



# RIGHT TO

# REPAIR

## COMPETITION POLICY AND THE GREEN DEAL

### Right to Repair campaign submission to the call for contributions

20<sup>th</sup> November 2020

#### 1. Introduction

As outlined in the call for contributions, Europe faces a complex challenge: how to “*repair the economic and social damage brought by the pandemic and to kick-start the European recovery in line with the twin green and digital transition goals*”

The [European Right to Repair](#) campaign represents a community of repair and sustainability activists promoting the role of repair in Europe’s transition to a sustainable economy.

Value retention activities (those relating to reuse, refurbishment and repair) and the concept of a “Right to Repair” have already been explicitly identified in the European Green Deal and Circular Economy Action Plan as a relevant opportunity to support sustainable development in key areas:

- **Environment:** reduce premature obsolescence and the overall environmental footprint of the economy by extending product lifetimes’ - including as part of the drive towards digitalisation
- **Social:** give consumers access to more durable, reusable and repairable products, creating local or regional jobs, supporting social enterprises, engaging populations in sustainable consumption, providing opportunities for reskilling
- **Economic:** reduce the life cycle cost of key products for consumers and public authorities, support a revitalisation of European remanufacturing sector, reduce dependency on imports for critical raw materials (such as those contained in electronic products)

The European Commission has already started to develop policy options to support repair and other activities related to value retention, notably through the following:

- Sustainable Product Policy Initiative
- Empowering the consumer for the green transition initiative
- New and updated rules under the existing ecodesign and energy labelling framework
- Circular ICT initiative

These policies predominantly cover product regulations and consumer law, as well as voluntary measures (such as green public procurement criteria). This said, there are aspects addressing competition which we believe may determine the success of these policies.

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## 2. Discussion on competition issues in the repair economy

The following section outlines examples which illustrate the interrelation between competition and product repair and which we hope can inform this initiative.

**This information relates primarily to Part 2: Antitrust rules.** Though not covered by the three questions the submission primarily illustrates cases of dominance - i.e. Article 102 of the Treaty.

*a) An emerging issue: the definition of “professional repairers” in the ecodesign framework*

**Amazon and Apple deal removes independent refurbishers from world’s largest online marketplace.** In 2018 Apple and Amazon struck a deal which would permit the sale of new Apple products on Amazon’s e-commerce platform. The deal included an agreement which would remove most third-party resellers of Apple’s products on Amazon’s marketplace – resellers in this case should be understood as independent businesses who repair and resell Apple products. The requirements set in the deal were that a) resellers would only be permitted to host their products on Amazon’s marketplace if they purchase USD 2.5 million of Apple refurbished inventory every 90 days or from a major retailer with over 5 billion USD in annual sales, and b) that the resellers must become Apple authorized provider of repairs and have a physical retail space which customers can go to. One article analysing this deal suggests that these conditions cannot be met by most independent refurbished phone resellers, that the average price of products has consequently increased, and that older models of device were no longer available.<sup>1</sup> The deal was recently announced to be subject to anti-trust investigations in Germany.<sup>2</sup>

**Norwegian Supreme Court ruling on Apple vs Henrik Huseby.** On the 3<sup>rd</sup> June 2020 one independent smartphone repairer lost his case against Apple in Norway’s Supreme Court. Huseby was accused of importing counterfeit iPhone screens to repair phones. Refurbishers in Europe often import screens assembled in China, where fresh glass is applied to original Apple displays with cracked glass. Huseby argued he used “refurbished” screens and that Apple does not make refurbished or original spare parts available to independent repairers, so he had no alternative. The technicalities of the case came down to trademark infringement, as many Apple components are marked with a very small “Apple” logo invisible to consumers. It was reported that Apple in Norway charges 1 959.75 NOK (185 EU) for mail-in service to replace the screen in an iPhone 6s, Apple’s authorised repair services in Norway charge 2699 NOK (255 EU), more than three times as much as Huseby charges, 800 NOK (75 EU).<sup>3</sup> Regardless of the outcome, the case provides another example of how competition in after sales markets for electronics can be stifled.

