <li>▪ A hologram or vignette, which a manufacture should attach to the exempt devices</li> </ul> <p>The above mentioned options can be considered to be rather vague as a clear definition of what a high performance device could be, is currently missing. These approaches might also not work due to several legal reasons, as for instance by leading to trade-barriers.</p> <p>An option could be to <b>demarcate the high performance devices on the basis of their prices at the point of sale</b>. In this case, a solid market data on the price levels of high performance devices per product category would be needed in order to set the threshold values.</p>		
18/10/2010	Task 7  VPR	<p><b><u>Limits to the POWER CONSUMPTION:</u></b></p> <ul style="list-style-type: none"> <li>○ Proposed limit of 10 W for video players in SD is too high. We recommend 8 W as this limit is already fulfilled by a large number of devices in the market.</li> <li>○ Proposed limit of 20 W for video players in HD is too high. We recommend 15 W as this limit is already fulfilled by a large number of devices in the market.</li> <li>○ We propose to <b>eliminate the possibility of a fast start mode in DVD and Blu-ray players</b>, as longer start-up times for players-only devices is not critical when compared to recording devices. If there is a fast start mode, it should be disabled by default, and when the consumer tries to activate it, a warning message should appear indicating the high energy consumption of fast start option.</li> <li>○ Proposed limits of 30 W for DVD recorders in PLAYBACK mode is way too high. We recommend 20 - 25 W for DVD-Recorders with and without HDD. For Blu-ray recorders, a limit of 30 W could be accepted for first tier as there are very few models in the market.</li> <li>○ <b>We propose to set limits for video recorders in RECORDING mode.</b> These are missing in the current draft.</li> <li>○ Proposed limits for live pause should also be lowered accordingly (not higher than limits for power consumption in ON-mode)</li> <li>○ <b>APD should be enabled per default for all devices</b> (video players 30 min; recorders 4 hours) --&gt; A warning message should appear if consumers wish to deactivate APD.</li> </ul>	The limits as proposed in task 7 have been determined following extensive stakeholder consultation	
18/10/2010	Task 7  VPR	<p><b><u>Consumer information:</u></b></p> <p>It is important to explain to the consumers that <b>use of fast start mode leads to enormous increases in total energy consumption.</b></p> <p>In order to create more transparency, it is important that <b>power consumption values in Watts for fast start mode and normal stand by mode is provided.</b></p>	This has been included in current proposed requirements.	

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		<p>It is important to mention that <b>deactivation of APD would lead to increased in total energy consumption (and hence higher electricity bills)</b>, as the device will continue to operate in operations modes with high power consumption.</p> <p>Lastly, from consumer's perspective, it is more effective to <b>get information on high power consumption of fast start mode when consumer decides to activate the fast start mode</b> (for instance, as a warning during configuration).</p>		
18/10/2010	Task 7, p166  VPR	<p><b>Fast start implementation</b></p> <p>For video <b>recorders</b> the report recommends implementation of „Fast Start“ as below:</p> <p>“For video recorders, the ability to start very rapidly to record is an important part of the user experience. However, this is generally only required while the TV is actively being used. Without specifying the precise technique, the use of fast start is expected to be limited to approximately four hours. This could be achieved, for example, by using HDMI-CEC or a timer that activates in line with a standby for 14h of normal usage patterns.” (p. 166-167)</p> <p>We would like to emphasize that a specific use of HDMI cannot be regulated, because it is not possible for any manufacturer to control or guarantee how its products will interact with products from other manufacturers regarding implementation of HDMI specifications. Therefore manufacturers can make statements about HDMI functionality only for their own range of products.</p>	No action needed	
18/10/2010	VPR	<p>We regard the development of a vignette/hologram-sticker-system as a viable solution to limit the environmental impacts of High End audio and video devices. As a secondary effect such a system will provide exact data about the market and give detailed information about the specific environmental impact of these niche market devices. A revision of the situation after a four years term and based on the data gained by the registration system for a vignette will help to monitor the development and its impacts in detail.</p> <p>For these reasons we would prefer a vignette/hologram sticker solution with the following advantages</p> <ul style="list-style-type: none"> <li>- easy to control</li> <li>- online registration</li> <li>- open for every High End manufacturer and compliant with WTO rules</li> <li>- options to circumvent are almost impossible, due to <ul style="list-style-type: none"> <li>- individualised vignette/sticker on the device</li> <li>- database with free access via Internet</li> </ul> </li> </ul>	Advantages of a sticker solution is added to Task 7.	12/11/10

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		<ul style="list-style-type: none"> <li>- activation of the registration upon arrival of payment</li> <li>- security backup database without Internet connection</li> </ul> <p>To keep the costs of the solution low, the vignette system should be organised by a foundation backed by the respective industry and the European importers. We would offer to initiate such a foundation and support its operation.</p> <p>We are, as the leading association of the High End industry in Europe and the European importers, open for any co-operation with the European Commission on the issue of a further and controlled access of High End equipment to the European market.</p>		
18/10/2010	VPR	<p>When compared to current base case products, <b>the proposed power caps for video players &amp; recorders appear insufficiently stringent</b>. We suggest 8 W for DVD players and 15 W for high definition playback of Blu-ray players for the 1st tier (2012). <b>A much more elaborated 2nd tier (2014) should also be proposed for all product categories and modes, to ensure dynamism.</b></p>	<p>There is no further development in DVD components. Thus reducing the power consumption of DVD players will not create a significant improvement, since manufacturers will have to shift to BD components, which will increase the power consumption per device to 15 W.</p>	
18/10/2010	VPR	<p>So-called 'Fast start' modes in media players and recorders should be disabled by default and consumers informed about their much higher electricity consumption compared to usual standby.</p>	<p>Fast start is disabled in 'as delivered' state – as in the report</p>	
18/10/2010	P / VPR	<p>Too rudimentary paragraphs are included on the <b>energy labelling</b> of video players and projectors. They are far insufficiently developed to be a guidance for policy making. <b>This is a pity since they could be interesting concepts</b>. We expect from the study team to beef-up and substantiate more these key aspects.</p>	<p>Projectors -existing test methodology for, and declaration of maximum light output of, projectors is currently too inaccurate to support labelling. The need for improvements in this test methodology in the context of energy labelling is clearly stated in the existing text.</p> <p>VPR – complex functional adders. Detail will be added to the paragraph on Energy Label of VPR</p> <p>Energy labelling for video players would result in 1 or 2 W steps. The difference between two steps would be too small to be recognised by the consumer.</p>	

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18/10/2010	Task 7 (policy/impact analysis)  P	Digital Projector: This general approach would be supported.	Thank you	
18/10/2010	Task 7, p181  P	We recommend further refinement of the criteria for 'professional projectors', as it seems the current draft could create potential loopholes. Manufacturers could sell quasi-professional products on the mass market (with an SDI interface or a misleading instruction manual) and be exempted of Ecodesign requirements. This would be an incentive to create more high-end powerful products instead of reducing the energy consumption.	Direct communication with the stakeholder to clarify this observation has been made. It has been pointed out in the communication that the caveats provided in the definition to exclude non-professional products from the main projector market are specifically aimed at low cost (generally low end) projectors with the potential to exploit loopholes that may allow them to be sold as quasi-professional products in the projector mass market category. High end powerful products could not compete on cost terms in this main projector mass market and this stakeholder observation is not understood.	
18/10/2010	Task 7, p182  P	The whole paragraph 7.3.2 (energy efficiency requirements) is expressed in an insufficiently rigorous and proof-checked language, leading to ambiguous or unclear expressions. The English needs to be proof-checked and clarified, and the requirements described in more precise descriptive terms.  <b>It would even be better and appropriate to express these requirements in the format of the language of Ecodesign regulations (inspiration may be found in adopted measures). This would better support policy development and facilitate stakeholder discussions.</b>	The paragraph has been carefully re-examined and minor grammatical changes made to ensure unambiguous interpretation	
18/10/2010	Task 7, p185  P	Minimum requirements are proposed with insufficient details on the rationale leading to these limit values. We would like to see more explanations on how these proposal compares to the LLCC values for example.	LLCC values are referenced in this context in the existing text	
18/10/2010	Task 7, p186  P	The 2015 saving potential could be deleted, as the calculation is not robust enough (as mentioned it is based on a stock assumption which is hardly credible).	Request to delete not accepted. The stock assumption is based on Industry data	

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18/10/2010	Task 7, p186 P	The description of the assumptions for the saving potential scenario calculations is not detailed enough. Only the baseline power consumptions are provided.	Text modified in savings potential to justify the use of baseline consumption only	
18/10/2010	Task 7, p187 P	<b>Same remark as for video players: we find the paragraph on other environmental impacts very disappointing and insufficient to guide policy development (see third page). The study has not provided the expected progress on how to adequately cover these aspects under the Ecodesign policy.</b> Easier dismantling is an example of where concrete proposals should be made, as well as using the ECMA basis to set a generic requirement in Tier 1 and then a mandatory specific requirement in a Tier 2 in 2014.	As for VPR  An annex is now provided with an ECMA template. This includes a requirement on dismantling	
18/10/2010	Task 7, p187 P	<b>We are surprised and very disappointed that the consultants have not spent any further effort on developing a comprehensive energy labelling proposal for projectors, as we had requested in our previous comments (from June 2010). The study has missed an important potential here.</b>	Not feasible at this stage – test method issues as discussed in earlier answer above	
18/10/10	Task 7, p190 P	The proposed requirement “All projectors should have a reduced power operating mode (Eco-mode) to conserve energy and extend projector lamp life” is unclear. More details are required to define this mode and its characteristics. The consultants are invited to accompany each of their proposal with a sufficient amount of technical description. Otherwise it cannot be included in a regulation.	Existing text clarified with suggested Eco-on -mode energy saving based on typical eco-on –mode specifications of current projectors in the European market.	
18/10/2010	Task 7, p190 P	We reiterate a comment already made in June and which has not be properly considered:  ➤ <b>Minimum requirements on the mercury content and lifetime of the projector lamp.</b> We would welcome more information on how (far) projector lamps are currently covered by RoHS and how the level of ambition there compares to benchmarks. Ecodesign can complement the RoHS policies if needed, for instance by setting tougher requirements and/or imposing the indication of the mercury content on the packaging of the lamp and projector. We also suggest exploring minimum requirements on the lamp lifetime (to avoid early replacement of the projector due to very high costs of retrofit lamps).	This point is covered by the ECMA declaration as clearly shown in the new ECMA annex. Furthermore mercury vapour and other projector lamps are covered by ROHS	
18/10/2010	Task 7, p191 P	The text stipulates that “light sources based on solid state diodes will foster cooler running and more compact products with a commensurate reduction in the weight of materials”. However, the study has not proposed clear policy options to promote and accelerate the deployment of such light sources. In that, it did not meet the objective of proposing policies to reduce all significant environmental aspects of the products.	Text has been modified to clearly indicate that – other industries are leading and funding solid state illumination developments (eg auto-makers) and that the projector industry will benefit from these technological developments without related direct policy.	
18/10/2010	Task 7, p170 P	<b>General Considerations - Anticipated potential development in projector technology</b>  We welcome that the final draft report acknowledges that predictions on potential projector energy efficiency improvements of 50% from projector solid state light sources need cannot be validated today, <i>even under non-disclosure agreements</i> , and that therefore it is impossible to predict the potential performance of Solid State	Reference to BNAT level of 0.05W/ lumen has been qualified in section 5.3.2 with the caveat that this is a claimed achievable efficiency from one projector industry manufacturer	

