

efficient gaming

Games Consoles Self-Regulatory Initiative

Consultation Forum Meeting

11 December 2023

10:00 – 17:00 CET

Hybrid event



Agenda

1. Welcome and introductions
2. Response to previous EC and stakeholder requests
3. Annual Compliance Report (ACR) presentation
4. Update from Signatories:
 - 4.1 SRI 2023 Review Report
 - 4.2 2023-2024 Timeline
5. AOB

2. Response to previous EC and stakeholder requests

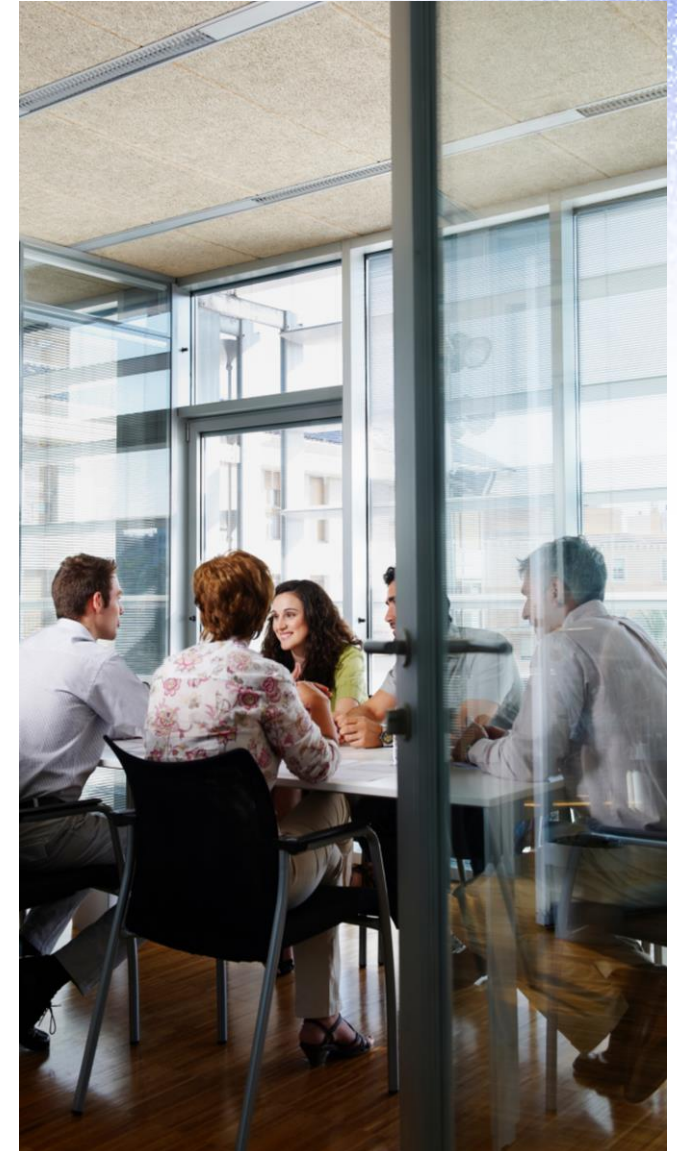
Stakeholder request	Stakeholder				Status	GCVA response
	Denmark	Germany	France	NGOs		
Increase information available to consumers and stakeholders	x		x		●	More information provision commitments added. Renewed website with more energy/resource information (2022)
No power cap increase for next generation (8K) consoles	x			x	●	No increase in power caps for new generation (8K capable) consoles despite significant performance improvements
Set more ambitious power cap for media playback mode	x	x			●	UHD media power cap reduced by 10 W for new (8K capable) consoles
Make spare parts available to independent repairers and end users		x		x	●	New commitment added to provide HDDs and external power supplies as of 2022
Remove instant-on mode as default choice for Microsoft consoles				x	●	"Energy saver" mode was made the default globally for Microsoft consoles
Undergo an independent review		x			●	Completed in 2019
Inform recyclers about plastic parts containing brominated flame retardants		x			●	Implemented as of 2020
Better align with other eco-design lots on SRI wording of requirements	x	x			●	Completed during 2020 review
Include consoles <20 W in scope of info and material efficiency requirements	x				●	Implemented as of 2021 and 2022
Phase out Halogenated flame retardants in plastic parts				x	●	Implemented for product casing components as of 2022
Clarify the anti-circumvention text and align with other Ecodesign initiatives	x				●	Implemented as of 2023

