

Monday 4<sup>th</sup> December 2023

## FEEDBACKS TO THE COMMISSION'S PROPOSAL FOR A REGULATION ON CIRCULARITY REQUIREMENTS FOR VEHICLE DESIGN AND ON MANAGEMENT OF END-OF-LIFE VEHICLES

### I. Toyota Motor Europe's Circularity Approach

At Toyota Motor Europe, we see sustainability as a fundamental pillar of our business. **We are accelerating opportunities to develop a fully sustainable circular economy, further enhancing our 360-degree approach to Reduce, Reuse, and Recycle.**

**Starting from Design** – Our approach to circularity helps to define our constant improvement in the way we design vehicles. We are using innovative materials and alternative power systems, while minimising carbon emissions and the use of valuable natural resources. We design our vehicles with an easy-to-dismantle concept, prioritising parts and materials that can be used again.

**Expanding the lifetime of vehicle parts** – During a car's time on the road, many of its parts can be reconditioned and reused. The same principles apply when a vehicle is prepared for scrapping. It may still contain many parts that can be retrieved for reconditioning and reuse. We operate a comprehensive parts remanufacturing programme which takes back used parts from our European retailer network. The returned parts are inspected and reconditioned at a remanufacturing centre, with any elements that have worn out being replaced. The part is reassembled, packaged, and made available at competitive prices to customers. We provide a second life to our fuel cell stacks so that they are utilized as power generators.

**Avoiding waste** – To keep waste to an absolute minimum, we try to recover as much as we can from our manufacturing operations. Even the finest waste residues can be recovered and used, for example as an alternative fuel source for industry. We also conserve water by using as little as possible and recycling wastewater generated by our production processes. The boxes in which our parts are supplied are designed for purpose and can be reused again and again.

### II. Key Messages

In line with our circularity approach, **we welcome the EU Commission Proposal for a Regulation on circularity requirements for vehicle design and on management of end-of-life vehicles**, which promises a transformation towards enhanced sustainability, circularity, and innovation.

We would like to highlight the **need for clarity, consistency across legislations linked to the automotive industry, and a feasible and progressive approach** aligned with the state of technology. The ELV legislation is and should remain the **central piece of law dealing with circularity requirements for design including automotive specific provisions** regarding substances, critical raw materials, production and end-of-life treatment of vehicles and their components.

We look forward to further discussions to ensure a coherent and effective regulatory framework, notably on the following points:

**Minimum Recycled Content Target:** A crucial prerequisite to set recycled content targets is a defined and described methodology. As such, pre-consumer waste as well as dealership/workshops waste should be included in the calculation of the recycled content. Also, the plastics definition should be based on the definition from the JRC study (Thermoplastics + PUR Foams).

**Extended Producer Responsibility:** Unlike consumer products, an end-of-life vehicle is a valuable good. Only contracted waste management operators should be entitled to claim deficit compensation. In addition, the producer should have the right to define the collection system when called upon his extended responsibility. Any approach contradicting free-market principles should be rejected.

**Circularity Strategy:** Most of the elements of the circularity strategy proposed by the new Regulation are outside the remit of manufacturers. Where relevant to vehicle producers, the circularity strategy should be applied to the manufacturer as a whole and not on vehicle type level.

**Mandatory dismantling:** The underlying criteria behind the list of parts and components, subject to mandatory removal from ELVs and possible exemptions, is unclear. Removal of parts and components for reuse or remanufacturing should remain driven by market demand and ecological feasibility.

**Leadtime between publication and implementation of design-impacting delegated acts:** Delegated acts impacting vehicle design and material definition should be published at least 5 years before the related application date to consider the long development cycle of vehicles.

**New Type Approval Requirements:** Transitional measures are needed to ensure that such approvals remain valid after the entry into force of the new rules (i.e., 72 months after the entry into force).

**Collect More:** We strongly welcome the proposed measure, namely the implementation of an EU-wide reliable vehicle registration/deregistration system, to collect more vehicles to reduce the volume of unknown whereabouts (the missing ELVs). The ambitious recycled content targets can only be achievable if it is ensured that the ELV feedstock is kept within the framework of the European Union.

