

Comments on the approach and questionnaire of the framework study to support Ecodesign measures to improve reparability of products

Brussels, 6 September 2017

DIGITALEUROPE has been contacted in the framework of a study that Deloitte is currently carrying out, together with the Sustainable Europe Research Institute (SERI) and the Institute for European Environmental Policy (IEEP), for the European Commission (DG Environment) with the objective to support Ecodesign measures to improve reparability of products. Having carefully assessed the questionnaire, we decided to comment already at this stage on the approach of the study and the questionnaire itself.

At a high-level, we suggest a review of the approach taken already at this point in time. As our comments and concerns on approach, terminology and the questionnaire will show, the questionnaire does not cater for the complexity and the diversity of the repair sector. We are concerned that the closed questions are not formulated in a neutral, open-ended way and therefore risk not delivering meaningful results that can support policy development.

- The focus of the study is large and small white goods, brown and grey goods. With grey goods the consultants mean ICT equipment. Industry is not using this term and the Cambridge dictionary defines “grey goods” as “products that are bought in a foreign country and sold more cheaply than in the manufacturer’s usual distribution system: *The biggest problem in buying grey goods is the lack of support and warranties.*” *The term is consequently inappropriate and we request the use a different term.*
- The questionnaire fails to distinguish between repair under warranty (legal and commercial) and out-of-warranty period. That is problematic as the sophistication of actors’ approaches vary. For example, manufacturers have reverse logistics systems in place for repairs within the warranty period.
- We are concerned that the questionnaire is not neutral: most questions are closed-ended and formulated in a way that they preclude a desired answer from stakeholders. The resulting study risks not doing justice to reality. We would caution any kind of hasty conclusions drawn from it and recommend that the questionnaire be reworded in a more neutral way.
- Large companies of the electronics sector have regional approaches and not country specific ones.

We have tried to respond to the best of our abilities to the questions through the sections below; and raise concerns on individual questions as well as provide concrete input that could not be submitted in a meaningful way via the structured questionnaire:

A. How would you describe the structure of the repair sector in your country?

In Europe a multitude of very diverse organisations are engaged in repair/refurbishment and re-use of EEE. They encompass companies/organizations performing repair on used goods as social or commercial enterprises¹, refurbishment companies², platforms/repair facilitators³ and spare part brokers.

Electronics producers belong to this broader community of reuse providers. EEE producers are performing repairs of their products or have repair organisations contracted to do so in their name in a highly professional way. This can be under warranty or beyond. The authorised repair centres have a contractually defined relation with the producer with regard to confidentiality, quality of service and reliability. This includes clearly defined expectations of the quality of the equipment used, of the repair processes employed and of the safety and EHS requirements related to them. EEE manufacturers generally provide a form of the requested information and tools to their authorised service/repair centres. Such a provision comes with very clearly defined terms and conditions to be able to safeguard the warranties of repaired products, proprietary information and intellectual property, copyright, safety, liability, quality of service and protection of the brand. To this end, the authorised repair operators and their technicians generally have to obtain certification and regular training by the manufacturers or third parties.

Industry has recognized the increasing secondary EEE market by for instance introducing partner programmes.⁴ EEE producers encourage interested parties to engage in these programmes. However, obliging producers to share confidential information and proprietary tools with non-contractually bound entities would create unacceptable liability and IPR issues.

B. Who repairs in most of the cases in your country? Please estimate their respective market share.

This question cannot be answered as posed. Under warranty (legal and commercial) nearly 100% of the repair is done by manufacturers or their authorized repair centres, with a sophisticated reverse logistics organization in place. The system might be different when the repair takes place outside of the warranty coverage, where the plethora of the above described organisations might be involved.

C. How would you describe in general the availability of spare parts in your country

It is not clear what this question is aiming at; we are assuming this question is looking at availability of spare parts to third party services within the warranty period. Note that across the board, it is very rare

¹ For example: Vangerow Systemwerkstätten supplying a network of 1.000 repair workshops in Germany; Mazuma mobile received between 50.000 and 150.000 phones per month, of which for can be reused; AfB (Essen), GSD (Munich) and bb-net (Schweinfurt) sell used PCs, monitors, Laptops and smaller IT equipment. The German company Akkutauschen.de specialised on replacement of batteries having currently 15.000 customers worldwide.

