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**TEXTS ADOPTED**

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**P9\_TA(2023)0394**

**Type-approval of motor vehicles and engines with respect to their emissions and battery durability (Euro 7)**

**Amendments adopted by the European Parliament on 9 November 2023 on the 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 (COM(2022)0586 – C9-0375/2022 – 2022/0365(COD))<sup>1</sup>**

**(Ordinary legislative procedure: first reading)**

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<sup>1</sup> The matter was referred back for interinstitutional negotiations to the committee responsible, pursuant to Rule 59(4), fourth subparagraph (A9-0298/2023).

## **Amendment 1**

### **Proposal for a regulation Recital -1 (new)**

*Text proposed by the Commission*

*Amendment*

***(-1) Decision (EU) 2022/591 of the European Parliament and of the Council<sup>1</sup> on a General Union Environment Action Programme to 2030 lays down as one of the Union's six thematic objectives for the period up to 31 December 2030 the pursuit of zero pollution, including in relation to harmful chemicals, in order to achieve a toxic-free environment, including for air, water and soil, as well as in relation to light and noise pollution, and protecting the health and well-being of people, animals and ecosystems from environment-related risks and negative impacts.***

***<sup>1</sup> Decision (EU) 2022/591 of the European Parliament and of the Council of 6 April 2022 on a General Union Environment Action Programme to 2030 (OJ L 114, 12.4.2022, p. 22).***

## **Amendment 2**

### **Proposal for a regulation Recital -1 a (new)**

*Text proposed by the Commission*

*Amendment*

***(-1a) The European Green Deal<sup>1a</sup> is the Union's proposal to initiate a transition aiming to achieve, by 2050 at the latest, a climate-neutral, clean and circular economy, optimising resource management, minimising pollution while recognising the need for deeply transformative policies. The Union is also committed to the 2030 Agenda for Sustainable Development<sup>1b</sup> and its Sustainable Development Goals<sup>1c</sup>. The***

***Sustainable and Smart Mobility Strategy adopted in December 2020<sup>1d</sup> and the Zero Pollution Action Plan<sup>1e</sup> adopted in May 2021 specifically address transport pollution aspects of the European Green Deal. Other particularly relevant policies for this initiative include, for example, the Ambient Air Quality Directive (AAQD)<sup>1f</sup>, the New Industrial Strategy for Europe<sup>1g</sup>, CO<sub>2</sub> emission standards for cars and vans<sup>1h</sup> and CO<sub>2</sub> emissions targets for new heavy-duty vehicles<sup>1i</sup>.***

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***<sup>1a</sup> 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***

***<sup>1b</sup>***

***[https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1) ¶E***

***<sup>1c</sup> <https://sdgs.un.org/goals>***

***<sup>1d</sup> COM(2020) 789 final***

***<sup>1e</sup> COM(2021) 400 final***

***<sup>1f</sup> Directive 2008/50/EC***

***<sup>1g</sup> COM(2020) 102 final and COM(2021) 350 final***

***<sup>1h</sup> COM/2021/556***

***<sup>1i</sup> COM(2023) 88 final***

### **Amendment 3**

#### **Proposal for a regulation**

##### **Recital 1**

*Text proposed by the Commission*

(1) The internal market is an area in which the free movement of goods, persons, services and capital must be ensured. To that end Regulation (EU) 2018/858 of the European Parliament and of the Council<sup>43</sup> introduced a

*Amendment*

(1) The internal market is an area in which the free movement of goods, persons, services and capital must be ensured. To that end Regulation (EU) 2018/858 of the European Parliament and of the Council<sup>43</sup> 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.

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<sup>43</sup> 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).

#### **Amendment 4**

##### **Proposal for a regulation Recital 2 a (new)**

*Text proposed by the Commission*

comprehensive type-approval and market surveillance system for motor vehicles, trailers, and for systems, components and separate technical units intended for such vehicles **and tyres for all vehicles**.

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<sup>43</sup> 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).

*Amendment*

***(2a) A successful transition to zero-emission mobility requires an integrated approach and the right enabling environment to stimulate innovation and maintain the Union's technological leadership in this sector. This includes public and private investments in research and innovation, the increasing supply of zero- and low-emission vehicles, the roll-out of recharging and refuelling infrastructure, integration into the energy systems, as well as the sustainable materials supply and sustainable production, re-use and recycling of batteries in Europe. It requires coherent action at Union, national, regional and local levels.***

#### **Amendment 5**

##### **Proposal for a regulation**

## **Recital 2 b (new)**

*Text proposed by the Commission*

*Amendment*

***(2b) In order to support the transition towards clean mobility while reindustrialising Europe and supporting citizens, it is essential to keep the prices of private and commercial vehicles affordable for citizens and businesses. This will help maintain quality of life, industrial competitiveness and innovation, support job creation and skill development in the sector.***

## **Amendment 6**

### **Proposal for a regulation Recital 2 c (new)**

*Text proposed by the Commission*

*Amendment*

***(2c) A socially acceptable and just transition towards zero-emission mobility should be ensured. It is important, therefore, to take into account the social effects of such transition throughout the whole automotive value chain and to address proactively the implications on employment. Targeted programmes at Union, national and regional levels, such as the development of just transition plans for automotive dependent regions are to be developed in the framework of the Just Transition Mechanism for the re-skilling, up-skilling and redeployment of workers, as well as education and job-seeking initiatives in adversely affected communities and regions, in close dialogue with the social partners and competent authorities. As part of that transition, women's employment, as well as equal opportunities in this sector, should be strengthened.***

## **Amendment 7**

**Proposal for a regulation**  
**Recital 4**

*Text proposed by the Commission*

(4) The technical requirements for the type-approval of motor vehicles, engines and replacement parts with regard to emissions ('emission type-approval') are currently set out in two Regulations that apply to emission type-approval for light-duty and heavy-duty vehicles respectively, i.e. Regulation (EC) No 715/2007 of the European Parliament and of the Council ('Euro 6')<sup>44</sup> and Regulation (EC) No 595/2009 of the European Parliament and of the Council ('Euro VI')<sup>45</sup>. ***The reason for having two Regulations was that the emissions of heavy-duty vehicles were checked based on engine testing, while for light-duty vehicles the basis was whole vehicle testing. Since then, methodologies have been developed that allow testing of both light- and heavy-duty vehicles on the road. It is therefore no longer necessary to base type-approval on engine testing.***

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<sup>44</sup> Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (OJ L 171, 29.6.2007, p. 1).

<sup>45</sup> Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC (OJ L 188, 18.7.2009, p. 1).

*Amendment*

(4) The technical requirements for the type-approval of motor vehicles, engines and replacement parts with regard to emissions ('emission type-approval') are currently set out in two Regulations that apply to emission type-approval for light-duty and heavy-duty vehicles respectively, i.e. Regulation (EC) No 715/2007 of the European Parliament and of the Council ('Euro 6')<sup>44</sup> and Regulation (EC) No 595/2009 of the European Parliament and of the Council ('Euro VI')<sup>45</sup>.

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<sup>44</sup> Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (OJ L 171, 29.6.2007, p. 1).

<sup>45</sup> Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC (OJ L 188, 18.7.2009, p. 1).

## Amendment 8

### Proposal for a regulation

#### Recital 5

*Text proposed by the Commission*

(5) Incorporating the requirements laid down in Regulation (EC) No 715/2007 and Regulation (EC) No 595/2009 into a single Regulation should ensure internal coherence of the system of emission type-approvals for both light and heavy-duty vehicles, while allowing for different emission limits for such vehicles.

*Amendment*

(5) Incorporating the requirements laid down in Regulation (EC) No 715/2007 and Regulation (EC) No 595/2009 into a single Regulation should ensure internal coherence of the system of emission type-approvals for both light and heavy-duty vehicles, while allowing for different emission limits ***and testing rules and conditions*** for such vehicles.

## Amendment 9

### Proposal for a regulation

#### Recital 7

*Text proposed by the Commission*

(7) It is also necessary to reduce complexity, administrative and implementation costs for manufacturers and authorities and to ensure effective and efficient implementation of the Euro emission standards. Simplification is achieved by eliminating different application dates for the limits and tests ***which existed under Euro 6 and Euro VI***, by eliminating multiple and complex emission tests where such tests are not needed, by referring to standards under existing UN Regulations where applicable, and by ensuring a streamlined and consistent set of procedures and tests for the various phases of the emission type-approval.

*Amendment*

(7) It is also necessary to reduce complexity, administrative and implementation costs for manufacturers and authorities and to ensure effective and efficient implementation of the Euro emission standards. Simplification is achieved by eliminating different application dates for the limits and tests, by eliminating multiple and complex emission tests where such tests are not needed, by referring to standards under existing UN Regulations where applicable, and by ensuring a streamlined and consistent set of procedures and tests for the various phases of the emission type-approval.

## Amendment 10

### Proposal for a regulation

#### Recital 8

*Text proposed by the Commission*

(8) In order to ensure that the emissions for both light and heavy duty vehicles are limited in real life, testing vehicles in real conditions of use with a minimum set of restrictions, boundaries and other driving requirements ***and not only in the laboratory*** is required.

*Amendment*

(8) In order to ensure that the emissions for both light and heavy duty vehicles are limited in real life, testing vehicles in real conditions of use ***which are statistically relevant***, with a minimum set of restrictions, boundaries and other driving requirements is required. ***This on-road testing should be based on normal driving and exclude biased driving.***

## **Amendment 11**

### **Proposal for a regulation**

#### **Recital 10**

*Text proposed by the Commission*

(10) Regulations (EC) No 715/2007 and (EC) No 595/2009 require that vehicles respect the emission limits for a specified period of time, which does not correspond anymore to the average lifetime of vehicles. It is therefore appropriate to lay down durability requirements that reflect the ***average*** expected lifetime of vehicles ***in*** the Union.

*Amendment*

(10) Regulations (EC) No 715/2007 and (EC) No 595/2009 require that vehicles respect the emission limits for a specified period of time, which does not correspond anymore to the average lifetime of vehicles. It is therefore appropriate to lay down durability requirements that reflect the expected lifetime of vehicles<sup>1a</sup> ***and their standard usage across the Union in light of differences between Member States. This is of particular importance to buyers of second hand vehicles who expect the vehicle to emit as much as it did when it was first placed on the market.***

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<sup>1a</sup> ***European Automobile Manufacturers' Association (ACEA) "Vehicles in Use, Europe 2022.***

## **Amendment 12**

### **Proposal for a regulation**

#### **Recital 10 a (new)**

*Text proposed by the Commission*

*Amendment*

*(10a) Member States are encouraged to develop and implement strategies for incentivising fleet renewal, with the aim of facilitating a progressive transition of the European fleet towards vehicles with reduced emissions, contributing to a cleaner and more sustainable transport ecosystem.*

## Amendment 13

### Proposal for a regulation

#### Recital 11

*Text proposed by the Commission*

(11) There are now technologies available and used widely worldwide that limit evaporative emissions of volatile organic compounds during the use, parking and refuelling of a vehicle with petrol fuel. It is therefore appropriate *to set* the emission limits for such volatile organic compounds at a lower level and introduce emission limits for the refuelling phase.

*Amendment*

(11) There are now technologies available and used widely worldwide that limit evaporative emissions of volatile organic compounds during the use, parking and refuelling of a vehicle with petrol fuel. *As these technologies are already proven and cost-effectively implemented in other markets and regions*, it is therefore appropriate *for the Union to align with other markets by setting* the emission limits for such volatile organic compounds at a lower level and *to* introduce emission limits for the refuelling phase.

## Amendment 14

### Proposal for a regulation

#### Recital 11 a (new)

*Text proposed by the Commission*

*Amendment*

*(11a) For the control of refuelling emissions, on-board refuelling vapour recovery has been implemented in other markets and regions for more than 15 years with a demonstrated vapour control efficiency. On-board refuelling vapour recovery requires no annual maintenance or inspections to maintain a higher level of refuelling vapour control efficiency while remaining compatible with the*

*current Stage II petrol stations.*

## Amendment 15

### Proposal for a regulation

#### Recital 12

*Text proposed by the Commission*

(12) Non-exhaust emissions consist of particles emitted by tyres and brakes of vehicles. Emissions from tyres is estimated to be the largest source of microplastics to the environment. As shown in the Impact Assessment, it is expected that by 2050, non-exhaust emissions will constitute up to 90% of all particles emitted by road transport, because exhaust particles will diminish due to vehicle electrification. Those non-exhaust emissions should therefore be measured and limited. The Commission should ***prepare a report on tyre abrasion by the end of 2024 to review the measurement methods and state-of-the-art in order to propose*** tyre abrasion limits.

*Amendment*

(12) Non-exhaust emissions consist of particles emitted by tyres and brakes of vehicles. Emissions from tyres is estimated to be the largest source of microplastics to the environment. As shown in the Impact Assessment, it is expected that by 2050, non-exhaust emissions will constitute up to 90% of all particles emitted by road transport, because exhaust particles will diminish due to vehicle electrification. Those non-exhaust emissions should therefore be measured and limited. The Commission should ***conduct a review before the end of 2025 for the measurement of tyre abrasion and define abrasion limits based on state-of-the-art methods in the event that uniform provisions have not been established which refer to the work on tyre abrasion done at UN WP.29 by mid-2026. The Commission should ensure that the UN WP.29 achieves its objectives in a timely manner, reflecting a high level of ambition based on solid scientific and technical grounds. The review should be accompanied by a legislative proposal for vehicles with traction batteries, including plugin hybrids and battery electric vehicles, to adopt tyre abrasion limits compatible with the Union's objective to reduce microplastics released into the environment by 30% by 2030 and based on state-of-the-art abrasion rates.***

## Amendment 16

### Proposal for a regulation

## Recital 14

*Text proposed by the Commission*

(14) Vehicles with traction batteries, including plugin hybrids and battery electric vehicles, contribute to the decarbonisation of the road transport sector. In order to gain and increase consumer trust in such vehicles, they should be performant and durable. It is therefore important to require that traction batteries retain a good part of their initial capacity after many years of use. That is of particular importance to buyers of second hand electric vehicles to ensure that the vehicle will continue to perform as expected. Monitors of the battery state-of-health should therefore be required for all vehicles that use traction batteries. In addition minimum performance requirements for battery durability of passenger cars should be introduced, taking into account the UN Global Technical Regulation 22<sup>47</sup>.

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<sup>47</sup> United Nations Global Technical Regulation on In-vehicle Battery Durability for Electrified Vehicles, UN GTR 22

*Amendment*

(14) Vehicles with traction batteries, including plugin hybrids and battery electric vehicles, contribute to the decarbonisation of the road transport sector. In order to gain and increase consumer trust in such vehicles, they should be performant and durable. It is therefore important to require that traction batteries retain a good part of their initial capacity after many years of use. That is of particular importance to buyers of second hand electric vehicles to ensure that the vehicle will continue to perform as expected. Monitors of the battery state-of-health should therefore be required for all vehicles that use traction batteries. In addition minimum performance requirements for battery durability of passenger cars **and light commercial vehicles** should be introduced, taking into account the UN Global Technical Regulation 22<sup>47</sup>.

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<sup>47</sup> United Nations Global Technical Regulation on In-vehicle Battery Durability for Electrified Vehicles, UN GTR 22

## Amendment 17

### Proposal for a regulation Recital 14 a (new)

*Text proposed by the Commission*

*Amendment*

***(14a) OBM, OBFCM or SOH devices use data generated by the vehicle to monitor its compliance with this Regulation. That same data should be shared according to the Data Act to the vehicle users and their service providers so that the vehicle users can benefit from advice and recommendations on how to limit the vehicle's emissions, its energy consumption and extend its battery-life***

*through improved use of the vehicle.*

## Amendment 18

### Proposal for a regulation Recital 15

*Text proposed by the Commission*

(15) Tampering of vehicles to remove or deactivate parts of the pollution control systems is a well-known problem. Such practice leads to uncontrolled emissions and should be prevented. Tampering of the odometer, leads to false mileage and hampers the proper in-service control of a vehicle. It is therefore of the utmost importance to guarantee the highest possible security protection of those systems, complete with security certificates and appropriate anti-tampering protection to ensure that neither pollution control systems nor the vehicle odometer can be tampered with.