### III. Detailed Feedbacks

#### 1. Minimum Recycled Content Target (articles 3 & 6)

According to Art. 3.1 (9) "plastic" means a polymer within the meaning of Article 3.5 of Regulation (EC) No 1907/2006, to which additives or other substances may have been added. The definition of plastic according to REACH Art. 3.5 ("polymers") includes non-recyclable materials such as elastomers and all thermosets along with process materials (paints, adhesives, sealant agents). We support the JRC study conclusion<sup>1</sup> (page 64) that states *"thermosets and elastomers (such as rubber tires) that are difficult to recycle should not be in the scope of the target, unlike polyurethane foam which should be accounted for"*. Process materials were not in the scope of the JRC study at all because these materials cannot be removed as a separate waste stream and then recycled. **Plastics definition should be based on the JRC report (Thermoplastics + PUR Foams).**

Based on the currently available recycling technologies, the 25% target described in Art. 6 is not technically achievable especially with the sole mechanical recycling of post-consumer waste. According

<sup>1</sup> Towards recycled plastic content targets in new passenger cars and light commercial vehicles:

<https://publications.jrc.ec.europa.eu/repository/handle/JRC129008>

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to the JRC study report recommendation<sup>2</sup> (page 64), *“the level of the targets should be set based on traceable flows of recyclates and considering the recycling technologies currently mature at full industrial scale (i.e. mechanical recycling. When chemical recycling becomes widely available, the level of the target could be then levelled up, e.g., through a review clause”*.

**A crucial prerequisite to set recycling content targets is a defined and described methodology.** As such, the following preconditions should be met:

- Any target should be based on plastics definition from the JRC (Thermoplastics + PUR Foams).
- Both mechanical and chemical recycling should be accepted.
- Dealership / workshop wastes should be included in the scope of the targets. Operations to repair and extend the life of our products generate a consistent volume of wastes that could be recycled in the industry.
- Pre-consumer wastes must be considered in the calculation (together with post-consumer waste) because of the quality and proximity to the manufacturing process.
- Special thresholds for legacy Substances Of Concerns should be set.

Closed loop approach proposed by the European Commission is challenging as it is not yet mainstream practice for waste management operators to distinguish the flows of wastes (differentiate ELV waste from non-ELV waste). In addition, the closed loop approach can be even unsustainable due to the carbon footprint emitted during the required extensive operations. Given the global scope of the automotive industry, it should be considered that **the volume of available feedstock for recycled content is not mature enough in other regions as in Europe**. Similarly to the draft of the Packaging Regulation (Proposal for a Packaging and Packaging Waste Regulation, COM (2022)0677, Art. 7.9 and 7.10) an exception clause should be introduced which enables the Commission to revise and amend the target in case of non-availability of automotive grade recycled material.

## 2. Extended Producer Responsibility (articles 16, 18, 20, 21, 23, 24, 25)

Art. 16 (a) and (b) requires the producers to ensure that authorized treatment facilities (ATF) treat all end-of-life vehicles in an environmentally sound manner so that they reach their treatment targets. In most cases there is no legal basis (contract) between the producer and all existing individual waste management operators (some tens of thousands in Europe). Therefore, the producer cannot be responsible for ensuring the compliance of each existing waste management operator in Europe and cannot be obligated to audit each waste management operator when there's not an extended practice to segregate between vehicle manufacturers. Similarly, the producers do not have the necessary legal instruments to enforce compliance by authorized treatment facilities. **Compliance with the Regulation should be the sole responsibility of the waste management operator or the authorized treatment facility and be monitored by local competent authorities.**

Art. 18.4 obliges Producer Responsibility Organizations (PRO) to ensure fair representation of producers and waste management operators in their governing bodies. A definition of “fair” is missing and it must be ensured that such actions required by this Regulation comply with competition law. Moreover, there is a possible conflict of interest if waste management operators can be part of PRO governing body while at the same time responding to PRO calls for tenders on ELV treatment.

Art. 20 obliges the producer to finance the costs of the whole collection and treatment chain which are not covered by revenues from sales of used spare parts, depolluted ELVs or secondary raw materials.

