











January 2013

Position of ECOS, EEB, Friends of the Earth Europe, WWF EPO, CAN Europe and INFORSE Europe on proposed Ecodesign requirements for game consoles

Background

The European Commission has presented to stakeholders on 9 November 2012 a draft voluntary initiative prepared by Sony, Microsoft and Nintendo on the energy performance of game consoles. This initiative, if deemed satisfactory, would replace a potential mandatory regulation under the Ecodesign Directive.

ECOS, EEB and other environmental NGOs across the globe have been in contact with these manufacturers in the past two years to discuss various aspects of the environmental performance of game consoles. While these talks have been interesting and the need to improve the ecological profile of consoles seems to be agreed, the content of the voluntary initiative presented in November falls short from meeting some of our basic expectations. This opinion appears to be shared by a large number of stakeholders.

In this paper, we highlight a list of essential improvements. If these are not seriously taken on board, we would oppose the endorsement of the initiative.

Missing pillars

In order to be candidate for endorsement, a voluntary initiative prepared by industry must comply with the nine criteria mentioned in Annex VIII of the Ecodesign Directive. The initiative presented by game console manufacturers neglects some of them.

The priority improvements are:

- Describing clearly how the review, revision and updating of targets and objectives will function in practice. The initiative should show how dynamism will be ensured, so that the requirements set in the initiative remain sufficiently demanding over time and readjusted based on technological progress.
- Defining sanctions for non-compliance. If a participant in the initiative does not meet the objectives, an action should be taken, such as excluding them from the initiative. This would mean *de facto* the end of the initiative, as with only two manufacturers the representativeness criteria would not be met anymore. These aspects need to be clarified.

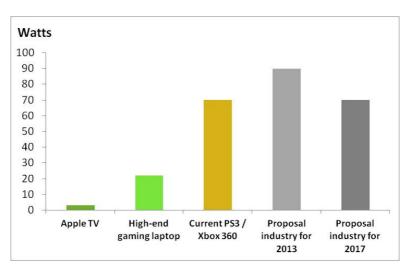
- Setting up a transparent monitoring and reporting system, with an independent inspector involved.
- Explaining how external stakeholders will be concretely involved in commenting the initiative. NGOs, Member States and independent experts shall be invited to participate in a steering committee of the initiative, with a clear procedure to consider their comments.

Insufficient ambition on energy use

The proposed power targets in the initiative do not appear sufficiently stringent. Power scaling technologies are rapidly expanding in many sectors (mobile phones, laptops, etc.), so the energy performance of game consoles could be much better optimised¹. We consider that what is currently foreseen in the industry proposal is only reflecting business-as-usual (i.e. consuming as much or more power than current designs on the market).

• In navigation and media playback modes, a console should use an amount of power commensurate to the function. The graph below illustrates the lack of ambition of the initiative, and the potential for improvement.

We consider that in these modes, a game console should not use more than 40 Watts.



Typical power consumption for streaming HD videos (source: NRDC)

• In addition to power caps on secondary modes, a target on internal power supply units would provide a strong complementary improvement related to energy efficiency. Personal computers and servers will soon be covered by an Ecodesign measure including such requirements on the power supply.

A target on the performance of the internal power supply unit (similar to the one in the Ecodesign measure for PCs) should be added.

• For networked standby modes, the initiative simply mentions that the applicable regulations will be complied with. This sentence could be deleted, as it is mandatory to comply with the law. But we would expect much more than this in the context of an ambitious initiative. Game consoles are sophisticated electronic products, for which power management can be finely adjusted.

More ambitious targets for networked standby could be included, especially for Tier 2.

¹ More information on power scalability in 'Power Scaling in Proportion to Data Processing' (report for the Asia-Pacific Partnership by C. Calwell et al., 2011).

• The initiative grants additional power allowances for the use of external interfaces. The proposed levels seem too high. For instance, at launch the 'Kinect' only used 12 W.

Additional functionality allowances should be reduced to a challenging level, e.g. 5 W in Tier 1 and 3 W in Tier 2.

• As regards auto-power down specifications, we strongly welcome the principle of systematising this feature. However, some modifications have been made to the content compared to the version suggested in the Ecodesign preparatory study for game consoles (that was backed by EU and US environmental NGOs). We think that it would make more sense to revert to this previous version. We are in particular concerned by three points: possibility to deactivate the APD at initial setup, temporary suspension of APD that can remain enabled after restart, APD opt-out for some current generation software. In addition, manufacturers should commit to inform users positively about this feature and encourage them to leave it on.

An ambitious voluntary initiative could foresee some additional commitments to save more energy and induce a more eco-friendly behaviour. Here are some recommendations:

- Auto-power down specifications could be applied not only to new products put on the market but also on the **installed base** through software update (wherever possible). This should be part of the commitments.
- Power management could include more specifications, such as **turning off the screen** when the console goes to sleep, as well as when it is only used to play background music.
- Consumer information requirements should be included: power consumption of consoles in different modes and other useful environmental data and tips should be displayed in the console manual, in the navigation menu, on relevant websites and somewhere on the screen when the console is in 'shop mode' (i.e. presented in shops).
- The initiative should plan the development of a standardised and consensual methodology to **measure the energy consumption in gaming mode**, so that this important information can be known to support future discussions on this mode.

It would also help to plan within this initiative the development of a consensual **study on game console usage patterns**, in order to solve current controversies on the usage time in the different modes (leading notably to controversy on the calculation of energy saving potentials).

Other environmental aspects need to be covered

Beyond energy use, the Ecodesign preparatory study from 2010 has identified a number of other environmental aspects that are worth considering for game consoles. They cover material content, as well as manufacturing and end of life stages. This should be reflected somewhere in the industry initiative, so that efforts are made beyond business-as-usual in these areas as well.

There is currently a momentum to start covering such impacts in all Ecodesign measures and revision thereof. A methodological study and case studies have been prepared by the EU Joint Research Center and discussed with stakeholders. The voluntary initiative for imaging equipment (Ecodesign Lot 5) also shows that tackling aspects beyond energy use is possible; it appears even easier in the framework of a voluntary initiative for which target setting, measurement and reporting can be more flexible and creative than for a mandatory regulation.

We expect the industry initiative on game consoles to consider the following requirements. (Some manufacturers may already have implemented partly or entirely some of these improvements; however it is essential that they are written down as part of the initiative, to create a level playing field for current participants and potential new entrants in the future.)

- Clear **marking of plastics** for separation and recycling, with a target of 90% on the share of plastics that are effectively fit for available recycling streams. Commitment could also be taken on rationalising the number of polymers used to a common few.
- Increase use of **recycled plastics**, through an information requirement at tier 1 to collect data and a minimum requirement at tier 2. (The methodology to document and assess this recycled content could align with EPEAT and other existing standards.)
- Target on maximum time for manual disassembly and/or material separability, especially regarding circuit boards containing scarce metals.
- Standardised presentation of the bill of material and **disassembly instructions** for recyclers.
- Removal of hazardous content such as brominated flame retardants, phtalates and beryllium.
- Standardised information on the **embedded energy and CO₂** in game consoles put on the market (according for instance to methodologies currently developed by the EU).
- Commitment to provide **extended warranty services and spare parts** to extend the life of game console generations.
- Optimisation of **product light weighting** (for instance in the form of a commitment that the first iterations of a new generation of consoles do not contain more material than the previous models).

Commitments in this area and data collection could be supported by the use of relevant standards (such as IEC 62075, ECMA 370 and IEEE 1680).

END.

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