*Amendment*

(15) Tampering of vehicles to remove or deactivate parts of the pollution control systems is a well-known problem. Such practice leads to uncontrolled emissions and should be prevented, ***including through action to deter the advertising, sale and installation of tampering devices, and sanctioned.*** Tampering of the odometer leads to false mileage and hampers the proper in-service control of a vehicle. It is therefore of the utmost importance to guarantee the highest possible security protection of those systems, complete with security certificates and appropriate anti-tampering protection to ensure that neither pollution control systems nor the vehicle odometer can be tampered with.

## Amendment 19

### Proposal for a regulation Recital 15 a (new)

*Text proposed by the Commission*

*Amendment*

***(15a) To prevent anti-tampering measures from unduly hampering competition, this Regulation and its secondary Legislation should maintain the possibility of independent operators to develop, distribute, install and activate aftermarket replacement parts. Therefore, manufacturers should ensure access by independent operators to the strictly necessary information, tools and processes for development and***

*installation of such replacement parts.*

## **Amendment 20**

### **Proposal for a regulation**

#### **Recital 16**

*Text proposed by the Commission*

(16) Sensors installed on vehicles are already used today to detect anomalies on emissions and trigger related repairs through the on-board diagnostic (OBD) system. The OBD system currently in use, however, does not detect accurately or timely the malfunctions and neither does it sufficiently and timely **force** repairs. As a result, it is possible that vehicles emit much more than they are allowed to do. The sensors used up to now for OBD can also be used to monitor and control the emission behaviour of the vehicles on a continuous basis via an on-board monitoring (OBM) system. The OBM will also warn the user to perform repairs of the engine or the pollution control systems when these are needed. It is therefore appropriate to require that such a system is installed and to regulate its technical requirements.

*Amendment*

(16) Sensors installed on vehicles are already used today to detect anomalies on emissions and trigger related repairs through the on-board diagnostic (OBD) system. The OBD system currently in use, however, does not detect accurately or timely the malfunctions and neither does it sufficiently and timely **urge** repairs. As a result, it is possible that vehicles emit much more than they are allowed to do. The sensors used up to now for OBD can also be used to monitor and control the **exhaust** emission behaviour of the vehicles on a continuous basis via an on-board monitoring (OBM) system. The OBM will also warn the user to perform repairs of the engine or the pollution control systems when these are needed. It is therefore appropriate to require that such a system is installed and to regulate its technical requirements. ***The inducement of measures implied by those systems should not lead to endangering of road safety or limiting mobility.***

## **Amendment 21**

### **Proposal for a regulation**

#### **Recital 17**

*Text proposed by the Commission*

(17) ***Manufacturers may opt to produce vehicles which comply with lower emission limits or with better battery durability than what is required in this Regulation, or which include advanced options including geofencing and***

*Amendment*

(17) ***An up-to-date*** environmental vehicle passport (EVP) should be made available ***for consumers to receive up to date information throughout the lifetime of the vehicle such as fuel consumption, state of health of batteries, emission limits,***

***adaptive controls. Consumers and national authorities should be able to identify such vehicles through appropriate documentation.*** An environmental vehicle passport (EVP) should ***therefore*** be made available.

***periodic technical inspections results and roadworthiness data and other relevant information.***

## **Amendment 22**

### **Proposal for a regulation Recital 18**

*Text proposed by the Commission*

***(18) In case the Commission makes a proposal for registering after 2035 new light-duty vehicles running exclusively on CO2 neutral fuels outside the scope of the CO2 fleet standards, and in conformity with Union law and the Union's climate neutrality objective, this Regulation will need to be amended to include the possibility to type approve such vehicles.***

*Amendment*

***deleted***

## **Amendment 23**

### **Proposal for a regulation Recital 19**

*Text proposed by the Commission*

(19) Emissions from vehicles sold by small volume manufacturers constitute an insignificant part of emissions in the Union. Some flexibility may therefore be allowed in some of the requirements for such manufacturers. Small volume manufacturers should therefore be able to substitute certain tests during type-approval with declarations of compliance, while ultra-small volume manufacturers should be allowed to use laboratory tests based on ***random*** real-driving cycles.

*Amendment*

(19) Emissions from vehicles sold by small volume manufacturers constitute an insignificant part of emissions in the Union. Some flexibility may therefore be allowed in some of the requirements for such manufacturers. Small volume manufacturers should therefore be able to substitute certain tests during type-approval with declarations of compliance, while ultra-small volume manufacturers should be allowed to use laboratory tests based on ***statistically relevant*** real-driving cycles.

## **Amendment 24**

**Proposal for a regulation**  
**Recital 20 a (new)**

*Text proposed by the Commission*

*Amendment*

***(20a) Whilst the term ‘State of Health’ (SOH) is commonly applied to refer to the health of a battery at a given point in its life, this term is not commonly defined and is determined through a variety of different methodologies: the ‘State of Certified Energy’ (SOCE) and the ‘State of Certified Range’ (SOCR). Both metrics represent a percentage of the certified battery energy or electric range remaining at a given point in time.***

**Amendment 25**

**Proposal for a regulation**  
**Recital 21**

*Text proposed by the Commission*

*Amendment*

(21) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission in relation to obligations of manufacturers as part of type-approval and procedures, test and methodologies to be applied for declaration of conformity, conformity of production check, in-service conformity-check and environmental vehicle passport (EVP); options ***and designations*** of vehicles; requirements, tests, methods and corrective measures related to durability of vehicles, systems, components and separate technical units, as well as registration and communication capabilities of OBM systems, including for the purpose of periodic technical inspections and roadworthiness checks; requirements and information to be provided ***by manufacturers of*** multistage vehicles as well as procedures to determine the CO<sub>2</sub> value for these multistage vehicles; technical elements, administrative and

(21) In order to ensure uniform conditions for the implementation of this Regulation and ***in order to supplement it, both*** implementing powers ***in accordance with Regulation (EU) No 182/2011 and power to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union*** should be conferred on the Commission in relation to obligations of manufacturers as part of type-approval and procedures, test and methodologies to be applied for declaration of conformity, conformity of production check, in-service conformity-check and environmental vehicle passport (EVP);; options of vehicles; requirements, tests, methods and corrective measures related to durability of vehicles, systems, components and separate technical units, as well as registration and communication capabilities of OBM systems, including for the purpose of periodic technical inspections and roadworthiness checks; requirements and information to be

documentation requirements for emission type-approval, checks and inspections and market surveillance checks, as well as reporting obligations, in-service conformity and conformity of production checks; methods and tests to (i) measure exhaust emissions in the lab and on the road, including random **and worst-case** RDE test cycles, the use of portable emissions measurement systems for verifying real driving emissions, and idle emissions, (ii) determine the CO<sub>2</sub> emissions, fuel and energy consumption, the electric range and engine power of a motor vehicle, (iii) provide specifications for gear shift indicator (GSI) (iv) determine the impact of O<sub>3</sub>, O<sub>4</sub> trailers on the CO<sub>2</sub>, fuel and energy consumption, electric range and engine power of a motor vehicle, (iv) measure crankcase emissions, evaporative emissions, brake emissions, (v) evaluate compliance with minimum performance requirements of battery durability, (vi) assess the in-service conformity of engines and vehicles; compliance thresholds and performance requirements, as well as (vii) test and methods to ensure performance of sensors (OBD and OBM); (viii) methods to ensure and assess security measures; specification and characteristics of driver warning systems and inducement methods and to assess their correct operation; (ix) methods to assess the correct operation, effectiveness, regeneration and durability of original and replacement pollution control systems; (x) methods to ensure and assess security measures including vulnerability analysis and tampering protection; **(xi) methods to assess the correct functioning of types approved under specific EURO7 designations;** (xii) criteria for emission type-approvals for small and ultra-small volume manufacturers; (xiii) checks and test procedures for multistage vehicles; (xiv) performance requirements for test equipment; (xv) specification of reference fuels; and (xvi) methods for assessing the absence of defeat devices and defeat

provided **for** multistage vehicles as well as procedures to determine the CO<sub>2</sub> value for these multistage vehicles; technical elements, administrative and documentation requirements for emission type-approval, checks and inspections and market surveillance checks, as well as reporting obligations, in-service conformity and conformity of production checks; methods and tests to (i) measure exhaust emissions in the lab and on the road, including random **but statistically relevant** RDE test cycles, the use of portable emissions measurement systems for verifying real driving emissions, and idle emissions, (ii) determine the CO<sub>2</sub> emissions, fuel and energy consumption, the electric range and engine power of a motor vehicle, (iii) provide specifications for gear shift indicator (GSI) (iv) determine the impact of O<sub>3</sub>, O<sub>4</sub> trailers on the CO<sub>2</sub>, fuel and energy consumption, electric range and engine power of a motor vehicle, (iv) measure crankcase emissions, evaporative emissions **and** brake emissions, (v) evaluate compliance with minimum performance requirements of battery durability , (vi) assess the in-service conformity of engines and vehicles; compliance thresholds and performance requirements, as well as (vii) test and methods to ensure performance of sensors OBD and OBM; (viii) methods to ensure and assess security measures; specification and characteristics of driver warning systems and inducement methods and to assess their correct operation; (ix) methods to assess the correct operation, effectiveness, regeneration and durability of original and replacement pollution control systems; (x) methods to ensure and assess security measures including vulnerability analysis and tampering protection; (xii) criteria for emission type-approvals for small and ultra-small volume manufacturers; (xiii) checks and test procedures for multistage vehicles; (xiv) performance requirements for test equipment; (xv) specification of reference fuels; and (xvi) methods for assessing the

strategies; (xvii) to measure tyre abrasion, as well as (xviii) EVP format, data and method of communication of the EVP data. ***Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council***<sup>50</sup>.

## Amendment 26

### Proposal for a regulation Recital 22

#### *Text proposed by the Commission*

(22) In order to amend or supplement, as appropriate, non-essential elements of this Regulation, 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 test conditions based on data collected when testing Euro 7 vehicles, brakes or tyres; test requirements, in particular taking into account technical progress and data collected when testing Euro 7 vehicles; ***introducing vehicle options and designations based on innovative technologies for manufacturers but also*** setting out brake particle emission limits and abrasion limits for tyre types as well as minimum performance requirements of batteries and durability multipliers based on data collected when testing Euro 7 vehicles and setting out ***definitions and*** special rules for small volume manufacturers for vehicles of categories M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub>. 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<sup>51</sup>. In particular, in order to ensure equal participation in the preparation of delegated acts, the European Parliament

absence of defeat devices and defeat strategies; (xvii) to measure tyre abrasion as well as (xviii) EVP format, data and method of communication of the EVP data.

#### *Amendment*

(22) In order to amend or supplement, as appropriate, non-essential elements of this Regulation, 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 test conditions based on data collected when testing Euro 7 vehicles, brakes or tyres; test requirements, in particular taking into account technical progress and data collected when testing Euro 7 vehicles; setting out brake particle emission limits and abrasion limits for tyre types as well as minimum performance requirements of batteries and durability multipliers based on data collected when testing Euro 7 vehicles and setting out special rules for small volume manufacturers for vehicles of categories M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub>. 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<sup>51</sup>. In particular, in order 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

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.

access to meetings of Commission expert groups dealing with the preparation of delegated acts.

## **Amendment 27**

### **Proposal for a regulation**

#### **Recital 22 a (new)**

*Text proposed by the Commission*

*Amendment*

***(22a) The Union is a signatory to the United Nations Economic Commission for Europe (UNECE) Agreement established on March 20, 1958. That agreement pertains to the standardisation of technical specifications for wheeled vehicles, their associated equipment, and components that can be installed on or used with wheeled vehicles. Additionally, it lays down the conditions for mutual recognition of approvals granted based on these specifications. The requirements laid down in this Regulation should, where appropriate, align with the standards laid out in the UNECE Regulations or any subsequent amendments to this Regulation, where available, particularly in relation to limits on brake particle emissions, limits on tyre types regarding abrasion, and the establishment of minimum performance criteria for batteries.***

## **Amendment 28**

### **Proposal for a regulation**

#### **Recital 25**

*Text proposed by the Commission*

*Amendment*

(25) It is important to grant Member States, national type-approval authorities

(25) It is important to grant Member States, national type-approval authorities

and economic operators enough time to prepare for the application of the new rules introduced by this Regulation. The date of application should therefore be deferred. While for light duty vehicles the date of application should be as soon as technically possible, for heavy duty vehicles and trailers the date of application may be further delayed **by two years**, since the transition to zero-emission vehicles will be longer for heavy duty vehicles.

## Amendment 29

### Proposal for a regulation Recital 26

#### *Text proposed by the Commission*

(26) Since the objectives of this Regulation, namely to lay down harmonised rules on the administrative and technical requirements for the type-approval of vehicles of categories M and N, and of systems, components and separate technical units, and on market surveillance of such vehicles, systems, components and separate technical units, with respect to emissions cannot be sufficiently achieved by the Member States, but can rather, by reason of their scale and effects, 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,

## Amendment 30

### Proposal for a regulation

and economic operators enough time to prepare for the application of the new rules introduced by this Regulation **and its secondary legislation**. The date of application should therefore be deferred. While for light duty vehicles the date of application should be as soon as technically **and economically** possible, for heavy duty vehicles and trailers the date of application may be further delayed , since the transition to zero-emission vehicles will be longer for heavy duty vehicles.

#### *Amendment*

(26) Since the objectives of this Regulation, namely to lay down harmonised rules on the administrative and technical requirements for the type-approval of vehicles of categories M and N, and of systems, components and separate technical units, and on market surveillance of such vehicles, systems, components and separate technical units, with respect to emissions, **as well as pursuing the high levels of environmental and health protection**, cannot be sufficiently achieved by the Member States, but can rather, by reason of their scale and effects, 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,

## Article 1 – paragraph 2

*Text proposed by the Commission*

2. This Regulation lays down rules for the initial emission type approval, conformity of production, in-service conformity, market surveillance, the durability of pollution control systems and traction batteries, on-board monitoring systems, security provisions to limit tampering and cybersecurity measures, and the accurate determination of CO<sub>2</sub> emissions, electric range, fuel and energy consumption and energy efficiency.

*Amendment*

2. This Regulation, ***in addition***, lays down rules for the initial emission type approval, conformity of production, in-service conformity, market surveillance, the durability of pollution control systems and traction batteries, on-board monitoring systems, security provisions to limit tampering and cybersecurity measures, and the accurate determination of CO<sub>2</sub> ***and pollutant*** emissions, electric range, fuel and energy consumption and energy efficiency.

