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 amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC (Text with EEA relevance)

# [<sup>F1</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 amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC]

# (Text with EEA relevance)

# THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee<sup>(1)</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty<sup>(2)</sup>,

Whereas:

- (1) The internal market comprises an area without internal frontiers in which the free movement of goods, persons, services and capital must be ensured. To that end a comprehensive Community type-approval system for motor vehicles is in place. The technical requirements for the type-approval of motor vehicles with regard to emissions should therefore be harmonised to avoid requirements that differ from one Member State to another and to ensure a high level of environmental protection.
- (2) This Regulation is a new separate regulation in the context of the Community typeapproval procedure under Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive)<sup>(3)</sup>. Therefore, Annexes IV, VI and XI to that Directive should be amended accordingly.
- (3) Following the request of the European Parliament, a new regulatory approach has been introduced in Community vehicle legislation. This Regulation should therefore lay down only fundamental provisions on vehicle emissions, whereas the technical specifications should be laid down by implementing measures adopted under the comitology procedures.

- (4)The Sixth Community Environment Action Programme adopted by Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002<sup>(4)</sup> establishes the need to reduce pollution to levels which minimise harmful effects on human health, paying particular attention to sensitive populations and to the environment as a whole. Community legislation has established appropriate standards for ambient air quality for the protection of human health and sensitive individuals in particular, as well as for national emission ceilings. Following its communication of 4 May 2001, which established the 'Clean Air For Europe (CAFE) programme', the Commission adopted another communication on 21 September 2005 entitled 'Thematic strategy for air pollution'. One of the conclusions of that thematic strategy is that further reductions in emissions from the transport sector (air, maritime and land transport), from households and from the energy, agricultural and industrial sectors are needed to achieve EU air quality objectives. In this context, the task of reducing vehicle emissions should be approached as part of an overall strategy. The Euro VI standards are one of the measures designed to reduce the actual in-use emissions of air pollutants such as particulate pollutants (PM) as well as ozone precursors such as nitrogen oxides (NO<sub>x</sub>) and hydrocarbons.
- (5) Achieving EU air quality objectives requires a continuous effort to reduce vehicle emissions. For that reason, industry should be provided with clear information on future emission limit values and should be allowed an appropriate period of time in which to attain them and pursue the requisite technical developments.
- (6) In particular, a reduction in NO<sub>x</sub> emissions from heavy duty vehicles is necessary to improve air quality and comply with limit values for pollution and national emission ceilings. Setting limit values for NO<sub>x</sub> emissions at an early stage should provide long-term, European Union-wide planning certainty for vehicle manufacturers.
- (7) In setting emission standards it is important to take into account the implications for competitiveness of markets and manufacturers, the direct and indirect costs imposed on business and the benefits that accrue in terms of stimulating innovation, improving air quality, reducing health costs and increasing life expectancy.
- (8) Unrestricted access to vehicle repair information, via a standardised format which can be used to retrieve the technical information, and effective competition on the market for vehicle repair and maintenance information services are necessary to improve the functioning of the internal market, particularly as regards the free movement of goods, freedom of establishment and freedom to provide services. A great proportion of such information is related to on-board diagnostic (OBD) systems and their interaction with other vehicle systems. It is necessary to lay down technical specifications to be followed by the manufacturers concerning the provision of information on their websites, along with targeted measures to ensure reasonable access for small and medium-sized enterprises (SMEs).
- (9) Not later than 7 August 2013, the Commission should review the operation of the system of unrestricted access to vehicle repair and maintenance information with a view to determining whether it would be appropriate to consolidate all provisions governing access to vehicle repair and maintenance information within the revised framework

legislation on type-approval. If the provisions governing access to such information are consolidated in this way, the corresponding provisions of this Regulation should be repealed, as long as existing rights of access to repair and maintenance information are preserved.