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		<p>Illumination for projectors beyond 2012.</p> <p>We note, though, that this important conclusion is not yet reflected in section 5.3.2 of the report, where it still says that BNAT is based on LED technology and that efficiencies of 0.05W/lumen can be reached. We are concerned that stakeholders might get confused about such contradicting messages and kindly request to revise also section 5.3.2 accordingly.</p>	<p>specialising in Solid State light source for projectors. But no evidence supporting this claim is forthcoming and the products using this type of light source are currently less efficient than those using discharge lamp technology</p>							
18/10/2010	Task 7, p170  P	<p><b>General Considerations - Definition proposal to define professional projectors</b></p> <p>We welcome the proposed way to define professional projectors which has been developed and revised in response to feedback from the consultants that we had received after the 2nd stakeholder meeting.</p>	<p>Thank you</p>							
18/10/2010	Task 7, p132  P	<p><b>Energy Efficiency Requirements - Potential for setting minimum requirements – definition for setting minimum requirements</b></p> <p>We note that the final draft report refers to a definition of short throw projectors which is taken from the Japanese Eco Mark specifications for projectors.</p> <p>We prefer the definition from Pacific Media Associates (PMA) which is major <b>global</b> market research firm for displays and better known in the industry than the Japanese definition.</p> <p><b>Definition of Short Throw Projectors (Pacific Media Associates)</b></p> <table border="0"> <tr> <td>Short throw ratio</td> <td>&lt;0.75</td> </tr> <tr> <td>Distance from projector screen</td> <td>from under 150cm</td> </tr> <tr> <td>Image size</td> <td>200cm image measured horizontally</td> </tr> </table>	Short throw ratio	<0.75	Distance from projector screen	from under 150cm	Image size	200cm image measured horizontally	<p>The project team has discussed this in detail with the stakeholder and maintain that the Japanese eco-mark definition of a short throw projector is technically the same as the PMA definition but with a different wording construction. This being the case, the PMA wording has been adopted in the Text since this is obviously preferred by the key Industry stakeholder and is originally worded in English.</p>	
Short throw ratio	<0.75									
Distance from projector screen	from under 150cm									
Image size	200cm image measured horizontally									
18/10/2010	Task 7, p132  P	<p><b>Energy Efficiency Requirements - Potential for setting minimum requirements – home cinema projector</b></p> <p>We note that the final draft report states that there is “insufficient Industry data available to set a coefficient for the colour filtering and image contrast enhancement light output loss inherent in home cinema projectors. Examination of available 2010 data for this genre of projector shows dramatic inconsistency in the impact of image processing on the efficiency. Some are no worse than the average standard projector efficiency 0.13 W/lumen and some degrade efficiency to worse than 0.8 W/lumen. It is noted that the home cinema projector market is less than 10% of the total EU27 market for projectors and it is predicted to be the first projector market to be seriously reduced by the impact of lower cost, very large screen, TVs.” (p. 184)</p> <p>We understand that our members have submitted sufficient industry data to the consultants and that the insufficiency relates to the “dramatic inconsistency” of energy efficiency of available home cinema projectors which is a fact. We agree that the home cinema projector market is less than 10% of the total EU27 market and is not expected to increase.</p> <p>We would like to emphasize that if home cinema projectors are to be regulated there is a definite need to find suitable a coefficient for the colour filtering and image contrast enhancement light output loss; otherwise the EU</p>	<p>The study team is unable to draw conclusions from data provided on home-cinema projectors thus far.</p> <p>The study team and Industry recognise there is an urgent need to find a way of declaring the basic on-mode efficiency of the home cinema projector before light processing artefacts are added for subjective image improvements. The text has been modified to further emphasise this issue. A nominal coefficient to correct for such light processing artefacts has been proposed in Task 7</p>							

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		market for home cinema projectors can no longer exist.		
18/10/2010	Task 7, p132  P	<p><b>Energy Efficiency Requirements - Potential for setting minimum requirements – Low power limits – network standby</b></p> <p>We are surprised and concerned to see that the final draft report refers to Regulation No 1275/2008 also for introducing Network Standby limit [1.0W].</p> <p>The report says that for network standby no extra allowance has been factored into the limit “since it is likely that, for example, network integrity data exchanges could use a very short duration timed window implemented in some network connected STBs or may be proxied to another supporting product (e.g. LAN server, router with mini-server).” (p. 185)</p> <p>We would like to emphasize that assumptions on “likely” scenarios need much more detailed assessment before they can become a potential subject of a mandatory regulation. Without such a proper assessment we cannot support a Network Standby limit for projectors.</p>	<p>The study team do not agree that the examples of technological solutions given for low energy solutions for network interfaces in a projector, would appear in a mandate. The object of the reference to Regulation 1275/2008 is to provide advice to the Commission that the limits set under this regulation are already challenging to projector designers and that lower product – specific limits should not be considered. A sentence has been added to this section indicating that relevant low power mode criteria would be subject to the take up of recommendations from the Lot 26 “Network Standby” study.</p>	
18/10/2010	Task 7, page 132  P	<p><b>Energy Efficiency Requirements - Potential for setting minimum requirements – On mode</b></p> <p>We welcome that the final draft report introduces a classification of projectors according to their effective flux for setting efficiency limits (p. 185).</p> <p>At the same time we would like to emphasize that the specific energy efficiency limits proposed in the table on page 185 are impossible to meet for home cinema projectors.</p>	<p>The study team agree that it is essential to develop a method of properly classifying the light output of home cinema projectors as discussed in the answer above</p>	
18/10/2010	Task 7, p 176  P	<p><b>Other Considerations on Ecodesign Requirements - Other environmental impacts of projectors – ECMA 370 (or similar tools)</b></p> <p>We understand that ECMA 370 is well suited to inform about the environmental impact of projectors. In case a reporting requirement based on ECMA 370 will be introduced in a regulation we kindly request to clarify that manufacturers should issue such information only based upon the latest version of ECMA 370 available at the launch of a new projector model and not be required to update an existing ECMA 370 report every time the ECMA 370 standard is updated.</p>	<p>The study team consider this to be a reasonable request.</p>	

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18/10/2010	Task 7, p176  P	<p><b>Other Considerations on Ecodesign Requirements - Relevance of energy or eco labelling, benchmarks, public procurement etc.</b></p> <p>We would like to highlight that the projector market is mainly a business to business market. Therefore we consider the environmental information provided in ECMA 370 much better suited to guide business customers than an A-G label which in our understanding is more suitable for the consumer market (which for projectors is less than 10% of the total market).</p>	Whereas the study team appreciate the endorsement of an ECMA based declaration they can not agree that an A-G energy label would not influence procurement customers.	
18/10/2010	Task 7, p176  P	<p><b>Other Considerations on Ecodesign Requirements - Measurement requirements and existing test procedures</b></p> <p>We appreciate the efforts from the consultants to support finding a suitable measurement approach for the major projector technologies. The measurement is a key factor and directly linked for interpreting any potential energy efficiency limit based on light output.</p> <p>We are confident that the current discussions among our members will lead to a workable solution and will inform the consultants and the Commission about it as soon as possible.</p> <p>At the same time we need to emphasize that considering the state of current discussions among industry we cannot support the below statement from the report:</p> <p>"But there is growing agreement in the Industry, at this final stage of the study, which would indicate that a declaration of maximum projected light output for both, primary colour illuminance and white light illuminance could be made." (p. 188).</p> <p>Significant parts of the industry consider that the proposal described in the draft final report does not adequately reflect their concerns. We are afraid that it is too early to recommend a specific approach in the study.</p>	The text has been modified to clearly indicate that the growing consensus on test methodology in the industry is a study team interpretation of current related Industry activities.'	
18/10/2010	Task 7, p176  P	<p><b>Other Considerations on Ecodesign Requirements - Product information and reporting</b></p> <p>We note that the proposed list regarding mandatory product information and reporting includes the item "EU ecolabel" (page 189). In our understanding there is no EU Eco label for projectors.</p>	Clarified by the small text change – "if one is devised"	
18/10/2010	Task 7, p178  P	<p><b>Policy Scenarios - Noise Level</b></p> <p>We are surprised to see a requirement for noise emissions in the final draft report. We do not think this is a relevant issue for projectors because it is regulated efficiently already by the market.</p>	The study team maintain that the existing text supports this sentiment but provides guidance for the Commission if it requires to mandate minimum noise standards for the projector product.	

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18/10/2010	Task 7, p190  P	<p><b>Policy Scenarios - Eco-mode</b></p> <p>We note that the final draft report states that all projectors "should have a reduced power operating mode (Eco-mode) to conserve energy and extend projector lamp life." (p. 190)</p> <p>We consider the term "Eco-mode" to be rather ambiguous. We understand "Eco-mode" is meant to address the same functionality as the term "Eco Video projection" which is introduced as an operational on mode in chapter 7.3.2 (p. 183). If either of these terms is meant to be used in a mandatory regulation we think a proper definition will be needed. We would like to offer our support in finding a suitable definition.</p>	As discussed in response to another stakeholder above, the text has been modified to specifically qualify the eco-mode relative efficiency level.	
18/10/2010	Task 7, p179  P	<p><b>Impact analysis</b></p> <p>We would like to comment on the first section of the Impact Analysis provided in chapter 7.3.5 of the final draft report ("Monetary impacts for categories of users in particular as regards affordability and life cycle cost of the product (confirming or modifying the results obtained in subtask 6.1)")</p> <p>We have already commented during the stakeholder meeting that we do not agree to the statement that "<i>There would be no negative effect on the users as a result of the proposed policy. This is because there are no additional costs assumed.</i>" More energy efficient video projectors rely on more expensive components and this will have an impact on the price that has to be paid by the user. Data on the cost of certain components has already been provided to the consultant under a Non Disclosure Agreement by an individual company.</p>	The study team maintain that the opinion stated in the text is a proper interpretation of data given under an NDA and of other related data, particularly that supporting the fact that other Industries (eg automobile industry) will bear the main burden of R&D costs for solid state NBAT lighting developments.	
18/10/2010	Task 7  P	<p><b><u>Two key points are missing from the proposed policy scenario in the draft report:</u></b></p> <ul style="list-style-type: none"> <li>▪ <b>Threshold values of minimum lamp life</b> (based on 50% of rated projected light output). This is of particular interest to consumers as the price of a lamp usually ranges from 200 to 600 euros, i.e. sometimes more expensive than an entry level category projector.</li> <li>▪ <b>Threshold values for acoustic noise levels</b> (compare German Blue Angel label or TCO-label for projectors)</li> </ul>	<p>The threshold value of the minimum lamp life of the lamp specified by the manufacturer is invariably provided in the product handbook and often provided in the general specification for the product at point of sale. The study team do not accept that the report text needs modification in this context.</p> <p>The study team recommendations on noise level are carefully considered and they can not find any evidence to support the recommendation of the arbitrarily stringent noise criteria of the referenced labels. The blue angel noise criteria in particular has prevented many projector products with otherwise excellent eco-design meeting label requirements.</p>	
18/10/2010	Task 7	<b><u>Consumer information on DLP technology and the "rainbow effect":</u></b>	The study team consider these	