² <http://www.re-tek.co.uk>; <https://leapp.nl>, <https://leapp.de>

³ For instance there are 120,000+ Sony spare parts available on this site: <http://uk.eetgroup.com/Guides/Sony/>. Any customer can buy any part. There are part numbers and descriptions but not exploded views and service manuals. ifixIT: <https://www.ifixit.com>

⁴ E.g. Microsoft Authorised Refurbisher Programm.

that manufacturers would implement different spare part policies country to country. Producers provide supply for normal operations and in-warranty repairs, but this is not open to the general economy. Spare parts are often produced on request or according to predicted demand. There is no excess stock in the market that intentionally is not used. Even if industry would provide a list of tools and spare parts, there is no guarantee on availability due to the limited supply. Part procurement and stock is not foreseen. The provision of spare parts comes with a risk of fraud. Industry makes the experience that a number of black sheep in the repair market do not request spare parts to service customers but for re-sale into the black and grey markets, thus enabling fraud and counterfeited products.

E. Does the social economy (cooperatives, associations, foundations, social enterprises, etc.) play a major part in the repair sector in your country?

It is unclear on the basis of the question what the consultant would define as constituting a significant part in the repair sector. However, as outlined above, the social economy is already today part of the repair activities post-warranty as is the commercial sector. Some companies donate their used IT products to charities after they have been written off. These social organizations repair the devices and resell them. Other companies resell the written off devices to commercial refurbishers. Both channels create jobs and have both environmental and social positive impacts that are difficult to weigh against one another.

G. Are you aware of any industry-led initiatives for increased repair (information campaigns, repair days, etc.)?

Once a product has been purchased, its lifetime can be extended through reuse, repair, refurbishment and remanufacturing - hence avoiding premature wastage. This part of our business is labour-intensive and therefore contributes to the EU's jobs and social agenda.

Significant elements of the circular economy are already a reality in the ICT sector. Reuse, repair, remanufacturing and refurbishment are flourishing practices. DIGITALEUROPE member companies are contributing directly to delivering both the economic and environmental benefits of the circular economy. The consumers also benefit from safe, durable, reusable products that are protected by warranties.

In order to enable DIGITALEUROPE member companies to expand this business and contribute further to the circular economy, the following principles should guide standardization and legislation of the aftersales market:

- A) Reuse, repair, refurbishment and remanufacturing should not be addressed under waste legislation.
- B) Recognise the potential of the reuse, repair, refurbishment and remanufacturing business of the ICT industry to the Circular Economy rather than hamper its contributions
 1. Ensure safety and quality of the repair experience of consumers by recognising the trusted status of authorised repair networks and refurbishment/ remanufacturing facilities
 2. Protect the IP rights associated with the innovative nature of our sector even in the aftersales, maintenance and repair market, in particular with regard to license agreements and access to proprietary information.

C) When legislating Ecodesign, set feasible goals, vetted by stakeholders, rather than prescribing design measures which have not been thoroughly studied, and could impede product innovation or affect product reliability and functionality. Such an approach empowers the industry to continue innovating. It also allows manufacturers to assess carefully the potential trade-offs between durability, reparability, ease of disassembly and other design features.

D) Safeguard the “repaired as produced principle” for spare parts. As recognized in EU RoHS, the availability of spare parts for electronics is key for allowing the repair, reuse and upgrades of equipment already placed on the market. Without this principle, equipment would either become prematurely obsolete, or at best, increase the cost of repair and upgrades.

E) Avoid negative side effects on circular economy through revising consumer policy.

- Do not revise EU law so that consumer (rather than then the trader) is allowed to choose the remedy. This would result in a significant increase of electronic devices unnecessarily being refunded or replaced rather than repaired – at a cost and local job impact.
- Guarantees for the period of 2 years should not be revisited. Current rules offer sufficient level of consumer protection. Forcing longer commercial guarantees through legislation might stifle both competition and consumer choice, whilst increasing the prices paid by all consumers.

F) Facilitate the flows of the innermost loops of the circular economy.

- a. Do not treat products shipped for repair/refurbishment/ remanufacturing as waste and do not place them under the blanket of suspicion of illegal waste shipment. The same applies for consumables, components and used parts of EEE that are being shipped with the intention of reuse.
- b. Reduce administrative burden from waste shipment regulation for shipments of products destined for failure analysis, repair,

Following our recommendations would ensure that the costs for repair, remanufacturing and refurbishment would be reduced. Shipment processes would be sped up. Millions of products would be diverted from a premature death and receive a new life. The transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised, is an essential contribution to the EU's efforts to develop a sustainable, low carbon, resource efficient and competitive economy.

H. On average, how much does an out of warranty repair cost incl. spare part?

It is challenging to provide an on average cost given that companies compete in this market on the basis of quality and cost. Companies may aim or not to provide fair wages and ensure their worker’s safety through training and up-to-date, audited facilities. Others might or might not be willing to compromise on the repair quality by not using original spare parts, not restoring all functionalities or performing all calibration and functionality tests. Additionally, some components are more difficult to repair or more costly to replace. A function button has a different spare part price as compared to a display.

