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Planned obsolescence: the government's choice?

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Abstract
Representatives of five Environmental Ministries and attached Agencies examined political instruments to ban products with built-in defects designed to end the product's life-cycle. The focus primarily laid on better consumer information. A lack of information concerning the durability and repairability of products creates an asymmetry in the market balance between producers and consumers. The need for common actions on EU-level was highlighted. Among these political instruments are voluntary measures and innovative economic models. The European legal framework for consumer protection has to be further evaluated, more specifically the concept of warranty law. With political feasibility being considered, conclusions were drawn unanimously. However, the authors take into consideration the findings of different national studies that could not validate the accusation of planned obsolescence.

Introduction

Building on their analysis Prakash et al. clearly state: "In the context of things, there is essentially no disagreement when it comes to the question as to whether manufacturers plan the life-times of their products" (Prakash et al. 2016, p. 49).

There is an emotional debate concerning how far the lifetime period of products is shortened on purpose, known as "planned obsolescence". Although products could be produced to last longer, the presumed aim is to engage customers to buy again earlier than needed, it is argued.
Obsolescence is an umbrella term to define the several reasons why a product is abandoned:

- defects due to lack of performance of materials or components (mechanical obsolescence)
- lack of interoperability of software and hardware (functional obsolescence)
- the desire for a new device, though the old still works (psychological obsolescence) and
- imbalance between repair costs and the cost of new products (economic obsolescence)

While there are ways to address problems regarding mechanical, functional and economical obsolescence the field of psychological obsolescence will not be considered further.

Method

This paper aims to address possible measures against planned obsolescence on a governmental or European level, with a special emphasis on legal steering tools. In order to find the most homogeneous solution possible, the final conclusions are the unanimous opinions of experts from Austria, Belgium, France, Germany, and Italy. They are all employees of Environmental Ministries or attached Agencies in their respective countries. They worked together as a subgroup of the "High Level Working Group", an advisory board of the Eco-Innovation Action Plan (COM(2011) 899 final).

After meeting twice and collecting national documents and studies on the issue of planned obsolescence over the past year, the group finally presented their findings to the European Commission in 2016. The conclusions highlight those strategies that have been identified by the authors to be the most promising ones and that can be implemented in a short to mid-term perspective.

Political Instruments

Voluntary communications by companies on durability

In France, Law n° 2015-992 concerning the energy transition for green growth states in its Article 70, the aim of "fighting against planned obsolescence of manufactured products by consumer information" and imposes that "experiments concerning the display of product life expectancy within consumer information can

be launched on a voluntary basis." (Assemblée Générale, 2015).

Similarly, the European Economic and Social Committee (EESC, 2013) advocates voluntary measures:

> The awareness of consumers is a prerequisite for proper and sustainable use of products. Additionally it is important to properly inform consumers about the minimal product lifetime which is relevant when making a decision on product purchase. In this context, voluntary commercial and business initiatives and activities would be welcome. […] For example, in the white goods sector, 10-year or 20-year component warranties were a definite selling point. This guarantee could be standardised at the EU level for all products purchased in the 28 EU countries so as to avoid penalising European businesses. (p. 2)

Current Legal Framework: guarantee for a minimum technical life time

As the title already reveals it may be up to the legislative authorities, namely the national parliaments and/or the European Commission to take measures to avoid planned obsolescence from occurring.

According to Twigg-Flessner (2007):

> The fundamental argument that is often advanced in favour of greater harmonisation, or even unification of contract law, is that the diversity between the domestic contract laws effectively constitutes a non-tariff barrier to trade between the Member States. A unified legal framework would reduce transaction costs considerably, and consequently, a European Contract Code is needed for business. (p. 200)

Consumer product quality expectations, contractually agreed product properties and advertising statements by the producer fall within the scope of warranty law. Therefore it is more feasible for the consumer to claim legal guarantee rights, if there is a legal obligation to provide information on the minimum technical life.

The European Consumer Organisation (BEUC, 2015) claims:

> The EU 1999 Directive on Consumer Sales foresees a minimum legal guarantee period of two years combined with a six-month period for the reversal of the burden of proof for the defect. This means that only within the first six months after purchase it is presumed that the product was faulty from the start. Afterwards it is the consumer who would have to prove that the defect was already inherent in the product when he/she bought it. This will not be possible in most cases without an expert investigation due to the complexity of current products and the high costs implied in technical expertise to assess the defect. Only two countries, Portugal and France have expanded the period for the reversal of proof to two years and only a few countries have longer guarantee periods. (p. 12)

In this context the Reuse and Recycling EU Social Enterprises network (RREUSE, 2015) demands:

> There is an urgent need for EU wide laws that motivate producers to manufacture long lasting products and protect consumer rights at the same time, such as
>
> - Extending the burden of proof on the manufacturer to at least two years EU wide
> - Introduce requirements for showing the average expected product lifetime (AEPL) at the time of purchase in order to better inform consumers about purchase decisions
> - Explore the effects and impacts of extending minimum functional guarantee period, for example, on independent repair operators
> - Obligation to use only standardised, freely available components for as many parts as possible (e.g. screws, motors, pumps etc.)
> - An obligation to provide spare parts. (p.7)

In France planned obsolescence is now a crime. The country went one step further by implementing a law against planned obsolescence in their penal law code, including imprisonment up to two years and a fine rising up to 5% of the annual revenue generated in France.