2. Response to previous EC and stakeholder requests

Stakeholder request	Stakeholder				Status
	Denmark	Germany	France	NGOs	
Set tiered targets for energy efficiency where the level of ambition is continuously set higher for each of the tiers	x			x	Part of 2023 Review
Set an additional and more ambitious tier 5 requirement for the UHD media playback mode		x			Part of 2023 Review
Increase the spare parts availability period	x	x		x	Part of 2023 Review
Make more spare parts available to end-users		x			Part of 2023 Review
Align wording for the requirement on halogenated flame retardant-free plastics with Lot 5 (Electronic Displays)				x	Part of 2023 Review
Introduce a requirement for post-consumer recycled plastic content in the plastic components of games consoles				x	Part of 2023 Review
Halogenated Flame Retardants: Lower the 25g weight exemption for external plastic enclosure parts				x	Part of 2023 Review

Stakeholder outreach update

- From June to September 2023, Signatories **presented the SRI proposals to the following EU stakeholders** seeking preliminary feedback:
 - ECOS - Environmental Coalition on Standards
 - EEB - European Environmental Bureau
 - European Commission
 - German stakeholders:
 - BMWK - Federal Ministry for Economic Affairs and Climate Action of Germany
 - Oekopol
 - UBA – German Environmental Agency
 - Netherlands Enterprise Agency
 - Swedish Energy Agency
- **Stakeholders raised questions** mainly on the proposals for power caps and spare parts, the out-of-warranty repair service, the compliance and verification process, and the 2023 timeline



3. Annual Compliance Report Intertek

4.1 SRI 2023 Review Report

- **Fourth SRI review (EU SRI v.5)**
- Previous reviews: 2017, 2019 and 2020 (reports available on the [GCVA website](#))
- The review covers the following proposals:

Energy
efficiency

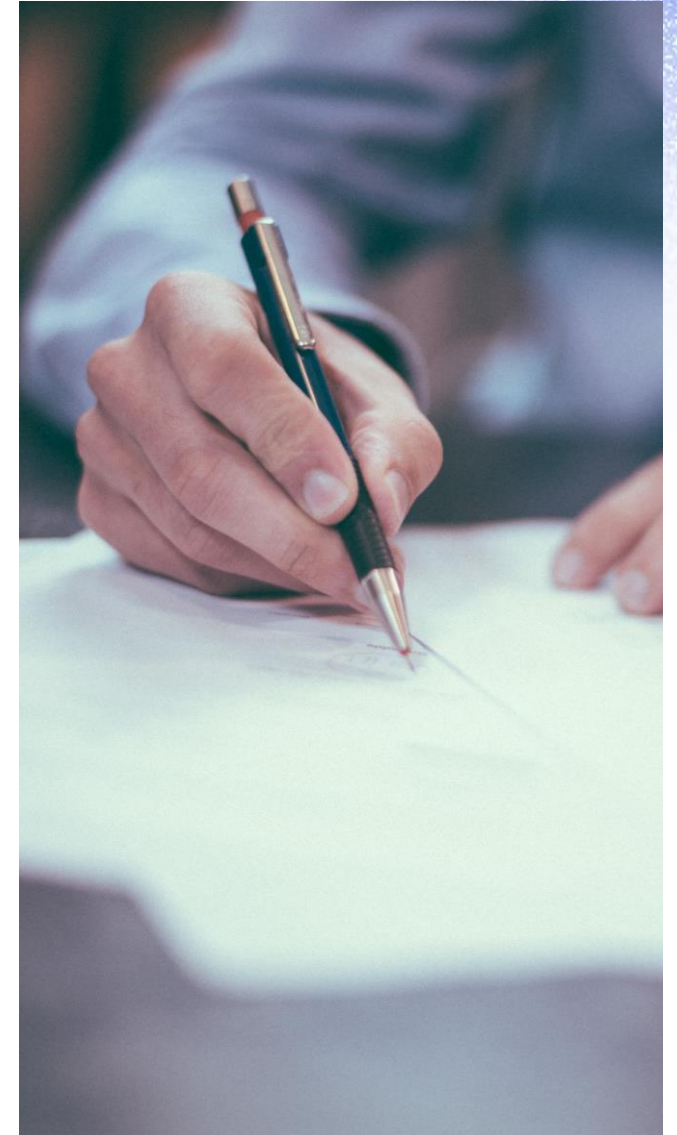
Resource
efficiency

Increased
transparency
and testing

Energy efficiency proposals

Standby regulation update

- The GCVA will be updated to reference the new EU regulation before the end of 2024



