



RIGHT TO REPAIR



IFIXIT EUROPE

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Response to the inception impact assessment on ecodesign & energy labelling requirements for mobile phones and tablets

We **strongly support the planned legislative initiative** to reduce the environmental impacts of mobile phones and tablets. With more mobile phones in use globally than the total number of people living on Earth¹ and more than 150 million purchased each year in the EU alone², **the climate and environmental footprint of these devices is tremendous**. Just the Europe's stock of 600 million active devices is responsible for some 14 million tonnes of CO₂ emissions – more than the annual carbon budget of Latvia³. Given that an estimated 72% of their climate impacts are due to manufacturing, distribution and disposal⁴ and that EU citizens replace their smartphones on average every 2 to 3 years⁵, business as usual can no longer be sustained and far-reaching measures are needed aimed at extending the useful lifetime of these devices. By ensuring that smartphones and tablets are more durable and easier to reuse, repair and remanufacture, **such measures would not only reduce their combined life cycle impacts, but also the amount of e-waste generated as well as precious resources required for their manufacture**, including lessening the environmental and social impacts arising from the mining of well over 50 different metals needed to make an average device⁶.

It is our view that the best way to ensure that smartphones and tablets are energy efficient, durable, easy to repair and to upgrade is through a **combination of minimum ecodesign requirements coupled with consumer information requirements under the Energy Labelling Regulation** (option 5 in the inception impact assessment). The dedicated ecodesign regulation should specify requirements for the entry to the European market that ensure **minimum levels of repairability, upgradeability, reusability, durability and recyclability of smartphones and tablets**, while Energy Labelling should provide relevant and comparable information to consumers that promotes a shift in consumer purchases towards most environmentally friendly options. Since batteries are a key lifetime-limiting component, the new Energy Label should be focused on an **A-G score on battery endurance** alongside key additional aspects. Most notably and building on the recent policy developments in France that demonstrate the potential for scoring approaches to inform consumers on the reparability and durability of their devices this should include an **A-G repairability and durability scores** that would be prominently displayed on the same label.

Our views on the different policy options considered under the inception impact assessment are presented below.

¹ The number of active mobile phone subscriptions has exceeded the number of people on this planet, according to data from the International Telecommunications Union (ITU): <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> & <https://qz.com/1608103/there-are-now-more-cellphones-than-people-in-the-world/>.

² Ecodesign preparatory study on mobile phones, smartphones and tablets, Draft Task 2 Report, Fraunhofer IZM, Fraunhofer ISI, VITO, 2020, pp. 15-16.

³ Coolproducts Don't Cost the Earth, Report Briefing, 2019: <https://eeb.org/library/coolproducts-briefing/>.

⁴ Coolproducts Don't Cost the Earth, Report Briefing, 2019: <https://eeb.org/library/coolproducts-briefing/>.

⁵ Ecodesign preparatory study on mobile phones, smartphones and tablets, Draft Task 2 Report, 2020, pp. 15-16

⁶ Guidance for the Assessment of Material Efficiency: Application to Smartphones, Final Report for Task 2, JRC Technical Report, 2020, p. 62.

Option 2 – self-regulation

The [Coolproducts campaign](#) and its members have **strong reservations about the potential for using self-regulatory initiatives instead of regulations** in all aspects of environmental policy making and under the Ecodesign Directive in particular. The Voluntary Agreements endorsed under this Directive to date have failed to deliver on circular economy objectives and fall short in ambition to constitute a meaningful set of commitments that can genuinely challenge business as usual⁷. As a result, we have a clear and unequivocal preference for legislation to achieve the objectives of EU's product policy.

It is our understanding that the existing **EcoRating** initiative has been proposed by some stakeholders as an option for self-regulation. We believe that this initiative **is not suitable to be considered as a self-regulation option for the following key reasons:**

- **Insufficient market coverage:** EcoRating is led by telecom providers rather than smartphone manufacturers, which means that the total market coverage of relevant products achieved today is a mere 25%. For a Voluntary Agreement to be considered as an alternative under the Ecodesign Directive, the market share achieved should be at least 80%.⁸
- **Inadequate scope of commitments:** EcoRating initiative does not include design-specific requirements and depends entirely on the provision of information to influence the market. This is insufficient for a self-regulation approach under the Ecodesign framework and runs the risk of conflicting with the EU Energy Label.
- **Deficient procedures for conformity assessment:** EcoRating does not include any clear procedures for conformity assessment (e.g. third party verification) and is unlikely to be compatible with the forthcoming legislative initiative on green claims, since the information provided would be self-declared.
- **Lacking technical foundation:** Even if the EcoRating for smartphones is based on the PEF methodology, there are currently no Product Environmental Footprint Category Rules (PEFCRs) for smartphones which means that there is no established benchmark⁹. Consequently, the assumptions made, weighting and data quality may vary between manufacturers, leading to business-to-consumer orientated comparisons being inappropriate and potentially misleading. Furthermore, such a label is unlikely to fulfil the requirements for environmental claims currently being established through the European Commission's initiative on green claims.