- (10) The Commission should encourage the development of an international standard format for unrestricted and standardised access to vehicle repair and maintenance information, for example through the work of the European Committee for Standardisation (CEN).
- (11) It is essential to establish a common European standard for the format of vehicle OBD and vehicle repair and maintenance information. Until such time as that standard is adopted, vehicle OBD and vehicle repair and maintenance information for heavy duty vehicles should be presented in a readily accessible manner and in a format guaranteeing non-discriminatory access. The information should be made available on the websites of manufacturers, or, if this is not feasible due to the nature of the information, in another appropriate format.
- (12) The Commission should keep under review emissions which are, as yet, unregulated and which arise as a consequence of the wider use of new fuel formulations, engine technologies and emission control systems. The Commission should also, where necessary, submit a proposal to the European Parliament and to the Council with a view to regulating such emissions.
- (13) It is appropriate to encourage the introduction of alternative fuel vehicles, which can have low  $NO_x$  and particulate emissions. Thus, limit values for hydrocarbons, non-methane hydrocarbons and methane should be introduced.
- (14) In order to ensure that emissions of ultrafine particulate pollutants (PM 0,1 µm and below) are controlled, the Commission should be empowered to adopt a number-based approach to emissions of particulate pollutants in addition to the mass-based approach which is currently used. The number-based approach to emissions of particles should draw on the results of the Particulate measurement programme (PMP) of the United Nations Economic Commission for Europe (UN/ECE) and be consistent with the existing ambitious objectives for the environment.
- (15) In order to achieve these environmental objectives, it is appropriate to indicate that the particle number limits are likely to reflect the highest levels of performance currently obtained with particle filters by using the best available technology.
- (16) The Commission should adopt worldwide harmonised driving cycles in the test procedure that provides the basis for EC type-approval emissions regulations. The application of portable emissions measurement systems for verifying the actual in-use emissions and the introduction of procedures to control off-cycle emissions should also be considered.
- (17) Retrofitting heavy duty vehicles with diesel particle filters could result in higher nitrogen dioxide (NO<sub>2</sub>) emissions. As part of the thematic strategy on air pollution, the Commission should therefore draft a legislative proposal to harmonise national legislation on retrofitting and ensure that it incorporates environmental conditions.

- (18) OBD systems are important to control emissions during the use of a vehicle. Due to the importance of controlling real-world emissions, the Commission should keep under review the requirements for such systems and the tolerance thresholds for monitoring faults.
- (19) In order to monitor the contribution of this sector, as a whole, to the global emissions of greenhouse gases, the Commission should introduce the measuring of fuel consumption and carbon dioxide (CO<sub>2</sub>) emissions of heavy duty vehicles.
- (20) In order to promote the market for clean and energy efficient vehicles, the Commission should study the feasibility and the development of a definition and a methodology of energy consumption and  $CO_2$  emissions for whole vehicles and not only for engines, without prejudice to the use of virtual and actual testing. Such a definition and the methodology should also cover alternative driveline concepts (e.g. hybrid vehicles) and the effects of improvements on vehicles such as aerodynamics, weight, loading capacity and rolling resistance. If a suitable method of presentation and comparison can be identified, the derived fuel consumption and  $CO_2$  emissions should be made publicly available for separate vehicle types.
- (21) In order to better control actual in-use emissions including off-cycle emissions and to facilitate the in-service conformity process, a testing methodology and performance requirements based on the use of portable emission measurement systems should be adopted within an appropriate timeframe.
- (22) With a view to meeting EU air quality objectives, the Commission should introduce harmonised provisions to ensure that off-cycle emissions from heavy duty engines and vehicles are appropriately controlled over a broad range of engine and ambient operating conditions.
- (23) The correct functioning of the after-treatment system, and more specifically in the case of  $NO_x$ , is the basic requirement for fulfilling the established standards for pollutant emissions. In this context, measures to guarantee the proper operation of systems relying on the use of a reagent should be introduced.
- (24) Member States are able, by means of financial incentives, to accelerate the placing on the market of vehicles which satisfy the requirements adopted at Community level. This Regulation should not affect the right of Member States to include emissions in the method for calculating taxes levied on vehicles.
- (25) When Member States draw up measures to ensure retrofitting of existing heavy duty vehicles, such measures should be based on the Euro VI standards.
- (26) Member States should lay down rules on penalties applicable to infringements of the provisions of this Regulation and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.
- (27) The requirements of engine power of motor vehicles contained in Council Directive 80/1269/EEC of 16 December 1980 on the approximation of the laws of the Member States relating to the engine power of motor vehicles<sup>(5)</sup> should be introduced in this Regulation and in 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<sup>(6)</sup>. Therefore, Regulation (EC) No 715/2007 should be amended accordingly and Directive 80/1269/EEC should be repealed.

- (28) In order to simplify Community legislation, it is appropriate to replace the existing heavy duty vehicles emissions legislation, namely Directive 2005/55/EC<sup>(7)</sup> and Commission Directive 2005/78/EC<sup>(8)</sup>, by a regulation. The use of a regulation should ensure that the detailed technical provisions are directly applicable to manufacturers, approval authorities and technical services and that they can be updated in a fast and efficient way. Therefore Directives 2005/55/EC and 2005/78/EC should be repealed and Regulation (EC) No 715/2007 should be amended accordingly.
- (29) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>(9)</sup>.
- (30) In particular, the Commission should be empowered to introduce particle number based limit values in Annex I, to specify, if appropriate, the value of the admissible level of the NO<sub>2</sub> component in the NO<sub>x</sub> limit value, to establish specific procedures, tests and requirements for type-approval, as well as a particle number measurement procedure, and to adopt measures concerning off-cycle emissions, the use of portable emissions measurement systems, access to vehicle repair and maintenance information and test cycles used to measure emissions. Since those measures are of general scope and are designed to amend non-essential elements of this Regulation, by supplementing it with new non-essential elements, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC.
- (31) Since the objective of this Regulation, namely the realisation of the internal market through the introduction of common technical requirements concerning emissions from motor vehicles and guaranteed access to vehicle repair and maintenance information for independent operators on the same basis as for authorised dealers and repairers, cannot be sufficiently achieved by the Member States and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. 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 that objective,