## Amendment 31

### Proposal for a regulation

#### Article 1 – paragraph 2 a (new)

*Text proposed by the Commission*

*Amendment*

***2a. This Regulation also establishes common technical requirements and administrative provisions for the abrasion emission type-approval and market surveillance of newly manufactured tyres. These are to be considered as complimentary to the tyre technical requirements and administrative provisions of Regulation (EU) 2019/2144.***

## Amendment 32

### Proposal for a regulation

#### Article 2 – paragraph 1

*Text proposed by the Commission*

This Regulation applies to motor vehicles of categories M<sub>1</sub>, M<sub>2</sub>, M<sub>3</sub>, N<sub>1</sub>, N<sub>2</sub> and N<sub>3</sub>, as well as trailers of O<sub>3</sub> and O<sub>4</sub> categories as specified in Article 4 of Regulation (EU) No 2018/858, including those designed and constructed in one or more stages, and to

*Amendment*

This Regulation applies to motor vehicles of categories M<sub>1</sub>, M<sub>2</sub>, M<sub>3</sub>, N<sub>1</sub>, N<sub>2</sub> and N<sub>3</sub>, as well as trailers of O<sub>3</sub> and O<sub>4</sub> categories as specified in Article 4 of Regulation (EU) No 2018/858, including those designed and constructed in one or more stages, and to

systems, components and separate technical units intended for such vehicles.

systems, components and separate technical units intended for such vehicles **and tyres of class categories C1, C2 and C3 as specified in UN Regulation No 117 with the exception of ice grip tyres.**

### Amendment 33

#### Proposal for a regulation

##### Article 3 – paragraph 2 – point 2

*Text proposed by the Commission*

(2) ‘initial emission type approval’ or ‘IETA’ means the first phase of an emission type approval procedure before the emission type approval certificate is granted by the authorities and vehicles are put into production;

*Amendment*

(2) ‘initial emission type approval’ or ‘IETA’ means the first phase of an emission type approval procedure before the emission type approval certificate is granted by the authorities and vehicles, **engines, systems, separate technical units or components** are put into production;

### Amendment 34

#### Proposal for a regulation

##### Article 3 – paragraph 2 – point 4

*Text proposed by the Commission*

(4) ‘in-service conformity’ or ‘ISC’ means the activities carried out on vehicles in circulation with the purpose of verifying the durability requirements set out in this Regulation;

*Amendment*

(4) ‘in-service conformity’ or ‘ISC’ means the activities carried out on vehicles, **engines, systems, separate technical units or components** in circulation with the purpose of verifying the durability requirements set out in this Regulation;

### Amendment 35

#### Proposal for a regulation

##### Article 3 – paragraph 2 – point 5

*Text proposed by the Commission*

(5) ‘engine’ means the **propulsion source** of a vehicle;

*Amendment*

(5) ‘engine’ means the **internal combustion engine** of a vehicle (**ICEV**);

## Amendment 36

### Proposal for a regulation Article 3 – paragraph 2 – point 9

*Text proposed by the Commission*

(9) ‘CO<sub>2</sub> emissions’ or ‘CO<sub>2</sub>’ means the emission of carbon dioxide from the tailpipe *of the motor vehicle or engine*;

*Amendment*

(9) ‘CO<sub>2</sub> emissions’ or ‘CO<sub>2</sub>’ means the emission of carbon dioxide from the tailpipe;

## Amendment 37

### Proposal for a regulation Article 3 – paragraph 2 – point 10

*Text proposed by the Commission*

(10) ‘nitrogen oxides’ or ‘NO<sub>x</sub>’ means the sum of *the oxides of* nitrogen emitted from the tailpipe;

*Amendment*

(10) ‘nitrogen oxides’ or ‘NO<sub>x</sub>’ means the sum of *nitric oxide (NO) and* nitrogen *dioxide (NO<sub>2</sub>)* emitted from the tailpipe;

## Amendment 38

### Proposal for a regulation Article 3 – paragraph 2 – point 10 a (new)

*Text proposed by the Commission*

*Amendment*

*(10a) ‘nitrous oxide’ or ‘N<sub>2</sub>O’ means the emission of nitrous oxide from the tailpipe;*

## Amendment 39

### Proposal for a regulation Article 3 – paragraph 2 – point 18

*Text proposed by the Commission*

(18) ‘non-methane hydrocarbons’ or ‘*NHMC*’ means the total hydrocarbons

*Amendment*

(18) ‘non-methane hydrocarbons’ or ‘*NMHC*’ means the total hydrocarbons

emitted from the tailpipe excluding methane;

emitted from the tailpipe excluding methane;

#### **Amendment 40**

##### **Proposal for a regulation**

##### **Article 3 – paragraph 2 – point 24**

*Text proposed by the Commission*

(24) ‘vehicle energy consumption calculation tool’ or ‘VECTO’ means a simulation tool used for determining CO<sub>2</sub> emissions, fuel consumption, electric energy consumption and the electric range from heavy duty vehicles; ***‘energy consumption’ means the consumption of electric energy from each and all propulsion sources within a vehicle;***

*Amendment*

(24) ‘vehicle energy consumption calculation tool’ or ‘VECTO’ means a simulation tool used for determining CO<sub>2</sub> emissions, fuel consumption, electric energy consumption and the electric range from heavy duty vehicles;

#### **Amendment 41**

##### **Proposal for a regulation**

##### **Article 3 – paragraph 2 – point 24 a (new)**

*Text proposed by the Commission*

*Amendment*

***(24a) ‘energy consumption’ means the consumption of electric energy from each and all propulsion sources within a vehicle;***

#### **Amendment 42**

##### **Proposal for a regulation**

##### **Article 3 – paragraph 2 – point 29**

*Text proposed by the Commission*

(29) ‘tyre abrasion’ means the mass of material lost from the tyre due to the abrasion process and emitted to the environment;

*Amendment*

(29) ‘tyre abrasion’ means the mass of material lost from the tyre due to the abrasion process ***referring to the work performed in the UN WP.29 common GRBP/GRPE Task Force on Tyre***

*Abrasion*, and emitted to the environment;

#### **Amendment 43**

##### **Proposal for a regulation**

##### **Article 3 – paragraph 2 – point 34**

*Text proposed by the Commission*

(34) ‘original pollution control systems’ means a pollution control system or an assembly of such systems covered by the type-approval granted for the vehicle concerned;

*Amendment*

(34) ‘original pollution control systems’ means a pollution control system or an assembly of such systems covered by the type-approval granted for the vehicle concerned ***and installed on the vehicle at its initial registration***;

#### **Amendment 44**

##### **Proposal for a regulation**

##### **Article 3 – paragraph 2 – point 36**

*Text proposed by the Commission*

(36) ‘***adaptive control function***’ means a system that adjusts engine, pollution control systems or other vehicle parameters with the purpose to improve fuel or energy consumption and the effectiveness of the pollution control system based on the expected usage of the vehicle;

*Amendment*

***deleted***

#### **Amendment 45**

##### **Proposal for a regulation**

##### **Article 3 – paragraph 2 – point 38**

*Text proposed by the Commission*

(38) ‘on-board monitoring system’ or ‘OBM’ means a system on board a vehicle that is capable of detecting either emission exceedances or when a vehicle is in zero emission mode if applicable, and capable

*Amendment*

(38) ‘on-board monitoring system’ or ‘OBM’ means a system on board a vehicle that is capable of ***monitoring emissions*** ***and*** detecting either emission exceedances or when a vehicle is in zero emission mode

of indicating the occurrence of such exceedances by means of information stored in the vehicle, and of communicating that information via the OBD port and over the air;

if applicable, and capable of indicating the occurrence of such exceedances by means of information stored in the vehicle, and of communicating that information via the OBD port and over the air;

## Amendment 46

### Proposal for a regulation

#### Article 3 – paragraph 2 – point 39

##### *Text proposed by the Commission*

(39) ‘on-board fuel and energy consumption monitoring device’ or ‘OBFCM device’ means any software or hardware that senses and uses vehicle, engine, fuel or electric energy and payload/mass parameters to determine, store in the vehicle the fuel and energy consumption data and other parameters relevant for determining the fuel or energy consumption and energy efficiency of the vehicle;

##### *Amendment*

(39) ‘on-board fuel and energy consumption monitoring device’ or ‘OBFCM device’ means any software or hardware that senses and uses vehicle, engine, fuel or electric energy and payload/mass parameters to determine, store in the vehicle the fuel and energy consumption data and other parameters relevant for determining the fuel or energy consumption and energy efficiency of the vehicle ***as well as for the purpose of roadworthiness controls***;

## Amendment 47

### Proposal for a regulation

#### Article 3 – paragraph 2 – point 44

##### *Text proposed by the Commission*

(44) ‘tampering’ means the inactivation, or modification by the economic operators or independent operators, of the engine, vehicle pollution control device and system, propulsion system, traction battery, odometer, OBFCM or OBD/OBM, including any software or other logical control elements of those systems and their data;

##### *Amendment*

(44) ‘tampering’ means the inactivation, or modification by the economic operators or independent operators, of the engine ***or electric motor***, vehicle pollution control device and system, propulsion system, traction battery, odometer, OBFCM or OBD/OBM, including any software or other logical control elements of those systems and their data;

## Amendment 48

## Proposal for a regulation

### Article 3 – paragraph 2 – point 47 – introductory part

*Text proposed by the Commission*

(47) ‘small volume manufacturer’ means a manufacturer of fewer than 10 000 new motor vehicles of category M<sub>1</sub> or 22 000 new motor vehicles of category N<sub>1</sub> registered in the Union per calendar year and which:

*Amendment*

(47) ‘small volume manufacturer’ means a manufacturer of fewer than 10 000 new motor vehicles of category M<sub>1</sub>, or 22 000 new motor vehicles of category N<sub>1</sub>, **or 600 new motor vehicles from categories M<sub>2</sub>, M<sub>3</sub>, and 6 900 new motor vehicles in total from categories N<sub>2</sub> and N<sub>3</sub>** registered in the Union per calendar year and which:

## Amendment 49

## Proposal for a regulation

### Article 3 – paragraph 2 – point 63

*Text proposed by the Commission*

(63) ‘rated power’ or ‘P<sub>rated</sub>’ means the maximum net power of the engine or motor in kW;

*Amendment*

(63) ‘rated power’ or ‘P<sub>rated</sub>’ means the maximum net power of the engine or **electric** motor in kW;

## Amendment 50

## Proposal for a regulation

### Article 3 – paragraph 2 – point 65

*Text proposed by the Commission*

(65) ‘traction battery’ means a battery system that stores energy with the main purpose of propelling the vehicle;

*Amendment*

(65) ‘traction battery’ means a battery system that stores energy with the main purpose of propelling the vehicle, **including its battery management system;**

## Amendment 51

## Proposal for a regulation

### Article 3 – paragraph 2 – point 65 a (new)

*Text proposed by the Commission*

*Amendment*

***(65a) ‘battery management system’ means an electronic device that controls or manages the electric and thermal functions of a battery in order to ensure the battery’s safety, performance and service life, manages and stores the data for the parameters for determining the battery’s state of health and expected lifetime set out in Annex VII to Regulation (EU) 2023/1542 and communicates with the vehicle in which the battery is incorporated, or with a public or private charging infrastructure;***

## **Amendment 52**

### **Proposal for a regulation**

#### **Article 3 – paragraph 2 – point 67**

*Text proposed by the Commission*

(67) ‘zero-emission range’ means the maximum distance a zero-emission vehicle can travel until the traction battery or fuel tank is depleted, which for PEVs corresponds to the electric range;

*Amendment*

(67) ‘zero-emission range’ means the maximum distance a zero-emission vehicle ***or a vehicle in zero-emission mode*** can travel until the traction battery or fuel tank ***of a non ICEV*** is depleted, which for PEVs corresponds to the electric range;

## **Amendment 53**

### **Proposal for a regulation**

#### **Article 3 – paragraph 2 – point 71**

*Text proposed by the Commission*

(71) ‘environmental vehicle passport’ or ‘EVP’ means a record on paper and digital form containing information ***on the environmental performance of a vehicle at the moment of registration, including the level of pollutant emission limits, CO<sub>2</sub> emissions, fuel consumption, energy consumption, electric range and engine power, and battery durability and other related*** values;

*Amendment*

(71) ‘environmental vehicle passport’ or ‘EVP’ means a record on paper and digital form containing ***all the information required to verify the tested and manufacturer declared values during type approval;***

## Amendment 54

### Proposal for a regulation

#### Article 3 – paragraph 2 – point 72

*Text proposed by the Commission*

(72) ‘excess emissions driver warning system’ means a system designed, constructed and installed in a vehicle to provide information to the user about excess emissions and enforce repairs;

*Amendment*

(72) ‘excess **exhaust** emissions driver warning system’ means a system designed, constructed and installed in a vehicle to provide information to the user about excess **exhaust** emissions and enforce repairs;

## Amendment 55

### Proposal for a regulation

#### Article 3 – paragraph 2 – point 77

*Text proposed by the Commission*

(77) *"snow tyre" means a tyre whose tread pattern, tread compound or structure is primarily designed to achieve in snow conditions a performance better than that of a normal tyre with regard to its ability to initiate or maintain vehicle motion;*

*Amendment*

*deleted*

## Amendment 56

### Proposal for a regulation

#### Article 3 – paragraph 2 – point 78

*Text proposed by the Commission*

(78) *"special use tyre" means a tyre intended for mixed use both on- and off-road or for other special duty. These tyres are primarily designed to initiate and maintain the vehicle in motion in off-road conditions.*

*Amendment*

*deleted*

## Amendment 57

**Proposal for a regulation**  
**Article 3 – paragraph 2 – point 78 a (new)**

*Text proposed by the Commission*

*Amendment*

**(78a) "Ice grip tyre" means a class C1 snow tyre for use in severe snow conditions that is additionally designed to be used on road surfaces covered with ice and that fulfils the requirements set in UN Regulation No 117.**

**Amendment 58**

**Proposal for a regulation**  
**Article 4 – paragraph 1**

*Text proposed by the Commission*

*Amendment*

1. Manufacturers shall ensure that the new vehicles they manufacture, which are sold, registered or put into service in the Union, are type approved in accordance with this Regulation. Manufacturers shall ensure that the new components or separate technical units, including engines, traction batteries, brake systems and replacement pollution control systems requiring type-approval which they manufacture and which are sold or put into service in the Union are type approved in accordance with this Regulation

1. Manufacturers shall ensure that the new vehicles they manufacture, which are sold, registered or put into service in the Union, are type approved in accordance with this Regulation. **From the specific dates of application set out in this Regulation**, manufacturers shall ensure that the new components or separate technical units, including engines, traction batteries, brake systems, **tyres** and replacement pollution control systems requiring type-approval which they manufacture and which are sold or put into service in the Union are type approved in accordance with this Regulation.

**Amendment 59**

**Proposal for a regulation**  
**Article 4 – paragraph 3 – subparagraph 1**

*Text proposed by the Commission*

*Amendment*

When verifying compliance with the exhaust emission limits, where the testing is performed in extended driving conditions, the emissions shall be divided

When verifying compliance with the exhaust emission limits, where the testing is performed in **one** extended driving conditions **at a time**, the emissions shall be

by the extended driving divider set out in Annex III.

divided by the extended driving divider set out in Annex III.

## **Amendment 60**

### **Proposal for a regulation**

#### **Article 4 – paragraph 3 – subparagraph 2**

*Text proposed by the Commission*

The emissions during regeneration of pollution control systems **will** be included as a weighted average based on the frequency and duration of the regeneration events.

*Amendment*

The emissions during regeneration of pollution control systems **shall** be included as a weighted average based on the frequency and duration of the regeneration events

## **Amendment 61**

### **Proposal for a regulation**

#### **Article 4 – paragraph 4**

*Text proposed by the Commission*

4. Manufacturers shall design and construct components or separate technical units, including engines, traction batteries, brake systems and replacement pollution control systems to comply with this Regulation, including complying with the emission limits set out in Annex I.

