Voluntary agreement on Game consoles
Comments following the Consultation Forum meeting on 15/11/2017

January 2018

The game console industry is proposing a review and update of its Voluntary Agreement (VA) under the Ecodesign Directive. It is meant to replace the current version in place since 2015.

Serious doubts about the added-value of the agreement

The game console industry claims that they have '*implemented all applicable energy efficient technologies possibilities already*', and that the new power limits that they propose in the review of their voluntary agreement '*are set to ensure 100% of their products and modes can comply*'. **This raises a fundamental question about the sense and relevance of this agreement**. If the purpose is just to acknowledge and record the current status quo of the market, then the agreement has no benefit.

The proposed Tier 4 (2019) power limits for the UHD console generation that is currently going to the market are significantly higher than for previous generations (that were not UHD): +40% for navigation mode and +80% for media play. They are so high that all models placed on the market now can already meet them without any additional effort. This means that this tier appears useless, and the power consumption of this product group will significantly increase in the future, contrary to what this agreement should be aiming at.

Requirements set in Voluntary Agreements need to be challenging, and based on a continuous improvement principle. History has shown that efficiency improvements and optimisations have always been possible on previous console generations. There is no reason to believe that the electronics and chip industries have suddenly stopped being innovative.

For these reasons, we consider that the proposed new efficiency tier as it stands does not meet the added-value criteria expected by the EU. VAs are supposed to meet the Ecodesign policy objectives more quickly or at lesser expense than mandatory requirements, which does not appear to be the case with this new version of the VA.

Benchmarking navigation and media play

Based on an analysis by J. Koomey, the industry considers that the active gaming performance of consoles is too difficult to compare and benchmark (due to the complexity of game characteristics and gamer behaviour). The active gaming mode is consequently not covered by power limits today. This can potentially be discussed, but in any case, we support a continuous reporting on the average performance in gaming mode as it is documented today. **Navigation and media play modes are**

addressed with power limits, and for them benchmarking is relevant. We suggest that for Tier 4, power limits are set on today's best performers for these modes.

For UHD media capable consoles, it means that the limits would be 27 W for navigation and 38 W for UHD media play (benchmark of the Xbox One S).

For UHD gaming capable consoles, limits would be set based on the lowest levels between PS4 Pro and Xbox One X. The official consumption data of the Xbox One X are not known, but first measurements found on the internet suggest around 62 W for navigation and 66 W for UHD media play.

In summary, we propose the following:

	Tier 4 limits – industry proposal	**Tier 4 limits – ECOS proposal**
UHD media capable models		
Navigation	50 W	27 W
HD media play	60 W	33 W
UHD media play	60 W	38 W
UHD gaming capable models		
Navigation	70 W	62 W
HD media play	70 W	56 W
UHD media play	110 W	66 W

The industry may claim that these values are not realistic. However, it is a fact (and they promote it) that they were always able in the past to dramatically reduce the power use of their console generations several times, by making efficiency steps of 30% or more. We do not believe that the technology will not be available and that engineers are now not innovating to make further progress on navigation and media play modes.

Issue of 'instant on' modes

As game consoles become more powerful with new functionalities, booting times are likely to increase. There will be a temptation to implement faster wake up modes such as the 'instant on' mode on the Xbox X One, at the price of a higher standby consumption (10 W or more for the Xbox X One). This has the potential to trigger a significant increase in the annual consumption of future consoles and offset if not nullify a large part of the efficiency gains.

The industry suggests little to deal with this issue. They only propose to '*provide consumers with information on each user-enabled standby capability available on each console, together with information on its power consumption*'. But there is no clarification on how and in which format this information is going to be provided. There is also no commitment to discourage as much as possible users from using these modes (e.g. through warning messages). There is also no commitment to reduce the power use of these modes.

We expect more commitments in the VA: better warning for users of the extra consumption of instant on modes, and reducing the power use of these modes.

Modest commitments on material efficiency

The proposed update to the voluntary agreement retains a few new commitments related to information for better recycling and reuse, which is welcome. But it also discards other feasible requirements that deserve better consideration, such as the inclusion of a requirement that plastic parts need to be made of a recyclable single polymer or a recyclable blend of polymer.

We would expect more quantified and staged commitments, including at a minimum an alignment with the requirements contained in the EC proposals on enterprises servers and displays.

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