Legally binding information and legal guarantee

Schlacke (2015) stresses:

> Civil law contains a great variety of obligations to inform. Those obligations in many cases derive from European directives, particularly from Directive 2011/83/EU on consumer rights. It contains basic duties to inform for B2C contracts, e.g. to inform the consumer of "the main characteristics of the goods" before the contract is concluded. A study on behalf of the German Environment Agency recommends specifying the term "main characteristics" by adding the minimum service life, the repair-friendliness and the energy efficiency as rule examples. (p. 29)

Legal guarantees and legal obligations to provide certain information can only be effective if closely linked together. While the legal guarantee concerns the relationship between buyer and seller, only the manufacturer has direct influence on the product properties such as durability.

Therefore – following Schlacke – "the producer should be obliged to inform about the time of the guarantee given by him. It is on him to set a period of time. He may decide not to give any guarantee, he would however be obliged to inform about it." (Schlacke et al., 2015, p 32). The risk of loss of reputation works as an incentive for giving a guarantee. This instrument could be combined with the information requirements on reparability. Minimum

standards regarding the manner of information on the given guarantee have to be set by law in order to avoid misleading information for the consumer. In cases of a provided guarantee, claims directly against the manufacturer are made possible. Another advantage is that the absence of defects is promised not only for the time of delivery, but for the entire period of the guarantee, putting the customer in a stronger legal position.

Reparability

In order to provide a wide range of repair choices for consumers, repair and re-use activities have to become more competitive and attractive. Achievable goals might be:

- Durable and easy to repair product design
- Spare parts availability must be guaranteed for longer periods, aligned to the life expectancy of a product
- Free access to repair service documentation and software
- Easy access for consumers to high quality and convenient repair services

Promoting ease-of-repair and upgradeability criteria extends the lifetime of a product and therefore reduces the need to purchase a new one. Consequently, energy and production resources can be saved.

A first step into the right direction is the implementation of the WEEE Directive (Directive on Waste Electrical and Electronic Equipment 2012/19/EU), which includes guidelines aiming to promote the repair and preparation for re-use of products.

Availability of spare parts / Independent repair services

Twigg-Flessner (2010) raises:

> A major difficulty for consumers at present is that they will often be unaware of the availability, or otherwise, of spare parts and after-sales support. There is not even an obligation to inform consumers about the extent to which parts may be available. (p. 205)

Following a BE/DE/NL non-paper, mandatory provision of spare parts might be impractical or harsh for some product groups. It is proposed as a first step to provide information about the availability of spare parts, the length of time that they are planned to be available after the end of production and the availability of repair manuals. The Commission announced in the circular economy package (COM (2015) 614 final) that the availability of repair information and spare parts will be considered under the ecodesign directive. Products that are not provided with spare parts or repair manuals need to bear a mandatory warning. In that way the availability of spare parts and repair guides remain voluntary. (Soenen B., Akkerman F., Oehme I.,Siderius H.-P.).

For BEUC it is crucial that consumers must have access to single spare parts such as a door sealing or a door clip which will allow for minor maintenance works to be carried out by the consumers themselves. Such spare parts should be made available by the manufacturer/trader to repair services but also directly to consumers in cases where maintenance and easy self-repair can safely be done by them. Hence, we need to place a greater importance on the urgent need for a better design for reparability (BEUC, 2015, p.13).

Erler and Rieger (2016) propose a lifecycle concept, allowing the product to adapt, to improve and to update it regularly and continuously as known from software products or the automotive sector.

Service-oriented models

Following an Italian Resolution the transition from the concept of "product" to "product as a service" marks a fundamental step towards reducing the use of resources. For this transition to take place, first, companies must be encouraged to adapt their business model. (Senate of the Italian Republic, 2015, para. O)

One strategy could be to introduce leasing–models. The producer/retailer would remain the products owner and would be leasing the goods to the end consumer. Instead of buying the product, the costumer buys a service. Within this model service options etc. can be implemented.

"The implications on such an economical change would be of deep impact. There are pros and cons for both, the producer/retailer and the consumer side".(Prakash et. al, 2016, p. 278)

Applying financial instruments

BEUC considers:

> A major focus to allow for an increased choice of greener products should be given to lower VAT rates which could be applied to reused or refurbished goods and to products which contain higher levels of recycled materials. Reduced prices for such goods will benefit lower income consumers. It could also be an incentive for multiplying repair shops and thereby contributing to job creating in Europe. (p.15)

Should the EU VAT Directive (2006/112/EC) be opened up, RREUSE suggests using differentiated VAT rates in accordance with the waste hierarchy to make repair more economically feasible:

- Zero VAT on repair, maintenance, upgrade services and sales of second hand/refurbished products
- Allow retailers to recoup VAT through donation of unsold new products to approved/accredited reuse centres from the social economy
- Zero rated VAT for preparation for reuse activities and services carried out by social enterprises

(p. 9)

Conclusions

The group takes into consideration the opinion of the European Economic and Social Committee on banning products with built-in defects designed to end the product's life. However, the group recognizes the findings of Prakash et al. (2016) which could not confirm planned obsolescence as regards manufacturers intentionally manipulating design or knowingly integrating weak points.

