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Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC

(Text with EEA relevance)

{SEC(2023) 292 final} - {SWD(2023) 255 final} - {SWD(2023) 256 final} - {SWD(2023) 257 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

The European Green Deal is Europe's growth strategy, which aims to ensure by 2050 a climate neutral, clean and circular economy, where the management of resources is optimised and pollution minimised. The circular economy action plan[1] and the new industrial strategy for Europe[2] lay out the roadmap for the European industry to meet the objectives of the Green Deal. The action plan contains a commitment to review the legislation on end-of-life vehicles (ELVs) with the aim to 'promote more circular business models by linking design issues to end-of-life treatment, consider rules on mandatory recycled content for certain materials, and improve recycling efficiency'. The EU action plan 'Towards Zero Pollution for Air, Water and Soil'[3] also stressed the need for the Commission to propose new measures to address the EU's external environmental footprint linked to the export of ELVs and used vehicles.

The European Council[4] and Parliament[5] have both recognised the importance of this initiative. The communication accompanying the proposal on the European Critical Raw Materials Act[6] also stressed the importance of the automotive sector in ensuring a sustainable supply of critical raw materials and increasing the EU's strategic autonomy.

The production of vehicles is one of the most resource-intensive industries. Europe's automotive sector is responsible for 19% of demand for the EU's steel industry (over 7 million tonnes/year), 10% of overall consumption of plastics (6 million tonnes/year), a significant share of the demand for aluminium (42% for all transport equipment, around 2 million tonnes/year), copper (6% for automotive parts), rubber (65% of the production of general rubber goods) and glass (1.5 million tonnes of flat glass produced in the EU).

As the automotive sector shifts to zero-emission mobility, and vehicles increasingly integrate electronics, there will be an increase in demand for copper and critical raw materials. They include the rare earth used in permanent magnets of e-drive motors, of which the automotive sector is one the biggest users. The automotive sector is also using more advanced and lightweight materials such as composite plastics, high-grade steel and aluminium alloys.

The result is that vehicle production can have a high environmental footprint. This is primarily due to the greenhouse gas emissions of the energy required to extract and process primary materials such as coal and iron ore (for steel), bauxite (for aluminium), copper and oil (for plastics). In addition, the increasing use of sophisticated and composite materials poses particular challenges for dismantling, reusing and recycling end-of-life vehicles.

In this light, the aim of this proposal is to facilitate the transition of the automotive sector to the circular economy, at all stages of the vehicle - from design to final treatment at end-of-life. The proposal is based on an evaluation of current legislation, which consists of two directives (Directive 2000/53/EC on end-of-life vehicles ('ELV Directive'))[7] and Directive

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1 https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en.

2 https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/industry-and-green-deal_en .

3 https://environment.ec.europa.eu/strategy/zero-pollution-action-plan_en

4 https://data.consilium.europa.eu/doc/document/ST-13852-2020-INIT/en/pdf .

5 https://www.europarl.europa.eu/doceo/document/TA-9-2021-0040_EN.html.

6 COM/2023/165 final.

7 Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles.

2005/64/EC on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability ('3R type-approval Directive')[8]).

The ELV Directive was adopted in 2000 and it was the first harmonised EU framework designed to ensure that vehicles reaching the end of their life and considered as waste are treated in an environmentally sound manner. The Directive sets out provisions on the collection and depollution of ELVs, it restricts hazardous substances in new vehicles and sets targets on reuse and recycling (85%) and on reuse and recovery (95%), based on the average weight of ELVs per vehicle and year. Since its adoption, the legislation has not been substantially amended.

During the revision of the Waste Framework Directive in 2018, the co-legislators agreed[9] that the *Commission "shall review [the ELV] Directive, by 31 December 2020, and to this end, shall submit a report to the European Parliament and the Council, accompanied, if appropriate, by a legislative proposal"*. It indicated that the process to revise the ELV Directive should focus on the feasibility of setting recycling targets for specific materials and the problem of 'unknown whereabouts' of end-of-life vehicles.

The 3R type-approval Directive, adopted in 2005, establishes a very close link between the provisions of the ELV Directive and the design provisions on reusability, recyclability and recoverability of the type-approval process for vehicle types. In particular, the 3R type-approval Directive states that vehicles should be constructed so as to be 85% recyclable/reusable and 95% reusable/recoverable and the ELV Directive contains the same targets for Member States when it comes to the reusability, recoverability and recyclability of vehicles. The 3R type-approval Directive is part of the type-approval framework[10], under which new vehicle types are tested and granted type-approval before being placed on the EU market, provided they meet a set of technical requirements.

The proposed regulation repeals both the 3R type-approval and ELV Directives and replaces them with a single legal instrument. Its overall objective is to modernise the EU existing legislation and to improve the functioning of the EU single market while reducing the negative environmental impacts linked to the design, production, service life and end-of-life treatment of vehicles and contributing to the sustainability of the automotive and recycling sectors.

This is an initiative within the Regulatory Fitness Programme (REFIT).

- **Consistency with existing policy provisions in the policy area**

In the first place, the proposed regulation is anchored in the overall EU legislation on type-approval of motor vehicles, which aims at facilitating the free movement of automotive products in the single market by laying down common requirements designed to achieve environmental, energy performance and safety objectives. Regulation (EU) 2018/858[11] sets the central procedural framework for the requirements for the approval and market surveillance of motor vehicles. It lays down the rules on conformity of vehicle types with the requirements of several pieces of legislation, which are listed in the Annexes to that

8 Directive 2005/64/EC of the European Parliament and of the Council of 26 October 2005 on the type-approval of motor vehicles with regard to their reusability, recyclability.

9 See Article 10a of Directive 2018/849/EU, OJ 150, 30.5.2018, p. 93.

10 Regulation (EU) 2018/858 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles.

11 Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC, (OJ L 151 14.6.2018, p. 1).

Regulation. The proposed regulation sets out requirements both on the circular design and on production of motor vehicles and will be included in those Annexes, so that these requirements are checked and enforced through the type-approval process[12].

The proposed regulation complements and is consistent with recent Commission legislative proposals aimed at improving the ecodesign of products and ensure the sustainable management of waste.

This is the case of the proposal for a new regulation on batteries[13], which covers automotive batteries and contains a comprehensive new legal regime covering their whole life cycle, designed to address their environmental footprint. The proposed regulation on 3R type-approval and ELV does not contain provisions regulating the design, production and end-of-life of batteries. It covers vehicles as a whole as well as their parts and components (except for batteries), in a way which complements the proposal for a batteries regulation and would ensure that the overall environmental footprint of vehicles is addressed. It also contains provisions designed to facilitate the removal of batteries from ELVs, to ensure that they are being re-used or recycled as per the batteries regulation.

Besides batteries, the Commission tabled proposals to address the environmental footprint of other resources intensive sectors (like construction products[14] and textile[15]) and the proposed regulation on 3R type-approval and ELV complements this initiative by covering the automotive sector, to ensure that common rules apply for manufacturers to construct vehicles that will be placed on the Union market, to facilitate the transition of this sector to a circular economy and strengthen its sustainability.

The proposed regulation is also consistent with the proposal for a regulation on Ecodesign for Sustainable Products[16], which aims to enable the setting of sustainability performance and information requirements for a wide range of physical products. Unlike other products, as indicated above, the requirements on the circular design and production of motor vehicles are currently based on a specific legal framework applying to vehicles, which are set out and enforced through the 'type-approval' process. This is therefore a separate legal framework than the one set out under the upcoming regulation on Ecodesign for Sustainable Products. In addition, the regulation on Ecodesign for Sustainable Products also does not deal with the end-of-life phase of the vehicle, which is subject to the proposed regulation on 3R type-approval and ELV.

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12 A manufacturer can obtain certification for a vehicle type in one EU country and market it EU-wide without further tests. The certification is issued by a national type-approval authority and the tests are carried out by the designated technical services: https://single-market-economy.ec.europa.eu/sectors/automotive-industry/technical-harmonisation/technical-harmonisation-eu_en

13 Proposal for a Regulation of the European Parliament and of the Council concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020, 2020/0353(COD).

14 Proposal for regulation laying down harmonised conditions for the marketing of construction products (COM(2022)144)

15 https://environment.ec.europa.eu/strategy/textiles-strategy_en

16 Proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC, COM(2022)142 final, 2022/0095 (COD).

Finally, the proposed regulation does not address the shipments of end-of-life vehicles, which are regulated by the waste shipment regulation[17]. ELVs are considered as hazardous waste and, as per the waste shipment regulation, their export from the EU to third countries which are not Members of the OECD is banned. The other provisions of the waste shipment regulation also apply to other shipments of ELVs, including between EU Member States.

- **Consistency with other Union policies**

There are also synergies between this proposal for a regulation and other EU policies, in particular climate policy. The transition of the automotive sector to circularity is essential for the EU to reach the 2050 targets on climate neutrality set out in the 'European Climate Law'[18], **complementing several other initiatives under the** 'Fit for 55' package[19]. In addition, the initiative complements other recent legislative developments designed to transform the automotive industry, such as the recently revised CO_2 standards for cars and vans[20], the proposed Euro 7 standard on emissions from new motor vehicles[21] and the ongoing revision of the three directives in the 'roadworthiness package'[22]. In addition, the regulation complements the Critical Raw Materials Act[23], in that it introduces measures specifically designed to achieve a higher degree of circularity of the critical raw materials used in vehicles, especially through the removal, re-use and recycling of parts, components and materials containing such CRMs.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- **Legal basis**

The legislative proposal is based on Article 114 of the Treaty on the Functioning of the European Union (TFEU), which aims to ensure the functioning of the single market[24]. This is essential as the proposal lays down clear and uniform requirements governing both the placing on the EU market of vehicles and their collection and treatment at end-of-life, which are required to facilitate the transition of the sector to a circular economy. Article 114 TFEU

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17 Proposal for a Regulation of the European Parliament and of the Council on shipments of waste and amending Regulations (EU) No 1257/2013 and (EU) No 2020/1056, COM(2021) 709 final, 2021/0367(COD).

18 https://climate.ec.europa.eu/eu-action/european-green-deal/european-climate-law_en

19 More information on the package is available at: https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3541.

20 Regulation (EU) 2023/851 of the European Parliament and of the Council of 19 April 2023 amending Regulation (EU) 2019/631 as regards strengthening the CO_2 emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's increased climate ambition (OJ L 110, 25.4.2023, p.).

21 Proposal for a Regulation of the European Parliament and of the Council on type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7).

22 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13132-Vehicle-safety-revising-the-EUs-roadworthiness-package_en.

23 Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020, COM(2023)160 final, 2023/0079 (COD).

24 It is noted that this proposal follows other examples of legislative proposals tabled by the Commission recently, which aim to cover sustainability/circularity requirements applying to the whole lifecycle of products under a single piece of legislation and which have Article 114 as their legal basis. Examples are the proposal for a Regulation of the European Parliament and of the Council concerning batteries and waste batteries, the proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and the proposal for a Regulation of the European Parliament and of the Council on packaging and packaging waste.

is the legal basis of the overall regulatory framework on type-approval of motor vehicles, including the 3R type-approval Directive, whereas the ELV Directive has an environmental legal basis (Article 192 TFEU).

The proposal tackles a number of key problems related to the single market. These include: i) an uneven implementation of the 3RTA and ELV Directives, since their provisions are subject to interpretation, leading to different situations for operators depending on where they place vehicles on the market and treating ELVs, ii) underdeveloped EU market for secondary materials destined to the automotive sector, iii) barriers to the functioning of recycling markets and to the improvement in economies of scale, iv) the persistent problem of 'missing vehicles' and lack of clarity to distinguish ELVs from used vehicles in the case of export and v) the need for a stable and fully harmonised regulatory framework to enable improving the performance, including the necessary investments, of all economic operators involved in the production and end-of-life treatment of vehicles.

At the same time, the main objective of the proposal is to establish a closer link between the design requirements for vehicles and the provisions concerning ELV management, thus enabling the smooth functioning of the single market. Therefore, the vehicle design requirements are formulated so that they are effectively prerequisites for proper execution of the provisions on ELV management. Examples of such twinning of requirements include the rates of reusability, recyclability and recoverability rates vs. targets for reuse, recovery and recycling, the requirements regarding substances present in vehicles vs. the obligation to remove parts and components containing such substances before shredding of ELVs, the recycled content requirements vs. plastic recycling target and the design for removal of parts vs. the obligation to remove parts prior to shredding of ELVs.

Article 114 of the TFEU is thus the appropriate legal basis for this proposal as it enable environmental-related requirements to form the core elements of conditions governing type-approval and thereby the placing on the EU market of vehicles, as well as to harmonise requirements on end-of-life treatment of vehicles. The rationale or centre of gravity of the proposal is to uniform the requirements for placing on the market (to be more precise – requirements for the type-approval of vehicles) and, consequently to ensure that when vehicles reach the end-of-life stage, they are treated in an environmentally sound manner, and quality secondary raw materials can effectively be retrieved from them. Therefore, in the case of this proposal, the environmental objective is not independent, but rather the driver for harmonisation of the design requirements concerning reusability, recyclability and recoverability or vehicles.

- **Subsidiarity (for non-exclusive competence)**

To achieve a harmonised and well-functioning EU single market and enable a smooth transition of the automotive sector to the circular economy, in line with the goal set out in the European Green Deal, it is essential to put in place a common set of rules at EU level with clear requirements and obligations for Member States and businesses. The objectives of the work to revise the EU rules on end-of-life vehicles cannot be sufficiently achieved by individual action by the Member States; given the scale and effects of the measures, they are best achieved by action taken at EU level.

Harmonising the requirements would tackle the implementation problems caused by different interpretations of existing legislation. Without EU-wide action, there is a risk of fragmenting the EU market and the risk that progress on circular economy depend on voluntary action by businesses or individual Member States.

- **Proportionality**

The principle of proportionality is reflected in the design of all measures contained in the proposed regulation. For example, it extends the scope of the existing legislation to new vehicles progressively, with transition periods for all new requirements to give economic operators time to adapt to the new rules.

A more detailed description of assessment of proportionality against each of the policy option is provided in Annex 8 to the impact assessment report.

- **Choice of the instrument**

The choice of a regulation is to create a harmonised framework applying to the design, production and end-of-life stages of vehicles. This will provide the legal certainty that operators and Member State authorities need. It will simplify the current regulatory landscape by consolidating all requirements into a single act and contribute to a stronger integration of the EU single market. Compared with a directive, the choice of a regulation also reduces the administrative costs linked to transposing the law into national legislation and allows new EU requirements to apply earlier. The choice of a regulation is consistent with the type-approval regulatory framework, under which directives are transformed into regulations as part of the measures adopted at EU level in the aftermath of the 'Dieselgate' emissions scandal.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

The evaluations of the ELV Directive[25] and of the 3R type-approval Directive[26] identified the generic nature of their provisions as one of their main shortcomings preventing the transition of the overall automotive supply chain to a circular economy. These shortcomings were discussed in the Fit for Future Platform (F4F) opinion[27]. As a result, the following problems were identified as hampering the functioning of the EU single market and falling short of the level of protection of the environment the EU aims to achieve:

– The design and production of new vehicles do not sufficiently contribute to the ambitions of the European Green Deal for a climate-neutral, clean and circular economy;

– The treatment of vehicles at the end of their life is suboptimal compared to its potential to contribute to a climate-neutral, clean and circular economy;

– An important share of vehicles subject to the ELV Directive are not collected to be treated under sound environmental conditions in the EU, potentially contributing to pollution in third countries;

– There is no EU level harmonised approach for the design, production and end-of-life treatment of vehicles currently outside the scope of the ELV Directive, resulting in unexploited potential to the circular economy objectives of the European Green Deal.

[25] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1912-End-of-life-vehicles-evaluating-the-EU-rules_en.

[26] See Annex 11 to the impact assessment report.

[27] https://cor.europa.eu/en/our-work/Pages/Fit-for-Future-opinion-on-End-of-life-vehicles-and-3R-type-approval.aspx.

To address these problems, the proposed regulation focuses on three main aspects: circularity requirements for the type-approval of vehicles, management of end-of-life vehicles and the export of used vehicles.

- **Stakeholder consultations**

Stakeholders were consulted on several occasions throughout the evaluation and impact assessment processes. These consultations formed the basis for the proposed regulation, especially the open public consultations, targeted consultations, stakeholder workshops[28] and bilateral meetings.

Stakeholders and Member States generally agreed with the main findings of the evaluation of ELV Directive and with the need to revise the EU rules on end-of-life vehicles to address these findings.

Many stakeholders from the automotive manufacturing sector stressed that they had already begun integrating circularity principles into their business practices and that only minimal amendments were needed to improve implementation of the current legislation. Therefore, they did not see the need to merge the ELV Directive and the 3R type-approval Directive. Other manufacturers were in favour of action to adapt the design for recycling in the new legislation to ensure a level playing field and improve transparency. The dismantling and recycling sectors, mostly consisting of SMEs, called for more ambitious legislation on design for dismantling/recycling and on sharing of information from manufacturers. Environmental NGOs, waste management authorities and public authorities unanimously supported a comprehensive lifecycle approach and design for circularity measures.

Although there was strong support for setting targets on recycled content in new vehicles from the recycling and dismantling sectors and from civil society organisations, the automotive sector had mixed opinions on setting targets for plastics. They raised concerns around the possible lack of the necessary supply and advocated for chemical recycling (like the plastics industry). The steel industry did not support a target on recycled content for steel in new vehicles.

On the end-of-life vehicle treatment, stakeholders favoured measures aiming to improve and increase the quality of materials from ELVs to favour the reuse of spare parts and components, as well as high-quality recycling of materials from ELV. However, the waste management sector raised concerns on the increase of costs that could be triggered by new measures governing the treatment of end-of-life vehicles and their waste.

Overall, stakeholders strongly supported the adoption of ambitious measures to tackle the continuing problem of 'missing vehicles'. There was also support for stricter requirements on the export of used vehicles, to avoid that used vehicles which are not roadworthy, generate air pollution and present road safety risks are exported from the EU to third countries.

Vehicle manufacturers were of the position that the dismantling sector is already self-sustaining and there is no need to provide compensation for the cost of treatment by setting up

[28] A public consultation was held during the evaluation of the Directive (https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1912-End-of-life-vehicles-evaluating-the-EU-rules_en). An inception impact assessment was published on 15 October 2020 for public feedback and then during the impact assessment, a 14-week open public consultation was held between 20 July 2021 and 26 October 2021 (https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12633-End-of-life-vehicles-revision-of-EU-rules/public-consultation_en).

extended producer responsibility schemes. If such schemes are established, they stressed the importance that vehicle manufacturers have the right to exercise their responsibility individually. The dismantling, shredding and recycling sectors called for improved financial responsibility from the automotive industry to cover additional costs related to quality improvements, with safeguards to protect their independence in the schemes.

A majority of stakeholders, including environmental NGOs, public authorities and waste management operators (mainly SMEs), were in favour of extending the regulatory scope of the ELV Directive to additional vehicle categories. Automotive producers and suppliers expressed diverse views, highlighting that it would not be desirable to fully extend the scope to new vehicle categories in the short term due to their differences.

- **Collection and use of expertise**

To underpin the analysis of different regulatory options, the Commission engaged external consultants under a support contract[29].

Evidence was compiled from the evaluation reports of the ELV Directive[30] and the targeted evaluation of the 3R type-approval Directive, which was carried out in parallel to the impact assessment and presented in Annex 11 to the impact assessment report.

The Joint Research Centre (JRC), the European Commission's science and knowledge service, produced a technical report on targets for recycled plastic content in new passenger cars[31] and a report on critical raw materials in the automotive sector[32]. The results of these reports fed into the impact assessment underpinning the proposal for a regulation.

The proposal also takes account of the suggestions provided in the Fit for Future Platform (F4F) opinion[33].

Additional supporting evidence fed into the process via specific desk studies and data collection, also integrated in the overall impact assessment work.

- **Impact assessment**

The proposal is based on an impact assessment, which is published together with the proposal. In line with the Commission better regulation guidelines, the Regulatory Scrutiny Board issued two opinions on draft versions of the impact assessment report, which focused on the justification for the measures on the export of used vehicles, the description of the impacts of the preferred option, the choices of some measures on recycled content and extended producer responsibility schemes as well as issues linked to the methodology followed in the report. These opinions were taken into consideration in the final report of the impact assessment.

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29 Baron, Y.; Kosińska-Terrade, I.; Loew, C.; Köhler, A.; Moch, K.; Sutter, J.; Graulich, K.; Adjei, F.; Mehlhart, G.: Study to support the impact assessment for the review of Directive 2000/53/EC on End-of-Life Vehicles by Oeko-Institut, June 2023.

30 SWD(2021) 60 final.

31 Maury, T., Tazi, N., Torres De Matos, C., Nessi, S., Antonopoulos, I., Pierri, E., Baldassarre, B., Garbarino, E., Gaudillat, P. and Mathieux, F., Towards recycled plastic content targets in new passenger cars, EUR 31047 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-51784-9 (online), doi:10.2838/834615 (online), JRC129008.

32 N. Tazi, M. Orefice, C. Marmy, Y. Baron, M Ljunggren, P Wäger, F. Mathieux, Initial analysis of selected measures to improve the circularity of Critical Raw Materials and other materials in passenger cars, EUR 31468 EN, Publications Office of the European Union, Luxembourg, 2023, ISBN 978-92-68-01625-1, doi: 10.2760/207541, JRC132821.

33 https://cor.europa.eu/en/our-work/Pages/Fit-for-Future-opinion-on-End-of-life-vehicles-and-3R-type-approval.aspx.

The impact assessment identified four problem areas to tackle at EU level:

1. There is a **lack of integration of circularity in vehicle design and production** leading to high dependencies for primary raw materials;
2. The **quality of treatment of vehicles at the end of their life is suboptimal** compared to the potential to retain more environmental and economic value;
3. An important share of **'missing vehicles'** subject to the ELV Directive are not collected to be treated under proper environmental conditions and **a large volume of non-roadworthy and polluting used vehicles are exported from the EU** every year;
4. There is unexploited circularity potential of vehicles currently outside the scope of the ELV Directive to contribute to the objectives of the European Green Deal.

To address each of these problems, specific policy options have been designed and analysed for the each of the following areas:

1. **'Design circular':** make design and production circular;
2. **'Use recycled content'**: increase the recycled content in new vehicles;
3. **'Treat better':** improve the treatment of ELVs;
4. **'Collect more'**: collect more ELVs in the EU and improve quality of exported used vehicles;
5. '**EPR:** provide the right incentives to increase the collection of ELVs and improve waste treatment through extended producer responsibility schemes;
6. **'Cover more vehicles'**: extend the scope of the legislation to additional vehicle categories.

The measures contained in each option are presented in the following table. The last column indicates the measures selected as the preferred option following the impact assessment.

Policy Options	No	Measures	Preferred Option
PO1 – *Design Circular*	1A	M1 - Ensure that new 3RTA rules provide for proper implementation of circularity requirements for new vehicle types	Yes
		M2 - Empowerment for the Commission to develop a refined methodology to determine compliance with 3R-requirements	Yes
		M3 - Provision of basic dismantling information to ELV treatment operators	Yes
		M4a - Declaration on substances of concern verified by 3R type-approval authorities	No
		M5a - Restrictions of substances under the revised ELV Directive	No
	1B	*Includes measures M1, M2, M3 of PO1A.*	
		M4b - Mandatory declaration on recycled content of plastics, steel, aluminium	Yes
		M5b - Restrictions of substances under REACH and other existing legislation	No
		M6 - Obligation for vehicle manufacturers to develop circularity strategies	Yes
		M7 - Design requirements for new vehicles to facilitate the removal of components	Yes
	1C	*Includes measures M1-M3, M6, M7 of PO1A and PO1B.*	
		M4c - Mandatory declaration on recycled content for materials, other than plastics, including CRMs, steel, aluminium	Yes
		M5c - Hybrid approach: maintenance of current restrictions under ELV with new restrictions under REACH (*analysed separately in Annex 9)*	Yes

		M8 - Establishment of a digital Circularity Vehicle Passport	Yes
PO2- *Use Recycled Content*	2A	M9a - Mandatory recycled content targets for plastic used in vehicles - 6% recycled plastics content by 2031, 10% by 2035 at fleet-level, of which 25% of recycled material from closed loop production, calculation and verification rules	No
		M10a – Empower the Commission to set a mandatory recycled content target for steel, including calculation and verification rules, based on a dedicated feasibility study	Yes
	2B	M9b – Recycled plastics content: 25% in 2031 for newly type-approved vehicles only, of which 25% from closed loop production, calculation and verification rules	Yes
		M10b - Steel recycled content: 20% in newly type-approved vehicles, calculation and verification rules	No
	2C	M9c – Recycled plastics content: 30% in 2031 for newly type-approved vehicles only, of which 25% from closed loop production, calculation and verification rules	No
		M10c - Steel recycled content: 30% in newly type-approved vehicles, of which 15% from closed loop production, calculation and verification rules	No
		M11 - Empower the Commission to set mandatory recycled content targets for other materials (aluminium alloys, CRMs), feasibility study, target levels calculation and verification rules	Yes
PO3- *Treat Better*	3A	M12- Aligning the definition of recycling and aligning the calculation methodology for recycling rates with other waste legislation	Yes
		M13a - Mandatory removal of certain parts/components prior to shredding to encourage their recycling or reuse, 'list A'	Yes
		M14a – New definition of 'remanufacturing' and new monitoring requirements for reuse/ remanufacturing	Yes
		M16a - Ban on the landfilling of automotive waste residues from shredding operations	Yes
	3B	*Includes all measures of PO3A (cumulative)*	
		M13b - Mandatory removal of a longer list of components, including those that contain a high concentration of valuable metals or CRMs, 'list B'	Yes
		M14b - Market support for the use of spare parts	Yes
		M15b - Recycling targets for plastics – 30%	Yes
		M16b - Ban on mixed shredding of ELVs with WEEE and packaging waste	Yes
	3C	*Includes all measures of PO3A and PO3B (cumulative)*	
		M13c - Mandatory removal of additional components, 'list C'	No
		M15c - Glass – 70% recycling as container glass quality or equivalent	No
		M16c - Setting requirements on post shredder technologies to improve the quantity and quality of metal scrap recovered from ELVs	No
PO4 – *Collect More*	4A	M17a - Reporting by Member States on missing vehicles, vehicle registration, the import and export of used vehicles, incentives to encourage delivery to an authorised treatment facility and penalties	No
		M18 - Obligations for dismantlers, recyclers to check and report on ELVs, certificates of destruction	Yes
		M19a – Setting minimum requirements for sector inspections and enforcement action (including non-binding Correspondents Guidelines No9)	Yes
	4B	M17b – Setting fines for the ELV sector if an ELV is sold to illegal dismantlers and for dealers (and electronic platforms) dealing with dismantled (used) spare parts from non-authorised facilities	Yes
		M19b - Clearer definition of ELVs to ensure that there is a better distinction between used vehicles and ELVs (binding CG9)	Yes
		M20 - Improving the information contained in national vehicle registries and making them interoperable	Yes
	4C	M19c - Provide or making available information on vehicle identification and roadworthiness to customs authorities (vehicle identification number)	Yes
		M21 - Export requirements for used vehicles linked to roadworthiness	Yes
	4D	Includes measures M17b, M18, M19a-c, M20, M21of PO4A, PO4B and PO4C (cumulative)	Yes
PO5 –	5A	M22 - Requirement for the Member States to establish collective or individual	Yes

Extended Producer Responsibility (EPR)		EPR schemes, including monitoring compliance costs and minimum financial obligations M23 - Reporting obligations for producers	Yes
	5B	*Includes measures M22, M23 of PO5A (cumulative)* M24 - Harmonised modulation of EPR fees M25 - Transfer of the EPR fees/ guarantees (cross-border EPR)	 Yes Yes
	5C	*Includes measures M22-M25 of PO5A and PO5B (cumulative)* M26 – Setting up national deposit refund schemes M27 - Harmonised Green Public Procurement criteria (voluntary)	 No No
PO6 – *Cover more vehicles*	6A	M28 - Provision of information to dismantlers and recyclers	Yes
	6B	*Includes measure M28 of PO6A (cumulative)* M30a - Mandatory treatment of end-of-life L3e-L7e-category vehicles, lorries (N2, N3) and buses (M2, M3) and trailers (O) at authorised treatment facilities M30b – Export requirements for used vehicles linked to roadworthiness status of lorries (N2, N3) and buses (M2, M3) and trailers (O) M31b – Minimum EPR requirements for end-of-life L3e-L7e category, lorries (N2, N3) and buses (M2, M3) and trailers (O) M32 – Review clause on the regulatory extension of 3RTA scope to new vehicles	 Yes Yes Yes Yes
	6C	*Includes measures M28, M30a-b, M31b of PO6A and PO6B (cumulative)* M31c – Full application of EPR and advanced economic incentives M33 – Full scope application of the new 3RTA and end-of-life treatment requirements to additional vehicle categories	 No No

The impacts of each policy option were analysed comprehensively, as were the joint impacts and synergies between the options. The impacts on small and medium-sized enterprises (SMEs) were taken into account and summarised in a dedicated SME test. The environmental, economic and social impacts were calculated until 2040 and compared with the baseline scenario. The main year for comparison is 2035 with all long-term measures due to have taken effect by that date.

The preferred policy package contains a combination of the following options.

Design circular. The preferred option contains short-term obligations for vehicle manufacturers to make available detailed and user-friendly dismantling and recycling information, including the use and location of CRMs in vehicles and information on the share of recycled content in new vehicles. Actions for the medium term include revising the methodology to calculate recyclability and reusability of new vehicles at type-approval stage and developing a circularity vehicle passport. Overall, this anchors circularity requirements into the type-approval of new vehicle types.

Recycled content. The preferred option is to set a medium level of ambition with target for recycled plastics content of 25% by 2030, of which 25% from closed loop ELV treatment. For steel, this option empowers the Commission to set a target for recycled steel content in newly approved vehicles within three years after the regulation enters into force, based on a feasibility study. The option to set recycled content targets for other materials such as aluminium and CRMs will be assessed in the future, based on changes to automotive designs and the availability of recycling capacity.

Treat better. The preferred option includes a stricter definition of recycling, a ban on landfill for automotive shredder residue fractions and a medium level of ambition on removal obligations to improve the recovery of key components from ELVs without disproportionate costs on treatment operators. It will increase the recovery of (critical) raw materials and improve the quality of plastics, steel and aluminium fractions.

Collect more. The preferred option is the most ambitious policy option. Measures such as clearer responsibility allocation for certificates of destruction, binding criteria for distinguishing used vehicles and ELVs, and new enforcement provisions will significantly increase the number of ELVs treated legally in the EU. It will also ban the export of vehicles that are no longer roadworthy, in accordance with the 'do no significant harm' principle.

Provide incentives to increase the collection of ELVs and improve waste treatment. The preferred option includes financial and organisation incentives by setting EPR requirements to increase the collection of ELVs and to offset the costs of improved treatment quality that cannot be offset by the value of materials and components recovered.

Cover more vehicles. The preferred option is a phased-in approach to gradually cover more vehicles under the new EU rules by requiring manufacturers to provide information on the composition of their vehicles. It also brings in a set of minimum treatment requirements for end-of-life L_3e-L_7e category vehicles, lorries, buses and trailers. The preferred option is expected to have a positive impact on the environment by reducing the environmental footprint linked to the production and end-of-life requirements of vehicles.

