

**GAMES CONSOLES VOLUNTARY AGREEMENT (GCVA)
FIRST UK STEERING COMMITTEE MEETING**

Tuesday, 7 September 2021, 16h30-18h00
Conference call

PARTICIPANTS

BEIS	1. Margaret Sutherland 2. Hannah Wall
DEFRA	3. James Butterworth 4. Matthew Stocks
Energy Saving Trust	5. Emilie Carmichael 6. Stew Horne
Microsoft	7. Kim Braun 8. Ted Eckert 9. Adriana Mattei, Zetacast, consultant to Microsoft
Nintendo	10. Julie Cheung-Rückert 11. Emil Schweiger
Sony	12. Josh Aslan 13. Kasia Colombani, Interel Group, consultant to Sony 14. Ceri Fenwick 15. Kieren Mayers
VA Administrator (Cambre Associates)	16. Laura Carre-Diaz 17. Ferial Saouli

AGENDA

1. Welcome and introductions
2. Election of UK Steering Committee Chair
3. Update from Signatories
 - Introduction to the UK GCVA
 - Update on proposed appointment of Administrator and Independent Inspector
 - Website
4. Update from the UK Government
 - Comments on draft VA v0.2
 - Impact assessment
 - Timeline for endorsement of the VA
5. AOB and date of next Steering Committee meeting
6. End of meeting

MEETING MINUTES

The meeting was held online via web conference, due to meeting/travel restrictions related to Covid-19.

1. Welcome and introductions

Ted Eckert (Microsoft) opened the meeting and welcomed all participants. Ferial Saouli (Cambre Associates, VA Administrator) then reviewed the agenda. No additional items were tabled.

2. Election of UK Steering Committee Chair

Ferial Saouli (Cambre Associates, VA Administrator) mentioned that as per the rules of procedure for the Steering Committee (Art. 4.3 of the [draft UK GCVA v0.2¹](#)), the Chair of the Steering Committee shall be elected from amongst the Signatories for a period of two years (may be re-elected once). Signatories (Microsoft, Nintendo and Sony) agreed to elect Mr. Ted Eckert (Microsoft) as Chair of the UK Steering Committee for the period 2021-2023.

3. Update from Signatories

Ted Eckert (Microsoft) said Signatories would start with an introduction of the UK GCVA, including its objective, the benefits it provides and how it works. He added Signatories would also provide an update on the appointment of both the Administrator and Independent Inspector, as well as an update on the Efficient Gaming website.

Introduction to the UK Games Consoles Voluntary Agreement (UK GCVA)

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https://www.efficientgaming.info/fileadmin/user_upload/UK_SRI/UK_SRI_drafts/Games_Consoles_UKVA_v0.2_Final_Draft.pdf

Ted Eckert (Microsoft) kicked off the discussion by explaining the GCVA is the result of many years of work, involving extensive consultations with the Signatories of the VA (Microsoft, Nintendo and Sony) and relevant stakeholders (such as civil society organisations and regulatory authorities), as a voluntary commitment to further improve the energy efficiency of games consoles. The EU GCVA was originally endorsed on 22 April 2015 by the European Commission and is continuously updated and is flexible enough to adapt to new technologies in a timely manner.

He added that the GCVA allows the games consoles industry to proactively develop integral and innovative energy efficiency solutions that allow for the evolution of gaming technology without degrading the level of play or compromising user experience. It sets maximum power and auto-power down (APD) limits and resource efficiency requirements for different types of mains-powered games consoles placed on the market within the UK. It also requires Signatories to provide additional information and instructions on how to minimise energy consumption.

UK GCVA timeline

Ted Eckert (Microsoft) explained that Signatories and the UK Government (represented by BEIS, Department for Business, Energy & Industrial Strategy) started discussions in Q3-2019 to prepare a Memorandum of Understanding (MoU), in which Microsoft, Nintendo and Sony stated their intention to draft and submit to the UK Government a UK GCVA, following the same principles as the EU GCVA.

Although the MoU was signed by all parties on 17 March 2021, the drafting process for the UK GCVA started in January 2021, and Signatories worked with BEIS to review the draft and replace EU legislations with the UK ones where appropriate.

