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)

# [FIREGULATION (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 type-approval 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<sub>x</sub> 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<sub>2</sub> 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<sub>2</sub> 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.
- 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.
- 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).

- (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.

# **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.

View outstanding changes

# Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by S.I. 2022/1273 reg. 53(14)
- Art. 3(1) words substituted by S.I. 2022/1273 reg. 53(3)(a)
- Art. 3(10) words substituted by S.I. 2022/1273 reg. 53(3)(a)