# HAVE ADOPTED THIS REGULATION:

#### **Textual Amendments**

F1 Substituted by 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 (Text with EEA relevance).

#### Article 1

#### Subject matter

This Regulation establishes common technical requirements for the type-approval of motor vehicles, engines and replacement parts with regard to their emissions.

[<sup>F1</sup>This Regulation also lays down rules for in-service conformity of vehicles and engines, the durability of pollution control devices, vehicle on-board diagnostic (OBD) systems and the measurement of fuel consumption and  $CO_2$  emissions.]

#### **Textual Amendments**

F1 Substituted by 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 (Text with EEA relevance).

#### Article 2

## Scope

This Regulation shall apply to motor vehicles of categories  $M_1$ ,  $M_2$ ,  $N_1$  and  $N_2$  as defined in Annex II of Directive 2007/46/EC with a reference mass exceeding 2 610 kg and to all motor vehicles of categories  $M_3$  and  $N_3$ , as defined in that Annex. [<sup>F2</sup>It shall also apply, for the purpose of Articles 5a, 5b, and 5c, to vehicles of categories  $O_3$  and  $O_4$ .]

This Regulation shall apply without prejudice to Article 2(2) of Regulation (EC) No 715/2007.

At the request of the manufacturer, the type-approval of a completed vehicle granted under this Regulation and its implementing measures shall be extended to its incomplete vehicle with a reference mass not exceeding 2 610 kg. Type-approvals shall be extended if the manufacturer can demonstrate that all bodywork combinations expected to be built onto the incomplete vehicle increase the reference mass of the vehicle to above 2 610 kg.

At the request of the manufacturer, the type-approval of a vehicle granted under this Regulation and its implementing measures shall be extended to its variants and versions with a reference mass exceeding 2 380 kg provided that it also meets the requirements relating to the measurement of greenhouse gas emissions and fuel consumption established in Regulation (EC) No 715/2007 and its implementing measures.

#### **Textual Amendments**

F2 Inserted by Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance).

#### Article 3

#### Definitions

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

- 1. 'engine' means the motive propulsion source of a vehicle for which type-approval as a separate technical unit, as defined in point 25 of Article 3 of Directive 2007/46/EC, may be granted;
- 2. 'gaseous pollutants' means the exhaust gas emissions of carbon monoxide,  $NO_x$ , expressed in  $NO_2$  equivalent, and hydrocarbons;
- 3. 'particulate pollutants' means components of the exhaust gas which are removed from the diluted exhaust gas at a maximum temperature of 325 K (52 °C) by means of the filters described in the test procedure for verifying average tailpipe emissions;
- 4. 'tailpipe emissions' means the emission of gaseous and particulate pollutants;
- 5. 'crankcase' means the spaces in, or external to, an engine which are connected to the oil sump by internal or external ducts through which gases and vapours can be emitted;
- 6. 'pollution control device' means those components of a vehicle that control and/or limit tailpipe emissions;
- 7. 'on-board diagnostic (OBD) system' means a system on board a vehicle or connected to an engine which has the capability of detecting malfunctions, and, if applicable, of indicating their occurrence by means of an alert system, of identifying the likely area of malfunction by means of information stored in computer memory, and of communicating that information off-board;
- 8. 'defeat strategy' means an emission control strategy that reduces the effectiveness of the emission controls under ambient or engine operating conditions encountered either during normal vehicle operation or outside the type-approval test procedures;
- 9. 'original pollution control device' means a pollution control device or an assembly of such devices covered by the type-approval granted for the vehicle concerned;
- 10. 'replacement pollution control device' means a pollution control device or an assembly of such devices intended to replace an original pollution control device and which can be approved as a separate technical unit, as defined in point 25 of Article 3 of Directive 2007/46/EC;
- 11. [<sup>F3</sup>....]
- 12. 'manufacturer' means the person or body who is responsible to the approval authority for all aspects of the type-approval or authorisation process and for ensuring conformity of production. It is not essential that the person or body be directly involved in all stages of the construction of the vehicle, system, component or separate technical unit which is the subject of the approval process;
- 13. [<sup>F3</sup>....]
- 14. 'alternative fuel vehicle' means a vehicle designed to be capable of running on at least one type of fuel that is either gaseous at atmospheric temperature and pressure, or substantially non-mineral oil derived;

- 15. 'reference mass' means the mass of the vehicle in running order less the uniform mass of the driver of 75 kg and increased by a uniform mass of 100 kg;
- 16. 'tampering' means inactivation, adjustment or modification of the vehicle emissions control or propulsion system, including any software or other logical control elements of those systems, that has the effect, whether intended or not, of worsening the emissions performance of the vehicle.