Governance of the VA

Julie Cheung-Rückert (Nintendo) explained the governance of the VA (see Articles 4 and 5 of the draft UK VA):

- The VA is governed by the Steering Committee, which consists of the three games console manufacturers (the Signatories) and the representative of the UK government, which supervises the implementation of the VA. The Steering Committee meetings are held twice-yearly in order to (1) Evaluate the VA effectiveness in achieving its objectives; and (2) Discuss current and future developments that may influence console energy consumption with a view to agreeing to a course of action or revising the VA.
- The Steering Committee meetings are open to stakeholders such as NGOs and other civil society representatives, who can comment.
- Each Signatory is represented by an appointed representative, who may be accompanied/supported by additional experts.
- The Chair of the Steering Committee shall be elected from amongst the Signatories, for a period of two years (may be re-elected once).
- All decisions are taken by consensus. A two-thirds majority vote is required if no consensus is reached.

- The Steering Committee members have voting rights. Other relevant stakeholders may participate as observers and comment during the meeting (with no voting rights).
- An Independent Inspector tests all new console models placed on the market, gathers data from each company, and verifies compliance with the Signatories' commitments under the VA. All compliance reports are published on the VA website.
- A third-party Administrator provides administrative support necessary for the effective running of the VA.
- All decisions are reported in the meeting minutes and published on the VA website within one month of the meeting.
- Steering Committee members and observers have the opportunity to comment on the minutes before they are published.

Benefits of the GCVA

Josh Aslan (Sony) presented some of the achievements of the VA so far. The energy efficiency commitments of the VA (which include power caps as well as auto-power down requirements) have **continuously driven the energy efficiency of games consoles**, as demonstrated in the graphs on the power consumption for PlayStation and Xbox for both HD media and navigation and HD gaming (see slides 10 and 11):

- The **power consumption** of PlayStation 4 and Xbox One consoles in some modes (media and navigation, for example) has been **reduced by up to 50%** since 2013.
- Previous generation games played on the latest consoles (PS5 and Xbox Series X) can consume up to **30% less power** than when played on the previous consoles (PS4 Pro and Xbox One X models) for some games.
- Signatories estimate that 6.1 TWh of electricity use were avoided in 2020 within Europe as a result of energy efficiency improvements driven by the requirements of the VA.
- Over the lifetime of the Ultra High Definition (UHD) capable consoles, Signatories estimate there will be 46 TWh of electricity use avoided in total in Europe (approximately equivalent to the annual electricity consumption of Portugal in 2016).

He added that according to a [Lawrence Berkeley study](#)² on gaming and gaming devices in general, **console manufacturers have made great strides in improving the energy efficiency of consoles**. Even though there is a historical increase in power consumption at the launch of a generation, the overall trend is that between generations, Signatories have made significant reductions in power consumption.

Emil Schweiger (Nintendo) mentioned that although Nintendo's consoles have always been in the lower end of power consumption, since 1 January 2021 the Nintendo Switch is in scope of the resource efficiency requirements of the VA, and it will be in scope for the energy efficiency information provision requirements as of 2022. He presented a graph showing the decrease in power consumption for gaming for the Nintendo consoles (see slide 12).

Reporting requirements in the VA

² https://drive.google.com/file/d/1toMqhOk4_E1kTh5c2go7ZH4xIW8R11qV/view

Ted Eckert (Microsoft) presented the Reporting requirements (Section 5):

- For every reporting period, each Signatory has to complete the Product Compliance Report (PCR) in accordance with the requirements in Annex B for each of their games consoles in scope of the VA and submit it to the Independent Inspector.
- The role of the Independent Inspector is to:
 - Verify that the PCRs for all games consoles within the scope of the VA contain the required information and are submitted on time.
 - Ensure that the products from an individual Signatory comply with the VA energy and resource efficiency requirements through verification testing investigations when required.
 - Based on the PCRs, the Independent Inspector prepares an Annual Compliance Report (ACR) to be submitted to the Steering Committee within 4 months following the end of each Reporting Period.
- A further requirement, that the VA covers more than 80% of the games consoles sold in the UK (all Signatories' consoles in aggregate that are in scope of the VA) during the previous reporting period, requires the Signatories to report directly to the Secretary of State/BEIS. Signatories will provide data from an independent 3rd party to the Secretary of State/BEIS to prove market coverage within three months following a change in Signatories and will reconfirm market coverage every two years during the operation of the VA.

