Commission Regulation (EU) 2019/318 of 19 February 2019 amending Regulation (EU) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO2 emissions and fuel consumption of heavy-duty vehicles (Text with EEA relevance)

COMMISSION REGULATION (EU) 2019/318

of 19 February 2019

amending Regulation (EU) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO_2 emissions and fuel consumption of heavy-duty vehicles

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard 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[(1)], and in particular Article 4(3) and Article 5(4)(e) thereof,

Having regard to 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)[(2)], and in particular Article 39(7) thereof,

Whereas:

(1) Commission Regulation (EU) 2017/2400[(3)] introduces a common method to objectively compare the performance of heavy-duty vehicles placed on the Union market as regards their CO_2 emissions and fuel consumption. It lays down provisions for the certification of components with an impact on CO_2 emissions and fuel consumption of heavy-duty vehicles, introduces a simulation tool for the purpose of determining and declaring CO_2 emissions and fuel consumption of those vehicles and lays down, inter alia, requirements for Member States' authorities and manufacturers to verify the conformity of the certification of the components and the conformity of the simulation tool operation.

(2) The experience gained following the entry into force of Regulation (EU) 2017/2400 has led to the identification of several aspects of the common method for determination of the CO_2 emissions and fuel consumption of heavy-duty vehicles, the operation of the simulation tool, the certification of components, separate technical units and systems and the procedure for the checking of conformity of the operation of the simulation tool and of the certification of components, separate technical units and systems which need

clarification. Those clarifications also have an impact on the information provided by manufacturers in accordance with Directive 2007/46/EC.

(3) The Commission has carried out an assessment regarding the technical and economic implications of the necessary clarifications.

(4) The improvement of the common method to objectively compare the performance of heavy-duty vehicles in terms of CO_2 emissions and fuel consumption should increase the competitiveness of Union industry and the transparency in the market as regards the fuel consumption of heavy-duty vehicles.

(5) Liquefied natural gas (LNG) is an available alternative fuel to diesel for heavy-duty vehicles. The deployment of upcoming innovative LNG-based technologies will contribute to further decrease in CO_2 emissions as compared to diesel vehicles. To ensure that LNG is covered by the engine test procedure, it is appropriate to include LNG as an additional reference fuel in the certification of engines in order to determine the CO_2 emissions and fuel consumption of heavy-duty vehicles.

(6) It is appropriate to take into account the specificities of vocational vehicles, i.e. vehicles that are used for other purposes than the delivery of goods. Those vehicles should therefore be attributed to specific sub-groups within the existing vehicle groups to distinguish them from vehicles that are used only for the delivery of goods and their CO_2 emissions should be determined in accordance with dedicated mission profiles.

(7) It is also appropriate to clearly define those vehicles which, due to their advanced powertrains, including electric, hybrid electric and dual-fuel powertrains, cannot for the moment be subject to the requirement of determining their CO_2 emissions or fuel consumption using the available simulation tool. In order to ensure a good understanding of the rate of market penetration of those vehicles, a specific procedure should be provided for to allow a clear identification of those vehicles and their respective powertrains.

(8) It is essential for achieving CO_2 reductions that the CO_2 emissions of newly produced heavy-duty vehicles are in conformity with the values determined pursuant to Regulation (EU) 2017/2400. The conformity of the operation of the simulation tool and of the certification of the components, separate technical units and systems with an impact on CO_2 emissions and fuel consumption should therefore be verified using an on-road verification testing procedure, in addition to the procedures already set out in Regulation (EU) 2017/2400. The verification testing procedure should be carried out by manufacturers and be verified by approval authorities.

(9) It should be possible for the approval authorities to impose remedial measures for any systematic irregularities with regard to the certification of CO_2 emissions and fuel consumption related properties of components, separate technical units or systems and the operation of the simulation tool, including when such irregularities are identified in the course of the investigation following a vehicle failure in the verification testing procedure. If the approval authorities find no irregularities with regard to the certification of CO_2 emissions and fuel consumption related properties of components, separate technical units or systems or to the operation of the simulation tool despite the

***Changes to legislation:** There are currently no known outstanding effects for the Commission Regulation (EU) 2019/318. (See end of Document for details)*

vehicle test failure, it should be possible for the Commission to examine a potential malfunction of the simulation tool.

(10) During the verification testing procedure, the wheel torque, engine speed, engaged gear and fuel consumption of the heavy-duty vehicle should be measured on the road, close to the simulation tool mission profile, and compared to the fuel consumption calculated by the simulation tool. For a successfully passed verification testing procedure, the calculated fuel consumption should correspond to the measured fuel consumption within a certain tolerance.

(11) The systematic verification of the results of a numerical simulation by a physical test is a new concept in the European type approval legislation. The underlying verification test procedure will therefore be evaluated with a view to possible improvements. The Commission and the approval authorities should therefore be authorised to collect the results of verification test procedures from manufacturers and to evaluate them.

(12) In order to ensure sufficient time for the approval authorities and manufacturers to adapt to the new provisions, the obligation to verify CO_2 emissions and fuel consumption of new vehicles using the on-road verification testing procedure should be applicable as of 1 July 2020.

(13) The CO_2 emissions data for vehicles falling within vehicle groups 4, 5, 9 and 10 that have been determined in accordance with Regulation (EU) 2017/2400 are to be monitored under Regulation (EU) 2018/956 of the European Parliament and of the Council[(4)], starting in 2019. The aim of the amendments to Regulation (EU) 2017/2400 set out in this Regulation is to ensure that reliable CO_2 emissions data can be collected for all the vehicles concerned by Regulation (EU) 2018/956 for 2019. It is therefore important to ensure that the amendments set out in this Regulation enter into force without delay.