The overall environmental benefits are assessed as an annual reduction of 12.3 million tons of CO_2-eq in 2035 (10.8 million tons in 2030 to 14.0 million tonnes in 2040), key to decarbonising the automotive industry. These CO_2 savings represent EUR 2.8 billion when monetised. This is linked to a better valorisation of 5.4 million tons of materials (plastics, steel, aluminium, copper, CRMs) which would be either recycled at higher quality or reused, and to the fact that up to 3.8 million additional ELVs would be collected and treated in the EU. 350 tonnes of rare earths in permanent magnet materials would be separately collected for reuse and recycling in 2035 (and 1 500 tonnes in 2040), which would contribute greatly to the EU's goal to achieve strategic autonomy for critical raw materials. The preferred option contributes mostly to the sustainable development goals of sustainable innovations (SDG9), responsible consumption and production (SDG12) and climate action (SDG13).

The total annual revenue for the preferred option is EUR 5.2 billion in 2035, including EUR 2.8 billion of CO_2 savings when monetised, against a cost of EUR 3.3 billion yielding to a EUR 1.8 billion in net revenue.

The cost of the preferred option is estimated to reach EUR 66 per vehicle put on the market in 2035. It is estimated to create 22 100 additional jobs, of which 14 200 in SMEs, mostly dismantlers and recyclers.

While there will be some short-term costs for the EU automotive industry, the preferred option will also generate energy savings, reduce the EU's dependency on materials sourced from third countries and ensure that the transition to vehicle electrification is made based on sustainable and circular business models, all contributing to the long-term competitiveness of the sector.

The preferred option will generate both costs (linked to investment in new technologies) and revenue (linked to higher values of spare parts and recycled materials) for the waste management sector. While the situation will vary between different Member States and operators due to differences in technologies used and labour costs, the planned changes will significantly strengthen and modernise the EU dismantling, shredding and recycling industry.

Member State authorities are expected to face limited costs associated with monitoring and enforcing compliance with the new legislation. The costs will primarily be due to inspections, checks on the export of ELVs and used vehicles and the need to adapt registration systems. In return, increased digitalisation (for reporting on the certificate of destruction, for exchange of information from national vehicle registration registries on export of ELVs and used vehicles

and with interoperability with single windows system) will increase efficiency for both enforcement authorities and businesses and will also reduce their burden. The estimated overall cost for public authorities to supervise the EPR schemes, carry out enforcement work and adapt national vehicle registration systems is around EUR 24 million, less than EUR 2 per vehicle.

Consumers may face an increase in new vehicle prices of approximately EUR 39 per vehicle, and lower prices (by EUR 12 per vehicle) when selling second-hand cars due to the fall in exports. Conversely, measures to support the recovery and sale of used spare parts are expected to result in lower purchase prices and cheaper repair and maintenance for consumers, which is a benefit.

The advanced requirements for end-of-life vehicle treatment may pose challenges for SMEs in terms of higher short- and medium-term implementation costs and adaptation to new treatment technologies. At the same time, more investment in the automotive recycling sector, support for the reuse market of secondary parts and easier access to dismantling information of a vehicle will boost innovation, unlock new opportunities for SMEs and help create new jobs in the sector. To further mitigate the impacts on SMEs, stronger EPR requirements enable the costs to be offset by higher collection rates and treatment quality.

The recurrent costs related to the 'one-in, one-out' approach per vehicle are assessed at 81.8 million EUR or EUR 5.45 per new vehicle for the preferred option package. The preferred option makes a maximum use of the digitalisation potential to ensure efficient enforcement of new requirements in accordance with the 'digital by default' principle. Without digitalisation, the impacts are estimated to be 32.2 million EUR or 40% higher.

- **Regulatory fitness and simplification**

The proposed regulation is expected to improve efficiency and harmonisation. It takes into account the majority of the suggestions made in the Fit for Future Platform (F4F) opinion[34]. Specifications of vehicle type-approval procedures on setting clear circularity requirements will streamline the single market procedures for manufacturers. Further simplification will be achieved through centralising restrictions on chemical substances under REACH, the EU's main piece of legislation governing chemicals. For the management of end-of-life vehicles, aligning recycling definitions with the Waste Framework Directive will harmonise and facilitate legal interpretation and make reporting data more comparable. Setting ELV-specific extended producer responsibility schemes will prevent uneven approaches among Member States. This will improve transparency and the fair allocation of financial responsibilities between companies involved in treating end-of-life vehicles.

Digitalisation will also help improve the collection of ELVs and tackle the issue of missing vehicles by bringing in digital reporting in authorised treatment facilities and sharing vehicle registration information among Member States. Interconnection with the EU Single Window Environment for Customs will enable customs authorities to enforce new conditions on the export of used vehicles. Tapping the potential of digitalisation will be essential to empower SMEs, in particular smaller and often family-run companies, to reach new markets by enabling them to connect to online platforms and distant markets at both local and international levels. In addition, the pull effect from setting a mandatory target on the recycled content of plastics is expected to boost the competitiveness of dismantlers, as they would become the primary source of supply of high-demand, high-quality secondary materials.

[34] For more information on the selected suggestions from the F4F opinion, see Annexes 1 and 5 of the Impact Assessment Report.

Particular attention was paid to limit reporting obligations to what is strictly necessary to assess and monitor the implementation of the legislation, privileging digital solutions and leaving discretion on how operators should report to national authorities.

- **Fundamental rights**

The proposal does not have consequences on the protection of fundamental rights.

4. BUDGETARY IMPLICATIONS

Implementing the proposal will require staff and financial resources to purchase services. Some of the requirements in terms of staffing are expected to be met under the existing allocations for the Commission, albeit some needs for additional external staff are presented in the accompanying legislative financial statement. A need for limited extra resources is expected at the European Chemicals Agency, which will be provided for in a subsequent legislative proposal covering Chemicals legislation.

The proposal includes several articles detailing further work streams that will need to be carried out to complement the regulation. This work will entail adopting implementing/delegated acts over the course of the following 1-8 years.

The main technical tasks include:

– improving the methodology for the calculation of the rates on recyclability, reusability and recoverability (3R rates);

– improving the risk assessment of the remaining hazardous substance exemptions (ECHA support);

– calculating and verifying the rules for the recycled content of plastics, a feasibility study for setting recycled content targets for steel in automotive applications and a wider feasibility study, including an economic assessment for setting recycled content targets for other materials and declaration formats (building on JRC expertise and methodology although not necessarily carried out by the JRC););

– specifying removability requirements for EV batteries and e-drive motors, general removal information for other relevant components and aligning the requirements for the CRM Act with the Batteries Regulation (as above, building on JRC expertise);

– updating the type-approval formats and the information folder to be provided to type-approval authorities;

– developing criteria for the vehicle circularity passport;

– establishing cross-border EPR mechanisms;

– amending the calculation and verification rules for quality in vehicle treatment performance (as above, building on JRC expertise);

– digitalisation: creating interoperable vehicle registers and real-time export controls via the EU Single Window Environment for Customs, based on valid roadworthiness requirements first and risk-based assessment as a second step (close cooperation between DG ENV, DG MOVE and DG TAXUD);

– taking a phased-in approach to extending the scope of vehicle categories and preparing for review 8 years after entry into force.

The Commission will require additional staff to carry out these technical tasks as follows:

– 0.5 full-time equivalent (FTE) contractual agents in 2024;

– 3.0 FTE contractual agents in 2025;

– 4.0 FTE contractual agents in 2026 and 2027, plus 1 FTE seconded national expert.

Overall, the total implementation costs, including the costs for Commission staff, is estimated at EUR 4.346 million, based on the latest salary scales.

5. OTHER ELEMENTS

• Implementation plans and monitoring, evaluation and reporting arrangements

Implementing the proposed regulation will be monitored by several indicators tracking information such as the volume of recycled materials used in new vehicles, recycling rates for specific materials from ELVs, materials/components/parts removed prior to shredding, the market share of used spare parts, the number of ELVs collected and processed in line with ELV requirements and the volume of used vehicles exported. More information on these indicators can be found in the impact assessment report.

A general review of a regulation is planned 8 years after it enters into force.

• Detailed explanation of the specific provisions of the proposal

Chapter I sets out the general provisions.

Article 1 lays down the subject matter of this regulation and *Article 2* indicates its scope. The majority of its provisions apply to vehicles of categories M_1 and N_1 (cars and vans). Certain provisions on the management of end-of-life vehicles and on export requirements also apply to certain L-category vehicles (vehicles of categories L_3e, L_4e, L_5e, L_6e and L_7e), to lorries, buses and to trailers (vehicles of categories M_2, M_3, N_2, N_3 and O).

Article 3 lays down the definitions needed for the purposes of this regulation. Several definitions are carried over from the repealed Directives 2000/53/EC and 2005/64/EC or from existing EU legislation, such as Directives 1999/37/EC, 2008/98/EC and 2014/45/EU or Regulation (EU) 2018/858.

Chapter II contains circularity requirements concerning vehicle design, to be verified in a type-approval process.

Article 4 lays down minimum requirements on the reusability, recyclability and recoverability of vehicle types, specifying the rates to be achieved by each type. It empowers the Commission to adopt implementing acts setting out the methodology for calculating and verifying these rates.

Article 5 restricts the use of lead, cadmium, mercury and hexavalent chromium in vehicles and Annex III provide exemptions from this restriction. The Commission will adopt delegated acts amending this Annex adjusting it to technical and scientific progress.

Article 6 requires that each vehicle type contains at least 25% of plastic recycled from post-consumer plastic waste, and that 25% of such material should come from recycled end-of-life vehicles. It also empowers the Commission to adopt delegated acts setting recycled content targets for other materials. Setting such potential targets must be underpinned by a detailed assessment.

Article 7 lays down a general obligation that the design of new vehicles must not hinder the removal of parts and components that have an important potential for reuse when vehicles become waste. It also lays down a requirement to design vehicles in a manner that enables the

removal and replacement of electric vehicle batteries and e-drive motors from the vehicle type during both the use phase and the waste phase.

Chapter III lays down information and labelling requirements for manufacturers.

Article 8 sets out the manner in which the manufacturers must prove compliance of their vehicle types with the requirements laid down in this regulation during the type-approval process.

Article 9 establishes the obligation to prepare a circularity strategy for each new vehicle type, containing the aspects listed in Annex IV. Manufacturers should update the strategies every 5 years, summarising the outcome of the actions taken to meet their undertakings.

Article 10 obliges manufacturers to declare in type-approval documentation the share of recycled content of indicated materials present in vehicles.

Article 11 obliges manufacturers to provide information on the safe removal and replacement of parts, components and materials contained in vehicles. This information must be accessible free of charge to waste management operators and repair and maintenance operators.

Article 12 covers the labelling of parts, components and materials present in vehicles in line with material coding standards. Detailed rules on labelling e-drive motors containing permanent magnets are laid down in Annex VI.

Article 13 establishes a circularity vehicle passport, a digital tool used to improve the provision of information on the safe removal and replacement of vehicle parts and components in a manner that is consistent with other digital information tools and platforms that already exist or are in further development in the automotive sector.

Chapter IV sets out rules on the management of end-of-life vehicles.

Section 1 contains provisions requiring Member States to designate the authorities responsible for implementing and enforcing Chapter IV and V (*Article 14*) and for setting the general conditions for issuing permits for authorised treatment facilities (*Article 15*).

Section 2 lays down requirements for extended producer responsibility.

Article 16 establishes a general obligation of producers on responsibility and indicates its scope. *Article 17* requires Member States to create a register that will monitor compliance of producers with these requirements. Producers who are not registered shall not make available vehicles on the market within a territory of a Member State. *Article 18* concerns producer responsibility organisations. *Article 19* lays down conditions for the authorisation of producers, in case of individual fulfillment of extended producer responsibility obligations, and producer responsibility organisations. *Article 20* indicates the costs related to managing end-of-life vehicles that should be covered by financial contributions of producers. *Article 21* lays down harmonised criteria for modulating these fees. *Article 22* sets out rules on the cost allocation mechanism for vehicles becoming end-of-life vehicles in another Member State. It empowers the Commission to adopt delegated acts concerning detailed rules on the application of fee modulation criteria and on the cost allocation mechanism of cross-border extended producer responsibility.

Section 3 covers the collection of end-of-life vehicles.

Article 23 sets out an obligation for producers to set up and participate in collection systems for end-of-life vehicles and sets out the requirements of these systems. It also obliges the Member States to ensure that these systems function properly.

Article 24 establishes an obligation to deliver all end-of-life vehicles to authorised treatment facilities.

Article 25 specifies obligation of authorised treatment facilities to issue certificates of destruction for all treated end-of-life vehicles.

Article 26 lists the obligations of vehicle owners to deliver their vehicles to an authorised treatment facility when it reaches the end-of-life stage and to present the subsequent certificate of destruction for the vehicle's deregistration.

Section 4 covers the treatment of end-of-life vehicles.

Article 27 sets outs obligations of authorised treatment facilities on the specific action needed to treat vehicles properly.

Article 28 sets out the general requirements applicable to the shredding of end-of life vehicles. It also bans the mixing of end-of-life vehicles, their parts, components and materials with packaging waste and waste electrical and electronic equipment.

Article 29 establishes requirements for the depollution of end-of-life vehicles, indicating that removed fluids and liquids must be separately stored, similarly as parts, components and materials containing lead, cadmium, mercury and hexavalent chromium. It also underlines, that removed electric vehicles batteries need to be stored and treated in line with Regulation (EU) 2023/[Batteries].

Article 30 obliges authorised treatment facilities to remove the parts and components listed in Annex VII Part C before shredding and sets out the conditions authorising an exemption from this requirement.

Article 31 sets out the obligations concerning removed parts and components to assess their fitness for reuse, remanufacturing, refurbishment, recycling, or other treatment operations and how they should be labelled. It also provides a list of parts that should not be reused, remanufactured or refurbished.

Article 32 lays down requirements governing the trading of used, remanufactured and refurbished parts and components. These parts and components must be properly labelled and covered by a warranty.

Article 33 states that Member States must adopt incentives to promote the reuse, remanufacturing and refurbishment of parts and components.

Article 34 sets out three targets: on the reuse and recycling of end-of-life vehicles, on their reuse and recovery and on plastic recycling.

Article 35 introduces a ban for landfilling of non-inert waste that are not processed through post shredder technology.

Article 36 lays down rules to calculate re-use, recycling and recovery targets in situations when end-of-life vehicles are shipped to another country for treatment.

Chapter V provides rules on used vehicles and their export.

Section 1 concerns the status of used vehicles. *Article 37* obliges the vehicle owner transferring the ownership of the vehicle to be able to demonstrate that the vehicle subject to the transfer is not an end-of-life vehicle.

Section 2 contains several provisions governing the export of used vehicles.

Article 38 lays down conditions for exporting used vehicles: they should not be end-of-life vehicles according to criteria set out in Annex I and they must be roadworthy. It also explains how the customs authorities will verify if and how vehicles comply with these requirements.

Article 39 obliges customs authorities to automatically and electronically verify the compliance of vehicles to be exported with export requirements.

Article 40 sets out when customs authorities should carry out checks on used vehicles to be exported.

Article 41 indicates when customs authorities should suspend the export of a used vehicle from releasing for export, *Article 42* concerns situations when a used vehicle should be released for export and *Article 43* provides for grounds for refusal to release the vehicle for export.

Article 44 covers cooperation between the authorities and exchange of customs-related information and *Article 45* indicates the electronic system to be used for this purpose.

Chapter VI contain provisions on the enforcement of the rules contained in the regulation.

Article 46 obliges Member States to carry out regular inspections of authorised treatment facilities, repair and maintenance operators and other facilities and economic operators who may treat end-of-life vehicles.

Article 47 obliges Member States to establish effective cooperation mechanisms at national and international level, enabling the exchange of the data needed under this regulation.

Article 48 requires Member States to establish effective, proportionate and dissuasive penalties for infringing this Regulation.

Article 49 lays down rules on reporting from Member States to the Commission on data concerning the collection and treatment of end-of-life vehicles, as well as on implementing the extended producer responsibility obligations.

Chapter VII is a standard chapter with articles on delegated acts (*Article 50*) and on implementing acts (*Article 51*).

Chapter VIII sets out amendments to Regulation (EU) 2019/1020 and Regulation (EU) 2018/858.

Chapter IX is a standard chapter on final provisions, with articles covering the requirement to evaluate the regulation 8 years after adoption (*Article 55*), on repeal and transitional provisions (*Article 56*) and entry into force (*Article 57*).

2023/0284 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee[1],

Having regard to the opinion of the Committee of the Regions[2],

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) The Communication of the Commission of 11 December 2019 on 'The European Green Deal'[3] (the 'European Green Deal') is Europe's growth strategy that aims to transform the Union into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net greenhouse gas emissions in 2050 and where economic growth is decoupled from resource use. In order for the Union's product policies to contribute to lowering carbon emissions on a global level, it needs to be ensured that products marketed and sold in the Union are sourced, manufactured and treated at their end-of-life in a sustainable manner.

(2) The automotive sector is an important contributor to the use of energy and material resources by the Union, and hence to the generation of greenhouse gases. The production of vehicles in third countries that are placed on the Union market contributes to the generation of global greenhouse gases, which in turn has a negative environmental impact on the Union. A shift from the use of fossil fuels in vehicles to zero emission mobility, as foreseen in the Fit for 55 package, is one of the prerequisites for reaching the climate neutrality goal in 2050. It will reduce the emissions of greenhouse gases from the automotive sector linked to the use phase of vehicles. The automotive industry is one of the largest users of primary aluminium, steel and plastics, linked to the manufacturing of new vehicles placed on the Union

[1] OJ C , , p. .

[2] OJ C , , p. .

[3] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal (COM (2019) 640 final).

market. This can represent a significant environmental impact, linked to the energy required for the extraction and processing of these materials. The environmental footprint linked to the manufacturing of new vehicles could increase with the ongoing electrification of the fleet, as well as due to more widespread use of electronics in future models, which both require a considerable amount of critical and strategic raw materials and precious metals, such as copper and rare earth elements. The result of these changes is that the production phase could have a larger environmental footprint than the use phase of vehicles. In addition, the current requirements in Union law on waste management result in a suboptimal recovery of resources from end-of-life vehicles, and there is high potential to increase the quantity and quality of parts, components and materials to be re-used, remanufactured, refurbished or recycled from end-of-life vehicles. To address these environmental impacts and contribute to the decarbonisation of the sector, it is necessary to improve the functioning of the single market and enhance the transition of the automotive industry to a circular economy. This is in line with Communication of the Commission of 11 March 2020 on 'A new Circular Economy Action Plan – For a cleaner and more competitive Europe'[4] which called for a revision of the current rules to "promote more circular business models by linking design issues to end-of-life treatment, consider rules on mandatory recycled content for certain materials, and improve recycling efficiency". The Council[5] and the Parliament[6] also stressed the need for new Union rules on these matters, replacing the existing rules on type approval of vehicles when it comes to re-usability, recyclability and recoverability and on end-of-life vehicles.

(3) Directive 2000/53/EC of the European Parliament and of the Council[7] sets up harmonised treatment requirements for end-of-life vehicles and targets for vehicles' reuse and recycling and reuse and recovery. It establishes obligations on collection of end-of-life vehicles, as well as obligations for economic operators, in particular restricting the use of heavy metals in vehicles. It also creates basic rules on extended producer responsibility, requiring vehicle producers to cover part of the costs of collection of end-of-life vehicles.

(4) The Commission's evaluation of Directive 2000/53/EC[8] highlighted that it has been effective in delivering many of its initial objectives, especially the elimination of cadmium, lead, mercury and hexavalent chromium from vehicles, an increase in collection points for end-of-life vehicles and the attainment of the recovery and recycling targets. The evaluation however found that the Directive however insufficiently addressed important issues linked to the collection of end-of-life vehicles and was not adapted any longer to ensure a high quality of treatment of these vehicles.

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4 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 11 March 2020, A new Circular Economy Action Plan – For a cleaner and more competitive Europe (COM(2020)98 final).

5 Council conclusions of 17 December 2020, Making the recovery circular and green.

6 European Parliament resolution of 10 February 2021 on the New Circular Economy Action Plan.

7 Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles (OJ L 269 21.10.2000, p. 34).

8 Evaluation of Directive (EC) 2000/53 of 18 September 2000 on end-of-life vehicles, SWD(2021) 61 final.

(5) Directive 2005/64/EC of the European Parliament and of the Council[9] regulates the type-approval of vehicles in relation to their reusability, recyclability and recoverability, so that these vehicles could meet the targets established in Directive 2000/53/EC at their end-of-life stage. That Directive has not been effective in improving substantially the re-usability, recyclability and recoverability of new vehicles and is not adapted to the features of new vehicles, which have considerably changed since the entry into force of that Directive.

(6) Regulation (EU) 2018/858 of the European Parliament and of the Council[10] introduced a comprehensive type-approval and market surveillance system for motor vehicles, trailers, and for systems, components and separate technical units intended for such vehicles with a view to ensuring the proper functioning of the single market and in order to offer a high level of environmental performance. There is a need for a separate regulatory act for the purposes of the EU type-approval procedure laid down in Annex II to Regulation (EU) 2018/858. It is necessary to lay down provisions and requirements on the circularity of vehicles in the process of EU type approval. To ensure the compliance of vehicles with those requirements it is necessary to ensure their verification in the EU type-approval process. The administrative provisions of Regulation (EU) 2018/858, including the provisions on market surveillance, corrective measures and penalties, apply to type approvals issued this Regulation. The administrative provisions of Regulation (EU) 2018/858, including the provisions on market surveillance, corrective measures and penalties, apply to type approvals issued in compliance with the requirements of this Regulation.

(7) In order to improve the functioning of the single market, while ensuring a high level of protection of the environment, it is essential to harmonise the conditions for the type-approval of vehicles when it comes their reusability, recyclability and recoverability, as well as the conditions governing waste management in the automotive sector. There are intrinsic links between the production stage and the end-of-life treatment of vehicles, as the environmentally sound treatment of end-of-life vehicles depends to a large extent on how vehicles are designed and constructed in the first place. The most efficient way of facilitating the transition of the automotive sector to a circular economy is therefore to establish a uniform regulatory framework at the Union level, covering in an integrated and consistent manner the design, manufacturing, placement on the market in the Union and end-of-life treatment of vehicles. This is also essential for the development of the Union market for secondary raw materials which are included in new vehicles placed on the market, as well as to avoid barriers to trade and distortions of competition, ensure legal clarity and improve the environmental performances of all of the economic operators involved in the design, production and end-of-life treatment of vehicles. In order to achieve these objectives and the necessity to have uniform rules for the single market driven by environmental concerns, and in line with the overall Union legislation on type-approval for motor vehicles, Directive 2000/53/EC and Directive 2005/64/EC should be replaced by a Regulation, based on Article 114 of the on the Functioning of the European Union (TFEU).

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[9] Directive 2005/64/EC of the European Parliament and of the Council of 26 October 2005 on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability and amending Council Directive 70/156/EEC (OJ L 310, 25.11.2005, p. 10).

[10] Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151 14.6.2018, p. 1).

(8) Directives 2000/53/EC and 2005/64/EC apply only to passenger vehicles (M_1) and light commercial vehicles (N_1), which constitute approximately 85% of all vehicles registered in the Union. The remaining vehicles, namely two- and three- wheel vehicles, lorries, busses and trailers, are not subject to any Union legislation concerning their eco-design and management at their end-of-life stages. Therefore, in order to ensure a circular framework for all vehicles registered in the Union, including their environmentally sound treatment, as well as to prevent fragmentation of the single market, this Regulation should apply not only to vehicles of categories M_1 and N_1, but, partially, also to certain L-category vehicles (L_3e-L_7e), heavy-duty vehicles and their trailers (M_2, M_3, N_2, N_3, O). There is a lack of comprehensive information regarding the treatment of such vehicles at their end-of-life in the Union, which prevents from applying to them the same regime as the one applying to M_1 and N_1 vehicles upon entry into force of this Regulation. However, the requirements regarding the collection of end-of-life vehicles, their mandatory delivery to authorised treatment facilities for treatment as well as their depollution should apply to L-category vehicles (L_3e-L_7e) and heavy-duty vehicles and their trailers (M_2, M_3, N_2, N_3, O). To facilitate treatment of these end-of-life vehicles, their manufacturers should be required to provide information on the removal and replacement of parts, components and materials from such vehicles. Also, the provisions governing the extended producer responsibility should apply to these vehicle categories, covering the costs of their collection and depollution at their end-of-life.

(9) Problems with exporting used vehicles concern not only passenger vehicles (M_1) and light commercial vehicles (N_1), but also, as studies show[11], larger vehicles. Therefore, these provisions should also apply to heavy-duty vehicles and their trailers (M_2, M_3, N_2, N_3, O).

(10) Special purpose vehicles are designed to perform a specific function and require special bodywork arrangements which are not entirely under the control of the manufacturer. Consequently, the reusability, recyclability and recoverability rates cannot be calculated properly. For those vehicles only the provisions concerning the collection, depollution and mandatory removal for parts and components should apply. Costs of conducting these activities should be covered by producers within the extended producer responsibility scheme. Provisions concerning substances in vehicles should also apply to special-purpose vehicles, as it is under Directive 2000/53/EC. The second stage manufacturer of vehicles that have been type-approved in multi-stage type-approval is not in a position to calculate the reusability, recyclability and recoverability rates for completed vehicles. It is therefore appropriate to require only the base vehicle to comply with this Regulation.

(11) One of the biggest practical challenges related to the application of Directive 2000/53/EC concerns the determination whether or not a vehicle has become an end-of-life vehicle, in particular in cases of transboundary shipments of vehicles. Despite the issuance of guidance[12] on this issue, such assessment remains problematic. It is therefore necessary to provide legally-binding precise criteria allowing to determine an end-of-life vehicle. Those criteria should be used by all economic operators and vehicle owners dealing with end-of-life vehicles.

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[11] https://www.unep.org/resources/report/global-trade-used-vehicles-report

[12] Correspondents' Guidelines No 9 on shipment of waste vehicles, https://ec.europa.eu/environment/pdf/waste/shipments/correspondents_guidelines9_en.pdf

(12) The evaluation of Directive 2000/53/EC concluded that the provisions in this Directive on the design of vehicles aimed at facilitating their dismantling and the uptake of recycled materials had a very limited impact on the design and manufacturing of new vehicles, as they were not sufficiently detailed, specific and measurable.

(13) Addressing the design of all vehicles placed on the Union market as well as their end-of-life stage requires the setting up of harmonised circularity requirements verified at the type-approval stage. Designing and manufacturing vehicles to ensure that their parts and components are reusable, and the materials that they contain are recyclable, is essential to avoid that these parts, components and materials cannot be properly valorised when a vehicle reaches the end of its life. Therefore, vehicle manufacturers and their suppliers should integrate design strategies that improve reusability and recyclability at an early stage in the development of new vehicles. Accordingly, new vehicle types should continue to be constructed so as to be reusable or recyclable to a minimum of 85 % by mass and reusable or recoverable to a minimum of 95 % by mass, as already foreseen in Directive 2005/64/EC. In order to ensure that the calculation of the reusability, recyclability and recoverability rates is done in a uniform manner and can be monitored, a new methodology for calculation and verification of the rates of reusability, recyclability and recoverability of a vehicle should be established. This methodology should better reflect the actual potential of a new vehicle to be recycled, reused and recovered at the end-of-life, while taking into account the ongoing technological progress. In order to ensure uniform conditions for the implementation of this Regulation implementing powers should be conferred on the Commission to establish such methodology. Until such methodology is established, the rates of reusability, recyclability and recoverability should continue to be calculated in accordance with the standard ISO 22628:2002, as in Directive 2005/64/EC.

(14) Vehicles should be designed and manufactured in a way as to limit the presence of substances of concern. In its Communication of 14 October 2020 on 'Chemicals Strategy for Sustainability – Towards a Toxic-Free Environment' (the 'Chemicals Strategy for Sustainability')[13], the Commission stated that substances of concern are to be minimised and substituted as far as possible, phasing out the most harmful ones for non-essential societal use, in particular in consumer products. Accordingly, substances of concern as constituents of materials used in vehicles or of any of the parts or components of vehicles should be minimised as far as possible to ensure that vehicles, as well as materials recycled from vehicles, do not have an adverse effect on human health or the environment, throughout their life-cycle.

(15) Directive 2000/53/EC already restricts the use of lead, mercury, cadmium and hexavalent chromium in vehicles and provides exemptions, where such substances may be used in certain applications. This Regulation should take over these existing rules. However, in order to ensure the coherence of legislation on chemicals, restrictions regarding placing on the market and use of other substances in vehicles should be addressed under Regulation (EC) No 1907/2006 of the European Parliament and of the Council[14]. Similarly, restrictions on the use of substances regulated in

[13] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 14 November 2020, Chemicals Strategy for Sustainability – Towards a Toxic-Free Environment, (COM/2020/667 final).

[14] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council

Regulation (EU) 2019/1021 of the European Parliament and of the Council[15], should be introduced based on provisions of that Regulation. Therefore, this Regulation should not provide the possibility to restrict any other substance than lead, mercury, cadmium and hexavalent chromium in vehicles.

(16) Directive 2000/53/EC provides exemptions to the restrictions on the use of lead and cadmium in batteries used in vehicles, which are taken over by this Regulation. However, the use of substances in batteries is comprehensively regulated in Regulation (EU) No 2023/[Batteries] of the European Parliament and of the Council[16]. Therefore, such substances should be addressed and eventually their restrictions and related exemptions transferred, as appropriate, to that Regulation and should not be regulated in this Regulation. Prior to introducing such restrictions under Regulation (EU) No 2023/[Batteries], a comprehensive assessment should be carried out under that Regulation to evaluate, if an exemption is still required and in what scope.

(17) In order to take account of scientific and technical progress, the power to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should continue to be delegated to the Commission in respect of amending exemptions from restrictions on the use of lead, mercury, cadmium and hexavalent chromium in vehicles under this Regulation. Modifying or deleting such exemptions should be preceded by an assessment of the socio-economic impacts of such change, which is absent in the Directive 2000/53/EC, including consideration of the availability of alternative substances and the impacts on human health and the environment across the lifecycle of vehicles. To ensure effective decision-making, coordination and management of the technical, scientific and administrative aspects of amending this Regulation with respect to restrictions on use of substances in vehicles, the European Chemicals Agency should assist the Commission in such assessment.

(18) To increase circularity in the automotive sector, vehicles should progressively be designed and manufactured in such a way which incorporates recycled materials instead of primary raw materials. The use of recycled materials allows for a more resource-efficient use of materials, decarbonises production and reduces negative environmental impacts related to the use of primary raw materials. Increased circularity for the vehicles manufactured in third countries that are placed on the Union market will also contribute to reducing greenhouse gas emissions globally, including the Union. It also reduces raw material and energy dependencies linked to the supply of primary raw materials and at the same time reinforces the market for secondary raw materials. Although there are no requirements concerning the use of recycled content on a global level, many manufacturers have already incorporated recycled materials in their vehicles. Establishing targets and uniform provisions on how to calculate the recycled content will provide legal certainty and contribute to creating fair competition between manufacturers. The requirements will apply to all manufacturers intending to place vehicles on Union's market, irrespective of where they are based. Acknowledging the importance of global value chains in the

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Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p 1).

[15] Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (OJ L 169, 25.6.2019, p. 45).

[16] Regulation of the European Parliament and the Council of [date] 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC (OJ L […]).

automotive sector, the Regulation should allow for sourcing the secondary raw materials from outside the Union.

