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## $\blacktriangleright\underline{B}$ $\blacktriangleright\underline{M5}$ 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) ◀

(Text with EEA relevance)

(OJ L 171, 29.6.2007, p. 1)

### Amended by:

### Official Journal

		No	page	date
<u>M1</u>	Commission Regulation (EC) No 692/2008 of 18 July 2008	L 199	1	28.7.2008
<u>M2</u>	Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009	L 188	1	18.7.2009
<u>M3</u>	Commission Regulation (EU) No 566/2011 of 8 June 2011	L 158	1	16.6.2011
► <u>M4</u>	Commission Regulation (EU) No 459/2012 of 29 May 2012	L 142	16	1.6.2012
► <u>M5</u>	Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018	L 151	1	14.6.2018

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### REGULATION (EC) No 715/2007 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

### of 20 June 2007

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**▼**B

(Text with EEA relevance)

### CHAPTER I

### SUBJECT MATTER, SCOPE AND DEFINITIONS

### Article 1

### Subject matter

This Regulation establishes common technical requirements for the type approval of motor vehicles (vehicles) and replacement parts, such as replacement pollution control devices, with regard to their emissions.

### **▼** M5

In addition, this Regulation lays down rules for in-service conformity, the durability of pollution control devices, vehicle on-board diagnostic (OBD) systems and the measurement of fuel consumption.

**▼**B

### Article 2

### Scope

- This Regulation shall apply to vehicles of categories M<sub>1</sub>, M<sub>2</sub>, N<sub>1</sub> and N<sub>2</sub> as defined in Annex II to Directive 70/156/EEC with a reference mass not exceeding 2 610 kg.
- At the manufacturer's request, type approval granted under this Regulation may be extended from vehicles covered by paragraph 1 to M<sub>1</sub>, M<sub>2</sub>, N<sub>1</sub> and N<sub>2</sub> vehicles as defined in Annex II to Directive 70/156/EEC with a reference mass not exceeding 2 840 kg and which meet the conditions laid down in this Regulation and its implementing measures.

### Article 3

### **Definitions**

For the purposes of this Regulation and its implementing measures the following definitions shall apply:

- 1. 'hybrid vehicle' means a vehicle with at least two different energy converters and two different energy storage systems (on vehicle) for the purpose of vehicle propulsion;
- 2. 'vehicles designed to fulfil specific social needs' means diesel vehicles of category M<sub>1</sub> which are either:

- (a) special purpose vehicles as defined in Directive 70/156/EEC with a reference mass exceeding 2 000 kg;
- (b) vehicles with a reference mass exceeding 2 000 kg and designed to carry seven or more occupants including the driver with the exclusion, as from 1 September 2012, of vehicles of category M<sub>1</sub>G as defined in Directive 70/156/EEC;

or

- (c) vehicles with a reference mass exceeding 1 760 kg which are built specifically for commercial purposes to accommodate wheelchair use inside the vehicle;
- 'reference mass' means the mass of the vehicle in running order less the uniform mass of the driver of 75 kg and increased by a uniform mass of 100 kg;
- 'gaseous pollutants' means the exhaust gas emissions of carbon monoxide, oxides of nitrogen, expressed in nitrogen dioxide (NO<sub>2</sub>) equivalent, and hydrocarbons;
- 5. 'particulate pollutants' means components of the exhaust gas which are removed from the diluted exhaust gas at a maximum temperature of 325 °K (52 °C) by means of the filters described in the test procedure for verifying average tailpipe emissions;
- 'tailpipe emissions' means the emission of gaseous and particulate pollutants;
- 'evaporative emissions' means the hydrocarbon vapours emitted from the fuel system of a vehicle other than those from tailpipe emissions;
- 8. 'crankcase' means the spaces in, or external to, an engine which are connected to the oil sump by internal or external ducts through which gases and vapours can be emitted;
- 'on-board diagnostic system' or 'OBD system' means a system for emission control which has the capability of identifying the likely area of malfunction by means of fault codes stored in a computer memory;
- 10. 'defeat device' means any element of design which senses temperature, vehicle speed, engine speed (RPM), transmission gear, manifold vacuum or any other parameter for the purpose of activating, modulating, delaying or deactivating the operation of any part of the emission control system, that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use;