Energy efficiency requirements in the VA

Josh Aslan (Sony) presented the main Energy efficiency requirements (Section 3.1):

- Auto-Power Down (APD): For all consoles in scope of the VA (and consuming more than 20 W in Active Gaming mode) the APD function will be activated as default prior to placing on the UK market.
 - In Media Playback mode, APD is triggered within 4 hours of starting any audio or video media playback or within 1 hour or less of user inactivity after termination of video media content.
 - For all other operational modes, the period of inactivity required to trigger APD is set at 1 hour or less from the time of the last user input when powering down to the regulatory standby mode(s).
- Power caps: The VA uses modal power caps, which are applicable to the games consoles consuming more than 20 W in Active Gaming mode.
 - The VA lists the power caps from 2014 to 2021 (Tiers 1 to 6). Tier 6 (effective from 1st January 2021) will be applicable to the UK GCVA.
 - For Navigation mode of 8K-capable consoles, the cap is set to 70 W (measured at UHD video resolution).

- For Media Playback mode, caps are set to 70 W and 100 W (measured at HD and UHD video resolutions, respectively).

Resource efficiency requirements in the VA

Ted Eckert (Microsoft) presented the Resource efficiency requirements (Section 3.2):

- Repair and recyclability: Section 3.2.1 of the VA covers the requirements for repair and recyclability of consoles in scope. It details the requirements for:
 - Availability of out-of-warranty repair service for each games console.
 - Availability of spare parts to authorised repair or refurbishment centres.
 - Facilitating non-destructive disassembly of key components as specified in the UK VA for recycling and reuse.
 - Use of joining and sealing techniques that do not prevent removal of components.
 - Improvement of recycling at end-of-life.
 - External plastic enclosure components >100 g are removable using tools commercially available to recyclers.
 - External plastic enclosure parts >25 g, which from 1 January 2022 will not contain halogenated flame retardants >0.1% by weight.
- Information: Section 3.2.2 of the VA covers the resource efficiency information requirements of consoles in scope. It details the requirements to provide information on:
 - Supporting product life extension (e.g. information to users on how to keep the consoles in good working condition, how to delete personal data, performance upgrade).
 - Refurbishment or out-of-warranty repair service (e.g. technical documentation to authorised repair centres, end-of-life processing, refurbishment, and out-of-warranty repair options to users etc).
 - Whether external plastic enclosure parts >25 g contain halogenated flame retardants >0.1 % by weight shall be included in the product disassembly instructions (to repair and recycling operations), or marked on the plastic parts to improve end-of- life recyclability .
- Section 3.3 of the VA lists other commitments to improve information dissemination related to the VA and transparency.

Update on proposed appointment of Administrator and Independent Inspector

Ted Eckert (Microsoft) mentioned that Signatories, in consultation with BEIS, have discussed and agreed to appoint [Cambre Associates](https://www.cambre-associates.com)³ as Administrator for the UK GCVA and proposed [Intertek](https://www.intertek.com)⁴ as the Independent Inspector. The appointment of both will be subject to separate UK-specific contracts.

³ <https://www.cambre-associates.com>

⁴ <https://www.intertek.com>

Website

Feriel Saouli (Cambre Associates, VA Administrator) mentioned that as of July 2021 the domain name of the [Efficient Gaming website](https://www.efficientgaming.info)⁵ has been changed from '.eu' to '.info'. The landing page has dedicated access to the EU and UK VA sections. The UK GCVA section has been populated with some documents, meeting and contact information.

Questions/comments from stakeholders

Emilie Carmichael (Energy Saving Trust) asked for clarification about the 2-year review process and how stakeholders can engage in relation to updates and further commitments in the VA.

Ted Eckert (Microsoft) explained that an update is made at least every two years. Technical amendments (small edits) can be made during that period. Changes to requirements and commitments in the VA can only be made through the official review process, in consultation with the VA stakeholders and Steering Committee. Review of the VA may be triggered between the normal 2-year period if a new class/type of game console is released by the signatories. The review will be done in collaboration with BEIS and interested stakeholders to discuss any changes that may be needed, as well as to discuss the timeline to get them implemented within the VA.