(19) In view of the low recycling rate for plastics, especially from end-of-life vehicles, and the overall negative impacts of other forms of treatment of plastic waste, it is appropriate to increase the uptake of recycled plastics in vehicles. To this end, a mandatory target for plastic recycled from post-consumer waste should be included in new vehicles. Accordingly, each vehicle type should contain twenty-five percent of plastic recycled from post-consumer plastic waste. Twenty-five percent of this recycled content target for plastics should be achieved by including plastics recycled from end-of-life vehicles in the vehicle type concerned. In order to ensure uniform conditions for the implementation this obligation, implementing powers should be conferred on the Commission to establish methodology for the calculation and verification of the share of plastics recovered from post-consumer waste, and from end-of-life vehicles respectively, present in and incorporated into the vehicle type.

(20) The automotive sector is one of the biggest users of steel and the current uptake of recycled steel in new vehicles remains low. In order to contribute to lowering the carbon footprint linked to the production of new vehicles and support the move of the automotive industry towards climate neutrality, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of establishing a minimum share of steel recycled from post-consumer steel waste to be present and incorporated into vehicle types. The establishment of a future target should be preceded by a dedicated study by the Commission covering all relevant technical, environmental and economic factors linked to the feasibility of such target. In order to ensure uniform conditions for the implementation this obligation, implementing powers should be conferred on the Commission to establish methodology for the calculation and verification of the share of steel recovered from post-consumer steel waste present in and incorporated into the vehicle type.

(21) There is a potential to increase the use of recycled content in vehicles for other materials commonly used by the automotive industry for which markets for secondary raw materials are underdeveloped, the footprint linked to the production of primary raw materials is high or recycling levels are limited, while sorting and recycling technologies are improving. It is therefore appropriate for the Commission to assess the desirability, feasibility and impacts of setting out targets on recycled content of neodymium, dysprosium, praseodymium, terbium, samarium, boron used in permanent magnets as well as for aluminium and its alloys, or magnesium and its alloys. For the feasibility of potentially setting targets on specific types of aluminium and magnesium alloys, the study should address the matching of demand by secondary supply in general and in particularly investigate the trade-off between maximising economies of scale by specifying a minimum number of alloy families versus maximising value retention by sorting into a wider range of specific alloy types.

(22) In order to boost the underdeveloped markets for secondary raw materials, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of establishing a minimum share of establishing a minimum share of aluminium and its alloys, magnesium and its alloys, neodymium, dysprosium, praseodymium, terbium, samarium or boron recycled from post-consumer waste that shall be present in and incorporated into the vehicles types. In order to ensure uniform conditions for the implementation this obligation, implementing powers should be conferred on the

Commission to establish methodology for the calculation and verification of the shares of the materials recycled from post-consumer waste in vehicle types. The methodology is necessary to clarify the definitions of post-consumer scrap and pre-consumer scrap. This is relevant to incentivise the improvement of quality and the retainment of value, in particular for post-consumer fractions. In order to promote decarbonisation via the use of more recycled content, clear definitions are necessary to incentivise the recycling of post-consumer scrap, while minimising the use of pre-consumer scrap, which usually carries the same carbon footprint as the primary raw material.

(23) In line with the requirements of Regulation (EU) [CRM Act] of the European Parliament and of the Council[17], and considering that it is necessary to establish in this Regulation provisions on recycled content in vehicles and on critical raw materials used in parts and components of vehicles, those provisions should apply as the sector specific implementation of the provisions contained in Regulation (EU) [CRM Act]. This will ensure streamlining and integrating various information, labelling and removal obligations under the procedures of this Regulation with those for other parts, components and materials.

(24) In order to ensure that batteries are recycled in accordance with the requirements of the Regulation (EU) 2023/[Batteries], and that e-drive motors, which contain important quantities of rare earth elements, can also be replaced and recycled, it is necessary to introduce design requirements for new vehicles types, ensuring that these batteries and e-drive motors can be removed in a readily manner by authorised treatment facilities or repair and maintenance operators during any phase of the life-cycle of a vehicle. In order to take into account technical and scientific progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending this Regulation by revising the list of parts and components that are to be designed for removal and replacement from vehicles. In order to ensure uniform conditions for the implementation of this design requirement, implementing powers should be conferred on the Commission.

(25) The type-approval system laid down in Regulation (EU) 2018/858 requires manufacturers to construct their vehicles, systems, components and separate technical units in conformity with an approved vehicle type. To ensure that manufacturers comply with the circularity requirements that are applicable to them at type-approval stage and which are laid down in this Regulation, and that type-approval authorities can verify compliance, it is necessary for manufacturers to include the information required for the type-approval procedure in the information folder. To increase transparency and ensure that the required type-approval information is presented in a manner coherent with the requirements in other legislation governing type-approval requirements for vehicles, the Commission should amend the rules established in Commission Implementing Regulation (EU) 2020/683[18] which standardise the

[17] Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020 (COM(2023) 160 final).

[18] Commission Implementing Regulation (EU) 2020/683 of 15 April 2020 implementing Regulation (EU) 2018/858 of the European Parliament and of the Council with regards to the administrative requirements for the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (OJ L 163, 26.5.2020, p. 1).

documents and information to be included into the information folder and thus specify the administrative requirements for type-approval.

(26) In order to ensure that manufacturers of passenger cars and light commercial vehicles put in place actions to ensure that they meet the circularity requirements under this Regulation, and to incentivise them to improve the circularity of the vehicle types they place on the market, they should draw up a comprehensive circularity strategy for each new type and provide it to the type-approval authority. This strategy should be based on proven technologies, which are available or in development at the time of applying for the vehicle type approval and be periodically updated. The Commission should regularly report on the circularity of the automotive sector based on the circularity strategies provided by the manufacturers. In order to take account of technical and scientific progress in vehicle manufacturing and management of end-of-life vehicles, market developments in the automotive sector and regulatory changes, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending the annex containing requirements on the content of circularity strategy and the updates thereto.

(27) In order to increase transparency on the use of recycled materials by the automotive sector and provide incentives to increase recycled content levels, vehicle manufacturers should be required to provide technical documentation showing the percentage of recycled materials present in new vehicle types which are submitted for type-approval. This requirement should apply to a selection of materials for which an increase in recycled content level in vehicles would bring about particularly important environmental benefits. The mandatory declaration should be submitted to the type-approval authority together with other documents as part of the application for type-approval.

(28) Access to up-to-date information and timely communication between vehicle manufacturers and waste management operators across the automotive value chain are essential to maximise reuse, remanufacturing and refurbishment of parts and components of a vehicle and to ensure high-quality recycling of end-of-life vehicles. Therefore, manufacturers should provide to waste management operators and repair and maintenance operators unrestricted, standardised and non-discriminatory access to information enabling safe removal and replacement of certain parts, components and materials present in a vehicle. The information should guide the waste management operators and repair and maintenance operators through the steps and provide clear instructions on the use of tools or technologies required to access and remove electric vehicle batteries, including the tools or technologies enabling their safe discharge, and e-drive motors. This information should also help to identify, locate and remove the parts, components and materials, that should be depolluted and removed from the vehicle prior shredding, as well as parts and components, containing the critical raw materials in permanent magnets referred to in Regulation (EU) [CRM Act]. This should be done through communication platforms established by manufacturers and the information should be provided free of charge, excluding administrative costs. The type-approval authorities should verify that the required information has been submitted by the manufacturers. In order to regularly update scope of information to be provided by the manufacturers to the waste management operators and repair and maintenance operators, the power to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending Annex V.

(29) While digital coding is increasingly used to control different parts and components in vehicle, the evaluation of Directive 2000/53/EC identified that such coding could impede the reuse, remanufacturing and refurbishment potential of certain parts and components. It is therefore essential that vehicle manufacturers are requested to provide information allowing professional waste management operators to overcome the problems posed by these digitally coded parts and components in a vehicle, where such coding prevents repair, maintenance or replacement operations in another vehicle.

(30) Manufacturers and their suppliers should use component and material coding standards, which were established initially in Commission Decision 2003/138/EC[19], for labelling and identification of vehicles' plastic and elastomer parts, components and materials. They should ensure, that all parts and components of vehicles are marked in accordance with other applicable Union legislation, in particular concerning labelling of batteries and of permanent magnets included in vehicles that they place on the market. In order to take into account the technical and scientific progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending Annex VI specifying how parts and components of vehicles should be labelled.

(31) In order to facilitate the end-of-life treatment of vehicles, vehicle manufacturers should provide, via digital tools, accurate, complete and up-to-date information on the safe removal and replacement of vehicle parts and components. A Circularity Vehicle Passport should therefore be developed and made available as a data carrier for such information, in a manner that is consistent with other digital information tools and platforms that already exist or are in further development in the automotive sector on the environmental performance of vehicles and aligned with corresponding provisions in the Regulation (EU) 2023 [Batteries], the Regulation [ESPR] of the European Parliament and of the Council[20] and the Regulation [Euro 7] of the European Parliament and of the Council[21]. In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission to lay down the technical design and operation requirements for the passport and rules on location of the data carrier or other identifier enabling accessing the passport on the vehicle.

(32) In order to ensure that producers and other economic operators are subject to the same rules across the Member States, it is necessary to lay down harmonised rules for waste management of end-of-life vehicles. This should lead to a high level of protection of human health and the environment across the Union. It would also result in further harmonisation of the quality of waste management services provided by economic operators and facilitate the functioning of the market for secondary raw materials.

(33) In order to guarantee the safe and environmentally sound treatment of end-of-life vehicles, any establishment or undertaking intending to perform waste treatment

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19 Commission Decision 2003/138/EC of 27 February 2003 establishing component and material coding standards for vehicles pursuant to Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles (OJ L 53, 28.2.2003, p. 58–59).

20 Proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC.

21 Proposal for a Regulation of the European Parliament and of the Council on type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7) and repealing Regulations (EC) No 715/2007 and (EC) No 595/2009.

operations for these vehicles should obtain an authorisation from the competent authority. The authorisation should be granted only if the establishment or undertaking has the technical, financial and organisational capacity needed to carry out the end-of-life treatment operations for vehicles in a manner that complies with the applicable EU and national law, including the specific treatment requirements established in this Regulation. Additionally, authorised treatment facilities should have the competence to issue certificates of destruction in accordance with this Regulation.

(34) Directive 2000/53/EC establishes a basic obligation for vehicle producers to cover part of the costs of collection of end-of-life vehicles. Building on this obligation, in line with the polluter-pays principle and consistent with the general minimum requirements for extended producer responsibility schemes set out in Directive 2008/98/EC of the European Parliament and of the Council[22], it is appropriate to lay down at Union level requirements on the responsibilities of vehicle manufacturers relating to the management of end-of-life vehicles. Producers should have extended producer responsibility for the vehicles that they have placed on the market once they reach their end-of-life stage. The extended producer responsibility should cover the obligations to ensure that the vehicles made available by the producers on the market in a Member State are collected and treated in accordance with this Regulation and that waste management operators treating such vehicles meet the recycling targets established by this Regulation.

(35) In order to facilitate monitoring of compliance of producers with their extended producer responsibility obligations, Member States should establish a register of producers. The registration requirements should be harmonised across the Union to facilitate registration, in particular where producers make vehicles available in different Member States. The register should be also used for the purposes of reporting to competent authorities on the performance of extended producer responsibility obligations. The features and procedural aspects linked to this register should also be consistent with the register of producers established by Regulation (EU) 2023/[OP: Batteries], to enable producers of vehicles and producers of batteries to use one and the same register.

(36) In case the producer makes vehicles available on the market for the first time within a territory of a Member State, where the producer is not established, the producer should designate an appointed representative for the extended producer responsibility.

(37) Producers should be able choose whether they will exercise their extended producer responsibility obligations individually or collectively, by means of producer responsibility organisations taking responsibility on their behalf. Producer responsibility organisations should ensure the confidentiality of data provided to them by producers. In order to ensure that the interests of all economic operators are properly taken into consideration and avoid that waste management operators are placed at a disadvantage in the decisions taken in extended producer responsibility schemes, a fair representation of producers and waste management operators should be ensured in the governing bodies of such organisations.

(38) Producers should finance part of the costs of collection and treatment of end-of-life vehicles necessary to meet the requirements established in this Regulation, in particular obligations aimed at ensuring higher quality of secondary raw materials retrieved from vehicles. The exact level of the costs of such operations that should be

[22] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

covered by producers should be determined taking into account the revenues of authorised treatment facilities and other waste management operators gained from sale of used spare parts or components and of secondary raw materials retrieved from end-of-life vehicles. To this end, the competent authorities, in cooperation with producers and waste management operators, should monitor the average costs of collection, recycling and treatment operations as well as the level of financial contributions paid by the producers in order to ensure that a fair allocation of costs between all interested operators is in place.

(39) The financial contributions of producers should also cover the costs of educational campaigns aimed to increase the collection of end-of-life vehicles, establishment of the notification system for issuance and transfer of certificates of destruction and gathering and reporting of data to the competent authorities. All these actions are indispensable for ensuring proper management of end-of-life vehicles, in particular for tracking the vehicles for which producers are responsible in accordance with this Regulation.

(40) Producers who choose to fulfil their extended producer responsibility obligations individually should also provide a guarantee to be used to cover the costs of management of end-of-life vehicles. Such guarantees may be used in particular in cases where the concerned producers become insolvent or permanently cease their operations.

(41) In case a producer exercises its extended producer responsibility obligations collectively with a producer responsibility organisation, the financial contributions paid by the producer should be modulated based on harmonised criteria. Such criteria should create economic incentives for the manufacturers to increase circularity in the design and production of new vehicles, taking into consideration the amount of primary and recycled materials in a vehicle, the extent to which it contains parts, components and materials which are difficult to remove, dismantle, reuse or recycled, as well as the amount of hazardous substances that it contains. In order to avoid distortion of the single market, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of supplementing this Regulation by establishing detailed rules on how the criteria for the modulation of the financial contributions paid to producer responsibility organisations should be applied.

(42) As vehicles often become end-of-life vehicles in a different Member State than in the Member State where they were registered for the first time, it is necessary to introduce rules on cross-border extended producer responsibility. These rules should ensure that the responsibility of the producer properly covers the collection and treatment costs incurred by the waste management operators in the Member State where the vehicle becomes an end-of-life vehicle. To this end, producer should appoint a representative for the extended producer responsibility in each Member State and set up mechanisms for cross-border cooperation with relevant waste management operators. Introducing such a mechanism contributes to creating a level playing field between the authorised treatment facilities across the Union and facilitates the development of Union wide approaches in case of individual producer responsibility.

(43) In order to ensure compliance with this obligations and to avoid distortion of the single market, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of establishing further detailed rules on the obligations of the producers, Member

States and waste management operators and the features of the cross-border mechanisms.

(44) A key prerequisite for the sound treatment of end-of-life vehicles is that all end-of-life vehicles are collected. Therefore, this Regulation should impose certain obligations linked to the collection primarily on the producers and, secondarily, on the Member States. Producers should set up or participate in setting up the collection systems, and Member States should adopt all necessary measures to ensure that the systems are in place and that those systems enable meeting the objectives of this Regulation. The collection systems should enable vehicle owners and other vehicle holders to deliver the vehicle to an authorised facility without unnecessary efforts or costs. This means in practice that such systems should appropriately cover the whole territory of each Member State. They should also allow for collection of all brands of end-of-life vehicles, as well as of waste parts from repair of vehicles.

(45) End-of-life vehicles should be treated only in authorised treatment facilities, thus such facilities play a vital role in collection of the end-of-life vehicles. In order to facilitate collection and ensure adequate availability of facilities collecting end-of-life vehicles, this Regulation provides for a possibility for establishing collection points. The role of such points would be limited to collecting of end-of-life vehicles, storing them in proper conditions and transporting them to the authorised treatment facility. Operating such a point requires a specific permit. Collection points should be required to deliver all collected end-of-life vehicles to authorised treatment facilities.

(46) In order to effectively collect all end-of-life vehicles it is necessary to inform the public on the existence of collection systems. Vehicle owners should be aware that they can in principle deliver an end-of-life vehicle, with or without the electric vehicle battery, to a collection point or authorised treatment facility free of charge. The educational campaign by producers or producer responsibility organisations should also present the consequences for the environment and human health of improper collection and treatment of end-of-life vehicles.

(47) The authorised treatment facility should issue a certificate of destruction to document that an end-of-life vehicle was treated. This is necessary to ensure a proper supervision of management of end-of-life vehicles. The minimum requirements for this certificate are currently laid down in Commission Decision 2002/151/EC[23] and the content of this Decision should be included in this Regulation, with necessary adaptations. This certificate should be issued in an electronic format and provided to the last owner of an end-of-life vehicle, and then transmitted by the authorised treatment facilities and the last owner to the relevant authorities of the Member State, as its presentation allows for cancelling the registration of a vehicle. The electronic notification system should enable transmitting both the document confirming collection of end-of-life vehicle and the certificate of destruction.

(48) Despite an obligation in Directive 2000/53/EC to transfer all end-of-life vehicles for treatment to an authorised treatment facility, there is a very significant share of vehicles whose whereabouts are unknown, and which might have been either illegally treated or exported as end-of-life vehicles, or whose status is not properly reported to the Member States registration authorities. Such vehicles are referred to as “missing vehicles”. Member States should strengthen their cooperation so as to reduce the

[23] Commission Decision 2002/151/EC of 19 February 2002 on minimum requirements for the certificate of destruction issued in accordance with Article 5(3) of Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles (OJ L 50, 21.2.2002, p. 94–95).

number of missing vehicles. Recognition of certificates of destruction issued in another Member State and obligation to inform the authorities of the Member States, where the vehicle is registered, that a certificate of destruction is issued, should allow for better tracking of end-of-life vehicles' whereabouts.

(49) To ensure effective collection of end-of-life vehicles, explicit obligations should be addressed to vehicle owners. They should deliver their vehicle, when it reaches the end-of-life stage, to collection points or authorised treatment facilities and present the certificate of destruction to the registration authorities in order to cancel the registration of their vehicle.

(50) In order to ensure a uniform and environmentally sound treatment of end-of-life vehicles in the Union, it is essential to ensure that the authorised treatment facilities accept and treat all end-of-life vehicles, parts, components and materials, including waste parts from repairs of vehicles, in compliance with the conditions set out in their permits, as well as in accordance with the requirements set out in this Regulation, the best available techniques, and Directive 2010/75/EU of the European Parliament and of the Council[24].

(51) In view of the key role of authorised treatment facilities in managing end-of-life vehicles in a way that does not adversely affect the environment or human health and contributes to the achievement of circular economy objectives of the Union, it is necessary to lay down obligations applying to such facilities and covering all their activities, from acceptance and storage of an end-of-life vehicle until its final treatment.

(52) In order to ensure traceability on their activities, the authorised treatment facilities should document the performed treatment operations and electronically store the record for a minimum of three years, and be able to present it, upon request, to relevant national authorities.

(53) The depollution of an end-of-life vehicle is the first step towards preventing damage to the environment, human health and risks to work safety. It is therefore essential that an end-of-life vehicle undergoes the necessary depollution operations as soon as possible after its delivery to the authorised treatment facility, before the end-of-life vehicle is treated any further. In this phase, waste oils should be collected and stored separately from the other fluids and liquids, and be further treated in accordance with Directive 2008/98/EC. In addition, the parts, components and materials containing lead, cadmium, mercury and hexavalent chromium, should be removed from the end-of-life vehicle, to avoid adverse effects on humans or the environment.

(54) In order to ensure a proper implementation of Regulation (EU) 2023/ [OP: Batteries Regulation], all batteries incorporated in vehicles are to be separately removed from an end-of-life vehicle and stored in a designated area for further treatment.

(55) In order to maximise the potential of reuse, remanufacturing and refurbishment of parts and components, and preserve a high value for the secondary materials which derive from end-of-life vehicles, certain parts and components should mandatorily be removed from an end-of-life vehicle prior to shredding. The parts and components concerned should be removed in a manual dismantling process or a semi-automated disassembly process. To stimulate progress in technologies for dismantling, sorting, shredding and post-shredding, it should be possible to deviate from the requirement

[24] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (OJ L 334, 17.12.2010, p. 17).

on mandatory removal of parts and components in certain exceptional cases. It should be demonstrated the parts and components concerned can be removed as effectively with those technologies than as with manual or semi-automated processes and without lowering the quality of the resulting treatment fractions. In order to take into account technical and scientific progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending Annex VII.

(56) Once the authorised treatment facilities have removed parts and components from an end-of-life vehicle, they should carefully assess and determine whether those parts and components are fit for reuse, remanufacturing or refurbishment, based on objective criteria linked to the technical features of the parts and components and requirements on vehicle safety.

(57) Regulation (EU) 2023/[Batteries] sets out rules on the sustainability, performance, safety, collection, recycling and second life of batteries as well as on removal information about batteries for economic operators. The potential for a second life of batteries should be taken into consideration in this Regulation by excluding the electric vehicle battery from the essential parts or components' to allow for handing over the vehicle for treatment, free of charge, without the electric vehicle battery.

(58) Recognising the potential of remanufacturing and refurbishment in the automotive sector, and their contribution towards circular economy, it is necessary to provide legal clarity to the economic operators involved in this sector. It should therefore be clarified that parts and components removed from an end-of-life vehicle, which are suitable for reuse, remanufacturing or refurbishment, should not be considered waste. This is necessary to facilitate the shipment, transportation or any other transfer of such parts and components. The relevant national authorities should be in position to request documentation, from the authorised treatment facility that removed the part or component concerned, that confirms, via a dedicated assessment, the technical suitability of the relevant parts and components for remanufacturing, refurbishment or reuse.

(59) In its evaluation of Directive 2000/53/EC, the Commission found that used spare parts and components are offered to the public by unidentified providers and often come from illegal activities. Therefore, new requirements should be established concerning the trading of used, remanufactured or refurbished parts and components. Such parts and components should, above all, be marked with a label indicating the vehicle identification number of the vehicle from which the component or part has been removed and details of the operator who removed them, and be accompanied by a warranty.

(60) In the interests of road safety and protection of the environment, certain components and parts which have been removed from end-of-life vehicles should not be reused, remanufactured or refurbished. Such parts and components should be used neither for the construction of new vehicles, nor in vehicles that have already been placed on the market.

(61) In order to encourage the development and proper functioning of the market for reusable, refurbished and remanufactured parts and components in the Union, Member States should be encouraged to take the necessary incentives at the national level to promote the reuse, refurbishment and remanufacturing of parts and components, whether they are removed during the use or end-of-life phase of a vehicle. The Commission should facilitate the exchange of information among Member States by

sharing their best practices on the incentives taken at the national level, with a view to monitoring their effectiveness.

(62) In its evaluation of Directive 2000/53/EC, the Commission found that the definition of recycling in that Directive is too broad and not consistent with Directive 2008/98/EC, as it considers 'backfilling' as a recycling operation. Therefore, the Regulation should align the definition of recycling with Directive 2008/98/EC, excluding backfilling from its scope.

(63) The recycling of all plastics from end-of life vehicles should be continuously improved, and it is important to ensure a sufficient supply of recyclates to meet the demand for recycled plastics in vehicles. It is therefore necessary to lay out a specific recycling target of 30 % of plastics from end-of-life vehicles. This target would be complementary to the targets for (85 %) of end-of-life vehicles as well as re-use and recovery (95 %) of end-of-life vehicles by average weight per vehicle and year. To facilitate the implementation of those requirements by waste management operators, a transitional period of three years is needed. In the meantime, the current targets for the re-use and recycling (85 %) as well as re-use and recovery (95 %) of end-of-life vehicles, as established by the Directive 2000/53/EC, and based on the definition of recycling in that Directive, should continue to apply.

(64) It is important to increase the recovery of high-quality secondary materials by improving shredding processes of end-of-life vehicles. Therefore, end-of-life vehicles, their parts, components and materials should not be processed in a shredder in combination with packaging waste and waste electrical and electronic equipment, particularly to improve the separation of copper from steel fractions.

(65) To further increase the treatment quality of end-of-life vehicles, it should not be possible to landfill waste fractions resulting from shredded end-of-life vehicles, which contain non-inert waste and which are not processed by post-shredder technology.

(66) End-of-life vehicles are classified as hazardous waste and cannot be exported to non-OECD countries. Depolluted end-of-life vehicles may still be treated outside the Union, provided that those depolluted end-of-life vehicles are shipped in compliance with Regulation (EU) 1013/2006.

(67) In case an end-of-life vehicle is shipped from the Union to a third country, the exporter should provide documentary evidence approved by the competent authority in the destination country, confirming that the treatment conditions are broadly equivalent to the requirements of this Regulation and to human health and environmental protection requirements laid down in other Union legislation, in line with Regulation (EU) [new Waste Shipment Regulation].

(68) In order to ensure that end-of-life vehicles are treated in an environmentally sustainable manner, it is important to establish clarity on a vehicle's status throughout its entire life, particularly in situations when there is a need for distinguishing used vehicles from end-of-life vehicles. A vehicle owner that intends to transfer the ownership of a used vehicle, should in particular be required to demonstrate that the vehicle is not an end-of-life vehicle. To assess the status of a used vehicle, the vehicle owner, other economic operators and competent authorities should verify if certain criteria determining whether or not the vehicle concerned is an end-of-life vehicle are met. In order to take into account technical and scientific progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European

Union should be delegated to the Commission in respect of amending Annex I determining the criteria on when a vehicle is end-of-life vehicle.

(69) The EU Action Plan: "Towards Zero Pollution for Air, Water and Soil"[25] stressed the need for the Commission to propose new measures to address the Union's external environmental footprint linked to the export of end-of-life vehicles and used vehicles. Taking into account that the export of used vehicles raises important environmental and public health challenges as documented by the UN Environmental Programme[26], and that the Union is the biggest exporter of used vehicles worldwide, it is necessary to lay out specific requirements at Union level governing the export of used vehicles [from the Union]. The requirements should be based on objective criteria according to which a used vehicle is not an end-of-life vehicle and is to be roadworthy pursuant to Directive 2014/45/EU of the European Parliament and of the Council[27]. This should ensure that only used vehicles which are suitable to be driven on the Union roads can be exported to a third country, thereby reducing risks that the export of used vehicles from the Union contributes to air pollution or road accidents in third countries. To allow customs authorities to verify that those requirements are met upon export, any person exporting a used vehicle should be required to provide those authorities with the vehicle identification number and a statement confirming that the used vehicle is not an end-of-life vehicle and that it is considered roadworthy.

(70) It is important to establish a mechanism where the compliance of used vehicles with the export requirements can be effectively verified without impeding the trade between the Union and third countries. An electronic system should therefore be established by the Commission, enabling authorities in the Member States to exchange information in real time on the vehicle identification number and the roadworthiness status of used vehicles to be exported. In view of its existing features and functionalities linked to the sharing, between vehicle registration authorities, of information relating to vehicles registered in the Union, the MOVE-HUB, a message exchange platform has been developed by the Commission for the exchange of messages to interconnect Member State national electronic registers. The platform currently hosts the interconnection of road transport undertaking registers (ERRU), the driving licence registers (RESPER), the interconnection of professional driver training registers (ProDriveNet), the notification of vehicle roadside inspection failures (RSI) and the interconnection of tachograph driver card registers (TACHOnet). Therefore, the functionalities of the MOVE-Hub should be further extended to enable the exchange of information on the vehicle identification number and the roadworthiness status of used vehicles to be exported. To allow customs to verify electronically and automatically whether a used vehicle to be exported complies with the export requirements, the electronic system operated by MOVE-HUB should be interconnected to the EU Single Window Environment for Customs, in accordance with Regulation (EU) 2022/2399 of the European Parliament and of the Council[28]. That Regulation provides for a comprehensive framework of automated controls, which apply to a specific Union non-customs formality. Therefore, this Regulation should set out the main elements

[25] COM(2021)400

[26] https://www.unep.org/resources/report/global-trade-used-vehicles-report

[27] Directive 2014/45/EU of the European Parliament and of the Council of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC (OJ L 127, 29.4.2014, p. 51–128).

[28] Regulation (EU) 2022/2399 of the European Parliament and of the Council of 23 November 2022 establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013 (OJ L 317, 9.12.2022, p. 1).

which are to be controlled, while the technical aspects of the implementation of this control would be laid down under Regulation (EU) 2022/2399.

(71) In order to ensure uniform conditions for the implementation of export requirements, implementing powers should be conferred on the Commission to develop the necessary electronic systems and make them operational with national systems.

(72) Member States should collaborate with one another to ensure an effective implementation of the requirements governing the export of used vehicles and to provide mutual assistance. This assistance should include information exchange to verify the status of vehicles prior to their export, including confirming registration information in the Member State where they were previously registered. Furthermore, in pursuit of comprehensive cooperation, Member States should cooperate with authorities from third countries.

(73) It is important that customs authorities are able to carry out controls on used vehicles to be exported in accordance with Regulation (EU) No 952/2013 of the European Parliament and of the Council[29]. A significant share of used vehicles leaving the Union are destined to countries where import requirements are established or might be established, such as requirements in relation to the age of the vehicle or to its emissions. It is important that customs authorities are able to verify electronically and automatically, via the EU Single Window Environment for Customs, whether a used vehicle to be exported complies with those requirements, when the information on these requirements is officially communicated to the Commission by the third countries concerned. In order to protect the environment and road safety in third countries, the power to adopt delegated acts in accordance Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of setting these requirements.

(74) To prevent the risk of vehicles being exported without the required documents indicating the vehicle identification number and roadworthiness of the vehicle and of non-compliance with export requirements being detected only when the vehicle has already left the Union, the application of the simplified customs procedures set out in Regulation (EU) No 952/2013 should not be allowed. Those procedures would prevent customs authorities from conducting real-time controls through the EU Single Window Environment for Customs, which would increase the risk of breaching the Union rules on the export of used vehicles.

(75) In its evaluation of Directive 2000/53/EC, the Commission considered the lack of requirements on mandatory inspections as a shortcoming of the Directive. Therefore, this Regulation should set out minimum requirements concerning the frequency of inspections, their scope and characteristics of facilities subject to such inspections. The competitiveness of the authorised treatment facilities in relation to the illegal operators would thus be safeguarded and a continued compliance with conditions of permits and requirements on the collection and treatment of end-of-life vehicles would be ensured.

(76) The inspections should cover compliance with the provisions on export of used vehicles and on treatment of end-of-life vehicles. Each year, the inspections should cover at least 10 % of authorised treatment facilities and operators. Sites of repair and maintenance operators should also be subjected to inspection. It needs to be underlined, that inspections carried out under this Regulation should be

[29] Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code (OJ L 269, 10.10.2013, p. 1).

complementary to inspections on the shipment of end-of-life vehicles, which are comprehensively regulated in Regulation [OP: new Waste Shipment Regulation].

(77) Member States should establish cooperation mechanisms at national and international level so that inspections can take place in an efficient manner. Such mechanisms should allow for the exchange of vehicle registration data, necessary for tracking the vehicles and checking if they have been properly treated when they reach end-of-life stage.

(78) All necessary enforcement measures should be taken by the Member States to tackle illegal treatment of end-of-life vehicles, in order to prevent damages to the environment or human health due to such activities. Any establishment or undertaking treating end-of-life vehicles without a valid permit, or in breach of conditions or requirements set out in the permit, should therefore be subject to penalties. Also other measures, such as withdrawing the permit or suspending the operations of an operator should be considered by Member States to ensure effective compliance with this Regulation.