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<sup>1</sup> <https://www.theverge.com/2019/5/21/18624846/amazon-marketplace-apple-deal-iphones-mac-third-party-sellers-john-bumstead>

<sup>2</sup> <https://www.bloomberg.com/news/articles/2020-10-29/amazon-apple-probed-by-germany-over-online-sales-curbs>

<sup>3</sup> <https://repair.eu/news/apple-crushes-one-man-repair-shop/>



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**Google advertisement blocks on independent repair.** A further barrier to repair is limited access to repair service providers. Google has been criticized by independent repairers for banning independent repairers from advertising through its search engine. This issue was brought to the attention of Commissioner Vestager by German repair group Runder-Tisch-Reparatur in their letter of 21 June 2019.<sup>4</sup> In the USA, NGO US PIRG submitted a letter with 7,000 signatures to Google calling for an end to its ban on electronic repair ads and sent a letter to the Federal Trade Commission. US PIRG stated that some repair shops reported drops in revenues of as much as 70 percent after Google removed their ads.<sup>5</sup> Runder-Tisch-Reparatur argued that Google was abusing its dominance on the market.

**New ecodesign requirements and the definition of “professional repairer”.** 1 October 2019 the European Commission formally adopted ecodesign requirements<sup>6</sup> for household appliances which incorporated, for the first time, requirements for material efficiency including repairability.<sup>7</sup> The requirements, notably access to spare parts and repair manuals, are most comprehensive for “professional repairers” in contrast to “end users” who have access to more limited provisions. The definition of professional repairer is however left open to member states to implement through registries, or by manufacturers themselves. Independent actors and campaigners are concerned that national registries are unlikely to be established and OEMs will determine who they grant access to. Ecodesign and material efficiency requirements are currently under development for additional products such as smartphones and computers. Overall, these new measures, which will come into force in March 2021, should help to make aftersales markets for electronics more open, however the technicality presented by the definition of professional repairer could severely limit their effectiveness. The forthcoming sustainable products initiative will also likely extend this style of provisions to wider product groups than just electronics.<sup>8</sup>

To give a concrete example to illustrate how the repair market could be constrained if OEMs define what a professional repairer is, this can already be seen in Apple’s authorised service programme and independent repair provider program. Launched in the US in 2019, in July 2020 Apple announced its independent repair provider program would be expanded to Europe.<sup>9</sup> Although hailed as a possible breakthrough for the right to repair - many repairers and repair activists have been vocal about criticising these programmes. Firstly, Apple’s repair services are much more expensive than independently provided repairs<sup>10</sup>. Also their official programmes only offer certain types of laptop and smartphone repair (e.g. screen and battery) while other relevant repairs such as changing ports or logic board work are not offered even though these represent common failures and the repairs are

<sup>4</sup> [https://runder-tisch-reparatur.de/wp-content/uploads/2019/06/Open-letter\\_Google-threatens-existence-of-independent-repair-service-providers-1.pdf](https://runder-tisch-reparatur.de/wp-content/uploads/2019/06/Open-letter_Google-threatens-existence-of-independent-repair-service-providers-1.pdf)

<sup>5</sup> <https://uspirg.org/blogs/blog/usp/banning-fix-google-continues-blocking-third-party-repair-ads>

<sup>6</sup> [https://ec.europa.eu/energy/topics/energy-efficiency/energy-label-and-ecodesign/regulation-laying-down-ecodesign-requirements-1-october-2019\\_en?redir=1](https://ec.europa.eu/energy/topics/energy-efficiency/energy-label-and-ecodesign/regulation-laying-down-ecodesign-requirements-1-october-2019_en?redir=1)

<sup>7</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_5895](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_5895)

<sup>8</sup> <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12567-Sustainable-Products-Initiative>

<sup>9</sup> <https://support.apple.com/irp-program>

<sup>10</sup> <https://support.apple.com/en-gb/iphone/repair/service#otherrepairs>