*Amendment*

4. Manufacturers shall design and construct components or separate technical units, including engines, traction batteries, brake systems and replacement pollution control systems to comply with this Regulation, including complying with the emission limits set out in Annex I ***under the testing conditions set out in Annex III.***

## **Amendment 62**

### **Proposal for a regulation**

#### **Article 4 – paragraph 6 – point a**

*Text proposed by the Commission*

(a) OBD systems **capable of detecting** malfunctioning systems which lead to emission exceedances in order to facilitate repairs;

*Amendment*

(a) OBD systems **that can detect** malfunctioning systems which lead to **exhaust** emission exceedances **or the malfunction of other components** in order to facilitate repairs;

## Amendment 63

### Proposal for a regulation

#### Article 4 – paragraph 6 – point b

*Text proposed by the Commission*

(b) OBM systems capable of detecting emissions above the emission limits due to malfunctions, increased degradation or other situations that increase emissions;

*Amendment*

(b) OBM systems capable of detecting emissions above the emission limits due to malfunctions, increased degradation or other situations that increase emissions ***within the tolerance range of OBM measurements or the zero emission mode;***

## Amendment 64

### Proposal for a regulation

#### Article 4 – paragraph 6 – point d

*Text proposed by the Commission*

(d) SOH monitors of the traction battery ***and emission systems;***

*Amendment*

(d) SOH monitors of the traction battery;

## Amendment 65

### Proposal for a regulation

#### Article 4 – paragraph 6 – point e

*Text proposed by the Commission*

(e) excess emissions driver warning systems;

*Amendment*

(e) excess ***exhaust*** emissions driver warning systems;

## Amendment 66

### Proposal for a regulation

#### Article 4 – paragraph 6 – point g

*Text proposed by the Commission*

(g) devices communicating vehicle

*Amendment*

(g) devices communicating vehicle

generated data used for compliance with this regulation and OBFCM data, for the purpose of periodic roadworthiness tests and technical roadside inspection over the air, and for the purposes of communicating with recharging infrastructure and stationary power systems capable of supporting smart and bidirectional charging functionalities.

generated data ***together with the approval number and type approval variant*** used for compliance with this regulation and OBFCM data, for the purpose of periodic roadworthiness tests and technical roadside inspection, over the air and for the purposes of communicating with recharging infrastructure and stationary power systems capable of supporting smart and bidirectional charging functionalities ***and also for the provision of third-party services to the vehicle user in order to improve vehicle usage, reduce energy consumption and emissions, or extend the lifespan of its battery during use.***

#### **Amendment 67**

##### **Proposal for a regulation**

##### **Article 4 – paragraph 7 – point d**

*Text proposed by the Commission*

(d) odometer ***and***

*Amendment*

(d) odometer,

#### **Amendment 68**

##### **Proposal for a regulation**

##### **Article 4 – paragraph 7 – point e a (new)**

*Text proposed by the Commission*

*Amendment*

***(ea) electric motor and related control units,***

#### **Amendment 69**

##### **Proposal for a regulation**

##### **Article 4 – paragraph 7 – point e b (new)**

*Text proposed by the Commission*

*Amendment*

***(eb) vehicle safety systems.***

## Amendment 70

### Proposal for a regulation Article 4 – paragraph 8

*Text proposed by the Commission*

8. The manufacturer shall prevent the possibility of exploiting vulnerabilities referred to in paragraph 7. When such a vulnerability is found, the manufacturer shall remove the vulnerability, by software update or any other appropriate means.

*Amendment*

8. The manufacturer shall prevent the possibility of exploiting vulnerabilities referred to in paragraph 7 ***to the fullest extent possible based on the best available knowledge at the time of type approval.*** When such a vulnerability is found, the manufacturer shall ***take all the possible measures taking into account the state of technology to*** remove the vulnerability, by software update or any other appropriate means.

## Amendment 71

### Proposal for a regulation Article 4 – paragraph 8 a (new)

*Text proposed by the Commission*

*Amendment*

***8a. Manufacturers shall ensure access by independent operators to the information, tools and processes required to develop compatible aftermarket replacement parts that meet the technical requirements of the manufacturer and the ability to install and activate those parts on the vehicle, including OBM related components, in compliance with the anti-tampering measures implemented by the manufacturer.***

***When considering withholding, on anti-tampering grounds, such information, tools and processes that are essential for independent operators, vehicle manufacturers shall demonstrate whether withholding information, tools and processes in question would be a proportionate means to address the anti-tampering concerns at issue. They shall***

*therefore examine in particular whether less restrictive measures would suffice.*

## **Amendment 72**

### **Proposal for a regulation Article 4 – paragraph 10**

*Text proposed by the Commission*

*Amendment*

**10. The Commission shall adopt, by means of implementing acts, detailed rules on the procedures, tests and methodologies to verify compliance with the requirements laid down in paragraphs 1 to 9. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2).**

*deleted*

## **Amendment 73**

### **Proposal for a regulation Article 5 – paragraph 1**

*Text proposed by the Commission*

*Amendment*

**1. Manufacturers may designate the vehicles they manufacture as “Euro 7+ vehicle” where those vehicles comply with the following:**

*deleted*

**(a) for ICEV and NOVC-HEV by declaring compliance with at least 20 % lower emission limits than those set out in Annex I for gaseous pollutants and one order of magnitude lower emission limits for particle number emissions;**

**(b) for OVC-HEV by declaring compliance with at least 20 % lower emission limits than those set out in Annex I for gaseous pollutants, one order of magnitude lower emission limits for particle number emissions and battery durability that is at least 10 percentage points higher than the requirements set**

*out in Annex II;*

*(c) for PEV by declaring battery durability that is at least 10 percentage points higher than the requirements set out in Annex II.*

#### **Amendment 74**

##### **Proposal for a regulation Article 5 – paragraph 2**

*Text proposed by the Commission*

*Amendment*

**2. Compliance of these vehicles with the requirements under paragraph 1 shall be checked against the declared values.**

*deleted*

#### **Amendment 75**

##### **Proposal for a regulation Article 5 – paragraph 3**

*Text proposed by the Commission*

*Amendment*

**3. Manufacturers may designate vehicles as “Euro 7A vehicle” where those vehicles are equipped with adaptive control functions. The use of adaptive control functions shall be demonstrated to the type-approval authorities during type-approval and verified during the lifetime of the vehicle as set out in table 1, Annex IV.**

*deleted*

#### **Amendment 76**

##### **Proposal for a regulation Article 5 – paragraph 4**

*Text proposed by the Commission*

*Amendment*

**4. Manufacturers may designate vehicles as “Euro 7G vehicle” where those vehicles are equipped with internal**

*deleted*

*combustion engines with geofencing technologies. The manufacturer shall install a driver warning system on those vehicles to inform the user when the traction batteries are nearly empty and to stop the vehicle if not charged within 5 km from the first warning while on zero-emission mode. The application of such geofencing technologies may be verified during the lifetime of the vehicle.*

#### **Amendment 77**

##### **Proposal for a regulation Article 5 – paragraph 5**

*Text proposed by the Commission*

*Amendment*

**5. Manufacturers may construct vehicles combining two or more of the characteristics referred to in paragraphs 1, 2 or 3 and designate them using a combination of symbols and letters such as “Euro 7+A”, “Euro 7+G”, “Euro 7+AG” or “Euro 7AG” vehicles.** *deleted*

#### **Amendment 78**

##### **Proposal for a regulation Article 5 – paragraph 6**

*Text proposed by the Commission*

*Amendment*

**6. At the manufacturer’s request, for  $N_2$  vehicles between 3.5 and 4.0 tonnes maximum mass originating from an  $N_1$  vehicle type, the type-approval authority may grant an emission type-approval for  $N_1$  vehicle type. Such vehicles shall be designated as “Euro 7ext vehicle”.** *deleted*

#### **Amendment 79**

##### **Proposal for a regulation**

## Article 5 – paragraph 7

*Text proposed by the Commission*

7. ***The Commission shall adopt, by means of implementing acts, detailed rules on the procedures, tests and methodologies to verify compliance with the requirements laid down in paragraphs 1 to 6. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2).***

*Amendment*

***deleted***

## Amendment 80

### Proposal for a regulation

#### Article 6 – paragraph 3

*Text proposed by the Commission*

3. Manufacturers shall ensure that OBFCEM, OBD and OBM devices and anti-tampering measures installed in these vehicles comply with the provisions of this Regulation as long as the vehicle is in use.

*Amendment*

3. Manufacturers shall ensure that ***the design and functionality of*** OBFCEM, OBD and OBM devices and anti-tampering measures installed in these vehicles ***shall*** comply with the provisions of this Regulation ***and shall not be deactivated*** as long as the vehicle is in use.

## Amendment 81

### Proposal for a regulation

#### Article 6 – paragraph 4

*Text proposed by the Commission*

4. The requirements referred to in ***points*** 1 to 3 shall apply to vehicles for all types of fuels or energy sources by which they are powered. The same requirements shall also apply to all separate technical units and components intended for such vehicles.

*Amendment*

4. The requirements referred to in ***paragraphs*** 1 to 3 shall apply to vehicles for all types of fuels or energy sources by which they are powered. The same requirements shall also apply to all separate technical units and components intended for such vehicles.

## Amendment 82

**Proposal for a regulation**  
**Article 6 – paragraph 6 – introductory part**

*Text proposed by the Commission*

6. The OBM systems installed by the manufacturer in these vehicles shall be capable of ***all of the following***:

*Amendment*

6. The OBM systems installed by the manufacturer in these vehicles shall be capable of:

**Amendment 83**

**Proposal for a regulation**  
**Article 6 – paragraph 6 – point b**

*Text proposed by the Commission*

(b) communicating the data of the emission behaviour of the vehicle, including pollutant sensor and exhaust flow data, via the OBD port and over the air, including for the purpose of roadworthiness tests and technical roadside inspections<sup>55</sup>, <sup>56</sup>;

*Amendment*

(b) communicating the data of the ***exhaust*** emission behaviour of the vehicle, including pollutant sensor and exhaust flow data, via the OBD port and over the air, including for the purpose of roadworthiness tests and technical roadside inspections<sup>55</sup>, <sup>56</sup> ***or for the purpose of detecting tampering and providing third-party services that assist the vehicle user in reducing use-phase emissions;***

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<sup>55</sup> Directive 2014/47/ EU of the European Parliament and of the Council of 3 April 2014 on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union and repealing Directive 2000/30/EC (OJ L 127, 29.4.2014, p. 134).

<sup>56</sup> 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. 129)

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<sup>55</sup> Directive 2014/47/ EU of the European Parliament and of the Council of 3 April 2014 on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union and repealing Directive 2000/30/EC (OJ L 127, 29.4.2014, p. 134).

<sup>56</sup> 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. 129)

**Amendment 84**

**Proposal for a regulation**

## Article 6 – paragraph 6 – point c

*Text proposed by the Commission*

(c) **triggering** repair of the vehicle when the driver warning system notifies significantly excess emissions.

*Amendment*

(c) **urging the** repair of the vehicle when the driver warning system notifies significantly excess emissions.

## Amendment 85

### Proposal for a regulation

#### Article 6 – paragraph 7

*Text proposed by the Commission*

7. The OBFCM devices installed by the manufacturer in these vehicles shall be capable of communicating **the** vehicle data they record via the OBD port and over the air.

*Amendment*

7. The OBFCM devices installed by the manufacturer in these vehicles shall be capable of communicating **all legally required relevant** vehicle data they record, via the OBD port and over the air, **respecting the provisions of Regulation (EU) 2016/679**.

## Amendment 86

### Proposal for a regulation

#### Article 6 – paragraph 8

*Text proposed by the Commission*

8. For vehicles, systems, components and separate technical units presenting a serious risk or non-compliance with the requirements laid down in this regulation, manufacturers shall **immediately** take the necessary corrective measures, including repairs or modifications of those vehicles, systems, components and separate technical units as appropriate, to ensure compliance with this regulation. Manufacturers or any other economic operator shall withdraw it from the market or recall it, as appropriate. The manufacturer shall immediately inform the type approval authority that granted the type-approval of the non-conformity with

*Amendment*

8. For vehicles, systems, components and separate technical units presenting a serious risk or non-compliance with the requirements laid down in this regulation, manufacturers shall, take the necessary corrective measures, including repairs or modifications of those vehicles, systems, components and separate technical units as appropriate, to ensure compliance with this regulation. Manufacturers or any other economic operator shall withdraw it from the market or recall it, as appropriate,. The manufacturer shall immediately inform the type approval authority that granted the type-approval **and the Commission** of the

appropriate details.

non-conformity with appropriate details.

## Amendment 87

### Proposal for a regulation Article 6 – paragraph 9

*Text proposed by the Commission*

*Amendment*

**9. The Commission shall adopt, by means of implementing acts, detailed rules on requirements, tests, methods and corrective measures related to the obligations referred to in paragraphs 1 to 8. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2).**

*deleted*

## Amendment 88

### Proposal for a regulation Article 7 – paragraph 2

*Text proposed by the Commission*

*Amendment*

2. The manufacturer shall provide the type-approval authority with a signed declaration of conformity as regards the RDE, CO<sub>2</sub> ambient temperature correction, OBD, OBM, emission and battery durability, continuous or periodic regeneration, anti-tampering and crankcase requirements as specified in Annex V. ***The manufacturer shall provide to the type-approval authority a signed declaration of conformity on the use of adaptive controls and geofencing options when the manufacturer selects these options.***

2. The manufacturer shall provide the type-approval authority with a signed declaration of conformity as regards the RDE, CO<sub>2</sub> ambient temperature correction, OBD, OBM, emission and battery durability, continuous or periodic regeneration, anti-tampering and crankcase requirements as specified in Annex V.

## Amendment 89

### Proposal for a regulation Article 7 – paragraph 4

*Text proposed by the Commission*

4. Manufacturers shall issue the environmental vehicle passport (EVP) for each vehicle and deliver that passport to the purchaser of ***the vehicle together with*** the vehicle, extracting the relevant data from sources such as the certificate of conformity and the type-approval documentation. The manufacturer shall ensure that EVP data are available for display in the vehicle electronic systems and can be transmitted from on- to off-board.

*Amendment*

4. Manufacturers shall issue the environmental vehicle passport (EVP) for each vehicle ***to be communicated at the point of sale together with the vehicle*** and deliver that passport to the purchaser of the vehicle, extracting the relevant data from sources such as the certificate of conformity and the type-approval documentation. The manufacturer shall ensure that EVP data are available for display in the vehicle electronic systems and can be transmitted from on- to off-board.

**Amendment 90**

**Proposal for a regulation  
Article 7 – paragraph 5**

*Text proposed by the Commission*

5. ***The Commission shall adopt implementing acts laying down the testing and compliance verifications as well as procedures, related to emission type-approval, conformity of production, in-service conformity, declaration of conformity and EVP under paragraphs 1 to 4. Those implementing acts shall be adopted*** in accordance with ***the examination procedure referred to in Article 17(2).***

*Amendment*

5. ***Manufacturers shall issue an updated EVP after*** in-service conformity checks, ***mentioning updated values for the information mentioned in Article 3 (71) of this Regulation.*** In accordance with ***Regulation (EU) 2018/858 and Directive 2014/45/EU, manufacturers shall allow for competent authorities and testing centres to update the EVP with accurate data from the OBD port and the OBFCM device of the vehicle.***

**Amendment 91**

**Proposal for a regulation  
Article 7 a (new)**

*Text proposed by the Commission*

*Amendment*

***Article 7a***

***Specific provisions relating to vehicle tyre abrasion***

*Upon the publication of the relevant uniform provisions in the UN WP.29 the Commission shall adopt delegated acts in accordance with Article 16 supplementing this Regulation by setting out the abrasion emission measurement methods and limits per tyre category for the purpose of type approval which shall refer to the uniform provisions and derogations to be established in UN WP.29 concerning the approval of tyres with regard to Tyre Abrasion emissions Type Approval.*

*In the event that uniform provisions have not been established in the UN WP.29 by 30 June 2026 for C1 tyres, and by 31 December 2035 for C2 and C3 tyres, the Commission shall conduct a review and, if appropriate, develop a method for the measurement of tyre abrasion and define abrasion limits for tyres based on other existing state-of-the-art methods. Following that review and if appropriate, the Commission shall adopt delegated acts by 30 October 2026 in accordance with Article 16 specifying such methods and setting out the abrasion emission limits per tyre category.*

## **Amendment 92**

### **Proposal for a regulation Article 8 – title**

*Text proposed by the Commission*

Special rules for small volume manufacturers

*Amendment*

Special rules for small **and ultra-small** volume manufacturers

## **Amendment 93**

### **Proposal for a regulation Article 8 – paragraph 1**

*Text proposed by the Commission*

1. As regards pollutant emissions, small

*Amendment*

1. As regards pollutant emissions, small

volume manufacturers may substitute tests set out in tables 1, 3, 5, 7 and 9 of Annex V with declarations of conformity. The compliance of vehicles constructed and put into the market by small volume manufacturers may be tested for in service conformity and market surveillance in accordance with tables 2, 4, 6, 8 and 10 of Annex V. Conformity of production tests set out in Annex V shall not be required. Article **4(4)** point (b) shall not apply to small volume manufacturers.