Kieren Mayers (Sony) added this 2-yearly update is more rapid than the regulatory cycle/parallel statutory measures. As an example, the EU GCVA has already been updated three times since it was initially recognised in 2015 (compared to PCs and gaming PCs which have seen no updates during the same period (gaming PCs are also exempt from energy requirements)).

Emilie Carmichael (Energy Saving Trust) asked if the UK Government was planning on building in some form of independent review for the first review period.

Hannah Wall (BEIS) replied that the UK Government had carried out a “*de minimis*” impact assessment of the VA (since the total impact was below GBP 5m) and had not looked at the option of further independent review at the moment. However, this could be considered moving forward.

Kieren Mayers (Sony) added that in 2019 the European Commission had done an [independent review](#)⁶ of the EU GCVA, run by CESS, OekoPol and the University of Vienna. The VA requirements are constantly looked at independently by different stakeholders (OekoPol, Intertek, Lawrence Berkeley). The UK GCVA process will inherit that considerable scrutiny/independent review from the EU process.

Stew Horne (Energy Saving Trust) said he was pleased to hear there is a high degree of independent scrutiny and the possibility for public consultation during the 2-year review process.

⁵ <https://www.efficientgaming.info>

⁶ <https://op.europa.eu/en/publication-detail/-/publication/b29e4799-e4bd-11e9-9c4e-01aa75ed71a1/language-en>

He asked if there was any kind of benchmarking with other technological sectors, such as PCs, gaming PCs or TVs that have energy efficiency requirements.

Ted Eckert (Microsoft) replied that for material efficiency requirements, Signatories have been trying to mirror as much as possible into the VA the new requirements coming into the EU for Lot 5 (displays and television), while maintaining the safety/security of game consoles. Stakeholders are invited to the Steering Committee meetings and are able to ask questions, provide comments/feedback both to Signatories and BEIS. These are regular meetings taking place during the review cycle.

In terms of comparable-type products, Josh Aslan (Sony) said there is currently no comparison in terms of requirements set for gaming PCs within Europe. Additionally, games consoles are a unique type of product: over the generation and lifespan of a product, performance is held constant and there is a large reduction in power consumption over the course of 5-7 years of a console generation, all while maintaining/increasing performance; whereas increasing the performance of PCs results in their energy consumption either increasing or remaining flat (there is typically no reduction). The [study from Lawrence Berkeley](#)⁷ covers this. If you look at equivalent European legislation, the Lot 3 Ecodesign requirements for PCs have not had updated energy efficiency requirements since 2013 (are currently under review). During the same period the GCVA has had a series of 6 reduction tiers of power consumption. Through the open review cycle that involves interested stakeholders, the GCVA has continuously reduced the power consumption and improved the energy efficiency of games consoles.

On the issue of comparable gaming PCs, Ted Eckert (Microsoft) added that it's not uncommon now for gaming PCs to have power supplies of up to 600 W or more. In addition, gaming PCs are currently exempt from any energy efficiency requirements under the Ecodesign directive.

Stew Horne (Energy Saving Trust) said he appreciates there are some poorly performing sectors in the PC market (compared to the energy efficiency of games consoles), but in terms of transparency **it would be helpful to provide some projective benchmarks to compare the performance on certain type of function or metric rather than on the device as a whole (i.e. media streaming performance, battery life power consumption, etc.)**. This could help get a sense of where products sit in a suite of electronic products, all of which we would hope to see becoming more and more efficient over time. He said he believes VAs can be really good at pushing industry faster than legislation, they are more flexible and allow industry to be more responsive, but they also need to have a certain degree of transparency and mechanisms to demonstrate best practice.

Emilie Carmichael (Energy Saving Trust) agreed with Mr. Horne and asked if, given the UK's commitments to go further than the EU in some areas, there was scope to have some more forward-looking commitments from Signatories on some of the areas where improvement and innovation could still come?