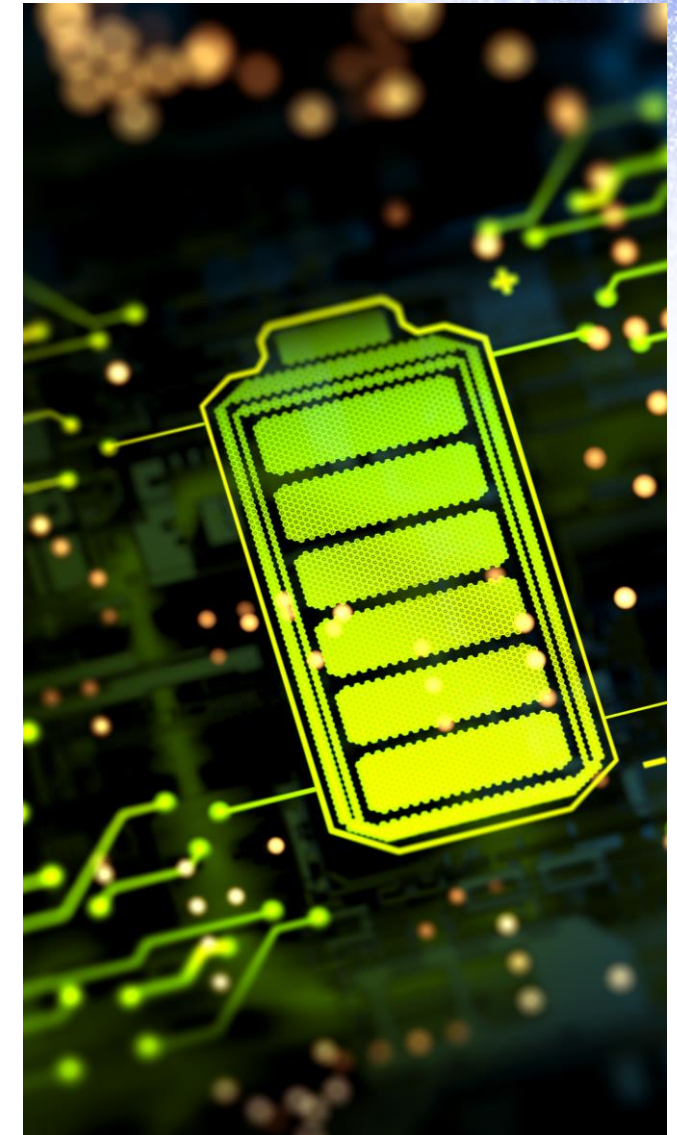
Power cap reductions

Proposed reductions from 1st Jan 2024:

HD capable	Current	Proposal
Navigation HD	50 W	40 W
Media HD	60 W	45 W

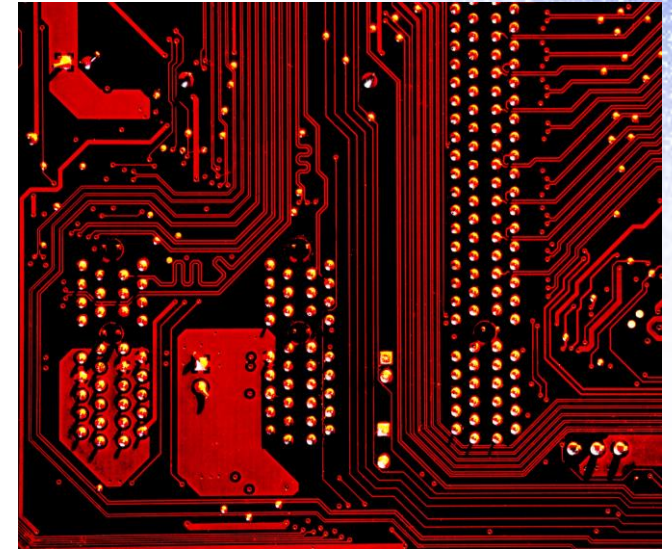
UHD media capable	Current	Proposal
Navigation HD	50 W	45 W
Navigation UHD	50 W	45 W
Media HD	60 W	50 W
Media UHD	60 W	50 W

8k capable	Current	Proposal
Navigation HD	70 W	60 W
Navigation UHD	70 W	60 W
Media HD	70 W	60 W
Media UHD	100 W	85 W



Limitations for future power reduction

- Approaching end of Moore's law – past power reductions no longer possible
 - Signatories will continue to investigate other methods to improve energy efficiency
- Video codec evolution:
 - Streaming companies are migrating from H.264 encoding to AV-1
 - AV-1 provides higher compression reducing demand on networks but requires more energy on the edge device to decode
 - The increased power required to decode AV-1 negates most of the energy reduction from new silicon designs
 - The new codec, and likely future new codecs, will make it harder to reduce media playback caps



Energy efficiency information

Efficient Gaming website now includes:

- The estimated total annual energy consumption (TEC) for Signatories' consoles
- Links to the Signatories' websites for additional information

Energy Use

Since the GDCU was introduced in 2015 there have been six tiers of power caps introduced to improve the energy efficiency of consoles in the EU. These power caps, together with power management requirements, and the automatic power down time limits, have helped drive substantial energy efficiency improvements in game consoles.

Below Electronics Consumption (TEC) values are shown below for Microsoft, Nintendo and Sony consoles. TEC values are an estimate of the energy used to power consoles over an average year. TEC is an estimate for powering the console based on operational conditions: continuous play (100% of a game, media playback and loading) in the average home time spent in each mode.

