RIGHT TO REPAIR

Comments

on the review of the MEErP – Methodology for Ecodesign of Energy-related Products (Tasks 1 & 2)

Brussels, 19 July 2021

Following the stakeholder consultation meeting on 24 June 2021, the environmental stakeholders hereby submit their views on the draft JRC Technical Report on the Review of the Methodology for Ecodesign of Energy-related Products (MEErP). We appreciate the work undertaken by the JRC to date so to make the methodology better suited to examine the wider resource efficiency impacts of energy-related products and to facilitate the shift towards more durable, repairable and circular products. In particular, we strongly support the following aspects:

- Overall inclusion of material efficiency aspects (repairability, upgradability, durability, recyclability, reuse of materials and components) in the methodology, including the proposed calculation of 'equivalent annual cost'
- Enhanced stock modelling and sales projection functionality with the potential to examine the impacts of product lifetime variation
- Intention to improve on impact categories in line with the Product Environmental Footprint (PEF)
- Intention to use updated EF 3.0 datasets for the analysis
- Extension of recyclability benefit rate to other materials beyond plastics
- Removal of energy recovery and disposal in landfill from the circular footprint formula
- The correction to the default fixed assumption in the bill of materials that spare parts comprise 1% of materials
- Improvements on packaging and distribution aspects

It is of paramount importance that material efficiency aspects (repairability, upgradability, durability, recyclability, reuse of materials and components) and product lifetime considerations are addressed in sufficient detail to arrive at meaningful outcomes when undertaking analysis under the reviewed MEErP. This means that detailed guidance within the tool – including provision of accompanying worked examples – is needed to ensure consistency in how the methodology is to be applied across product groups by the different users. The remainder of this paper details a number of associated recommendations for the attention of the project team.

Impact categories

Section 2.1, Subtask 1.a

- List of new impact categories for the revised ERT (Figure 1.b): in order to facilitate the analysis, the report should provide a comparative table demonstrating how the old ERT categories are integrated within the updated category list.

Modelling of recycled content and recyclability

Section 2.2, Subtasks 1.d & 1.g

- Recycled material quality: care should be taken when relying on the PEF approach for recycled content estimation to ensure that the application in the MEErP tool takes into account the quality of recycled content. It has been observed in the relevant literature that "*the quality term can be "adjusted" to almost any "desired" result. The very environmentally relevant aspect of how often a material can be recycled is not reflected in the formula at all. A material that is recycled barely once gets the same burden/credit as a material that is recycled 100 times.*"[1] The review of the Ecoreport tool should take due consideration of this and allow for the necessary differentiation.

- Electronics recyclability: it is unclear how the proposed default value for the recyclability of electronics, which is currently proposed to be set at 50%, is derived. The report should clarify this, and detail the situations in which this value may or may not be appropriate.

Modelling of material efficiency aspects

Section 2.5, Subtask 1.d

- Ability to evaluate different repair cases: the updated Ecoreport tool should take into account the need for preparatory study analysts to be able to aggregate repair scenarios for different priority parts (e.g. battery replacement or screen repair), To ensure modelling consistency and transparency on repair rates while still keeping analysis relatively simple, a column could be added to the initial bill of materials with an additional factor for likelihood of repairs (i.e. replaced in X% of products over lifetime), as suggested by Mr Karsten Schischke (Fraunhofer IZM) during the stakeholder meeting of 24 June 2021.

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[1] Finkbeiner, M. (2014) Product environmental footprint—breakthrough or breakdown for policy implementation of life cycle assessment?, *International Journal of Life Cycle Assessment*, 19, 266–271 available at: https://link.springer.com/article/10.1007/s11367-013-0678-x

Modelling of annual sales

Section 2.6, Subtask 1.df

- Ensuring consistent use of stock model: we believe that clear guidance on how to appropriately adjust the Weibull distribution with real product examples is necessary to ensure proper use of the proposed approach.

Estimation of expected product lifetime

Section 3.1

- Terminology: Rather than referencing 'critical components', terminology consistent with the CEN-CENELEC 4555X standard series should be adopted, referencing 'priority parts' instead.

- Consistency between upgradability and repairability (Figure 15): it is unclear why the figure lists some aspects (e.g. safety skills and working environment, commercial guarantee) in relation to upgradability but not repairability. This should be clarified in the report.

- Levels approach for reliability, repairability and upgradeability: stakeholder feedback during the meeting on 24 June 2021 has demonstrated that the proposed level approach is unclear to a number of stakeholders. Clear guidance and worked examples should be provided on how to apply the 4 proposed levels so to avoid the risk of considerable variation between studies. Additional clarity is in particular needed on whether and how the % increase in lifetime levels would be determined for a whole product rather than per part / repair. If each of the levels is to be analysed for each key part, this would presumably require multiple dedicated analyses.

- Cost-per-day and wider benefits of repair: The current proposal to calculate the cost-per-day of repair is insufficient as it does not take into account the wider benefits of repair. If the durability index approach is to be used consistently to fill this gap, it needs to be integrated into the tool and accompanied by appropriate guidance and examples. The cost-per-day / equivalent-annual-cost calculation should be expanded to also include impacts-per-day / equivalent-annual-impact.

- Learning curve for repair costs: Considering the delay in the implementation of regulatory measures from the time when the preparatory study is completed, learning/experience curves for costs should be integrated into the tool to take into account future cost decreases. More sophisticated job modelling could be considered as well, so to address job losses associated to anti-repair design trends under the business-as-usual scenario.

- Reuse and remanufacturing: As reusability and remanufacturability are harder to address, especially as only one failure and corresponding repair action can be considered in the tool before end-of-life occurs, clear guidance should be provided on how these aspects can be addressed within the existing structure. This is especially important for future-proofing as the new approach is likely to be in place for an extended number of years.

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