- 11. 'pollution control device' means those components of a vehicle that control and/or limit tailpipe and evaporative emissions;
- 12. 'original pollution control device' means a pollution control device or an assembly of such devices covered by the type approval granted for the vehicle concerned;
- 13. 'replacement pollution control device' means a pollution control device or an assembly of such devices intended to replace an original pollution control device and which can be approved as a separate technical unit as defined in Directive 70/156/EEC;

### **▼**<u>B</u>

- 'biofuels' means liquid or gaseous fuels for transport, produced from biomass;
- 17. 'alternative fuel vehicle' means a vehicle designed to be capable of running on at least one type of fuel that is either gaseous at atmospheric temperature and pressure, or substantially non-mineral oil derived;

### **▼**<u>M4</u>

18. 'direct injection engine' means an engine which can operate in a mode where the fuel is injected into the intake air after the air has been drawn through the inlet valves.

### **▼**B

### CHAPTER II

### MANUFACTURERS' TYPE-APPROVAL OBLIGATIONS

### Article 4

### Manufacturers' obligations

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

These obligations include meeting the emission limits set out in Annex I and the implementing measures referred to in Article 5.

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

In addition, the technical measures taken by the manufacturer must be such as to ensure that the tailpipe and evaporative emissions are effectively limited, pursuant to this Regulation, throughout the normal life of the vehicles under normal conditions of use. Therefore, in-service conformity measures shall be checked for a period of up to five years or 100 000 km, whichever is the sooner. Durability testing of pollution control devices undertaken for type approval shall cover 160 000 km. To comply with this durability test, the manufacturers should have the possibility to make use of test bench ageing, subject to the implementing measures referred to in paragraph 4.

In-service conformity shall be checked, in particular, for tailpipe emissions as tested against emission limits set out in Annex I. In order to improve control of evaporative emissions and low ambient temperature emissions, the test procedures shall be reviewed by the Commission.

- 3. Manufacturers shall set out carbon dioxide emissions and fuel consumption figures in a document given to the purchaser of the vehicle at the time of purchase.
- 4. The specific procedures and requirements for the implementation of paragraphs 2 and 3 shall be established in accordance with the procedure referred to in Article 15(2).

### Article 5

### Requirements and tests

- 1. The manufacturer shall equip vehicles so that the components likely to affect emissions are designed, constructed and assembled so as to enable the vehicle, in normal use, to comply with this Regulation and its implementing measures.
- 2. The use of defeat devices that reduce the effectiveness of emission control systems shall be prohibited. The prohibition shall not apply where:
- (a) the need for the device is justified in terms of protecting the engine against damage or accident and for safe operation of the vehicle;
- (b) the device does not function beyond the requirements of engine starting;

or

- (c) the conditions are substantially included in the test procedures for verifying evaporative emissions and average tailpipe emissions.
- 3. The specific procedures, tests and requirements for type approval set out in this paragraph, as well as requirements for the implementation of paragraph 2, which are designed to amend non-essential elements of this Regulation, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 15(3). This shall include establishing the requirements relating to:

•	v

- (a) tailpipe emissions, including test cycles, low ambient temperature emissions, emissions at idling speed, smoke opacity and correct functioning and regeneration of after-treatment systems;
- (b) evaporative emissions and crankcase emissions;
- (c) OBD systems and in-use performance of pollution control devices;
- (d) durability of pollution control devices, replacement pollution control devices, in-service conformity, conformity of production and roadworthiness;
- (e) measurement of greenhouse gas emissions and fuel consumption;
- (f) hybrid vehicles and alternative fuel vehicles;
- (g) extension of type approvals and requirements for small volume manufacturers;
- (h) test equipment;

(i) reference fuels, such as petrol, diesel, gaseous fuels and biofuels, such as bioethanol, biodiesel and biogas;

**▼**<u>M2</u>

(j) measurement of engine power.

**▼**<u>B</u>

The above requirements shall, where relevant, apply to vehicles regardless of the type of fuel by which they are powered.