Manufacturer	Console Model	Estimated annual TEC	Comments
Microsoft	Xbox Series X	120kWh	Based on the European Reference Laboratory (ERL) power cap of 100W and the maximum power cap of 150W. Power cap is based on the average power cap of 100W.
Microsoft	Xbox Series S	20kWh	Based on the European Reference Laboratory (ERL) power cap of 25W and the maximum power cap of 35W. Power cap is based on the average power cap of 25W.
Nintendo	Nintendo Switch OLED	40kWh	Based on the European Reference Laboratory (ERL) power cap of 40W and the maximum power cap of 50W. Power cap is based on the average power cap of 40W.
Nintendo	Nintendo Switch (OLED)	40kWh	Based on the European Reference Laboratory (ERL) power cap of 40W and the maximum power cap of 50W. Power cap is based on the average power cap of 40W.

Power Consumption and Settings

For information on the power consumption and settings of each console, please see each manufacturer's website:

- Microsoft: About power settings on Xbox One and Xbox Series X|S. Read more
- Nintendo: Information about energy efficiency and energy usage on Nintendo Switch consoles. Read more
- Sony: Energy efficiency and power management information for PlayStation Consoles. Read more

How can I minimise console energy use?

Enable automatic power down

If you need to set up your console to conserve energy use, ensure you have automatic power down enabled. This will ensure that the console only draws a small amount of power.

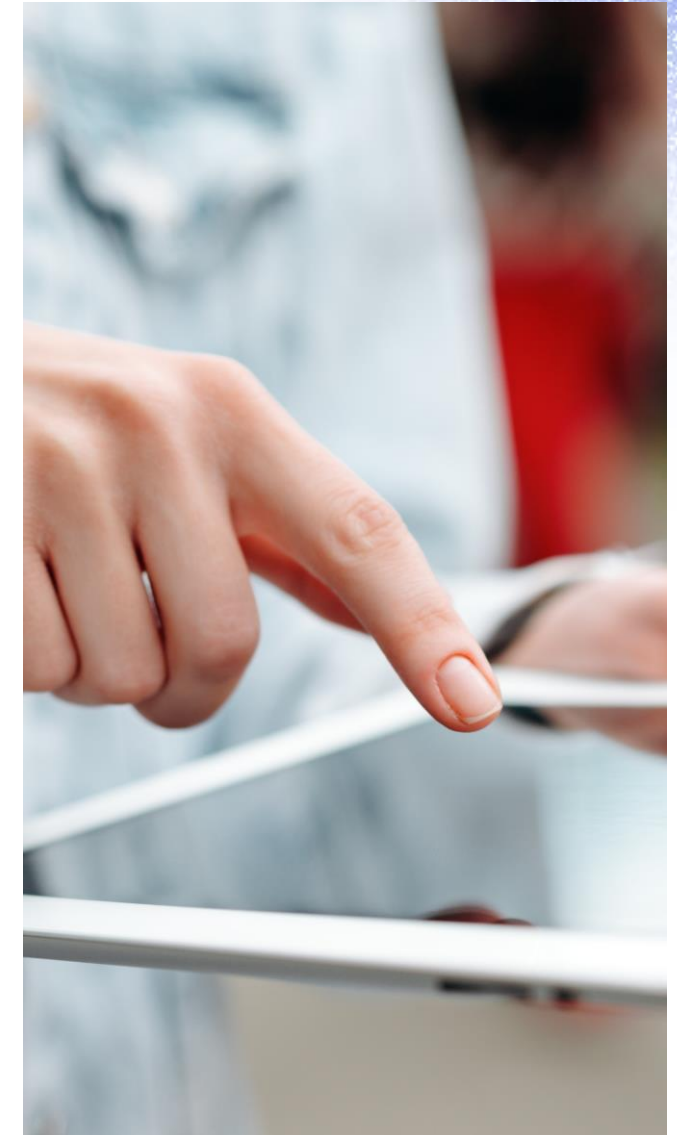
For instructions on how to set up power management settings on your console, see:

- Microsoft: See "Optimize power" in Xbox power settings (Xbox One and Xbox Series X|S).
- Nintendo: See "Power management" in the Nintendo Switch System Settings.
- Sony: See "Media Center" in the console energy cap in PlayStation and the EnergyCap/PlayStation.

Choose the correct power settings for you

Consider how you use your console to help you choose the correct power settings for your preferences. For more information on these settings and how to control the console, visit us to help you save energy use.

Microsoft: See About power settings on Xbox One and Xbox Series X|S.- Nintendo: See "Power management" in the Nintendo Switch System Settings.
- Sony: See "Media Center" in the console energy cap in PlayStation and the EnergyCap/PlayStation.