**and ultra-small** volume manufacturers may substitute tests set out in tables 1, 3, 5, 7 and 9 of Annex V with declarations of conformity. The compliance of vehicles constructed and put into the market by small volume manufacturers may be tested for in service conformity and market surveillance in accordance with tables 2, 4, 6, 8 and 10 of Annex V. Conformity of production tests set out in Annex V shall not be required. Article **4(6)** point (b) shall not apply to small **and ultra-small** volume manufacturers

## Amendment 94

### Proposal for a regulation Article 8 – paragraph 2

*Text proposed by the Commission*

2. Ultra-small volume manufacturers shall comply with the emission limits set out in Annex I in laboratory tests based on **random** real-driving cycles for in-service conformity and market surveillance purposes.

*Amendment*

2. Ultra-small volume manufacturers shall comply with the emission limits set out in Annex I in laboratory tests based on **statistically relevant** real-driving cycles for in-service conformity and market surveillance purposes.

## Amendment 95

### Proposal for a regulation Article 9 – title

*Text proposed by the Commission*

Special rules for multistage **vehicles**

*Amendment*

Special rules for multistage **vehicle type-approval**

## Amendment 96

### Proposal for a regulation Article 9 – paragraph 1

*Text proposed by the Commission*

*Amendment*

1. *In multistage type-approvals, manufacturers of the second or subsequent stages shall be responsible for the emission type-approval where they modify any part of the vehicle that, according to the data provided by the manufacturers of the previous stage, might affect emissions or battery durability.*

1. *Specific provisions set out in Annex V—Tables 3, 4 and 5 shall apply to multistage vehicles.*

#### **Amendment 97**

##### **Proposal for a regulation Article 9 – paragraph 2**

*Text proposed by the Commission*

*Amendment*

2. *The Commission shall adopt implementing acts laying down the administrative requirements and data to be provided by manufacturers of the previous stage in accordance with paragraph 1 and procedures for the determination of CO<sub>2</sub> emissions of such vehicles. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2).*

*deleted*

#### **Amendment 98**

##### **Proposal for a regulation Article 10 – paragraph 1**

*Text proposed by the Commission*

*Amendment*

1. National approval authorities shall put in place measures to grant emission type-approvals to vehicle types, components and separate technical units and to perform tests, checks and inspections for verifying whether the manufacturers comply with the requirements for conformity of production and in-service conformity in accordance

1. National approval authorities shall put in place measures to grant emission type-approvals to vehicle types, **systems**, components and separate technical units and to perform tests, checks and inspections for verifying whether the manufacturers comply with the requirements for conformity of production and in-service conformity in accordance

with Annex V.

with Annex V.

## **Amendment 99**

### **Proposal for a regulation Article 10 – paragraph 2 a (new)**

*Text proposed by the Commission*

*Amendment*

**2a. When performing tests, checks and inspections, national authorities and testing centres shall update the environmental vehicle passport (EVP) with updated values for the information referred to in Article 3, point (71).**

## **Amendment 100**

### **Proposal for a regulation Article 10 – paragraph 3 a (new)**

*Text proposed by the Commission*

*Amendment*

**3a. With effect from 24 months after the entry into force of all relevant secondary legislation, and according to the specific provisions for systems, components, and separate technical units, national approval authorities shall, on grounds relating to CO<sub>2</sub> and pollutant emissions, fuel and energy consumption or battery durability, in the case of new types of M<sub>1</sub>, N<sub>1</sub> vehicles, refuse to grant EU emission type-approval or national emission type-approval which do not comply with this Regulation.**

## **Amendment 101**

### **Proposal for a regulation Article 10 – paragraph 4**

*Text proposed by the Commission*

4. With effect from **1 July 2025**, national authorities shall, in the case of new M<sub>1</sub>, N<sub>1</sub> vehicles which do not comply with this Regulation consider certificates of conformity to be no longer valid for the purposes of registration and shall, on grounds relating to CO<sub>2</sub> and pollutant emissions, fuel and energy consumption or battery durability, prohibit the registration, sale or entry into service of such vehicles.

*Amendment*

4. With effect from **36 months after the entry into force of all relevant secondary legislation, and according to the specific provisions for systems, components, and separate technical units**, national authorities shall, in the case of new M<sub>1</sub>, N<sub>1</sub> vehicles which do not comply with this Regulation consider certificates of conformity to be no longer valid for the purposes of registration and shall, on grounds relating to CO<sub>2</sub> and pollutant emissions, fuel and energy consumption or battery durability, prohibit the registration, sale or entry into service of such vehicles.

**Amendment 102**

**Proposal for a regulation**  
**Article 10 – paragraph 4 a (new)**

*Text proposed by the Commission*

*Amendment*

**4a. With effect from 48 months after the entry into force of all relevant secondary legislation, and according to the specific provisions for systems, components, and separate technical units, national approval authorities shall, on grounds relating to CO<sub>2</sub> and pollutant emissions, fuel and energy consumption, energy efficiency or battery durability, in the case of new types of M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and new O<sub>3</sub>, O<sub>4</sub> trailers, refuse to grant EU emission type-approval or national emission type-approval which do not comply with this Regulation.**

**Amendment 103**

**Proposal for a regulation**  
**Article 10 – paragraph 5**

*Text proposed by the Commission*

5. With effect from **1 July 2027**, national authorities shall, in the case of new M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and new O<sub>3</sub>, O<sub>4</sub> trailers, which do not comply with this Regulation consider certificates of conformity to be no longer valid for the purposes of registration and shall, on grounds relating to CO<sub>2</sub> and pollutant emissions, fuel and energy consumption, energy efficiency or battery durability, prohibit the registration, sale or entry into service of such vehicles.

*Amendment*

5. With effect from **60 months after the entry into force of all relevant secondary legislation, and according to the specific provisions for systems, components, and separate technical units**, national authorities shall, in the case of new M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and new O<sub>3</sub>, O<sub>4</sub> trailers, which do not comply with this Regulation consider certificates of conformity to be no longer valid for the purposes of registration and shall, on grounds relating to CO<sub>2</sub> and pollutant emissions, fuel and energy consumption, energy efficiency or battery durability, prohibit the registration, sale or entry into service of such **engines, vehicles or trailers**.

**Amendment 104**

**Proposal for a regulation  
Article 10 – paragraph 8**

*Text proposed by the Commission*

**8. The Commission shall adopt implementing acts laying down the administrative and technical elements required for performing tests, checks and inspections for the purposes of verifying compliance with paragraph 1, as well as the technical elements required for market surveillance checks under paragraph 2. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2).**

*Amendment*

**deleted**

**Amendment 105**

**Proposal for a regulation  
Article 11 – paragraph 1**

*Text proposed by the Commission*

*Amendment*

1. With effect from **1 July 2025**, the sale or installation of a system, component or separate technical unit intended to be fitted on an M<sub>1</sub>, N<sub>1</sub> vehicle approved under this Regulation, shall be prohibited if the system, component and separate technical unit is not of type approved in compliance with this Regulation.

1. With effect from **24 months after the entry into force of all relevant secondary legislation**, the sale or installation of a system, component or separate technical unit intended to be fitted on an M<sub>1</sub>, N<sub>1</sub> vehicle approved under this Regulation, shall be prohibited if the system, component and separate technical unit is not of type approved in compliance with this Regulation.

## **Amendment 106**

### **Proposal for a regulation Article 11 – paragraph 2**

*Text proposed by the Commission*

2. With effect from **1 July 2027**, the sale or installation of a system, component or separate technical unit intended to be fitted on an M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicle approved under this Regulation, shall be prohibited if the system, component and separate technical unit is not type approved in compliance with this Regulation.

*Amendment*

2. With effect from **48 months after the entry into force of all relevant secondary legislation**, the sale or installation of a system, component or separate technical unit intended to be fitted on an M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicle **and O<sub>3</sub>, O<sub>4</sub> trailers** approved under this Regulation, shall be prohibited if the system, component and separate technical unit is not type approved in compliance with this Regulation.

## **Amendment 107**

### **Proposal for a regulation Article 11 – paragraph 3 a (new)**

*Text proposed by the Commission*

*Amendment*

**3a. With effect from 12 months after adoption of the delegated act on the type approval of C1 tyres as regards abrasion emissions limits in accordance with Article 7a, national authorities shall only grant component or separate technical unit EU type approval in respect of new types of tyre where it is in compliance with this Regulation and refuse to grant component/separate technical unit EU**

*type approval in respect of new types of tyre that do not comply with this Regulation.*

*With effect from 36 months after adoption of the delegated act on the type approval of C1 tyres as regards abrasion emissions in accordance with Article 7a, national authorities shall refuse to grant type approval or type approval in respect of new C1 tyres which do not comply with this Regulation. C1 tyres that were manufactured prior to the entry-into-force time set out in this subparagraph and which do not comply with the requirements of this Regulation and its implementing measures may be sold for a period not exceeding 30 months.*

## **Amendment 108**

### **Proposal for a regulation**

#### **Article 12 – paragraph 1 – subparagraph 1 a (new)**

*Text proposed by the Commission*

*Amendment*

*Tampering which results in emissions that exceed the limits laid out in Annex 1, shall result in the vehicle no longer being in compliance with this Regulation.*

## **Amendment 109**

### **Proposal for a regulation**

#### **Article 12 – paragraph 1 – subparagraph 1 b (new)**

*Text proposed by the Commission*

*Amendment*

*Non-compliance resulting from tampering shall result in the adoption of appropriate corrective measures, including recalls, and effective, proportionate and dissuasive financial penalties by the national competent authorities.*

## **Amendment 110**

**Proposal for a regulation**  
**Article 12 – paragraph 2**

*Text proposed by the Commission*

2. National authorities shall, during in-service conformity or market surveillance checks, verify whether manufacturers of vehicles have correctly installed excess emissions driver warning systems, low-reagent driver warning systems and whether vehicles can be tampered.

*Amendment*

2. National authorities shall, during in-service conformity or market surveillance checks, verify ***the quality of the reagent used***, whether manufacturers of vehicles have correctly installed excess emissions driver warning systems, low-reagent driver warning systems, and whether vehicles can be tampered.

**Amendment 111**

**Proposal for a regulation**  
**Article 13 – paragraph 1**

*Text proposed by the Commission*

1. The Commission or third parties, in accordance with Article 9 and 13(10) of Regulation (EU) 2018/858, ***may*** perform in-service conformity and market surveillance checks set out in Tables 2, 4, 6, 8, and 10 of Annex V, to verify compliance of vehicles, components and separate technical units with this Regulation.

*Amendment*

1. The Commission or third parties, in accordance with Article 9 and 13(10) of Regulation (EU) 2018/858, ***shall*** perform in-service conformity and market surveillance checks set out in Tables 2, 4, 6, 8, and 10 of Annex V, to verify compliance of vehicles, components and separate technical units with this Regulation.

**Amendment 112**

**Proposal for a regulation**  
**Article 13 – paragraph 2 a (new)**

*Text proposed by the Commission*

*Amendment*

***2a. The Commission shall continuously monitor the situation at Union level with a view to identifying practices of circumvention and non-conformity. When violations in conformity are found, the Commission shall present a report to the European Parliament and to the Council and shall follow-up with a***

*legislative proposal, if appropriate, to address and eliminate the risks to that non-conformity.*

## **Amendment 113**

### **Proposal for a regulation Article 14 – paragraph 2**

*Text proposed by the Commission*

2. Tests to prove compliance with the requirements of *Article 4* shall be applied by manufacturers and national authorities as specified in Annex V. Tests to prove compliance with the requirements of *Article 4* may be applied by the Commission and third parties also as specified in Annex V.

*Amendment*

2. Tests to prove compliance with the requirements of ***this Regulation*** shall be applied by manufacturers and national authorities as specified in Annex V. Tests to prove compliance with the requirements of ***this Regulation*** may be applied by the Commission and third parties also as specified in Annex V.

## **Amendment 114**

### **Proposal for a regulation Article 14 – paragraph 3 – introductory part**

*Text proposed by the Commission*

3. The Commission shall adopt implementing acts for all the phases of emission type-approval, including conformity of production, in-service conformity and market surveillance, addressing ***procedures and tests for emission type-approval, testing methodologies***, administrative provisions, amending and extending emission type-approvals, data access, documentation requirements and templates for all of the following:

*Amendment*

3. The Commission shall adopt implementing acts for all the phases of emission type-approval, including conformity of production, in-service conformity and market surveillance, addressing administrative provisions, amending and extending emission type-approvals, data access, documentation requirements and templates for all of the following:

## **Amendment 115**

### **Proposal for a regulation Article 14 – paragraph 3 – point d a (new)**

*Text proposed by the Commission*

*Amendment*

***(da) excess emissions driver warning system;***

#### **Amendment 116**

##### **Proposal for a regulation**

##### **Article 14 – paragraph 3 – point d b (new)**

*Text proposed by the Commission*

*Amendment*

***(db) low-reagent driver warning system;***

#### **Amendment 117**

##### **Proposal for a regulation**

##### **Article 14 – paragraph 3 – point e**

*Text proposed by the Commission*

*Amendment*

(e) anti-tampering, security and cybersecurity systems;

***(e) anti-tampering systems, taking into account aftermarket requirements and the provision to independent operators of all required information, tools and processes for the development and installation of replacement parts, and security and cybersecurity systems;***

#### **Amendment 118**

##### **Proposal for a regulation**

##### **Article 14 – paragraph 3 – point g**

*Text proposed by the Commission*

*Amendment*

(g) brake system types and their replacement parts;

***(g) brake system types and their replacement parts in respect to particle emissions for all vehicle categories, while taking into account other on-vehicle systems that contribute to the braking of vehicles;***

## **Amendment 119**

### **Proposal for a regulation**

#### **Article 14 – paragraph 3 – point g a (new)**

*Text proposed by the Commission*

*Amendment*

***(ga) brake system types and their replacement parts to be retrofitted into vehicles already placed on the market in order to significantly reduce the brake emissions;***

## **Amendment 120**

### **Proposal for a regulation**

#### **Article 14 – paragraph 3 a (new)**

*Text proposed by the Commission*

*Amendment*

***3a. The Commission shall be empowered to adopt delegated acts in accordance with Article 16 for procedures and tests for emission type-approval and testing methodologies for all phases of the emission type-approval, including in-service conformity, conformity of production and market surveillance, for all of the following:***

- (a) M1 and N1 vehicle types;***
- (b) M2, M3, N2 and N3 vehicle types;***
- (c) engines used in M2, M3, N2 and N3 vehicle types;***
- (d) OBM/OBD systems;***
  - (da) excess emissions driver warning system;***
  - (db) low-reagent driver warning system;***
- (e) anti-tampering systems, taking into account aftermarket requirements and the provision to independent operators of all required information, tools and processes for the development and installation of replacement parts, and security and cybersecurity systems;***