▼<u>M5</u>

**▼**<u>B</u>

### CHAPTER IV

### **OBLIGATIONS OF MEMBER STATES**

### Article 10

### Type approval

1. With effect from 2 July 2007, if a manufacturer so requests, the national authorities may not, on grounds relating to emissions or fuel consumption of vehicles, refuse to grant EC type approval or national type approval for a new type of vehicle, or prohibit the registration, sale or entry into service of a new vehicle, where the vehicle concerned complies with this Regulation and its implementing measures, and in particular with the Euro 5 limit values set out in Table 1 of Annex I or with the Euro 6 limit values set out in Table 2 of Annex I.

- 2. With effect from 1 September 2009, and from 1 September 2010 in the case of category  $N_1$  class II and III and category  $N_2$  vehicles, the national authorities shall refuse, on grounds relating to emissions or fuel consumption, to grant EC type approval or national type approval for new types of vehicle which do not comply with this Regulation and its implementing measures, and in particular with the Annexes, with the exception of the Euro 6 limit values set out in Table 2 of Annex I. For the test on tailpipe emissions, the limit values applied to vehicles designed to fulfil specific social needs shall be the same as for category  $N_1$  class III vehicles.
- 3. With effect from 1 January 2011, and from 1 January 2012 in the case of category  $N_1$  class II and III and category  $N_2$  vehicles and vehicles designed to fulfil specific social needs, national authorities shall, in the case of new vehicles which do not comply with this Regulation and its implementing measures, and in particular with the Annexes with the exception of the Euro 6 limit values set out in Table 2 of Annex I, consider certificates of conformity to be no longer valid for the purposes of Article 7(1) of Directive 70/156/EEC and shall, on grounds relating to emissions or fuel consumption, prohibit the registration, sale or entry into service of such vehicles. For the test on tailpipe emissions, the limit values applied to vehicles designed to fulfil specific social needs shall be the same as for category  $N_1$  class III vehicles.
- 4. With effect from 1 September 2014, and from 1 September 2015 in the case of category  $N_1$  class II and III and category  $N_2$  vehicles, the national authorities shall refuse, on grounds relating to emissions or fuel consumption, to grant EC type approval or national type approval for new types of vehicle which do not comply with this Regulation and its implementing measures, and in particular with the Euro 6 limit values set out in Table 2 of Annex I.
- 5. With effect from 1 September 2015, and from 1 September 2016 in the case of category  $N_1$  class II and III and category  $N_2$  vehicles, national authorities shall, in the case of new vehicles which do not comply with this Regulation and its implementing measures, and in particular with the Euro 6 limit values set out in Table 2 of Annex I, consider certificates of conformity to be no longer valid for the purposes of Article 7(1) of Directive 70/156/EEC and shall, on grounds relating to emissions or fuel consumption, prohibit the registration, sale or entry into service of such vehicles.

### **▼** M1

6. The 5,0 mg/km emission limit for mass of particulate matter referred to in Tables 1 and 2 of Annex I shall be effective from the applicable dates set out in paragraphs 1, 2 and 3.

The 4,5 mg/km emission limit for mass of particulate matter and the particle number limit referred to in Tables 1 and 2 of Annex I shall be effective from 1 September 2011 for the type-approval on new types of vehicles and from 1 January 2013 for all new vehicles sold, registered or put into service in the Community.

### **▼**<u>M4</u>

7. Until three years after the applicable dates set out in paragraphs 4 and 5 for new type approvals and the registration, sale or entry into service of new vehicles and upon the choice of the manufacturer, a particle number emission limit of  $6 \times 10^{12}$  #/km shall apply to vehicles with a direct injection positive ignition engine.

### **▼**B

### Article 11

### Type approval of replacement parts

- 1. For new replacement pollution control devices intended to be fitted on vehicles approved under this Regulation, national authorities shall prohibit their sale or installation on a vehicle if they are not of a type in respect of which a type approval has been granted in compliance with this Regulation and its implementing measures.
- 2. National authorities may continue to grant extensions to EC type approvals for replacement pollution control devices intended for standards preceding this Regulation under the terms which originally applied. National authorities shall prohibit the sale or installation on a vehicle of such replacement pollution control devices unless they are of a type in respect of which a relevant type approval has been granted.
- 3. Replacement pollution control devices intended to be fitted on vehicles type approved prior to the adoption of component type approval requirements are exempt from the requirements of paragraphs 1 and 2.