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An end-of-life vehicle is a valuable good. If a waste management operator claims insufficient profits, this claim cannot be verified by a producer, due to the lack of a legal basis in the relationship between the producer and waste management operator. **There is no independent verification mechanism for the waste management operators' claims** – which is worrying and can lead to financial inconsistencies. Even a contracted operator cannot be forced to disclose financial information. In addition, it cannot be the responsibility of the producers to subsidize an unlimited number of inefficient operators. The profitability of ATFs depends on several factors related to entrepreneurial decisions or ability on which producers cannot have any influence (such as cost structure, capitalization, managerial ability etc.). Just stating the producers will have to pay the cost will lead to lower investment innovation from ATFs, inefficiency and ultimately higher costs paid by consumers. **It should therefore be clarified that only contracted waste management operators should be entitled to claim deficit compensation.**

**The financial modulation criteria of the fees for a Producer Responsibility Organization in Art.21 need to be reconsidered because several criteria are not feasible or representative.** For example, the vehicle weight is not an indicative criterion because a higher vehicle weight may mean more dismantling time but may bring more revenue, depending on the material composition. In addition, it is impossible to objectively measure the dismantling time due to widely differing equipment levels of treatment operators and subsidization of inefficient operations needs to be avoided. It should also be mentioned that substances preventing high quality recycling should not automatically be classified as ecologically negative but can also have a positive effect on the sustainability of a vehicle. The presence of certain substances is a complex criterion and would not be feasible in practice.

Art. 23.2(c) in combination with Art. 20.1(a) obliges the producer to ensure and finance workshop disposal. It is unclear how this is supposed to work for independent operators without a contract or legal basis with the producer. In addition, **producers should not finance disposal of parts that they have not themselves put on the market.** Further Art. 23. 2(d) states that the producers shall collect vehicles of every brand. **Every manufacturer can only be responsible for the collection of their own brands.**

Art. 24 obliges all Authorized Treatment Facilities (ATFs) to take back ELVs at zero costs for the last owner, even in the case of a missing electric vehicle battery. Such a regulation would increase the danger of missing electric vehicle batteries, unsafe transport/handling by non-professionals whose activities are not in the scope of EU Regulation 2023/1542 on Batteries and consequently to a lack of tracking on the fate of s to the battery. **Only professional operators should be allowed to dismantle batteries from ELVs or used vehicles.**

According to Art. 25, the Certificate of Destruction (CoD) is intended to serve as the basis for final deregistration of the vehicle. To give a real impact to this important article, the enforcement is vital. Therefore, **the Regulation should oblige Member States more explicitly in Art. 47 to introduce consequences for ongoing registration and temporary deregistration**, e.g., continuation of tax/insurance payments in case of temporary deregistrations, which should be only possible for a limited period (e.g., one year), and the vehicle needs to be presented for prolongation of a temporary deregistration.

### 3. Circularity Strategy (articles 3, 9, 10, 13)

According to Art. Par. 3.1(28), the remanufacturing operation imposes that “*at least one change is made to the part or components that affects its safety, performance purpose or type*”. This definition comes from the Commission’s proposal for a Regulation establishing a framework for setting eco-design requirements for sustainable products and repealing Directive 2009/125/EC (EPDR). Even if the effort to harmonize EU legislations is welcomed, this definition does not fit the specificities of the automotive sector which was not involved in the discussions on EPDR. The remanufacturing in the automotive sector is understood as a standardized industrial process by which worn or non-functional products or

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parts (called “cores”) are returned to same-as-new, or better, condition and performance. Therefore, **the definition of remanufacturing should be adjusted to reflect the specificities of the automotive industry.**

Art. 9 requires that a circularity strategy must be drawn up for newly type approved vehicles. **The obligation to submit the circularity strategy should apply for manufacturers at company level** and not for each newly type-approved model, similarly to the current company recycling strategy under the 3R Directive. To avoid any leakage about design information and other know-how, clarification would be needed on what is covered by “confidential information” (Art. 9.6). It is also worth noting that most of the elements of the circularity strategy introduced with the proposal, namely Annex IV, Part A, par. 5, 6 and 7 are outside of the remit of vehicle manufacturers. Furthermore, the waste management operators (recyclers) should be targeted to improve and implement the recycling technologies (Annex IV, point 6) but not the producer of the vehicle, since the expertise and responsibilities lie with the waste management operators.