Resource efficiency proposals

Spare parts

New proposal to supply spare parts to 3rd parties avoiding stockpiling:

- The Signatories **may utilise one or more of the following strategies** to support their own repair and refurbishment processes for consoles and provide spare parts to third parties:
 - providing new parts
 - providing refurbished parts or consoles
 - providing recovered parts
 - directing to 3rd party part supplier or providing them, when safe and technically feasible
 - keeping an archive of new [or used] consoles for parts recovery
- Proposal:
 - Excludes IP protected components (encryption system)
 - Aligns with EU circular economy objectives



Encrypted parts are critical to protect against game piracy

- Hackers are constantly attempting to modify (or “crack”) consoles to enable piracy
- Some internal components (e.g. Motherboard, Optical Drive) form a specialised and locked encrypted system to prevent this software piracy
 - These parts and associated blueprints cannot be provided to independent repair companies without compromising protection



By console manufacturers taking steps to prevent illegally copied games they protect game developers and the wider video game industry.



Spare Parts Proposal

After significant technical review, the Signatories propose to provide the following spare parts effective from 1 January 2026:

- Internal and external parts that are not part of the encryption system (when applicable) to be provided to professional repairers:
 - **Internal axial fan**
 - **Internal power supply**
 - **Circuit board assemblies not protected by internal encryption**
 - **External plastic enclosure parts**
- Standard bundled **external cables** (when applicable), such as USB, power and HDMI, are to be provided to professional repairers and end-users
 - **Continue to provide HDD and EPS**



Spare Parts Proposal

Availability of spare parts

As well as increasing the list of spare parts available to professional repairers and end-users, Signatories commit to increasing length of time to provide spare parts **from 2 to 5 years** effective from 1 January 2026

Last date of manufacture

To improve Signatories' ability to forecast and stakeholders to assess the availability of spare parts, we propose changing the start time to **last date of manufacture** instead of **last unit placed on the market**



Regulatory handling of spare parts

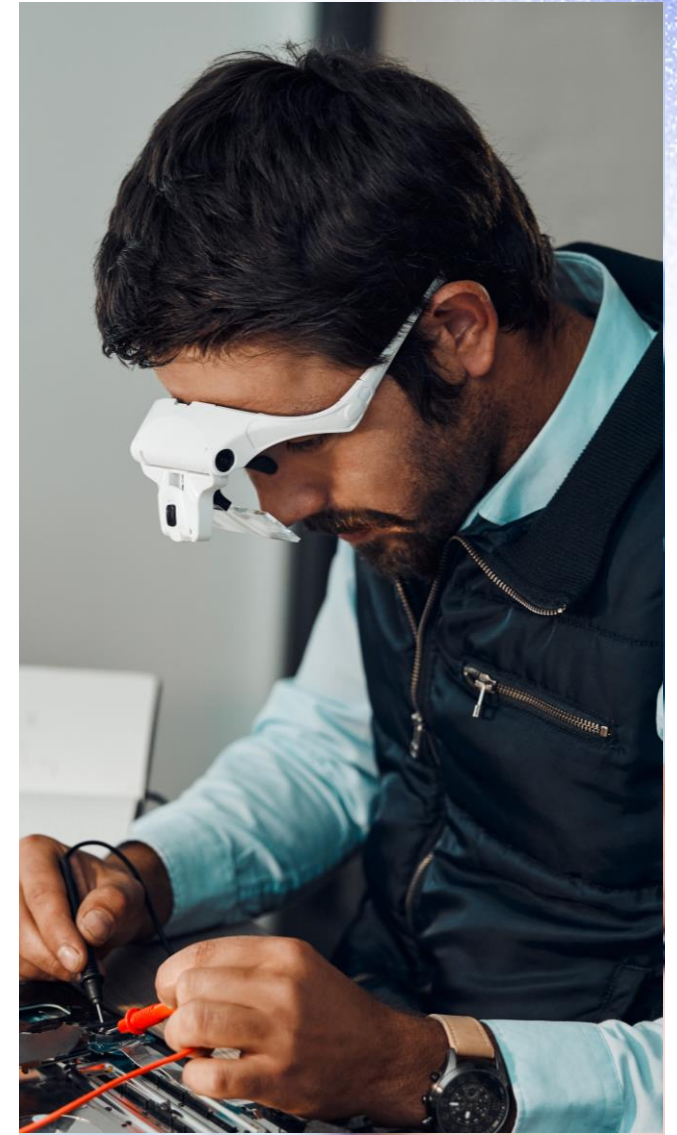
- The Signatories commit to improving resource efficiency by providing spare parts to third parties, and to reducing waste from excess inventory, where possible (stockpiling)
- In some instances, updates to EU regulations and standards (e.g. safety, chemicals, etc.) may prevent Signatories from providing spare parts to third parties, as spare parts would need to meet these new regulatory requirements which come into force after the original console was last placed on the market

The proposed strategy will enable Signatories to:

- (1) increase the length of time they can provide spare parts**
- (2) increase the types of spare parts available to third parties**