(79) Member States should lay down rules on penalties applicable to infringements of this Regulation and ensure that those rules are implemented. The penalties should be established in particular for violations of the provisions on export of used vehicles, on delivery of end-of-life vehicles to authorised treatment facilities or collection points and on trading used, remanufactured or refurbished parts and components. The penalties provided for should be effective, proportionate and dissuasive.

(80) Establishing reporting obligations is necessary to ensure proper implementation, monitoring and evaluation of Union legislation and to provide markets with up-to-date transparency information. Correct and valid data is indispensable for the Commission to assess whether the measures provided for in the Regulation function properly and to propose, where necessary, further adjustments aimed at ensuring environmentally sound treatment of end-of-life vehicles or at streamlining the implementation of the Regulation. With a view to limiting the burden linked to reporting, only data which are indispensable for the purpose of the implementation of this Regulation should be reported and reporting should be facilitated through digital tools. Based on these elements, it should be specified which data is to be reported by economic operators to the relevant authorities and by the Member States to the Commission. In order to ensure uniform conditions for the implementation of reporting requirements, implementing powers should be conferred on the Commission. The implementing acts, which should replace Commission Decision 2005/293/EC[30], should also lay down a methodology for calculating and verifying whether the reuse, recycling and recovery targets have been attained.

(81) The competent authorities of the Member States play an important role in verifying compliance with the obligations established under this Regulation relating to the collection and management of end-of-life vehicles, including better tracking by those authorities of the vehicles' whereabouts and combating illegal handling of end-of-life vehicles. Member States should thus require that waste management operators and other relevant economic operators provide the competent authorities with data allowing them to better monitor how the provisions on collection and management of end-of-life vehicles are being implemented.

[30] Commission Decision 2005/293/EC of 1 April 2005 laying down detailed rules on the monitoring of the reuse/recovery and reuse/recycling targets set out in Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles (OJ L 94, 13.4.2005, p. 30–33).

(82) The implementing powers that are conferred on the Commission by this Regulation should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council[31].

(83) When adopting delegated acts under this Regulation, it is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making[32]. To ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

(84) Annex II to Regulation (EU) 2019/1020, which lists Union harmonisation legislation without provisions on penalties, should be amended to delete Directives 2000/53/EC and 2005/64/EC from that list as it is necessary that the current Regulation contains penalty provisions.

(85) It is necessary to ensure that the type-approval related provisions and requirements of this Regulation are verified during the EU type-approval process. Regulation (EU) 2018/858 should therefore be amended accordingly.

(86) Missing vehicles have been recognised as one of the major implementation challenges of Directive 2000/53/EC. The absence of an efficient system allowing for real time exchange of information between Member States on the registration status of vehicles hinders traceability and has been identified as a reason for the high number of "missing vehicles" in the Union. To address this, the Commission should propose a revision of Council Directive 1999/37/EC on the registration documents for vehicles[33]. This revision should require Member States to record electronically, for vehicles registered on their territory, data allowing to properly document the reasons for the cancellation of a registration of a vehicle, especially if a vehicle has been treated as end-of-life vehicles in an authorised treatment facility, re-registered in another Member State, exported to a third country outside the Union, or stolen. Moreover, to prevent the illegal dismantling or export of vehicles that have been temporarily de-registered, the vehicle owners should be obliged to promptly report any changes in their ownership to the national vehicle registration authority. These amendments complement and build on the existing requirements for Member States to electronically record data on all vehicles registered on their territory.

(87) In view of the need to ensure a high level of environmental protection and to take into account scientific progress, the Commission should submit to the European Parliament and to the Council a report on the application of this Regulation and its impact on the functioning of the single market and the environment. The Commission should include, in its report, an evaluation of the provisions on the design of new vehicles, including the targets for re-usability, recyclability and recoverability, the management of end-of-life vehicles, including the recycling targets, and on penalties as well as an assessment of the need and feasibility of further extending the scope of this Regulation

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31 Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

32 OJ L 123, 12.5.2016, p.1.

33 Council Directive 1999/37/EC of 29 April 1999 on the registration documents for vehicles (OJ L 138, 1.6.1999, p. 57).

to certain L-category vehicles, heavy-duty vehicles and their trailers. This assessment should focus not only on aspects concerning treatment of end-of-life vehicles, but also on the relevance and added-value of laying down design requirements.

(88) The report from the Commission should also include an assessment of the measures concerning provision of information on substances of concern present in vehicles and whether the traceability of such substances need to be improved. It should also assess whether there is a need to introduce measures addressing the substances that may affect the treatment of vehicles when they reach end-of-life stage, in order to align it more closely with Regulation (EU) [Ecodesign for Sustainable Products].

(89) It is necessary to provide for sufficient time for economic operators to comply with their obligations under this Regulation, and for Member States to set up the administrative infrastructure necessary for its application. The application of this Regulation should therefore be deferred.

(90) In order to allow Member States to take the necessary administrative measures regarding establishment of collection systems, while keeping continuity for economic operators and waste management operators, repeal of Directive 2000/53/EC should be deferred.

(91) This Regulation does not change the rules on restrictions on the use of lead, mercury cadmium and hexavalent chromium in vehicles established under Directive 2000/53/EC or exemptions from those restrictions. However, it lays down clearer rules on how compliance with these restrictions, as well as with other circularity requirements, are to be verified during the type-approval process. In order to ensure that manufacturers have sufficient time to comply with those rules, their application should be deferred. Therefore, provisions of Directive 2000/53/EC concerning restrictions on the use of lead, mercury cadmium and hexavalent chromium should remain in force until those rules become applicable, in order to ensure continuity and to assure that vehicles placed on Union's market do not contain such substances, in cases other than provided for in that Directive.

(92) This Regulation also provides clearer provisions on extended producer responsibility than Directive 2000/53/EC. As establishment of such schemes and necessary national provisions on authorisation of producers and producer responsibility organisations requires some time, the application of those provisions should be deferred. The corresponding provisions of Directive 2000/53/EC should remain in force until those provisions become applicable in order to ensure continuity with regard to the producers financing of the costs of collecting end-of-life vehicles.

(93) Similarly, this Regulation contains new requirements on the treatment of end-of-life vehicles, in particular on the removal of parts and components for the purpose of promoting their reuse, remanufacturing or refurbishment as well as increasing the quality of recycling processes. Waste management operators require time to adjust to those new requirements and the application of them should therefore be deferred. The corresponding provisions of Directive 2000/53/EC should remain in force until those requirements become applicable in order to ensure continuity with regard to treatment of end-of-life vehicles.

(94) Obligations under Directive 2000/53/EC on reporting and the related obligations for the transmission of data to the Commission should remain in force for a period of time in order to ensure continuity until the new calculation rules and reporting formats are adopted by the Commission under this Regulation.

(95) The application of all provisions concerning vehicle of categories L_3e-L_7e, M_2, M_3, N_2, N_3 and O should be deferred in order to provide sufficient time for operators to comply with the new requirements. This is particularly important with respect to permits for authorised treatment facilities that are capable of conducting depollution and further treatment of such vehicles.

(96) In the interest of clarity, rationality and simplification, since the rules on type-approval of motor vehicles with regard to their reusability, recyclability and recoverability are all contained in this Regulation, the repeal of Directive 2005/65/EC should be deferred. This time provides sufficient time for manufacturers to ensure that the vehicles types they design and construct comply with the circularity requirements and for approval authorities to implement the new rules.

(97) Since the objectives of this Regulation, namely to contribute to the functioning of the single market, to prevent and reduce the adverse impacts from management of end-of-life vehicles and to ensure a high level of protection of human health, and the environment, cannot be sufficiently achieved by the Member States but can rather, by reason of the need for harmonisation, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.

HAVE ADOPTED THIS REGULATION:

CHAPTER I
GENERAL PROVISIONS

Article 1
Subject matter

This Regulation lays down circularity requirements on vehicle design and production related to reusability, recyclability and recoverability and the use of recycled content, which are to be verified at type-approval of vehicles, and on information and labelling requirements on parts, components and materials in vehicles. It also lays down requirements on extended producer responsibility, collection and treatment of end-of-life vehicles, as well as on the export of used vehicles from the Union to third countries.

Article 2
Scope

1. This Regulation shall apply:

   (a) to vehicles and end-of-life vehicles of categories M_1 and N_1 as set out in Article 4(1), point (a)(i) and (b)(i), of Regulation (EU) 2018/858;

   (b) from [OP: Please insert the date = the first day of the month following 60 months after the date of entry into force of this Regulation] to vehicles and end-of-life vehicles of categories M_2, M_3, N_2, N_3 and O as set out in Article 4(1) of Regulation (EU) 2018/858;

   (c) from [OP: Please insert the date = the first day of the month following 60 months after the date of entry into force of this Regulation] to vehicles and end-of-life vehicles and of categories L_3e, L_4e, L_5e, L_6e and L_7e as set out in Article 4(2), points (c) to (g), of Regulation (EU) 168/2013.

2. This Regulation shall not apply to:

   (a) special purpose vehicles as defined in Article 3, point (31), of Regulation (EU) 2018/858;

   (b) other parts of a vehicle that have been type-approved in multi-stage type approval of category N_1, N_2, N_3, M_2 or M_3 than the base vehicle;

   (c) vehicles produced in small series, as defined in Article 3, point (30), of Regulation 2018/858;

   (d) vehicles of historical interest as defined in Article 3, point (7), of Directive 2014/45/EU.

3. Notwithstanding paragraph 1, point (b), the following provisions shall not apply to vehicles and end-of-life vehicles of categories M_2, M_3, N_2, N_3 and O:

   (a) Article 4 on reusability, recyclability and recoverability of vehicles;

   (b) Article 5 on requirements for substances in vehicles;

   (c) Article 6 on minimum recycled content in vehicles;

   (d) Article 7 on design to enable removal and replacement of certain parts and components in vehicles;

   (e) Article 8 on general obligations;

(f) Article 9 on circularity strategy;

(g) Article 10 on declaration on recycled content present in vehicles;

(h) Article 12 on labelling of parts, components and materials present in vehicles;

(i) Article 13 on circularity vehicle passport;

(j) Article 21 on fee modulation;

(k) Article 22 on cost allocation mechanism for vehicles becoming end-of-life vehicles in another Member State;

(l) Article 28 on general requirements for shredding;

(m) Article 30 on mandatory removal of parts and components for reuse and recycling prior to shredding;

(n) Article 31 on requirements concerning the removed parts and components;

(o) Article 32 on trade of used, remanufactured or refurbished parts and components;

(p) Article 33 on reuse, remanufacturing and refurbishment of parts and components;

(q) Article 34 on reuse, recycling and recovery targets;

(r) Article 35 on ban on landfilling of non-inert waste;

(s) Article 36 on shipments of end-of-life vehicles.

4. Notwithstanding paragraph 1, point (c), the following provisions shall not apply to vehicles and end-of-life vehicles of categories L_3e, L_4e, L_5e, L_6e and L_7e:

(a) Articles listed in paragraph 3;

(b) Article 38 on controls and requirements on the export of used vehicles;

(c) Article 39 on automated verification of the Vehicle Identification Number and the information on vehicle status;

(d) Article 40 on risk management and customs controls;

(e) Article 41 on suspension;

(f) Article 42 on release for export;

(g) Article 43 on refusal to release for export;

(h) Article 44 on cooperation among authorities and exchange of information;

(i) Article 45 on electronic systems.

5. Notwithstanding paragraph 2, point (a), the following provisions shall apply to special purpose vehicles:

(a) Article 5 on requirements for substances in vehicles;

(b) Article 16 on extended producer responsibility;

(c) Article 20 on financial responsibility of producers;

(d) Article 23 on collection of end-of-life vehicles;

(e) Article 24 on delivery of end-of-life vehicles to the authorised treatment facilities;

(f) Article 25 on certificate of destruction;

(g) Article 26 on obligations for the vehicle owner;

(h) Article 29 on depollution;

(i) Article 30 on mandatory removal of parts and components for reuse and recycling prior to shredding.

6. Notwithstanding paragraph 1, points (b) and (c), Articles 16, 19, 20, 27 and 46 to 49 shall apply to vehicles and end-of-life vehicles of categories L_3, L_4, L_5, L_6 L_7, M_2, M_3, N_2, N_3 and O with the following modifications:

(a) the extended producer responsibility, referred to in Article 16, shall include the obligation of producers of such vehicles to ensure that vehicles, that they have made available on the market for the first time within the territory of a Member State and that become end-of-life vehicles, are:

(i) collected, in accordance with Article 23;

(ii) depolluted, in accordance with Article 29;

(b) the authorisation, referred to in Article 19, shall be granted upon demonstration that the applicant meets the criteria laid down in Article 19(2) with respect to the collection and depollution of vehicles;

(c) the financial contributions to be paid by producers in accordance with Article 20(1), point (a), shall cover the costs of collection and depollution of vehicles of such categories, which are not covered by the revenues of waste management operators linked to the sales of used spare parts and used spare components, of depolluted end-of-life vehicles, or of secondary raw materials recycled from end-of-life vehicles;

(d) Article 27 shall apply except for paragraph 3, points (c) and (d);

(e) Articles 46 to 49 shall apply only with respect to enforcement of obligations applicable for such vehicle categories.

Article 3
Definitions

1. For the purposes of this Regulation, the following definitions shall apply:

(1) ‘vehicle’ means any vehicle as defined in Article 3, point (15), of Regulation (EU) 2018/858 or listed in Article 4(2), points (c) to (g), of Regulation (EU) 168/2013;

(2) ‘end-of-life vehicle’ means a vehicle which is waste as defined in Article 3, point (1), of Directive 2008/98/EC, or vehicles that are irreparable according to criteria Part A, points 1 and 2 of Annex I;

(3) ‘vehicle type’ means any type of vehicle as defined in Article 3, point (32), of Regulation (EU) 2018/858 or vehicle type as defined in Article 3, point (73), of Regulation (EU) No 168/2013;

(4) ‘reusability’ means the possibility for reuse of parts or components diverted from an end-of-life vehicle;

(5) ‘reuse’ means any operation by which parts or components of end-of life vehicles are used for the same purpose for which they were conceived;

(6) ‘recyclability’ means the possibility for recycling of parts, components or materials diverted from an end-of-life vehicle;

(7) ‘recoverability’ means the possibility for recovery of parts, components or materials diverted from an end-of-life vehicle;

(8) ‘supplier’ means any natural or legal person who supplies parts, components or materials to a manufacturer who uses them to manufacture vehicles;

(9) ‘plastic’ means a polymer within the meaning of Article 3, point (5), of Regulation (EC) No 1907/2006, to which additives or other substances may have been added;

(10) ‘critical raw materials’ means critical raw materials as defined in Article 2, point (2), of Regulation (EU) [Critical Raw Materials Act];

(11) ‘post-consumer waste’ means waste that is generated from products after they have been placed on the market;

(12) ‘removal’ means manual, mechanical, chemical, thermal or metallurgic handling with the result that the targeted parts, components or materials from end-of-life vehicles are individually identifiable as a separate output stream or part of an output stream;

(13) ‘e-drive motor’ means an electric motor that converts electrical input power into mechanical output power to provide traction to a vehicle;

(14) ‘electric vehicle battery’ means electric vehicle battery as defined in Article 3, point (14), of Regulation (EU) 2023/ [Batteries and waste batteries];

(15) ‘authorised treatment facility’ means any establishment or undertaking that is permitted in accordance with Directive 2008/98/EC and this Regulation to carry out collection and treatment of end-of-life vehicles;

(16) ‘treatment’ means any activity after the end-of-life vehicle has been handed over to a facility for depollution, dismantling, compacting, shearing, shredding, recovery or preparation for disposal of the shredder waste, and any other operation carried out for the recovery or disposal of the end-of-life vehicle and its parts, components and materials;

(17) ‘shredding’ means any operation used for tearing into pieces or fragmenting end-of-life vehicles;

(18) ‘repair and maintenance operator’ means any natural or legal person who, related to that person’s trade, business, craft or profession, provides repair or maintenance services, whether independently from or authorised by manufacturers;

(19) ‘placing on the market’ means making available a vehicle for the first time in the Union;

(20) ‘making available on the market’ means any supply of a vehicle for distribution or use on the market in the course of a commercial activity, whether in return for payment or free of charge;

(21) ‘waste management operator’ means any natural or legal person dealing on a professional basis with the collection or treatment of end-of-life vehicles;

(22) ‘producer’ means any manufacturer, importer or distributor who, irrespective of the selling technique used, including by means of distance contracts as defined in Article 2, point (7), of Directive 2011/83/EU, supplies a vehicle for the first time for distribution or use, within a territory of a Member States on a professional basis;

(23) ‘producer responsibility organisation’ means a legal entity that financially or financially and operationally organises the fulfilment of extended producer responsibility obligations on behalf of several producers;

(24) ‘appointed representative for the extended producer responsibility’ means a natural or legal person established in a Member State in which the producer makes vehicle available on the market for the first time, which is different from the Member State where the producer is established, and is appointed by the producer in accordance with Article 8a(5), third subparagraph, of Directive 2008/98/EC to fulfil the obligations of that producer under Chapter IV of this Regulation;

(25) ‘secondary raw materials’ means materials that have been obtained through recycling processes and can substitute primary raw materials;

(26) ‘vehicle owner’ means any natural or legal person holding the ownership right of a vehicle and, if not specified otherwise, any holder of the registration certificate;

(27) ‘post-shredder technology’ means techniques and technologies used to process materials from end-of-life vehicles, after they have been shredded, for further recovery;

(28) ‘remanufacturing’ means an operation in which a new part or component is manufactured from parts and components that are either removed from vehicles or end-of-life vehicles and in which at least one change is made to the part or component that affects its safety, performance, purpose or type;

(29) ‘refurbishment’ means actions carried out to prepare, clean, test and, where necessary, repair a part or component that is removed from vehicles or end-of-life vehicles in order to restore the performance or functionality of that part or component within the intended use and range of performance originally conceived at the design stage applicable at the time of its placing on the market;

(30) ‘packaging waste’ means packaging waste as defined in Article 3, point (2), of European Parliament and Council Directive 94/62/EC[34] [Article 3, point (20), of Regulation (EU) [Packaging and Packaging Waste Regulation]];

(31) ‘waste electrical and electronic equipment’ means waste electrical and electronic equipment as defined in Article 3(1), point (e), of Directive 2012/19/EU of the European Parliament and of the Council[35];

(32) ‘non-inert waste’ means waste that does not meet the conditions of definition of ‘inert waste’ laid down in Article 2, point (e), of Council Directive 1999/31/EC[36];

(33) ‘used vehicle’ means a vehicle which has been registered in a Member State or any other country and is not an end-of-life vehicle;

(34) ‘used vehicle to be exported’ means a used vehicle that is to be placed under the customs procedure laid down in Article 269 of Regulation (EU) No 952/2013;

(35) ‘economic operators’ means producers, collectors, vehicle insurance companies, suppliers, repair and maintenance operators, waste management operators and any

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34 European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, p. 10).

35 Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197 24.7.2012, p. 38).

36 Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1–19).

other operators involved in design of vehicles, trade in used vehicles, or management of end-of-life vehicles.

2. In addition to the definitions referred to in paragraph 1, the following definitions shall apply:

(a) 'waste', 'waste oils', 'waste holder', 'waste management', 'collection', 'prevention', 'recycling', 'recovery', 'backfilling', 'disposal' and 'extended producer responsibility scheme' laid down in Article 3, points (1), (3), (6), (9), (10), (12), (15), (17), (17a), (19) and (21), of Directive 2008/98/EC;

(b) 'type-approval','multi-stage type approval', 'component', 'parts', 'spare parts', 'base vehicle', 'vehicle produced in small series', 'special purpose vehicle', 'market surveillance authority', 'approval authority' 'manufacturer', 'importer' and 'distributor' laid down in Article 3, points (1), (8), (19), (21), (23), (24) (28), (30), (31), (35), (36), (40), (42) and (43), of Regulation (EU) 2018/858;

(c) 'registration', 'registration certificate', 'suspension', 'holder of registration certificate' and 'cancellation of registration' laid down in Article 2, points (b), (c), (d), (e) and (f), of Directive 1999/37/EC;

(d) 'vehicle of historical interest', 'roadworthiness test' and 'roadworthiness certificate' laid down in Article 3, points (7), (9) and (12), of Directive 2014/45/EU;

(e) 'substance of concern' and 'data carrier' laid down in Article 2, points (28) and (30), of Regulation [Ecodesign for sustainable products].

CHAPTER II
CIRCULARITY REQUIREMENTS

Article 4
Reusability, recyclability and recoverability of vehicles

1. Each vehicle belonging to a vehicle type that is type-approved as of [OP: Please insert the date = the first day of the month following 72 months after the date of entry into force of this Regulation] under Regulation (EU) 2018/858 shall be constructed so that it is:

(a) reusable or recyclable to a minimum of 85 % by mass;

(b) reusable or recoverable to a minimum of 95 % by mass.

2. For each vehicle type referred to in paragraph 1, manufacturers shall take the following measures:

(a) collect the necessary data through the full chain of supply, in particular the nature and the mass of all materials used in the construction of the vehicles, to ensure continued compliance with the requirements;

(b) keep all the other appropriate vehicle data required by the calculation process referred to in point (e);

(c) verify the correctness and completeness of the information received from suppliers;

(d) the breakdown of the materials shall be managed and documented;

(e) calculate the reusability, recyclability and recoverability rates for the purposes of paragraph 1 in accordance with the methodology established by the Commission under paragraph 3 or, before such methodology has been adopted, in accordance with ISO standard 22628:2002 in combination with the elements set out in Part A of Annex II;

(f) mark the parts and components of the vehicles made of polymers and elastomers in accordance with Article 12(1);

(g) ensure that parts and components listed in Part E of Annex VII are not reused in the construction of new vehicles.

3. The Commission shall, by [*OP: please enter the date = the last day of the month following 35 months after the date of entry into force of this Regulation*], adopt an implementing act establishing a new methodology for calculation and verification of the rates of reusability, recyclability and recoverability of a vehicle, taking into account the elements set out in Annex II.

That implementing act shall be adopted in accordance with the examination procedure referred to in Article 51(2).

Article 5

Requirements for substances in vehicles

1. The presence of substances of concern in vehicles and in their parts and components shall be minimised as far as possible.

2. In addition to the restrictions set out in Annex XVII to Regulation (EC) No 1907/2006 and, as applicable, to the restrictions set out in Annexes I and II to Regulation (EU) 2019/1021 and in Regulation (EU) 2023/[OP: Batteries], any vehicle type that is type-approved as of [*OP: Please insert the date = the first day of the month following 72 months after the date of entry into force of this Regulation*], under Regulation (EU) 2018/858 shall not contain lead, mercury, cadmium or hexavalent chromium.

3. By way of derogation from paragraph 2, vehicle types may contain lead, mercury, cadmium or hexavalent chromium under the conditions and up to the maximum concentration values laid down in Annex III.

4. The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend Annex III in order to adapt it to scientific and technical progress by:

(a) establishing maximum concentration values up to which the presence of lead, mercury, cadmium or hexavalent chromium in specific parts, components and homogenous materials of vehicles is to be tolerated;

(b) exempting certain parts, components and homogenous materials of vehicles from the prohibition on the presence of lead, mercury, cadmium or hexavalent chromium set out in paragraph 2 where the following conditions are fulfilled:

(i) the use of those substances is unavoidable;

(ii) it is demonstrated that socio-economic benefits outweigh the risk to human health or the environment arising from the use of those substances;

(iii) there are no suitable alternative substances or technologies.

(c) deleting parts, components and homogenous materials of vehicles from Annex III, if the use of lead, mercury, cadmium or hexavalent chromium is avoidable;

(d) designating those parts, components and homogenous materials of vehicles that shall be removed before further treatment and require them to be labelled or made identifiable by other appropriate means.

The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend Annex III, in particular by removing certain exemptions for homogenous materials and components from the list, in case the specific exemption is addressed under other Union legislation.

5. Upon request from the Commission, and within 12 months from the request, the European Chemicals Agency (the 'Agency') shall prepare a report on the technical and economic feasibility of alternatives pertaining to existing exemptions listed in Annex III and, based on such assessment, a motivated proposal for the specific amendment of the exemption.

6. As soon as it receives the request from the Commission, the Agency shall publish on its website a notice that a report on a possible amendment of an exemption in Annex III will be prepared and invite all interested parties to submit comments within eight weeks from the date of publication of the notice. The Agency shall publish on its website all comments received from the interested parties.

7. At the latest nine months following the submission of the report referred to in paragraph 4 to the Commission, the Committee for Socio-economic Analysis of the Agency, set up pursuant to Article 76(1), point (d), of Regulation (EC) No 1907/2006, shall adopt an opinion on the report and on the specific amendments proposed. The Agency shall submit that opinion to the Commission without delay.

8. The Commission shall adopt the delegated acts referred to in paragraph 4 and shall take into account the socio-economic impact of introducing, modifying or deleting an exemption to the restriction in the use of lead, mercury, cadmium or hexavalent chromium in vehicle types, including the availability of alternatives and the impacts on human health and the environment across the full lifecycle of vehicles.

Article 6
Minimum recycled content in vehicles

1. The plastic contained in each vehicle type that is type-approved as of [OP: Please insert the date = the first day of the month following 72 months after the date of entry into force of the Regulation] under Regulation (EU) 2018/858 shall contain a minimum of 25 % of plastic recycled by weight from post-consumer plastic waste.

At least 25 % of the target set out in the first subparagraph shall be achieved by including plastics recycled from end-of-life vehicles in the vehicle type concerned.

2. By [OP: Please insert the date = the last day of the month following 23 months after the date of entry into force of this Regulation], the Commission shall adopt an implementing act in accordance with Article 51(2) to supplement this Regulation by establishing the methodology for the calculation and verification, for the purposes of paragraph 1 of this Article, of the share of plastics recovered from post-consumer waste, and from end-of-life vehicles respectively, present in and incorporated into the vehicle type.

3. The Commission is empowered to adopt delegated acts, in accordance with Article 50, to supplement this Regulation by establishing a minimum share of steel recycled from post-consumer steel waste to be present and incorporated into vehicle types to be type-approved in accordance with this Regulation and Regulation (EU) 2018/858.

The minimum share of recycled steel referred to in the first subparagraph shall be based on a feasibility study, carried out by the Commission. The study shall be finalised by [*OP: Please insert the date = the last day of the month following 23 months after the date of entry into force of this Regulation*], looking in particular at the following aspects:

(a) the current and forecasted availability of steel recycled from post-consumer sources of steel waste;

(b) the current share of post-consumer waste in various steel semi-products and intermediates used in vehicles;

(c) the potential uptake of post-consumer recycled steel by manufacturers in vehicles to be type-approved in the future;

(d) the relative demand of the automotive sector in comparison to the demand for post-consumer steel waste of other sectors;

(e) economic viability, technical and scientific progress, including changes in the availability of recycling technologies concerning steel recycling rates;

(f) the contribution of a minimum share of recycled content of steel in vehicles to the Union's open strategic autonomy, climate and environmental objectives;

(g) the need to prevent disproportionate negative impacts on the affordability of vehicles; and

(h) the influence on the overall costs and competitiveness of the automotive sector.

The Commission may adopt an implementing act establishing the methodology for the calculation and verification of the share of steel recycled from post-consumer steel waste present in and incorporated into vehicle types.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 51(2).

4. By [OP: Please insert the date = the last day of the month following 35 months after the date of entry into force of this Regulation], the Commission shall assess the feasibility of establishing a requirement on the minimum share of:

(a) aluminium and its alloys, magnesium and its alloys, recycled from post-consumer waste and incorporated into vehicle types; and

(b) neodymium, dysprosium, praseodymium, terbium, samarium or boron recycled from post-consumer waste and incorporated into permanent magnets in e-drive motors.

After finalisation of the assessment referred in the first subparagraph, the Commission is empowered to adopt delegated acts, in accordance with Article 50, to supplement this Regulation by establishing a minimum share of aluminium and its alloys, magnesium and its alloys, neodymium, dysprosium, praseodymium, terbium, samarium or boron recycled from post-consumer waste that shall be present in and incorporated into the vehicles types to be type-approved under this Regulation and Regulation (EU) 2018/858.

The minimum share of recycled content of the materials referred to in the second subparagraph shall be based on the feasibility study referred to in the first subparagraph, taking into account all of the following:

(a) the current and forecasted availability of the materials listed in the second subparagraph recycled from post-consumer waste;

(b) the current shares of recycled content from post-consumer waste in the materials listed in the second subparagraph in vehicles placed on the market;

(c) economic viability, technical and scientific progress, including changes in the availability of recycling technologies concerning the type of materials recycled, and their recycling rates;

(d) the contribution of a minimum share in vehicles of recycled content of the materials listed in the second subparagraph to the Union's strategic autonomy and its climate and environmental objectives;

(e) possible impacts on the functioning of vehicles from incorporating recycled content of the materials listed in the second subparagraph into vehicle parts and components;

(f) the need to prevent disproportionate negative impacts on the affordability of vehicles containing the materials listed in the second subparagraph;

(g) the influence on the overall costs and competitiveness of the automotive sector.

The Commission may adopt an implementing act establishing the methodology for the calculation and verification of the share of the materials recycled from post-consumer waste in vehicle types.

That implementing act shall be adopted in accordance with the examination procedure referred to in Article 51(2).

Article 7

Design to enable removal and replacement of certain parts and components in vehicles

1. Each vehicle belonging to a vehicle type that is type-approved as of [OP: Please insert the date = the first day of the month following 72 months after the date of entry into force of this Regulation] shall be designed in a way which does not hinder the removal by authorised treatment facilities of the parts and components listed in Part C of Annex VII from the concerned vehicle during the waste phase of the vehicle.

2. Each vehicle belonging to a vehicle type that is type-approved as of [OP: Please insert the date = the first day of the month following 72 months after the date of entry into force of this Regulation] under Regulation (EU) 2018/858 shall be designed, as regards joining, fastening and sealing elements, so as to enable, in a readily and non-destructive manner, the removal and replacement of electric vehicle batteries and e-drive motors from the vehicle by authorised treatment facilities or repair and maintenance operators during the use phase and waste phase of the vehicle.

3. The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend paragraph 2 by revising the list of parts and components that are to be designed for removal and replacement from vehicles, in order to include in that paragraph additional parts and components listed in Part C of Annex VII, taking into account technical and scientific progress.

4. The Commission may adopt implementing acts laying down the conditions for the design for removal and replacement of parts and components referred to in paragraph 2 where necessary to ensure harmonised implementation of the obligation set out in paragraph 2.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 51(2).

CHAPTER III
OBLIGATIONS OF MANUFACTURERS

Article 8
General obligations

1. Manufacturers shall demonstrate that new vehicles that they have manufactured and that are placed on the market, are type-approved in accordance with the requirements of Regulation (EU) 2018/858 and of this Regulation.

2. For the purposes of type-approval of vehicles to which the requirements in Articles 4, 5, 6 or 7, the manufacturer shall provide the documentation showing compliance with those requirements and shall:

   (a) include it in the information folder referred to in Article 24 of Regulation (EU) 2018/858; and

   (b) submit it to the type-approval authority in accordance with Article 23 of Regulation (EU) 2018/858.

3. For the purposes of type-approval of vehicles to which the requirement in Article 9 applies, the manufacturer shall submit the circularity strategy to the type-approval authority together with the application for type-approval referred to in Article 23 of Regulation (EU) 2018/858.