- (f) replacement pollution control systems types and their parts;*
- (g) brake system types and their replacement parts;*
- (ga) brake system types and their replacement parts to be retrofitted into vehicles already placed on the market in order to significantly reduce the brake emissions;*
- (h) tyre types in respect to tyre abrasion*
- (i) M1 and N1 vehicle types;*
- (j) CO<sub>2</sub>, fuel and energy consumption, electric range and engine power determination for M1 and N1 vehicles, and provisions for OBFCM;*
- (k) CO<sub>2</sub>, fuel and energy consumption, zero-emission range, electric range and engine power determination for M2, M3, N2 and N3 vehicles, energy efficiency of O3 and O4 trailers, and provisions for OBFCM.*

## Amendment 121

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – introductory part

##### *Text proposed by the Commission*

The Commission shall be empowered to adopt **implementing** acts for all phases of the emission type-approval, including in-service conformity, conformity of production and market surveillance, to lay down the following:

##### *Amendment*

The Commission shall be empowered to adopt **delegated** acts for all phases of the emission type-approval, including in-service conformity, conformity of production and market surveillance, to lay down the following:

## Amendment 122

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point b a (new)

##### *Text proposed by the Commission*

##### *Amendment*

*(ba) methods for the type-approval of applicable hybrid technologies of category M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub> and N<sub>3</sub> vehicles;*

## Amendment 123

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point g

*Text proposed by the Commission*

(g) the methods to measure brake particle emissions, including methods for *HDV*, real driving brake particle emissions and regenerative braking;

*Amendment*

(g) the methods to measure brake particle emissions including methods for *M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub> and N<sub>3</sub> vehicles*, real driving brake particle emissions and regenerative braking;

## Amendment 124

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point j

*Text proposed by the Commission*

(j) OBFCM *device*, OBD and OBM systems, including compliance thresholds, performance requirements and tests, methods to ensure performance of sensors and over the air communication of data recorded by these devices and systems;

*Amendment*

(j) *characteristics and performance of OBFCM devices*, OBD and OBM systems, including compliance thresholds, performance requirements and tests, methods to ensure performance of sensors and over the air communication of data recorded by these devices and systems;

## Amendment 125

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point l

*Text proposed by the Commission*

(l) the methods to assess the correct operation, effectiveness, regeneration and durability of original and replacement pollution control systems;

*Amendment*

(l) the methods *and requirements* to assess the correct operation, effectiveness, regeneration and durability of original and replacement pollution control systems *and the quality of the reagents*;

## Amendment 126

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point o

*Text proposed by the Commission*

(o) the methods to assess the correct functioning of vehicle types ***approved under the designations in Article 5***

*Amendment*

(o) the methods to assess the correct functioning of vehicle types ;

## Amendment 127

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point p

*Text proposed by the Commission*

(p) checks for compliance with ***the provisions of Article 9 (1) and*** test procedures for multistage vehicles;

*Amendment*

(p) checks for compliance with test procedures for multistage vehicles;

## Amendment 128

### Proposal for a regulation

#### Article 14 – paragraph 4 – subparagraph 1 – point s

*Text proposed by the Commission*

(s) methods for establishing the absence of defeat devices and defeat strategies;

*Amendment*

(s) methods for establishing the absence of defeat devices and defeat strategies ***and to carry-over into this Regulation requirements laid down in Article 5(2) of Regulation (EC) No 715/2007 and Article 5(11) of Regulation (EU) 2017/1151 applicable to category M<sub>1</sub> and N<sub>1</sub> vehicles, and in UNECE Regulation No. 49, Revision 6, Annex 10, paragraph 5.1.2 applicable to category M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub> and N<sub>3</sub> vehicles;***

## Amendment 129

**Proposal for a regulation**

**Article 14 – paragraph 4 – subparagraph 1 – point t**

*Text proposed by the Commission*

*Amendment*

**(t) *methods to measure tyre abrasion;* deleted**

**Amendment 130**

**Proposal for a regulation**

**Article 14 – paragraph 4 – subparagraph 1 – point v**

*Text proposed by the Commission*

*Amendment*

(v) administrative requirements and documentation for emission type-approval;

(v) administrative requirements and documentation for emission type-approval ***and for performing tests, checks and inspections for the purposes of verifying compliance;***

**Amendment 131**

**Proposal for a regulation**

**Article 14 – paragraph 4 – subparagraph 1 – point w**

*Text proposed by the Commission*

*Amendment*

(w) reporting obligations where appropriate.

(w) ***format and data*** reporting obligations where appropriate;

**Amendment 132**

**Proposal for a regulation**

**Article 14 – paragraph 4 – subparagraph 2**

*Text proposed by the Commission*

*Amendment*

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2).

**5.** Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17(2)

***The implementing acts referred to in paragraph 3, points (a) to (f) and (i) to (k),***

*and the delegated acts referred to in paragraph 3a, points (a) to (f) and (i) to (k), and paragraph 4, points (a) to (f) and (j) to (w), shall be adopted no later than .... [12 months from the date of entry in force of this Regulation].*

*The implementing acts referred to in paragraph 3, points (g) to (h), , and the delegated acts referred to in paragraph 3a, points (g) to (h), and paragraph 4, points (g) to (i), shall be adopted, without undue delay, following the publication of the relevant uniform provisions of the UN WP.29.*

### Amendment 133

#### Proposal for a regulation

##### Article 15 – paragraph 1 – introductory part

*Text proposed by the Commission*

1. The Commission shall be empowered to adopt delegated acts in accordance with Article 16 in order to take into account technical progress to amend *the following*:

*Amendment*

1. The Commission shall be empowered to adopt delegated acts in accordance with Article 16 in order to take into account technical progress to amend *this Regulation as follows*:

### Amendment 134

#### Proposal for a regulation

##### Article 15 – paragraph 1 – point a

*Text proposed by the Commission*

(a) Annex III, as regards the test conditions for M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles, based on data collected when testing Euro 7 vehicles;

*Amendment*

(a) Annex III, **Table 2**, as regards the test conditions for M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles, based on data collected when testing Euro 7 vehicles;

### Amendment 135

#### Proposal for a regulation

##### Article 15 – paragraph 1 – point b

*Text proposed by the Commission*

(b) Annex III, as regards the test conditions, based on data collected when testing Euro 7 brakes or tyres;

*Amendment*

(b) Annex III, **Tables 4 and 5**, as regards the test conditions based on data collected when testing Euro 7 brakes or tyres;

**Amendment 136**

**Proposal for a regulation**

**Article 15 – paragraph 1 – point d**

*Text proposed by the Commission*

**(d) Article 5 by introducing options and designations based on innovative technologies for manufacturers.**

*Amendment*

**deleted**

**Amendment 137**

**Proposal for a regulation**

**Article 15 – paragraph 2 – point c a (new)**

*Text proposed by the Commission*

*Amendment*

**(ca) if appropriate, setting out abrasion limits for tyre types in Annex I in the event that uniform provisions have not been established in UN WP.29 before the relevant deadline laid down in Article 7a;**

**Amendment 138**

**Proposal for a regulation**

**Article 15 – paragraph 2 – point d**

*Text proposed by the Commission*

(d) setting out durability multipliers in Annex IV based on data collected when testing Euro 7 **M<sub>2</sub>**, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and a report **on** the durability of **heavy duty** vehicles submitted to the European Parliament and Council;

*Amendment*

(d) setting out durability multipliers in Annex IV based on data collected when testing Euro 7 M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and **the conclusions of** a report **assessing** the durability of **heavy-duty** vehicles **in regard of emissions** submitted to the European

## Amendment 139

### Proposal for a regulation

#### Article 15 – paragraph 2 – point e

*Text proposed by the Commission*

(e) setting out **definitions and** special rules for small volume manufacturers for vehicle categories M2, M3, N2, N3 under Article 3 and Article 8 of this Regulation.

*Amendment*

(e) setting out special rules for small volume manufacturers for vehicle categories M2, M3, N2, N3 under Article 3 and Article 8 of this Regulation.

## Amendment 140

### Proposal for a regulation

#### Article 15 – paragraph 2 – subparagraph 1 a (new)

*Text proposed by the Commission*

*Amendment*

***The Commission shall adopt those delegated acts referred to in to points (a) to (c) without undue delay following the publication of the relevant uniform provisions of the UN WP.29. In the event that uniform provisions have not been established in the UN WP.29 by 30 June 2026 for C1 tyres, and by 31 December 2035 for C2 and C3 tyres, Article 7a of this Regulation shall apply.***

## Amendment 141

### Proposal for a regulation

#### Article 16 – paragraph 2

*Text proposed by the Commission*

*Amendment*

2. The power to adopt delegated acts referred to in **Article 15** shall be conferred on the Commission for a period of five years from... [OP please insert the date = the date of entry into force of this Regulation]. The Commission shall draw

2. The power to adopt delegated acts referred to in **Article 14(3a), Article 14(4) and Article 15** shall be conferred on the Commission for a period of five years from... [OP please insert the date = the date of entry into force of this Regulation]. The

up a report in respect of the delegation of power not 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 not later than three months before the end of each period.

Commission shall draw up a report in respect of the delegation of power not 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 not later than three months before the end of each period.

## **Amendment 142**

### **Proposal for a regulation Article 16 – paragraph 3**

#### *Text proposed by the Commission*

3. The delegation of power referred to in **Article 15** 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.

#### *Amendment*

3. The delegation of power referred to in **Article 14(3a), Article 14(4) and Article 15** 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.

## **Amendment 143**

### **Proposal for a regulation Article 16 – paragraph 6**

#### *Text proposed by the Commission*

6. A delegated act adopted pursuant to **Article 15** shall enter into force only if no objection has been expressed either by the European Parliament or by 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

#### *Amendment*

6. A delegated act adopted pursuant to **Article 14(3a), Article 14(4) and Article 15** shall enter into force only if no objection has been expressed either by the European Parliament or by 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

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.

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.

## **Amendment 242**

### **Proposal for a regulation Article 16 a (new)**

*Text proposed by the Commission*

*Amendment*

#### **Article 16a**

##### ***Natural or legal persons' substantiated complaints***

- 1. Any natural or legal person, individually or in association, shall be entitled to submit substantiated complaints to national market surveillance authorities when they have reasons to believe that one or more manufacturers, economic operators or independent operators are not complying with this Regulation.***
- 2. Where persons submitting substantiated complaints so request, market surveillance authorities shall take the necessary measures for the appropriate protection of the identity of that person and their personal information, which, if disclosed, would be harmful to that person.***
- 3. National market surveillance authorities shall, without undue delay, diligently and impartially assess the substantiated complaints, including whether the claims are well-founded, and take the necessary steps, including carrying out checks and evaluations pursuant to Articles 8 and 51 of Regulation (EC) 2018/858, with a view to detecting potential non-compliance with this Regulation and, where appropriate, requiring corrective measures or taking appropriate restrictive measures under Article 52 of Regulation (EC) 2018/858.***
- 4. The national market surveillance***

*authority shall, within 3 months, inform the natural or legal persons referred to in paragraph 1 of its decision to accede to or refuse the request for action and of any steps it plans to take to address the concerns raised in the substantiated complaint, providing the reasons for both the decision taken and the steps proposed.*

#### **Amendment 144**

##### **Proposal for a regulation Article 18 – paragraph 2**

*Text proposed by the Commission*

2. By 1 September 2031, on the basis of the information supplied in accordance with paragraph 1, the Commission shall submit to the European Parliament and to the Council an evaluation report on the application of this Regulation.

*Amendment*

2. By 1 September 2031, on the basis of the information supplied in accordance with paragraph 1, the Commission shall submit to the European Parliament and to the Council an evaluation report on the application of this Regulation, ***including an evaluation of the exhaust and non-exhaust emission reductions achieved and an assessment of its contribution in meeting the air pollution standards laid down in the [XXX recast proposal of the Ambient Air Quality Directive.]***

#### **Amendments 181 and 192**

##### **Proposal for a regulation Article 18 – paragraph 2 a (new)**

*Text proposed by the Commission*

*Amendment*

***2a. No later than 31 December 2025, the Commission shall submit to the European Parliament and to the Council a report assessing the durability performance of heavy duty vehicles with regard to emissions.***

#### **Amendment 146**

**Proposal for a regulation**  
**Article 19 – paragraph 1**

*Text proposed by the Commission*

Regulation (EC) 715/2007 is repealed with effect from 1 July **2025**.

*Amendment*

Regulation (EC) 715/2007 is repealed with effect from 1 July **2030**.

**Amendment 147**

**Proposal for a regulation**  
**Article 19 – paragraph 2**

*Text proposed by the Commission*

Regulation (EC) 595/2009 is repealed with effect from 1 July **2027**.

*Amendment*

Regulation (EC) 595/2009 is repealed with effect from 1 July **2031**.

**Amendment 148**

**Proposal for a regulation**  
**Article 20 – subparagraph 2**

*Text proposed by the Commission*

It shall apply from **1 July 2025 for** M<sub>1</sub>, N<sub>1</sub> vehicles and components and separate technical units for those vehicles and **from 1 July 2027 for** M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and components and separate technical units for those vehicles and O<sub>3</sub>, O<sub>4</sub> trailers.

*Amendment*

It shall apply from **24 months after the entry into force of all relevant secondary legislation for new type** M<sub>1</sub>, N<sub>1</sub> vehicles and components and separate technical units for those vehicles and **36 months after the entry into force of all relevant secondary legislation for new** M<sub>1</sub>, N<sub>1</sub> vehicles and components and separate technical units for those vehicles.

**It shall apply 48 months after the entry into force of all relevant secondary legislation for new type** M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and components and separate technical units for those vehicles and **O<sub>3</sub>, O<sub>4</sub> trailers and 60 months after the entry into force of all relevant secondary legislation for new** M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub> vehicles and components and separate technical units for those vehicles and O<sub>3</sub>, O<sub>4</sub> trailers.

## Amendment 149

### Proposal for a regulation Article 20 – subparagraph 3

*Text proposed by the Commission*

It shall apply from 1 July 2030 for M<sub>1</sub>, N<sub>1</sub> vehicles constructed by small volume manufacturers.

*Amendment*

It shall apply **as** from 1 July 2030 for M<sub>1</sub>, N<sub>1</sub> **vehicles, constructed by small volume manufacturers and from 1 July 2031 for M2, M3, N2, N3** vehicles constructed by small volume manufacturers.

