Study on a Right to Repair for electronics

Task Clarification Note

Introduction

Following an online meeting on 15/06/2021 between DG CNECT and the contractor team, the purpose of this note is to clarify the Terms of Reference for the study, in particular under task 1, and to provide guidance to the contractor on how to proceed and prioritise with certain elements.

This note is divided by the tasks and subtasks of the study Terms of Reference, using the original text as a structure for further clarifications.

Generally, it should be emphasised that DG CNECT is not expecting a draft legal text for a right to repair as an outcome/deliverable of this study. Rather, we are looking for a list of the desirable demand-side and supply-side elements as well as potential business model scenarios / cases (under task 1) and assessment of their impacts under different options (under task 2). In the sections below, more extensive lists of elements to be considered are included.

Task 1. Problem identification

<table>
<thead>
<tr>
<th>Terms of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this task, the contractor will assess four main areas of the CEI, as defined in the background above.</td>
</tr>
<tr>
<td>I. Supply-side conditions that prevent circularity and the right to repair to be availed of in practice (including what is missing on the design and capacity side plus evidence of contractual practices).</td>
</tr>
<tr>
<td>II. Demand-side conditions that prevent consumers from having their electronics easily repaired including demanding repair as a right, which is enforceable (redress mechanisms) and enforced (empowerment of competent authorities).</td>
</tr>
<tr>
<td>III. Economic assessment / business model development, to assess the overall societal costs, benefits and effects of a right to repair on current and new markets, on sustainability, and how to support a transition towards circularity.</td>
</tr>
<tr>
<td>IV. Legal and commercial aspects - e.g. potential barriers, overlaps and synergies within IPR, product liability, sector and Member State specific legislation.</td>
</tr>
</tbody>
</table>

In each area, the contractor will conduct a thorough analysis resulting in evidence-based conclusions and will follow up with concrete recommendations with options on how to proceed to achieve the goals of the CEI and overcome/mitigate potential challenges and risks.

Clarifications

Point IV in the TOR text above should not be taken as separate point. Rather, it should be included in the task 1 sub-tasks as applicable.

Subtask 1.a. Supply-side conditions

<table>
<thead>
<tr>
<th>Terms of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>As mentioned above, there are several ongoing or recently concluded preparatory studies to support planned EU legislative and non-legal measures, which likely cover all or a majority of the</td>
</tr>
</tbody>
</table>
CEI-relevant supply-side conditions, including design requirements and the availability of spare parts and repair information.

On the supply-side, the study should:

- Provide a gap analysis of the elements of reparability (e.g. OEM requirements on design, spare parts, information, embedded software, after sale/repair services) that are necessary to provide a basis for a strong consumer ‘Right to Repair’, which are not currently fully covered by existing or planned requirements or studies (see list in Annex I).
- Analyse the conditions (technical, legal, practical) under which software updates can be covered by reparability/’Right to Repair’ requirements for devices in scope of the CEI.
- Assess other potential legislative issues, overlaps and synergies (e.g. liability issues between OEMs and repairers, sector specific legislation, intellectual property law, environmental law and Member States’ law).

Clarifications

Elements of reparability:

- What should the requirements look like to support an effective R2R? E.g.:
  - Reparability requirements
    - Requirements on the disassembly of devices – the ability to use commonly available tools without damaging the device/components or reducing their durability or functionality (e.g. no critical parts/casings glued/soldered together)
    - Modularity of key components (e.g. screens, battery, camera, microphone, speakers, charging connector) for easy replacement and/or upgrades
    - Availability of spare parts and repair manuals for a minimum pre-determined period, and for how long? Important to set out the criteria that can be used to determine the length of such a period, including the relevant data.
    - Availability of software or firmware updates for a minimum period of time – which types of updates and for how long? Note interaction with obligation in Sale of Goods Directive for seller to ensure that the consumer is supplied with security updates for as long as the consumer can reasonably expect (Art. 7(3)).
  - Durability/reliability
    - What (if any) is the distinction between durability and reliability?
      - [Also take into account the definition of “durability” in existing legislation – such as the Sale of Goods Directive, Art. 2 (13) and accompanying recital 32].
    - What are the trade-offs between durability, reliability and reparability? Can provisions on durable/reliable design hinder device reparability further down the line? If so, how can this be resolved? [E.g. one draft Ecodesign requirement is on disassembly & battery replacement, unless the batter is considered “durable”.]
Potential legislative issues:

- What are the implications in IP of requiring OEMs to provide repair manuals and other information (such as exploded views, wiring and connection diagrams, software tools etc.) to independent repairers/consumers?