4. For the purposes of type-approval of vehicles to which the requirements set out in Article 10 apply, the manufacturer shall draw up the information referred to in Article 10(1) and submit it, in accordance with Article 24(1), point (a), of Regulation (EU) 2018/858, to the type-approval authority together with the application for type-approval referred to in Article 23 of that Regulation.

5. For the purposes of type-approval of vehicles to which the requirements set out in Article 11 apply, the manufacturer shall submit the declaration confirming compliance with the requirement set out in Article 11(1), in accordance with 24(1), point (a), of Regulation (EU) 2018/858, to the type-approval authority together with the application for type-approval referred to in Article 23 of that Regulation.

Article 9
Circularity strategy

1. For each vehicle type that is type-approved under Regulation (EU) 2018/858 as of [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation], the manufacturer shall draw up a circularity strategy.

2. The circularity strategy shall describe which actions the manufacturers will take to follow-up on their obligations to ensure that the circularity requirements in Chapter II, which are verified in the type-approval procedures and which are applicable to the vehicle type concerned, are met.

3. The circularity strategy shall contain the elements laid down in Part A of Annex IV.

4. The manufacturer shall provide a copy of the circularity strategy to the Commission within 30 days after the type-approval for the concerned vehicle type has been granted.

5. The manufacturer shall monitor and follow up on the actions contained in the circularity strategy and update the strategy every five years in accordance with Part B of Annex IV. The updated circularity strategy shall be provided to the type-approval authority that issued the type-approval for the vehicle type and to the Commisssion.

6. The Commission shall make the circularity strategies and any updates to those strategies publicly available, except for confidential information.

7. The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend Part B of Annex IV by adapting the requirements on the content of the circularity strategy and the updates to that strategy to technical and scientific progress in vehicle manufacturing and management of end-of-life vehicles, to market developments in the automotive sector and to regulatory changes.

8. By [OP: Please insert the date = the last day of the month following 83 months after the date of entry into force of this Regulation] and every six years thereafter, the Commission shall draw up and publish a report on the circularity of the automotive sector. The report shall be based in particular on circularity strategies and updates to such strategies.

Article 10

Declaration on recycled content present in vehicles

1. Manufacturers shall declare, for each vehicle type that is type-approved as of [*OP: Please insert the date = the first day of the month following 36 months after the entry into force of the Regulation*] under Regulation (EU) 2018/858, the respective share of recycled content of:

   (a) neodymium, dysprosium, praseodymium, terbium, samarium, boron in permanent magnets in e-drive motors;

   (b) aluminium and its alloys;

   (c) magnesium and its alloys;

   (d) steel.

   The declaration shall concern the recycled content of these materials present in the vehicle type and indicate, per material share, whether the material is recycled from pre-consumer waste or from post-consumer waste.

2. The type-approval authorities shall verify that the required documentation has been submitted by the manufacturers and that it contains the information referred to in paragraph 1.

3. By way of derogation from paragraph 1, the requirement to declare the share of recycled content of a certain material shall not apply where a target has been established for that material under Article 6(3) or (4).

Article 11
Information on removal and replacement of parts, components and materials present in vehicles

1. From [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation], manufacturers shall provide waste management operators and repair and maintenance operators unrestricted, standardised and non-discriminatory access to the information listed in Annex V, enabling access to, and safe removal and replacement of, the following:

   (a) electric vehicle batteries incorporated in the vehicle;

   (b) e-drive motors incorporated in the vehicle;

   (c) parts, components and materials which contain the fluids and liquids listed in Part B of Annex VII and which are contained in vehicles;

   (d) parts and components listed in Part C of Annex VII contained in vehicles;

   (e) parts and components, containing the critical raw materials as referred to in Article 27(1), point (b), of Regulation (EU) [CRM Act] at the time of the type-approval of the vehicle;

   (f) digitally coded components and parts in a vehicle, where such coding prevents their repair, maintenance or replacement in another vehicle.

2. Manufacturers shall ensure cooperation with the authorised treatment operators and repair and maintenance operators by establishing necessary communication platforms to provide and keep up-to-date the information referred to in paragraph 1 and the information specified in Annex V.

   The manufacturers shall provide the information referred to in the first subparagraph free of charge. The manufacturers may collect charges from waste management operators and repair and maintenance operators to the amount necessary to cover the administrative costs for making the required information accessible through communication platforms.

3. The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend Annex V by revising the list of parts, components and materials of vehicles and scope of information to be provided by the manufacturers.

Article 12
Labelling of parts, components and materials present in vehicles

1. Manufacturers and their suppliers shall use the nomenclature of the component and material coding standards listed in points 1 to 3 of Annex VI for the labelling and identification of parts, components and materials of vehicles.

2. Manufacturers shall ensure that e-drive motors containing permanent magnets bear a conspicuous, clearly legible and indelible label indicating the information listed in point 4 of Annex VI.

3. The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend Annex VI in order to adapt it to technical and scientific progress.

Article 13
Circularity Vehicle Passport

1. From [*OP: please insert a date = the first day of the month following 84 months after entry into force of the Regulation*] each vehicle placed on the market shall have a circularity vehicle passport, which shall be aligned with and, where possible, integrated in other vehicle related environmental passports established under Union law.

2. The circularity vehicle passport shall contain the information referred to in Article 11 of this Regulation in digital format and shall be accessible free of charge.

3. The manufacturer placing the vehicle on the market shall ensure that the information in the circular vehicle passport is accurate, complete and up to date.

4. All information included in the circularity vehicle passport shall comply with the rules established by the Commission under paragraph 6 and shall be:

   (a) based on open standards;

   (b) developed with an interoperable format;

   (c) transferable through an open interoperable data exchange network without vendor lock-in;

   (d) machine-readable, structured, and searchable.

5. The circularity vehicle passport of a vehicle that has become an end-of-life vehicle shall cease to exist at the earliest 6 months after the certificate of destruction for that end-of-life vehicle was issued.

6. The Commission shall adopt implementing acts laying down rules on the following:

   (a) the manner and technical specification of the solution to be used for accessing the circularity vehicle passport;

   (b) the technical design and operation requirements for the circularity vehicle passport, including rules on:

      (i) the interoperability of the circularity vehicle passport with other passports required by Union legislation;

      (ii) the storage and processing of information included in the circularity vehicle passport;

      (iii) the availability of the circularity vehicle passport after the manufacturer responsible for the fulfilment of the obligations set out in paragraph 3 ceases to exist or ceases its activity in the Union;

   (c) the introduction, modification and updating of information included in the circularity vehicle passport by third parties other than the manufacturer;

   (d) the location of the data carrier or other identifier enabling access to the circularity vehicle passport of the vehicle.

   When laying down the rules referred to in the first subparagraph, the Commission shall take into account the need to ensure a high level of security and privacy.

The implementing acts referred to in the first subparagraph of this Article shall be adopted in accordance with the examination procedure referred to in Article 51(2).

CHAPTER IV
MANAGEMENT OF END-OF-LIFE OF VEHICLES

SECTION 1
GENERAL PROVISIONS

Article 14
Competent authority

1. Member States shall designate one or more competent authorities responsible for the obligations under this Chapter, in particular for monitoring and verifying compliance of producers and producer responsibility organisations with their obligations as set out in Articles 15 to 36.

2. Each Member State may designate one contact point, among the competent authorities referred to in the paragraph 1, for the purpose of communicating with the Commission.

3. Member States shall lay down the details of the competent authorities' organisation and operation, including the administrative and procedural rules for:

   (a) the registration of producers in accordance with Article 17;

   (b) the authorisation of producers and producer responsibility organisations in accordance with Article 19;

   (c) the oversight of the implementation of extended producer responsibility obligations in accordance with Articles 16 and 20;

   (d) the collection of data on vehicles and end-of-life vehicles in accordance with Articles 17(12) and 49(6);

   (e) making information available in accordance with Article 49.

4. By [*OP: Please insert the date = the last day of the month following 3 months after the date of entry into force of this Regulation*], Member States shall notify the Commission of the names and addresses of the competent authorities designated pursuant to paragraph 1. Member States shall inform the Commission without undue delay of any changes to the names or addresses of those competent authorities.

Article 15
Authorised treatment facilities

1. Without prejudice to Directive 2010/75/EU, any establishment or undertaking that intends to carry out treatment operations on end-of-life vehicles shall obtain a permit from the competent authority in accordance with Article 23 of Directive 2008/98/EC and shall comply with the conditions laid down in that permit.

2. In order to issue a permit referred to in paragraph 1, the competent authority shall verify whether the establishment or undertaking has the technical, financial and

organisational capacity that is necessary to comply with the obligations set out in Article 27.

3. Permits referred to in paragraph 1 shall indicate that the treatment facilities have the competence to issue a certificate of destruction, as referred to in Article 25.

4. The competent authority shall ensure that the conditions of, and the procedures for the granting of, the permit are fully coordinated where more than one competent authority or more than one establishment or undertaking intending to carry out treatment operations on end-of-life vehicles is involved in those permit procedures.

SECTION 2
EXTENDED PRODUCER RESPONSIBILITY

Article 16
Extended producer responsibility

From [*OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation*] producers shall have extended producer responsibility for vehicles that they make available on the market for the first time within the territory of a Member State. The scheme established by producers to exercise that responsibility shall be consistent with Articles 8 and 8a of Directive 2008/98/EC and comply with the requirements of this Chapter.

The extended producer responsibility shall include the obligation for producers to ensure that:

(a) vehicles which they have made available on the market for the first time within the territory of a Member State and which become end-of-life vehicles

  (i) collected in accordance with Article 23;

  (ii) treated in accordance with Article 27;

(b) the waste management operators treating end-of-life vehicles referred to in point (a) meet the targets laid down in Article 34.

Article 17
Register of producers

1. By [OP: Please insert the date = the last day of the month following 35 months after the date of entry into force of this Regulation] Member States shall establish a register of producers which shall serve to monitor compliance of producers with the requirements of this Chapter.

   The register shall provide links to other national registers of producers' websites to facilitate, in all Member States, registration of producers or appointed representatives for the extended producer responsibility.

2. Producers shall register in the register referred to in paragraph 1. They shall to that end submit an application for registration in each Member State where they make a vehicle available on the market for the first time.

   Producers shall submit the application for registration via an electronic data-processing system as referred to in paragraph 8, point (a).

Producers shall only make available vehicles on the market of a Member State, if they or, in case of authorisation, their appointed representatives for the extended producer responsibility, are registered in such Member State.

3. The application for registration shall include the information listed in Annex VIII. Member States may request additional information or documents, as necessary, to use the register of producers in an efficient manner.

4. By way of derogation from paragraph 3, the information referred to in point 1 (d) of Annex VIII shall be provided either in the application for registration under paragraph 3 or in the application for authorisation under Article 19.

5. Where a producer has appointed a producer responsibility organisation in accordance with Article 18, the obligations under this Article shall be met by that organisation *mutatis mutandis* unless otherwise specified by the Member State in which the vehicle has been made available on the market for the first time.

6. The obligations under this Article may be fulfilled on a producer's behalf by an appointed representative for the extended producer responsibility.

7. Member States may decide that the registration procedure pursuant to this Article and the authorisation procedure pursuant to Article 19 constitute a single procedure, provided that the application for authorisation meets the requirements set out in paragraphs 3 to 6 of this Article.

8. The competent authority shall:

   (a) make available on its website information about the application process via an electronic data-processing system;

   (b) grant registrations and provide a registration number within a maximum period of 12 weeks from the moment that all the information required under paragraphs 2 and 3 is provided.

9. The competent authority may:

   (a) lay down modalities with regard to the requirements and process of registration without adding substantive requirements to those laid down in paragraphs 2 and 3;

   (b) charge cost-based and proportionate fees to producers for the processing of the applications referred to in paragraph 2.

10. The competent authority may refuse to register a producer or withdraw the producer's registration where the information referred to in paragraph 3 and related documentary evidence are not provided or are not sufficient, or where the producer no longer meets the requirements laid down in Annex VIII, point 1 (d).

    The competent authority shall withdraw the producer's registration if the producer has ceased to exist.

11. The producer, or, where applicable, the producer's appointed representative for the extended producer responsibility or the producer responsibility organisation appointed on behalf of the producers it represents shall without undue delay notify the competent authority of any changes to the information contained in the registration and of any permanent cessation as regards the making available on the market within the territory of the Member State of the vehicles referred to in the registration.

12. The producer or, where applicable, the producer's appointed representative for the extended producer responsibility or the producer responsibility organisation shall report to the competent authority responsible for the register on the performance of extended producer responsibility obligations.

Article 18
Producer Responsibility Organisation

1. Producers may choose to fulfil their extended producer responsibility obligations either individually or may entrust a producer responsibility organisation authorised in accordance with Article 19 to fulfill the extended producer responsibility obligations on their behalf.

2. Producer responsibility organisations shall ensure the confidentiality of the data in their possession as regards proprietary information or information directly attributable to individual producers or their appointed representatives for the extended producer responsibility.

3. In addition to the information referred to in Article 8a(3), point (e), of Directive 2008/98/EC, producer responsibility organisations shall publish on their websites at least each year, subject to commercial and industrial confidentiality, the information on the collection of end-of-life vehicles and achievement of targets on reuse and recycling, reuse and recovery and plastic recycling by the producers which entrusted the producer responsibility organisation.

4. Producer responsibility organisations shall ensure a fair representation of producers and waste management operators in their governing bodies.

Article 19
Authorisation on fulfilment of extended producer responsibility

1. A producer, in the case of individual fulfilment of extended producer responsibility obligations, and producer responsibility organisations appointed in the case of collective fulfilment of extended producer responsibility obligations, shall apply for an authorisation from the competent authority.

2. The authorisation shall be granted only where it is demonstrated that the requirements laid down in Article 8a(3), points (a) to (d), of Directive 2008/98/EC are complied with and the measures put in place by the producer or producer responsibility organisation are sufficient to meet the obligations set out in this Chapter with regard to the number of vehicles made available on the market for the first time within the territory of a Member State by the producer or producers on whose behalf the producer responsibility organisation acts.

3. Member States shall, in their measures laying down administrative and procedural rules referred to in Article 14(3), point (b), include the details of the authorisation procedure, which may differ according to whether it relates to individual or collective fulfilment of the extended producer responsibility obligations, and the modalities for verifying compliance of producers or producer responsibility organisations, including the information to be provided by producers or producers responsibility organisations to that end.

4. The producer or the producer responsibility organisations shall notify the competent authority without undue delay of any changes to the information contained in the

authorisation, of any changes that concern the terms of the authorisation or of the permanent cessation of operations.

5. The self-control mechanism provided for in 8a(3), point (d), of Directive 2008/98/EC shall be carried out regularly, and at least every 3 years, and upon the request by the competent authority, in order to verify that the provisions in that point are complied with and the conditions for authorisation referred to in paragraph 2 continue to be met. The producer or the producer responsibility organisation shall, upon request, present a self-control report and, where necessary, the draft corrective action plan to the competent authority. Without prejudice to the competencies under paragraph 6, the competent authority may make observations on the self-control report and on the draft corrective action plan, and shall communicate any such observations to the producer or the producer responsibility organisation. The producer or producer responsibility organisation shall draw up and implement the corrective action plan based on those observations.

6. The competent authority may decide to revoke the authorisation if the producer or producer responsibility organisation no longer fulfils the requirements with regard to the organisation of the collection and treatment of end-of-life, fails in relation to reporting to the competent authority, fails to notify the competent authority of any changes that concern the terms of the authorisation, or has ceased operations.

Article 20
Financial responsibility of producers

1. The financial contributions paid by the producer shall cover the following costs related to the vehicles that the producer makes available on the market:

   (a) the costs of the collection of end-of-life vehicles that is necessary to meet the requirements in Articles 23 to 26 and the costs of the treatment of end-of-life vehicles that is necessary to meet the requirements in Articles 27 to 30, 34 and 35, provided that they are not covered by the revenues of waste management operators linked to the sales of used spare parts and used spare components, of depolluted end-of-life vehicles, or of secondary raw materials recycled from end-of-life vehicles;

   (b) the costs of conducting awareness raising campaigns aimed to improve collection of end-of-life vehicles;

   (c) the costs of establishing notification system referred to in Article 25;

   (d) the costs of data gathering and reporting to the competent authorities.

2. The competent authority shall, in close cooperation with producers, producer responsibility organisations and waste management operators, monitor:

   (a) the average costs of collection, recycling and treatment operations and the revenues of waste management operators;

   (b) the level of financial contributions to be paid by the producers to the producer responsibility organisations appointed in the case of collective fulfilment of extended producer responsibility obligations so that the costs are fairly allocated between all interested operators.

3. The financial contributions paid by the producers making available on the market special purpose vehicles shall cover only these costs referred to in point (a) of paragraph 1 that concern collection and depollution of such vehicles.

4. In the case of individual fulfilment of extended producer responsibility obligations, the producers shall provide a guarantee for vehicles that they make available on the market for the first time in the territory of a Member State. That guarantee shall ensure that the operations referred to in paragraph 1 relating to those vehicles will be financed.

The amount of the guarantee shall be determined by the Member States in which the vehicle has been made available on the market for the first time taking into account criteria laid down in Article 21.

The guarantee may take the form of participation by the producer in appropriate schemes for the financing of the management of end-of-life vehicles, a recycling insurance or a blocked bank account.

Article 21
Fee modulation

1. In the case of a collective fulfilment of extended producer responsibility obligations, producer responsibility organisations shall ensure that the financial contributions paid to them by producers are modulated by taking into account the following:

(a) the weight of the vehicle;

(b) the type of drivetrain;

(c) the rate of recyclability and reusability of the vehicle type to which the vehicle belongs, based on the information submitted to the type-approval authority in accordance with Article 4;

(d) the time needed to dismantle the vehicle at an authorised treatment facility, especially for parts and components which need to be removed prior to shredding under Article 30;

(e) the share of materials and substances preventing a high-quality recycling process, such as adhesives, composite plastics, or carbon-reinforced materials;

(f) the percentage of recycled content of materials listed in Articles 6 and 10 used in the vehicle;

(g) the presence and amount of substances referred to in Article 5(2).

2. The Commission is empowered to adopt delegated acts in accordance with Article 50 supplementing this Regulation by establishing detailed rules on how the criteria provided for in paragraph 1 are to be applied.

Article 22
Cost allocation mechanism for vehicles becoming end-of-life vehicles in another Member State

1. Where a vehicle becomes an end-of-life vehicle in another Member State than the Member State within whose territory the vehicle was made available on the market for the first time, the producer of that vehicle or, where appointed in accordance with Article 18, the producer responsibility organisation shall ensure that the net costs of

waste management operations referred to in Article 20 incurred by waste management operators in other Member States are covered.

2. A producer or, where appointed in accordance with Article 18, a producer responsibility organisation shall:

(a) designate by a written mandate an appointed representative for the extended producer responsibility in each Member State;

(b) establish cross-border cooperation mechanisms with the waste management operators carrying out waste management operations referred to in Article 20.

3. The Member State where the vehicle became an end-of-life vehicle shall monitor producers' or, where appointed in accordance with Article 18, producer responsibility organisations' compliance with paragraphs 1 and 2. The monitoring shall be based on the information reported and verified by producers' or, where appointed in accordance with Article 18, producer responsibility organisations', to the competent authorities on the implementation of paragraphs 1 and 2, in particular on the calculation and allocation of costs for the management of end-of-life vehicles referred to in paragraph 1, with due regard for business confidentiality and other concerns regarding competitiveness.

4. Where necessary to ensure compliance with this Article and avoid distortion of the single market, the Commission is empowered to adopt delegated acts in accordance with Article 50 this Regulation by laying down detailed rules on the obligations of the producers, Member States and waste management operators and the features of the mechanisms referred to in paragraph 1.

SECTION 3
COLLECTION OF END-OF-LIFE VEHICLES

Article 23
Collection of end-of-life vehicles

1. The producers or, where appointed in accordance with Article 18, producer responsibility organisations shall set up, or participate in the setting up of, collection systems, including collection points, for all end-of-life vehicles belonging to vehicle categories that they have made available for the first time on the market in the territory of a Member State.

Member States shall adopt the necessary measures to ensure that producers or, where appointed in accordance with Article 18, producer responsibility organisations set up collection systems for all end-of-life vehicles.

2. The producers or, where appointed in accordance with Article 18, producer responsibility organisations shall ensure that collection systems referred to in paragraph 1:

(a) cover the whole territory of the Member State;

(b) ensure adequate availability of authorised treatment facilities, taking into account population size and density, expected volume of end-of-life vehicles, not being limited to areas where the collection and subsequent management is most profitable;

(c) ensure collection of waste parts from repairs of vehicles;

(d) enable collection of end-of-life vehicles of every brand, irrespective of their origin;

(e) enable the delivery of all end-of-life vehicles free of charge to authorised treatment facilities as provided in Article 24(2).

3. Producers or, where appointed in accordance with Article 18, producer responsibility organisations shall carry out educational campaigns promoting the collection system for end-of-life vehicles and informing about environmental consequences of improper collection and handling of end-of-life vehicles.

4. Member States may authorise waste management operators other than authorised treatment facilities to set up collection points for end-of-life vehicles.

The waste management operator operating the collection point shall:

(a) ensure that the collection point meets the conditions for storage of end-of-life vehicles, laid down in Part A of Annex VII;

(b) be authorised by the competent authorities referred to in Article 14 to collect end-of-life vehicles and be registered in the respective register;

(c) guarantee that all collected end-of-life vehicles are transferred to an authorised treatment facility within one year from receipt of the end-of-life vehicle; and

(d) meet all other applicable conditions for storage of waste laid down in national law.

5. The waste management operators, including authorised treatment facilities, shall issue a document in electronic format, confirming receipt of an end-of-life vehicle, to the vehicle owner, and provide it through an electronic notification procedure established in accordance with Article 25(2) to the relevant authorities of the Member State, including the competent authorities designated under Article 14.

Article 24
Delivery of end-of-life vehicles to authorised treatment facilities

1. All end-of-life vehicles shall be delivered for treatment to authorised treatment facilities.

2. Delivery of an end-of-life vehicle to an authorised treatment facility shall be free of charge for the last owner of a vehicle unless the end-of-life vehicle lacks any of the essential vehicle parts or components, except the electric vehicle battery, or contains waste which has been added to the end-of-life vehicle.

Article 25
Certificate of destruction

1. Authorised treatment facilities shall issue a certificate of destruction for every treated end-of-life vehicle to the last owner of the end-of-life vehicle. The certificate of destruction shall contain the information listed in Annex IX.

2. The certificate of destruction shall be issued in an electronic format and provided through an electronic notification procedure to the relevant authorities of the Member State, including the competent authorities designated under Article 14.

3. In case the end-of-life vehicle, for which a certificate of destruction has been issued in a Member State, is registered in another Member State, the vehicle registration authorities of the Member State where the certificate of destruction was issued shall inform the relevant vehicle registration authorities of the Member State where the vehicle is registered that a certificate of destruction has been issued for the vehicle in question.

4. The relevant authorities of a Member State shall cancel the registration of an end-of-life vehicle only after receiving the certificate of destruction for that vehicle.

5. Certificates of destruction issued in a Member State shall be recognised in all other Member States.

Article 26
Obligations for the vehicle owner

The owner of a vehicle that becomes an end-of-life vehicle shall:

(a) deliver the end-of-life vehicle to an authorised treatment facility or, in cases referred to in Article 23(4), to a collection point, without undue delay after receiving information that the vehicle meets any of the criteria for irreparability laid down in Part A, points 1 and 2, of Annex I;

(b) present a certificate of destruction to the relevant registration authority.

SECTION 4
TREATMENT OF END-OF-LIFE VEHICLES

Article 27
Obligations for authorised treatment facilities

1. Authorised treatment facilities shall ensure that all end-of-life vehicles and their parts, components and materials, as well as waste parts from repairs of vehicles, are accepted and treated in compliance with the conditions set out in their permits, as well as in accordance with this Regulation.

2. Authorised treatment facilities shall ensure that all treatment for end-of-life vehicles comply, as a minimum, with Articles 28, 29, 30, 31, 34 and 35 and Annex VII of this Regulation, and shall apply best available techniques as defined in Article 3(10) of Directive 2010/75/EU.

3. Authorised treatment facilities shall:

   (a) store, even temporarily, all end-of-life vehicles and their parts, components and materials in compliance with the minimum requirements set out in Part A of Annex VII;

   (b) depollute all end-of-life vehicles, in compliance with Article 29 and the minimum requirements set out in Part B of Annex VII;

   (c) remove the parts and components listed in Part C of Annex VII from the end-of-life vehicle, prior to shredding shredding or compacting by means of manual dismantling or (semi-) automated disassembly in a non-destructive way for components with a reuse, remanufacturing or refurbishment potential;

(d) treat all end-of-life vehicles and their parts, components and materials in accordance with the waste hierarchy and the general requirements laid down in Article 4 of Directive 2008/98/EC, and with Articles 32, 34, 35 and 36 of this Regulation.

In addition to the requirements set out in Article 35 of Directive 2008/98/EC, the authorised treatment facilities shall electronically store the record of the performed treatment operations of end-of-life vehicles for 3 years, and be able to present this information, upon request by relevant national authorities.

4. The Commission is empowered to adopt delegated acts in accordance with Article 50 to amend Annex VII by adapting the minimum treatment requirements for end-of-life vehicles to scientific and technical progress.

5. Member States shall encourage authorised treatment facilities to introduce certified environmental management systems in accordance with Regulation (EC) No 1221/2009.

Article 28
General requirements for shredding

1. From [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation] authorised treatment facilities and other waste management operators shall request that end-of-life vehicles delivered to them for shredding are accompanied by the following:

(a) documentation which includes the Vehicle Identification Number (VIN) for the end-of-life vehicle concerned;

(b) a copy of the certificate of destruction that has been issued for the end-of-life vehicle concerned.

2. Authorised treatment facilities and waste management operators receiving end-of-life vehicles not compliant with the requirements set out in paragraph 1 shall:

(a) report the non-compliance to the competent authority;

(b) refrain from using those end-of-life vehicles in their shredding operations unless the competent authority authorises such operations.

3. Waste management operators conducting shredding of end-of-life vehicles shall not mix end-of-life vehicles, their parts, components and materials with packaging waste and waste electrical and electronic equipment.

Article 29
Depollution of end-of-life vehicles

1. As soon as possible after delivery of an end-of-life vehicle to the authorised treatment facility, that facility shall depollute those vehicles before they are further treated, in compliance with the minimum requirements set out in Part B of Annex VII.

2. The fluids and liquids listed in Part B of Annex VII shall be separately collected and stored, in line with the requirements set out in Part A of Annex VII. Waste oils shall be collected and stored separately from the other fluids and liquids and be treated in accordance with Article 21 of Directive 2008/98/EC.

3. The parts, components and materials containing substances referred to in Article 5(2) shall be removed from the end-of-life vehicles, and handled in accordance with Article 17 of Directive 2008/98/EC.

4. The batteries shall be separately removed from end-of-life vehicles and stored in a designated area for further treatment in accordance with Article 70(3) of Regulation (EU) 2023/ [OP: Batteries Regulation].

5. The parts, components and materials, that have been depolluted, shall be handled and labelled in accordance with Articles 18 and 19 of Directive 2008/98/EC.

6. The authorised treatment facility shall document the depollution of end-of-life vehicles, by recording the information listed in Part B, point 3, of Annex VII.

Article 30

Mandatory removal of parts and components for reuse and recycling prior to shredding

1. From [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation] authorised treatment facilities shall ensure that the parts and components listed in Part C of Annex VII, are removed from an end-of-life vehicle prior to shredding, after the depollution operations referred to in Article 29, have been completed.

2. Paragraph 1 shall not apply if an authorised treatment facility demonstrates, that post-shredder technologies separates materials from parts and components listed in Part C, entries 13 to19, of Annex VII, as efficiently as manual dismantling processes or semi-automated disassembly processes.

   For the purposes of the first subparagraph, the authorised treatment facility shall provide the information listed in Part G of Annex VII.

3. In addition to the obligations set out in Article 35 of Directive 2008/98/EC, the authorised treatment facilities shall maintain records of the end-of-life vehicles that are processed without the prior removal of parts, components and materials in accordance with paragraph 2, including the name and address of the treatment facilities, and the Vehicle Identification Number (VIN) of the end-of-life vehicles concerned.

   The authorised treatment facilities shall provide the information in the records referred to in the first subparagraph to the competent authority in accordance with Article 49(6).

Article 31

Requirements concerning the removed parts and components

1. All parts and components that have been removed from an end-of-life vehicle pursuant to Article 30(1), shall be assessed to determine whether they are fit for:

   (a) reuse, in accordance with Part D, point 1(a), of Annex VII;

   (b) remanufacturing or refurbishment, in accordance with Part D, point 1(b), of Annex VII;

   (c) recycling; or

(d) other treatment operations, taking into account the specific treatment requirements in Part F of Annex VII

The parts and components that are fit for reuse, remanufacturing or refurbishment shall not be considered waste.

The assessment shall be carried out taking into account in particular technical feasibility of conducting the processes referred to in the first subparagraph and vehicle safety requirements.

Documentation confirming the conducted assessment shall be, upon request, made available to the relevant national authorities, including when the parts and components are transported for the purpose of reuse, remanufacturing or refurbishment.

2. The removed parts and components fit for reuse, remanufacturing or refurbishment shall be:

(e) labelled in compliance with Part D, point 2, of Annex VII;

(f) accompanied by a warranty, if the parts and components are transferred to or used by another person.

3. The parts and components listed in Part E of Annex VII shall not be reused.

Article 32
Trade of used, remanufactured or refurbished parts and components

From [*OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation*] any person trading used, remanufactured or refurbished spare parts and components shall, at the point of sale:

(a) ensure that parts and components are labelled in compliance with Part D, point 2, of Annex VII;

(b) provide a warranty for the used, remanufactured or refurbished parts and components.

Article 33
Reuse, remanufacturing and refurbishment of parts and components

1. From [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation] Member States shall take necessary incentives to promote the reuse, remanufacturing and refurbishment of parts and components, whether removed during the use or end-of-life phase of a vehicle.

The incentives referred to in the first subparagraph 1 may include:

(a) a requirement for maintenance and repair operators to offer customers to repair a vehicle with used, remanufactured or refurbished spare parts and components alongside offer to repair the vehicle with new parts and components, provided that such a requirement is formulated not to create excessive costs or administrative burdens for micro- and small enterprises;

(b) the use of economic incentives, including the establishment of a reduced rate of value added tax for used, remanufactured or refurbished spare parts and components.

The Commission shall facilitate the exchange of information and sharing of best practices among Member States on such incentives.

2. The Commission shall monitor the effectiveness of the incentives given by Member States.

Article 34
Reuse, recycling and recovery targets

1. From [OP: Please insert the date = the first day of the calendar year following 36 months after the date of entry into force of the Regulation], Member States shall ensure that the following targets are met by the waste management operators:

   (a) the reuse and recovery, as calculated together, shall be a minimum of 95 %, by average weight per vehicle, excluding batteries, and year;

   (b) the reuse and recycling, as calculated together, shall be a minimum of 85 %, by average weight per vehicle, excluding batteries, and year.

2. From [OP: please insert a date = the first day of the calendar year following 60 months after the date of entry into force of the Regulation] Member States shall ensure that waste management operators achieve a yearly target for the recycling of plastics of at least 30 % of the total weight of plastics contained in the vehicles delivered to the waste management operators.

Article 35
Ban on landfilling of non-inert waste

From [*OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation*] fractions from shredded end-of-life vehicles, containing non-inert waste, that are not processed by the post-shredder technology, shall not be accepted in a landfill.

