

BETTER DESIGN AND TESTING FOR MORE DURABLE PRODUCTS

Main takeaways and policy recommendations from the PROMPT project

WHAT IS PROMPT?

PROMPT¹ was a research project run between 2019 and 2023 by a consortium of consumer groups, researchers and repair specialists. It aimed to push for products designed to last and spur new legislation. To do so, partners have looked into ways to set up an independent testing programme to assess the lifetime of consumer products.

WHY IT MATTERS

Products discarded too early – a phenomenon known as ‘premature obsolescence’ – puts considerable strain on planetary resources (think materials extraction, emissions and waste) and households’ budgets, recently also hit hard by the cost-of-living crisis.

MAIN TAKEAWAYS AND RECOMMENDATIONS FOR POLICYMAKERS



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DESIGN PRODUCTS TO LAST LONGER WITHOUT FAILING

What PROMPT has shown

Premature obsolescence is a systemic issue

We gathered more than 16,000 cases across seven EU countries where consumers highlighted products failing before their expectations and being too hard or costly to repair. Smartphones, printers, washing machines, TVs and dishwashers were in the top 5 of short-lived products.

Improving design is not rocket science: a few tweaks can do wonders

Just a handful of components seem central to a large range of product failures. For example, of nearly 2,100 cases of smartphones failures, more than half were due to three components: batteries, screen and software. For washing machines, almost one third of reports were about the electronic controller, followed by the drum bearings.

How to fix it?

OPTIMISE DESIGN:

- **Consumer relevant design:** Ecodesign reliability requirements should be based on complying with ambitious testing criteria reflecting the average way products are used every day. For example smartphones must resist a high number of drops and over daily surfaces such as stone rather than metal.
- **Prioritise products and parts:** When developing Ecodesign requirements and testing protocols, thoroughly analyse technical, market and consumer data to prioritise products and determine key components to focus on.²
- **Software is part of durability:** They should be provided throughout at least the expected lifespan of the product to keep the product running longer in the first place.

¹ It stands for “PRemature Obsolescence Multi-stakeholder Product Testing programme”

² PROMPT identified the key components to test for each product following guidelines in standards EN45552 and EN45554 and based on both testing and consumer surveys data.

GUARANTEES AND INFORMATION:

- **Expand products' guarantees:** Consumers expect their washing machine or TV to last much longer than the current two-year guarantee. So, policymakers should extend legal guarantee periods based on product-specific aspects like consumer expectations. They should also encourage voluntary free extended guarantees beyond such period. The burden of proving whether a defect existed already at the time of delivery should never be on the consumer.
- **Point-of-sale information needed:** Consumers need access to trustworthy information on guarantees and durability to compare all products on the market. It can also provide an attractive tool for manufacturers leading in offering longer lasting products.

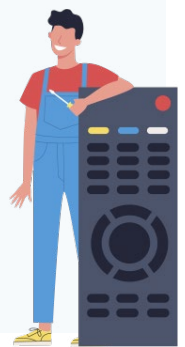
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MAKE REPAIR EASIER IN ALL ITS DIMENSIONS: DESIGN AND SERVICES

What PROMPT has shown

Repair is currently not integral to product design, repair services need improvement

Many products are not designed to be repaired: for instance, we found it can take up to 30 minutes for professionals to take apart the screen of a smartphone. Consumers also report that repair services seem too costly, hard to find and trust.



How to fix it?

OPTIMISE DESIGN:

- **Diagnosis as a first step:** Design features hinting at what is failing can facilitate and encourage consumers to repair. How? Via easy disassembly and even integrated tools such as sounds or error messages.
- **Easier disassembly:** Reduce time needed to repair by design, not just number of steps as commonly specified in Ecodesign policy and technical discussions. Imagine only two steps are needed to take out a screen from a smartphone, but that each of these steps takes enormous efforts and time... Just making products easier to disassemble can lead to multiple wins: easier diagnosis, maintenance and repair.
- **Lift software barriers:** Manufacturers' software tools can make repair very difficult or impossible for third parties. The new EU Batteries regulation will ban this practice for batteries, and this should be examined for all parts and products.