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	P	<p>DLP projectors utilizing a mechanical spinning color wheel may exhibit an anomaly known as the "rainbow effect." This is best described as brief flashes of perceived red, blue, and green "shadows" observed most often when the projected content features high contrast areas of moving bright/white objects on a mostly dark/black background.</p> <p>Effects on the viewer range from a minor distraction to a severe flaw that makes the projector unwatchable. <b>In addition to being visually distracting, the effect is also reported to cause headaches and eyestrain.</b></p> <p>Unconfirmed industry sources indicate that the rainbow effect is noticed by 1% of the population. Other unconfirmed sources estimate that <b>up to 10% of the population might be sensitive to the effect.</b> Although the market appears to be gradually shifting away from single-chip DLP projectors, the latter are still very much available, especially in the entry level price category.</p> <p>→ <b>Therefore, following line should be added in consumer information with single-chip DLP projectors "single-chip DLP projectors might result in the rainbow effect. Hence, three-chip DLP projectors represent a better option in terms of avoiding rainbow effect".</b> A brief explanation of rainbow effect as stated above should be included as well.</p>	<p>observations to be a subjective assessment of a specific projection engine technology and in the interests of maintaining the technological neutrality of the study can not accept the comments.</p>	
18/10/2010	Task 7  P	<p><b><u>Consumer information on lamp life duration:</u></b></p> <p>Several projectors include a lamp life counter (in hours) in their menu. Such counters count hours linearly and currently do not take into account the various modes in which the projector has been used. A lamp life counter may indicate 500 hours on a projector which has only been used in low-consumption modes, while another counter may also indicate 500 hours for a projector which has been used in an intensive mode. As a result, <b>lamp life indicators provide very inaccurate information on the real status of the lamp and on the very consequences of their choices of modes.</b></p> <p>An option to tackle this issue could be to have manufacturers clearly state (in consumer information and user guide) that the counter is purely indicative and is based on assumptions of typical use.</p>	<p>No recommendation is made by the study team in the context of lamp life indicators precisely for the reasons given in this comment. The study team do note that lamp life (to 50% of rated light output) is stated by all manufacturers in product specifications. (See related answer above)</p>	
20/10/2010	Task 7, p 184+185  P	<p>It is stated that the best available projectors with rated light output of 2000-4000 lumen have efficiency on 0.07 W/lumen. But in the table of efficiency limits at p. 185 the limit is set at 0.095 W/lumen. One would assume that the BAT would in the coming years gain momentum, and hence the limits could be lowered. Could the project team please explain why the BAT has not been incorporated in the efficiency limit perhaps at a later stage e.g. 2015?</p>	<p>The study team do not recommend a Tier 2 mandated minimum efficiency because of the rapid developments in solid state illumination. It is possible that a value of .07 W/lumen may not represent a challenging efficiency performance level for Tier 2. The study team recommend that the Commission constantly reviews this issue in the implementation period of a final mandate or agreed VA.</p>	

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20/10/2010	Task 7, p 184+185 P	We appreciate that no adders is put on minimum efficiency regarding various lens technologies.	Thank you	
20/10/2010	Task 7, p186, Table Usage pattern P	Could the project team please explain the direct impact on the usage pattern (saving in average usage) when introducing APD?	The report text clearly states that the APD for projectors is a function to specifically prolong the life of current projector lamps. The APD implementation period (no user requirement) is usually factory defaulted at 10 minutes but may be re-set by the user. The text states that the actual APD shut down period involves a cooling sequence but that this is too short to impact on the energy usage pattern of the projector.	
20/10/2010	Task 7, p189 P	It is stated that new technologies with similar or even better energy efficiency will emerge within the next month, and that the Commission should conduct an ongoing review. This is a highly essential conclusion, as new and more efficient projectors will increase the saving potential and hence the limits in the coming years could be lower. We recommend that this statement is highlighted very clear in the final report.	No comment – we agree.	
18/10/2010	Task 7 GC	While the limitation of the power consumption shown in the Task 7 seem to be suitable for single (or double) chipped low price mass-market devices the limits given are by far too strict for High End products.  Supplying a niche market with a market share of less than 1%, the European High End manufacturers and the respective importers have no access to mainstream mass-market highly integrated silicon and such highly integrated silicon is not available to provide the quality for the specific demands of the High End market.	The high definition games consoles have not been considered as High End products during the preparatory study due to the very large sales volumes.	
18/10/2010	Task 7, p13 GC	GC TEXT: "Most of the power modes, except the active mode, present a good potential for reducing power consumption. Idle and sleep mode power demand could be reduced to the levels provided in the draft ENERGY STAR specification, while for off mode no further power requirements are deemed necessary as it is already appropriately covered by the ecodesign Commission Regulation No 1275/2008."  This report refers in numerous locations to <i>Energy Star® Program Requirements for Computers, Version 5.1, Game Console Requirements – Draft Final</i> . This draft version defined and set limits for modes based on previous work and study based on computers, not game consoles. The mode definitions were as a result incorrect and the	It is made clear in the Task 7 report that the ENERGY STAR specification was in draft at the time of writing.	

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		<p>power limits prescribed were unachievable. For this reason, it was not possible for the Game Console industry to participate further and the effort was abandoned. The draft was never adopted by Energy Star and has since been replaced with Version 5.2 which removes all references to consoles. See:</p> <p><a href="http://www.energystar.gov/ia/partners/prod_development/revisions/downloads/computer/prog_reqs_draft_v5.2.pdf">http://www.energystar.gov/ia/partners/prod_development/revisions/downloads/computer/prog_reqs_draft_v5.2.pdf</a> for complete text including the specific exclusion of game consoles from the scope.</p> <p>There clearly is no Energy Star specification for games consoles and even if there were it would have applied only to the top quartile. As we and other stakeholders noted in responses to the last draft, it is inappropriate to use the abandoned draft as guidance for the development of regulations with such significant impact to the industry. To continuously to refer to it as a legitimate document gives it gravitas that is not warranted and has the potential to mislead stakeholders into thinking that it has some validity where there is none.</p> <p><b><i>All references to Energy Star game console requirements should be removed from this report.</i></b></p>		
18/10/2010	Task 7, p 193  GC	<p>GC TEXT: It is also necessary to add in a separate definition to aid in the distinction between games consoles offering high performance gaming compared to more standard performance. Higher performing games consoles can currently be defined as those which support high definition images. As such as the additional definitions should also be considered:</p> <ul style="list-style-type: none"> <li>• <b>"High Definition Games console"</b>: can support gaming at 1080p high definition output (native resolution of 1920x1080)</li> <li>• <b>"Standard Definition Games console"</b>: can only support output at resolutions of below 1920x1080</li> </ul> <p><b><i>High Definition is generally defined as minimum native resolution of 1280X720. A games console supporting 1920X1080 is High Definition, not Standard Definition.</i></b></p>	The commentator is correct that a native resolution of 1280x720 is considered to be high definition. The Task 7 report used 1080p as the benchmark for "high definition" rather than 720p as suggested by the commentator as 1080p resolution is "Full HD". For the purposes of accuracy the definition will be changed to 1280x720.	
18/10/2010	Task 7, pp. 196-197  GC	<p>GC TEXT <b>Game console operational modes</b></p> <p>This section is derived from the void Energy Star document referenced earlier. The definitions are not appropriate for games consoles. More appropriate definitions are:</p> <p>Active Gaming</p> <p>Media Play</p> <p>Navigational (dashboard or mode select screen)</p> <p>Networked standby</p>	<p>As part of the Task 7 review, the preparatory study team have received a set of power mode definitions from NGOs and industry. The Task 7 report has been updated to reflect these suggested definitions.</p> <p>The commentator has particular concerns about the use of the "Game Play Idle" mode. This mode is designed to reflect a power mode where a game is loaded but the console is not providing its major function of "game</p>	

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		<p>Standby/Off</p> <p>Particularly problematic (and drawn from the Energy Star requirements) is the use of the term "Idle." According to Terra Novum, the consultancy that prepared the original E* document V 5.0, "Idle" is a part of what is defined for computers as <i>"Active State: The state in which the computer is carrying out useful work in response to a) prior or concurrent user input or b) prior or concurrent instruction over the network. This state includes active processing, seeking data from storage, memory, or cache, including idle state time while awaiting further user input and before entering low power modes."</i></p> <p>Tasks associated with gaming in all of the idle modes in the Energy Star document require constant, ongoing active processing, seeking data from storage, memory, or cache, and the like. Time in an "idle" mode cannot be accurately measured, and if it could, it would constitute a very small fraction of the time spent in any active mode.</p> <p><b><u>We ask that all references to Idle in this context be removed.</u></b></p> <p><b><u>The specific reference to Game Play Idle on p. 197:</u></b></p> <p><i>Game Play Idle: A game is loaded, from any source, while not actively being played and the console has received no local user input for a period of ten minutes.</i></p> <p><b><u>should be addressed through automatic power-down to limit the time in that mode, rather than through a limit on power in the mode.</u></b></p>	<p>play". The commentator has not provided a technical reason to prove that the mode "Game Play Idle" as described is incorrect i.e.) that current games consoles do not have a power mode where the game is loaded but is not providing any functionality.</p> <p>The commentator claims that "Time in an "idle" mode cannot be accurately measured, and if it could, it would constitute a very small fraction of the time spent in any active mode". The study team has not seen any evidence to suggest that time spent in an "idle" mode would constitute a very small fraction of overall time. In addition, it is suggested that the "Game Play Idle" mode as described in the Task 7 report could be measured as easily as any other mode where there has been no user activity for a pre-defined period of time.</p> <p>The commentator does not provide a technical reason for suggesting that energy use from "Game Play Idle" should be reduced through APD functionality rather than by any power efficiency limits.</p>	
18/10/2010	<p>Task 7, pp 197-198</p> <p>GC</p>	<p>GC TEXT: Sleep Mode</p> <p><i>Although we have no objection to inclusion of this mode in the definitions as an optional mode, we do not support mandating the inclusion of sleep functionality similar to ACPI S3 (commonly known as "Sleep Mode") or S5 ("Hibernate")</i></p>	<p>The Task 7 report suggests that sleep mode power demand is addressed either as part of a TEC approach or as an individual power mode. If addressed as an individual power mode it is suggested that the draft ENERGY STAR power requirements and industry proposed levels are considered as ErP requirements.</p> <p>The Task 7 report does not define the</p>	