Article 36
Shipments of end-of-life vehicles

1. Treatment of end-of-life vehicles may be undertaken outside the Union, provided that the shipment of end-of-life vehicles is in compliance with Regulation (EC) No 1013/2006.

2. Shipments of end-of-life vehicles from the Union to a third country in accordance with paragraph 1 shall only count towards the fulfilment of obligations and targets set out in Article 34 if the exporter of the end-of-life vehicles provides documentary evidence approved by the competent authority of destination demonstrating that the treatment took place in conditions that are broadly equivalent to the requirements laid down in this Regulation and to human health and environmental protection requirements laid down in other Union legislation.

CHAPTER V
USED VEHICLES AND THEIR EXPORT

SECTION 1
STATUS OF USED VEHICLES

Article 37
Distinction between used vehicles and end-of-life vehicles

For the purpose of transferring ownership of a used vehicle, the vehicle owner shall be able to demonstrate to any natural or legal person interested in acquiring ownership of the concerned vehicle or to the competent authorities that the vehicle is not an end-of-life vehicle. When assessing the status of a used vehicle, the vehicle owner, other economic operators and competent authorities shall verify if the criteria laid down in Annex I are met in order to determine whether it is not an end-of-life vehicle.

SECTION 2
EXPORT OF USED VEHICLES

Article 38
Controls and requirements on the export of used vehicles

1. From [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation] used vehicles to be exported shall be subject to the controls and requirements laid down in this Section.

2. This Section is without prejudice to any other provisions of this Regulation as well as to other Union legal acts governing the release for export of goods, in particular Regulation (EU) No 952/2013 and its Articles 46, 47, 267 and 269.

3. Used vehicles may be exported only if they are:

   (a) not end-of-life vehicles based on the criteria listed in Annex I;

   (b) considered roadworthy in the Member State where the vehicles were last registered, in accordance with Article 5(1), points (a) and (b), and Article 8 of Directive 2014/45/EU.

4. The following information shall be provided or made available to customs authorities for each used vehicle to be exported:

   (a) the Vehicle Identification Number (VIN) of the used vehicle and the identification of the Member State where the vehicle was last registered;

   (b) a statement confirming that the used vehicle fulfills the requirements set out in paragraph.

5. In order to verify the compliance with this Section on allowing a used vehicle to be released for export:

   (a) until the interconnection referred to in Article 45(4) is operational, customs authorities shall exchange information and cooperate with competent authorities in accordance with Article 44, and, where necessary, shall take into

account such exchange of information and cooperation in order to allow a used vehicle to be released for export;

(b) once the interconnection referred to in Article 45(4) is operational, Articles 39, 40(2) and (3) and 42(3) shall apply, and notifications and other exchanges under Articles 41 to 43 shall take place by means of those electronic systems.

6. A used vehicle to be exported shall not:

(a) be placed under a customs procedure based on a simplified declaration pursuant to Article 166 of Regulation (EU) No 952/2013;

(b) be subject to an entry in the declarant's records pursuant to Article 182 of Regulation (EU) No 952/2013;

(c) be subject to self-assessment pursuant to Article 185 of Regulation (EU) No 952/2013.

7. The Commission is empowered to adopt delegated acts, in accordance with Article 50 of this Regulation, to amend the criteria listed in Annex I determining whether a used vehicle is an end-of-life vehicle.

Article 39
Automated verification of the information on vehicle status

1. Before releasing used vehicles for export, customs shall verify electronically and automatically via the electronic systems referred to in Article 45, that based on the Vehicle Identification Number and the information on the Member State of last registration, the vehicle is considered roadworthy in accordance with Article 38(3), point (b).

2. Where the information provided or made available to customs does not correspond to the information in the national vehicle registers and national electronic systems on roadworthiness pursuant to paragraph 1, customs authorities shall not release that vehicle for export and shall inform the economic operator concerned thereof through these systems.

Article 40
Risk management and customs controls

1. For the purpose of enforcing the provisions laid down in Article 38, customs authorities shall carry out controls on used vehicles to be exported in accordance with Articles 46 and 47 of Regulation (EU) No 952/2013. Without prejudice to Article 39, such controls shall primarily be based on risk analysis, as established in Article 46(2) of Regulation (EU) No 952/2013.

2. In addition to the risk management referred to in paragraph 1, once the interconnection referred to in Article 45 is operational, customs shall use these electronic systems referred to in Article 45(1) to determine whether a used vehicle to be exported complies with specific conditions linked to the protection of the environment or road safety in accordance with paragraph 3 of this Article.

3. The Commission is empowered to adopt delegated acts in accordance with Article 50 to supplement this Regulation by setting out the compliance conditions referred to in paragraph 2, including specific conditions applied to the import of used vehicles by the third country of import linked to the protection of the environment and road

safety, when such conditions have been notified by that third country to the Commission. Those conditions shall be verifiable against the information available in the electronic systems referred to in Article 45(1).

Article 41
Suspension

1. Where there are reasonable grounds to believe that a used vehicle to be exported may not comply with the requirements of this Section, the customs authorities shall suspend the release for export of that used vehicle. They shall also immediately notify the competent authorities of the suspension and transmit all relevant information needed to determine whether the used vehicle complies with the requirements of this Regulation and may be released for export.

2. For the purpose of determining whether a used vehicle, subject to suspension as referred to in paragraph 1, complies with this Regulation, the competent authorities may request, from any person involved in the export of that used vehicle, additional information, including information on the sale or transfer of vehicle ownership, such as a copy of the invoice or contract, and documentary evidence that that used vehicle is destined for further use.

Article 42
Release for export

1. Where the release for export of a used vehicle has been suspended in accordance with Article 41, that used vehicle shall be released for export where all the other requirements and formalities relating to such release have been fulfilled and where any of the following conditions is satisfied:

   (a) the competent authorities have not requested, within four working days from the beginning of the suspension, the customs authorities to maintain the suspension, or

   (b) the competent authorities have informed the customs authorities of their approval for release for export pursuant to this Section.

2. The release for export shall not be deemed proof of compliance with Union law and, in particular, with this Regulation or Regulation (EU) No 952/2013.

3. After each release for export of a used vehicle, customs authorities shall notify that release for export to the competent authority of the Member State where the vehicle in question was registered at the time of export.

Article 43
Refusal to release for export

1. Where the competent authority concludes that a used vehicle for which the suspension has been notified in accordance with Article 41 does not comply with this Section, they shall immediately require the customs authorities not to release it for export and notify them thereof.

2. Upon the notification from the competent authority pursuant to paragraph 1, the customs authorities shall not release the used vehicle for export.

Article 44
Cooperation among authorities and exchange of information

1. Member States shall mutually assist one another in the implementation of this Section through exchange of information at bilateral level, in particular for the purpose of verifying the status of a vehicle, including the verification of its registration status in the Member State in which it was previously registered.

2. Where appropriate, competent authorities of Member States shall also cooperate with administrative authorities from third countries. Such cooperation may include sharing of relevant information, conducting joint inspections, and other forms of mutual assistance as deemed necessary to ensure compliance with applicable laws and regulations governing the export of used vehicles.

3. Customs authorities and competent authorities of Member States shall cooperate in accordance with Article 47(2) of Regulation (EU) No 952/2013 and exchange information necessary for the fulfilment of their functions under this Regulation, including via electronic means. The customs authorities may communicate, in accordance with Article 12(1) and Article 16(1) of Regulation (EU) No 952/2013, confidential information acquired by the customs authorities in the course of performing their duties, or provided to the customs authorities on a confidential basis, to the competent authority of the Member State where the operator or trader is established.

4. Where the competent authorities have received information in accordance with paragraphs 1 to 3 of this Article, those competent authorities may communicate that information to competent authorities from other Member States.

5. Risk-related information shall be exchanged as follows:

   (a) between customs authorities in accordance with Article 46(5) of Regulation (EU) No 952/2013;

   (b) between customs authorities and the Commission in accordance with Article 47(2) of Regulation (EU) No 952/2013;

   (c) between customs authorities and competent authorities, including competent authorities from other Member States, in accordance with Article 47(2) of Regulation (EU) No 952/2013.

Article 45
Electronic systems

1. The MOVE-HUB electronic system developed by the Commission shall be used for exchanging Vehicle Identification Number and information on the vehicle registration and roadworthiness status between national vehicle registers and electronic systems on roadworthiness of the Member States, as well as, to interconnect to the EU Single Window Environment for Customs, where necessary for controls and requirements laid down in this Section.

2. The MOVE-HUB electronic system, referred to in paragraph 1 shall provide at least the following functionalities:

   (a) exchange the data in real-time with the national vehicle registers, national electronic systems on roadworthiness of the Member States interconnected with it;

(b) enable an automated electronic check of data provided in a roadworthiness certificate as referred to in Annex II of Directive 2014/45/EU of the date of first registration of a vehicle, as well as of the Member State where a vehicle was last registered, as referred to in Directive 1999/37/EC, to determine whether a used vehicle to be exported complies with the requirements set out in Article 38, Article 39(1) and Article 40;

(c) interconnect to the EU Single Window Environment for Customs, in accordance with Regulation (EU) 2022/2399 for the purpose of exchanging data and support the process of exchange of information referred to in Articles 39(1) and Article 40(2), as well as support the notifications referred to in Articles 41 to 43;

(d) for the purpose of cooperation with third countries under Article 44(2), allow electronic exchange of information with the competent authorities of third countries which have notified to the Commission pursuant to Article 40(2) the specific conditions for the import of used vehicles that they apply.

3. Member States shall interconnect their national vehicle registers and national electronic systems on roadworthiness with the MOVE-HUB electronic system referred to in paragraph 1. That interconnection shall be operational within 2 years after the adoption of the implementing act referred to in paragraph 5.

4. The Commission shall interconnect the MOVE-HUB system referred to in paragraph 1 to the EU Customs Single Window Certificate Exchange System established in Article 4 of Regulation (EU) 2022/2399, so that the automated controls referred to in Article 39 and Article 40(2) and the notifications referred to in Articles 41, 42 and 43 can be performed. That interconnection shall be operational within 4 years after the adoption of the implementing act referred to in paragraph 5.

5. The Commission shall adopt the implementing acts laying down the necessary arrangements for the implementation of the functionalities of the MOVE-HUB referred to in paragraph 2, including the technical aspects necessary for the interconnection of national electronic systems to the MOVE-HUB, the conditions of connection to MOVE-HUB, the data to be transmitted by the national systems and the format for the transmission of that data through the interconnected national systems.

The implementing acts shall be adopted in accordance with the examination procedure referred to in Article 51(2).

CHAPTER VI
ENFORCEMENT

Article 46
Inspections

1. Member States shall, for the purpose of enforcing this Regulation, inspect:

(a) authorised treatment facilities;

(b) repair and maintenance operators;

(c) other facilities and economic operators, which may treat end-of-life vehicles.

2. The inspections shall cover at least 10 % of the operators listed in paragraph 1, points (a) and (c), in each calendar year.

3. Member States shall also carry out inspections concerning export of used vehicles in order to verify compliance with Article 38.

Article 47
Enforcement cooperation at national level and between Member States

1. Member States shall establish, as regards all relevant competent authorities involved in the enforcement of this Regulation, effective mechanisms to enable those authorities to cooperate and coordinate domestically concerning the development and implementation of enforcement policies and activities related to monitoring vehicles registration, de-registration, suspension and cancellation of the registration as well as prevention of illegal treatment of end-of-life vehicles.

2. Member States shall cooperate, bilaterally and multilaterally, with one another in order to facilitate the prevention and detection of illegal treatment of end-of-life vehicles. They shall exchange relevant information on vehicles registration, de-registration and suspension and cancellation of the registration, through the electronic exchange system referred to in Article 45. They shall also exchange relevant information on authorised treatment facilities and repair and maintenance operators not permitted as authorised treatment facilities, and other facilities and economic operators, who may perform operations concerning treatment of end-of-life vehicles. They shall share experience and knowledge on enforcement measures within established structures.

   The exchange of vehicle registration data shall include access to and exchange of data on performance, and the nature and results of the checks carried out, with other Member States' competent authorities to facilitate the enforcement of this Regulation.

3. Member States shall notify to the Commission which members of their permanent staff that are responsible for the cooperation referred to in paragraph 2 of this Article and Article 44.

Article 48
Penalties

By [*OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation*] Member States shall lay down the rules on penalties applicable to infringements of Article 15(1), Article 16, Article 19(1), Article 22(1) and (2), Articles 23 and 24, Article 25(1) and (2), Articles 26 to 32, and Articles 34, 35, 37 and 38 of this Regulation, and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive. Member States shall, without delay, notify the Commission of those rules and of those measures and shall notify it, without delay, of any subsequent amendment affecting them.

Article 49
Reporting to the Commission

1. From [OP: Please insert the date = the first day of the month following 36 months after the date of entry into force of this Regulation] Member States shall make publicly available in an aggregated form for each calendar year and in the format

established by the Commission pursuant to paragraph 5, the following data, which shall be based on information and data received from producers, producer responsibility organisations and waste management operators:

(a) the number of vehicles registered in the Member State;

(b) the number of vehicles made available on the market for the first time in the territory of the Member State;

(c) the number and weight of end-of-life vehicles collected and depolluted in the Member State;

(d) the number and weight of end-of-life vehicles recycled in the territory of the Member State;

(e) the number and weight of end-of-life vehicles exported or shipped for further treatment to another Member State or a third country;

(f) the number of certificates of destruction issued;

(g) the total amount and weight of parts, components and materials removed from end-of-life vehicles for purpose of;

  (i) reuse;

  (ii) remanufacturing or refurbishment;

  (iii) recycling;

  (iv) recovery, including energy recovery;

  (v) disposal;

(h) the amount and weight of end-of-life vehicles treated in a different manner than indicated in point (d);

(i) the amount and weight of end-of-life-vehicles used for backfilling;

(j) the rates of the targets laid down in Article 34 attained by all waste management operators that are active in the Member State;

(k) use of the exemption provided for in Article 30(2), and how it was monitored by the reporting Member State;

(l) data on the producer responsibility organisations, including the names of the legal persons they represent;

(m) data on the implementation of Article 21.

Member States shall make the data referred to in paragraph 1 publicly available within 18 months of the end of the reporting period for which it is collected. The data shall be machine readable, sortable and searchable, and shall respect open standards for third party use. Member States shall notify the Commission when the data referred to in the first subparagraph is made available.

The first reporting period shall be the first calendar year after the adoption of the implementing act referred to in paragraph 5.

2. The data made available by Member States in accordance with paragraph 1 shall be accompanied by a quality check report. That information shall be presented in the format established by the Commission pursuant to paragraph 5.

3. Member States shall every 5 years draw up a report summarising:

(n) incentives introduced to promote the reuse, remanufacturing and refurbishment of parts and components in accordance with Article 33;

(a) the application of penalties and other sanctions envisaged in their national law for infringements of this Regulation adopted in accordance with Article 48, including a list of type of infringements notified and types of measures taken;

(b) results of inspections carried out in accordance with Article 46;

(c) the manner of application of definitions of 'end-of-life vehicle' and 'used vehicle', including practical difficulties encountered in that context.

Member States shall submit the report to the Commission within 6 months from the end of the five year period which it covers. The first report shall be provided to the Commission by [*OP: please insert a date = the first day of the month following 6 years after the date of entry into force of this Regulation*].

The Commission shall review the reports submitted by the Member States and, if appropriate, draw up reports on the received information in order to facilitate the exchange of information on best practices applied in the Member States.

4. For the purpose of monitoring the implementation of this Regulation, the Commission shall collect and review the information made available in accordance with this Article.

5. The Commission shall adopt implementing acts laying down:

(a) the methodology and rules for the calculation, verification and reporting of data in accordance with paragraph 1, including:

(i) the methodology for determining the amount and weight of parts, components and materials removed for purposes referred to in paragraph 1, points (g), (h) and (i);

(ii) the methodology for determining the weight of recycled waste, including determination of calculation points and measurement points, and, if necessary, possibilities of applying average loss rates;

(iii) the methodology for calculation and verification of the attainment of the reuse, recycling and recovery targets referred to in Article 34.

(b) the format for the reporting to the Commission referred to in paragraph 1, as well as the format for the quality check report.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 51(2).

6. Producers, producer responsibility organisations, waste management operators and other relevant economic operators provide competent authorities with accurate and reliable data allowing Member States to fulfil their reporting obligations under this Article.

CHAPTER VII
DELEGATED POWERS AND COMMITTEE PROCEDURE

Article 50
Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Articles 5(4), 6(3), 6(4), 7(3), 9(7), 11(3), 12(3), 21(2), 22(4), 27(4), 38(7) and 40(3) shall be conferred on the Commission for a period of 5 years from [*OP: Please insert the date = the date of entry into force of this Regulation*]. The Commission shall draw up a report in respect of the delegation of power no later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension no later than three months before the end of each period.

3. The delegation of power referred to in Articles 5(4), 6(3), 6(4), 7(3), 9(7), 11(3), 12(3), 21(2), 22(4), 27(4), 38(7) and 40(3) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.

5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6. A delegated act adopted pursuant to Articles 5(4), 6(3), 6(4), 7(3), 9(7), 11(3), 12(3), 21(2), 22(4), 27(4), 38(7) and 40(3) shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 51
Committee procedure

1. The Commission shall be assisted by the committee established by Article 39 of Directive 2008/98/EC. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

CHAPTER VIII
AMENDMENTS

Article 53
Amendments to Regulation (EU) 2019/1020

In Regulation (EU) 2019/1020, Annex II, points 10 and 11 are deleted.

Article 54
Amendments to Regulation (EU) 2018/858

Annex II to Regulation (EU) 2018/858 is amended in accordance with Annex X to this Regulation.

CHAPTER IX
FINAL PROVISIONS

Article 55
Review

1. By 31 December 203* [*OP: Please insert the date = the last day of the year following 95 months after the date of entry into force of this Regulation*], the Commission shall review and draw up a report on the application of this Regulation and its impact on the environment, human health and the functioning of the single market and submit it to the European Parliament and to the Council.

2. Taking account of technical progress and practical experience gained in Member States as well as any revision of Regulation (EC) No 1907/2006, the Commission shall, in its report, include an evaluation on the following aspects of this Regulation:

   (a) the need to extend the scope of this Regulation, in particular provisions of Chapters II and III, as well as Chapter IV Section II, to vehicles of categories L_3e, L_4e, L_5e, L_6e and L_7e as defined in Article 4(2), points (c) to (g), of the Regulation (EU) 168/2013 and vehicles of categories M_2, M_3, N_2, N_3 and O as defined in Article 4(1) of Regulation (EU) 2018/858;

   (b) the measures concerning provision of information on substances of concern present in vehicles and the need of introducing further provisions addressing substances of concern that may affect high-quality recycling of vehicles at their end-of-life;

   (c) the measures regarding management of end-of-life vehicles laid down in Chapter IV, including the levels of targets laid down in Article 34 and the need of their revision;

   (d) infringements and the effectiveness, proportionality and dissuasiveness of penalties as set out in Article 48;

   (e) the need to amend Article 5 of this Regulation.

Article 56
Repeal and transitional provisions

1. Directive 2000/53/EC is repealed with effect from [OP: Please insert the date = the first day of the month following 12 months after the date of entry into force of this Regulation].

   However, the following provisions of Directive 2000/53/EC shall continue to apply:

   (a) Article 4(2) until [OP: Please insert the date the last day of the month following 71 months after the date of entry into force of this Regulation];

   (b) Article 5(4), second subparagraph, Article 6(3), second sub-paragraph, Article 7(1), Article 8(3) and (4), until [OP: Please insert the date = the last day of the month following 35 months after the date of entry into force of this Regulation];

   (c) Article 7(2) point (b), until 31 December 20** [OP: Please insert the year = the last day of the year following 35 months after the date of entry into force of this Regulation];

   (d) Article 9, paragraphs (1a) sub-paragraphs 1 and 3, (1b) and (1d) until [OP: Please insert the date = *the last day of the month following* 35 months after the date of entry into force of this Regulation];

   (e) Article 9(1a), sub-paragraph two, until [OP: Please insert the date = the last day of the month following 59 months after the date of entry into force of the Regulation].

2. Directive 2005/64/EC is repealed with effect from [OP: Please insert the date = the last day of the month following 71 months after the date of entry into force of this Regulation].

   However, its Article 6(3) is repealed with effect from [*OP: Please insert the date = the last day of the month following 35 months after the date of entry into force of this Regulation*].

3. References to the repealed Directives shall be construed as references to this Regulation and shall be read in accordance with the correlation tables in Annex XI.

Article 57
Entry into force and application

1. This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

2. It shall apply from [OP: Please insert the date = the first day of the month following 12 months after the date of entry into force of this Regulation].

   However, Article 54 shall apply from [*OP: Please insert the date = the first day of the month following 72 months after the date of entry into force of this Regulation*].

This Regulation shall be binding in its entirety and directly applicable in the Member States.

Done at Brussels,

For the European Parliament	*For the Council*
The President	*The President*

LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

1.2. Policy area(s) concerned

1.3. The proposal/initiative relates to:

1.4. Objective(s)

1.4.1. General objective(s)

1.4.2. Specific objective(s)

1.4.3. Expected result(s) and impact

1.4.4. Indicators of performance

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

1.5.2. Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention, which is additional to the value that would have been otherwise created by Member States alone.

1.5.3. Lessons learned from similar experiences in the past

1.5.4. Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments

1.5.5. Assessment of the different available financing options, including scope for redeployment

1.6. Duration and financial impact of the proposal/initiative

1.7. Method(s) of budget implementation planned

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

2.2. Management and control system(s)

2.2.1. Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)

2.3. Measures to prevent fraud and irregularities

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

3.2.2. Estimated output funded with operational appropriations

3.2.3. Summary of estimated impact on administrative appropriations

3.2.3.1. Estimated requirements of human resources

3.2.4. Compatibility with the current multiannual financial framework

3.2.5. Third-party contributions

3.3. Estimated impact on revenue

FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Regulation of the European Parliament and of the Council on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC.

1.2. Policy area(s) concerned

Policy areas:	03 Single Market 09 Environment
Activities:	09 02 02 - Programme for Environment and Climate Action (LIFE) - Circular economy and quality of life 03 02 01 01 – Operation and development of the internal market of goods and services

1.3. The proposal/initiative relates to:

☑ **a new action**

☐ **a new action following a pilot project/preparatory action**[71]

☑ **the extension of an existing action**

☑ **a merger or redirection of one or more actions towards another/a new action**

1.4. Objective(s)

1.4.1. General objective(s)

Improve the functioning of the EU internal market by reducing the negative environmental impacts linked to the design, production, service life and end-of-life treatment of vehicles and contributing to the sustainability of the automotive and recycling sectors.

1.4.2. Specific objective(s)

Design and production - Facilitate and increase the removal, reuse, remanufacturing and recycling of materials, parts and components contained in vehicles. - Increase the use of recycled materials in the production of vehicles, thereby incentivising recycling, reducing strategic dependencies of raw materials and supporting the decarbonisation of the automotive industry. - Increase circularity for lorries, buses, trailers and certainL-category vehicles currently outside the scope of the ELV and 3R type-approval legislation. **End of life treatment** - Improve treatment of end-of-life vehicles by increasing the quantity and quality of materials re-used, remanufactured and recycled, thereby reducing the environmental footprint linked to the end-of-life stage.

[71] As referred to in Article 58(2)(a) or (b) of the Financial Regulation.

- Increase the collection of ELVs in the EU and ensure roadworthiness of used vehicles exported from the EU, so that the number of "missing vehicles" and their environmental footprint is reduced.

1.4.3. Expected result(s) and impact

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

- Better aligment of the production versus waste stages of vehicles
- Incentivising recycling, reducing strategic dependencies of raw materials and energy
- Supporting the decarbonisation of the automotive industry.
- Reducing the environmental footprint linked to the vehicles recycling.
- Reducing the EU external pollution footprint and road safety risks associated with the export of non-roadworthy used vehicles.
- Increase circularity and ensure proper treatment of vehicles currently out of scope.

1.4.4. Indicators of performance

Specify the indicators for monitoring progress and achievements.

- Improved recyclability and reusability of vehicles
- More streamlined dismantling information for treatment operators
- Lower repair costs from 2nd-hand spare parts
- Improved collection of vehicles, reduced exports of low-quality used vehicles and end-of-life vehicles
- Reduced number of vehicles treated illegally and informally
- Increased amounts of parts and components reused and recycled
- Increased amounts of materials recycled, recycled at higher quality and more critical and strategic materials recycled reducing dependencies,
- Reduced energy dependency in metal and plastic production
- Lower amounts of landfill
- Higher uptake levels of recycled content for plastics and possibly other materials in new vehicles
- Significant green house gas savings from improved resource efficiency
- Reduced air pollution and road accidents in importing countries from higher quality and roadworthy vehicles
- Lower repair costs for vehicle owners
- Increased revenues from improved collection and treatment
- Improved markets for secondary raw materials, especially plastics
- Reduced air pollution from increased plastics recycling
- Significant increase in employment.
- Reduced environmental externalities of mismanaged waste
- More legitimate income and increased tax revenue
- Improved reuse and recycling of vehicles currently outside scope

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

The detailed requirements would need to be adopted through implementing/delegated acts in a time horizon of 1-8 years. A series of actions in terms of mandates, delegated or implementing decisions and impact assessment reports will stem from this proposed regulation.

The actions will cover consistent definition and improved verification with recyclability, reusability, removability and circularity information requirements, recycled content declarations. For collection and treatment various provision require establishing further specification for collection and treatment, including calculations rules for reuse and recycling targets and electronic exchange of information between Member States to enable interoperable registers and streamlined customs controls. Further harmonisation elements relate to establishing uniform criteria for EPR fee modulation and cross-border EPR.

In more detail (timeline for task completion in months after entry-into-force):

- Improving the methodology for the determination of the 3R-rates (36 months),
- Improved risk assessment of the remaining hazardous substance exemptions with support of ECHA (24 months), transfer of battery related substance restriction exemptions to the Battery Regulation, general review and alignment with REACH/ "Omnibus Regulation" (96 months)
- Calculation and verification rules for recycled content of plastics (24 months), feasibility study for the setting recycled content targets for steel (36 months) and other materials (36 months), declaration formats for other materials including Critical Raw Materials (60 months)
- Specification of removability requirements for EV-batteries and e-drive motors, and general removal information for other relevant components, including amendment of selective treatment Annex VII, (36 months), update of information requirements (72 months).
- Specification of the circularity strategy requirements and harmonised reporting (36 months)
- Labelling requirements of plastic parts (updated at 72 months), EV batteries and e-drive motors, in line with Battery Regulation and CRM Act requirements (36 months),
- Amending reporting obligations for export and calculation rules for treatment performance (24 months)
- Updating of the existing reporting and its formats on treatment performance currently based on Commission Decision 2005/293 (executed by ESTAT), in particular on batteries and e-drive motors removed (36 months).
- Updating of the type-approval formats and information folder to be provided to type-approval authorities (between 24 and 48 months using existing empowerment).
- Development of Vehicle Circularity Passport criteria (84 months).

- Harmonised EPR fee (60 months) and cross-border EPR cooperation criteria (36 months).

- Criteria for export used vehicles, roadworthiness requirement and interoperability of vehicle registration information (48 months)
- IT development of the 'Single Window' system and support of DG TAXUD for the transmission of information for custom authorities under MOVEHUB (84 months) - Evaluation of the functioning of the market for spare parts (96 months, review clause)
- Phased-in approach for the vehicle category scope extension and preparation for review (96 months)

1.5.2. Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention, which is additional to the value that would have been otherwise created by Member States alone.

Reasons for action at European level (ex-ante):

Modernising the current ELV Directive adopted more than 20 years ago is necessary to ensure that manufacturers, importers and economic operators are incentivised to the objectives of the Green Deal and put in position to contribute tot the Circular Economy Action plan.

The evaluations of these Directives have shown that considerable improvements were needed to boost the transition of the automotive sector to a circular economy, thereby reducing the environmental footprint linked to the production and end-of-life treatment of vehicles, and strengthening the sustainability of the automotive and recycling industry in Europe.

As the automotive sector is undergoing a massive transformation with the shift to electric vehicles, this means main share of the environmental footprint of vehicles will shift from the use-phase to the production and recycling stages, and that important supplies of critical raw materials (CRMs) will be required.

Expected generated Union added value (ex-post):

This action reduces the resulting increased vulnerability of the EU industry supply chains, especially for critical raw materials essential for the EU's strategic autonomy. At the same time, improving quality of collection and treatment facilitates improved uptakes of recycled materials supporting the transition to a carbon-neutral economy by up to 14 million tonnes of CO_2 equivalent per year in 2040.

The added value of an EU approach in the form of a single Regulation is that it ensures consistency in the requirement set at design and production of vehicles under the type-approval umbrella with the requirements at the collection and waste stages. Improved synchronisation is needed to ensure retainment of both economic and environmental quality of parts, components and materials from reuse, remanufacturing and recycling.

1.5.3. Lessons learned from similar experiences in the past

This Regulation follows the example of the Battery Regulation that is providing a comprehensive framework for improving circularity of batteries. Several provisions are complementing the sustainability requirements for EV batteries forming the largest future subsector under the Battery Regulation. It further specifies in this sectoral waste legislation, fully to be embedded in the type-approval framework, the detailed needs for improved design, production and recovery of critical and strategic raw materials as addressed by the recently adopted CRM act, notably for permanent magnet materials in e-drive motors for vehicles.

1.5.4. Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments

The European Commission is proposing a major recovery plan based on a reinforced long term budget for the next Multiannual Financial Framework and a new recovery instrument, Next Generation EU.

The European Green Deal will be the basis of the EU's recovery strategy. This includes the objective of cleaner transport and logistics, including e-mobility, which are the main driver of the exponential growth of demand for batteries, e-drive motors and many other CRMs and strategic raw materials, including their embedded energy of production.

The objectives of this regulation are supported by the Multiannual Financial Framework and the Next Generation EU, which both place an important emphasis on funding and investments to support the transition of the European economy to climate-neutral and circular models. This includes investments to modernise waste management, increase capacity for recycling for specific waste streams and promote high quality recycling and innovation.

Circular economy is also embedded in the matrix of the Horizon Europe programme on research, notably its partnership on circularity and is one of the pillars of the Programme for the environment and climate action (LIFE) 2021–2027. These will be essential to ensure the sustainable competitiveness of Europe in this field as well as to boost its economy, growth and well-being. It is expected that the EU will continue to promote the research in this and in related fields in the next MFF.

1.5.5. Assessment of the different available financing options, including scope for redeployment

For streamlining and improving consistency in the assessment of substance restrictions, the expertise of ECHA (risk assessments of substances) and JRC (development of methodologies and procedures) would be the most appropriate to ensure consistency in the implementation of the proposed approach in relation to related files like like EPSR, Batteries and the CRM act similary calling upon their expertise.

As far as the JRC is concerned, work could build on previous JRC research for the impacts assessment of recycled content targets and verification rules for recycling

rates of batteries and ongoing activities by the JRC for ESPR as well as activities of the JRC for DG GROW on future policy measures for CRMs (0.837 M EUR). The JRC will consider how best to synergise and support the work in cooperation with ENV and GROW.

For the development of the IT system and data exchanges for customs controls, the staff and resource needs in DG TAXUD and DG MOVE are related to the MOVEHUB digitalisation of vehicle registration information and reflect the ambition to restrict the export of low-quality non-roadworthy vehicles to third countries to tackle the persistent problem of unknown whereabouts of vehicles. In the long term, this IT development supports further digitalisation of vehicle registration information under consideration for the ongoing revision of the DG MOVE Directives on the matter planned for adoption later in 2023.