Options 3-5 – mandatory specific and/or generic ecodesign requirements and/or energy labelling

We strongly believe that **mandatory specific ecodesign requirements are needed in order for the dedicated regulatory instrument to effectively address the environmental impacts of smartphones and tablets**. This would not only ensure a minimum level of repairability, upgradeability, reusability, durability and recyclability of smartphones and tablets but also facilitate market surveillance and ensure consistency with the approach taken for other product groups. Scoring options, in turn, need to be limited to those that go beyond minimum regulatory requirements and are sufficiently challenging to differentiate between best-performing and other products.

⁷ See our recent position papers on the Voluntary Agreements on games consoles and imaging equipment for more detail: <https://www.coolproducts.eu/>.

⁸ See Commission's guidelines for self-regulation measures, C/2016/7770.

⁹ In their recent technical report TR 103 679 V1.1.1, ETSI concluded that "over- and underestimations are common due to a myriad of assumptions" and that approaches taken could be very variable and not comparable. It is unlikely that this issue will be resolved, as ETSI recommended against the creation of such guidance:

https://www.etsi.org/deliver/etsi_tr/103600_103699/103679/01.01.01_60/tr_103679v010101p.pdf.

The concept of generic, scoring-based ecodesign requirements as introduced in the draft ecodesign preparatory study on smartphones and tablets¹⁰ is, in our view, wholly inappropriate to achieve the above objectives and are unlikely to lead to the necessary market transformation. In order to be effective, key sustainability information should be provided to the consumer in an easy to access and easy-to-understand manner and be both comparable and easy to verify, including by market surveillance authorities. This will best be achieved by mandatory labelling and our **preference therefore is unequivocally for the introduction of a dedicated EU Energy Label.**

The main parameter on the label should be an **A-G score on battery endurance** (expressed in terms of number of hours between charges), coupled with aggregate **A-G scores on repairability and durability** that empower consumers to choose the most durable and repairable option available on the market and in turn rewarding innovation in long-lasting devices. The choice of focus on the endurance of the battery is, as outlined in the draft ecodesign preparatory study, the most appropriate focus for the Energy Label as it has a direct link to energy usage (less frequent charging means less energy use over time) but also, as a corollary, to longer battery lifetime overall¹¹. However, the recommended foundation of the battery endurance metric on the GSMarena benchmark in the said study would need to be improved to be suitable for use in an EU Energy Label by aligning it with real-life use and thus ensuring that information provided to consumers is representative¹². The details of the individual criteria to be taken into account when developing aggregate durability and repairability scores should, meanwhile, be freely accessible to consumers and appropriate sanctions and verification procedures should be put in place to deter misleading and inaccurate claims.

A detailed proposal for the recommended minimum ecodesign requirements and information aspects to be considered when developing the labelling approach is provided in the annex to these comments below.

Annex: specific policy recommendations

The table below provides a **detailed list of recommendations** for how the combination of regulatory tools (ecodesign and energy labelling) should address the resource efficiency of mobile phones and tablets, ensuring consistency with the approaches used in similar regulations to date while taking a pragmatic approach to ensure flexibility as to the ways in which manufacturers innovate towards durable and repairable designs.

Aspect	Mandatory specific Ecodesign requirements	Energy labelling and scoring requirements
Repair & upgrade	User replaceable battery (with tools, reversible and/or reusable fasteners) ¹³	Additional points in multi-criteria scoring for user replaceable battery without

¹⁰ Ecodesign preparatory study on mobile phones, smartphones and tablets, Draft Task 7 Report, 2020.
¹¹ Ecodesign preparatory study on mobile phones, smartphones and tablets, Draft Task 7 Report, 2020.
¹² The GSMarena is based on assumptions that represent a very low active usage profile of only three hours per day. The draft Task 3 preparatory study report demonstrated that in 2017 almost half of users spent five or more hours on their smartphones daily, and more than 25% spent more than seven hours every day using their device. Therefore, the number of hours between charge cycles presented by the benchmark is highly unlikely to match with actual consumer experience and should be aligned with the findings of the preparatory study.
¹³ Two different options for user-replaceable batteries should be considered. A distinction should be made between a battery that is replaceable with no tools, and one which uses commonly available tools as per EN 45554:2020. The Commission's recent proposal on batteries (COM(2020) 798) goes in this direction, and mandates for portable batteries to be 'readily removable and replaceable by the end-user or by independent operators', with 'readily replaceable' being defined as cases 'where, after its removal from an appliance, the battery can be substituted by a similar battery without affecting the functioning or the performance of that appliance'.