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			<p>sleep mode of games consoles as being equivalent to ACPI S3 (sleep mode) found in desktop and notebook personal computers (PCs). The Task 7 report includes the suggestion that an "off mode" of Games Consoles (where the console is not connected to a network and no reactivation by remote control is possible) is similar to the off mode of PCs (ACPI S5). The Task 7 report also suggests that the off mode of games consoles (in the condition described above) could also be viewed as "off mode" as defined in EC 1275/2008. The Task 7 report also states that the standby/sleep mode of Games Consoles (where the console is not connected to a network but reactivation by remote control is possible) could be considered to equal the definition of standby in EC 1275/2008. Where a Games Console is in a sleep/standby mode with an active network connection present then it is suggested that this mode could be considered "network standby".</p>	
18/10/2010	Task 7, p200  GC	<p>GC TEXT: <b>Figure 25 – Draft ENERGY STAR Specifications for Games console System Idle</b></p> <p><b><u><i>This table is part of the obsolete draft e* game spec and not included in present Energy Star specifications. As such it is not relevant to this discussion. Please delete all references from this report.</i></u></b></p>	<p>As previously stated, the task 7 report makes it clear that the ENERGY STAR specification was draft at the time of writing.</p>	
18/10/2010	Task 7, p200  GC	<p>GC TEXT: However, it is also important to note that at the time of writing the US EPA have postponed finalisation of the ENERGYSTAR games console specification. Some games console manufacturers have suggested that finalisation of the specification has been postponed due to industry concerns about the specification values.</p> <p><b><u><i>Energy Star Reference. The specification was discontinued, not postponed. Please delete.</i></u></b></p>	<p>See earlier comment.</p>	

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18/10/2010	Task 7, pp204-206  GC	<p>GC TEXT: Sleep Mode, Networked Standby Mode</p> <p>(See above for comment on Sleep Mode)</p> <p>The Lot 26 Preparatory Study now underway is examining networked standby losses, which presumably will apply to games consoles. Therefore, to include further verbiage covering networked standby issues in this document is confusing and risks developing mutually exclusive requirements. We ask that networked standby limit discussions be addressed in that forum.</p>	<p>The task 7 report includes discussion of "network standby" in games consoles and suggests that an additional allowance (in Watts) on top of "off mode", as found in PCs, could be used in a measure for this power mode.</p> <p>It is suggested that product specific ErP measures can be made more relevant than horizontal measures. The Commission appears to have taken this opinion for other computing products, such as PCs, where the off mode requirements have been removed from EC 1275/2008 and placed inside the computing requirements working document.</p>	
18/10/2010	Task 7, pp205-209  GC	<p>GC TEXT: TEC</p> <p><b><u>We support the use of TEC metrics for determining impact of games consoles and requests to be included in the further development of definitions and limits in that regard.</u></b></p> <p>We expect that the usage profile be developed from on-line data available from at least two manufacturers. Specific independent research could be commissioned, if appropriate. We suggest that modes measured be limited to standby/off, navigational (dashboard), media play, and game play.</p> <p>The report notes on page 208, "<i>Whilst the above TEC calculation may be suitable for current generation high specification games consoles (i.e. the active mode power requirements are known) it is unlikely to be suitable for future games consoles where active mode power might increase. As previously mentioned, any restriction placed on the active mode is likely to impact the functionality of future products. It is not currently possible to predict the active mode power demand of future games consoles as manufacturers have stated that they are, at the time of writing, undecided on future specifications. As such, the exact amount of energy allowable for any future games console under a TEC approach will need to be decided once there is a clearer idea about future active mode power demand.</i>" (emphasis added)</p> <p>We agree with this observation and will be pleased to participate in further development of a TEC approach.</p> <p>In Figure 33, we dispute the 70%/30% division of "Active" to "Idle" functionality and question where this number</p>	<p>There will be a need to further define the use profile used in any TEC approach for games consoles.</p> <p>There will also be a need to finalise the definitions of the different modes that are measured as part of the TEC approach.</p> <p>The assumed 70%/30% Active/Idle time split was based on an assumption given lack of any other data being available. Further data from manufacturers would be very useful.</p>	

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		came from. Please refer to our previous comment, pp. 196-197, GC TEXT <b>Game console operational modes</b> , for our rationale.		
18/10/2010	Task 7, pp 208 and 209  GC	GC: <b>gigaFLOPS</b>  The idea of defining “efficiency” as a ratio of FLOPs to watts is new to us in the context of a verifiable energy metric. We are not aware of any agreed-upon method of measuring this ratio and question its predictive value with regard to future console innovation unless considerably more study is done on the subject. The text seems to imply that a reduction of both active computing power per watt and “Idle” power per watt are desirable and should be pursued separately.  The point of setting limits is to reduce the energy used by the product. Reasonable TEC limits will achieve that goal without setting unrealistic hypothetical power limits for poorly defined modes such as “Idle” and will allow manufacturers more options when optimizing their products’ energy use.	The TEC approach described in the task 7 report includes a recommendation that the computing efficiency in terms of FLOPS/Watts is considered as this would allow requirements to be set for future games consoles that are yet to come to market.  Setting maximum TEC limits for all current and future games consoles, without consideration of future computing performance, could negatively impact the functionality of future products by setting de facto power limits that are too stringent.	
18/10/2010	Task 7, p 209  GC	GC TEXT: <b>Tier I – Idle Mode Power Limits – 2014</b>  Please see our previous comments, p. 200, <b>Figure 25 – Draft ENERGY STAR Specifications for Games console System Idle</b> , pp 196-197, <b>Game console operational modes</b> .  “Idle” is not a valid mode in the context of games consoles.	See earlier comment	
18/10/2010	Task 7, pp210  GC	GC TEXT: <b>Potential for game console power management</b>  <b><u>Again there are numerous references to the “Energy Star Specification.” Please delete.</u></b>		

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18/10/2010	Task 7,  pp210-214  GC	<p><b>GC TEXT: Potential for game console power management</b></p> <p>Please remove reference to Energy Star for reasons previously stated.</p> <p><b>GC TEXT: Tier I – Implementation to be 6 months after publication of ecodesign measure</b></p> <p>All games consoles (with active or idle mode power demand of over 50W) in any power mode other than Game Play, Game Pause, Game Play Idle or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes hour of user inactivity. A high definition game console in Game Play or Media Play may not automatically power down. All high definition games consoles must be shipped with these auto power down settings enabled as default.</p> <p>For clarification, we ask that this requirement be implemented 6 months after publication of ecodesign measure 1275 or this ecodesign measure, whichever comes last. Please remove reference to “Idle mode.”</p> <p>We have been working with other industry members to develop a “best practices” document that we believe will provide a better user experience and thus better compliance than that proposed in the report. Specifically:</p> <p><i>By default, auto power-down shall be set at 1 hour or less from the time of the last user input. Consoles shall not auto-power down during the first 4 hours while audio-visual media playback remains active.</i></p> <p><b><u>We recommend that the 30-minute requirement be increased to one hour to diminish the likelihood of unintentional nuisance power-downs which might encourage the user to disable the functionality.</u></b></p> <p><b>GC TEXT: Tier II/1 – Implementation date in line with the APD requirements date in Commission Regulation No 1275/2008 (2013)</b></p> <p>All games consoles in System Idle, Game Play Idle, Game Pause, Media Play Idle and Media Pause, or any state other than Game Play or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes of user inactivity. On resume, a game console should return to the previous mode that the console was in prior to sleep/network standby/standby unless there was an interruption in power to the console during sleep. In addition, after an automatic wake event, the console must power down immediately after performing required System Maintenance and Downloads or STB Functions. A game console in Game Play or Media Play may not automatically power down. When operating games published on or after the effective date of the Tier II requirements, the games console must support automatic saving of a user’s place in a game (as defined by that game’s game play model) to allow auto-power down to a sleep/network standby/standby. The game consoles must be shipped with these settings enabled by default.</p> <p>Please remove references to “Idle” modes.</p>	<p>See earlier comment about ENERGY STAR.</p> <p>Changing the requirement to be implemented 6 months after publication of EC 1275/2008 would not be suitable since that Regulation was published in 2008.</p> <p>It is suggested that a power down after 1 hour of inactivity is too long a period of time. It is suggested that the default power time remain at 30 minutes but that users have the opportunity to change to 1 hour.</p> <p>The commentator states that, “We concur that we cannot support any kind of a game-save unless the game itself has also been configured to do so”. However, the industry/NGO suggested APD specification states that:</p> <ul style="list-style-type: none"> <li>• Console operating systems must support auto-save and resume by providing means: <ol style="list-style-type: none"> <li>1. For notification between the console and software in advance of impending auto-power down</li> <li>2. To enable game software to save information as appropriate to avoid loss of user data or game position</li> <li>3. To ensure users can be automatically returned to their saved game after an auto-save event</li> </ol> </li> </ul> <p>It therefore appears that the</p>	

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		<p>We concur that we cannot support any kind of a game-save unless the game itself has also been configured to do so. For most competitive games -- live games, Karaoke or Dance games, for example, inactivity on the part of the player will result in losing the game. There is a natural incentive in this case for the user to manually save prior to inactivity. Furthermore, most games automatically save periodically in accordance with theme and user experience.</p> <p>It is not appropriate or necessary to support game save in the case of inactivity for these games. Additionally, although the hardware could potentially provide such support where appropriate, it is up to the game publishers to provide the games which are compatible with the algorithm.</p> <p>It is our understanding that games are not an energy related product and, hence, not within the scope of the Directive. Accordingly, any policy recommendation which requires games developers to write software to specific requirements are inappropriate. Moreover it is not legitimate to place an obligation on console manufacturers which they are unable themselves to fulfil through the (eco)design of the product.</p>	commentator is supporting auto-save functionality in the proposed APD specification.	
18/10/2010	Task 7, pp221-223  GC	<p><b>GC TEXT: 7.4.4 Policy scenarios</b></p> <p><b>Policy scenarios for games consoles</b></p> <p>The following APD requirements for games consoles could be considered:</p> <p><b>Tier 1 – Implementation to be 6 months after publication of the ecodesign measure</b></p> <p>All high definition games consoles (with active or idle mode power demand of over 50W) in any power mode other than Game Play, Game Pause, Game Play Idle or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes of user inactivity. A high definition game console in Game Play or Media Play may not automatically power down. All high definition games consoles must be shipped with these auto power down settings enabled as default.</p> <p>Please remove reference to "Idle mode."</p> <p>We have been working with other industry members to develop a "best practices" document that we believe will provide a better user experience and thus better compliance than that proposed in the report. Specifically:</p> <p><i>By default, auto power-down shall be set at 1 hour or less from the time of the last user input. Consoles shall not auto-power down during the first 4 hours while audio-visual media playback remains active.</i></p> <p><b><u>We recommend that the 30-minute requirement be increased to one hour to diminish the likelihood of unintentional nuisance power-downs which might encourage the user to disable the functionality.</u></b></p>	See earlier comments.	