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technically straightforward.<sup>11</sup> Altogether, the pricing of repairs, the limited service offering, and failure to offer data recovery could be resulting in unnecessary waste, as well as customers being overcharged for repairs/replacements and losing their data.<sup>12</sup> Independent repairers have also reported that their posts on forums have been deleted because they highlight the limits of repair services offered by manufacturers.<sup>13</sup>

A study of the constricted repair market in the US estimated that 416,000 phones are disposed of each day in that market.<sup>14</sup> Our own analysis of the European smartphone market estimate that 210 million phones are sold every year - with a climate impact from all phones equivalent to more than the annual emissions of Luxembourg.<sup>15</sup>

**Software locks, serialisation and Digital Rights Management.** As well as attributes of the physical design of a device, such as disassembly sequence and the use of non-proprietary tools, other barriers exist such as software and legal measures. Software locks and serialisation are an increasingly common occurrence on consumer electronics and prevent repair by independent actors without access to OEM software and diagnostic tools. In a review of repair services in the US, NGO US PIRG identified that “on the latest iPhones, even battery and screen replacement repairs now require special diagnostic software to fully complete, software no manufacturer provides”. Independent assessments of the repairability of the iPhone 12 (Apple’s most recent model) have identified that serialisation or pairing of parts to the phone makes repairs impossible if not carried out by an Apple-authorized repair provider<sup>1617</sup>. For example, when unpaired parts are replaced functions such as the camera stop working. Similar issues have also been observed on the Samsung A51 since a software update in September 2020 - whereby a screen replacement disables the fingerprint sensor of the phone<sup>18</sup>. It should be noted that software locks are currently not considered in existing ecodesign requirements on repairability.

A further issue is that Digital Rights Management and patent protection on software or product information can also present a legal barrier to repair. Analysis of the US market, where the Digital Millennium Copyright Act (DMCA), explains that manufacturers have “aggressively” used intellectual property law to undermine ownership, and monopolise secondary markets for repair and maintenance.<sup>19</sup> A widely reported example is the case of John Deere tractors. When a farmer purchases

<sup>11</sup> [https://www.youtube.com/watch?v=o2\\_SZ4tfLns&ab\\_channel=LouisRossmann](https://www.youtube.com/watch?v=o2_SZ4tfLns&ab_channel=LouisRossmann)

<sup>12</sup> <https://www.businessinsider.nl/apple-macbook-pro-repair-quote-unauthorized-2018-12?international=true&r=US>

<sup>13</sup> <https://www.cultofmac.com/620124/apple-support-forum-jessa-jones/>

<sup>14</sup> <https://uspirg.org/feature/usp/fix>

<sup>15</sup> <https://mk0eeborgicuyctuf7e.kinstacdn.com/wp-content/uploads/2019/09/Coolproducts-report.pdf>

<sup>16</sup> [https://www.youtube.com/watch?v=FY7DtKMBxBw&ab\\_channel=HughJeffreys](https://www.youtube.com/watch?v=FY7DtKMBxBw&ab_channel=HughJeffreys)

<sup>17</sup> <https://www.theverge.com/21546575/iphone-12-repairability-ifixit-interview-kyle-wiens-kay-kay-clapp-vergecast-podcast-interview>

<sup>18</sup> <https://www.youtube.com/watch?v=oWC-K0GHYBg>

<sup>19</sup>

[https://static1.squarespace.com/static/5e449c8c3ef68d752f3e70dc/t/5ea8a6d93b485d0feb9b5d6b/1588111098207/Report\\_RightToRepair\\_HanleyKellowayVaheesan-1.pdf](https://static1.squarespace.com/static/5e449c8c3ef68d752f3e70dc/t/5ea8a6d93b485d0feb9b5d6b/1588111098207/Report_RightToRepair_HanleyKellowayVaheesan-1.pdf)