The Commission may adapt the definition in point 7 of the first subparagraph to reflect technical progress in OBD systems. That measure, designed to amend non-essential elements of this Regulation, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(2).

**Textual Amendments** 

F3 Deleted by 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 (Text with EEA relevance).

## Article 4

#### **Obligations of the manufacturers**

1 Manufacturers shall demonstrate that all new vehicles sold, registered or put into service within the Community, all new engines sold or put into service within the Community and all new replacement pollution control devices requiring type-approval pursuant to Articles 8 and 9, which are sold or put into service within the Community, are type-approved in accordance with this Regulation and its implementing measures.

2 Manufacturers shall ensure that type-approval procedures for verifying conformity of production, durability of pollution control devices and in-service conformity are followed.

The technical measures taken by the manufacturer shall be such as to ensure that the tailpipe emissions are effectively limited, pursuant to this Regulation and its implementing measures, throughout the normal life of the vehicles under normal conditions of use.

For that purpose, the mileage and period of time by reference to which the tests for durability of pollution control devices undertaken for type-approval and testing of conformity of in-service vehicles or engines are to be carried out shall be the following:

- a 160 000 km or five years, whichever is the sooner, in the case of engines fitted to vehicles of category  $M_1$ ,  $N_1$  and  $M_2$ ;
- b 300 000 km or six years, whichever is the sooner, in the case of engines fitted to vehicles of category N<sub>2</sub>, N<sub>3</sub> with a maximum technically permissible mass not exceeding 16 tonnes and M<sub>3</sub> Class I, Class II and Class A, and Class B with a maximum technically permissible mass not exceeding 7,5 tonnes;
- c 700 000 km or seven years, whichever is the sooner, in the case of engines fitted to vehicles of category  $N_3$  with a maximum technically permissible mass exceeding 16 tonnes and  $M_3$ , Class III and Class B with a maximum technically permissible mass exceeding 7,5 tonnes.

3 The Commission shall establish specific procedures and requirements for the implementation of paragraphs 1 and 2 of this Article. Those measures, designed to amend nonessential elements of this Regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(2).

#### Article 5

#### **Requirements and tests**

1 Manufacturers shall ensure compliance with the emission limits set out in Annex I.

2 Manufacturers shall equip vehicles and engines so that the components likely to affect emissions are designed, constructed and assembled so as to enable the vehicle or engine, in normal use, to comply with this Regulation and its implementing measures.

3 The use of defeat strategies that reduce the effectiveness of emission control equipment shall be prohibited.

4 The Commission shall adopt measures for the implementation of this Article including measures in relation to the following:

- a tailpipe emissions, including test cycles, the use of portable emissions measurement systems for verifying the actual in-use emissions, verifying and limiting off-cycle emissions, the setting of limits for particle numbers while retaining the existing ambitious environmental requirements, and emissions at idling speed;
- b crankcase emissions;
- c OBD systems and in-service performance of pollution control devices;
- d durability of pollution control devices, replacement pollution control devices, conformity of in-service engines and vehicles, conformity of production and roadworthiness;
- e CO<sub>2</sub> emissions and fuel consumption;
- f granting extension of type-approvals;
- g test equipment;
- h reference fuels such as petrol, diesel, gaseous fuels and biofuels, such as bioethanol, biodiesel and biogas;
- i measurement of engine power;
- j correct functioning and regeneration of pollution control devices;
- k specific provisions to ensure the correct operation of  $NO_x$  control measures; such provisions shall ensure that vehicles cannot be operated if the  $NO_x$  control measures are inoperative due, for example, to lack of any required reagent, incorrect exhaust gas recirculation (EGR) flow or deactivation of EGR.

Those measures, designed to amend non-essential elements of this Regulation, inter alia, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(2).

# [<sup>F2</sup>Article 5a

# Specific requirements for manufacturers with regard to the environmental performance of vehicles of categories M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub>, O<sub>3</sub> and O<sub>4</sub>

1 Manufacturers shall ensure that new vehicles of categories  $O_3$  and  $O_4$  that are sold, registered or put into service meet the following requirements:

- a the influence of those vehicles on the  $CO_2$  emissions, fuel consumption, electric consumption and zero-emission driving range of motor vehicles is determined in accordance with the methodology referred to in point (a) of Article 5c;
- b they are fitted with on-board devices for the monitoring and recording of the payload in accordance with the requirements referred to in point (b) of Article 5c.