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18/10/2010	Task 7, pp221-223  GC	<p>GC TEXT: <b>Tier II – Implementation date in line with the APD requirements date in Commission Regulation No 1275/2008 (2013)</b></p> <p>All games consoles in System Idle, Game Play Idle, Game Pause, Media Play Idle and Media Pause, or any state other than Game Play or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes of user inactivity. On resume, a game console should return to the previous mode that the console was in prior to sleep/network standby/standby unless there was an interruption in power to the console during sleep. In addition, after an automatic wake event, the console must power down immediately after performing required System Maintenance and Downloads or STB Functions. A game console in Game Play or Media Play may not automatically power down. When operating games published on or after the effective date of the Tier II requirements, the games console must support automatic saving of a user's place in a game (as defined by that game's game play model) to allow auto-power down to a sleep/network standby/standby. The game consoles must be shipped with these settings enabled by default.</p> <p>Please remove references to "Idle" modes.</p> <p>We cannot support any kind of a game-save unless the game itself has also been configured to do so. For most competitive games -- live games, shooters, Karaoke or Dance games, for example, inactivity on the part of the player will result in losing the game. There is a natural incentive in this case for the user to manually save prior to inactivity. Furthermore, most games automatically save periodically in accordance with theme and user experience.</p>	See earlier comments.	
18/10/2010	Task 7, pp221-223  GC	<p>GC TEXT: <b>Tier II – Implementation date in line with the APD requirements date in Commission Regulation No 1275/2008 (2013)</b></p> <p>All games placed on the market on or after the Tier II implementation date must support auto-save ahead of a games console powering down to a sleep/network standby/standby mode after a period of inactivity not exceeding 30 minutes. Any games first placed on the market before the Tier II implementation date are not required to support auto-save functionality.</p> <p>This is the first mention that the proposed requirements would extend to games developers. We do not consider that the Directive's scope includes games.</p>	The task 7 report suggests that games published after 2014 would be required to support auto-save functionality provided by the games console. Without this support users would be more likely to disable the APD. No change is suggested to the task 7 recommendation.	
18/10/2010	Task 7 (policy/impact analysis)  GC	Game Console: This general approach would be supported. However, as standalone DVD and Bluray (BD) players consistently achieve vastly better power efficiency levels in playback (15-20W) than game consoles, a more aggressive potential measure for secondary functions of games consoles to achieve levels similar to standalone products should be considered.	The task 7 report includes discussion around the impacts of setting stringent power requirements for media playback. It is suggested that power demand limits on media playback are set at a level that can be achieved without the inclusion of separate media specific components as this could negatively impact the functionality and potentially lifetime of	

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			games consoles.	
18/10/2010	Task 7, p198 GC	The text discusses a comment we had provided in our last position paper (from June 2010). It seems there was a misleading wording in our comments, so we suggest simplifying the reference by rewriting the paragraph as such:  <i>Some stakeholders have commented that by not addressing active mode power demand ecodesign measures would fail to address the primary function of games consoles. It was suggested that all other adopted ecodesign measures have addressed the active modes of products. However, it is important to point out that the draft ecodesign measure on computers does not address the active mode of any computing products. It is suggested that active mode requirements were not proposed for computers due to the potential impacts on the functionality of the products.</i>	The points included in the suggested text will be included in the task 7 report	
18/10/2010	Task 7, p199 GC	<b>We request inclusion of the following paragraph (top of the page, before the 'idle mode' heading):</b>  <i>It should be noted that not setting power requirements on the game play mode can have important drawbacks. It does not push console and game manufacturers to improve the energy efficiency of future gaming developments. It also does not encourage console manufacturers to integrate energy efficiency as a horizontal priority in the development of their next generation of products. Therefore, it would fail to grasp a part of the potential energy savings at stake and would have less impact on changing technological trends.</i>	The points included in the suggested text will be included in the task 7 report	
18/10/2010	Task 7, p207 GC	The table of TEC calculations clearly shows that by only expecting (even aggressive) improvements on the idle modes, the overall saving on the console consumption would only be in the order of 10-15%. This saving potential would even be reduced by application of APD requirements. This demonstrates that addressing the idle mode is not sufficient and <b>active modes also need to be addressed by Ecodesign requirements.</b>  Setting a power cap on the gaming mode does not necessarily stifle innovation or gaming development, <b>if the measurement protocol is based on a clearly defined and fixed gaming cycle</b> (using a harmonised test template). This means that some games in the future could use more peak electricity for some new gaming developments, but at least the requirement would address a part of the basic gaming functionalities.	The suggested TEC methodology only sets out the process for defining a TEC limit and not the actual requirements. The resulting idle mode values could be significantly lower if a greater reduction from active mode is included. Setting power demand limits on the active mode of future games consoles could limit the functionality of future products.  The second point is not clear and therefore cannot be answered.	

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18/10/2010	Task 7, p208  GC	<p>Some of the text basically suggests to wait for manufacturers to develop their next generation of consoles without any constraint, and only then start looking at how much power they use. This passive approach is exactly the opposite of what we consider the Ecodesign policy should do.</p> <p>It is well known that in the electronics sector, when a new generation of products is out, the energy efficiency is then progressively improved together with product optimisation. This is business-as-usual, and this is not necessarily where the Ecodesign policy can have the best impact.</p> <p><b>However, where the Ecodesign policy can achieve a significant and meaningful result is in ensuring that energy efficiency is a priority in the design of new generations of products and these next generations do not require much more power than the previous ones. This can only be achieved by setting some sort of long-term caps based on assumptions of the next generation's characteristics. Such long-term caps are <u>not the end of the world</u>: they may eventually be re-discussed and revised if there is very strong evidence that they cannot be met by new technological developments. At least, they send a clear message to the industry about what is expected from them, and they give motivation to front runners.</b></p> <p>WE WOULD STRONGLY APPRECIATE THAT THIS COMMENT IS QUOTED IN THE STUDY. THANKS IN ADVANCE.</p>	<p>The proposed TEC approach included in task 7 was developed in such a way as to enable requirements to be set before new games consoles are placed on the market. It is therefore not a passive approach but takes account of uncertainty in the future computing demands of games consoles where technical specifications are not yet available.</p> <p>Setting unrealistic power demand values would almost certainly result in values needing to be "re-discussed and revised" as new products come to market. Setting achievable efficiency requirements ahead of new product development, based on current technology, is less likely to lead to requirements having to be "re-discussed and revised" as new products come onto the market.</p> <p>The stakeholder comment will be included in the task 7 report.</p>	
18/10/2010	Task 7, p209  GC	<p>As the proposition of a 'W per gigaflop' metrics is a brand new proposal in the study, we were not able to gather enough technical expertise to provide comments.</p> <p>We suggest exploring the concept with the industry and decision-makers in the context of the Consultation Forum.</p>	See earlier comments about TEC approach.	
18/10/2010	Task 7, p213  GC	<p><b>Finalisation of the legal wording of the APD requirements still requires some work. It will be left to stakeholders within the Consultation Forum.</b> These specifications will require a very precise and comprehensive wording to make sure it encompasses all modes and possible user issues.</p>	Agreed. Some changes can be made to the task 7 report ahead of the consultation forum	

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18/10/2010	Task 7, p213  GC	<p><b>As mentioned by us and several other stakeholders, it is not acceptable that game consoles can continue using 75 W to play a Blu-ray or DVD when stand-alone players use a fourth of that. Even if it raises technological and cost issues, there is a clear momentum to improve the situation on this aspect as quickly as possible.</b></p> <p>Therefore, the study is expected to provide requirements for the media playback mode, both for current generation and to influence the development of the next.</p>	See earlier comment on media playback.	
18/10/2010	Task 7, p215  GC	As the game console market is global, it is unlikely that manufacturers would start developing differentiated products for the EU market and the rest of the world. Therefore, we can assume that Ecodesign requirements adopted at EU level will have a worldwide impact of much greater size. We advise the consultants to also make a calculation of the TWh savings taking into account not only the EU stock but the worldwide stock of consoles. This would show the genuine effect of the measures in terms of global energy and CO <sub>2</sub> savings.	The stakeholder comment has much merit. The stock in the simple model could be changed to reflect world markets if the Commission requires these changes to be made.	
18/10/2010	Task 7, p216  GC	<p><b>Previous remarks for video players and projectors regarding other environmental aspects apply here as well (see third page). Increasing dismantability of game consoles should be a priority.</b></p> <p>As some initiatives have been taken by manufacturers, a generic requirement for providing technical data according to standard IEC 62075 or sustainability consortium schemes should be included in Tier 1 (2012), <b>with the view to setting additional specific requirements by 2013 or 2014.</b></p>	Further discussion about the other environmental impacts will be included in the task 7 report.	
18/10/2010	Task 7  GC	<p><b><u>Importance of consoles resuming quickly from sleep to on mode:</u></b></p> <p>An important aspect missing in the proposed policy scenario is to <b>ensure that the unit quickly powers back up and restores the user to her previous position in a game in a minimal amount of time.</b> When the user returns to the console, he/she should be able to return to his/her last saved position in a game and actually begin playing within a few seconds. <b>If powering up from sleep takes much longer, there is the risk that users will become impatient and simply disable the feature of Auto Power Down (APD).</b></p>	This is an important point which will be addressed in the task 7 report.	
18/10/2010	Task 7  GC	<p><b><u>Power consumption requirements:</u></b></p> <p>In Tier 1 requirements for APD, the policy suggestion states: All high definition games consoles (<u>with active or idle mode power demand of over 50W</u>) in any power mode other than Game Play, Game Pause, Game Play Idle or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes of user inactivity. <b>It is not clear why game consoles below 50 W should not fulfil the APD requirement.</b></p> <p><b>→ It is recommended to put the APD requirement for all game consoles irrespective of their power consumption in active or idle mode.</b></p>	<p>One of the main games consoles currently on the market cannot meet the APD requirements without major changes to the base components. It would not be possible to request major changes to a product already on the market.</p> <p>The date of 2014 was set as this date would likely mean that only the next</p>	

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		<ul style="list-style-type: none"> <li>Sleep and standby-mode requirements correspond to the current draft of Energy Star on game consoles, but have been proposed to be active in 2014. <b>While the debate on the Energy Star requirements is ongoing, it is recommended to set the date for the implementation of this requirement in 2013.</b></li> <li>Similarly, idle mode power limits for system idle and game play idle also correspond to the current draft of Energy Star on game consoles, but have been proposed to be active in 2014. <b>While the debate on the Energy Star requirements is ongoing, it is recommended to set the date for the implementation of this requirement in 2013.</b></li> <li>The appropriateness of calculating threshold values for active and idle power mode on the basis of graphic computational power [(gigaFLOPS)/ Active mode power (W)], and then specifying TECLimits based on a defined user profile, can not be judged at this point of time. Yet, there is no methodology available to judge the computational performance of game consoles. Secondly, a deeper analysis would be required to calculate the TEC-limits for various game categories of game consoles, and then compare them against the available market data on the current generation of game consoles in order to assess the plausibility of the TEC-limits. <b>We recommend that the preparatory study undertakes a comprehensive analysis of the above mentioned approach and proposes limits of idle and active mode power consumption for the current generation of game consoles.</b></li> <li><b>We also recommend that preparatory study predicts the power consumption requirements, functionalities and configuration of next generation consoles, and propose power consumption limits accordingly.</b></li> </ul>	<p>generation of games consoles would need to meet the requirements. This would give manufacturers time to design their new products to meet the requirements. No change will be made to the suggested 2014 implementation dates.</p> <p>The task 7 report includes a statement suggesting that it would be necessary to define a test methodology to determine the computational power of games consoles in active mode.</p> <p>It is recognised that the TEC approach is not consistent with earlier suggested approaches and may need further description. Further description will be included in the task 7 report to include suggested TEC values for current generation of products (as exemplars) and for theoretical future games consoles.</p>	
18/10/2010	Task 7  GC	<p><b><u>Consumer information</u></b></p> <p><b>From consumers' perspective, it will be important that game console manufacturers provide transparent information on the power consumption of secondary functions, such as media playback options, and indicate that this power consumption is much higher compared to that of stand-alone devices.</b></p>	Agreed. This point will be made in the task 7 report.	
17/10/2010	GC	We are pleased that the benefits of a TEC approach are recognised and that other comments have been taken on board. We remain concerned, however, about other aspects which are addressed in our comments. In particular, like the other games consoles manufacturers we requested that references to the Energy Star draft initiatives for games consoles should be removed. These are not only void and inappropriate but, as I am sure you are aware, would have applied in any event to only the upper quartile of consoles. As the requirements for consoles have been dropped by Energy Star it is irrelevant to include references to Energy Star in your study.	See earlier comments.	
18/10/2010	GC	Firstly we would like to acknowledge the significant amount of work which has gone into the completion of this final report for Lot 3 and the progress made since the publication of the draft tasks, particularly in terms of understanding of our products and technology. Following the publication of the report and as work continues	No action required	