For the circularity strategy, criteria for the Circularity Vehicle Passport as well as EPR related requirements, external contractors are best positioned to provide the necessary technical support (0.500 M EUR by DG GROW). The same counts for support studies for treatment requirements, the functioning of the markets for spare parts), the preparation for reviewing substance restriction exemptions (0.075 M EUR) and the foreseen phased-in approach for the scope extension (0.575 M EUR by DG ENV for 2024-2027)

1.6. Duration and financial impact of the proposal/initiative

☐ **limited duration**

– ☐ in effect from [DD/MM]YYYY to [DD/MM]YYYY

– ☐ Financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

☑ **unlimited duration**

– Implementation with a start-up period from 2025 to 2028,
– followed by full-scale operation and complete implementation around 2032.

1.7. Method(s) of budget implementation planned[72]

☑ **Direct management** by the Commission

– ☑ by its departments, including by its staff in the Union delegations;
– ☐ by the executive agencies

☐ **Shared management** with the Member States

☐ **Indirect management** by entrusting budget implementation tasks to:

– ☐ third countries or the bodies they have designated;
– ☐ international organisations and their agencies (to be specified);

[72] Details of budget implementation methods and references to the Financial Regulation may be found on the BUDGpedia site: https://myintracomm.ec.europa.eu/corp/budget/financial-rules/budget-implementation/Pages/implementation-methods.aspx

– ☐ the EIB and the European Investment Fund;
– ☐ bodies referred to in Articles 70 and 71 of the Financial Regulation;
– ☐ public law bodies;
– ☐ bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees;
– ☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees;
– ☐ bodies or persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.
– *If more than one management mode is indicated, please provide details in the 'Comments' section.*

Comments

Direct management by DG ENV, DG GROW, DG MOVE, DG TAXUD and administrative arrangements with the JRC.

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

Specify frequency and conditions.

The initiative involves procurement, administrative arrangement with the JRC and impact on the COM HR.

2.2. Management and control system(s)

2.2.1. Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

N.A.

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

N.A.

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)

N.A.

2.3. Measures to prevent fraud and irregularities

Specify existing or envisaged prevention and protection measures, e.g. from the Anti-Fraud Strategy.

N.A.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.[73]	from EFTA countries [74]	from candidate countries and potential candidates [75]	fromother third countries	other assigned revenue
1	03.02.01.01 Operation and development of the internal market of goods and services	Diff.	YES	NO	NO	NO
3	09.02.02 – Circular Economy and quality of life	Diff.	YES	NO	NO	NO
7	20.02.01.01 Contract staff	Non-diff.	NO	NO	NO	NO
7	20.02.01.03 National civil servants temporarily assigned to the institution	Non-diff.	NO	NO	NO	NO

- New budget lines requested

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.	from EFTA countries	from candidate countries and potential candidates	from other third countries	other assigned revenue
	N.A.					

[73] Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.
[74] EFTA: European Free Trade Association.
[75] Candidate countries and, where applicable, potential candidates from the Western Balkans.

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

– ☐ The proposal/initiative does not require the use of operational appropriations

– ☑ The proposal/initiative requires the use of operational appropriations, as explained below:

EUR million (to three decimal places)

Heading of multiannual financial framework	1	Single market, innovation and digital

DG: GROW	03.02.01.01		2024 **N-1**	2025 **N**	2026 **N+1**	2027 **N+2**	**TOTAL** 2024-2027
Operational expenditure, support studies	Commitments	(1a)	-	0.250	-	0.250	**0.500**
	Payments	(2a)	-	0.250	-	0.250	**0.500**
TOTAL appropriations for DG GROW	Commitments	=1a+1b +3	-	**0.250**	**-**	**0.250**	**0.500**
	Payments	=2a+2b+3	-	**0.250**	**-**	**0.250**	**0.500**

DG GROW has estimated that the development of the updated methodology for the 3R rates, the removability criteria for batteries and e-drive motors and the electronic information exchange for the proposed Vehicle Circularity Passport require respectively (0.250, 0.250 M EUR). Some additional resources will be needed in the period 2028-2033 to progress with work after the end of the current MFF in 2027: for DG GROW, a total amount is scheduled for the period from 2028 until full implementation around 2032 of 0.150 M EUR for technical studies.

The amount reported above would also be needed to finance the relevant share of the administrative arrangements, to be discussed between DG ENV/DG GROW and the JRC and for the procurement of studies and data related to DG GROW provisions (updated methodology for the 3R rates, the removability criteria for batteries and e-drive motors and the electronic information exchange for the proposed Vehicle Circularity Passport). Significant synergies would be taken into account with the ongoing policy support by the JRC for the CRM Act.

EUR million (to three decimal places)

Heading of multiannual financial framework	3	Natural resources and environment

DG: ENV	09.02.02		2024 **N-1**	2025 **N**	2026 **N+1**	2027 **N+2**	**TOTAL** 2024-2027
Operational expenses DG ENV, support studies	Commitments	(1a)	0.025	0.200	0.050	0.300	**0.575**
	Payments	(2a)	0.025	0.200	0.050	0.300	**0.575**
Co-delegation to DG TAXUD, development of the Single Window Customs	Commitments	(1b)	-	0.030	0.260	0.260	**0.550**
	Payments	(2b)	-	0.030	0.260	0.260	**0.550**
Co-delegation to DG MOVE, IT support	Commitments	(1a)	0.225	0.080	0.080	0.080	**0.465**
	Payments	(2a)	0.225	0.080	0.080	0.080	**0.465**
Administrative Agreement with JRC	Commitments	(1a)	-	0.209	0.293	0.335	**0.837**
	Payments	(2a)	-	0.209	0.293	0.335	**0.837**
TOTAL appropriations for DG ENV	Commitments	=1a+1b+3	0.250	0.519	0.683	0.975	**2.427**
	Payments	=2a+2b+3	0.250	0.519	0.683	0.975	**2.427**

DG ENV has estimated the need for technical support studies (from 2024 until 2031) for plastic recycled content and chemical recycling prospects (0.100 M EUR), the study for determining steel recycled content target levels (0.100 M EUR), the wider feasibility study for CRMs, aluminium and magnesium recycled content (0.100 M EUR in 2027), criteria for EPR fee modulation (0.050 M EUR), quality requirements for PST technologies (0.050 M EUR), cross-border EPR cooperation mechanism (0.100 M EUR), the preparation for reviewing substance restriction exemptions (0.075 M EUR) and rules for calculating and verification of recycling performance totalling (0.575 M EUR) for the period 2024 – 2027.

The JRC is likely to play an important role in supporting the Commission with some of the technical work required as mentioned above for developing recycled content specification, removability of batteries and CRM rich e-drive motors and the calculation and verification rules related to treatment. A possible administrative arrangement may cover the estimated needs (0.837 M EUR for 2024-2027), while maximising synergies with related tasks under the CRM Act, ESPR, SuP and PPWR proposals.

Co-delegation is applied from DG ENV to DG TAXUD and DG MOVE to digitalise vehicle registration information by extending IT systems to create interoperability of vehicle registers digitalisation and as a second step to establish real-time export controls by linking to the Customs Single Window system for the period 2024 -2027.

Some additional resources will be needed in the period 2028-2033 to progress with work after the end of the current MFF in 2027:

(c) For DG ENV, a total amount is scheduled for the period from 2028 until full implementation around 2032 of 0.550 M EUR in technical studies.

(d) For DG TAXUD, a total amount is scheduled for the period from 2028 until full implementation around 2032 of 0.500 M EUR for IT deployment.

(e) Resources for JRC in the form of a possible additional administrative arrangements for a total amount of 0.335 M EUR for 2028 - 2032.

TOTAL appropriations under HEADINGS 1 to 6 of the multiannual financial framework(Reference amount)	Commitments	=4+6	0.250	0.769	0.683	1.225	**2.927**
	Payments	=5+6	0.250	0.769	0.683	1.225	**2.927**

EUR million (to three decimal places)

Heading of multiannual financial framework	7	Administrative expenditure

DG ENV, DG TAXUD			2024 **N-1**	2025 **N**	2026 **N+1**	2027 **N+2**	**TOTAL** 2024-2027
Human Resources, DG ENV	Commitments	(1a)	0.139	0.275	0.321	0.321	**1.055**
	Payments	(2a)	0.139	0.275	0.321	0.321	**1.055**
Human Resources, DG TAXUD	Commitments	(1a)	-	0.091	0.137	0.137	**0.364**
	Payments	(2a)	-	0.091	0.137	0.137	**0.364**
TOTAL appropriations under HEADING 7 of the multiannual financial framework **for DG GROW, DG TAXUD**	Commitments	=1a+1b +3	**0.139**	**0.366**	**0.457**	**0.457**	**1.419**
	Payments	=2a+2b+3	**0.139**	**0.366**	**0.457**	**0.457**	**1.419**

Please find the justification for the staff needs in section 3.2.3 below.

		2024 **N-1**	2025 **N**	2026 **N+1**	2027 **N+2**	**TOTAL** 2024-2027
TOTAL appropriations under HEADINGS 1 to 7 of the multiannual financial framework	Commitments	0.389	1.135	1.140	1.682	**4.346**
	Payments	0.389	1.135	1.140	1.682	**4.346**

3.2.2. Estimated output funded with operational appropriations

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ⇩			Year **N**		Year **N+1**		Year **N+2**		Year **N+3**		Enter as many years as necessary to show the duration of the impact (see point 1.6)						**TOTAL**	
	OUTPUTS																	
	Type [76]	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	Total No	Total cost
SPECIFIC OBJECTIVE No 1[77]…																		
- Output																		
- Output																		
- Output																		
Subtotal for specific objective No 1																		
SPECIFIC OBJECTIVE No 2 ...																		
- Output																		
Subtotal for specific objective No 2																		
TOTALS																		

[76] Outputs are products and services to be supplied (e.g.: number of student exchanges financed, number of km of roads built, etc.).

[77] As described in point 1.4.2. 'Specific objective(s)…'

3.2.3. Summary of estimated impact on administrative appropriations

3.2.3.1. Estimated requirements on administrative appropriations in the Commission

– ☐ The proposal/initiative does not require the use of human resources.

– ☑ The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full time equivalent units

	2024 **N-1**	2025 **N**	2026 **N+1**	2027 **N+2**	**TOTAL** *2024 - 2027*
20 01 02 01 (Headquarters and Commission's Representation Offices) DG GROW: TA					
20 01 02 01 (Headquarters and Commission's Representation Offices) DG ENV: TA					
20 01 02 03 (Delegations)					
01 01 01 01 (Indirect research)					
01 01 01 11 (Direct research)					
Other budget lines (specify)					
20 02 01 (AC, END, INT from the 'global envelope') DG ENV	1.5	3	3.5	3.5	**11.5**
20 02 01 (AC, END, INT from the 'global envelope') DG TAXUD	0.0	1.0	1.5	1.5	**4.0**
- in Delegations					
01 01 01 02 (AC, END, INT - Indirect research)					
01 01 01 12 (AC, END, INT - Direct research)					
Other budget lines (specify)					
TOTAL	**1.5**	**4.0**	**5.0**	**5.0**	**15.5**

The human resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Description of tasks to be carried out:

Officials and temporary staff	No additional TA posts are needed for the general management. Expected supervision of all negotiation tasks in 2024 and for the preparation, drafting and adoption of secondary legislation according to the deadlines proposed will be covered by existing TA staff.
External staff	Additional technical tasks lead by DG GROW will be covered by existing staff, supplemented with DG ENV support and JRC technical expertise (where agreed): - Improving the methodology for the determination of the 3R-rates; - Improved risk assessment of the remaining hazardous substance exemptions with support of ECHA, transfer of battery related substance restriction exemptions to the Battery Regulation, general review and alignment with REACH/ "Omnibus Regulation"; - Specification of removability requirements for EV-batteries and e-drive motors, and general removal information for other relevant components (including amendment of selective treatment Annex IV, update of information requirements (JRC support);

	- Specification of the circularity strategy requirements; - Labelling requirements of plastic parts (updated at 72 months), EV batteries and e-drive motors in line with Battery Regulation and CRM Act requirements (36 months); - Updating of the type-approval formats and information folder to be provided to type-approval authorities; -Development of Vehicle Circularity Passport criteria. For DG ENV additional tasks will need to be covered by additional CA and END posts. For DG ENV this should be 1.0 FTE END from 2024 onwards, complemented by respectively 0.5 FTE CA posts for 2024, 2.0 FTE CA posts in 2025 and 2.5 FTE CA posts in both 2026 and 2027 to perform the technical work, with JRC support where agreed, including: - Calculation and verification rules for recycled content of plastics, feasibility study for the setting recycled content targets for steel, wider technical and economic feasibility study for CRMs and other materials, declaration formats for other materials including CRMs (DG GROW and JRC support); - Amending reporting obligations for export and calculation rules for treatment performance (JRC support); - Quality requirements for treatment operators and PST; - Harmonised EPR fee and cross-border EPR cooperation criteria; - Criteria for export used vehicles. - Evaluation of the functioning of the market for spare parts (96 months, review clause) - Phased-in approach for the vehicle category scope extension and preparation for review (96 months) For DG TAXUD 1.0 FTE for 2025 and 1.5 FTE of CA posts are foreseen towards 2026 and 2027 and DG MOVE tasks will be coverd by existing staff, with technical support from DG ENV (covered by DG ENV staff listed above): - Implementation of the roadworthiness requirement and interoperability of vehicle registration information; - - IT development of the 'Single Window' system and support of DG TAXUD for the transmission of information for custom authorities under MOVEHUB;

3.2.4. Compatibility with the current multiannual financial framework

The proposal/initiative:

– ☑ can be fully financed within the relevant heading of the Multiannual Financial Framework (MFF).

– ☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation.

– ☐ requires a revision of the MFF.

3.2.5. Third-party contributions

The proposal/initiative:

– ☑ does not provide for co-financing by third parties

– ☐ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year **N**[78]	Year **N+1**	Year **N+2**	Year **N+3**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			Total
Specify the co-financing body								
TOTAL appropriations co-financed								

[78] Year N is the year in which implementation of the proposal/initiative starts. Please replace "N" by the expected first year of implementation (for instance: 2021). The same for the following years.

3.3. Estimated impact on revenue

– ☑ The proposal/initiative has no financial impact on revenue.

– ☐ The proposal/initiative has the following financial impact:

  – ☐ on own resources

  – ☐ on other revenue

  – please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative						
		Year **N**	Year **N+1**	Year **N+2**	Year **N+3**	Enter as many years as necessary to show the duration of the impact (see point 1.6)		
Article …….								

For assigned revenue, specify the budget expenditure line(s) affected.

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

EUROPEAN
COMMISSION

Brussels, 13.7.2023
COM(2023) 451 final

ANNEXES 1 to 11

ANNEXES

to the Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC

{SEC(2023) 292 final} - {SWD(2023) 255 final} - {SWD(2023) 256 final} -
{SWD(2023) 257 final}

ANNEX I

CRITERIA FOR DETERMINATION WHETHER A USED VEHICLE IS AN END-OF-LIFE VEHICLE

PART A

CRITERIA FOR ASSESSMENT OF REPARABILITY OF VEHICLES

1. A vehicle is technically irreparable if it meets one or more of the following criteria:

   (a) it has been cut into pieces or stripped;

   (b) it has been welded up or closed by insulating foam;

   (c) it has been completely burnt to the point where the engine compartment or passenger compartment is destroyed;

   (d) it has been been submerged in water to a level above the dashboard;

   (e) one or several of the following components of the vehicle cannot be repaired or replaced:

      (i) ground coupling components (such as tyres and wheels), suspension, steering, braking, and their control components;

      (ii) seat fixings and joints;

      (iii) airbags, pre-tensioners, safety belts, and their peripheral operating components;

      (iv) the vehicle's hull and chassis;

   (f) its structural and safety components have technical defects that are irreversible and turn them non-replaceable, such as metal aging, multiple breaks in primers, or excessive perforating corrosion;

   (g) its repair requires the replacement of the engine, gearbox, shell, or chassis assembly, resulting in the loss of the vehicle's original identity.

2. The vehicle is economically irreparable if its market value is lower than the cost of the necessary repairs needed to restore it in the Union to a technical condition that would be sufficient to obtain a roadworthiness certificate in the Member State where the vehicle was registered before repair.

3. A vehicle may be considered technically irreparable when:

   (h) it has been submerged in water to a level below the dashboard, and damaged the engine or electrical system;

   (i) its doors are not attached to it;

   (j) its fuel or fuel vapours are discharged posing a risk of fire and explosion;

   (k) gas has leaked from its liquid gas system posing a risk of fire and explosion;

   (l) its operating liquids (fuel, brake fluid, anti-freeze liquid, battery acid, coolant liquid) have been discharged posing a risk of water pollution; or

   (m) its brakes and steering components are excessively worn.

If one of those conditions is met, an individual technical assessment shall be carried out in order to assess if the technical status of a vehicle would be sufficient to obtain a roadworthiness certificate in the Member State where the vehicle was registered before repair.

PART B

INDICATIVE LIST OF CRITERIA FOR END-OF-LIFE VEHICLES

The following criteria may also be used as additional justification to determine if a used vehicle is an end-of-life vehicle:

(b) absence of means allowing to identify a vehicle, in particular the Vehicle Identification Number;

(c) its owner is unknown;

(d) it has not had its required national technical roadworthiness test for more than two years from the date when this was last required;

(e) it is not appropriately protected against damage during storage, transportation, loading and unloading; or

(f) it was handed over for treatment to an authorised collection point or an authorised waste treatment facility.

ANNEX II

CALCULATION OF THE RATES OF REUSABILITY, RECYCLABILITY AND RECOVERABILITY

For the purposes of this Annex, 'reference vehicle' means the version within a vehicle type, which is identified by the approval authority, in consultation with the manufacturer and in accordance with the criteria laid down in Annex II Part A, as being the most problematic in terms of reusability, recyclability and recoverability.

PART A

4. The materials present in the vehicle and their respective shares and locations shall be specified, together with any relevant information necessary to correctly calculate the rates of recyclability and recoverability.

5. Masses shall be expressed in kg with one decimal place. The rates shall be calculated in percent with one decimal place, then rounded as follows:

   (a) if the figure following the decimal point is between 0 and 4, the total is rounded down;

   (b) if the figure following the decimal point is between 5 and 9, the total is rounded up.

6. For the purposes of the selection of the reference vehicles, account shall be taken of the following criteria:

   (c) the type of bodywork;

   (d) the available trim levels;

   (e) the available optional equipment which can be fitted under the manufacturer's responsibility.

7. Should the type-approval authority and the manufacturer fail jointly to identify the most problematic version within a type of vehicle, in terms of reusability, recyclability and recoverability, one reference vehicle shall be selected, within:

   (f) each 'type of bodywork', as defined in point 2 of part C of Annex I to Regulation (EU) 2018/858 in the case of M_1 vehicles;

   (g) each 'type of bodywork', i.e., van, chassis-cab, pick-up, etc., in the case of N_1 vehicles.

8. For the purposes of checks of the materials and masses of component parts, the manufacturer shall make available vehicles and component parts as deemed necessary by the type-approval authority.

PART B

9. In order to be counted as reusable, components or parts shall be removable in a readily and non-destructive manner.

10. The total mass of reusable parts, components and materials shall be considered as 100 % reusable, recyclable and recoverable.

11. Parts and components listed in Part B, points 1 and 2, of Annex VII shall be considered as 0 % reusable and 100 % recyclable and recoverable. Parts and components listed in Part E of Annex VII shall be considered as 0 % reusable and 100 % recyclable and recoverable. The methodology shall ensure, that in case of amending Annex VII results in the extending the list of parts and components listed in Part E of that Annex, these newly added parts and components shall be considered as 0 % reusable and 100 % recyclable and recoverable.

12. The calculation of the rates of reusability, recyclability and recoverability shall be coherent with the circularity strategy, reflecting technological progress in end-of-life treatment technologies.

ANNEX III

CONDITIONS AND MAXIMUM CONCENTRATION VALUES FOR THE PRESENCE OF LEAD, MERCURY, CADMIUM AND HEXAVELENT CHROMIUM IN MATERIALS, PARTS AND COMPONENTS

A maximum concentration value of substances up to 0,1 % by weight in homogeneous material for lead, hexavalent chromium and mercury and up to 0,01 % by weight in homogeneous material for cadmium shall be tolerated.

Spare parts put on the market after 1 July 2003 which are used for vehicles put on the market before 1 July 2003, except for wheel balance weights, carbon brushes for electric motors and brake linings, shall be exempted from Article 5(2) of Regulation.

Homogenous materials, parts and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 5(4), point (d)
Lead as an alloying element		
1(a). Steel for machining purposes and batch hot dip galvanised steel components containing up to 0,35 % lead by weight		
1(b). Continuously galvanised steel sheet containing up to 0,35 % lead by weight	Vehicles type approved before 1 January 2016 and spare parts for such vehicles	
2(a). Aluminium for machining purposes with a lead content up to 2 % by weight	As spare parts for vehicles placed on the market before 1 July 2005	
2(b). Aluminium with a lead content up to 1,5 % by weight	As spare parts for vehicles placed on the market before 1 July 2008	
2(c)(i). Aluminium alloys for machining purposes with a lead content up to 0,4 % by weight	Vehicles type-approved before 1 January 2028 and spare parts for such vehicles	
2(c)(ii). Aluminium alloys not included in entry 2(c)(i) with a lead content up to 0,4 %	(1)	

by weight (2)		
3. Copper alloys containing up to 4 % lead by weight	(3)	
4(a). Bearing shells and bushes	As spare parts for vehicles placed on the market before 1 July 2008	
4(b). Bearing shells and bushes in engines, transmissions and air conditioning compressors	As spare parts for vehicles placed on the market before 1 July 2011	
Lead and lead compounds in components		
5(a). Lead in batteries used in high-voltage systems (4) that are used only for propulsion in M1 and N1 vehicles	Vehicles type approved before 1 January 2019 and spare parts for such vehicles	X
5(b)(i). Lead in batteries: (1) used in 12 V applications (2) used in 24 V applications in special purpose vehicles as defined in Article 3 of Regulation (EU) 2018/858	(3)	X
5(b)(ii). Lead in batteries used in applications not included in entry 5(a) or entry 5(b)(i)	Vehicles type approved before 1 January 2024 and spare parts for such vehicles	X
6. Vibration dampers	Vehicles type approved before 1 January 2016 and spare parts for such vehicles	X
7(a). Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings	As spare parts for vehicles placed on the market before 1 July 2005	
7(b). Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine	As spare parts for vehicles placed on the market before 1	

mountings containing up to 0,5 % lead by weight	July 2006	
7(c). Bonding agents for elastomers in powertrain applications containing up to 0,5 % lead by weight	As spare parts for vehicles placed on the market before 1 July 2009	
8(a). Lead in solders to attach electrical and electronic components to electronic circuit boards and lead in finishes on terminations of components other than electrolyte aluminium capacitors, on component pins and on electronic circuit boards	Vehicles type approved before 1 January 2016 and spare parts for such vehicles	X(5)
8(b). Lead in solders in electrical applications other than soldering on electronic circuit boards or on glass	Vehicles type approved before 1 January 2011 and spare parts for such vehicles	X(5)
8(c). Lead in finishes on terminals of electrolyte aluminium capacitors	Vehicles type approved before 1 January 2013 and spare parts for such vehicles	X(5)
8(d). Lead used in soldering on glass in mass airflow sensors	Vehicles type approved before 1 January 2015 and spare parts of such vehicles	X(5)
8(e). Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	(1)	X(5)
8(f)(i). Lead in compliant pin connector systems	Vehicles type approved before 1 January 2017 and spare parts for such vehicles	X(5)
8(f)(ii). Lead in compliant pin connector systems other than the mating area of vehicle harness connectors	Vehicles type approved before 1 January 2024 and spare parts for such vehicles	X(5)

8(g)(i). Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	Vehicles type approved before 1 October 2022 and spare parts for such vehicles	X(5)
8(g)(ii). Lead in solders to complete a viable electrical connection between the semiconductor die and the carrier within integrated circuit flip chip packages where that electrical connection consists of any of the following: (1) a semiconductor technology node of 90 nm or larger; (2) a single die of 300 mm^2 or larger in any semiconductor technology node; (3) stacked die packages with dies of 300 mm^2 or larger, or silicon interposers of 300mm^2 or larger.	(1) Vehicles type-approved from 1 October 2022 and spare parts for such vehicles	X(5)
8(h). Lead in solder to attach heat spreaders to the heat sink in power semiconductor assemblies with a chip size of at least 1 cm^2 of projection area and a nominal current density of at least 1 A/mm^2 of silicon chip area	Vehicles type approved before 1 January 2016 and spare parts for such vehicles	X(5)
8(i). Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing	Vehicles type approved before 1 January 2016 and spare parts for such vehicles	X(5)
8(j). Lead in solders for soldering of laminated glazing	Vehicles type approved before 1 January 2020 and spare parts for such vehicles	X(5)
8(k). Soldering of heating applications with 0,5A or more of heat current per related solder joint to single panes of laminated glazings not exceeding wall thickness of 2,1 mm. This exemption does not cover soldering to contacts embedded in the intermediate polymer.	Vehicles type approved before 1 January 2024 and spare parts for such vehicles	X(5)
9. Valve seats	As spare parts for engine types developed before 1 July 2003	

10(a). Electrical and electronic components, which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: (i) glass in bulbs and glaze of spark plugs, (ii) dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d).		X(6) (for components other than piezo in engines)
10(b). Lead in PZT based dielectric ceramic materials of capacitors being part of integrated circuits or discrete semiconductors		
10(c). Lead in dielectric ceramic materials of capacitors with a rated voltage of less than 125 V AC or 250 V DC	Vehicles type approved before 1 January 2016 and spare parts for such vehicles	
10(d). Lead in the dielectric ceramic materials of capacitors compensating the temperature-related deviations of sensors in ultrasonic sonar systems	Vehicles type approved before 1 January 2017 and spare parts for such vehicles	
11. Pyrotechnic initiators	Vehicles type approved before 1 July 2006 and spare parts for such vehicles	
12. Lead-containing thermoelectric materials in automotive electrical applications to reduce CO_2 emissions by recuperation of exhaust heat	Vehicles type approved before 1 January 2019 and spare parts for such vehicles	X
Hexavalent chromium		
13(a). Corrosion preventive coatings	As spare parts for vehicles placed on the market before 1 July 2007	

13(b). Corrosion preventive coatings related to bolt and nut assemblies for chassis applications	As spare parts for vehicles placed on the market before 1 July 2008	
14. Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution: (a) designed to operate fully or partly with electrical heater, having an average utilised electrical power input < 75W at constant running conditions; (b) designed to operate fully or partly with electrical heater, having an average utilised electrical power input ≥ 75W at constant running conditions; (c) designed to fully operate with non-electrical heater.	For (a): Vehicles type approved before 1 January 2020 and spare parts for such vehicles For (b): Vehicles type approved before 1 January 2026 and spare parts for such vehicles	X
Mercury		
15(a). Discharge lamps for headlight application	Vehicles type approved before 1 July 2012 and spare parts for such vehicles	X
15(b). Fluorescent tubes used in instrument panel displays	Vehicles type approved before 1 July 2012 and spare parts for such vehicles	X
Cadmium		
16. Batteries for electric vehicles	As spare parts for vehicles placed on the market before 31 December 2008	

Notes to the table:

1. This exemption shall be reviewed in 2024.

2. Applies to aluminium alloys where lead is not intentionally introduced, but is present due to the use of recycled aluminium.

3. This exemption shall be reviewed in 2025.

4. Systems that have a voltage of > 75 V DC as provided for in Article 1 of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (OJ L 96, 29.3.2014, p. 357).

5. Dismantling if, in correlation with entry 10(a), an average threshold of 60 grams per vehicle is exceeded. For the purposes of this note, electronic devices not installed by the manufacturer on the production line shall not be taken into account.

6. Dismantling if, in correlation with entries 8(a) to 8(k), an average threshold of 60 grams per vehicle is exceeded. For the purposes of this note, electronic devices not installed by the manufacturer on the production line shall not be taken into account.

ANNEX IV

CIRCULARITY STRATEGY

PART A

ELEMENTS OF THE CIRCULARITY STRATEGY

13. A non-technical description of the actions planned to ensure that the vehicles belonging to the vehicle type continue to meet the legal requirements referred to in Articles 4 to 7 throughout their production.

14. A non-technical description of procedures implemented by the manufacturer to:

(h) collect the relevant data through the full supply chain;

(i) check and verify the information received from suppliers;

(j) react adequately where the data received from the suppliers indicate a risk of non-compliance with the requirements under Article 4, 5 or 6.

15. Information on the assumptions on end-of-life treatment technologies in place, relevant technological progress in end-of-life treatment technologies and capacity investment in such technologies, as of submitting the application for type-approval, that the manufacturer used in order to calculate the reusability, recyclability and recoverability in accordance with Article 4 of the vehicle type.

16. Information on the share of recycled content in vehicles as referred to in Articles 6 and 10.

17. A list of actions that the manufacturer commits to carry out in order to ensure that the treatment of end-of-life vehicles of the type concerned is carried out in accordance with this Regulation, with a particular focus on:

(k) measures designed to facilitate removal of parts indicated in Annex VII Part C;

(l) measures contributing to the development of recycling technologies for materials used in vehicles, for which such technologies are not widely available at commercial scale at the moment of submission of application for type-approval;

(m) the monitoring on how parts, components and materials contained in vehicles belonging to the vehicle type are reused, recycled and recovered in practice;

(n) measures to address the challenges posed by the use of materials and techniques which hamper easy dismantling or make recycling very challenging, for example adhesives or fibre-reinforced materials;

(o) measures to promote the reuse of parts and components.

18. A description of the nature and form of the actions referred to in point 5, for example investments in research and development, investments in the development of recycling technologies or infrastructure, and how it has been cooperating with waste management operators involved in reuse, recycling and recovery of vehicles and removal of their parts.

19. A description of the manner in which the effectiveness of the actions referred to in point 6 will be assessed.

Before Articles 4 to 7 become applicable, the circularity strategy shall explain how the manufacturer complies with circularity requirements laid down in Directive 2005/64/EC verified during the type-approval process, in particular Article 5 of that Directive, and the requirements laid down in Directive 2000/53/EC, in particular Article 4(2) of that Directive.

PART B

FOLLOW-UP AND UPDATE OF THE CIRCULARITY STRATEGY

20. The manufacturers shall provide an update of the circularity strategy at least every 5 years.

21. The updated circularity strategy shall include the following:

(p) a description of how the actions referred to in point 6 of Part A have been undertaken and, in the case that one or more actions indicated in the strategy has not been conducted, an explanation of the reasons for this;

(q) an assessment of the effectiveness of the actions referred to in point 6 of Part A;

(r) a description of how the actions referred to in point 6 of Part A have been or will be taken into account in the design of new vehicle types.

22. In case of significant changes in the design and production of the vehicle type, the updated circularity strategy shall have a particular focus on the following:

(s) changes in the use of parts and components in new vehicles which are easy to dismantle for reuse or for high quality recycling;

(t) changes in the use of materials in new vehicles which are easy to recycle;

(u) the adoption of design features to address the challenges posed by the use of materials and techniques which hamper easy removal or make recycling very challenging, for example adhesives, composite plastics or fibre-reinforced materials;

(v) changes in the use of recycled materials in new vehicles, remanufactured or refurbished parts and components in vehicles and of compatibility of parts and components from other types of vehicles; and

(w) changes in the use of substances referred to in Article 5 in new vehicles.