2 Manufacturers shall ensure that new vehicles of categories  $M_2$ ,  $M_3$ ,  $N_2$  and  $N_3$  that are sold, registered or put into service are fitted with on-board devices for the monitoring and recording of fuel and/or energy consumption, payload and mileage in accordance with the requirements referred to in point (b) of Article 5c.

They shall also ensure that the zero-emission driving range and electricity consumption of those vehicles are determined in accordance with the methodology referred to in point (c) of Article 5c.

#### Textual Amendments

F2 Inserted by Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance).

# Article 5b

# Specific requirements for Member States with regard to the environmental performance of vehicles of categories M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub>, O<sub>3</sub> and O<sub>4</sub>

1 National authorities shall, in accordance with the implementing measures referred to in Article 5c, refuse to grant EC type-approval or national type-approval in respect of new vehicle types of categories  $M_2$ ,  $M_3$ ,  $N_2$ ,  $N_3$ ,  $O_3$  and  $O_4$  which do not comply with the requirements set out in those implementing measures.

2 National authorities shall, in accordance with the implementing measures referred to in Article 5c, prohibit the sale, registration or entry into service of new vehicles of categories  $M_2$ ,  $M_3$ ,  $N_2$ ,  $N_3$ ,  $O_3$  and  $O_4$  which do not comply with the requirements set out in those implementing measures.

#### **Textual Amendments**

**F2** Inserted by Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending

Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance).

## Article 5c

# Measures for determining certain aspects of the environmental performance of vehicles of categories M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub>, N<sub>3</sub>, O<sub>3</sub> and O<sub>4</sub>

By 31 December 2021, the Commission shall, by means of implementing acts, adopt the following measures:

- (a) a methodology for assessing the performance of vehicles of categories  $O_3$  and  $O_4$  with regard to their influence on the  $CO_2$  emissions, fuel consumption, electricity consumption and zero-emission driving ranges of motor vehicles;
- (b) technical requirements for the fitting of on-board devices for the monitoring and recording of fuel and/or energy consumption and mileage of motor vehicles of categories M<sub>2</sub>, M<sub>3</sub>, N<sub>2</sub> and N<sub>3</sub>, and for determining and recording the payloads or total weight of vehicles meeting the characteristics set out in point (a), (b), (c) or (d) of the first subparagraph of Article 2(1) of Regulation (EU) 2019/1242 of the European Parliament and of the Council<sup>(10)</sup> and of their combinations with category O<sub>3</sub> and O<sub>4</sub> vehicles, including the transmission of data between vehicles within a combination, as necessary;
- (c) a methodology for determining the zero-emission driving range and electricity consumption of new vehicles of categories  $M_2$ ,  $M_3$ ,  $N_2$  and  $N_3$ .

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13a.]

#### **Textual Amendments**

F2 Inserted by Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance).

# F<sup>3</sup>Article 6

# [<sup>F3</sup>Access to information]

#### **Textual Amendments**

F3

Deleted by 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 (Text with EEA relevance).

#### Article 7

#### **Obligations concerning systems using a consumable reagent**

1 Manufacturers, repairers and operators of the vehicles shall not tamper with systems which use a consumable reagent.

2 Operators of the vehicles shall ensure that vehicles are not being driven without a consumable reagent.

#### Article 8

#### Timetable for application of type-approval of vehicles and engines

1 With effect from 31 December 2012, national authorities shall refuse, on grounds relating to emissions, to grant EC type-approval or national type-approval in respect of new types of vehicles or engines which do not comply with this Regulation and its implementing measures.

Type-approval technical certificates corresponding to the emission stages prior to Euro VI may be granted to vehicles and engines intended for export to third countries, provided such certificates clearly state that the vehicles and engines in question cannot be placed on the Community market.

2 With effect from 31 December 2013, national authorities shall, in the case of new vehicles which do not comply with this Regulation and its implementing measures, consider certificates of conformity to be no longer valid for the purposes of Article 26 of Directive 2007/46/EC and shall, on grounds relating to emissions, prohibit the registration, sale and entry into service of such vehicles.

With effect from the same date and except in the case of replacement engines for inservice vehicles, national authorities shall prohibit the sale or use of new engines which do not comply with this Regulation and its implementing measures.