Out of warranty repair service

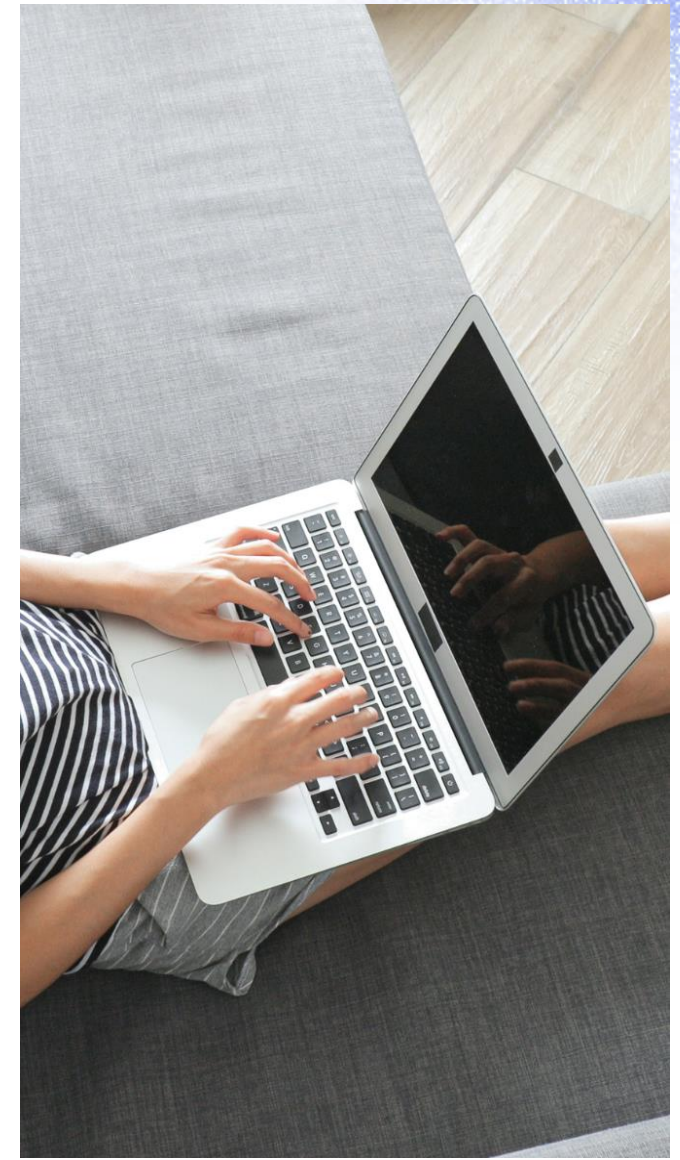
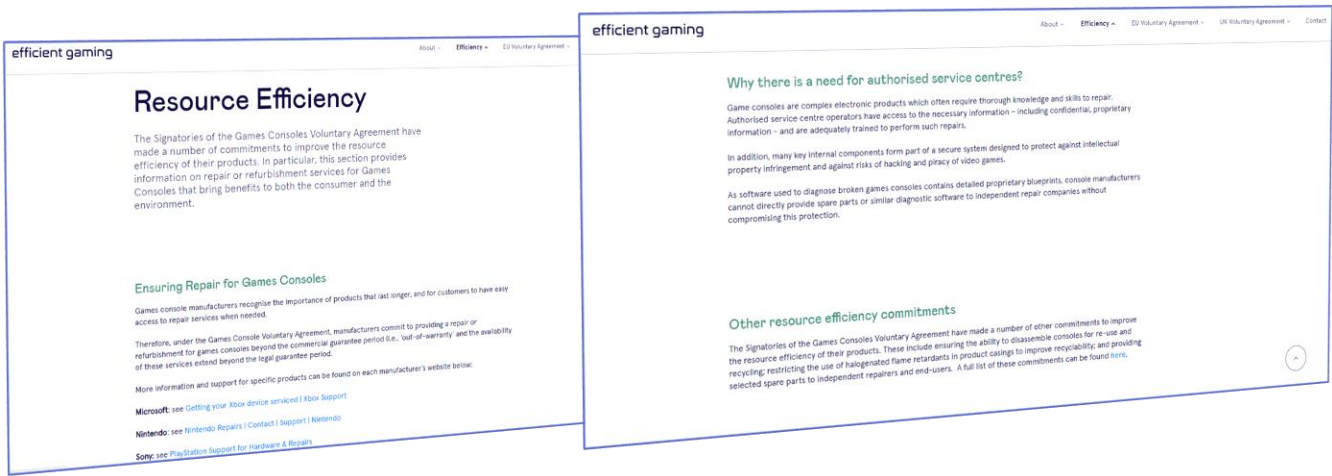
- The GCVA already requires Signatories to provide an out-of-warranty repair and refurbishment service for end-users:
 - Benefits of this service include the provision of safe and reliable repairs, as well as the ability to collect data on reoccurring issues to improve reliability of future models
 - Aligning with the intentions of the European Commission's proposal on common rules promoting the repair of goods (March 2023)
- Signatories propose that from 1 January 2026, authorised repair or refurbishment centres shall provide an out-of-warranty repair and refurbishment service to end-users **for a minimum five years** (*after the last unit was manufactured*)