		tools and for using reversible and/or reusable fasteners
	<p>Joining, fastening or sealing techniques do not prevent the disassembly for repair or reuse purposes using commonly available tools of the following components: display screen/display unit, cameras, glass back cover, charging connector, motherboard, buttons, audio output, speaker, microphone.</p> <p>Replacement of these parts by professional repairers (including both authorised and independent repairers) is not to be prevented by any other design choices such as part serialisation.</p>	<p>Multi-criteria scoring with points awarded for:</p> <ul style="list-style-type: none"> i) low number of steps to access and remove specified key components, ii) use of “removable and reusable” vs “removable and non-reusable fasteners” iii) user replaceable component without tools
	6-7 year spare parts availability (with separate lists for professionals and users ¹⁴), including a requirement on spare part price transparency	Multi-criteria scoring with additional points for every year spare parts are provided beyond the mandatory time period
	Information provision on correct use and repair made available to users and professional (authorised and independent) repairers, including repair manuals with instructions for all key components and diagnostic tools	Multi-criteria scoring with additional points for additional categories of information (e.g. board-level schematics) and increased accessibility (e.g. in cases where all repair information is available publicly at no additional cost for consumers, independent and professional repairers)
Durability	5 years OS support ¹⁵	Multi-criteria scoring with additional points for every year beyond the mandatory time period and for the reversibility of updates
	Mandatory IP 44 rating in relation to water & dust resistance	Multi-criteria scoring with extra points for <ul style="list-style-type: none"> i) higher IP ratings beyond the mandatory level ii) robustness of display and glass back cover to drop

¹⁴ Components to be made available to users: battery, display screen/display unit, glass back cover; components to be made available to professional repairers in addition to the above: cameras, charging connector, motherboard, buttons, audio output, speaker, microphone.

¹⁵ The draft Task 6 report of the ecodesign preparatory study demonstrates that the 5-year requirement represents significant benefits, particularly given that: i) discontinued OS support is a major reason for security and performance issues, ii) an OS support of 5 years eliminates the OS as a major lifetime limiting factor for 20% of devices, and iii) the design option is achievable at a low cost of only 2 euros additional purchase price. Requirements for all manufacturers of 5 years OS support ensures consistent demand for and provision of such support from third party providers going forward, so that the Ecodesign Regulation can successfully transform the smartphone market towards more sustainable solutions and avoid planned obsolescence.

		iii) provision of additional screen and glass back cover protection option to consumers
	Battery minimum lifetime (minimum cycle performance of 80% at 600 cycles ¹⁶)	Energy Label A-G rating for charge endurance, based on the revised GSMArena benchmark with more representative assumptions of between 5 to 7 hours per day. Multi-criteria scoring of battery durability ¹⁷ , based on either the maximum number of cycles at 90% health or giving extra points for each 100 cycles over 600 at which 80% performance is achieved
	Provision of pre-installed battery management software and battery-related information, including on battery status	
Reuse	Data encryption and ease of erasure by default	Multi-criteria scoring points for features that facilitate ease of data transfer
External power supplies	Standardised power supply and mandatory unbundling of chargers and cables	Multi-criteria scoring points for unbundling of other accessories
Recyclability and end-of-life	Information requirement establishing a digital product passport, which includes, <i>inter alia</i> , information on critical raw material (CRM) content	Multi-criteria scoring points for commitments to use post-consumer recycled material content in casings, to not use conflict area minerals in production, full disclosure on chemical contents to facilitate recycling, and respect of International Labour Organisation (ILO) standards

¹⁶ It is important to recognise the equivalence between number of charge cycles and time (years) of device use. Since the ecodesign preparatory study base cases assume 1 full charge per day, this implies 365 charge cycles per year. We believe that 80% after 600 cycles therefore is an appropriate minimum requirement, considering that as stated in the draft Task 6 report (section 2.2.5) 80% after 500 cycles is already specified as the design norm, at least for some brands.

¹⁷ For a multi-criteria scoring approach on smartphone batteries, it is important to go beyond the endurance (in hours) of a charge cycle for a new product and to address the durability (in relation to the number of cycles that a phone can be expected to be performing at a specified state of health), taking into account the degradation in battery performance over time. This would also align with the recent Commission's proposal on batteries (COM(2020) 798) which suggests durability requirements for portable batteries to be established by means of a dedicated delegated act (and supported by standards) by 2025. The proposed parameters will cover both endurance and durability.

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