- What are the implications in IP on the possible scope for a R2R? Which are the critical components/parts and which are less so but could have an effect on the potential extent of a R2R? I.e. certain patents/trade secrets (e.g. held by a third party) prevents an R2R requirement to (fully) disclose information (to certain types of repairers/users) to enable repair of certain parts, including appropriate tools/know-how.

- What could be the form of commercial arrangements that enables/inhibits repair, e.g. licensing, franchising, NDAs.

- Different OEMs may be responsible for different components (e.g. Qualcomm SoC vs Samsung). Can this impede reparability/upgradability? Liability issues? Can this be tackled by R2R legislation?

- [How could developments in design, e.g. as a consequence of the new R2R design requirements, be taken into account to ensure that design requirements do not become ineffective, or render the R2R ineffective, in the near/mid-term future? E.g. loopholes/backdoors.]

- How could a R2R work with products-as-a-service business models?

Subtask 1.b. Demand-side conditions

<table>
<thead>
<tr>
<th>Terms of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>The consumer angle (i.e. demand-side) of a ‘Right to Repair’ is currently not sufficiently covered by ongoing studies. The contractor will explore the conditions that would allow consumers to demand repairs as a right and which is enforceable (e.g. including via effective redress mechanisms and the empowerment of competent authorities).</td>
</tr>
</tbody>
</table>

On the demand-side, the study will:

- Identify the consumer protection elements (e.g. rights, conditions, guarantees, safeguards, redress and sanction mechanisms) that are necessary to establish a ‘Right to Repair’, complementing the supply-side requirements, in particular in respect of electronic devices as envisaged by the CEI, with a view to facilitating repair for the consumer and supporting the sustainability goals and the circular economy transition.

- Determine which of these consumer protection elements are already covered by existing or planned studies, non-legal or soft law measures and legislation.

- Determine how could such a right be concretely and feasibly drafted (process, scope, and format/structure). At a minimum, this should assess the following:
  - From the perspective of the consumer, determine where in the supply chain it will be more effective to impose such a ‘Right to Repair’, and what costs it may have along the supply chain.
  - Identify if it is possible to determine a reasonable/proportionate price or price-range, which a repairer/manufacturers may charge for repairs and spare parts, and if so how.

- Explore how consumers can be incentivised to choose repair over replacement, taking into account existing studies (such as those carried out by DG JUST).
Clarifications

The contractor asked for a clarification on how to draft a right to repair. [What is missing downstream that would hinder a R2R?]

- On the design of the right
  - Direction of the right:
    - Against whom could such a right be enforced? Where in the supply chain would it be more effective to impose such a 'Right to Repair', and what costs may such a right have along the supply chain? ("effective" to be interpreted widely to include all considerations, including costs, implications on consumers and achievement of sustainability objective).
    - For the benefit of whom could such a right be established? E.g. consumers, user/end-users/business users/employees, repairers, public administrations.
  - Applicability of the right
    - What are the options for its application? In which conditions could it apply? E.g. user’s fault; design fault; other.
    - "Durability" guarantee: if design requirements allow a manufacturer to choose to assert durability, rather than reparationability (e.g. under Ecodesign where a battery does not need to be replaceable if it is proven sufficiently durable), should the manufacturer/seller then be required to provide a guarantee on durability instead of a R2R?
    - What are the trade-offs between durability, reliability and reparationability in terms of the overall sustainability of a device? Can provisions on durable/reliable design hinder device reparationability further down the line? If so, how can this be resolved? [E.g. one draft Ecodesign requirement is on disassembly & battery replacement, unless the battery is considered "durable".]
    - Timeframe: when should the right be applicable? Should the right be applicable during the legal guarantee period (under current consumer acquis)? If the right were to extend beyond the legal guarantee period, what would be an appropriate duration for its application? [E.g. corresponding to Ecodesign requirements on spare parts availability, or renewing the legal guarantee period after repair].
  - What are the cost issues? Under what circumstances should a cost apply? Should/could the cost be regulated (e.g. "reasonable" price), and if so, how?
  - Should any particular characteristics of electronics be reflected in the design of the right (or any supporting measures) in order to make it effective (focus on IPR issues and particular supply chain issues like maintenance of critical components from suppliers to manufacturers e.g. mainboards, chipsets; privacy/data protection concerns)?
Who would oversee the functioning of the R2R, how would R2R right holders (consumers, users/end-users/business users, public administrators etc.) seek redress and how would it be enforced? What role could consumer associations and public authorities play?