### Article 12

## Financial incentives

1. Member States may make provision for financial incentives that apply to vehicles in series production which comply with this Regulation and its implementing measures.

Those incentives shall be valid for all new vehicles offered for sale on the market of a Member State which comply at least with the emission limit values in Table 1 of Annex I in advance of the dates set out in Article 10(3); they shall cease on those dates.

Financial incentives that apply exclusively to vehicles which comply with the emission limit values in Table 2 of Annex I may be granted for such new vehicles offered for sale on the market of a Member State from the dates set out in Article 10(3) in advance of the dates set out in Article 10(5); they shall cease on the dates set out in Article 10(5).

2. Member States may grant financial incentives for the retrofitting of in-use vehicles and for scrapping vehicles which do not comply.

- 3. For each type of vehicle, the financial incentives referred to in paragraphs 1 and 2 shall not exceed the additional cost of the technical devices introduced to ensure compliance with the emission limits specified in Annex I, including the cost of installation on the vehicle.
- 4. The Commission shall be informed in sufficient time of plans to institute or change the financial incentives referred to in paragraphs 1 and 2.

### Article 13

### **Penalties**

- 1. Member States shall lay down the provisions on penalties applicable for infringement by manufacturers of the provisions of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 2 January 2009 and shall notify it without delay of any subsequent amendment affecting them.
- 2. The types of infringements which are subject to a penalty shall include:
- (a) making false declarations during the approval procedures or procedures leading to a recall;
- (b) falsifying test results for type approval or in-service conformity;
- (c) withholding data or technical specifications which could lead to recall or withdrawal of type approval;
- (d) use of defeat devices.

<b>▼</b> <u>M5</u>		

**▼**<u>B</u>

### CHAPTER V

### FINAL PROVISIONS

### Article 14

### Redefinition of specifications

- 1. The Commission shall consider including methane emissions in the calculation of carbon dioxide emissions. If necessary, the Commission shall present a proposal to the European Parliament and the Council with measures to account for, or limit, methane emissions.
- 2. After the completion of the UN/ECE Particulate Measurement Programme, conducted under the auspices of the World Forum for Harmonisation of Vehicle Regulations, and at the latest upon entry into force of Euro 6, the Commission shall adopt the following measures, which are designed to amend non-essential elements of this Regulation, inter alia by supplementing it, without lowering the existing ambition level with regard to the environment:

- (a) amendment of this Regulation in accordance with the regulatory procedure with scrutiny referred to in Article 15(3) for the purpose of recalibrating the particulate mass based limit values set out in Annex I to this Regulation, and introducing particle number based limit values in that Annex so that they correlate broadly with the petrol and diesel mass limit values;
- (b) adoption of a revised measurement procedure for particulates and a particle number limit value, in accordance with the regulatory procedure with scrutiny referred to in Article 15(3).
- 3. The Commission shall keep under review the procedures, tests and requirements referred to in Article 5(3) as well as the test cycles used to measure emissions. If the review finds that these are no longer adequate or no longer reflect real world emissions, they shall be adapted so as to adequately reflect the emissions generated by real driving on the road. The necessary measures, which are designed to amend non-essential elements of this Regulation, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 15(3).
- 4. The Commission shall keep under review the pollutants subject to the requirements and tests referred to in Article 5(3). If the Commission concludes that it is appropriate to regulate the emissions of additional pollutants it shall present a proposal to the European Parliament and to the Council to amend this Regulation accordingly.
- 5. The Commission shall review the emission limits set out in Table 4 of Annex I for the carbon monoxide and hydrocarbon tailpipe emissions after a cold start test and shall present, as appropriate, a proposal to the European Parliament and to the Council with a view to tightening the emission limits.