On the other hand it is proved, that devices are more and more replaced or disposed in another way after a short period of use.

Manufacturers and consumers interact with one another and influence product development and consumption patterns. The lack of information concerning durable and reparable products causes an asymmetry in the market balance and leaves consumers unable to make the best buying decisions regarding to their own needs.

1. A legal definition of planned obsolescence has to be worked out on EU level.

2. When it comes to political enforceability, all participating experts agree on the improvement of consumer information on the life-time expectancy of products. This measure – among others – will help building confidence on manufacturers, who are suspected of shortening life-time of products on purpose.

3. The displayed lifetime information needs to be verifiable. It should be supported by solid and objective methods. These could be measurement methods of the final product or a reference document providing guidance for the assessment of the durability of the product based on critical components and the way of assembling. Within the period of legal guarantee the fact that the producer displays lifetime information reinforces the consumers expectancy and therefore supports the consumer in claiming his/her legal rights.

4. Building on existing or future reference documents, displaying lifetime expectancy information (further than legal guarantee provided by the consumer rights directive) could be made mandatory for certain product groups. The producer who is unable to provide such information should instead mention: "no information available".

5. A prerequisite for durability of products is an appropriate design. The ecodesign directive is the right tool to set requirements.

6. Further studies, initiatives and experiments at large scale involving producers and consumers are needed at EU level to define for each product category the minimal durability based on the best trade-off between the product life cycle impact and cost, where the reparability phase is included and the consumers expected lifetime and willingness to pay.

7. Standards to check life-time expectancy of products or components should be developed and kept smart and coherent at an EU-level.

8. A mandatory information instrument concerning the voluntary guarantee as proposed by Schlacke et al. (2015) is necessary to bring clarity on the market and motivate to provide voluntary guarantee which establishes consumer rights to the manufacturer directly.

9. Repair-oriented approaches can save or create green jobs, respectively. The availability of spare parts and spare parts and/or repair manuals counteracts the prevalent suspicion of planned obsolescence. Adequate information needs to be available for end-consumers as well as repair services. In this regard the European rules established for the repair of vehicles (regulation (EG) 715/2007 in its present version) can serve as an example.

10. Improving the functioning of legal guarantees has to be further evaluated.

References

Assemblée Nationale, France. (2015). Loi n° 2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte

BEUC, The European Consumer Organisation (2015). Durable goods: More sustainable products, better consumer rights; BEUC-X-2015-069 – 18/08/2015,

European Economic and Social Committee, EESC Rapporteur Libaert T., Haber J.-P. (2013). *Towards more sustainable consumption: industrial product lifetimes and restoring trust through consumer information*; CCMI/112 Product lifetimes and consumer information

Erler S., Rieger, E. (2016). *Product evolvement through entirely scheduled lifecycles*. Paper presented at 23rd CIRP Conference on Life Cycle Engineering. Procedia CIRP 48 (2016) pp.79-83. doi:10.1016/j.procir.2016.04.077

Prakash, S., Dehoust, G., Gsell, M., Schleicher, T., & Stamminger, R. (2016). *Einfluss der Nutzungsdauer von Produkten auf ihre Umweltwirkung – Schaffung einer Informationsgrundlage und Entwicklung von Strategien gegen Obsoleszenz*. UBA-Texte 11/2016.

RREUS, The Reuse and Recycling EU Social Enterprises network. (2015). *Improving product reparability: Policy options at EU level*. Available at www.rreuse.org/wp.../Routes-to-Repair-RREUSE-final-report.pdf

Senate of the Italian Republic. (2015). Resolution approved by the Committee assigned to the business, Doc XXIV, No.51.

Soenen B., Akkerman F., Oehme I., & Siderius H.-P. (n.d.) BE/DE/NL *Non-paper on supporting circular economy objectives with measures under the Eco-Design Directive* (not published).

Schlacke, S., Alt, M., Tonner, K., Gawel, E., & Bretschneider, W. (2015). *Stärkung eines nachhaltigen Konsums im Bereich Produktnutzung durch Anpassungen im Zivil- und öffentlichen Recht*. UBA-Texte 72/2015

Twigg-Flessner C. (2007). The Europeanisation of Contract Law. Abingdon: Routledge.

Twigg-Flessner C. (2010). The Law on Guarantees and Repair Work. In Tim Cooper (Ed.) *Longer lasting Products; Alternatives to the Throwaway Society*. (pp. 205-214) Farnham: Gower Publishing Limited