## Amendment 150

### Proposal for a regulation Annex I – Table 1

<i>Text proposed by the Commission</i>				
Table 1: Euro 7 exhaust emission limits for M <sub>1</sub> , N <sub>1</sub> vehicles with internal combustion engine				
Pollutant emissions	M <sub>1</sub> , N <sub>1</sub> vehicles	<b>Only for N<sub>1</sub> vehicles with power to mass ratio<sup>1</sup> less than 35 kW/t</b>	Emission budget for all trips less than 10 km for M <sub>1</sub> , N <sub>1</sub> vehicles	Emission budget for all trips less than 10 km only for N <sub>1</sub> <b>vehicles with power to mass ratio less than 35 kW/t</b>
	per km	per km	per trip	per trip
NO <sub>x</sub> in mg	60	75	600	750
PM in mg	4.5	4.5	45	45
PN <sub>10</sub> in #	6×10 <sup>11</sup>	6×10 <sup>11</sup>	6×10 <sup>12</sup>	6×10 <sup>12</sup>
CO in mg	500	630	5000	6300
THC in mg	100	130	1000	1300
NMHC in mg	68	90	680	900
NH <sub>3</sub> in mg	20	20	200	200

<sup>1</sup> Measured in accordance with paragraph 5.3.2. of UNECE Regulation No 85 in the case of ICEVs and PEVs, or, in all other cases, measured in accordance with one of the test procedures laid down in paragraph 6 of UN Global Technical Regulation 21

<i>Amendmen</i>				
Table 1: Euro 7 exhaust emission limits for M <sub>1</sub> , N <sub>1</sub> vehicles with internal combustion engine				

	M <sub>1</sub> vehicles	N <sub>1</sub> (Class I)	N <sub>1</sub> (Class II)	N <sub>1</sub> (Class III)	Emission budget for all trips less than 10 km for M <sub>1</sub> , N <sub>1</sub> vehicles	<i>Emission budget for all trips less than 10 km for N<sub>1</sub> (Class I)</i>	Emission budget for all trips less than 10 km only for N <sub>1</sub> (Class II)	<i>Emission budget for all trips less than 10 km for N<sub>1</sub> (Class III)</i>
<i>Mass in running order (MRO) in kg</i>	-	<i>For N<sub>1</sub> vehicles with MRO ≤ 1280</i>	<i>For N<sub>1</sub> vehicles with 1280 &lt; MRO ≤ 1735</i>	<i>For N<sub>1</sub> vehicles with 1735 &lt; MRO</i>	-	<i>For N<sub>1</sub> vehicles with MRO ≤ 1280</i>	<i>For N<sub>1</sub> vehicles with 1280 &lt; MRO ≤ 1735</i>	<i>For N<sub>1</sub> vehicles with 1735 &lt; MRO</i>
Pollutant emissions	per km	<i>per km</i>	per km	<i>per km</i>	per trip	per trip	per trip	per trip
NO <sub>x</sub> in mg	60	<b>60</b>	75	<b>82</b>	600	<b>600</b>	750	<b>820</b>
PM in mg	4.5	<b>4.5</b>	4.5	<b>4.5</b>	45	<b>45</b>	45	<b>45</b>
PN <sub>10</sub> in #	6×10 <sup>11</sup>	<b>6×10<sup>11</sup></b>	6×10 <sup>11</sup>	<b>6×10<sup>11</sup></b>	6×10 <sup>12</sup>	<b>6×10<sup>12</sup></b>	6×10 <sup>12</sup>	<b>6×10<sup>12</sup></b>
CO in mg	500	<b>500</b>	630	<b>740</b>	5000	<b>5000</b>	6300	<b>7400</b>
THC in mg	100	<b>100</b>	130	<b>160</b>	1000	<b>1000</b>	1300	<b>1600</b>
NMHC in mg	68	<b>68</b>	90	<b>108</b>	680	<b>680</b>	900	<b>1080</b>
NH <sub>3</sub> in mg	20	<b>20</b>	20	<b>20</b>	200	<b>200</b>	200	<b>200</b>

## Amendment 151

### Proposal for a regulation Annex I – Table 2

<i>Text proposed by the Commission</i>				
Table 2: Euro 7 exhaust emission limits for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles with internal combustion engine and internal combustion engines used in those vehicles				
Pollutant emissions	<i>Cold emissions<sup>1</sup></i>	<i>Hot emissions<sup>2</sup></i>	<i>Emission budget for all trips less than 3*WHTC long</i>	<i>Optional idle emission limits<sup>3</sup></i>
	<i>per kWh</i>	<i>per kWh</i>	<i>per kWh</i>	<i>per hour</i>
NO <sub>x</sub> in mg	<b>350</b>	<b>90</b>	<b>150</b>	<b>5000</b>
PM in mg	<b>12</b>	<b>8</b>	<b>10</b>	
PN <sub>10</sub> in #	<b>5x10<sup>11</sup></b>	<b>2x10<sup>11</sup></b>	<b>3x10<sup>11</sup></b>	

CO in mg	<b>3500</b>	<b>200</b>	<b>2700</b>	
NMOG in mg	<b>200</b>	<b>50</b>	<b>75</b>	
NH <sub>3</sub> in mg	<b>65</b>	<b>65</b>	<b>70</b>	
CH <sub>4</sub> in mg	500	<b>350</b>	<b>500</b>	
N <sub>2</sub> O in mg	160	<b>100</b>	<b>140</b>	
HCHO in mg	30	<b>30</b>		
<sup>1</sup> Cold emissions refers to the 100 <sup>th</sup> percentile of moving windows (MW) of 1 WHTC for vehicles, or WHTC <sub>cold</sub> for engines				
<sup>2</sup> Hot emission refers to the 90 <sup>th</sup> percentile of moving windows (MW) of 1 WHTC for vehicles or WHTC <sub>hot</sub> for engines				
<sup>3</sup> Applicable only if a system is not present that automatically shuts down the engine after 300 seconds				

<i>Amendment</i>		
Table 2: Euro 7 exhaust emission limits for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles with internal combustion engine and internal combustion engines used in those vehicles		
Pollutant emissions	<i>WHSC (CI) and WHTC (CI and PI)</i>	<b>REAL Driving Emissions (RDE)</b>
	<i>per kWh</i>	<i>per kWh</i>
NO <sub>x</sub> in mg	<b>200</b>	<b>260</b>
PM in mg	<b>8</b>	<b>10</b>
PN <sub>10</sub> in #	<b>6x10<sup>11</sup></b>	<b>7.8x10<sup>11</sup></b>
CO in mg	<b>1500</b>	<b>1950</b>
NMOG in mg	<b>75</b>	<b>98</b>
NH <sub>3</sub> in mg	<b>60</b>	<b>78</b>
CH <sub>4</sub> in mg	500	<b>650</b>
N <sub>2</sub> O in mg	160	<b>208</b>
HCHO in mg	30	<b>39</b>

## Amendment 152

### Proposal for a regulation

#### Annex I – Table 4 – Title

<i>Text proposed by the Commission</i>	<i>Amendment</i>
Euro 7 brake particle emission limits in standard driving cycle applying until 31/12/2034	Euro 7 brake particle emission limits in standard driving cycle <b>for internal combustion engine</b> vehicles applying until 31/12/2034

## Amendment 153

### Proposal for a regulation

**Annex I – Table 4 a (new)**

<i>Text proposed by the Commission</i>

<i>Amendment</i>			
<b>Table 4a: Euro 7 brake particle emission limits in standard driving cycle for pure electric vehicles, fuel-cell vehicles and hybrid electric vehicles applying until 31/12/2029</b>			
<i>Emission limits in mg/km per vehicle</i>	<i>M1, N1 vehicles</i>	<i>M2, M3 vehicles</i>	<i>N2, N3 vehicles</i>
<b>Brake particle emissions (PM10)</b>	<b>3</b>		
<b>Brake particle emissions (PN)</b>			

**Amendment 154****Proposal for a regulation****Annex I – Table 4 b (new)**

<i>Text proposed by the Commission</i>

<i>Amendment</i>			
<b>Table 4b: Euro 7 brake particle emission limits in standard driving cycle for pure electric vehicles, fuel-cell vehicles and hybrid electric vehicles, applying from 1/1/2030</b>			
<i>Emission limits in mg/km per vehicle</i>	<i>M1, N1 vehicles</i>	<i>M2, M3 vehicles</i>	<i>N2, N3 vehicles</i>
<b>Brake particle emissions (PM10)</b>			
<b>Brake particle emissions (PN)</b>			

**Amendment 155****Proposal for a regulation****Annex I – Table 5**

<i>Text proposed by the Commission</i>			
<b>Table 5: Euro 7 brake particle emission limits in applying from 1/1/2035</b>			
Emission limits in mg/km per vehicle	M <sub>1</sub> , N <sub>1</sub> vehicles	M <sub>2</sub> , M <sub>3</sub> vehicles	N <sub>2</sub> , N <sub>3</sub> vehicles
Brake particle emissions (PM <sub>10</sub> )	<b>3</b>		
Brake particle emissions (PN)			

<i>Amendment</i>			
Table 5: Euro 7 brake particle emission limits in <i>standard driving cycle for all vehicles</i> applying from 1/1/2035			
Emission limits in mg/km per vehicle	M <sub>1</sub> , N <sub>1</sub> vehicles	M <sub>2</sub> , M <sub>3</sub> vehicles	N <sub>2</sub> , N <sub>3</sub> vehicles
Brake particle emissions (PM <sub>10</sub> )			
Brake particle emissions (PN)			

## Amendment 156

### Proposal for a regulation

#### Annex I – Table 6

<i>Text proposed by the Commission</i>			
Table 6: Euro 7 tyre abrasion <i>rate</i> limits			
<i>Tyre mass lost in g/1000 km</i>	<i>C1 tyres</i>	<i>C2 tyres</i>	<i>C3 tyres</i>
<i>Normal tyres</i>			
<i>Snow tyres</i>			
<i>Special use tyres</i>			

<i>Amendment</i>				
Table 6: Euro 7 tyre abrasion <i>test method</i> , limits <i>and implementation timeline</i>				
<i>UN Regulation Number</i>	<i>Subject</i>	<i>Series of amendments published in the OJ</i>	<i>OJ Reference</i>	<i>Scope covered by current and future UN WP29 Regulations</i>
<i>[1xx]</i>	<i>Tyres with regard to Abrasion</i>	<i>00 series of amendments</i>	<i>OJ L xxx, xx.x.20XX, p. x</i>	<i>C1, C2*, C3*</i>
<i>* In the future, the United Nations (UN) will extend the development of an appropriate test method and limits for assessing the abrasion performance of C2 and C3 tyre classes.</i>				

## Amendment 157

### Proposal for a regulation

#### Annex II – Table 1

<i>Text proposed by the Commission</i>
Table 1: Euro 7 Minimum performance requirements (MPR) for battery durability for M <sub>1</sub> vehicles

Battery energy based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>8</b> years or <b>160 000</b> km	Vehicles up to additional lifetime*
OVC-HEV	<b>80%</b>	<b>70%</b>	
PEV	<b>80%</b>	<b>70%</b>	

Range based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>8</b> years or <b>160 000</b> km	Vehicles up to additional lifetime*
OVC-HEV			
PEV			

<i>Amendment</i>			
Table 1: Euro 7 Minimum performance requirements (MPR) for battery durability for M <sub>1</sub> vehicles			
Battery energy based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>10</b> years or <b>200 000</b> km	Vehicles up to additional lifetime*
OVC-HEV	<b>85%</b>	<b>75%</b>	
PEV	<b>85%</b>	<b>75%</b>	

Range based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>10</b> years or <b>200 000</b> km	Vehicles up to additional lifetime*
OVC-HEV			
PEV			

## Amendment 158

### Proposal for a regulation Annex II – Table 2

<i>Text proposed by the Commission</i>			
Table 2: Euro 7 Minimum performance requirements (MPR) for battery durability for N <sub>1</sub> vehicles			
Battery energy based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>8</b> years or	Vehicles up to additional lifetime*

		<b>160 000 km</b>	
OVC-HEV	<b>75%</b>	<b>65%</b>	
PEV	<b>75%</b>	<b>65%</b>	

Range based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of 8 years or 160 000 km	Vehicles up to additional lifetime*
OVC-HEV			
PEV			

*Amendment*

Table 2: Euro 7 Minimum performance requirements (MPR) for battery durability for N<sub>1</sub> vehicles

Battery energy based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>10</b> years or <b>200 000</b> km	Vehicles up to additional lifetime*
OVC-HEV	<b>80%</b>	<b>70%</b>	
PEV	<b>80%</b>	<b>70%</b>	

Range based MPR	Start of life to 5 years or 100 000 km whichever comes first	Vehicles more than 5 years or 100 000 km, and up to whichever comes first of <b>10</b> years or <b>200 000</b> km	Vehicles up to additional lifetime*
OVC-HEV			
PEV			

**Amendment 159**

**Proposal for a regulation**

**Annex III – Table 1**

*Text proposed by the Commission*

Table 1: Conditions for testing compliance of M<sub>1</sub>, N<sub>1</sub> vehicles with exhaust emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle

Parameter	Normal driving conditions	Extended driving conditions*
Extended driving divider	-	1.6 (applies to measured emissions only during the time when one of the conditions set out in this

		column applies)
Ambient temperature	0°C to 35°C	<b>-10°C</b> to 0°C or 35°C to <b>45°C</b>
Maximum altitude	700 m	More than 700 m and below <b>1 800</b> m
Maximum speed	Up to 145 km/h	Between 145 and 160 km/h
Towing/aerodynamic modifications	Not allowed	Allowed according to manufacturer specifications and up to the regulated speed.
Auxiliaries	Possible as per normal use	-
Maximum average wheel power during first 2 km after cold start	Lower than 20% of maximum wheel power	<b>Higher than</b> 20% of maximum wheel power
Trip composition	Any	-
Minimum mileage	10 000 km	Between 3 000 and 10 000 km
<i>*The same emission strategy shall be used when a vehicle is run outside those conditions, unless there is a technical reason approved by the type approval authority.</i>		

<i>Amendment</i>		
Table 1: Conditions for testing compliance of M <sub>1</sub> , N <sub>1</sub> vehicles with exhaust emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle		
<b>Parameter</b>	<b>Normal driving conditions</b>	Extended driving conditions <sup>1</sup>
Extended driving divider	-	1.6 (applies to measured emissions only during the time when one of the conditions set out in this column applies) <b>data obtained when more than one of the conditions set out in this column apply, shall be excluded from the test<sup>1</sup>.</b>
Ambient temperature	0°C to 35°C	<b>-7°C</b> to 0°C or 35°C to <b>38°C</b>
Maximum altitude	700 m	More than 700 m and below <b>1 300</b> m
Maximum speed	Up to 145 km/h	Between 145 and 160 km/h
Towing/aerodynamic modifications	Not allowed	Allowed according to manufacturer specifications and up to the regulated speed.
Auxiliaries	Possible as per normal use	-
Maximum average wheel power during first 2 km after cold start	Lower than 20% of maximum wheel power	<b>Between 20% and 30%</b> of maximum wheel power

Trip composition	Any, <i>as per normal use</i> <sup>2</sup> and excluding biased driving	Any, <i>as per normal use</i> <sup>2</sup> and excluding biased driving
Minimum mileage	10 000 km	Between 3 000 and 10 000 km
<sup>1</sup> Only the combination of two extended conditions of temperature and altitude shall be allowed.		
<sup>2</sup> Per normal use refers to the trip dynamics set in Annex 9 of UN Regulation No. 168.		