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### Article 15

### Committee procedure

- 1. The Commission shall be assisted by a committee.
- 2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

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

### Article 16

### Amendments to Directives 70/156/EEC and 2005/55/EC

- 1. Directive 70/156/EEC shall be amended in accordance with Annex II to this Regulation.
- 2. Directive 2005/55/EC is hereby amended as follows:
- (a) The title shall be replaced by the following:

'Directive 2005/55/EC of the European Parliament and of the Council of 28 September 2005 on type approval of heavy duty vehicles and engines with respect to their emissions (Euro IV and V)';

(b) Article 1 shall be replaced by the following:

### 'Article 1

For the purposes of this Directive the following definitions shall apply:

- (a) "vehicle" means any motor vehicle as defined in Article 2 of Directive 70/156/EEC with a reference mass exceeding 2 610 kg;
- (b) "engine" means the motive propulsion source of a vehicle for which type-approval as a separate technical unit, as defined in Article 2 of Directive 70/156/EEC, may be granted;
- (c) "enhanced environment-friendly vehicle (EEV)" means a vehicle propelled by an engine which complies with the permissive emission limit values set out in row C of the tables in Section 6.2.1 of Annex I.';
- (c) Section 1 of Annex I shall be replaced by the following:
  - '1. This Directive applies to the control of gaseous and particulate pollutants, useful life of emission control devices, conformity of in-service vehicles/engines and on-board diagnostic (OBD) systems of all motor vehicles, and to engines as specified in Article 1 with the exception of those vehicles of category M<sub>1</sub>, N<sub>1</sub>, N<sub>2</sub> and M<sub>2</sub> for which type-approval has been granted under Regulation (EC) No 715/2007 (\*).

<sup>(\*)</sup> OJ L 171, 29.6.2007, p. 1.'

### Article 17

### Repeal

- 1. The following Directives shall be repealed with effect from 2 January 2013:
- Directive 70/220/EEC,
- Directive 72/306/EEC,
- Directive 74/290/EEC,
- Directive 77/102/EEC,
- Directive 78/665/EEC,
- Directive 80/1268/EEC,
- Directive 83/351/EEC,
- Directive 88/76/EEC,
- Directive 88/436/EEC,
- Directive 89/458/EEC,
- Directive 91/441/EEC,
- Directive 93/59/EEC,
- Directive 93/116/EC,
- Directive 94/12/EC,
- Directive 96/44/EC,
- Directive 96/69/EC,
- Directive 98/69/EC,
- Directive 98/77/EC,
- Directive 1999/100/EC,
- Directive 1999/102/EC,
- Directive 2001/1/EC,
- Directive 2001/100/EC,
- Directive 2002/80/EC,
- Directive 2003/76/EC,
- Directive 2004/3/EC.
- 2. Annexes II and V of Commission Directive 89/491/EEC of 17 July 1989 adapting to technical progress Council Directives 70/157/EEC, 70/220/EEC, 72/245/EEC, 72/306/EEC, 80/1268/EEC and 80/1269/EEC relating to motor vehicles (¹) shall be deleted with effect from 2 January 2013.
- 3. References made to the repealed Directives shall be construed as being made to this Regulation.

<sup>(1)</sup> OJ L 238, 15.8.1989, p. 43.

4. Member States shall repeal their implementing legislation adopted under the Directives referred to in paragraph 1 with effect from 2 January 2013.

### Article 18

### Entry into force

- 1. This Regulation shall enter into force on the third day following its publication in the *Official Journal of the European Union*.
- 2. This Regulation shall apply from 3 January 2009, with the exception of Articles 10(1) and 12 which shall apply from 2 July 2007.
- 3. The amendments or implementing measures referred to in Article 5(3) and Article 14(6) shall be adopted by 2 July 2008.

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

ANNEX I

## **EMISSION LIMITS**

Table 1

# Euro 5 Emission Limits

	►M4 Number of particles (PN) ◀		CI	$6,0 \times 10^{11}$				
	M4   PM4   Pai	L <sub>6</sub> (#/km)	PI				ı	
	articulate ter	s km)	CI	5,0/4,5	5,0/4,5	5,0/4,5	5,0/4,5	5,0/4,5
	Mass of particulate matter  ► M3  (PM)	L <sub>5</sub> (mg/km)	PI ( <sup>7</sup> )	5,0/4,5	5,0/4,5	5,0/4,5	5,0/4,5	5,0/4,5 5,0/4,5
	Combined mass of hydrocarbons and oxides of nitrogen (THC + NO <sub>x</sub> )	L <sub>2</sub> + L <sub>4</sub> (mg/km)	CI	230	230	295	350	350
	Combined mass of hydrocarbons and oxides of nitrogen (THC + NO <sub>x</sub> )	L <sub>2</sub> + (mg/	PI				ı	
Limit values	Mass of oxides of nitrogen (NO <sub>x</sub> )	4 km)	CI	180	180	235	280	280
Limi	Mass of on the mitro (NC)	L <sub>4</sub> (mg/km)	PI	09	09	75	82	82
	Mass of non-methane hydrocarbons (NMHC)	L <sub>3</sub> (mg/km)	CI				ı	
	Mass of non-me hydrocarboi (NMHC)	$L_3$ (mg/k	PI	89	89	06	108	108
			CI					
	Mass of to carb (TF		PI	100	100	130	160	160
	Mass of carbon monoxide (CO)		CI	009	005	089	740	740
	Mass of mone (C	L <sub>1</sub> (mg/km)	Id	1 000	1 000	1 810	2 270	2 270
	Reference mass (RM) (kg)			All	RM ≤ 1 305	$1305 < RM \le 1760$	1 760 < RM	All
			Class		I	П	III	
			Category	M	$N_1$			$N_2$

Key: PI = Positive Ignition, CI = Compression Ignition

► M3 ← Solitive ignition particulate mass standards shall apply only to vehicles with direct injection engines.

Table 2

Euro 6 Emission Limits

				)11	)11	)11	)11	)11
	Number of particles (PN)		CI	6,0 × 10	6,0 × 10	6,0 × 10	6,0 × 10	6,0 × 10
	Number o	L <sub>6</sub> (#/km)	PI (²) (³)	$6.0 \times 10^{11} \mid 6.0 \times 10^{11}$	$6,0 \times 10^{11}$ $6,0 \times 10^{11}$			
	articulate ter ( <sup>( )</sup>	s km)	CI	4,5	4,5	4,5	4,5	4,5
	Mass of particulate matter (PM) (¹)	L <sub>5</sub> (mg/km)	PI (²)	4,5	4,5	4,5	4,5	4,5
	Combined mass of hydrocarbons and oxides of nitrogen (THC + NO <sub>x</sub> )	- L <sub>4</sub> km)	CI	170	170	195	215	215
	Combined mass of hydrocarbons and oxides of nitrogen (THC + NO <sub>x</sub> )	$L_2 + L_4$ (mg/km)	PI		ı	I	I	
Limit values	oxides of gen	t km)	CI	08	80	105	125	125
Limit	Mass of oxides of nitrogen (NO <sub>x</sub> )	L <sub>4</sub> (mg/km)	PI	09	09	75	82	82
	n-methane urbons HC)	cm)	CI		1	1		
	Mass of non-methane hydrocarbons (NMHC)	L <sub>3</sub> (mg/km)	PI	89	89	06	108	108
	of total hydro- carbons (THC)	cm)	CI					
	Mass of total carbons (THC)	L <sub>2</sub> (mg/km)	PI	100	100	130	160	160
	carbon xide ))	km)	CI	200	200	630	740	740
	Mass of carbon monoxide (CO)	L <sub>1</sub> (mg/km)	PI	1 000	1 000	1 810	2 270	2 270
	Reference mass (RM) (kg)			All	RM ≤ 1 305	1 305 < RM ≤ 1 760	1 760 < RM	All
			Class		I	П	Ш	
			Category	M	Z I			$N_2$

Key: PI = Positive Ignition, CI = Compression Ignition
 (1) A limit of 5.0 mg/km for the mass of particulate emissions applies to vehicles type approved to the emission limits of this table with the previous particulate mass measurement protocol, before 1.9.2011.
 (2) Positive ignition particulate mass and number limits shall apply only to vehicles with direct injection engines.
 (3) Until three years after the dates specified in Article 10(4) and (5) for new type approvals and new vehicles respectively, a particle number emission limit of 6,0 × 10<sup>12</sup> #/km shall apply to Euro 6 PI direct injection vehicles upon the choice of the manufacturer. Until those dates at the latest a type approval test method ensuring the effective limitation of the number of particles emitted by vehicles under real driving conditions shall be implemented.

 $\label{eq:Table 3} \mbox{Emission limit for the evaporative emissions test}$ 

Mass of Evaporative Emission (g/test)	
2,0	

 $Table\ 4$  Emission limit for the carbon monoxide and hydrocarbon tailpipe emissions after a cold start test

Test temperature 266 K (-7 ° C)								
Vehicle Category	Class	Mass of carbon monoxide (CO) L <sub>1</sub> (g/km)	Mass of hydrocarbons (HC) L <sub>2</sub> (g/km)					
M		15	1,8					
$N_1$	I	15	1,8					
	II	24	2,7					
	III	30	3,2					
N <sub>2</sub>		30	3,2					

### ANNEX II

### Amendments to Directive 70/156/EEC

Directive 70/156/EEC is hereby amended as follows:

1. in Article 2 the following sentence shall be added after the last indent:

'If reference is made in this Directive to a separate Directive or Regulation it shall also include their implementing acts.';

the words 'or Regulation' shall be added after the words 'separate Directive' in the following provisions:

Article 2, first indent; Article 2, ninth indent; Article 2, tenth indent; Article 2, fourteenth indent; Article 3(1); Article 3(4); Article 4(1)(c); Article 4(1)(d); Article 5(5); Article 6(3); Article 7(2); Article 13(4); Article 13(5); Annex I, first subparagraph; Annex III, Part III; Annex IV, Part II, first paragraph; Annex V Section 1(a); Annex V Section 1(b); Annex V Section 1(c); Annex VI, Side 2 of EC vehicle type-approval certificate; Annex VII(1), Section 4; Annex VII, footnote (1); Annex X, Section 2.1; Annex X, Section 3.3; Annex XI, Appendix 4, Meaning of letters: X; Annex XII, Section B(2); Annex XIV, Section 2(a); Annex XIV, Section 2(c); Annex XIV, Section 2(d);

the words 'or Regulations' shall be added after the words 'separate Directives' in the following provisions:

Article 2, eight indent; Article 3(1); Article 3(2); Article 4(1)(a) first and second indents; Article 4(1)(b); Article 4(3); Article 5(4) third subparagraph; Article 5(6); Article 8(2); Article 8(2)(c); Article 9(2); Article 10(2); Article 11(1); Article 13(2); Article 14(1)(i); List of Annexes: title of Annex XIII; Annex I, first subparagraph; Annex IV, Part I, first and second lines; Annex IV, Part II, footnote (1) to the table; Annex V Section 1(b); Annex V Section 3; Annex V Section 3(a); Annex V Section 3(b); Annex VI, points 1 and 2; Annex VI, Side 2 of EC vehicle type-approval certificate; Annex X, Section 2.2; Annex X, Section 2.3.5; Annex X, Section 2(c);

the words 'or Regulation' shall be added after the word 'Directive' in the following provisions:

Article 5(3) third subparagraph; Annex IV, Part I, footnote X to the table; Annex VI, Side 2 of EC vehicle type-approval certificate the heading of the tables; Annex VII(1) Section 2; Annex VII(1) Section 3; Annex VII(1) Section 4; Annex VIII, Sections 1, 2, 2.1, 2.2, and 3; Annex IX, Side 2 for complete or completed vehicles of category  $M_1$  points 45, 46.1 and 46.2; Annex IX, Side 2 for complete or completed vehicles of categories  $M_2$  and  $M_3$  points 45 and 46.1; Annex IX, Side 2 for complete or complete vehicles of categories  $N_1,\ N_2$  and  $N_3$  points 45 and 46.1; Annex IX, Side 2 for incomplete vehicles of categories  $M_2$  and  $M_3$  points 45 and 46.1; Annex IX, Side 2 for incomplete vehicles of categories  $M_2$  and  $M_3$  points 45 and 46.1; Annex IX, Side 2 for incomplete vehicles of categories  $N_1,\ N_2$  and  $N_3$  points 45 and 46.1; Annex IX, Side 2 for incomplete vehicles of categories  $N_1,\ N_2$  and  $N_3$  points 45 and 46.1; Annex IX, Side 2 for incomplete vehicles of categories  $N_1,\ N_2,\ N_3$  and  $N_4,\ N_4,\ N_4,\ N_5,\ N_4,\ N_5,\ N_5,\ N_5,\ N_6,\ N_$ 

The words 'or Regulations' shall be added after the word 'Directives' in the following provisions:

Annex IX, Side 2 for complete or completed vehicles of category  $M_1$ ; Annex IX, Side 2 for complete or completed vehicles of categories  $M_2$  and  $M_3$ ; Annex IX, Side 2 for complete or completed vehicles of categories  $N_1$ ,  $N_2$  and  $N_3$ ; Annex IX, Side 2 for incomplete vehicles of category  $M_1$ ; Annex IX, Side 2 for incomplete vehicles of categories  $M_2$  and  $M_3$ ; Annex IX, Side 2 for incomplete vehicles of categories  $N_1$ ,  $N_2$  and  $N_3$ ; Annex IX, Side 2 for incomplete vehicles of categories  $N_1$ ,  $N_2$  and  $N_3$ ; Annex XV;

- in Article 8(2)(c) the words 'or Regulation(s)' shall be added after the word 'Directive(s)';
- in Annex IV, part I, the heading of the table and point 2 shall be replaced by the following:

'Subject D	Directive/Regulation	Official Journal				Applica	ability					
	number	reference	$M_1$	M <sub>2</sub>	$M_3$	$N_1$	N <sub>2</sub>	N <sub>3</sub>	$O_1$	O <sub>2</sub>	$O_3$	$O_4$
2. Emission- s/Access to informati- on	//EC (EC) No/	L, p	X (1)	X (1)		X (1)	X (1)					

- (1) For vehicles with a reference mass not exceeding 2 610 kg. At the manufacturer's request may apply to vehicles with a reference mass not exceeding 2 840 kg.';
- 7. in Annex IV, part I, points 11 and 39 shall be deleted;
- in Annex VII(4) the words 'or Regulation' shall be added after the words 'in the case of a Directive';
- 9. in Annex VII(5) the words 'or Regulation' shall be added after the words 'the latest Directive';
- 10. in Annex XI, Appendix 1, the heading of the table and point 2 shall be replaced by the following:

ʻItem	Subject	Directive/Regulation number	$M_1 \le 2500  (^1)  kg$	$M_1 > 2500 (^1) \text{ kg}$	$M_2$	M <sub>3</sub>
2	Emissions/Access to information	//EC (EC) No/	Q	G + Q	G + Q'	

- 11. in Annex XI, Appendix 1, points 11 and 39 shall be deleted;
- 12. in Annex XI, Appendix 2, the heading of the table and point 2 shall be replaced by the following:

ʻItem	Subject	Directive/Regu- lation number	$M_1$	$M_2$	M <sub>3</sub>	$N_1$	$N_2$	N <sub>3</sub>	$O_1$	O <sub>2</sub>	O <sub>3</sub>	O <sub>4</sub>
2	Emissions/Access to information	//EC (EC) No/	A	A		A	A'					

14. in Annex XI, Appendix 3, the heading of the table and point 2 shall be replaced by the following:

ʻItem	Subject	Directive/Regulation number	$M_2$	M <sub>3</sub>	N <sub>1</sub>	N <sub>2</sub>	N <sub>3</sub>	$O_1$	O <sub>2</sub>	O <sub>3</sub>	O <sub>4</sub>
2	Emissions/ Access to information	//EC (EC) No/	Q		Q	Q'					

- 15. in Annex XI, Appendix 3, point 11 shall be deleted;
- 16. in Annex XI, Appendix 4, the heading of the table and point 2 shall be replaced by the following:

'Item Subject		Directive/Regulation number	Mobile crane of category N				
2	Emissions/Access to information	//EC (EC) No/	N/A'				

17. in Annex XI, Appendix 4, point 11 shall be deleted.