Art. 10 requests manufacturers to declare the share of recycled content of steel 36 months after the date of entry into force of the regulation, while Art. 6.3 foresees a study to assess the feasibility of a minimum share of recycled steel to be present and incorporated in the vehicle type by the last day of the month following 23 months after the date of entry into force of the regulation. As data shall be gathered for the feasibility study, it would be preferable for the **declaration obligation to come into force before the feasibility study is carried out.** The calculation and verification methodology for recycled content shall be established (via an implementing act) in a reasonable timeframe before the declaration obligation comes into force, so that the methodology can be integrated into company tools and used by all automotive suppliers. This is also the case for other materials (aluminum and its alloys, magnesium and its alloys, neodymium, dysprosium, praseodymium, terbium, samarium, boron), as the feasibility study (Art. 10) is expected to be finalized just before the declaration obligation enters into force (Art. 6.4).

Art. 13 describes the obligation for manufacturers to provide a circular vehicle passport for certain components of each vehicle placed on the market. The manufacturer shall ensure that the information in the circular vehicle passport is accurate, complete, and up to date. Today, the available IT system IDIS (International Dismantling Information System) already provides detailed information (e.g., on parts for recycling and dismantling of components) to all interested waste management operators, per vehicle type. To avoid duplication and unnecessary burden, **the circularity vehicle passport should require information (e.g., for reuse, dismantling and recycling) only per vehicle type**, but not for each individual vehicle and should make use of existing systems, such as IDIS. It has to be noted that a guarantee of completeness and up-to-date-ness for the vehicle passport can only be ensured by the manufacturer at the time the vehicle is produced and not later because of maintenance, customization and repair during its lifetime.

#### 4. Mandatory dismantling (articles 7 & 30)

In Art. 30, the mandatory removal of parts and components from ELVs prior to shredding is trying to address the improvement of re-use, re-furbishing, and remanufacturing; compelling safety reasons (e.g., traction or SLI batteries) or the impossibility to reach an equivalent level of material extraction and separation with post-shredding techniques (e.g., catalytic converters). However, for several components mentioned in Annex VII, part C, dismantling is not the most efficient solution to achieve any of the above-mentioned objectives. The reuse of ELV parts for example would constrain ATFs to dismantle old ELV parts that are not fit for reuse, refurbishment or remanufacturing or for which there is no demand and that would therefore eventually be destroyed, thus incurring high dismantling, transport and storage costs and corresponding additional carbon footprint for no environmental benefit.

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**Demand-side measures (e.g., reduced VAT, incentive insurance policies) would be a more effective way** of bolstering the markets and removal rates of reused, refurbished, or remanufactured parts without such adverse effects.

**The mandatory disassembly of the dashboard and displays is not helpful** since the dashboard is not clearly defined and consisting out of a large variety of sub-components, or materials which are not harmonized even within and across vehicle manufacturers and thus would generate a large heterogeneous waste stream with no benefit of a separate recycling supported by dismantling. Therefore, even after dismantling, post-shredding technologies would still be needed to the same extend.

**Disassembling of several components such as wiring harnesses or circuit boards larger than 10 cm<sup>2</sup>, as proposed in Annex VII part C, is not justified.** The corresponding trade-offs have never been assessed via e.g., a life cycle assessment or feasibility studies. The content of precious metals depends on the number of components on the printed circuit board and not on the size.

Art. 7 stipulates that batteries for electric vehicles must be designed in terms of fasteners, fasteners and sealing elements in such a way that they can be easily removed and replaced without destruction. In addition, the Commission is empowered to adopt implementing acts laying down the conditions for the design of the dismantling and replacement of parts and components. To decrease insurance rates and keep their residual value, vehicles' components are already replaceable in a non-destructive manner as far as possible. In addition, other legal requirements including the Battery Regulation also require such components to be removable. Therefore, **there is no need for detailed requirements under the ELVR.**

In addition, paragraphs 3 and 4 indicate that design guidelines are issued by the EU Commission. Such requirements should be rejected as a matter of principle, as they hinder competition and the search for the best technical solution by manufacturers, as well as prevent innovation or future technical developments. In addition, vehicles are a long-term investment asset for which customers already expect to be used in the long term through appropriate repair methods and replacement solutions.

