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## COMMISSION REGULATION (EU) .../...

of XXX

amending Regulation (EC) No 692/2008 as regards emissions from light passenger and commercial vehicles (Euro 6)

(Text with EEA relevance)

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# amending Regulation (EC) No 692/2008 as regards emissions from light passenger and commercial vehicles (Euro 6)

(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 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>1</sup>, and in particular Article 5(3) thereof,

#### Whereas:

- (1) Regulation (EC) No 715/2007 requires the Commission to keep under review the procedures, tests and requirements for type approval that are set out in Commission Regulation (EC) No 692/2008<sup>2</sup> and to adjust them so that they adequately reflect the emissions generated by real driving on the road, if necessary.
- (2) The Commission has performed a detailed analysis in this respect on the basis of own research and external information and found that emissions generated by real driving on the road of Euro 5/6 vehicles substantially exceed the emissions measured on the regulatory New European Driving Cycle (NEDC), in particular with respect to NOx emissions of diesel vehicles.
- (3) Type-approval emission requirements for motor vehicles have been tightened significantly through the introduction and subsequent revision of Euro standards. While vehicles in general have delivered substantial emission reductions across the range of regulated pollutants, this is not true of NOx emissions from diesel engines (especially light-duty vehicles). Actions for correcting this situation are therefore needed. Addressing the problem of NOx emissions from diesel engines should contribute to decrease the current sustained high levels of NO2 concentrations in ambient air, which are particularly related to those emissions and are a major concern regarding human health, as well as a challenge regarding compliance with Directive 2008/50/EC of the European Parliament and of the Council<sup>3</sup>.
- (4) The Commission has established in January 2011 a working group involving all interested stakeholders for developing a real driving emission (RDE) test procedure

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Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council 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 199, 28.7.2008, p. 1).

Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008, p. 1).

better reflecting emissions measured on the road. For this purpose the technical option suggested in Regulation (EC) No 715/2007, i.e. the use of portable emission measurement systems (PEMS) and not-to-exceed (NTE) regulatory concepts has been followed.

- In order to allow manufacturers gradually to adapt to the RDE requirements, the respective test procedures should be introduced in two phases as agreed with stakeholders in the Cars 2020 process<sup>4</sup>: during a first transitional period the test procedures should only be applied for monitoring purposes, while afterwards they should be applied together with binding quantitative RDE requirements to all new type approvals/new vehicles. The final quantitative RDE requirements will be introduced in two subsequent steps.
- (6) Quantitative RDE requirements should be established in order to limit tailpipe emissions under all normal conditions of use pursuant to the emission limits set out in Regulation (EC) No 715/2007. For that purpose statistical and technical uncertainties of the measurement procedures should be taken into account.
- (7) An individual RDE test at the initial type approval cannot cover the full range of relevant traffic and ambient conditions. Therefore in-service-conformity testing is of utmost importance for ensuring that a widest possible range of such conditions is covered by a regulatory RDE test, thereby providing for compliance with the regulatory requirements under all normal conditions of use.
- (8) For small volume manufacturers the execution of PEMS tests according to the envisaged procedural requirements may constitute a significant burden that is not in balance with the expected environmental benefit. It is therefore appropriate to allow for some specific exemptions for those manufacturers. Real driving emissions test procedure should be updated and improved if necessary to reflect, e.g., changes in vehicle technology. To assist the revision procedure, vehicle and emissions data obtained during the transitional period should be considered.
- (9) In order to allow approval authorities and manufacturers to put in place the necessary procedures to comply with the requirements of this Regulation, it should apply from 1 January 2016.
- (10) It is therefore appropriate to amend Regulation (EC) No 692/2008 accordingly.
- (11) 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

Regulation (EC) No 692/2008 is amended as follows:

- 1) In Article 2, the following points 41 and 42 are added:
  - "41. "Real driving emissions (RDE)" means the emissions of a vehicle under its normal conditions of use;

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Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions CARS 2020: Action Plan for a competitive and sustainable automotive industry in Europe (COM/2012/0636 final).