ANNEX V

INFORMATION REQUIREMENTS ON REMOVAL AND REPLACEMENT

23. Electric vehicle batteries incorporated in the vehicle:

(x) number;

(y) location;

(z) weight;

(aa) type of battery chemistry;

(bb) instructions for safe discharging of the battery;

(cc) technical instructions on removal and replacement, including the sequence of all steps and types of joining, fastening, sealing techniques;

(dd) tools or technologies required for the access, removal and replacement of the electric vehicle batteries.

24. E-drive motors incorporated in the vehicle:

(ee) number;

(ff) location;

(gg) weight;

(hh) types of permanent magnets present in e-drive motors, if they belong to the following types:

(i) Neodymium-Iron-Boron;

(ii) Samarium-Cobalt;

(iii) Aluminium-Nickel-Cobalt;

(iv) Ferrite.

(ii) technical instructions on removal and replacement, including the sequence of all steps and types of joining, fastening, sealing techniques;

(jj) tools or technologies required for the access, removal and replacement of the e-drive motors.

25. Components, parts and materials listed in Part B of Annex VII:

(kk) presence of the substances listed in Article 5(2), which need to be labelled as referred to in Annex III in a vehicle;

(ll) number;

(mm) location;

(nn) weight;

(oo) technical instructions on removal, including the sequence of all steps;

(pp) availability of best treatment techniques.

26. Components, parts and materials listed in Part C of Annex VII:

(qq) number;

(rr) location;

(ss) technical instructions on removal and replacement, including the sequence of all steps.

27. Digitally coded components and parts in a vehicle:

(tt) Number;

(uu) Location;

(vv) technical instructions on access, removal and replacement, including - coding and software necessary to activate spare parts and components to function in another vehicle;

(ww) description on functionality, interchangeability and compatibility with specific parts and components of other makes and models;

(xx) contact point of the manufacturer for technical assistance.

ANNEX VI

LABELLING REQUIREMENTS

28. Vehicle plastic parts, components and materials having a weight of more than 100 grams:

(yy) ISO 1043-1 Plastics - symbols and abbreviated terms. Part 1: Basic polymers and their special characteristics;

(zz) ISO 1043-2 Plastics - symbols and abbreviated terms. Part 2: Fillers and reinforcing materials;

(aaa) ISO 11469 Plastics - Generic identification and marking of plastic products.

29. Vehicle elastomer parts, components and materials having a weight of more than 200 grams, except tyres: ISO 1629 Rubbers and latices - Nomenclature.

30. The symbols "<" or ">" used in the ISO standards, can be substituted by brackets.

31. Information on the label of e-drive motors containing permanent magnet materials:

(bbb) an indication that those products incorporate one or more permanent magnets;

(ccc) an indication whether those magnets belong to any of the following types:

(i) Neodymium-Iron-Boron;

(ii) Samarium-Cobalt;

(iii) Aluminium-Nickel-Cobalt;

(iv) Ferrite;

(ddd) for permanent magnets of the types referred in point 3 (b)(i) and (ii), a data carrier linked to a unique product identifier that provides access to the following:

(i) the name, registered trade name or registered trademark and the postal address of the responsible natural or legal person and, where available, electronic means of communication where they can be contacted;

(ii) information on the weight, location and type of all individual permanent magnets included in the product and on the presence and type of magnet coatings, glues and any additives used;

(iii) information enabling access and removal of all permanent magnets incorporated in the product, at least including the sequence of all removal steps, tools or technologies required for the access and removal of the permanent magnet, without prejudice to Article 15(1) of Directive 2012/19/EU.

ANNEX VII

TREATMENT REQUIREMENTS

PART A
MINIMUM REQUIREMENTS FOR STORAGE SITES AND TREATMENT SITES

32. Storage sites, including storage sites in the collection points, for the storage of end-of-life vehicles, prior to their treatment, and of their components, parts and materials, shall:

(eee) have impermeable surfaces with spillage collection facilities, decanters and cleanser-degreasers;

(fff) be equipped for the treatment of water, including rainwater, in compliance with health and environmental requirements.

33. Storage shall be organised so as to avoid damage to:

(ggg) components and parts containing the liquids and fluids listed in points 1 and 2 of Part B of this Annex VII;

(hhh) components, parts and materials listed in Part C of this Annex VII.

34. The sites where end-of-life vehicles and their components, parts and materials are treated shall have:

(iii) impermeable surfaces for appropriate areas with the provision of spillage collection facilities, decanters and cleanser-degreasers;

(jjj) appropriate storage for parts, components and materials that have been removed from the end-of-life vehicle, including impermeable storage for oil-contaminated parts, components and materials;

(kkk) appropriate containers for storage of batteries (with electrolyte neutralisation on site or elsewhere), filters and PCB/PCT-containing condensers;

(lll) appropriate separate storage tanks for the segregated storage of end-of-life vehicle fluids: fuel, motor oil, gearbox oil, transmission oil, hydraulic oil, cooling liquids, antifreeze, brake fluids, battery acids, air-conditioning system fluids and any other fluid contained in the end-of-life vehicle,

(mmm) equipment for the treatment of water, including rainwater, in compliance with health and environmental regulations;

(nnn) appropriate storage for used tyres, taking into account the need to prevent fire hazards and excessive stockpiling.

35. Authorised treatment facilities that are permitted to treat electric vehicles shall comply with the requirements set out in Annex XII of Regulation 2023/ [Batteries and Waste Batteries.

PART B
MINIMUM REQUIREMENTS FOR DEPOLLUTION

36. The following fluids and liquids shall be removed from the end-of-life vehicle, unless they are necessary for the re-use of the parts concerned:

(ooo) fuel;

(ppp) motor oil;

(qqq) transmission oil;

(rrr) gearbox oil;

(sss) hydraulic oil;

(ttt) cooling liquids;

(uuu) antifreeze;

(vvv) brake fluids;

(www) air-conditioning system fluids; and

(xxx) any other fluid contained in the end-of-life vehicle.

The collection containers shall be labelled to indicate the type of liquid that is contained within them and stored separately from each other in a secure location, compliant with the Part A of this Annex, to prevent accidental spillage, leakage or unauthorised access to it.

37. The following components, parts and materials shall be removed from end-of-life vehicles:

(yyy) airbags, liquefied petroleum gas (LPG) tanks, compressed natural gas (CNG) tanks, hydrogen tanks and any other potentially explosive parts and components shall be neutralised;

(zzz) air conditionings systems and refrigerants shall be treated in accordance with Regulation (EU) No 517/2014;

(aaaa) components identified as containing mercury, shall be separated during treatment into an identifiable stream, which shall be safely immobilised and disposed in accordance with Article 17 of Directive 2008/98/EC;

(bbbb) materials containing substances referred to in Article 5(2), which need to be labelled as laid down in Annex III, shall be separated during treatment into an identifiable stream, which shall be safely immobilised and disposed in accordance with Article 17 of Directive 2008/98/EC.

All parts, components and materials collected during the depollution shall be stored in designated containers. The collection containers shall be labelled to indicate the components, parts and materials that are contained within them and stored in a secure location in compliance with Part A, in order to prevent accidental spillage, leakage or unauthorised access to it.

38. The following information on the depollution of the end-of-life vehicles shall be recorded:

(cccc) date and time of depollution operations;

(dddd) type of depollution operations carried out;

(eeee) quantity and nature of depolluted waste, including materials and pollutants removed or neutralized;

(ffff) name and contact details of the waste transporter, if applicable;

(gggg) contact information of the final disposal site for the waste collected during the depollution process.

PART C

MANDATORY REMOVAL OF PARTS AND COMPONENTS FROM END-OF-LIFE VEHICLES

39. Electric vehicle batteries;

40. E-drive motors, including their casings and any associated control units, wiring, and other parts, components and materials;;

41. SLI batteries as defined in Article 3, point (12), of Regulation (EU) 2023/****[on batteries and waste batteries];

42. Engines;

43. Catalytic converters;

44. Gear boxes;

45. Windshields, rear and side windows made of glass;

46. Wheels;

47. Tyres;

48. Dashboards;

49. Directly accessible parts of the infotainment system, including sound, navigation, and multimedia controllers, including displays of a surface greater than 100 square centimetres;

50. Headlights, including their actuators;

51. Wire harnesses;

52. Bumpers;

53. Fluid containers;

54. Heat exchangers;

55. Any other mono-material metal components, heavier than 10 kg;

56. Any other mono-material plastic components, heavier than 10 kg;

57. Electrical and electronic components:

(hhhh) inverters of the electric vehicles;

(iiii) printed circuit boards with a surface area, larger than 10 cm^2;

(jjjj) photo-voltaic (PV) panels with a surface area, larger than 0.2 m^2;

(kkkk) control modules and valve boxes for the automatic transmission.

PART D

REUSE, REMANUFACTURING AND REFURBISHMENT OF PARTS AND COMPONENTS

58. Technical evaluation of the removed parts and components:

(llll) For reuse:

(i) the part or component is functional;

(ii) it is fit to be used, in a readily manner, for its primary purpose it was conceived for.

(mmmm) For remanufacturing or refurbishment:

(i) the part or component is complete;

(ii) an assessment of damage, reduced functionality or performance and repairs needed for restoring the part or component to a state where it is fit to be used;

(iii) there is no heavy corrosion.

59. Minimum information to be provided in the labelling of the parts and components:

(nnnn) name of the component or part;

(oooo) reference to the vehicle identification number (VIN) of the vehicle from which the component or part has been removed; and

(pppp) name, the postal address, indicating a single contact point and e-mail address, a web-address, if applicable, identifying the operator that removed the component or part.

PART E

COMPONENTS AND PARTS NOT TO BE REUSED

60. All airbags including cushions, pyrotechnic actuators, electronic control units and sensors.

61. Emission after-treatment systems (e.g. catalytic converters, particulate filters).

62. Exhaust silencers.

63. Automatic or non-automatic seat belt assemblies, including webbing, buckles, retractors, pyrotechnic actuators.

64. Seats in cases where they incorporate safety belt anchorages and/or airbags.

65. Steering lock assemblies acting on the steering column.

66. Immobilisers, including transponders and electronic control units.

PART F

SPECIFIC TREATMENT REQUIREMENTS OF THE REMOVED PARTS, COMPONENTS AND MATERIALS

67. SLI Batteries shall be treated in accordance with Article 70 of the Regulation (EU) 2023/****[on batteries and waste batteries].

68. Electric vehicle batteries shall be treated in accordance with Article 70 of the Regulation (EU) 2023/****[on batteries and waste batteries].

69. Permanent magnet materials containing neodymium, dysprosium or praseodymium as defined (Neodymium-Iron-Boron (NdFeB), as defined in Article 27 Regulation [proposal for Regulation on CRMs], copper from e-drive motors that are not suitable for reuse, remanufacturing or refurbishment, shall be removed where the process for removal is feasible to be performed by authorised treatment facilities without excessive cost. In case of lack of technical progress to recycle NdFeB permanent magnet materials, the e-drive motors or its permanent magnet material containing parts shall be stock-piled and labelled in accordance with Article 27(1), point (b), of Regulation [proposal for Regulation on CRMs].

70. Removed electronic components and parts, which are not subject for reuse, remanufacturing or refurbishment and non-ferrous fractions, including shredded printed circuit boards, shall be treated by treatment operators as specified in Article 8(3) of Directive 2012/19/EU.

71. Removed glass from the end-of-life vehicle, as a minimum, shall be recycled into container glass, fibre glass, or equivalent quality.

PART G

INFORMATION TO BE PROVIDED FOR EXEMPTIONS FROM THE OBLIGATION TO REMOVE OF PARTS, COMPONENTS AND MATERIALS FROM END-OF-LIFE VEHICLES

72. A copy of the written contract between the authorised treatment facility and the facility which performs the shredding operations and uses post-shredding technologies, including the specifications on the quality of the secondary materials and the technical specification followed in processing treatment fractions from end-of-life vehicles.

73. A report of the sample analysis on the quality and quantity of the treatment fractions (output) for a representative treatment configuration provided by an independent body.

74. Any other type of documentation demonstrating that the quality and quantity of the materials from the end-of-life vehicles is not lower compared to the quality and quantity of components and parts that were separately removed prior-shredding in accordance with the requirements laid down in Part C.

ANNEX VIII

INFORMATION FOR REGISTRATION IN THE REGISTER OF PRODUCERS

75. Information to be submitted by the producer or its appointed representative for extended producer responsibility:

(qqqq) name, and brand names if available, under which the producer operates in the Member State and address of the producer, including postal code and place, street and number, country, telephone number, if any, web address and e-mail address, indicating a single contact point;

(rrrr) national identification code of the producer, including its trade register number or equivalent official registration number and the European or national tax identification number;

(ssss) categories of vehicles that the producer intends to make available on the market for the first time within the territory of a Member State;

(tttt) information on how the producer meets its responsibilities laid down in Article 16, including information in written form on the following:

(i) the measures put in place by the producer to fulfil the producer responsibility obligations laid down in Articles 16 and 20;

(ii) the measures put in place to fulfil the collection obligation laid down in Article 23 with regard to the amount of vehicles the producer makes available on the market in the Member State; and

(iii) the system to ensure that the data reported to the competent authorities are reliable;

(uuuu) a statement by the producer or, where applicable, producer's appointed representative for the extended producer responsibility or producer responsibility organisation, stating that the information provided is true.

76. Information to be provided, in addition to the information listed in point 1, where a producer responsibility organisation is appointed to carry out the extended producer responsibility obligations:

(vvvv) the name and contact details, including postal code and place, street and number, country, telephone number, web and e-mail address and the national identification code of the producer responsibility organisation;

(wwww) the trade register number or an equivalent official registration number and the European or national tax identification number of the producer responsibility organisation; and

(xxxx) the represented producer's mandate.

77. Information to be provided, in addition to the information listed in point 1 by the producer responsibility organisation in the case of an authorisation in accordance with Article 18(1):

(yyyy) the names and contact details, including postal codes and places, streets and numbers, countries, telephone numbers, web addresses and e-mail addresses of the producers represented;

(zzzz) the mandate of each represented producer, where applicable;

(aaaaa) where the producer responsibility organisation represents more than one producer, it shall indicate separately how each one of the represented producers meets the responsibilities set out in Article 16.

78. Where obligations under Article 16 are fulfilled on a producer's behalf by an appointed representative for the extended producer responsibility that represents more than one producer, that representative shall, in addition to the information listed in point 1, provide the name and the contact details for each of the represented producers separately.

ANNEX IX

INFORMATION TO BE INCLUDED IN THE CERTIFICATE OF DESTRUCTION

79. Name, address, and registration or identification number of the establishment or undertaking issuing the certificate, where such number is provided in the national registration or identification system.

80. Name and address of competent authority which has issued a permit (in accordance with Article 14 of the Regulation) for the establishment or undertaking issuing the certificate of destruction.

81. Date of issue of the certificate of destruction.

82. Vehicle nationality mark and registration number (registration document, where such document exists on paper, or statement by the authorised treatment facility issuing the certificate that the registration document has been destroyed(2) to be attached to the certificate).

83. Class of vehicle, brand and model.

84. Vehicle identification number (chassis).

85. Name, address, nationality of the holder or owner of the vehicle delivered.

ANNEX X

AMENDMENTS TO REGULATION (EU) 2018/858

86. Annex II to Regulation (EU) 2018/858 shall be amended as follows:

(1) In Part I, entry G13 is replaced by the following:

‘

G13	Circularity	Regulation [PO enter the number of this Regulation]	X			X							

’;

(2) Appendix 1 is amended as follows:

(bbbbb) in table 1, entry G13 is replaced by the following:

‘

'G13	Circularity	Regulation [PO enter the number of this Regulation]		n/a However, Annex VII Part E on prohibition of reuse of the specified component parts shall apply.

(ccccc) in table 2, entry G13 is replaced by the following:

‘

'G13	Circularity	Regulation [PO enter the number of this Regulation]		n/a However, Annex VII Part E on prohibition of reuse of the specified component parts shall apply.

’;

(3) in Appendix 2, point 4 is amended as follows:

(ddddd) in the table ‘Part I: Vehicles belonging to category M1’, entry 59 is replaced by the following:

‘

59	Regulation [PO enter the number of this Regulation] (Circularity)	The requirements of that Regulation shall not apply.

‘:

(eeeee) in the table ‘Part II: Vehicles belonging to category N1’, entry 59 is replaced by the following:

‘

59	Regulation [PO enter the number of this Regulation] (Circularity)	The requirements of that Regulation shall not apply.

’;

(4) Part III is amended as follows:

(fffff)In Appendix 1, entry 59 is replaced by the following:

‘;

59	Circularity	Regulation [PO enter the number of this Regulation]	N/A	N/A		

’,

(ggggg) in Appendix 2, entry 59 is replaced by the following:

‘;

59	Circularity	Regulation [PO enter the number of this Regulation]	N/A				N/A							

’;

(hhhhh) in Appendix 3, entry 59 is replaced by the following:

‘

59	Circularity	Regulation [PO enter the number of this Regulation]	N/A

’;

(iiiii) in Appendix 4, entry 59 is replaced by the following:

‘

59	Circularity	Regulation [PO enter the number of this Regulation]	N/A				N/A							

’.

ANNEX XI

CORRELATION TABLE

87. Directive 2000/53/EC

Directive 2000/53/EC	*This Regulation*
Article 1	Article 1
Article 2(1)	Article 3(1) point (1)
Article 2(2)	Article 3(1) point (2)
Article 2(3)	Article 3(1) point (22)
Article 2(4)	Article 3(2) point (a)
Article 2(5)	Article 3(1) point (16)
Article 2(6)	Article 3(1) point (5)
Article 2(7)	Article 3(2) point (a)
Article 2(8)	Article 3(2) point (a)
Article 2(9)	Article 3(2) point (a)
Article 2(10)	Article 3(1) point (35)
Article 2(11)	-
Article 2(11) point (a)	-
Article 2(11) point (b)	-
Article 2(11) point (c)	-
Article 2(11) point (d)	-
Article 2(12)	-
Article 2(13)	-
Article 3(1)	Article 2(1) point (a)
Article 3(2)	-
Article 3(3)	-
Article 3(4)	Article 2(2) point (a) and paragraph (5)
Article 3(5)	Article 2(1) point (c) and paragraph (5) and

Directive 2000/53/EC	*This Regulation*
	(6)
Article 4(1) point (a)	Article 5(1)
Article 4(1) point (b)	Article 7(1)
Article 4(1) point (c)	Article 6
Article 4(2) point (a)	Article 5(2) and (3)
Article 4(2) point (b)(i)	Article 5(4)(a)
Article 4(2) point (b)(ii)	Article 5(4)(b)
Article 4(2) point (b)(iii)	Article 5(4)(c)
Article 4(2) point (b)(iv)	Article 5(4)(d)
Article 4(2) point (c)	--
Article 5(1), first tiret	Article 23(1) and (2) point (c)
Article 5(1), second tiret	Article 23(2) point (b)
Article 5(2)	Article 23(4) sub-paragraphs 1 and 2 point (c)
Article 5(3), first subparagraph	Article 25
Article 5(3), second subparagraph	--
Article 5(3), third subparagraph	--
Article 5(4), first subparagraph	Article 24(2)
Article 5(4), second subparagraph	Article 16 and 20(1)(a)
Article 5(4), third subparagraph	Article 24(2)
Article 5(4), fourth subparagraph	--
Article 5(5), first subparagraph	Article 25(1) and Annex IX
Article 5(5), second subparagraph	Article 25(5)
Article 6(1)	Article 27 (1) and (3)
Article 6(2), first subparagraph	Article 15(1)
Article 6(2), second subparagraph	--

Directive 2000/53/EC	*This Regulation*
Article 6(3), first subparagraph	Article 30(1) and Annex VII Part C
Article 6(3), second subparagraph	Article 29(1)
Article 6(4)	Article 15(2)
Article 6(5)	Article 27(5)
Article 6(6)	Article 27(4)
Article 7(1)	Article 33(1)
Article 7(2) point (a)	--
Article 7(2) point (b)	Article 34(1) points (a) and (b)
Article 7(2), second subparagraph	--
Article 7(2), third subparagraph	Article 49(5)
Article 7(3)	--
Article 7(4)	--
Article 7(5)	--
Article 8(1)	Article 12(1)
Article 8(2)	Article 12(3)
Article 8(3)	Article 11(1)
Article 8(4)	Article 11(1) and (2)
Article 9(1a), first subparagraph	Article 49(1) point (j)
Article 9(1a), second subparagraph	Article 49(1) second sub-paragraph
Article 9(1a), third subparagraph	Article 49(1) third sub-paragraph
Article 9(1b)	Article 49(2)
Article 9(1c)	--
Article 9(1d)	Article 49(5)
Article 9(2)	Article 9
Article 9a(1)	Article 50(1)

Directive 2000/53/EC	*This Regulation*
Article 9a(2)	Article 50(2)
Article 9a(3)	Article 50(3)
Article 9a(4)	Article 50(4)
Article 9a(5)	Article 50(5)
Article 9a(6)	Article 50(6)
Article 10(1)	--
Article 10(2)	--
Article 10(3)	--
Article 10a	Article 55
Article 11(1)	Article 51(1)
Article 11(2)	Article 51(2)
Article 12(1)	Article 57(1)
Article 12(2)	Article 57(2)
Article 12(3)	--
Article 13	--
Annex I	Annex VII
Annex II	Annex III

88. Directive 2005/64/EC

Directive 2005/64/EC	*This Regulation*
Article 1, first subparagraph	Article 1
Article 1, second subparagraph	--
Article 2	Article 2(1) point (a)
Article 3 point (a)	Article 2(2) point (a)
Article 3 point (b)	Article 2(2) point(b)
Article 3 point (c)	Article 2(2) point (c)
Article 4(1)	Article 3(1) point (1)
Article 4(2)	Article 3(2) point (b)
Article 4(3)	Article 3(1) point (3)
Article 4(4)	Article 3(1) point (2)
Article 4(5)	Annex II
Article 4(6)	Article 3(2) point (b) in combination with Article 3(1) point (1)
Article 4(7)	Article 3(2) point (b)
Article 4(8)	Article 3(2) point (b)
Article 4(9)	Article 3(1) point (5)
Article 4(10)	Article 3(2) point (a)
Article 4(11)	--
Article 4(12)	Article 3(2) point (a)
Article 4(13)	Article 3(1) point (4)
Article 4(14)	Article 3(1) point (6)
Article 4(15)	Article 3(1) point (7)
Article 4(16)	--
Article 4(17)	--

Article 4(18)	Article 9
Article 4(19)	--
Article 4(20)	--
Article 5(1)	--
Article 5(2)	Article 8(1) second sentence
Article 5(3)	Article 8(4)
Article 5(4)	Article 24
Article 6(1)	Article 4(2)
Article 6(2), second subparagraph	Article 5(8)
Article 6(3)	Article 11
Article 6(4)	--
Article 6(5)	--
Article 6(6)	--
Article 6(7)	--
Article 6(8)	--
Article 7 point (a)	Annex VII Part E
Article 7 point (b)	Annex VII Part E
Article 8	--
Article 9	--
Article 10(1)	--
Article 10(2)	--
Article 10(3)	--
Article 10(3)	--
Article 10(4)	--
Article 11(1)	--
Article 11(2)	--

Article 12	--
Article 13	--
Annex I	Article 4 (1)
Annex II	--
Annex III	--
Annex VII	--
Annex V	Annex VII Part E
Annex VI	--

1.1. Information Note

1. Proposal
Proposal for a Regulation of the European Parliament and of the Council on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC.

2. Date of Commission document
13/07/2023

3. Number of Commission document
COM (2023) 451

4. Number of Council document:
2023/0284 (COD)

5. Dealt with in Brussels by
Working Party on the Environment (WPE)

6. Department with primary responsibility
Department of the Environment, Climate and Communications (DECC)

7. Other Departments involved
DECC will be responsible for negotiating the regulation as well as for its general implementation and adoption. Other Departments and agencies that will provide input may include the Department of Transport, the Department of Enterprise, Trade and Employment, the Central Statistics Office (CSO) (statistical input), and the Office of the Revenue Commissioners.

8. Background to, short summary and aim of the proposal
Every year, over six million vehicles in Europe reach the end of their life and are treated as waste. When end-of-life vehicles (ELVs) are not properly managed, they can cause environmental problems and the European economy loses millions of tonnes of materials.

The automotive manufacturing industry is among the largest consumers of primary raw materials and is one of the most resource-intensive industries. Although the recycling rates of materials from ELVs are generally high, the scrap metals produced are of low quality and only small amounts of plastic are recycled. The automotive industry in the EU is the No. 1 consumer of aluminium (42%), magnesium (44%), platinum group metals (63%), natural rubber (67%) and rare earth elements (30% in 2025 and increasing).

End of Life Vehicle Directive 2000/53/EC (ELV Directive) was adopted in 2000 and sets out provisions on the collection and depollution of ELVs. It also restricts hazardous substances in

new vehicles and sets targets for reuse and recycling (85%) and reuse and recovery (95%), based on the average weight of ELVs per vehicle and year.

The ELV Directive has largely delivered on its objectives, but the issue of 'missing vehicles' persists, representing approximately 4 million vehicles per annum. The ELV Directive is also not entirely suitable to address the challenges posed by the evolution in the production of vehicles since its adoption in 2000 (increased use of new materials such as plastics, of electronics, critical raw materials and carbon fibre, as well as expected development of the market for electric vehicles).

The Proposal updates the ELV Directive in light of the European Green Deal and Circular Economy Action Plan. The main objectives of the Proposal are to:

- Prevent and limit waste from end-of-life vehicles and their components.
- Improve the environmental performance of all economic operators involved in the end-of-life cycle of vehicles.

Specific measures include the following:

i. Improve circular design of vehicles to facilitate removal of materials, parts and components for reuse and recycling.
ii. Ensure that at least 25% of plastic used to build a vehicle comes from recycling (of which 25% from recycled ELVs).
iii. Recover more and better-quality raw materials, including critical raw materials, plastics, steel and aluminium.
iv. Ensure that producers are made financially responsible for vehicles when they become waste, to ensure proper financing for mandatory ELV treatment operations and incentivise recyclers to improve quality.
v. Prevent vehicles going "missing", through more inspections, interoperability of national vehicle registration systems, improved distinction of used vehicles from end-of-life vehicles and a ban on exporting used vehicles that are not roadworthy.
vi. Cover more vehicles, and gradually expand EU rules to include new categories such as motorcycles, lorries, and buses, ensuring a proper end of life treatment.

9. Legal basis of the Proposal

Article 114 of the Treaty on the Functioning of the European Union (TFEU). Article 114 TFEU is the legal basis for the overall regulatory framework on type-approval for motor vehicles, whereas the End-of-Life (ELV) Directive has an environmental legal basis (Article 192 TFEU).

10. Voting Method

Qualified Majority Vote

11. Role of the EP

Co-decision

12. Category of proposal
Some significance

13. Implications for Ireland and Ireland's Initial View
Ireland is broadly supportive of the overall objectives of the Proposal which aims to enhance the existing ELV legislative framework to strengthen its coherence with the Waste Framework Directive, eco-design, batteries, car registration and type-approval in line with the policy direction of the EU Green Deal and Circular Economy Action Plan.

Ireland will be monitoring the following themes in particular:

- A circular life-cycle approach as the most appropriate long-term goal, with the potential to share responsibility, encourage collaboration, and bring benefits across the stakeholders involved in a vehicle's life cycle.
- Focus on the long term horizon and caution in relation to short or medium measures that may lock industry into courses of action that negatively affect its ability to transition to a circular economy in the longer term.
- Requirement for more information for verification methods around the use of minimum recycled content.
- The importance of viewing a vehicle as one product and including the full range of stakeholders within the system to help provide the overall environmental and societal benefits desired.
- Coherence with Batteries Regulation 2023/1542 and alignment with Waste Framework Directive 2018/851/EU.

14. Impact on the public
EU consumers and citizens have little information to date on the environmental impacts of the design, production and end-of-life treatment of vehicles. This is partly due to a lack of proactive information on this issue by the automotive industry.

The European Commission's impact assessment report on the proposal indicates that consumers may be affected by an increase in the price of new vehicles of around €39 EUR per vehicle. Consumers might also expect a decrease in prices when selling second-hand cars due to reduced export there of €12 EUR per vehicle, but should also be able to benefit from cheaper prices for used spare parts due to all measures designed to support their recovery and sales. Changes designed to boost the market for used spare parts might on the other hand lower the prices of these parts, to the benefits of consumers who must change parts (for example during repair operations), as used parts are usually considerably cheaper than new parts.

The challenges linked to the implementation of the ELV Directive are also relevant to society as a whole, as improved circularity can greatly help reduce the environmental footprint and

associated harm to the environment linked to the production and end-of-life treatment of vehicles.

15. Have any consultations with Stakeholders taken place or are there any plans to do so?

The Commission consulted stakeholders on several occasions throughout the evaluation and impact assessment processes. These consultations formed the basis for the proposed regulation, especially the open public consultations, targeted consultations, stakeholder workshops[79] and bilateral meetings. Stakeholders and Member States generally agreed with the main findings of the evaluation of ELV Directive and with the need to revise the EU rules on end-of-life vehicles to address these findings.

Ireland actively participated throughout this engagement process and engaged directly with key national stakeholders. The Department of the Environment, Climate and Communications will invite submissions from key national stakeholders and meet to discuss any issues arising.

16. Are there any subsidiarity issues for Ireland?

No. The objectives of this Regulation are to prevent and limit waste from end-of-life vehicles and their components and improve the environmental performance of all economic operators involved in the end-of-life cycle of vehicles. Therefore, to achieve a harmonised and well-functioning EU single market and enable a smooth transition of the automotive sector to the circular economy, in line with the goal set out in the European Green Deal, it is essential to put in place a common set of rules at EU level with clear requirements and obligations for Member States and businesses. The objectives of the work to revise the EU rules on end-of-life vehicles cannot be sufficiently achieved by individual action by the Member States; given the scale and effects of the measures, they are best achieved by action taken at EU level.

17. Anticipated negotiating period

The Proposal has not yet been presented to the European Council.

79A public consultation was held during the evaluation of the Directive (https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1912-End-of-life-vehicles-evaluating-the-EU-rules_en). An inception impact assessment was published on 15 October 2020 for public feedback and then during the impact assessment, a 14-week open public consultation was held between 20 July 2021 and 26 October 2021 (https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12633-End-of-life-vehicles-revision-of-EU-rules/public-consultation_en).

18. Proposed implementation date
No details regarding a proposed implementation date have been provided.

19. Consequences for national legislation
Domestic legislation will be updated as necessary.

20. Method of Transposition into Irish law
The Commission Proposal is for a Regulation which will not require transposition.

21. Anticipated Transposition date
See reply to No. 20 above.

22. Consequences for the EU budget in Euros annually
None/annual amount if available

		2024 **N-1**	2025 **N**	2026 **N+1**	2027 **N+1**	**Total** 2024 - 2027
TOTAL appropriations under HEADINGS 1 to 7 of the multiannual financial framework	Commitments	0.389	1.135	1.140	1.682	**4.346**
	Payments	0.389	1.135	1.140	1.682	**4.346**

23. Contact name, telephone number and e-mail address of official in Department with primary responsibility

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