## 5. Leadtime

Delegated acts impacting vehicle design and material definition should be published at least 5 years before the related application date to consider the long development cycle of vehicles.

## 6. Other feedbacks

- **Reusability or recyclability targets** (article 4)

Art. 4 sets out the key goals for manufacturers of “(a) reusability or recyclability to a minimum of 85% by mass and (b) reusability or recoverability to a minimum of 95% by mass”. At the same time, Art. 34 requires waste management operators to meet similar 85% and 95% targets but without including EV-batteries in the calculation methodology. It is our understanding that the formulation of the provision does not necessarily denote an exclusive disjunction, but rather, it leaves open the possibility that **each vehicle belonging to a vehicle type that is type-approved as of [...] under Regulation (EU) 2018/858 shall be constructed so that it is reusable and/or recyclable to a minimum of 85 % by mass and reusable and/or recoverable to a minimum of 95 % by mass.** It allows the possibility of either option or both.

- **Requirements for substances in vehicles** (article 5)

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Art. 5 lays down the requirements for substances present in vehicles which shall be compliant with REACH, POPs, and Battery Regulations, as well as the restriction and the exemptions regarding the use of heavy metals in vehicles (Annex III). Nevertheless, we believe that the **already introduced provisions for enforcement regarding substance restrictions stated in REACH, EU POP and Batteries Regulation in those respective regulations are sufficient to ensure compliance**. Any additional request to demonstrate compliance during vehicle type approval would therefore be considered as double regulation and would add unjustified burden for OEMs.

Furthermore, the link to the definition of Substances of Concern (SoCs) in the Commission's proposal for a Regulation establishing a framework for setting eco-design requirements for sustainable products (repealing Directive 2009/125/EC) and to the CLP Regulation (which is a dynamic piece of legislation, covering thousands of substances) is not directly relevant for articles or products such as vehicles. In addition, ESPR Art. 2.28(c) refers to substances which "negatively affect the re-use and recycling of materials in the product in which it is present". Proving compliance with such criteria is impossible for highly durable products such as vehicles as it is today not known the recycling technologies available once our vehicles are becoming waste in 15 to 20 years. **The ELV Regulation should contain clear definitions and processes to define requirements for SoCs in vehicles.**

Not allowing product manufacturers the usage of substances only based on the non-scientifically proven assumption that this substance may have negative impacts on recycling in the far future will ultimately limit their competitiveness as well as that of their products.

A SOC definition beyond that of substance intrinsic hazard classifications therefore is another example for the NOFAS (No One Fits All Solution) principle. Whereas ESPR Art. 2.28(c) may make sense for products with a short- to mid-lifetime, it bears more risks and disadvantages especially for highly durable products, including vehicles.

This sub-point (c) is therefore highly critical. Instead of referencing to the ESPR, **it should include an own definition for SoCs under the ELVR with deletion of sub-point (c).**

- **New Type Approval Requirements** (articles 4 – 13)

The Commission's proposal contains new type approval requirements (Art. 4 – 13), e.g., changes to calculation methodologies, raising many new demands on manufacturers and type approval authorities who therefore require clear clarification, tools, and processes of how these new requirements affect the issuing of new type approvals. Furthermore, the new demands introduce divergence from the globally harmonized UN R133 regulation and thus loss of synergies whereby EU divergence from non-EU markets will require duplication of workload to meet the same aims i.e. without additional benefit. The proposal allows the type-approval according to the current Directive 2005/64/EC pending its repeal. **Transitional measures are needed to ensure that such approvals remain valid after the entry into force of the new rules (i.e., 72 months after the entry into force).**

- **Information requirements** (articles 11 & 12)

Art. 11 sets information requirements for removal and replacement of parts, components and materials present in vehicles. These new requirements should be limited to newly type-approved vehicles, from 36 months after the date of entry into force of this Regulation. The same logic should apply to Art. 12 on the labelling of parts, components and materials present in vehicles. In addition, in Art. 12, it is physically impossible to display detailed parts in units of parts, therefore it should be displayed in units of assemblies.