Kieren Mayers (Sony) thanked Mr. Horne and Ms. Carmichael for their comments and said it was good there was enthusiasm for the VA approach. Signatories believe in the process and

⁷ https://drive.google.com/file/d/1toMqhOk4_E1kTh5c2go7ZH4xIW8R11qV/view

have put a lot of effort into it. He said Signatories had done benchmarking where possible (i.e. video performance of the console) and they also measure, report, and compare the gaming power consumption. There was a limit however to certain benchmarks (as demonstrated by Lawrence Berkeley study). Gaming is an artistic endeavour so it is difficult to work out what is an equivalent output and to make a comparison based on specific performance metrics (there is no meaningful metric to benchmark the performance of gameplay). The specifications of each console and its functions are published, together with power consumption for active gameplay, as a transparent way for making approximate comparisons with other devices in lieu of a performance benchmark.

As to whether there could be more ambition in the UK VA, the problem at the moment is that the UK process is slightly trailing the EU one. Signatories have been consulting the UK throughout the process, even before the Brexit agreement was concluded. Ideally the EU and UK processes should be synchronized in terms of the 2-year review period, to understand what the ambition/requests from both sides are and try to accommodate both. One VA cannot contradict the other in terms of requirements.

4. Update from the UK Government

Hannah Wall (BEIS) provided the update from the UK Government in terms of the impact assessment, timeline for endorsement and comments of the current draft UK GCVA v0.2.

Impact assessment

Hannah Wall (BEIS) explained there had been a “*de minimis*” impact assessment because the total impact of the VA was calculated to be below GBP 5m (this does not satisfy the criteria for a full impact assessment and therefore there is no requirement to publish one). The focus was analysing what and where the costs to UK businesses and the energy savings:

- No direct cost to UK businesses: zero additionality for domestic businesses due to none of the manufacturing taking place within the UK.
- Domestic energy savings compared to BAU: 1.3 MtCO₂e over 7 years (console generation typical lifespan).
- The VA is the *de facto* standard for products exported to the UK, so it is important for the UK Government to continue to engage with regulatory changes/standards (do not drop below those of the EU and keep UK ambition moving forward).

Timeline for endorsement

Hannah Wall (BEIS) said the formal endorsement of the UK VA is likely to take place mid to end-November, and there would be a period for stakeholder comments and Signatories’ feedback between the Steering Committee and the endorsement:

- 7 September: 1st UK SC meeting.
- Until end September: Comments from stakeholders.
- Around mid-October: Feedback from Signatories (need minimum 3 weeks after receiving comments).

- Mid to end-November: Formal endorsement.
- January 2022: Start of review process (aligned with EU review process and 2-year cycle).

Comments on draft VA v0.2

Hannah Wall (BEIS) said that because both parties had already had previous discussions and BEIS had seen the draft VA several times, there were very limited comments on the draft VA v0.2 at this stage. Some areas of ambition the UK Government would like to look at in the next review cycle would be:

- Power cap requirements (maintain ambition).
- Spare parts availability (length of time and specific parts).
- Use of recycled plastic in plastic components of consoles (long-term ambition).
- Take-back schemes for recycling of console components.
- Information sharing with gamers (power consumption, repair instructions, low power modes, transparency, enable right to repair and information sharing).
- Cloud gaming/future of gaming tech (keep up with technology and innovation).

Ms. Wall (BEIS) concluded her update by thanking Signatories for their hard work to agree on the 1st UK GCVA and said she was looking forward to continued cooperation and ambition going forward.

Questions/comments from stakeholders

Stew Horne (Energy Saving Trust) mentioned the potential for the VA to grow and capture a larger slice of the market in time. The market has changed a lot over the past 20 years, both in terms of product and players, so there could be an ambition to capture fringe players into the VA (i.e. VR machines and other smaller players).