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		toward future energy standards for games consoles, we remain committed to maintaining an open dialogue between all stakeholders so that the greatest environmental benefit can be achieved whilst retaining a fair and competitive market and without limiting innovation.		
18/10/2010	GC	Given the considerable potential for energy saving, we fully support the implementation of an improved Automatic Power Down (APD) feature for games consoles. Indeed, we have played a leading role in drafting a holistic proposal for APD in collaboration with both other console manufacturers and US and EU NGOs. This proposal includes advanced features, not included in the Lot 6 requirements, such as auto-save and auto resume, where appropriate. It should be noted that auto-save is not appropriate for all games, but we agree that all consoles should support this option where the game requires.	See earlier comments	
18/10/2010	GC	Furthermore, the draft proposal includes different APD times for different uses, such as DVD playback, where the APD function will automatically default to shut down after 4 hours. This will eliminate interruption of consumers' experience and reduce frustration which would otherwise lead to disabling of the function. Finally, the shortest APD time recommended in the industry and NGO draft is 1 hour. 30 minutes, as recommended by the consultant, has been deemed too aggressive by NGOs and a study regarding APD for PCs showed that 80% of PC users disable APD <sup>1</sup> when the period of inactivity is too short to allow for normal patterns of use.	The stakeholder suggests that a period of 30 minutes inactivity before powering down a games console is too short as most users will turn off the functionality. The use patterns of games consoles are very different to the use patterns of PCs. It is suggested that whilst in PCs there may be lengthy periods of inactivity as users leave the PC to perform a function in their absence (e.g. downloading files). It is therefore suggested that a 30 minute APD time remain, but that users have the option of resetting to a 1 hour APD. It is also suggested in the task 7 report that an APD time of 4 hours during media playback is too long.  [	
18/10/2010	GC	<u>TEC is not suitable for application to games consoles:</u>  We are concerned to see that reference to a TEC approach has been added in at a very late stage of the drafting and without consultation of all manufacturers. We do not support the use of TEC given the limitations of this approach for our technology, many of which are acknowledged in the report. A TEC approach would be difficult to apply given the complexity in defining some modes, the constant evolution of the functionality of consoles and the changing/unknown usage patterns. For other product categories within this Lot, TEC has been deemed inappropriate or too confusing to apply with power caps. The report also recognises that without knowledge of the next generation no TEC limits can be set. To set the requirements after launch would necessitate the redesign of consoles which is too expensive and may mean energy saving opportunities are missed. As an alternative, we would advocate for a power cap on inactive default navigation mode.	Earlier feedback from the same stakeholder suggested that whilst they did not think a TEC approach was preferable they would like to discuss TEC as a potential alternative approach.  It is acknowledged that the TEC approach was developed at a very late stage in the drafting of the task 7 report. The TEC approach was developed	

<sup>1</sup> ENERGY CENTER OF WISCONSIN 2010. Electricity Savings Opportunities for Home Electronics and Other Plug-In Devices in Minnesota Homes: A technical and behavioural field assessment.

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			because: <ul style="list-style-type: none"> <li>• One of the main manufacturers had a strong preference for a TEC approach</li> <li>• There was a need to define an approach that would enable the Commission to set requirements for future products before knowing the level of functionality/specification of these future products.</li> </ul>	
18/10/2010	GC	<p><u>Mode definitions do not accurately represent the behaviour of consoles:</u></p> <p>The definition of modes is difficult for consoles given their varied functionality and complexity. In particular, idle mode is not appropriate for consoles given that even in the absence of local user input, the console may still be performing certain key functions. These might include loading the next scene in the background, or in the case of online gaming communicating via the internet as other players interact with the game. In addition, some games need to continually refresh and re-draw the image on screen to maintain the view of the game. It has also been noted that for video players/recorders and projectors, the term idle mode has been replaced with "Low Power", to describe the lowest end of the active state, a definition which could be applied to consoles.</p> <p>We suggest the use of:</p> <ul style="list-style-type: none"> <li>▪ <b>"Inactive default navigation"</b> – a definition of this mode will need further discussion.</li> </ul>	<p>It is recognized that the functionality described by the stakeholder would not constitute an "idle" state. However, the definition of "Game Play Idle" used in the task 7 report states that "A game is loaded, from any source, while not actively being played and the console is receiving no user input". Under this situation a games console may or may not be performing the functions listed by the stakeholder. A note will be added to the task 7 report to discuss this fact.</p>	
18/10/2010	GC	<p><u>Proposed sleep mode requirements are not achievable for current generation:</u></p> <p>Consoles are consumer electronic devices and require a minimum level of power to manage authentication during sleep modes. The suggested sleep mode requirements would require a full redesign of our product which would be prohibitively expensive. For next generation we propose the following limits:</p> <ul style="list-style-type: none"> <li>▪ Wired WOL: 3W</li> <li>▪ Wireless WOL: 5W</li> <li>▪ Wireless AP/router: 7W</li> <li>▪ Other sleep functions: To be defined</li> </ul> <p>For current generation these allowances would need to be greater.</p>	<p>These suggested values will be considered in more detail within an update to the task 7 report. The values suggested by the stakeholder do not appear to be too far removed from draft PC requirements.</p>	

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18/10/2010	GC	<p><u>Suggested power caps do not consider performance:</u></p> <p>The report recognises the difficulties of placing power caps on active power use as this will limit performance and innovation; however a power cap is proposed for idle mode. This does not consider the performance of the console and may allow some consoles to meet the requirements despite providing a lower level of performance. We would also like to highlight that the proposed power caps and TEC limits are not equivalent.</p> <p>As above for sleep mode, this is of greater concern for the current generation as redesigning existing hardware is costly.</p>	<p>The task 7 report includes power limits on idle mode as an alternative to the TEC approach.</p>	
18/10/2010	GC	<p><u>Lack of equivalence between gaming PC and console requirements:</u></p> <p>There are many comparisons drawn between gaming PCs and games consoles in the report. This may be logical as in some areas they provide a similar function. However, in many cases this comparison has not been done fairly. For instance gaming PCs, which provide the same performance as consoles whilst consuming more power, are not required to use power management technology for their chipsets (i.e. scalable power). Furthermore, the energy use and performance of a games console is compared to a PC GPU. This is not a fair comparison as a games console contains many other components in addition to a GPU. Finally, auto-save is not a requirement for PC games. This will need to be addressed to ensure a level playing field is maintained.</p> <p>We are also concerned about the impact of future standards on existing generations of products due to the difficulties in redesigning existing products. Data has been made available to the consultants which demonstrate the significant energy savings already achieved by us for our product. We request that different categories of products are recognised and limits defined separately.</p>	<p>The task 7 report includes a comparison of a desktop and notebook PC with a discrete GPU included. The analysis is not limited to just the discrete PC GPU.</p> <p>Desktop and notebook PCs often use power management technologies in their chipsets to ensure that they can meet idle mode requirements of both voluntary and mandatory measures.</p> <p>It is recognized that auto-save is not currently listed as a draft ErP requirement in the computer measure (which would cover gaming PCs). However, auto-save functionality is readily found in other software used on PCs e.g. word processing. It is widely recognized that the ability for office based productivity software to support auto-save is a key issue in users' acceptance of power management functionality.</p> <p>It is likely that developing an ErP requirement for all PC software to support auto-save would be unworkable given the large amount of software available for these products,</p> <p>It is suggested in the task 7 report that most requirements should only be applied to future games consoles to avoid major impacts on the current games consoles already on the market.</p>	

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18/10/2010	GC	<p><u>Use of additional components for non-gaming functions is not a viable option:</u></p> <p>While this recommendation has been withdrawn from the executive summary it still features in the main body of the report. As already indicated by the industry, the use of additional components for non-gaming functions such as media playback would add unnecessary additional cost and is not feasible from a technological point of view. Achieving the same power use as stand-alone players is not realistic; however scalable power management may help in the future to ensure that each function is performed in the most efficient way.</p>	See earlier comments	
18/10/2010	GC	<p><u>Draft EnergyStar version 5.1 for consoles is not a valid basis for analysis:</u></p> <p>We would like to reiterate that the Energy Star version 5.1 for consoles has now been withdrawn completely since the release of a draft publication in January 2010 and is therefore not a valid base for assessment. The modal limits proposed in this EnergyStar draft were rejected by industry and should not be included in this analysis.</p>	See earlier comments	
18/10/2010	GC	<p><u>Incorrect assumptions on market evaluation:</u></p> <p>The report assumes that our product will be removed from the market in 2014 and that new generations will be launched in 2012 and 2017. Consoles manufacturers have already indicated that future launch dates are not yet known and we can confirm that we plan to continue to sell our product model beyond 2014. Sales are also predicted to decrease by 60% in the coming years which is not in line with what we are seeing on the market.</p>	Remains possibility to provide data. Study doesn't have it so work is based on assumptions	
18/10/2010	GC	<p>Since the publication of the Draft Tasks 6 and 7, we have been working on a proposal to submit to the Commission as the Working Documents are prepared. This will include further details regarding our position on APD, console power management and efficiency and sleep mode power use. We hope to be able to share the core principles of our position with policy makers in the coming weeks.</p>	<p>The APD paper (joint industry/NGO) has been received and reviewed. The industry/NGO APD proposal provides a good framework for potential APD games console requirements and provides clarification for some of the earlier task 7 recommendations. However, there would be a need to provide additional detail to the APD proposal if used within future ecodesign requirements. The task 7 APD recommendations have been altered to take account of some of the suggestions in the industry/NGO APD proposal.</p> <p>The sleep mode power use values have also been reviewed.</p>	