STRENGTHENED REPAIR SERVICES:

- **Improve promotion and quality:** Provide consumers information on local repair services³, build trust by establishing certification schemes including independent repairers, offer consumers replacement products while they wait for repair, promote staff training to improve service quality and increase professional interest in repair services. Independent repair services must have access to manufacturer's information and spare parts needed for repair.
- **More affordable repair:** We found price is the main consumer barrier to repair. Upscale existing national initiatives for financial support, such as the Austrian⁴ and French⁵ repair schemes that reduce the cost of repair for consumers.

³ Centralised national websites can be established to facilitate this information to consumers, as done already in France.

⁴ <https://www.reparaturbonus.at/fren>

⁵ https://www.inc-conso.fr/sites/default/files/pdf/cp_fonds_reparation_vf.pdf

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TESTING MATTERS: FOR PRODUCT COMPLIANCE AND COMPARISON

What PROMPT has shown

Testing is time-consuming and costly

Product testing is a resource-intensive task, with high costs and time needed. For instance, testing the durability of smartphone batteries can cost up to 4,000 euros per model and take one whole year. Spiraling electricity prices are also affecting the cost of testing.

As product policy increasingly sets more sophisticated reliability and repairability requirements on top of “traditional” energy efficiency criteria, the capacity to test is becoming even more central for market surveillance authorities (MSAs) to ensure compliance and for consumer organisations to compare products for consumer advice.

How to fix it?

MORE BUDGET IS NEEDED:

- **Provide sufficient budget for market surveillance.** National authorities should provide MSAs with the necessary resources, to ensure they can test enough samples and apply the best methodology where checks are needed for compliance.
- **Manufacturers can play a role too.** Manufacturers can prove compliance with Ecodesign reliability and repairability requirements through certifications by third-party testing labs, reducing the efforts needed by MSAs, especially for the more resource-intensive tests. Manufacturers’ Extended Producer Responsibility schemes could be a tool to explore to lower the cost of testing.⁶

FILL STANDARDISATION GAPS:

- **More product-specific durability standards are needed:** While for TVs there are none available, for other products there is room for improvement. Standards can also lower the cost of testing, so that technicians don’t need to design tests from scratch. Standards should also define average use scenarios that are as close as possible to real life conditions and can provide the basis for manufacturers to provide lifetime information to consumers.

BETTER EXPLOIT SYNERGIES:

- **Bridge the work of civil society and enforcement:** The European Commission could set up a platform for independent testing organisations to submit their test results to flag potential problems of compliance which would be followed by systematic action from MSAs. Relevant precedents exist in the context of product safety (Safety Gate) and the automotive sector.
- **Share data on which products fail and why:** The European Commission should collect and monitor data on product failures and repairability to inform policy measures. The upcoming EU Digital Product Passport can facilitate this task.
- **Future EU funding programmes on testing:** More research is needed on premature obsolescence and testing, to cover also other relevant product groups and contribute to filling standardisation gaps.



⁶ Taking inspiration from Extended Producer Responsibility (EPR) schemes used recently in France to finance repair, a small percentage of the product cost could also be destined to enforcement.

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DESIGN CHANGES CAN ALSO ADDRESS PSYCHOLOGICAL OBSOLESCENCE

What PROMPT has shown

Behavioural/psychological obsolescence is massive

Particularly for “trendy” products like televisions, we found consumers often replace them even though they still work. A wide set of measures can help shift to more sustainable consumption, including lifetime information, upgradeable design, awareness campaigns, manufacturer’s policies and more.

How to fix it?

- **Design to keep the product attractive over time:** Manufacturers and policymakers should explore design strategies and Ecodesign requirements to maintain product appearance ‘as good as new’ over time and provide consumers upgrade options for new or improved functionalities, through software and hardware.
- **Shine the light on circular business models:** Promote secondhand use and research the potential of manufacturers’ circular business models and how to ensure they bring value to consumers and the planet.
- **Raise awareness on durability, maintenance and repair:** promote a cultural shift for consumers to maintain and repair their products for longer and raise consumers’ expectations on product lifetimes. Repair activities could be included in school curricula.
- **Make irresponsible marketing out of fashion:** Consider imposing obligations on marketing and advertisement practices to add disclaimers on the importance of durability and repair. A precedent for inspiration comes from France where car advertising must promote more sustainable public transport.

Imagine a world where all products are perfectly “ecodesigned”, durable and repairable... yet still consumers discard product. Design and cultural changes are needed to promote products used for longer, particularly those most affected by fast fashion.



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