I. Do you consider that the second-hand market is well developed in your country?

Deloitte Global predicted (conservatively) for 2016, that approximately 120 million used smartphones were sold or traded in by consumers, calling it the “\$17 billion market you may never have heard of”.⁵ The used smartphone market is a fast-growing market, outperforming the overall smartphone market four to five times. IDC expects the global market for used smartphones to grow to \$30bn by 2020.⁶

The market for used IT equipment is even larger. As Green Alliance puts it: “A circular economy for consumer electronics is already here. ... the value of Apple devices sold on eBay in the US in 2013 was nearly \$2 billion. ... WRAP estimated in 2013 that the value of two to three year old laptops in the UK was £720 million and two to three year old tablets were worth £90 million after any collection and repair costs were taken into account.”⁷ The Deloitte Mobile Consumer Survey 2016 for 12 European countries found 19% of the participants had passed on their previous phone to a family member or friend when purchasing a new one. Another 10% sold or traded the old phone through different channels.⁸

For DIGITALEUROPE members, this does not come as a surprise. We know that ICT equipment is handed down several times before it becomes waste. In that sense, digital B2C devices have many lives. They find a new owner through:

- Online market places like Ebay and Amazon
- Handing the device over to family or friends
- Donation to charity
- Trade-in to companies like Brightstar, Mazuma and Redeem as well as Original Equipment Manufacturers (OEM)

http://www.digitaleurope.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=2397&language=en-US&PortalId=0&TabId=353

J. In general, how do you consider the attitude of the consumers towards repair activities in your country?

We suggest to conduct a consumer survey to establish a statistically reliable, representative response to this question. In addition, the predefined answers positive equals “much demand” and negative “few demand” whereas a certain attitude might not necessarily translate into demand one way or another. Demand is not only a function of attitude.

⁵ Deloitte Global TMT Predictions 2016 <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Technology-Media-Telecommunications/gx-tmt-prediction-2016-full-report.pdf>

⁶ Worldwide Market for Used Smartphones Forecast to Grow to 222.6 Million Units in 2020, According to IDC, Press Release 21.11.2016, International Data Corporation, <https://www.idc.com/getdoc.jsp?containerId=prUS41929916>; <http://www.idc.com/getdoc.jsp?containerId=US41737016>

⁷ Green Alliance: A circular economy for smart devices.

⁸ Deloitte Global Mobile Consumer Survey, European countries (Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Sweden and UK), May-July 2016. For more details, see Deloitte's Global Mobile Consumer Survey: www.deloitte.com/gmcs

Key barriers

K. According to you, from the following list, what are the five most important barriers towards increased repairability? Please rank from 1) most important to 5) least important.

	Small white goods	Large white goods	Brown goods	Grey goods
a) The delay of a repair is too long, since consumers are not willing to wait anymore (behavioural barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
b) Consumers tend to replace their products instead of repairing them (behavioural barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
c) Consumers mistrust repairers (behavioural barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d) The cost of repair is relatively high as compared to the price of new products (economic barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
e) Retailers as well as e-commerce have rather an incentive to sell new products instead of offering repair services (economic barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
f) The spare parts are too expensive (economic barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
g) The repair sector is not very well structured (organizational barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
h) The quality of the training is not adequate (organisational barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
i) The job of a repairer is not attractive to the young generation (organisational barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
j) Many products are not designed to be repaired (technical barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
k) Spare parts are often not available (technical barrier)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other barriers (please precise) <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Ka) This is a question best answered by consumers themselves. The length of a repair is very subjective and depends on the use case, some might want to wait and be compensated by a temporary replacement unit, some others may not favour that option.

Kb) This is a presumption from the author of the questionnaire. We see a significant interest in repair. However, repair versus new purchase as a customer decision point is best researched with hard market data rather than via an opinion-based ‘tend to’ question.

Kc) A consumer survey seems to be the only means to establish a verifiable data point. Such a survey could lead to a statement that x% of the respondents declared to mistrust repairers. However, mistrust does not necessarily prevent the use of a repairer. It would also be important to differentiate between authorised, manufacturer-led programs and independent third party repair services.

Kd) “relatively high” needs to be clearly defined. What percentage point is considered “high”? In addition, we believe different customer segments may make their decision on the basis of different points of comparison: e.g. initial purchasing price, residual value at time of repair, price of comparable new

replacement device, size or importance of component replaced. The question also does not take into account potential price difference due to quality, guarantees offered, customer data secured in advance of repair etc.

Kf) This question needs better definitions: what is considered as “too expensive” and expensive to whom: the service provider or the consumer? In addition, not only the cost of a spare part but also the qualification and skill necessary to replace a part need to be taken into account.