- 42. "Portable emissions measurement system (PEMS)" means a portable emissions measurement system meeting the requirements specified in Appendix 1 to Annex IIIA;"
- 2) In Article 3, the following paragraph 10 is added:
  - "10. The manufacturer shall ensure that, throughout the normal life of a vehicle which is type approved in accordance with Regulation (EC) No 715/2007, its emissions as determined in accordance with the requirements set out in Annex IIIA to this Regulation and emitted at an RDE test performed in accordance with that Annex, shall not exceed the values set out therein.

Type approval in accordance with Regulation (EC) No 715/2007 may only be issued if the vehicle is part of a validated PEMS test family according to Appendix 7 of Annex IIIA .

Until the adoption of specific values for the parameters  $CF_{pollutant}$  in the table of point 2.1. of Annex IIIA to this Regulation, the following provisions shall apply:

- (a) The requirements of point 2.1 of Annex IIIA to this Regulation shall only apply after the adoption of specific values for the parameters  $CF_{pollutant}$  in the table of point 2.1. of Annex IIIA to this Regulation;
- (b) The other requirements of Annex IIIA, in particular with regard to RDE tests to be performed and data to be recorded and made available, shall apply only to new type approvals according to Regulation (EC) No 715/2007 issued after the twentieth day following that of the publication of Annex IIIA in the OJEU.
- (c) The requirements of Annex IIIA shall not apply to type approvals granted to small volume manufacturers as defined in Article 2(32) of Regulation (EC) No 692/2008.
- (d) Where the requirements set out in Appendices 5 and 6 of Annex IIIA are satisfied for only one of the two data evaluation methods described in those Appendices, the following procedures shall be followed:
  - (i) one additional RDE test shall be performed;
  - (ii) where those requirements are again satisfied for only one method the analysis of the completeness and normality shall be recorded for both methods and the calculation required by point 9.3 of Annex IIIA may be limited to the method for which the completeness and normality requirements are satisfied.

The data of both RDE tests and of the analysis of the completeness and normality shall be recorded and made available for examining the difference in the results of the two data evaluation methods.

- (e) The power at the wheels of the test vehicle shall be determined either by wheel hub torque measurement or from the CO<sub>2</sub> mass flow using "Velines" according to point 1.9 of Appendix 6 of Annex IIIA.
- 3) In Article 6, paragraph 1, the fourth subparagraph is replaced by the following:

"The requirements of Regulation (EC) 715/2007 shall be deemed to be met if all the following conditions are fulfilled:

- (a) the requirements of Article 3(10) are met;
- (b) the requirements of Article 13 of this Regulation are met;
- (c) for vehicles type-approved to the requirements of the Euro 5 emission limits given in table 1 of Annex I of Regulation 715/2007, the vehicle has been approved according to UN/ECE Regulations No 83, series of amendments 06, No 85, No 101, series of amendments 01 and in the case of compression ignition vehicles No 24 Part III, series of amendments 03;
- (d) for vehicles type-approved to the requirements of the Euro 6 emission limits given in table 2 of Annex I of Regulation 715/2007, the vehicle has been approved according to UN/ECE Regulations No 83, series of amendments 07, No 85 and its supplements, No 101, Revision 3 (comprising series of amendments 01 and their supplements) and in the case of compression ignition vehicles No 24 Part III, series of amendments 03."
- 4) Annex I, point 2.4.1., Figure I.2.4, is amended as follows:
  - (a) the following rows are inserted after the row starting with "Particulate mass and particulate number (Type 1 test)":

Gaseous Yes pollutants,  $\binom{4}{1}$ (both (both (both (both (both (both RDE (Type fuels) fuels) fuels) fuels) fuels) fuels) 1A test) Particulate Yes Yes Yes Yes Yes Yes Yes number, (both (both (both (both (both RDE (Type fuels) fuels) fuels) fuels) fuels)  $1A \ test)$  ( $^{5}$ )

(b) the following explanatory note is added:

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(5) The particulate number RDE test only applies to vehicles for which Euro 6 emission limits are defined in Table 2 of Annex I to Regulation (EC) 715/2007.

5) A new Annex IIIA is inserted as set out in the Annex to this Regulation.

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### Article 2

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

It shall apply from 1 January 2016.

This Regulation shall be binding in its entirety and directly applicable in all Member States. Done at Brussels,

For the Commission The President Jean-Claude Juncker