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18/10/2010	GC	By not suggesting minimum requirements on the gaming mode of game consoles, <b>the study fails to use a fundamental leverage to ensure that energy efficiency is a priority in the design of the new generations.</b> A long-term cap on gaming products would not be the end of the world (as it can eventually be re-discussed if there is very strong evidence that it is indispensable). At least, it would send a clear message to the industry about what is expected from them, and give motivation to front runners.	See earlier comments.	
18/10/2010	GC	We again express our concern that media playback on game consoles can consume four times more energy than a stand-alone player. <b>The study has not proposed a satisfactory way of fixing this problem.</b>	See earlier remark The reason for this situation is explained in detail in the study. The only option to fix this problem would be to lock the playback option in the GC and urge the consumer to buy a separate stand alone playback device that couldn't be upgraded via a firmware upgrade.	
18/10/2010	GC	A stakeholder has submitted an "Auto-Power Down (outline proposal)" for consideration by the study team.  The requirements form the basis of an advanced auto-power down proposal (APD) for games consoles. As such this proposal represents overall best practice for games consoles, and defines advanced features that may be considered best practice across several categories of Energy related Products.	See earlier comments.	
18/10/2010	GC	A stakeholder has submitted a "Test Method for Energy Efficiency of Game Consoles – DRAFT" for consideration by the study team.  The purpose of this test method is two-fold: <ol style="list-style-type: none"> <li>1. Measure game console energy use in the major operating modes</li> <li>2. Verify conformity with the auto-power down standard.</li> </ol> This test procedure covers the game console major operating modes listed below. It is understood that not all game consoles provide all the modes listed. <ol style="list-style-type: none"> <li>1. Home Menu (aka System Menu, Cross Media Bar, or Dashboard)</li> <li>2. Game Play</li> <li>3. Video Playback DVD</li> <li>4. Video Playback Blu-ray Disc</li> <li>5. Video Streaming HD</li> </ol>	The NRDC test methodology is reviewed within the revised task 7 report. In general the NRDC test methodology provides a good framework for a future measurement standard for games consoles. However, the NRDC methodology does not address performance in the active mode which would also be inconsistent with one of the suggested policy measures in the task 7 report. The test methodology is open to interpretation in some areas and would therefore need minor adjustments if used in future ecodesign measures.	

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		6. Off/Standby after Auto-Power Down 7. Off/Standby after pressing the Off button 8. Off/Standby when switched off from controller 9. Other modes for research purposes														
18/10/2010	GC / VPR	The study should develop <b>more refined wording for the Auto-power down requirements (APD)</b> , to ensure they cover all possible modes and avoid annoyances to users. This is particularly true for game consoles, where the study team should consider the current detailed drafts elaborated by manufacturers and NGOs. Refinement of the APD for video players is also required.	The task 7 APD recommendations will be updated taking into account some of the suggestions in the stakeholder APD proposal.													
27/10/2010	p194  GC	<b>Move towards high definition consoles by one manufacturer</b> The last paragraph on page 194 of the Report states that <i>“although one manufacturer has commented that their console is likely to support high definitions in the near future”</i> . We consider that this sentence refers to (or could be understood to be referring to) one stakeholder who has never made this comment. The stakeholder would therefore prefer that the sentence is clarified or removed.	The sentence will be clarified.													
27/10/2010	p199  GC	<b>Improving efficiency of standard definition consoles</b> By using the current best practice for <u>standard definition consoles</u> , a stakeholder has recently reduced the energy consumption of the console subsequent to its initial launch as indicated in the table below: <table border="1" data-bbox="415 967 1419 1138"> <thead> <tr> <th></th> <th>System Menu</th> <th>Game Play</th> <th>Game Pause/Game Idle</th> </tr> </thead> <tbody> <tr> <td>console before GPU modification</td> <td>17W</td> <td>18W</td> <td>18W</td> </tr> <tr> <td>console after GPU modification</td> <td>12W</td> <td>14W</td> <td>14W</td> </tr> </tbody> </table> On page 199 of the Report, the consultants refer to the actions of one manufacturer in achieving power savings on an existing console. As shown above, we have also achieved power savings by reducing the size of the transistor in the GPU. We have been able to reduce the energy consumption by 23% in game Play mode and by 30% in System Menu mode. Distribution of the lower power consumption consoles started at the end of 2009.		System Menu	Game Play	Game Pause/Game Idle	console before GPU modification	17W	18W	18W	console after GPU modification	12W	14W	14W	The improvements in the energy efficiency of the standard definition games console will be noted in the task 7 report.	
	System Menu	Game Play	Game Pause/Game Idle													
console before GPU modification	17W	18W	18W													
console after GPU modification	12W	14W	14W													
27/10/2010	p206  GC	<b>TEC vs modal power caps approach</b> In the last paragraph of page 206, the consultants mention that games console manufacturers have suggested that the TEC approach could be applied to games consoles. We believe that <u>only one manufacturer</u> has	No action required													

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		<p>recommended this approach and the Report should be amended to reflect that this approach as been suggested by only one manufacturer.</p> <p>Furthermore, the TEC approach clearly presents some challenges in its application to games consoles and has not been submitted to sufficient stakeholder consultation. In particular, <u>it would be very difficult to establish an adequate average user profile for games consoles</u>, a fact which the consultants have themselves recognised elsewhere in the Report (page 157). For this reason, we do not support the TEC approach and would prefer to support the modal power caps approach.</p> <p>The only other comment we wish to make about the TEC vs power caps approach suggested by the consultants is to specify that the chosen approach should apply only to high power consuming (i.e. above 50W) consoles. To arrive at a possible formula for determining the maximum permissible TEC limits for future game consoles, the consultants rely on data for PCs with power consumption levels that are 40W and higher (see Figure 28 on page 203).</p>		
27/10/2010	p208-209  GC	<p><b>Active mode efficiency</b></p> <p>We consider that the methodology used by the consultants to determine a suggested Active mode efficiency requirement is inappropriate. The Active mode efficiency test proposed by the consultants essentially considers how efficient a console is at processing graphics.</p> <p>The example provided by the consultants shows the Active mode power efficiency of a high specification games console and then uses it as a reference for determining the Active mode power efficiency of all games consoles (both standard and high definition). The consultants rely on the active mode efficiency data of only one high definition console currently on the market and use that together with a formula based on extrapolated desktop PC data to calculate idle mode power values that are used to determine TEC limits. Using PCs as a reference point for consoles could result in limiting innovation in the consoles market as it would mean that the console manufacturer would not be able to develop higher specifications for its games consoles than are available for PCs. <u>Since the calculation is based on data from just one high definition game console, rather than data that is fairly representative of all games consoles, it cannot be applied to all games consoles on the market.</u></p> <p>Therefore, the stakeholder does not agree with the proposed Active mode cap since it was calculated using an improper methodology that would restrict the freedom of development and could be an obstacle to providing consumers with consoles which deliver quality entertainment.</p> <p>Much more investigation would be required to develop an adequate standard with a robust index reference and calculation method which would cause further delay and uncertainty for manufacturers. If graphic processing power were to be used as the index, the manufacturer might have to install additional chips to meet the active mode efficiency targets, which would increase the cost of the console and could be an obstacle for the games console manufacturer and the games software publisher to provide users with quality entertainment.</p>	<p>The TEC approach proposed in the task 7 report is meant to illustrate a possible solution for developing measures on products that have yet to be designed and placed on the market. The uncertainty surrounding the computational performance of the future games consoles necessitates an approach that can take efficiency into account rather than relying on absolute power limits.</p> <p>However, it is recognised that the active mode efficiency used as a basis for determining the TEC approach in the example would need to be updated with more accurate values ahead of the development of a requirement. These values could be updated once a suitable methodology is developed.</p> <p>The manufacturer's comments on the possible impacts to chips due to thermal expansion are recognised. Further use profile data from manufacturers could be submitted to support their assumptions that a 30 minute shut down time would result in more on/off cycling of games consoles. A comment to this effect will be placed in the task 7 report.</p>	

Date received	Task No. and Page No.	Stakeholder Comment	Study Team Action	Action date
27/10/2010	p212  GC	<p><b>Auto-power down (APD) after 30 minutes</b></p> <p>We have discussed this issue with other stakeholders in the industry who all consider that 60 minutes would be a more appropriate time period of user inactivity prior to APD compared to the 30 minutes proposed by the consultants.</p> <p>The stakeholder considers that 60 minutes would be a more appropriate period of user inactivity to set prior to activating APD for reasons relating to user behaviour and technical reasons relating to the thermal expansion of the chip.</p> <ul style="list-style-type: none"> <li> <p><u>User behaviour</u>: On page 212 of the Report, the consultants have referred to the fact that PCs are shipped with APD set to 30 minutes and therefore game consoles should also have an APD function set to 30 minutes. We consider that the user behaviour in relation to PCs is different from user behaviour in relation to game consoles. This is recognised by the consultants elsewhere in the Report (see page 195). We believe that PC users at home would most likely turn on PCs in order to use the internet or check personal emails and would then switch off the PC. In an office environment PCs would be kept running continuously for the purposes of work before being switched off at the end of the day. In contrast, games consoles are usually placed in the living room and it is common for users to take a break from using the console in order to prepare food or drinks or for other activities which may take longer than 30 minutes before returning to continue playing the console. If the period prior to APD is too short, then the user will be more likely to switch off the APD function in order to avoid the inconvenience it causes.</p> </li> <li> <p><u>Thermal expansion effect</u>: In order to meet the suggested power limit for the sleep/standby mode, which would be less than 1W without WoL and 1.7W with WoL if a power limits approach is adopted, we would need to switch off the GPU and CPU chips when APD is activated. If these chips are running, we cannot achieve a power consumption for the console of less than 1W. When these chips are running, they generate heat, which causes a slight expansion of the chip itself. When the console goes into APD, these chips cool down and return to their original size. If this happens very frequently, it damages the chips. Therefore, it is clearly preferable for this thermal expansion to happen as infrequently as possible. It is also possible that consumers would become aware of the potential for such damage to the chip if APD is set to activate after a short period of time. This might lead to consumers deciding to turn off the APD function, rather than risk damaging their consoles.</p> </li> </ul> <p>We believe that if APD in games consoles were set to activate after 30 minutes, it would be frequently activated (in situations where users in fact intend to continue using the console) due to the average user's behaviour described above. The comparison with PCs is not appropriate due to the different user profiles between games consoles and PCs. Also the useful product lifetime of games consoles is longer than for PCs. Therefore, the chances for chips to be broken would be higher in games consoles than in PCs. If the consultants' suggestion for a 30 minute APD is based on the comparison with PCs, further evidence should be brought to demonstrate the appropriateness of such a comparison.</p> <p>Considering the risk of the damage of the chips and the inconvenience to users, The stakeholder would prefer to include an APD function set to 60 minutes in its future generation games consoles which would avoid adversely impacting user enjoyment and would result in less frequent repairs being required.</p>	See earlier comment.	