Kg) This statement needs differentiation. See above.

Kh) This answer needs differentiation. We provide a nuanced description of the repair sector above which we hope is more informative than providing a simple ranking.

Ki) Service technicians in the IT sector work both with hardware and software and might be required to have relatively specialised skills or competences. Potential job applicants best answer whether such an occupation is of interest but manufacturer-led programs aim to ensure that both the training opportunities and the wages are fair and interesting.

Kj) “many products are not designed to be repaired.” We object to this statement and request its removal. The question is misleading and insinuates a negative intent without taking into account that manufacturers routinely perform repair under legal warranty, proving that the products are repairable. Based on the requirements from the Consumer Sales and Guarantees Directive, Member States have adopted legal guarantee regimes of minimum 2 years. On top of the legal guarantee, consumers may also be offered a commercial guarantee. That is the case for most consumer electronics and electrical products: from time to time, manufacturers may offer longer commercial guarantees alongside legal guarantees in an attempt to gain commercial advantage.

When seeking a remedy for a defective product, the consumer is entitled, under the Consumer Sales and Guarantees Directive, to a repair or replacement. Should it be disproportionate or impossible for the trader to provide such remedies, the consumer is then entitled to a reduction of the price or a refund.

Kk) This question would benefit from a clear definition of “often” and “available to whom” and does not take into account the nuances introduced in our responses above.

Key drivers

L. According to you, from the following list, what are or could be the five most important drivers towards increased repairability (please rank from 1) most important to 5) least important)?

	Small white goods	Large white goods	Brown goods	Grey goods
a) An extension of the legal warranty period to five years	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
b) A new European label informing the consumer about the repairability of the product	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
c) Fiscal measures on the national level (such as reduced VAT rates on repair activities, tax deductions on income taxes, tax exemptions for repairers for payroll taxes/social security taxes, etc.)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d) Producers' initiatives taking a lead on repairability (seeking competitive advantage from products designed to be repairable beyond the legal warranty and communicating on this strategy)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
e) Public awareness campaigns that aim to increase demand for repair on the consumer side	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
f) 3D printers improving the availability of mechanical spare parts	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
g) Connected homes/internet of things (improving remote diagnostics)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
h) New economic models (sharing economy, functional economy, etc.)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
i) Aggregation of independent repairers on a virtual platforms which are accessible through mobile applications ("Uberisation" of repair services)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
j) Self-repair (driven by online tutorials and social initiatives such as Repair Cafés)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other drivers (please precise)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

L a) The statement would benefit from being formulated more open-ended. Five years is arbitrary whereas it could have been formulated as “an extension of the legal warranty period”

What is more, the expected lifespan of a good is very difficult if not impossible to calculate. ICT and consumer electronic products are complex by virtue of their design, components and innovation. Expected lifespan could only be measured against objective criteria based on a “normal” or “average” use. However, there is no industry definition, no standard and no agreed measurement method of expected lifespan. Establishing an objective, reliable, comparable and verifiable tool to assess and determine the life expectancy of a certain product or product category would be challenging if not impossible.

Furthermore, we would like to stress that the life expectancy of a product heavily depends on how the consumer uses the product and under which conditions. A product’s lifespan varies depending on many factors that are beyond the manufacturer’s control: use frequency, maintenance, installation, location. For instance, it is impossible for manufacturers to set a life expectancy which takes into account variables such as the room in which the customer uses a good (e.g. a TV placed in the kitchen is exposed to higher temperatures and humidity levels compared to a TV placed in the living room).

Finally, it should be noted that technological advancement and innovation could also have an effect on the period of time during which a product continues to function. Even though manufacturers offer software updates to ensure that customers enjoy new functions that were not available when the product was placed on the market, inevitably a product's lifespan can be affected in cases where software updates are not sufficient to support a new technology or feature which becomes popular after the product is placed on the market. We should also bear in mind that today's hardware cannot be guaranteed to sufficiently support absolutely any future software requirements in the future. For instance, today's microprocessors might not be able to support Operating Systems which may be required in the future so as to run certain services. Ultimately, obliging manufacturers to commit to a certain expected lifespan for their products could actually cause manufacturers to think twice before introducing new innovative features, effectively slowing down the pace of technological evolution.

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ABOUT DIGITALEUROPE

DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies. DIGITALEUROPE ensures industry participation in the development and implementation of EU policies.

DIGITALEUROPE's members include in total 25,000 ICT Companies in Europe represented by 61 corporate members and 37 national trade associations from across Europe. Our website provides further information on our recent news and activities: <http://www.digitaleurope.org>

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