- Should any supporting measures (e.g. reparability scoring; downstream incentives to choose repair that are not currently being considered via other initiatives) be considered to complement the right to repair? If yes, what would be the most effective ones?

### Subtask 1.c. Business model development

<table>
<thead>
<tr>
<th>Terms of Reference</th>
</tr>
</thead>
</table>
| The study will develop at least three scenarios to implement a ‘Right to Repair’. The study will also explore the effects of CEI requirements and a ‘Right to Repair’ on current and new markets, how to support a transition towards circularity and the potential development of new business models (e.g. independent repair / refurbish businesses/activities, spare parts markets, etc.). The study will:
| - Estimate for each scenario:
| | o the expected economic effects such as job and business creation (e.g. in repair and refurbishment market; spare parts design and production); innovation; research & development; repair and manufacturing markets; aftermarkets – when compared to business-as-usual;
| | o The estimated effects on market competition from the establishment of relevant market actors (new and old);
| | o The potential increase in production costs for manufacturers from new requirements, e.g. relating to costs of making spare parts available for a certain period; designing electronics for repair, disassembly and dismantling; using durable materials; providing software and security updates/upgrades; etc. Can they be offset and what are the potential commercial revenues/returns brought about by selling spare parts to repairers and consumers and/or licensing/franchising their production/software development?
| | o The expected increase in costs for manufacturers if obligated to provide repair services. Can they be offset and what are the potential commercial revenues/returns brought about by repair market organised/facilitated by OEMs?
| | o Other potential benefits of, and incentives for, introducing reparability and a ‘Right to Repair’.
| - Assess a reasonable timeline for OEMs to adjust to potential new requirements.
| - Identify if there is a need for incentive schemes or other measures to foster the development of more circular electronics markets, and if so which ones.
| - Identify and assess new economic models (sharing economy) and initiatives (e.g. repair cafes) for the promotion and facilitation of the repair culture.

Note that some of the elements above may also already be covered by existing or ongoing studies as explained above, e.g. effects of additional product requirements on manufacturers, in which case the contractor will summarise the available results in this study, filling in any gaps, and include them in their analyses.

**Clarifications**
Continue with the multiple scenarios, understood as possible futures of the evolution of the market for repairs and reuse. The different scenarios should be:

a. The market consolidates in a few big repair companies.
b. The market is dominated by small, individual companies that provide all the most common repairs needed.
c. Most repairs are done by consumers themselves.
d. [Any other scenario deemed feasible.]

Each scenario should come with a series of figures attached (e.g. job and business creation, impact on innovation, etc.) that in turn would let the Commission choose which scenario is the most desirable and as a result configure the elements of each option in Task 2 (who can do the repairs, for how long the software updates, etc.). For instance:

a. if the market should be dominated by small companies, the requirements to become a professional repairer must be as low as possible (e.g. OEMs should provide training courses to anyone for a minimum fee);
b. if, on the other hand, the ideal scenario is to ensure the quality of the repairs, then the requirements to become a professional repairer (and post-repair guarantees, etc.) should be much higher;
c. if innovation is to be pushed, probably the best option would be to let individual consumers do all the repairs themselves. A similar process happened with the development of the current personal computer, generating countless innovations in its own market and, most importantly, in adjacent markets. Such an approach could have clashes with IPR.

Further challenges/opportunities to consider

- Are there, from a business point of view, any IPR hurdles to affordability/availability of repair, what would be some appropriate measure to tackle these?
- Scope for manufacturing relevant parts in Europe
- Ways to encourage phone sellers to not only focus on new devices
- Dealing with locked ecosystems
- How to address the trend of manufacturers introducing artificial tech to render devices unfixable (camera fingerprinting, security chips, etc.)
- Consider the role of Digital Product Passports in the scenarios
- Innovation. The R2R should be seen as something that could also increase innovation, and not just as a consumer right. The open architecture used in the PC\(^1\) ushered into an enormous wave of innovation. Allowing as many people as possible to have access to the hardware (or even software) will have the same effect as it had in the past: increased innovation. Currently, eco-design implementing regulation has a taxonomy where only some people/companies can have access to some tools/designs. Nevertheless, the study could help identify this source of innovation for future revisions of those measures.

---

\(^1\) Stemming from the loss of IP rights from 1973’s Honeywell, Inc. v. Sperry Rand Corp