## Amendment 160

### Proposal for a regulation

#### Annex III – Table 2

<i>Text proposed by the Commission</i>		
Table 2: Conditions for testing compliance of M2, M3, N2 and N3 vehicles with exhaust emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle		
<i>Parameter</i>	<i>Normal driving conditions</i>	<i>Extended driving conditions*</i>
<i>Extended Driving Divider</i>	-	2 (applies to measured emissions only during the time when one of the conditions set out in this column applies)
<i>Ambient temperature</i>	-7°C to 35°C	-10°C to -7°C or 35°C to 45°C
<i>Maximum altitude</i>	1 600 m	From 1 600 to 1 800 m
<i>Towing/aerodynamic modifications</i>	Not allowed	Allowed according to manufacturer specifications and up to the regulated speed
<i>Vehicle Payload</i>	Higher or equal than 10%	Less than 10%
<i>Auxiliaries</i>	Possible as per normal use	-
<i>Internal Combustion Engine Loading at cold start</i>	Any	-
<i>Trip composition</i>	As per usual use	-
<i>Minimum mileage</i>	5 000 km for <16t TPMLM 10 000 km for > 16t TPMLM	Between 3 000 km and 5 000 km for <16t TPMLM Between 3 000 km and 10 000 km for > 16t TPMLM

<i>Amendment</i>	
Table 2: Conditions for testing compliance of M2, M3, N2 and N3 vehicles with exhaust emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle	
<i>Laboratory exhaust emission measurement</i>	<i>Real Driving Emission (RDE) measurement</i>
<i>For all exhaust emission tests conducted</i>	<i>The provisions of UN Regulation No 49<sup>2</sup>, Annex</i>

<p>using the WHTC/WHSC engine bench test cycles, the provisions of UN Regulation No 49<sup>1</sup>, Annex 4 shall apply.</p>	<p>8 shall apply <u>with the following exceptions</u> of:</p> <ul style="list-style-type: none"> <li>• The power threshold in Table 1 of Annex III is 0%. For windows where power is below 6%, 6% shall be used for calculations;</li> <li>• The conformity factor (CF) in Table 2 of point 6.3 where the value = 1.0 shall be used for all pollutants. The applicable limits are the Real RDE limits in Annex I Table 2.</li> </ul>
<p><sup>1</sup> 07 series of amendments (OJ L 14, 16.1.2023, p. 1).</p> <p><sup>2</sup> 07 series of amendments (OJ L 14, 16.1.2023, p. 1).</p>	

## Amendment 161

### Proposal for a regulation Annex III – Table 5

<i>Text proposed by the Commission</i>		
Table 5: Conditions for testing compliance with tyre abrasion limits		
	M <sub>1</sub> , N <sub>1</sub> vehicles	M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles
Tyre abrasion limits test	Based on the testing methodologies developed in UN for testing tyre abrasion in real world	Based on the testing methodologies developed in UN for testing tyre abrasion in real world

<i>Amendment</i>		
Table 5: Conditions for testing compliance with tyre abrasion limits		
	M <sub>1</sub> , N <sub>1</sub> vehicles	M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles
Tyre abrasion limits test	Based on the testing methodologies developed in UN for testing tyre abrasion in real world <b><i>in accordance with Article 7 a (new)</i></b>	Based on the testing methodologies developed in UN for testing tyre abrasion in real world <b><i>in accordance with Article 7 a (new)</i></b>

## Amendment 162

### Proposal for a regulation Annex IV – Table 1

<i>Text proposed by the Commission</i>			
Table 1: Lifetime of vehicles, engines and pollution control systems			
	M <sub>1</sub> , N <sub>1</sub> and M <sub>2</sub>	N <sub>2</sub> , N <sub>3</sub> <16t, M <sub>3</sub> <7.5t:	N <sub>3</sub> >16t, M <sub>3</sub> >7.5t
Lifetime of vehicles, engines and replacement pollution control devices			
Main lifetime	Up to <b>160 000</b> km or	<b>300 000</b> km or <b>8</b> years,	<b>700 000</b> km or <b>15</b>

	8 years, whichever comes first	whichever comes first	years, whichever comes first
Additional lifetime	After main lifetime and up to <b>200 000</b> km or <b>10</b> years whichever comes first	After main lifetime and up to <b>375 000</b> km	After main lifetime and up to <b>875 000</b> km

<i>Amendment</i>			
Table 1: Lifetime of vehicles, engines and pollution control systems			
Lifetime of vehicles, engines and replacement pollution control devices	M <sub>1</sub> , N <sub>1</sub> and M <sub>2</sub>	N <sub>2</sub> , N <sub>3</sub> ≤ 16t, M <sub>3</sub> ≤ 7.5t.	N <sub>3</sub> > 16t, M <sub>3</sub> > 7.5t
Main lifetime	Up to <b>200 000</b> km or <b>10</b> years, whichever comes first	<b>340 000</b> km or <b>10</b> years, whichever comes first	<b>750 000</b> km or <b>15</b> years, whichever comes first
Additional lifetime	After main lifetime and up to <b>240 000</b> km or <b>12</b> years whichever comes first	After main lifetime and up to <b>400 000</b> km or <b>12 years, whichever comes first</b>	After main lifetime and up to <b>900 000</b> km or <b>17 years whichever comes first</b>

## Amendment 163

### Proposal for a regulation

#### Annex V – Table 3

<i>Text proposed by the Commission</i>			
Table 3: Application of <b>tests</b> , declarations and other requirements for type-approval and extensions for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles for manufacturers			
Test requirements	Tests and requirements <b>at initial</b> emission type approval	Tests at conformity of production	Tests at in-service conformity
Gaseous pollutants, <b>PM and PN</b> in road testing (RDE) for each fuel and for the	Required demonstration tests for all fuels for which the type	<b>Conformity of production performed at engine level only</b>	Required test on a vehicle with any fuel and on any vehicle category and any

applicable vehicle categories (M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> ) <b>and low load test (if applicable)</b>	approval is granted per vehicle type and a declaration of compliance for all fuels, all payloads and all applicable vehicle <b>types</b>		payload for all engine types every two <b>year</b>
<b>CO<sub>2</sub> and fuel/energy consumption, zero emission/electric range determination of a vehicle</b>	<b>VECTO licence</b>	<b>For components</b>	<b>Not required</b>
Energy efficiency of trailers	VECTO licence	For components	Not required
Verification testing procedure	Not required	Required	Not required
Crankcase emissions	Check installation of closed crankcase system or routing to the tailpipe	Not required	Optional <sup>6</sup>
Emissions durability	Declaration	Not required	Not required
Battery durability	Declaration	Not required	Not required
On-board diagnostics (OBD family level)	Declaration	Not required	Optional <sup>6</sup>
On-board monitoring (OBM family level)	Demonstration +Declaration	Not required	Required
Anti-tampering, security and cybersecurity	Declaration and documentation	Not required	Not required
<b>Adaptive controls (where applicable)</b>	<b>Declaration</b>	<b>Not required</b>	<b>Not required</b>
<b>Geofencing technologies (where applicable)</b>	<b>Declaration and demonstration</b>	<b>Not required</b>	<b>Not required</b>

*Amendment*

Table 3: Application of **test requirements**, declarations and other requirements for type-approval and extensions for M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub> and N<sub>3</sub> vehicles for manufacturers

Test requirements	Tests and requirements <i>for</i> emission type approval	Tests at conformity of production	Tests at in-service conformity
<b><i>Gaseous pollutants, PM and PN and CO<sub>2</sub> emissions, fuel consumption on transient cycle (WHTC Cold and Hot)</i></b>	<b><i>Required on the parent engine of the emission family and declaration for all family members*</i></b> **	<b><i>Required on an engine out of the family</i></b> **	
Gaseous pollutants, PN in road testing (RDE) for each fuel and for the applicable vehicle categories (M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> )	Required demonstration tests for all fuels for which the type approval is granted per vehicle type and a declaration of compliance for all fuels, all payloads and all applicable vehicle <b><i>categories</i></b> **	<b><i>Not required</i></b>	Required test on a vehicle with any fuel and on any vehicle category and any payload for all engine types every two <b><i>years</i></b> **
Energy efficiency of trailers	VECTO licence	For components	Not required
Verification testing procedure	Not required	Required	Not required
Crankcase emissions	Check installation of closed crankcase system or routing to the tailpipe **	Not required	Optional <sup>28</sup>
Emissions durability	Declaration **	Not required	Not required
<b><i>Correct operation of systems using a consumable reagent and pollution control systems</i></b>	<b><i>Declaration</i></b> **	<b><i>Not required</i></b> **	<b><i>Optional</i></b> **
Battery durability	Declaration	Not required	Not required
<b><i>Power determination</i></b>	<b><i>Required</i></b> **	<b><i>Not required</i></b>	<b><i>Not required</i></b>
On-board diagnostics (OBD family level)	Declaration	Not required	Optional <sup>28</sup>
On-board monitoring	Demonstration +	Not required	Required

(OBM family level)	Declaration		
Anti-tampering, security and cybersecurity	Declaration and documentation	Not required	Not required
<p>* <b>Supported by data of engine testing of all power ratings.</b></p> <p>** <b>In the case of a vehicle with an approved engine system with regard to emissions, the engine manufacturer is responsible to perform this test.</b></p>			

## Amendment 164

### Proposal for a regulation

#### Annex V – Table 4

Text proposed by the Commission						
Table 4: Application of test requirements and declarations for type-approval and extensions for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles for Member States and recognised third parties/Commission						
Test requirements	Tests and requirements <i>at initial</i> emission type approval	Tests at conformity of production	Tests at in-service conformity		Tests at market surveillance	
Relevant actor	<i>Type</i> approval authority <i>for issuing the type approval</i>	<i>Type</i> approval authority	<i>Type</i> approval authority	Third parties and Commission	Market surveillance authorities	Third parties and Commission
Gaseous pollutants, <b>PM and PN</b> in road testing (RDE) for each fuel and for the applicable vehicle categories (M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> ) + <b>low load test (if applicable)</b>	Required demonstration tests for all fuels for which the type approval is granted per vehicle type and a declaration of compliance for all fuels, all payloads and all	(see engine requirements)	Required yearly for an adequate number of vehicle types on any fuel and on any vehicle category	Optional	Required/Optional	Optional

	applicable vehicle <i>types</i>		ry covered by the emission type approval			
CO <sub>2</sub> emissions, fuel/energy consumption, zero-emissions/electric range determination of a vehicle	Issue VECTO licence	For components	Not required	Not required	Optional	Optional
Energy efficiency of trailers	Issue VECTO licence	For components	Not required	Not required	Optional	Optional
Verification testing procedure	Not required	Required	Optional	Optional	Optional	Optional
Crankcase emissions	Check installation of closed crankcase system or routing to the tailpipe	Not required	Optional	Optional	Optional	Optional
Emissions durability	Declaration	Not required	Optional	Optional	Required	Optional
Battery durability	Declaration	Not required	Optional	Optional	Optional	Optional
On-board diagnostics (OBD family level)	Declaration	Not required	Optional	Optional	Required	Optional
On-board monitoring (OBM family level)	Declaration and demonstration	Not required	<i>Not required</i>	Not required	Required	Optional
Anti-	Declaration	Not	Not	Not	Required	Optional

tampering, security and cybersecurity	n and documentation	required	required	required		
<b>Adaptive controls (where applicable)</b>	<b>Declaration</b>	<b>Not required</b>	<b>Not required</b>	<b>Not required</b>	<b>Optional</b>	<b>Optional</b>
<b>Geofencing technologies (where applicable)</b>	<b>Declaration and demonstration</b>	<b>Not required</b>	<b>Not required</b>	<b>Not required</b>	<b>Required</b>	<b>Optional</b>

<i>Amendment</i>						
Table 4: Application of test requirements and declarations for type-approval and extensions for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles for Member States and recognised third parties/Commission						
Test requirements	Tests and requirements <i>for</i> emission type approval	Tests at conformity of production	Tests at in-service conformity		Tests at market surveillance	
Relevant actor	<b>Granting type</b> approval authority	<b>Granting type</b> approval authority	<b>Granting type</b> approval authority	Third parties and Commission	Market surveillance authorities	Third parties and Commission
Gaseous pollutants, PM and PN in road testing (RDE) for each fuel and for the applicable vehicle categories (M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> )	Required demonstration tests for all fuels for which the type approval is granted per vehicle type and a declaration of compliance for all	(see engine requirements)	Required yearly for an adequate number of vehicle types on any fuel and on any	Optional	Required/Optional	Optional

	fuels, all payloads and all applicable vehicle <i>categories</i> **		vehicle category covered by the emission type approval **			
CO <sub>2</sub> emissions, fuel/energy consumption, zero-emissions/electric range determination of a vehicle	Issue VECTO licence	For components	Not required	Not required	Optional	Optional
Energy efficiency of trailers	Issue VECTO licence	For components	Not required	Not required	Optional	Optional
Verification testing procedure	Not required	Required	Optional	Optional	Optional	Optional
Crankcase emissions	Check installation of closed crankcase system or routing to the tailpipe	Not required	Optional	Optional	Optional	Optional
Emissions durability	Declaration	Not required	Optional	Optional	Required	Optional
<b><i>Correct operation of systems using a consumable reagent and pollution control</i></b>	<b><i>Not required</i></b>	<b><i>Not required</i></b>	<b><i>Required</i></b>	<b><i>Optional</i></b>	<b><i>Required</i></b>	<b><i>Correct operation of systems using a consumable reagent and</i></b>

<i>systems</i>						<i>pollution control systems</i>
Battery durability	Declaration	Not required	Optional	Optional	Optional	Optional
<b>Power determination</b>	<b>Required**</b>	<b>Not required</b>	<b>Optional</b>	<b>Optional</b>	<b>Optional</b>	<b>Optional</b>
On-board diagnostics (OBD family level)	Declaration	Not required	Optional	Optional	Required	Optional
On-board monitoring (OBM family level)	Declaration and demonstration	Not required	<b>Required</b>	Not required	Required	Optional
Anti-tampering, security and cybersecurity	Declaration and documentation	Not required	Not required	Not required	Required	Optional
<b>** In the case of a vehicle with an approved engine system with regard to emissions, the engine manufacturer is responsible to perform this test.</b>						

## Amendment 165

### Proposal for a regulation Annex V – Table 5

<i>Text proposed by the Commission</i>			
Table 5: Application of test requirements and declarations for type-approval and extensions of engines intended for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles for manufacturers			
Test requirements for each fuel	Tests and requirements <b>at initial</b> emission type approval	Tests at conformity of production	Tests at in-service conformity
Gaseous pollutants, PM and PN and CO <sub>2</sub> emissions, fuel consumption on transient cycle (WHTC Cold and Hot)	Required on the parent engine of the emission family and declaration for all family members**	Required on an engine out of the family	Performed only with the complete vehicle as in Tables 3 and 4
Engine tests for verifying data	Required	Required	

required for CO <sub>2</sub> determination			
Continuous/periodic regeneration	Declaration	Not required	
Crankcase emissions	Check installation of closed crankcase system or routing to the tailpipe	Not required	
Emissions Durability	Declaration	Not required	
On-board diagnostics (OBD family level)	Declaration	Not required	
On-board monitoring (OBM family level)	Performed only with the complete vehicle as in Tables 3 and 4	Not required	
<b>Engine power</b>	<b>Required</b>		
* The type approval authority may request a test to be performed during initial type approval. ** Supported by data of engine testing of all power ratings.			

<i>Amendment</i>			
Table 5: Application of test requirements and declarations for type-approval and extensions of engines intended for M <sub>2</sub> , M <sub>3</sub> , N <sub>2</sub> and N <sub>3</sub> vehicles for manufacturers			
Test requirements for each fuel	Tests and requirements <i>for</i> emission type approval	Tests at conformity of production	Tests at in-service conformity
Gaseous pollutants, PM and PN and CO <sub>2</sub> emissions, fuel consumption on transient cycle (WHTC Cold and Hot)	Required on the parent engine of the emission family and declaration for all family members**	Required on an engine out of the family	Performed only with the complete vehicle as in Tables 3 and 4
<b><i>Gaseous pollutants, PN in road testing (RDE) for each fuel and for the applicable vehicle categories (M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub> and N<sub>3</sub>)</i></b>	<b><i>Required demonstration tests for all fuels for which the type approval is granted per vehicle type and a declaration of compliance for all fuels, all payloads and all applicable vehicle categories</i></b>	<b><i>Not required</i></b>	
Engine tests for verifying data required for CO <sub>2</sub> determination	Required	Required	

Continuous/periodic regeneration	Declaration	Not required	
Crankcase emissions	Check installation of closed crankcase system or routing to the tailpipe	Not required	
Emissions Durability	Declaration	Not required	
<b><i>Power determination</i></b>	<b><i>Required</i></b>	<b><i>Not required</i></b>	
On-board diagnostics (OBD family level)	Declaration	Not required	
On-board monitoring (OBM family level)	Performed only with the complete vehicle as in Tables 3 and 4	Not required	
<b>** Supported by data of engine testing of all power ratings.</b>			