Resource efficiency information

Efficient gaming website includes information on:

- Repair or refurbishment services (also available on Signatories' websites)
- Other resource efficiency commitments

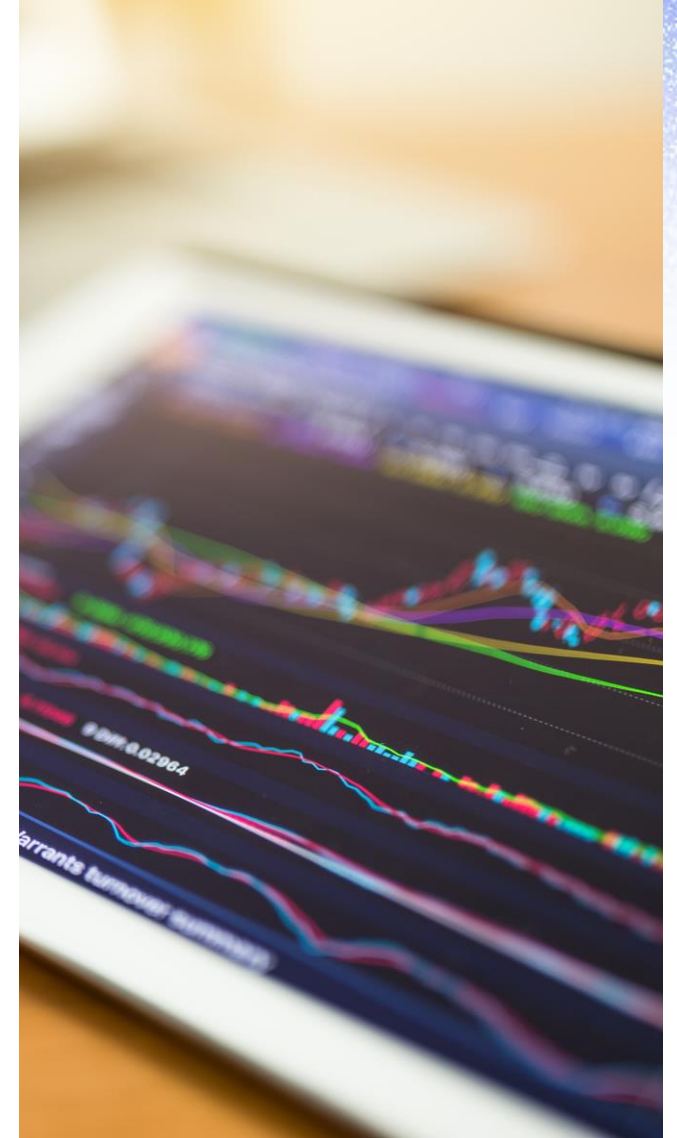


Other proposals

Increased transparency and testing

The Signatories updated the compliance and verification methods to further increase transparency representativeness:

- The Independent Inspector can now test energy efficiency requirements of a game console model **each year**
- Resource efficiency requirements will also be checked by the Inspector for the selected games consoles