(14) The measures provided for in this Regulation are in accordance with the opinion of the Technical Committee — Motor Vehicles,

HAS ADOPTED THIS REGULATION:

Article 1

Amendments to Regulation (EU) 2017/2400

Regulation (EU) 2017/2400 is amended as follows:

(1) in Article 2, paragraph 2 is replaced by the following:

2. In case of multi-stage type-approvals or individual approvals of vehicles referred to in paragraph 1, this Regulation shall apply only to base vehicles equipped at least with a chassis, engine, transmission, axles and tyres.;

(2) Article 3 is amended as follows:

(a) the following point 4a is added:

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(4a) "vehicle manufacturer" means a body or person responsible for issuing the manufacturer's records file and the customer information file pursuant to Article 9;;

(b) point 7 is replaced by the following:

(7) "torque converter" means a hydrodynamic start-up component either as a separate component of the driveline or transmission with serial or parallel power flow that adapts speed between engine and wheel and provides torque multiplication;;

(c) the following points 15 to 21 are added:

(15) "zero emission heavy-duty vehicle" or "ZE-HDV" means a heavy-duty vehicle without an internal combustion engine, or with an internal combustion engine that emits less than 1 g CO_2/kWh;

(16) "vocational vehicle" means a heavy-duty vehicle not intended for the delivery of goods and for which one of the following digits is used to supplement the bodywork codes, as listed in Appendix 2 to Annex II of Directive 2007/46/EC: 09, 10, 15, 16, 18, 19, 20, 23, 24, 25, 26, 27, 28, 31; or a tractor with a maximum speed not exceeding 79 km/h;

(17) "rigid lorry" means a lorry that is not designed or constructed for the towing of a semi-trailer;

(18) "tractor" means a tractor unit that is designed and constructed exclusively or principally to tow semi-trailers;

(19) "sleeper cab" means a type of cabin that has a compartment behind the driver's seat intended to be used for sleeping;

(20) "hybrid electric heavy-duty vehicle" or "He-HDV" is as defined in Article 3(15) of Directive 2007/46/EC;

(21) "dual-fuel vehicle" is as defined in Article 2(48) of Regulation (EU) No 582/2011.;

(d) the following second paragraph is added:

With regard to He-HDVs, Articles 5(3), 9(1) and 12(1) shall apply only to He-HDVs where the second highest maximum net power of all energy converters is less than 10 % of the highest maximum net power of all energy converters. Energy converters used only for the starting are in this respect not taken into consideration.;

(3) Article 5 is amended as follows:

(a) paragraph 3 is replaced by the following:

3. The simulation tool shall be used for the purposes of determining CO_2 emissions and fuel consumption of new vehicles, or for the purposes of determining whether those vehicles are a ZE-HDVs, He-HDVs or dual-fuel vehicle. The simulation tool shall be designed to operate on the basis of input information as specified in Annex III, as well as input data referred to in Article 12(1).;

***Changes to legislation:** There are currently no known outstanding effects for the Commission Regulation (EU) 2019/318. (See end of Document for details)*

(b) paragraph 5 is replaced by the following:

5. The hashing tools shall be used for establishing an unequivocal association between the certified CO_2 emission and fuel consumption related properties of a component, separate technical unit or system and its certification document, as well as for establishing an unequivocal association between a vehicle and its manufacturer's records file and customer information file as referred to in Annex IV.;

(4) Article 9 is amended as follows:

(a) the first subparagraph of paragraph 1 is replaced by the following:

1. A vehicle manufacturer shall determine the CO_2 emissions and fuel consumption of each new vehicle, with the exception of ZE-HDVs, He-HDVs and dual-fuel vehicles, to be sold, registered or put into service in the Union using the latest available version of the simulation tool referred to in Article 5(3). With regard to ZE-HDVs, He-HDVs and dual-fuel vehicles to be sold, registered or put into service in the Union, the vehicle manufacturer shall determine only the information specified for those vehicles in the models set out in Part I and Part II of Annex IV using the latest available version of the simulation tool referred to in Article 5(3).;

(b) paragraph 3 is replaced by the following:

3. The vehicle manufacturer shall create cryptographic hashes of the manufacturer's records file and of the customer information file using the hashing tool referred to in Article 5(5).;

(c) paragraph 5 is replaced by the following:

5. Each vehicle to be registered, sold or to enter into service shall be accompanied by a certificate of conformity or, in the case of vehicles approved in accordance with Article 24 of Directive 2007/46/EC, an individual approval certificate, including an imprint of the cryptographic hash of the manufacturer's records file and of the customer information file referred to in paragraph 3.;

(5) in Article 12, paragraphs 6 and 7 are added:

6. In the case of ZE-HDVs, He-HDVs and dual-fuel vehicles, the simulation tool input data shall include the information set out in Table 5 of Annex III.

7 Where the vehicle is to be registered, sold or put into service with snow tyres and standard tyres, the vehicle manufacturer may choose which of the tyres to use for determining the CO_2 emissions.;

(6) in Article 13, paragraph 8 is replaced by the following:

8. The standard value for tyres shall be the one for C3 snow tyres as set out in Table 2 of Part B of Annex II to Regulation (EC) No 661/2009 of the European Parliament and of the Council[(5)].;

(7) Article 20 is amended as follows:

(a) the title is replaced by the following: