

Brussels, 17 January 2017 (OR. en)

5365/17

ENT 13 ENV 28 MI 46

## **COVER NOTE**

Encl.: D045884/03

From:	European Commission
date of receipt:	16 January 2017
To:	General Secretariat of the Council
No. Cion doc.:	D045884/03
Subject:	COMMISSION REGULATION (EU)/ of XXX supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Regulation (EC) No 692/2008

Delegations will find attached document D045884/03.

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Brussels, XXX D045884/03 [...](2016) XXX draft

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

of XXX

supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Regulation (EC) No 692/2008

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supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Regulation (EC) No 692/2008

## 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 Articles 8 and 14(3) 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)<sup>2</sup>, and in particular Article 39(2) thereof.

#### Whereas:

- (1) Regulation (EC) No 692/2008 implementing and amending Regulation (EC) No 715/2007<sup>3</sup> provides for light-duty vehicles to be tested in accordance with the New European Driving Cycle (NEDC).
- (2) Based on the continuous review of the relevant procedures, test cycles and test results provided for in Article 14(3) of Regulation (EC) No 715/2007, it is evident that the information about fuel consumption and CO2 emissions provided by testing vehicles in accordance with the NEDC is no longer adequate and no longer reflects real world emissions.
- (3) Against that background, it is appropriate to provide for a new regulatory test procedure by implementing the Worldwide harmonised Light-duty vehicles Test Procedures (WLTP) into Union legislation.
- (4) The WLTP was developed at the level of the United Nations Economic Commission for Europe (UNECE) and was adopted as Global Technical Regulation (GTR) N° 15

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OJ L 171, 29.6.2007, p. 1

OJ L 263, 9.10.2007, p.1

OJ L 199, 28.7.2008, p. 1.

- by the World Forum for Harmonization of Vehicle Regulations (WP.29) in March 2014.
- (5) In addition to more realistic information about fuel consumption and CO2 emissions for consumer and regulatory purposes, the WLTP also creates a global framework for vehicle testing, leading to a closer international harmonisation of test requirements.
- (6) The WLTP provides a full description of a vehicle test cycle for CO2 and regulated pollutant emissions under standardised ambient conditions. In order to adapt it to the EU type-approval system, it is necessary to complement it by further improving the transparency requirements for technical parameters that will allow independent parties to reproduce the type approval test results and by reducing testing flexibilities.
- (7) This proposal also specifies a revised procedure for the conformity of production (CoP) assessment of vehicles. Since under the new provisions the CoP evolution coefficient as described in point 4.2.4.1 of Annex I is likely to be determined more often by specific testing of the manufacturer instead of using a default value, the respective test procedure will need to be revised in due course.
- (8) While the WLTP specifies a new test cycle and procedure for measuring emissions, other obligations, such as those linked to durability of pollution control devices, inservice conformity or consumer information on CO2 emissions and fuel consumption, remain essentially the same as those laid down in Regulation (EC) 692/2008.
- (9) In order to allow approval authorities and manufacturers to put in place the necessary procedures to comply with the requirements of this Regulation, as well as to follow as much as possible the established calendar for the application of emissions requirements, it should apply to new type-approvals from 1 September 2017 in the case of categories M1, M2 and category N1 class I vehicles and from 1 September 2018 in the case of N1 vehicles of class II and III and category N2 vehicles, and to new vehicles from 1 September 2018 in the case of categories M1, M2 and category N1 class I vehicles, and from 1 September 2019 in the case of N1 vehicles of class II and III and category N2 vehicles.
- (10) As the purpose of this Regulation is the introduction of the WLTP into European legislation, the timetable and the transitional provisions for introducing the real driving emissions test procedure remain unchanged with respect to those lined out previously in Regulations (EU) 2016/427 and 2016/646.
- (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

## **Subject matter**

This Regulation lays down measures for the implementation of Regulation (EC) No 715/2007.

#### **Definitions**

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

- 1. 'vehicle type with regard to emissions and vehicle repair and maintenance information' means a group of vehicles which:
  - (a) do not differ with respect to the criteria constituting an "interpolation family" as defined in point 5.6 of Annex XXI;
  - (b) fall in a single "CO<sub>2</sub> interpolation range" as defined in point 1.2.3.2 of sub-Annex 6 to Annex XXI;
  - (c) do not differ with respect to any characteristics that have a non-negligible influence on tailpipe emissions, such as, but not limited to, the following:
  - types and sequence of pollution control devices (e.g. three-way catalyst, oxidation catalyst, lean NOx trap, SCR, lean NOx catalyst, particulate trap or combinations thereof in a single unit);
  - exhaust gas recirculation (with or without, internal/external, cooled/non-cooled, low/high pressure).
- 2. 'EC type-approval of a vehicle with regard to emissions and vehicle repair and maintenance information' means an EC type-approval of the vehicles contained in a 'vehicle type with regard to emissions and vehicle repair and maintenance information' with regard to their tailpipe emissions, crankcase emissions, evaporative emissions, fuel consumption and access to vehicle OBD and vehicle repair and maintenance information:
- 3.'odometer' means that part of the odometer equipment which indicates to the driver the total distance recorded by the vehicle since its entry into service;
- 4. 'starting aid' means glow plugs, modifications to the injection timing and other devices which assist the engine to start without enrichment of the air/fuel mixture of the engine;
- 5. 'engine capacity' means either of the following:
  - (a) for reciprocating piston engines, the nominal engine swept volume;
  - (b) for rotary piston (Wankel) engines, double the nominal engine swept volume;
- 6. 'periodically regenerating system' means an exhaust emissions control device (e.g. catalytic converter, particulate trap) that requires a periodical regeneration process in less than 4,000 km of normal vehicle operation;

- 7. 'original replacement pollution control device' means a pollution control device or an assembly of pollution control devices whose types are indicated in Appendix 4 to Annex I to this Regulation but are offered on the market as separate technical units by the holder of the vehicle type-approval;
- 8. 'type of pollution control device' means catalytic converters and particulate filters which do not differ in any of the following essential aspects:
  - (a) number of substrates, structure and material;
  - (b) type of activity of each substrate;
  - (c) volume, ratio of frontal area and substrate length;
  - (d) catalyst material content;
  - (e) catalyst material ratio;
  - (f) cell density;
  - (g) dimensions and shape;
  - (h) thermal protection;
- 9. 'mono fuel vehicle' means a vehicle that is designed to run primarily on one type of fuel;
- 10. 'mono fuel gas vehicle' means a mono fuel vehicle that primarily runs on LPG, NG/biomethane, or hydrogen but may also have a petrol system for emergency purposes or starting only, where the petrol tank does not contain more than 15 litres of petrol;
- 11. 'bi fuel vehicle' means a vehicle with two separate fuel storage systems that can run part-time on two different fuels and is designed to run on only one fuel at a time;
- 12. 'bi fuel gas vehicle' means a bi fuel vehicle that can run on petrol and also on either LPG, NG/biomethane or hydrogen;
- 13. 'flex fuel vehicle' means a vehicle with one fuel storage system that can run on different mixtures of two or more fuels:
- 14. 'flex fuel ethanol vehicle' means a flex fuel vehicle that can run on petrol or a mixture of petrol and ethanol up to an 85 per cent ethanol blend (E85);
- 15. 'flex fuel biodiesel vehicle' means a flex fuel vehicle that can run on mineral diesel or a mixture of mineral diesel and biodiesel;
- 16. 'hybrid electric vehicle' (HEV) means a hybrid vehicle where one of the propulsion energy converters is an electric machine;

- 17. 'properly maintained and used' means, for the purpose of a test vehicle, that such a vehicle satisfies the criteria for acceptance of a selected vehicle laid down in section 2 of Appendix 3 to UN/ECE Regulation No 83<sup>4</sup>;
- 18. 'emission control system' means, in the context of the OBD system, the electronic engine management controller and any emission-related component in the exhaust or evaporative system which supplies an input to or receives an output from this controller;
- 19. 'malfunction indicator' (MI) means a visible or audible indicator that clearly informs the driver of the vehicle in the event of a malfunction of any emission-related component connected to the OBD system, or of the OBD system itself;
- 20. 'malfunction' means the failure of an emission-related component or system that would result in emissions exceeding the limits in section 2.3 of Annex XI or if the OBD system is unable to fulfil the basic monitoring requirements set out in Annex XI;
- 21. 'secondary air' means the air introduced into the exhaust system by means of a pump or aspirator valve or other means that is intended to aid in the oxidation of HC and CO contained in the exhaust gas stream;
- 22. 'driving cycle', means, in respect of vehicle OBD systems, the engine start-up, driving mode where a malfunction would be detected if present, and engine shut-off;
- 23. 'access to information' means the availability of all vehicle OBD and vehicle repair and maintenance information, required for the inspection, diagnosis, servicing or repair of the vehicle.
- 24. 'deficiency' means, in the context of the OBD system, that up to two separate components or systems which are monitored contain temporary or permanent operating characteristics that impair the otherwise efficient OBD monitoring of those components or systems or do not meet all of the other detailed requirements for OBD;
- 25. 'deteriorated replacement pollution control device' means a pollution control device as defined in Article 3(11) of Regulation (EC) No 715/2007 that has been aged or artificially deteriorated to such an extent that it fulfils the requirements laid out in section 1 to Appendix 1 to Annex XI of UN/ECE Regulation No 83;
- 26. 'vehicle OBD information' means information relating to an on-board diagnostic system for any electronic system on the vehicle
- 27. 'reagent' means any product other than fuel that is stored on-board the vehicle and is provided to the exhaust after-treatment system upon request of the emission control system;
- 28. mass in running order means the mass of the vehicle, with its fuel tank(s) filled to at least 90 per cent of its or their capacity/capacities, including the mass of the driver, fuel and liquids, fitted with the standard equipment in accordance with the

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<sup>&</sup>lt;sup>4</sup> OJ L 172, 3.7.2015, p.1

manufacturer's specifications and, when they are fitted, the mass of the bodywork, the cabin, the coupling and the spare wheel(s) as well as the tools;

- 29. 'engine misfire' means lack of combustion in the cylinder of a positive ignition engine due to absence of spark, poor fuel metering, poor compression or any other cause;
- 30. 'cold start system or device' means a system which temporarily enriches the air/fuel mixture of the engine thus assisting the engine to start;
- 31. 'power take-off operation or unit' means an engine-driven output provision for the purposes of powering auxiliary, vehicle mounted, equipment;
- 32. 'small volume manufacturers' means vehicle manufacturers whose worldwide annual production is less than 10000 units;
- 33. 'Electric power train' means a system consisting of one or more electric energy storage devices, one or more electric power conditioning devices and one or more electric machines that convert stored electric energy to mechanical energy delivered at the wheels for propulsion of the vehicle;
- 34. 'Pure electric vehicle' (PEV) means a vehicle equipped with a powertrain containing exclusively electric machines as propulsion energy converters and exclusively rechargeable electric energy storage systems as propulsion energy storage systems.
- 35. 'Fuel cell' means an energy converter transforming chemical energy (input) into electrical energy (output) or vice versa.
- 36. 'Fuel cell vehicle' (FCV) means a vehicle equipped with a powertrain containing exclusively fuel cell(s) and electric machine(s) as propulsion energy converter(s).
- 37. 'net power' means the power obtained on a test bench at the end of the crankshaft or its equivalent at the corresponding engine or motor speed with the auxiliaries, tested in accordance with Annex XX (Measurements of net power and the maximum 30 minutes power of electric drive train), and determined under reference atmospheric conditions;
- 38. 'rated engine power ( $P_{rated}$ ) means maximum engine power in kW as per the requirements of Annex XX to this Regulation';
- 39. 'maximum 30 minutes power' means the maximum net power of an electric drive train at DC voltage as set out in paragraph 5.3.2. of UN/ECE Regulation No 85<sup>5</sup>;
- 40. 'cold start' means, in the context of the in use performance ratio of OBD monitors, an engine coolant temperature or equivalent temperature at engine start less than or equal to 35 °C and less than or equal to 7 °C higher than ambient temperature, if available;

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OJ L 323, 7.11.2014, p52

- 41. 'Real driving emissions (RDE)' means the emissions of a vehicle under its normal conditions of use;
- 42. 'Portable emissions measurement system' (PEMS) means a portable emissions measurement system meeting the requirements specified in Appendix 1 to Annex IIIA:
- 43. 'Base Emission Strategy', ( 'BES') means an emission strategy that is active throughout the speed and load operating range of the vehicle unless an Auxiliary Emission Strategy is activated;
- 44. 'Auxiliary Emission Strategy', ('AES') means an emission strategy that becomes active and replaces or modifies a BES for a specific purpose and in response to a specific set of ambient or operating conditions and only remains operational as long as those conditions exist.
- 45. 'Fuel Storage System' means devices which allow storing the fuel, comprising of the fuel tank, the fuel filler, the filler cap and the fuel pump;
- 46. 'Permeability Factor (PF)' means the hydrocarbon emissions as reflected in the permeability of the fuel storage system;
- 47. 'Monolayer tank' means a fuel tank constructed with a single layer of material;
- 48. 'Multilayer tank' means a fuel tank constructed with at least two different layered materials, one of which is impermeable to hydrocarbons, including ethanol;

## Requirements for type-approval

- 1. In order to receive an EC type-approval with regard to emissions and vehicle repair and maintenance information, the manufacturer shall demonstrate that the vehicles comply with the requirements of this Regulation when tested in accordance with the test procedures specified in Annexes IIIA to VIII, XI, XIV, XVI, XX and XXI. The manufacturer shall also ensure that the reference fuels comply with the specifications set out in Annex IX.
- 2. Vehicles shall be subject to the tests specified in Figure I.2.4 of Annex I.
- 3. As an alternative to the requirements contained in Annexes II, V to VIII, XI, XVI and XXI, small volume manufacturers may request the granting of EC type-approval to a vehicle type which was approved by an authority of a third country on the basis of the legislative acts listed in section 2.1 of Annex I.

The emissions tests for roadworthiness purposes set out in Annex IV, tests for fuel consumption and CO<sub>2</sub> emissions set out in Annex XXI and the requirements for access to vehicle OBD and vehicle repair and maintenance information set out in Annex XIV shall be required to obtain EC type-approval with regard to emissions and vehicle repair and maintenance information under this paragraph.

The approval authority shall inform the Commission of the circumstances of each type approval granted under this paragraph.

- 4. Specific requirements for inlets to fuel tanks and electronic system security are laid down in Section 2.2 and 2.3 of Annex I.
- 5. The manufacturer shall take technical measures so as to ensure that the tailpipe and evaporative emissions are effectively limited, in accordance with this Regulation, throughout the normal life of the vehicle and under normal conditions of use.

These measures shall include ensuring that the security of hoses, joints and connections, used within the emission control systems, are constructed so as to conform with the original design intent.

- 6. The manufacturer shall ensure that the emissions test results comply with the applicable limit value under the specified test conditions of this Regulation.
- 7. For the Type 1 test set out in Annex XXI, vehicles that are fuelled with LPG or NG/biomethane shall be tested in the Type 1 test for variation in the composition of LPG or NG/biomethane, as set out in Annex XII. Vehicles that can be fuelled either with petrol or LPG or NG/biomethane shall be tested on both the fuels, tests on LPG or NG/biomethane being performed for variation in the composition of LPG or NG/biomethane, as set out in Annex XII.

Notwithstanding the requirement of the previous sub-paragraph, vehicles that can be fuelled with either petrol or a gaseous fuel, but where the petrol system is fitted for emergency purposes or starting only and which the petrol tank cannot contain more than 15 litres of petrol will be regarded for the Type 1 test as vehicles that can only run on a gaseous fuel.

8. For the Type 2 test set out in Appendix 1 to Annex IV, at normal engine idling speed, the maximum permissible carbon monoxide content in the exhaust gases shall be that stated by the vehicle manufacturer. However, the maximum carbon monoxide content shall not exceed 0.3 % vol.

At high engine idling speed, the carbon monoxide content by volume of the exhaust gases shall not exceed 0.2 %, with the engine speed being at least 2000 min $^{-1}$  and Lambda being 1  $\pm$  0.03 or in accordance with the specifications of the manufacturer.

- 9. The manufacturer shall ensure that for the Type 3 test set out in Annex V, the engine's ventilation system does not permit the emission of any crankcase gases into the atmosphere.
- 10. The Type 6 test measuring emissions at low temperatures set out in Annex VIII shall not apply to diesel vehicles.

However, when applying for type-approval, manufacturers shall present to the approval authority with information showing that the  $NO_x$  after-treatment device reaches a sufficiently high temperature for efficient operation within 400 seconds after a cold start at -7 °C as described in the Type 6 test.

In addition, the manufacturer shall provide the approval authority with information on the operating strategy of the exhaust gas recirculation system (EGR), including its functioning at low temperatures.

This information shall also include a description of any effects on emissions.

The approval authority shall not grant type-approval if the information provided is insufficient to demonstrate that the after-treatment device actually reaches a sufficiently high temperature for efficient operation within the designated period of time.

At the request of the Commission, the approval authority shall provide information on the performance of NO<sub>x</sub> after-treatment devices and EGR system at low temperatures.

11. 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 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.

## Article 4

## Requirements for type-approval regarding the OBD system

- 1. The manufacturer shall ensure that all vehicles are equipped with an OBD system.
- 2. The OBD system shall be designed, constructed and installed on a vehicle so as to enable it to identify types of deterioration or malfunction over the entire life of the vehicle.
- 3. The OBD system shall comply with the requirements of this Regulation during normal conditions of use.
- 4. When tested with a defective component in accordance with Appendix 1 of Annex XI, the OBD system malfunction indicator shall be activated.

The OBD system malfunction indicator may also activate during this test at levels of emissions below the OBD thresholds limits specified in section 2.3 of Annex XI.

- 5. The manufacturer shall ensure that the OBD system complies with the requirements for inuse performance set out in section 3 of Appendix 1 to Annex XI of this Regulation under all reasonably foreseeable driving conditions.
- 6. In-use performance related data to be stored and reported by a vehicle's OBD system according to the provisions of Section 7.6 of Appendix 1 to Annex XI of UN/ECE Regulation No 83 shall be made readily available by the manufacturer to national authorities and independent operators without any encryption.

#### Article 5

Application for EC type-approval of a vehicle with regard to emissions and access to vehicle repair and maintenance information

- 1. The manufacturer shall submit to the approval authority an application for EC type-approval of a vehicle with regard to emissions and access to vehicle repair and maintenance information.
- 2. The application referred to in paragraph 1 shall be drawn up in accordance with the model of the information document set out in Appendix 3 to Annex I.
- 3. In addition, the manufacturer shall submit the following information:
  - (a) in the case of vehicles equipped with positive-ignition engines, a declaration by the manufacturer of the minimum percentage of misfires out of a total number of firing events that either would result in emissions exceeding the limits given in section 2.3 of Annex XI if that percentage of misfire had been present from the start of a type 1 test as chosen for the demonstration according to Annex XI to this Regulation or could lead to an exhaust catalyst, or catalysts, overheating prior to causing irreversible damage;
  - (b) detailed written information fully describing the functional operation characteristics of the OBD system, including a listing of all relevant parts of the emission control system of the vehicle that are monitored by the OBD system;
  - (c) a description of the malfunction indicator used by the OBD system to signal the presence of a fault to a driver of the vehicle;
  - (d) a declaration by the manufacturer that the OBD system complies with the provisions of section 3 of Appendix 1 to Annex XI relating to in-use performance under all reasonably foreseeable driving conditions;
  - (e) a plan describing the detailed technical criteria and justification for incrementing the numerator and denominator of each monitor that must fulfil the requirements of paragraphs 7.2 and 7.3. of Appendix 1 to Annex XI of UN/ECE Regulation No 83, as well as for disabling numerators, denominators and the general denominator under the conditions outlined in paragraph 7.7 of Appendix 1 to Annex XI of UN/ECE Regulation No 83;
  - (f) a description of the provisions taken to prevent tampering with and modification of the emission control computer, odometer including the recording of mileage values for the purposes of the requirements of Annexes XI and XVI;
  - (g) if applicable, the particulars of the vehicle family as referred to in Appendix 2 to Annex 11 to UN/ECE Regulation No 83;
  - (h) where appropriate, copies of other type-approvals with the relevant data to enable extension of approvals and establishment of deterioration factors.
- 4. For the purposes of point (d) of paragraph 3, the manufacturer shall use the model of manufacturer's certificate of compliance with the OBD in-use performance requirements set out in Appendix 7 of Annex I
- 5. For the purposes of point (e) of paragraph 3, the approval authority that grants the approval shall make the information referred to in that point available to the approval authorities or the Commission upon request.

- 6. For the purposes of points (d) and (e) of paragraph 3, approval authorities shall not approve a vehicle if the information submitted by the manufacturer is inappropriate for fulfilling the requirements of section 3 of Appendix 1 to Annex XI.
- Paragraphs 7.2, 7.3 and 7.7 of Appendix 1 to Annex XI of UN/ECE Regulation No 83 shall apply under all reasonably foreseeable driving conditions.

For the assessment of the implementation of the requirements set out in these paragraphs, the approval authorities shall take into account the state of technology.

- 7. For the purposes of point (f) of paragraph 3, the provisions taken to prevent tampering with and modification of the emission control computer shall include the facility for updating using a manufacturer-approved programme or calibration.
- 8. For the tests specified in Figure I.2.4 of Annex I the manufacturer shall submit to the technical service responsible for the type-approval tests a vehicle representative of the type to be approved.
- 9. The application for type-approval of mono fuel, bi-fuel and flex-fuel vehicles shall comply with the additional requirements laid down in Sections 1.1 and 1.2 of Annex I.
- 10. Changes to the make of a system, component or separate technical unit that occur after a type-approval shall not automatically invalidate a type approval, unless its original characteristics or technical parameters are changed in such a way that the functionality of the engine or pollution control system is affected.
- 11. The manufacturer shall also provide an extended documentation package with the following information:
- (a) information on the operation of all AES and BES, including a description of the parameters that are modified by any AES and the boundary conditions under which the AES operate, and indication of the AES or BES which are likely to be active under the conditions of the test procedures set out in this Regulation;
- (b) a description of the fuel system control logic, timing strategies and switch points during all modes of operation.
- (c) a description of the coastdown mode, if any, as referred to in paragraph 4.2.1.8.5. of Sub-Annex 4 to Annexe XXI, and a description of the vehicle's dynamometer operation mode, if any, as referred to in paragraph 1.2.4. of Sub-Annex 6 to Annex XXI.
- 12. The extended documentation package referred to in paragraph 11 (a) and (b) shall remain strictly confidential. It may be kept by the approval authority, or, at the discretion of the approval authority, may be retained by the manufacturer. In the case the manufacturer retains the documentation package, that package shall be identified and dated by the approval authority once reviewed and approved. It shall be made available for inspection by the approval authority at the time of approval or at any time during the validity of the approval.

## Administrative provisions for EC type-approval of a vehicle with regard to emissions and access to vehicle repair and maintenance information

1. If all the relevant requirements are met, the approval authority shall grant an EC type-approval and issue a type-approval number in accordance with the numbering system set out in Annex VII to Directive 2007/46/EC.

Without prejudice to the provisions of Annex VII to Directive 2007/46/EC, Section 3 of the type-approval number shall be drawn up in accordance with Appendix 6 to Annex I to this Regulation.

An approval authority shall not assign the same number to another vehicle type.

2. By way of derogation from paragraph 1, at the request of the manufacturer, a vehicle with an OBD system may be accepted for type-approval with regard to emissions and vehicle repair and maintenance information, even though the system contains one or more deficiencies such that the specific requirements of Annex XI are not fully met, provided that the specific administrative provisions set out in Section 3 of that Annex are complied with.

The approval authority shall notify the decision to grant such a type approval to all approval authorities in the other Member States in accordance with the requirements set out in Article 8 of Directive 2007/46/EC.

3. When granting an EC type approval under paragraph 1, the approval authority shall issue an EC type-approval certificate using the model set out in Appendix 4 to Annex I.

#### Article 7

## **Amendments to type-approvals**

Articles 13, 14 and 16 of Directive 2007/46/EC shall apply to any amendments to the type-approvals granted in accordance to Regulation (EC) No 715/2007.

At the manufacturer's request the provisions specified in Section 3 of Annex I shall apply without the need for additional testing only to vehicles of the same type.

#### Article 8

## **Conformity of production**

1. Measures to ensure the conformity of production shall be taken in accordance with the provisions of Article 12 of Directive 2007/46/EC.

In addition, the provisions laid down in Section 4 of Annex I to this Regulation and the relevant statistical method in Appendices 1 and 2 to that Annex shall apply.

2. Conformity of production shall be checked on the basis of the description in the type-approval certificate set out in Appendix 4 to Annex I to this Regulation.

## In service conformity

- 1. Measures to ensure in-service conformity of vehicles type-approved under this Regulation shall be taken in accordance with Annex X to Directive 2007/46/EC and Annex II to this Regulation.
- 2. The in-service conformity measures shall be appropriate for confirming the functionality of the pollution control devices during the normal life of the vehicles under normal conditions of use as specified in Annex II to this Regulation.
- 3. The in-service conformity measures shall be checked for a period of up to 5 years of age or 100000 km, whichever is the sooner.
- 4. The manufacturer shall not be obliged to carry out an audit of in-service conformity if the number of vehicles sold precludes obtaining sufficient samples to test. Therefore, an audit shall not be required if the annual sales of that vehicle type are less than 5000 across the Union.

However, the manufacturer of such small series vehicles shall provide the approval authority with a report of any emissions related warranty and repair claims and OBD faults as set out in paragraph 9.2.3 of UN/ECE Regulation No 83. In addition, the type-approval authority may require such vehicle types to be tested in accordance with Appendix 3 to UN/ECE Regulation No 83.

6. With regard to vehicles type-approved under this Regulation, where the approval authority is not satisfied with the results of the tests in accordance with the criteria defined in Appendix 4 to UN/ECE Regulation No 83, the remedial measures referred to in Article 30(1) and in Annex X to Directive 2007/46/EC shall be extended to vehicles in service belonging to the same vehicle type which are likely to be affected with the same defects in accordance with section 6 of Appendix 3 to UN/ECE Regulation No 83.

The plan of remedial measures presented by the manufacturer according to section 6.1 of Appendix 3 to UN/ECE Regulation No 83 shall be approved by the approval authority. The manufacturer shall be responsible for the execution of the approved remedial plan.

The approval authority shall notify its decision to all Member States within 30 days. Member States may require that the same plan of remedial measures be applied to all vehicles of the same type registered in their territory.

7. If an approval authority has established that a vehicle type does not conform to the applicable requirements of Appendix 3 to UN/ECE Regulation No 83, it shall notify without delay the Member State which granted the original type-approval in accordance with the requirements of Article 30(3) of Directive 2007/46/EC.

Following that notification and subject to the provision of Article 30(6) of Directive 2007/46/EC, the approval authority which granted the original type-approval shall inform the manufacturer that a vehicle type fails to satisfy the requirements of these provisions and that certain measures are expected of the manufacturer. The manufacturer shall submit to that authority, within two months after this notification, a plan of measures to overcome the defects, the substance of which should correspond to the requirements of sections 6.1 to 6.8 of Appendix 3 to UN/ECE Regulation No 83. The approval authority which granted the original type-approval shall, within two months, consult the manufacturer in order to secure agreement on a plan of measures and on the carrying out the plan. If the approval authority which granted the original type-approval establishes that no agreement can be reached, the procedure pursuant to Article 30(3) and (4) of Directive 2007/46/EC shall be initiated.

#### Article 10

#### **Pollution control devices**

1. The manufacturer shall ensure that replacement pollution control devices intended to be fitted to EC type-approved vehicles covered by the scope of Regulation (EC) No 715/2007 are EC type-approved, as separate technical units within the meaning of Article 10(2) of Directive 2007/46/EC, in accordance with Article 12, Article 13 and Annex XIII to this Regulation.

Catalytic converters and particulate filters shall be considered to be pollution control devices for the purposes of this Regulation.

The relevant requirements shall be deemed to be met if all the following conditions are fulfilled:

- (a) the requirements of Article 13 are met;
- (b) the replacement pollution control devices have been approved according to UN/ECE Regulation No 103<sup>6</sup>.

In the case referred to in the third subparagraph Article 14 shall also apply.

- 2. Original equipment replacement pollution control devices, which fall within the type covered by point 2.3 of the Addendum to Appendix 4 to Annex I and are intended for fitment to a vehicle to which the relevant type-approval document refers, do not need to comply with Annex XIII provided they fulfil the requirements of points 2.1 and 2.2 of that Annex.
- 3. The manufacturer shall ensure that the original pollution control device carries identification markings.
- 4. The identification markings referred to in paragraph 3 shall comprise the following:
  - (a) the vehicle or engine manufacturer's name or trade mark;
  - (b) the make and identifying part number of the original pollution control device as recorded in the information referred to in point 3.2.12.2 of Appendix 3 to Annex I.

<sup>&</sup>lt;sup>6</sup> OJ L158, 19.6.2007, p106

## Application for EC type-approval of a type of replacement pollution control device as a separate technical unit

1. The manufacturer shall submit to the approval authority an application for EC type-approval of a type of replacement pollution control device as a separate technical unit.

The application shall be drawn up in accordance with the model of the information document set out in Appendix 1 to Annex XIII.

- 2. In addition to the requirements laid down in paragraph 1, the manufacturer shall submit to the technical service responsible for the type-approval test all of the following:
  - (a) a vehicle or vehicles of a type approved in accordance with this Regulation equipped with a new original equipment pollution control device;
  - (b) one sample of the type of the replacement pollution control device;
  - (c) an additional sample of the type of the replacement pollution control device, in the case of a replacement pollution control device intended to be fitted to a vehicle equipped with an OBD system.
- 3. For the purposes of point (a) of paragraph 2, the test vehicles shall be selected by the applicant with the agreement of the technical service.

The test vehicles shall comply with the requirements set out in Section 3.2 of Annex 4a to UN/ECE Regulation No 83.

The test vehicles shall respect all of the following requirements:

- (a) they shall have no emission control system defects;
- (b) any excessively worn out or malfunctioning emission-related original part shall be repaired or replaced;
- (c) they shall be tuned properly and set to manufacturer's specification prior to emission testing.
- 4. For the purposes of points (b) and (c) of paragraph 2, the sample shall be clearly and indelibly marked with the applicant's trade name or mark and its commercial designation.
- 5. For the purposes of point (c) of paragraph 2, the sample shall have been deteriorated as defined under point (25) of Article 2.

## Article 12

# Administrative provisions for EC type-approval of replacement pollution control device as separate technical unit

1. If all the relevant requirements are met, the type approval authority shall grant an EC type-approval for replacement pollution control devices as separate technical unit and issue a type-

approval number in accordance with the numbering system set out in Annex VII to Directive 2007/46/EC.

The approval authority shall not assign the same number to another replacement pollution control device type.

The same type-approval number may cover the use of that replacement pollution control device type on a number of different vehicle types.

- 2. For the purposes of paragraph 1, the approval authority shall issue an EC type-approval certificate established in accordance with the model set out in Appendix 2 to Annex XIII.
- 3. If the applicant for type-approval is able to demonstrate to the approval authority or technical service that the replacement pollution control device is of a type indicated in section 2.3 of the Addendum to Appendix 4 to Annex I, the granting of a type-approval shall not be dependent on verification of compliance with the requirements specified in section 4 of Annex XIII.

#### Article 13

## Access to vehicle OBD and vehicle repair and maintenance information

- 1. Manufacturers shall put in place the necessary arrangements and procedures, in accordance with Articles 6 and 7 of Regulation (EC) No 715/2007 and Annex XIV of this regulation, to ensure that vehicle OBD and vehicle repair and maintenance information is readily accessible.
- 2. Approval authorities shall only grant type-approval after receiving from the manufacturer a Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information.
- 3. The Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information shall serve as the proof of compliance with Article 6(7) of Regulation (EC) No 715/2007.
- 4. The Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information shall be drawn up in accordance with the model set out in Appendix 1 of Annex XIV.
- 5. If the vehicle OBD and vehicle repair and maintenance information is not available, or does not conform to Article 6 and 7 of Regulation (EC) No 715/2007 and Annex XIV of this Regulation, when the application for type-approval is made, the manufacturer shall provide that information within six months of the date of type approval.
- 6. The obligations to provide information within the period specified in paragraph 5 shall apply only if, following type-approval, the vehicle is placed on the market.

When the vehicle is placed on the market more than six months after type-approval, the information shall be provided on the date on which the vehicle is placed on the market.

7. The approval authority may presume that the manufacturer has put in place satisfactory arrangements and procedures with regard to access to vehicle OBD and vehicle repair and maintenance information, on the basis of a completed Certificate on Access to Vehicle OBD

and Vehicle Repair and Maintenance Information, providing that no complaint was made, and that the manufacturer provides this information within the period set out in paragraph 5.

- 8. In addition to the requirements for the access to OBD information that are specified in Section 4 of Annex XI, the manufacturer shall make available to interested parties the following information:
  - (a) relevant information to enable the development of replacement components which are critical to the correct functioning of the OBD system;
  - (b) information to enable the development of generic diagnostic tools.

For the purposes of point (a), the development of replacement components shall not be restricted by: the unavailability of pertinent information, the technical requirements relating to malfunction indication strategies if the OBD thresholds are exceeded or if the OBD system is unable to fulfil the basic OBD monitoring requirements of this Regulation; specific modifications to the handling of OBD information to deal independently with vehicle operation on petrol or on gas; and the type-approval of gas-fuelled vehicles that contain a limited number of minor deficiencies.

For the purposes of point (b), where manufacturers use diagnostic and test tools in accordance with ISO 22900 Modular Vehicle Communication Interface (MVCI) and ISO 22901 Open Diagnostic Data Exchange (ODX) in their franchised networks, the ODX files shall be accessible to independent operators via the web site of the manufacturer.

9. The Forum on Access to Vehicle Information (the Forum).

The Forum shall consider whether access to information affects the advances made in reducing vehicle theft and shall make recommendations for improving the requirements relating to access to information. In particular, the Forum shall advise the Commission on the introduction of a process for approving and authorising independent operators by accredited organisations to access information on vehicle security.

The Commission may decide to keep the discussions and findings of the Forum confidential.

## Article 14

# Compliance with the obligations regarding access to vehicle OBD and vehicle repair and maintenance information

- 1. An approval authority may, at any time, whether on its own initiative, on the basis of a complaint, or on the basis of an assessment by a technical service, check the compliance of a manufacturer with the provisions of Regulation (EC) No 715/2007, this Regulation, and the terms of the Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information.
- 2. Where an approval authority finds that the manufacturer has failed to comply with its obligations regarding access to vehicle OBD and vehicle repair and maintenance information, the approval authority which granted the relevant type approval shall take appropriate steps to remedy the situation.

- 3. The steps referred to in paragraph 2 may include withdrawal or suspension of type-approval, fines, or other measures adopted in accordance with Article 13 of Regulation (EC) No 715/2007.
- 4. The approval authority shall proceed to an audit in order to verify compliance by the manufacturer with the obligations concerning access to vehicle OBD and vehicle repair and maintenance information, if an independent operator or a trade association representing independent operators files a complaint to the approval authority.
- 5. When carrying out the audit, the approval authority may ask a technical service or any other independent expert to carry out an assessment to verify whether these obligations are met.