3 Without prejudice to paragraphs 1 and 2 of this Article, and subject to entry into force of the implementing measures referred to in Article 4(3), Article 5(4) and in the first subparagraph of Article 6(2), if a manufacturer so requests, national authorities may not, on grounds relating to emissions of vehicles, refuse to grant EC type-approval or national typeapproval for a new type of vehicle or engine, or prohibit the registration, sale or entry into service of a new vehicle and the sale or use of new engines, where the vehicle or engines concerned comply with this Regulation and its implementing measures.

#### Article 9

#### **Obligations of Member States concerning type-approval of replacement parts**

The sale or installation on a vehicle of new replacement pollution control devices intended to be fitted on vehicles approved under this Regulation and its implementing measures shall be prohibited if they are not of a type in respect of which a type-approval has been granted in compliance with this Regulation and its implementing measures.

#### Article 10

#### **Financial incentives**

1 Subject to the entry into force of the implementing measures to this Regulation, Member States may provide for financial incentives that apply to motor vehicles in series production, which comply with this Regulation and its implementing measures.

Those incentives shall apply to all new vehicles put on the market of the Member State concerned, which comply with this Regulation and its implementing measures. However, they shall cease to apply on 31 December 2013 at the latest.

2 Subject to the entry into force of the implementing measures to this Regulation, Member States may grant financial incentives for retrofitting in order to meet the emission limit values set out in Annex I of in-use vehicles and for scrapping vehicles which do not comply with this Regulation and its implementing measures.

3 For each type of motor vehicle, the financial incentives referred to in paragraphs 1 and 2 shall not exceed the additional cost of the technical devices used to ensure compliance with the emission limits specified in Annex I, including the cost of installation on the vehicle.

4 The Commission shall be informed of plans to institute or change the financial incentives referred to in paragraphs 1 and 2.

#### Article 11

#### Penalties

1 Member States shall lay down the provisions on penalties applicable for infringement of the provisions of this Regulation and its implementing measures and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 7 February 2011 and shall notify it without delay of any subsequent amendment affecting them.

2 The types of infringements by manufacturers which are subject to a penalty shall include:

- a making false declarations during the approval procedures or procedures leading to a recall;
- b falsifying test results for type-approval or in-service conformity;
- c withholding data or technical specifications which could lead to recall or withdrawal of type-approval;
- d use of defeat strategies[<sup>F1</sup>.]

The types of infringements by manufacturers, repairers and operators of the vehicles which are subject to a penalty shall include tampering with systems which control  $NO_x$  emissions. This shall include, for example, tampering with systems which use a consumable reagent.

The types of infringements committed by operators of the vehicles which are subject to a penalty shall include driving a vehicle without a consumable reagent.

#### **Textual Amendments**

- F1 Substituted by 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 (Text with EEA relevance).
- F3 Deleted by 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 (Text with EEA relevance).

#### Article 12

#### **Redefinition of specifications**

1 After the completion of the relevant parts of the PMP of the UN/ECE, conducted under the auspices of the World Forum for Harmonisation of Vehicle Regulations, the Commission shall, without lowering the level of environmental protection within the Community:

- a introduce as an additional control upon emissions of particulate matter particle number based limit values set at a level appropriate to the technologies actually being used at that time to meet the particulate mass limit;
- b adopt a measurement procedure for particle number.

The Commission shall also, without lowering the level of environmental protection within the Community, specify a limit value for emissions of  $NO_2$  in addition to that for total emissions of  $NO_x$ , if appropriate. The limit for emissions of  $NO_2$  shall be set at a level reflecting the performance of then existing technologies.

Those measures, designed to amend non-essential elements of this Regulation, inter alia, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(2).

2 The Commission shall establish correlation factors between the European transient cycle (ETC) and the European steady state cycle (ESC) as described in Directive 2005/55/ EC, and the worldwide harmonised transient driving cycle (WHTC) and the worldwide harmonised steady state driving cycle (WHSC) and shall adapt the limit values to that effect. Those measures, designed to amend non-essential elements of this Regulation, inter alia, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(2).

3 The Commission shall keep under review the procedures, tests and requirements referred to in Article 5(4) as well as the test cycles used to measure emissions.

If the review finds that those procedures, tests, requirements and test cycles are no longer adequate or no longer reflect actual world emissions, they shall be adapted so as to adequately reflect the emissions generated by real driving on the road. Those measures, designed to amend non-essential elements of this Regulation, inter alia, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(2).

4 The Commission shall keep under review the pollutants listed in point 2 of Article 3. If the Commission concludes that it is appropriate to regulate the emissions of additional

pollutants, it shall submit to the European Parliament and to the Council a proposal for amending this Regulation.

#### Article 13

#### **Committee procedure**

1 The Commission shall be assisted by the Technical Committee — Motor Vehicles (TCMV) established by Article 40(1) of Directive 2007/46/EC.