Summary

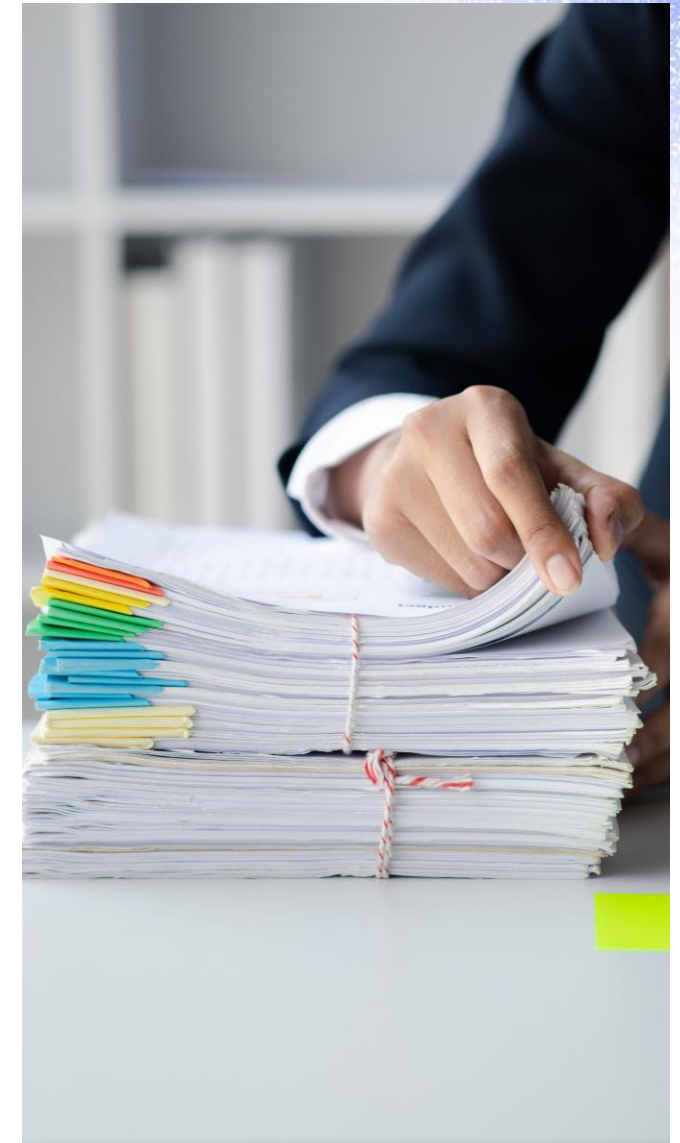
Summary of changes in EU SRI v.5

Revisions and clarifications (**SRI v.5**) include:

- Tier 7 of power caps reduction for Navigation and Media modes
- Increase duration of spare parts provision from 2 to 5 years
- Increase list of spare parts for third parties
- Commitment of 5 years to provide an out-of-warranty repair and refurbishment services
- Revision of the 25g exemption for halogenated flame retardants to 0.5g
- Energy and resource efficiency information requirements
- Revised verification method and annual test by the Independent Inspector

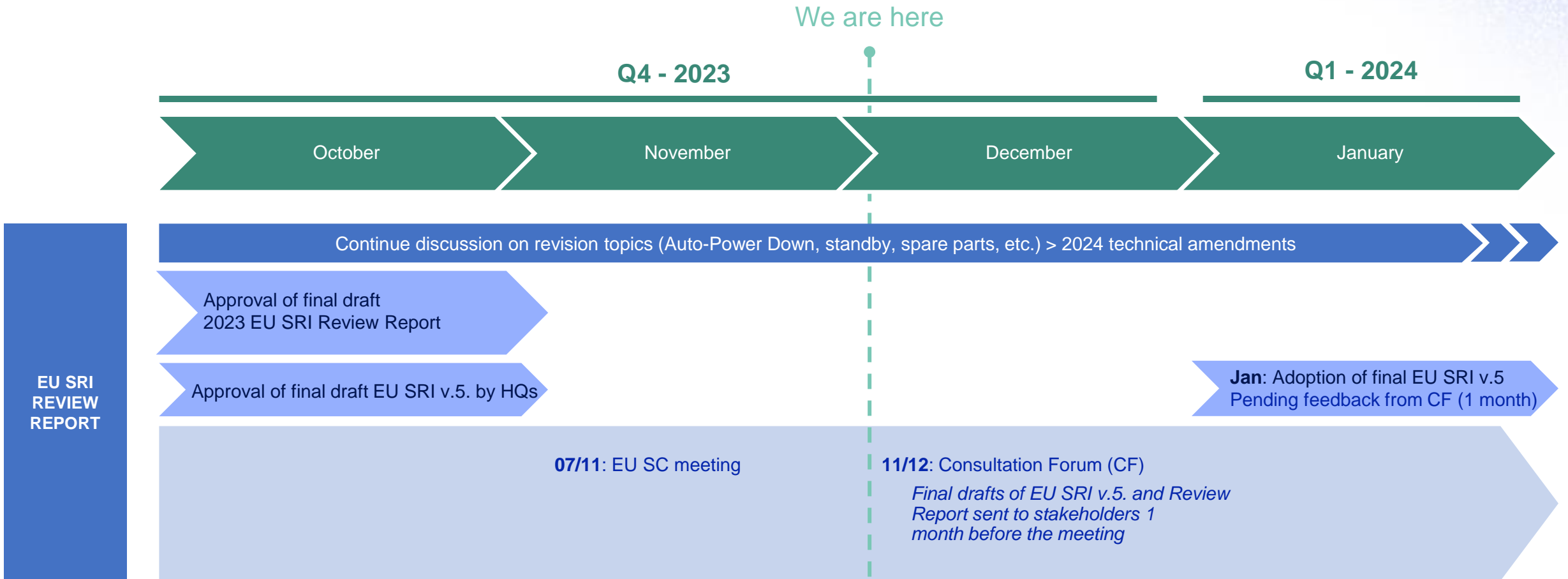
Planned adoption from January 2024

Annex A-1/A-2 will be updated after the Consultation Forum Meeting to align with the 2023 Review Report



Timeline

4.2 2023-2024 Timeline



5. AOB



END OF MEETING