## **Transitional provisions**

- 1. Until 31 August 2017 in the case of categories M1, M2 and category N1 class I vehicles, and until 31 August 2018 in the case of N1 vehicles of class II and III and category N2 vehicles manufacturers may request type-approval to be granted in accordance with this Regulation. Where such request is not made, Regulation (EC) No 692/2008 shall apply.
- 2. With effect from 1 September 2017 in the case of categories M1, M2 and category N1 class I vehicles, and from 1 September 2018 in the case of N1 vehicles of class II and III and category N2 vehicles, national authorities shall refuse, on grounds relating to emissions or fuel consumption, to grant EC type approval or national type approval, in respect to new vehicle types which do not comply with this Regulation.
- 3. With effect from 1 September 2018 in the case of categories M1, M2 and category N1 class I vehicles, and from 1 September 2019 in the case of N1 vehicles of class II and III and category N2 vehicles, national authorities shall, on grounds relating to emissions or fuel consumption, in the case of new vehicles which do not comply with this Regulation, consider certificates of conformity to be no longer valid for the purposes of Article 26 of Directive 2007/46/EC and shall prohibit the registration, sale or entry into service of such vehicles...
- 4. Until three years after the dates specified in Article 10(4) of Regulation (EC) No 715/2007 in the case of new vehicle types and four years after the dates specified in Article 10(5) of that Regulation in the case of new vehicles, the following provisions shall apply:
- (a) the requirements of point 2.1 of Annex IIIA shall not apply;
- (b) the requirements of Annex IIIA other than that in point 2.1, including the requirements with regard to RDE tests to be performed and data to be recorded and made available, shall apply only to new type approvals granted in accordance with Regulation (EC) No 715/2007 from [...][PO, please add date of entry into force of this Regulation]];
- (c) the requirements of Annex IIIA shall not apply to type approvals granted to small volume manufacturers;

(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, one additional RDE test shall be performed;

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" in accordance with point 4 of Appendix 6 to Annex IIIA.
- 5. Until 8 years after the dates given in Article 10(4) of Regulation (EC) No 715/2007:
- (a) type 1/I tests performed and completed in accordance to Regulation (EC) No 692/2008 until 3 years after the dates given in Article 10(4) of Regulation (EC) No 715/2007 shall be valid for the purposes of fulfilling the requirements of Annex VII and/or Appendix 1 to Annex XI to this Regulation;
- (b) procedures performed in accordance with section 3.13. of Annex III to Regulation (EC) No 692/2008 until 3 years after the dates given in Article 10(4) of Regulation (EC) 715/2007 shall be accepted by the approval authority for the purposes of fulfilling the requirements of the second paragraph of point 1.1 of Appendix 1 to Sub-Annex 6 to Annex XXI of this Regulation.
- 6. In order to ensure a fair treatment of previously existing type-approvals, the Commission shall examine the consequences of Chapter V of Directive (EC) 2007/46 for the purposes of this Regulation.

#### Article 16

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

Directive 2007/46/EC is amended in accordance with Annex XVIII to this Regulation.

## Article 17

## Amendments to Regulation (EC) No 692/2008

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

- (1) In Article 6, paragraph 1, shall be replaced by the following text:
- "1. If all the relevant requirements are met, the approval authority shall grant an EC type-approval and issue a type-approval number in accordance with the numbering system set out in Annex VII to Directive 2007/46/EC.

Without prejudice to the provisions of Annex VII to Directive 2007/46/EC, Section 3 of the type-approval number shall be drawn up in accordance with Appendix 6 to Annex I to this Regulation.

An approval authority shall not assign the same number to another vehicle type.

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) of this Regulation are met;
- (b) the requirements of Article 13 of this Regulation are met;
- (c) 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.
- (d) the requirements of Article 5(11) and (12) are met.

"

(2) the following Article 16a is added:

#### "Article 16a

## Transitional provisions

With effect from 1 September 2017 in the case of categories M1, M2 and category N1 class I vehicles, and from 1 September 2018 in the case of N1 vehicles of class II and III and category N2 vehicles, this Regulation shall only apply for the purposes of assessing the following requirements of vehicles type-approved in accordance with this Regulation before those dates:

- (a) conformity of production in accordance with Article 8;
- (b) in-service conformity in accordance with Article 9;
- (c) access to vehicle OBD and vehicle repair and maintenance information in accordance with Article 13;

This Regulation shall also apply for the purposes of the correlation procedure set out in Implementing Regulation [XXX][PO please insent reference]."

(3) Annex I is amended in accordance with Annex XVII to this Regulation.

### Article 18

## Amendments to Regulation (EU) No 1230/2012

In Regulation (EU) No 1230/2012, Article 2(5) is replaced by the following:

"(5) 'Mass of the optional equipment' means the maximum mass of the combinations of optional equipment which may be fitted to the vehicle in addition to the standard equipment in accordance with the manufacturer's specifications;"

## Article 19

## Repeal

Regulation (EC) No 692/2008 is repealed as from 1 January 2022.

#### Article 20

## Entry into force and application

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

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