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27/10/2010	p212  GC	<p><b>Implementation of Tier II APD requirement</b></p> <p>The consultants have suggested that an APD requirement for <u>all games consoles</u> should be implemented from 2013 (in order to be in line with the requirements of Regulation 1275/2008 on ecodesign requirements for standby and off mode electric power consumption of electric and electronic household and office equipment). The consultants suggest that games consoles should auto-power down to a <u>sleep/network standby/standby mode</u> within 30 minutes of user inactivity. Games consoles should also support auto-resume (returning the player to the previous mode before APD), and auto-save (saving a user's place in the game prior to APD) when APD is activated.</p> <p>There are two technical issues with this proposal:</p> <p>i. <u>Timing of implementation</u>: The consultants propose that the Tier II APD requirement should be implemented from 2013 for all games consoles. However they propose that the TEC/power caps requirements should only come into force in 2014. This raises a question regarding the interaction with Regulation 1275/2008 which has already set power limits for standby and off-mode and which mandates APD from 2013. This issue has not been addressed by the consultants.</p> <p>ii. <u>The appropriate standby mode</u>: It is not clear from the consultants' proposals how much power a console should be allowed to consume when in the sleep/network standby/standby mode after APD from 2013 until 2014. No limits have been set by regulation for either a sleep or a network standby mode (these are not addressed by Regulation 1275/2008) and therefore manufacturers could assume that there is no limit to the power consumption in these modes until a specific measure comes into force (i.e. in 2014 as suggested by the consultants) but this should be clarified. Regulation 1275/2008 mandates APD to a standby mode with a 0.5W limit from 2013. Games consoles cannot respect this limit as well as comply with the requirements of APD proposed by the consultants. This is because it is impossible to provide the auto-resume or auto-save functions which are required under the consultants' proposals with a 0.5W limit.</p> <p>The lengthy discussions over the Lot 3 preparatory study and the questions over interpretation and interaction with Regulation 1275/2008 are directly impacting the future design of the stakeholder's products. Given the procedure involved in adoption of a mandatory regulation, it seems unlikely that a product-specific regulation with an APD requirement would be adopted before the middle of next year (2011). In the interim period, the stakeholder does not know whether it should design (and re-design) its products already in order to try to comply with Regulation 1275/2008 (which involves many difficult issues of interpretation of that Regulation) or whether it will in fact have to comply with a different APD requirement by 2013.</p> <p>The proposal of the consultants to mandate APD for all consoles from 2013 would require the stakeholder to install APD functionality onto a console which would involve disproportionate financial costs (as explained further below).</p> <p>The stakeholder is committed to respecting ecodesign legislation but such legislation can only succeed if manufacturers are given sufficient time for compliance. The APD function is a critical issue for the stakeholder and in the event that no exemption from ecodesign requirements is granted for consoles with a low power consumption the stakeholder would like to be allowed an additional year for compliance with the</p>	<p>The task 7 report discusses the definition of off mode and standby in EC 1275/2008 and the implications for any separate measures on games consoles. This text will be made clearer.</p> <p>The stakeholder comments on the timelines for a potential game console measure should be discussed in a potential consultation forum.</p> <p>The existing horizontal Regulation 1275/2008 gives the manufacturer the possibility to provide technical justification on a product-by-product basis for the appropriateness/inappropriateness of off/standby mode.</p>	

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		<p>APD functionality (i.e. from 2014). This could also solve the problems of compatibility with the power limits/TEC approach advocated from 2014 and Regulation 1275/2008. APD would be included in the design of new products in any event which could be launched before the official implementation date provided in the legislation.</p>		
27/10/2010	p222  GC	<p><b>Tier I Idle mode Power Limits</b></p> <p>We do not agree that the power consumption of games consoles in System Idle mode and Game Idle mode should be limited to 45W as proposed by the consultants at page 222 of the Report. The figure of 45W appears to be taken directly from a comparison with the power consumption of PCs in idle mode. The consultants inaccurately assume that it would be possible for high definition game consoles which consume 90-100W to make a 50% reduction in idle mode using technologies utilised by the PC industry for desktop computers (See Figure 29 at page 203). We consider that the methodology is flawed and therefore the proposal is not sufficiently robust to form the basis of any mandatory idle mode power limit for games consoles.</p> <p><u>PC Idle Mode is not the same as Game Idle mode</u></p> <p>The consultants have quoted the power consumption of desktop and notebook PCs in PC Idle and PC Active modes on pages 201, 202 and 203. According to these statistics, a desktop PC with 80W power consumption in Active mode consumes only around 43.5W in Idle mode which is a 46% reduction in power consumption. These PC Idle mode is defined as follows in the US Energy Star requirements:</p> <p><i>"The state in which the operating system and other software have completed loading, a user profile has been created, the machine is not asleep, and activity is limited to those basic ENERGY STAR Program Requirements for Computers: Version 5.0 7 applications that the system starts by default".</i></p> <p>The test method defined in Energy Star in 5.0 is:</p> <p><i>"9. Ensure that the UUT is configured as shipped including all accessories, WOL enabling, and software shipped by default.</i></p> <p><i>13. Switch on the computer and begin recording elapsed time, starting either when the computer is initially switched on, or immediately after completing any log in activity necessary to fully boot the system. Once logged in with the operating system fully loaded and ready, close any open windows so that the standard operational desktop screen or equivalent ready screen is displayed."</i></p> <p>In the EU Commission working document on ecodesign requirements for computers, the Idle mode is defined as follows:</p> <p><i>"Idle State" means a state in which the operating system and other software have completed loading, a user profile has been created, the machine is not asleep, and activity is limited to those basic applications that the system starts by default"</i></p>	<p>The stakeholder evidence showing the power demand differences between "Game Play Idle" on games consoles and "Idle mode" in desktop PCs is noted. The task 7 report will be amended to reflect this new data.</p>	

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		<p>Game Play Idle in the Lot 3 study is defined as follows.</p> <p><i>"A game is loaded, from any source, while not actively being played and the console has received no local user input for a period often minutes."</i></p> <p>The definition of PC Idle mode under Energy Star and under the EU Commission's working document means that only the operating system and basic default applications are running. However, the suggested definition of Game Idle mode means that the operating system is running as well as the game software. This is a fundamental difference. In the games console, during Game Idle and System Idle modes the console is running the operating system and the game/system applications. During these idle modes, the GPU and CPU must be fully running which consume more energy than is required to power only the operating system.</p> <p>Whereas during PC Idle mode, only the operating system in the PC is running, during the Game Idle mode in game consoles both the operating system and game software applications are running. We consider that the methodology used by the consultants which quotes the desktop PC Idle mode power consumption and then appears to apply the same limit to Game Idle mode does not appropriately take into account the technical differences between these modes.</p> <p>For the stakeholder console, the power consumption levels in Active mode and Game Pause/Game Idle mode are nearly identical. We cannot offer to provide further power reductions on Game Idle mode because the console operating system and game software applications must run constantly in Game Idle mode. We therefore do not agree with the proposed idle mode power caps.</p> <p>We have measured gaming PC power demand with a game installed.</p> <ul style="list-style-type: none"> <li>• Game installed: Doom3</li> <li>• Gaming PC manufacturer: HP Workstation xw4600</li> <li>• OS: Windows XP</li> <li>• CPU: Intel Core2 Duo E8500 @3.16GHz</li> <li>• GPU: NVIDIA Quadro FX570</li> </ul> <ul style="list-style-type: none"> <li>✓ Power demand during game play: 111.W – 114W (OS and applications are running)</li> <li>✓ Game Pause: 111W – 1.14W</li> <li>✓ Desktop screen: 76W – 90W (only the OS is running)</li> </ul> <p>As shown above, according to our results even a gaming PC has the same power consumption requirements in Game Play and Game Pause modes. This Game Pause mode seems to be more equivalent to the Game Play Idle mode as defined in the Report than the PC Idle mode and therefore may provide a better comparison.</p>		
27/10/2010	p223	<b>Exemption for low power consuming consoles</b>	An exemption for consoles with active mode power of 20W or less could be considered as it may encourage	

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	GC	<p>The external consultants mention, at page 223 of the Report, that the power demands of standard definition consoles on the market are very low in comparison to high definition consoles and therefore do not perhaps need to be addressed in a future ecodesign measure. Although we do not agree with the figures which are quoted as best practice for these games consoles on page 224 (as mentioned below) we agree with the suggestion of the consultants to exclude consoles which have very low power demands (i.e. which are already energy efficient) from the scope of a future measure.</p> <p>The exact scope of such exclusion could be discussed but we would consider that an exclusion for consoles with a power demand in active mode of less than 20W would be appropriate. This would avoid excessive redesign costs which could be involved in bringing consoles in line with the APD requirements (see below).</p>	manufacturers to design product to use reduced power.	
27/10/2010	p137 and p223  GC	<p><b>Application of APD requirements to current generation consoles</b></p> <p>The Report fails to consider the disproportionate impact that imposing APD obligations would have on the stakeholder's current generation console . In this regard:</p> <ul style="list-style-type: none"> <li>• The Report comments that it is "relatively easy to implement" APD and that "APD could be implemented on a software basis and does not need any hardware changes" (page 137). The Report also suggests (at page 223) that implementing APD would not involve significant financial costs for manufacturers.</li> <li>• The above comments are wholly incorrect with regard to the the stakeholder's console. Indeed, the design of the the stakeholder's console is such that implementing APD would require a redesign of the product's hardware and software, which would involve significant financial costs.</li> <li>• It follows that the consultants' report fails to consider the very significant impact on the stakeholder of requiring the implementation of APD for the console.</li> </ul> <p>Accordingly, the stakeholder considers that it would be disproportionate to require APD to be implemented on his console, given:</p> <ul style="list-style-type: none"> <li>• the significant time and cost that implementing APD for the console would entail for the stakeholder, who would have to totally redesign the console's hardware and software;</li> <li>• the impact on the stakeholder would be significantly greater than the impact on other console suppliers whose consoles already partially support APD; and</li> <li>• the fact that the console is already a very low power console for which ecodesign measures are not objectively justified;</li> </ul>	The task 7 report includes the statement that the tier I APD requirements should be applied to games consoles using over 50W in active or idle mode. This limit would therefore make the stakeholder's console exempt from the requirements. It is recognised that the tier II limits will have an impact on the console if the console is still on the market in 2014. The stakeholder is advised to provide to the Commission, data on the impact on the console of the proposed tier II APD requirement.	

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		As mentioned above, the Report also reflects (at page 223) that the power demands of current standard definition games consoles might not need to be addressed in a future ecodesign measure at all. The stakeholder therefore considers that the console (or, at least, a category of products including the console) should be excluded from APD obligations, if not the entirety of the ecodesign requirements (as suggested above), given the low power consumption and therefore low environmental impact of such consoles.		
27/10/2010	p224  GC	<p><b>Current best practice for standard definition consoles</b></p> <p>On page 224 of the Report, the consultants have included a table which is entitled "Current Best Practice Levels for Standard Definition Games consoles" (Figure 41). This table illustrates the power demand of standard definition consoles in Game Play and Game Play Idle mode.</p> <p>The consultants seem to be suggesting that the numbers included in Figure 41 have already been achieved by standard definition consoles on the market. We do not know where the figures of 16.4W for Game Play mode and 10.5W for the Game Play Idle mode come from and therefore cannot agree that they represent current best practice for standard definition consoles. In particular, the stakeholder has not achieved the power demand figures indicated for Game Play Idle mode with our standard definition consoles. We would appreciate further clarity on the source of these figures.</p>	Reference will be provided in the task 7 report	