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a tractor from John Deere, the company argues that the farmer does not own the tractor but rather they receive “an implied license for the life of the vehicle to operate the vehicle,” subject to “contractual limitations.” Consequently, maintenance and repairs on the tractors cannot legally be performed by the farmers themselves because the engines are managed by onboard computers using software covered by copyright protection. One analysis of the role of copyright law which inhibits the repair or maintenance of products in Europe concluded: *“For independent repair technicians, the prohibition on the circulation of TPM circumvention means is effectively a roadblock to market access. It restricts the ability to lawfully repair or maintain these machines to the dealer or approved technicians only. This limits the options for consumers while creating significant negative effects on competition. ... It may also constitute an abuse of a dominant position by denying an essential facility for the secondary repair and service market.”*

In October 2020, the Australian Productivity Commission announced they would investigate Right to Repair including: “The barriers and enablers to competition in repair markets, including analysing any manufacturer-imposed barriers, and the costs and benefits associated with broader application of regulated approaches to right of repair and facilitating legal access to embedded software in consumer and other goods”.<sup>20</sup>

**Imaging equipment and ink cartridges.** The European market for printers and ink cartridges provides another example of after markets which are closed for competition. The biggest environmental impact from printers relates to their consumables (ink and paper). In the case of ink, the market is split in three segments OEM ink, refilled or refurbished cartridges, and cloned cartridges. Increasingly, manufacturers of printers use technology to ensure that only OEM ink can be used in their devices. This is done in several ways:

- Using software chips on cartridges to prevent cartridges from being re-used
- Not releasing schematics for cartridges and covering ink cartridges with licensing agreements
- Using regular firmware updates to lock out the use of non-OEM cartridges

In Europe printers are currently governed by a voluntary agreement under ecodesign legislation.<sup>21</sup> The voluntary agreement does not address ink cartridges or the issue of lockouts. In a previous Ecodesign stakeholder and Consultation Forum meeting dated 25th April and 12th December 2019 respectively the Commission, Member States and stakeholders have called for ink cartridges to be included in the agreement. Further, the Circular Economy Action Plan from March 2020 stated: *“Printers and consumables such as cartridges will also be covered unless the sector reaches an ambitious voluntary agreement within the next six months”*. On the 15th October the draft revision of the voluntary

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<sup>20</sup> <https://www.pc.gov.au/inquiries/current/repair/terms-of-reference>

<sup>21</sup> [https://ec.europa.eu/info/energy-climate-change-environment/standards-tools-and-labels/products-labelling-rules-and-requirements/energy-label-and-ecodesign/energy-efficient-products/voluntary-agreements-under-eco-design-legislation\\_en](https://ec.europa.eu/info/energy-climate-change-environment/standards-tools-and-labels/products-labelling-rules-and-requirements/energy-label-and-ecodesign/energy-efficient-products/voluntary-agreements-under-eco-design-legislation_en)



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agreement was shared with stakeholders. The draft voluntary agreement includes many problematic aspects from a competition perspective:

- The voluntary agreement is based on bilateral agreements with a limited number of refurbishers of ink cartridges
- The design of terms and conditions which permit manufacturers to continue to use lock outs

The draft voluntary agreement will be discussed by the ecodesign community on the 9th December 2020. We encourage DG Competition to look into the nature of this agreement.

**Medical device repair and maintenance during the Covid-19 pandemic.** Increased use rates and bed occupancy during the Covid-19 demanded more frequent repair and maintenance cycles on essential medical devices such as respirators. In the UK it was estimated that the number of medical devices being put into service during the pandemic has been unprecedented – as much as 50,000 in the Excel Centre or temporary Nightingale Hospital).<sup>22</sup> Stories of overcapacity hospitals overwhelmed biomedical technicians and medical devices failing were reported in different countries over the course of 2020<sup>23</sup>.