Kieren Mayers (Sony) thanked Ms. Wall for the update and reiterated Signatories are also looking forward to cooperating. On the comments made about the VA and the future ambition he explained the following:

- Power caps: those will always come back into the review according to technical possibilities and new products/technologies. Every two years the Signatories provide a comprehensive Review Report where additional details on this are provided.
- Spare parts: the VA already includes some requirements, but there is also the issue of anti-piracy/anti-hacking and needing to have certain parts which are required to be part of an encrypted system serviced by authorized repairers who are authorised to access that encryption system. Signatories also provide an out of warranty repair service.
- Recycled plastic: Signatories are always looking at this, there are some limitations in terms of the availability and the technical specifications of certain types of plastics, but there has been some progress among producers (on a voluntary basis) in using recycled plastics.
- Information sharing: the information is already included in the Signatories' websites and we are looking into how to make the information on energy efficiency/power consumption

more prominent on the Efficient Gaming website and also to make it more consumer friendly.

- Take-back schemes: some Signatories have been supporting the UK WEEE take-back schemes but this is difficult to include in the EU's Energy-Related Products Directive (ErP) which is product focused.
- Other products: VR products are a separate category well beyond games consoles as defined in scope of the VA. VR technology encompasses many more companies from outside the console industry, but progress is made on energy efficiency. Cloud gaming is also a different, as it is a digital service not a product. The various exercises that are currently underway to assess the impact of cloud gaming. Additionally, some Signatories are members of the [UN Playing for the Planet Alliance](https://playing4theplanet.org)⁸ and look are beginning to address the carbon impact of cloud gaming within that framework.

Julie Cheung-Rückert (Nintendo) asked if the impact assessment process had been finished and if any summary or other document would be published.

Hannah Wall (BEIS) said it had been finished but would not be published because it fell under the GBP 5m threshold. If Signatories want to use the energy savings figure shown in the impact assessment slide, she would need to check internally.

Julie Cheung-Rückert (Nintendo) asked if Signatories could expect the endorsement now that the impact assessment had been completed.

Hannah Wall (BEIS) confirmed the endorsement of the VA is expected.

5. AOB and date of next Steering Committee meeting

Emilie Carmichael (Energy Saving Trust) asked for additional clarification on the timeline to finalise the VA and the opportunity/process for stakeholders to offer written comments after the Steering Committee.

Hannah Wall (BEIS) replied stakeholders could submit comments until the end of September and then Signatories would have a period of 3 weeks to provide their feedback.

Feriel Saouli (Cambre Associates, VA Administrator) confirmed Signatories would need minimum three weeks to comment (depending on extent of the comments).

With regards to the date of the next Steering Committee meeting, Feriel (Cambre Associates, VA Administrator) mentioned the VA foresees there should be two Steering Committee meetings held every year. Signatories had considered having the next meeting in November-early December. It was agreed that GCVA will suggest some dates in the next couple of weeks.

Hannah Wall (BEIS) asked if a Steering Committee meeting is needed for the endorsement of the VA.

Feriel Saouli (Cambre Associates, VA Administrator) replied that for the EU process the Steering Committee just 'minuted' the endorsement, as there had already been a process of stakeholder

⁸ <https://playing4theplanet.org>

comments/feedback from Signatories prior to the meeting.

Kieren Mayers (Sony) clarified that for the EU process, the policy officer refers to recognition rather than endorsement. The VA was recognised in 2015 and then after each review cycle, the EU decides whether to continue the recognition or not. The UK Government would need to formally recognise the UK VA first, and then evaluate if good progress is being made in each review cycle to continue recognising the agreement.

Hannah Wall (BEIS) thanked Kieren Mayers and said it was helpful to have that background.

6. End of meeting

Ted Eckert (Microsoft) thanked all participants for their comments and closed the meeting at 17h42.

Actions

- VA Administrator to prepare and share the minutes of the current meeting.
- Signatories to share the [Lawrence Berkeley study](#)⁹ mentioned by Sony (done).
- Signatories to suggest next Steering Committee date (done).
- Stakeholders to provide comments on the [draft UK GCVA v0.2](#)¹⁰ by end September.
- Signatories to respond within 3 weeks (depending on the extent of the comments).
- Hannah Wall (BEIS) to send her slides after meeting (done).

⁹ https://drive.google.com/file/d/1toMqhOk4_E1kTh5c2go7ZH4xIW8R11qV/view

¹⁰

https://www.efficientgaming.info/fileadmin/user_upload/UK_SRI/UK_SRI_drafts/Games_Consoles_UKVA_v0.2_Final_Draft.pdf