2 Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

## [<sup>F2</sup>Article 13a

#### **Committee procedure**

1 The Commission shall be assisted by the Technical Committee for Motor Vehicles established by Regulation (EU) 2018/858 of the European Parliament and of the Council<sup>(11)</sup>. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

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

3 Where the Committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.]

#### **Textual Amendments**

F2 Inserted by Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance).

# Article 14

#### Implementation

The Commission shall adopt the implementing measures referred to in Article 4(3), Article 5(4), Article 6(2) and Article 12(1)(a) and (b) by 1 April 2010.

#### Article 15

#### Amendments to Regulation (EC) No 715/2007

Regulation (EC) No 715/2007 is hereby amended as follows:

- 1. Article 5(3) shall be amended as follows:
  - (i) after point (h), the word 'and' shall be deleted;

- (ii) the following point shall be added:
  - (j) measurement of engine power.;
- 2. Article 14(6) shall be deleted.

#### Article 16

#### Amendments to Directive 2007/46/EC

Annexes IV, VI and XI to Directive 2007/46/EC are amended in accordance with Annex II to this Regulation.

#### Article 17

## Repeal

1 Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC are repealed with effect from 31 December 2013.

2 References made to the repealed Directives shall be construed as references to this Regulation.

## Article 18

### **Entry into force**

This Regulation shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

[<sup>X1</sup>It shall apply from 31 December 2012.] However, Articles 8(3) and 10 shall apply from 7 August 2009 and points 1(a)(i), 1(b)(i), 2(a), 3(a)(i), 3(b)(i), 3(c)(i), 3(d)(i) and 3(e)(i) of Annex II shall apply from 31 December 2013.

#### **Editorial Information**

X1 Substituted by Corrigendum to 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 (Official Journal of the European Union L 188 of 18 July 2009).

This Regulation shall be binding in its entirety and directly applicable in all Member States.

# [<sup>F4</sup>ANNEX I

#### **Textual Amendments**

**F4** Substituted by Commission Regulation (EU) No 133/2014 of 31 January 2014 amending, for the purposes of adapting to technical progress as regards emission limits, Directive 2007/46/EC of the European Parliament and of the Council, Regulation (EC) No 595/2009 of the European Parliament and of the Council and Commission Regulation (EU) No 582/2011 (Text with EEA relevance).

### EURO VI EMISSION LIMITS

	Limit va	lues						
	CO(mg/ kWh)	THC(mg kWh)	/NMHC( kWh)	m <b>@H</b> 4(mg kWh)	/ NO <sub>X</sub> <sup>a</sup> (m kWh)	g/NH3(ppn		PM ;/ number(# kWh)
WHSC (CI)	1 500	130			400	10	10	8,0 × 10 <sup>11</sup>
WHTC (CI)	4 000	160			460	10	10	6,0 × 10 <sup>11</sup>
WHTC (PI)	4 000		160	500	460	10	10	<sup>b</sup> 6,0 × 10 <sup>11</sup>

a The admissible level of NO<sub>2</sub> component in the NO<sub>x</sub> limit value may be determined at a later stage.

**b** The limit value shall apply as from the dates set out in row B of Table 1 of Appendix 9 of Annex I to Regulation (EU) No 582/2011.

#### Note:

PI CI	<ul><li>= Positive Ignition.</li><li>= Compression Ignition.]</li></ul>

#### ANNEX II

#### Amendments to Directive 2007/46/EC

Directive 2007/46/EC is hereby amended as follows:

- 1. Part I of Annex IV shall be amended as follows:
  - (a) the table shall be amended as follows:
    - (i) points 40 and 41 shall be deleted;
    - (ii) the following point shall be inserted:

Sub	j <b>Rt</b>	gu <b>Qafi</b>	öciyad	plica	bility	7						
	act	Jou	r <b>M</b> al	M <sub>2</sub>	M <sub>3</sub>	N <sub>1</sub>	N <sub>2</sub>	N <sub>3</sub>	<b>O</b> <sub>1</sub>	<b>O</b> <sub>2</sub>	<b>O</b> <sub>3</sub>	04
	ref	er <b>ecti</b>	erenc	e								
ʻ41a	No	(Far	nx <sup>12</sup> sions 2 .2009 y		X	X <sup>12</sup>	X <sup>12</sup>	X'				

duty				
duty vehicles/				
access				
to				
informatio	on 🛛			

- (iii) the following note shall be added:
  - (<sup>12</sup>) For vehicles with a reference mass exceeding 2 610 kg which are not type-approved (at the manufacturer's request and provided their reference mass does not exceed 2 840 kg) under Regulation (EC) No 715/2007.;
- (b) in the Appendix, the table shall be amended as follows:
  - (i) points 40 and 41 shall be deleted;
  - (ii) the following point shall be inserted:

	Subject	Regulatory act reference	Official Journal reference	M <sub>1</sub>
ʻ41a	Emissions (Euro VI) heavy duty vehicles, with the exception	Regulation (EC) No 595/2009	OJ L 188, 18.7.2009, p. 1	A'
	of the whole set of requirements relating to on-board diagnostics	5		
	(OBDs) and access to information/ access to information			

- 2. in the Appendix to Annex VI, the table shall be amended as follows:
  - (a) points 40 and 41 shall be deleted;
  - (b) the following point shall be inserted:

Subject	-	Regulatory act reference	As amended by	Applicable to versions
ʻ41a	Emission (Euro VI)	Regulation (EC) <sup>n</sup> No 595/2009'		

heavy	
duty	
vehicles	
access	
to	
information	

3. Annex XI shall be amended as follows:

- (a) in Appendix 1, the table shall be amended as follows:
  - (i) points 40 and 41 shall be deleted;
  - (ii) the following point shall be inserted:

Item	Subject	Regula act referen	2 500	M <sub>1</sub> > 2 500 ( <sup>1</sup> ) kg	M <sub>2</sub>	M <sub>3</sub>
ʻ41a	Emissior (Euro VI) heavy duty vehicles/ access to informat			G + H	G + H	G + H'

- (b) in Appendix 2, the table shall be amended as follows:
  - (i) points 40 and 41 shall be deleted;
  - (ii) the following point shall be inserted:

Iter	n Sul	act	gu <b>Ma</b> te erenc	orM2 e	M <sub>3</sub>	N <sub>1</sub>	N <sub>2</sub>	N <sub>3</sub>	01	<b>O</b> <sub>2</sub>	<b>O</b> <sub>3</sub>	<b>O</b> <sub>4</sub>
ʻ41a	VI) heav duty vehi acce to	o(EC No v\$95/ cles/	) 2009		X	X	Х	X'				

- (c) in Appendix 3, the table shall be amended as follows:
  - (i) points 40 and 41 shall be deleted;
  - (ii) the following point shall be inserted:

Status: Point in time view as at 01/09/2020.

**Changes to legislation:** There are outstanding changes not yet made to Regulation (EC) No 595/2009 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details)

Item	Subject	Regulatory act reference	M <sub>1</sub>
ʻ41a	Emissions (Euro VI) heavy duty vehicles/ access to information	Regulation (EC) No 595/2009	X'

(d) in Appendix 4, the table shall be amended as follows:

- (i) points 40 and 41 shall be deleted;
- (ii) the following point shall be inserted:

Iten	1 Sub	jæteg	u Mateo	r∰3	N <sub>1</sub>	N <sub>2</sub>	N <sub>3</sub>	<b>O</b> <sub>1</sub>	<b>O</b> <sub>2</sub>	<b>O</b> <sub>3</sub>	<b>O</b> <sub>4</sub>
		act refe	rence								
ʻ41a	(Euro VI) heav duty vehic acces to	o(EČ) No y595/2 cles/	2009	ιΗ	Н	H	H'				

- (e) in Appendix 5, the table shall be amended as follows:
  - (i) points 40 and 41 shall be deleted;
  - (ii) the following point shall be inserted:

Item	Subject	Regulatory act reference	Mobile crane of category N <sub>3</sub>
ʻ41a	Emissions (Euro VI) heavy duty vehicles/ access to information	Regulation (EC) No 595/2009	V'

- (1) OJ C 211, 19.8.2008, p. 12.
- (2) Opinion of the European Parliament of 16 December 2008 (not yet published in Official Journal) and Council Decision of 8 June 2009.
- (**3**) OJ L 263, 9.10.2007, p. 1.
- (4) OJ L 242, 10.9.2002, p. 1.
- (5) OJ L 375, 31.12.1980, p. 46.
- (6) OJ L 171, 29.6.2007, p. 1.
- (7) Directive 2005/55/EC of the European Parliament and of the Council of 28 September 2005 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles (OJ L 275, 20.10.2005, p. 1).
- (8) Commission Directive 2005/78/EC of 14 November 2005 implementing Directive 2005/55/EC and amending Annexes I, II, III, IV and VI thereto (OJ L 313, 29.11.2005, p. 1).
- (9) OJ L 184, 17.7.1999, p. 23.
- (10) [<sup>F2</sup>Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO<sub>2</sub> emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (OJ L 198, 25.7.2019, p. 202).]
- (11) [<sup>F2</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).]

#### **Textual Amendments**

F2 Inserted by Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance).

# Status:

Point in time view as at 01/09/2020.

#### **Changes to legislation:**

There are outstanding changes not yet made to Regulation (EC) No 595/2009 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.