- Well known repair manual depository and community repair platform iFixit was widely reported for developing a dedicated open database<sup>24</sup> of medical device repair information covering more than 13,000 manuals.<sup>25</sup> While some manufacturers make manuals freely available others legally challenged iFixit for breaching copyright law.<sup>26</sup>
- One Italian start-up which 3D printed spare parts for ventilators was refused access to design files when trying to address a shortage.<sup>27</sup>
- Some manufacturers made specific allowances during the peak of the Covid crisis releasing schematic information to support increased production and repair.<sup>28</sup> Others were reported to withhold repair manuals during the peak of the pandemic.<sup>29</sup>
- A device developed independently by a hacker in Poland has allowed repair technicians to circumvent software locks on widely used ventilators and bring them back into use.<sup>30</sup>

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<sup>22</sup> <https://therestartproject.org/news/repair-covid19/>

<sup>23</sup> <https://www2.deloitte.com/ch/en/pages/life-sciences-and-healthcare/articles/covid19-shapping-future-regulation-of-emergency-medical-equipment-supply.html>

<sup>24</sup> <https://www.ifixit.com/News/41440/introducing-the-worlds-largest-medical-repair-database-free-for-everyone>

<sup>25</sup> <https://www.ifixit.com/Device/Ventilator>

<sup>26</sup> <https://www.eff.org/deeplinks/2020/06/medical-device-repair-again-threatened-copyright-claims>

<sup>27</sup> <https://www.theverge.com/2020/3/17/21184308/coronavirus-italy-medical-3d-print-valves-treatments>

<sup>28</sup> <https://newsroom.medtronic.com/news-releases/news-release-details/medtronic-shares-ventilation-design-specifications-accelerate>

<sup>29</sup> [https://www.youtube.com/watch?v=OnM1PiGKhk0&feature=emb\\_logo&ab\\_channel=VICENews](https://www.youtube.com/watch?v=OnM1PiGKhk0&feature=emb_logo&ab_channel=VICENews)

<sup>30</sup> <https://www.vice.com/en/article/3azv9b/why-repair-techs-are-hacking-ventilators-with-diy-dongles-from-poland>



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These limited examples suggest further investigation into the potential impact of closed after sales markets in the medical devices sector is warranted. They also illustrate that issues such as access to parts and software locks are relevant for a broader set of products than just consumer electronics.

### **3. Discussion and way forward**

The examples presented in the previous section suggests dominance is exercised by manufacturers of electronics and other product groups such as medical devices. This can hinder the extension of the lifetime of products or create unnecessary waste and consequently is counter to the objectives of the European Green Deal.

This can be observed in the following ways:

- Direct legal action and intimidation of independent repair actors
- Preventing access to online sales avenues for repair actors (e.g. by blocking ads or by removing re-sellers from dominant platforms which represent a significant share of the market)
- Using a combination of software, hardware and trademark/copyright law to make repairs or refurbishment technically increasingly challenging or illegal.

We call on the Commission's Competition directorate to explore what role competition and more specifically antitrust can play in creating a more open and fair market for value retention activities.

We suggest this could be done in the following ways:

- Investigate in more detail how dominance may be being executed in after-sales markets for electronics (including estimating the socio-economic and environmental impacts). The examples presented above present a mixture of journalism, independent anecdotal evidence, our own experiences from campaigning on this issue - more thorough analysis is needed including for wider product groups.
- Explore whether anti-competitive activities in the after-sales markets can be considered as behaviour which is abusive: e.g. charging excessive prices, refusing to supply input indispensable for competition in an ancillary market, requiring that buyers purchase all units of a particular product from the dominant company (exclusive purchasing)
- Investigate how a balance can be struck between protecting intellectual property and developing a thriving and competitive value retention sector in Europe.
- Update Commission guidance on anti-trust and procedures against abuse of dominance so that they are in tune with the digital age and the objectives of the green deal/circular economy action plan

*Please note that this submission builds on the discussions in a meeting between the Green10 (coalition of ten of the largest environmental organisations and networks active on the European level) and Ms Alina Ujupan from the Cabinet of Ms Vestager on 27th May 2020.*