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#### COVER NOTE

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From: Secretary-General of the European Commission,  
signed by Mr Jordi AYET PUIGARNAU, Director

date of receipt: 18 May 2018

To: Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of  
the European Union

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Subject: COMMISSION DELEGATED REGULATION (EU) .../... of 18.5.2018  
amending and correcting Delegated Regulation (EU) 2017/654  
supplementing Regulation (EU) 2016/1628 of the European Parliament and  
of the Council with regard to technical and general requirements relating to  
emission limits and type-approval for internal combustion engines for non-  
road mobile machinery

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Delegations will find attached document C(2018) 2473 final.

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Encl.: C(2018) 2473 final



Brussels, 18.5.2018  
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**COMMISSION DELEGATED REGULATION (EU) .../...**

**of 18.5.2018**

**amending and correcting Delegated Regulation (EU) 2017/654 supplementing Regulation (EU) 2016/1628 of the European Parliament and of the Council with regard to technical and general requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery**

(Text with EEA relevance)

## **EXPLANATORY MEMORANDUM**

### **1. CONTEXT OF THE DELEGATED ACT**

The term non-road mobile machinery "NRMM" covers a wide range of different machinery, including small handheld equipment (lawn mowers, chain saws,...), construction machinery (excavators, loaders, dozers,...) or agricultural & farming machinery (harvesters, cultivators,...), but also railcars, locomotives and inland waterway vessels.

Type-approval requirements applying to engines installed in NRMM are set out in Directive 97/68/EC of the European Parliament and of the Council<sup>1</sup> which has been repealed and replaced as from 1 January 2017 by Regulation (EU) 2016/1628 of the European Parliament and of the Council<sup>2</sup>, and its two delegated and one implementing Commission acts which apply as from 3 May 2017, namely:

- Commission Delegated Regulation (EU) 2017/654 of 19 December 2016 supplementing Regulation (EU) 2016/1628 of the European Parliament and of the Council with regard to technical and general requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery<sup>3</sup>,
- Commission Delegated Regulation (EU) 2017/655 of 19 December 2016 supplementing Regulation (EU) 2016/1628 of the European Parliament and of the Council with regard to monitoring of gaseous pollutant emissions from in-service internal combustion engines installed in non-road mobile machinery<sup>4</sup>, and
- Commission Implementing Regulation (EU) 2017/656 of 19 December 2016 laying down the administrative requirements relating to emission limits and type-approval of internal combustion engines for non-road mobile machinery in accordance with Regulation (EU) 2016/1628 of the European Parliament and of the Council<sup>5</sup>.

The European Commission wishes to further improve the technical and general requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery by amending Regulation (EU) 2017/654<sup>6</sup> in line with the experience obtained by industry and Member States with the first type-approvals of engines.

### **2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT**

In the preparation of this act, the Commission carried out appropriate consultations at expert level comprising the relevant industrial stakeholders, social partners and Member State experts.

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<sup>1</sup> Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (OJ L 59, 27.2.1998, p. 1).

<sup>2</sup> Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC (OJ L 252, 16.9.2016, p. 53).

<sup>3</sup> OJ L 102, 13.4.2017, p. 1.

<sup>4</sup> OJ L 102, 13.4.2017, p. 334.

<sup>5</sup> OJ L 102, 13.4.2017, p. 364.

<sup>6</sup> Commission Delegated Regulation (EU) 2017/654 of 19 December 2016 supplementing Regulation (EU) 2016/1628 of the European Parliament and of the Council with regard to technical and general requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery (OJ L 102, 13.4.2017, p. 1).

This act has been subject to a public consultation through the Better Regulation Portal from 30 November 2017 to 28 December 2017; no comments have been received.

### **3. LEGAL ELEMENTS OF THE DELEGATED ACT**

The legal basis of this delegated act is Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC.

COMMISSION DELEGATED REGULATION (EU) .../...

of 18.5.2018

**amending and correcting Delegated Regulation (EU) 2017/654 supplementing Regulation (EU) 2016/1628 of the European Parliament and of the Council with regard to technical and general requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery**

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC<sup>7</sup>, and in particular Article 25(4)(a-d), Article 26(6), Article 42(4)(b) and Article 43(5) thereof,

Whereas:

- (1) In order to enable the use of certain fuels legally marketed in some Member States without imposing an additional burden on manufacturers, the permitted content of Fatty-Acid Methyl Ester ('FAME') should be 8,0 % v/v instead of 7,0 % v/v.
- (2) In order to ensure consistency with Article 7(2) of Commission Implementing Regulation (EU) 2017/656<sup>8</sup>, where an existing RLL test report is submitted to obtain a Stage V type approval in accordance with that Article, it should be permitted to use the same version of 'F' test type cycle for the purposes of checking the conformity of production of engines type-approved on that cycle.
- (3) In order to improve the testing procedures for engines without an after-treatment system, specific requirements for determining deterioration factors should be established for engines without an after-treatment system.
- (4) In order to consider all possible emission control strategies, the technical requirements relating to emission control strategies should include the base emission control strategy and not only the auxiliary emission control strategy.
- (5) Emission control strategies' requirements were originally laid down for engines subject to a transient cycle. However, those requirements are not suitable for engines only subject to the NRSC which are not tested on a transient cycle. Existing engine transient emission control strategies should therefore be adapted to those engines by

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<sup>7</sup> OJ L 252, 16.9.2016, p. 53.

<sup>8</sup> Commission Implementing Regulation (EU) 2017/656 of 19 December 2016 laying down the administrative requirements relating to emission limits and type-approval of internal combustion engines for non-road mobile machinery in accordance with Regulation (EU) 2016/1628 of the European Parliament and of the Council (OJ L 102, 13.4.2017, p. 364).

distinguishing between the conditions on the emission test (steady-state only) and any other operating conditions (transient).

- (6) In order to take into account the regeneration of an after-treatment system during the demonstration based on random point selection in accordance with point 3 of Annex V to Delegated Regulation (EU) 2017/654 and to clarify that an engine after-treatment system may regenerate before the emission test cycle is run, the test requirements referred to in point 4 of Annex V of Delegated Regulation (EU) 2017/654 should be modified accordingly with new specific provisions on regeneration.
- (7) In addition, to reduce the likelihood of regeneration during the test, the minimum sample time when the discrete-mode NRSC is used for the demonstration based on random point selection in accordance with point 3 of Annex V to Delegated Regulation (EU) 2017/654 should be reduced to 3 minutes per point.
- (8) For the purpose of comprehensiveness, the manufacturer should include in the information folder as set out in Part A of Annex I to Implementing Regulation (EU) 2017/656 demonstration reports documenting the demonstrations conducted pursuant to specific technical requirements and procedures set out in Delegated Regulation (EU) 2017/654.
- (9) The reference to the provisions of Regulation (EU) 2016/1628 requiring that deterioration factors are taken into account in the emission laboratory test results set out in Article 4 of Commission Delegated Regulation (EU) 2017/654<sup>9</sup> is incorrect and should be corrected.
- (10) To ensure consistency of Regulation (EU) 2016/1628 and all Delegated and Implementing Regulations adopted pursuant to that Regulation, some requirements applicable to engine-after-treatment system families should also be applicable to engine families, or groups of engine families.
- (11) Certain changes should be made to provisions containing contradictions or redundant information and certain references should be corrected.
- (12) Following the publication of Delegated Regulation (EU) 2017/654, further errors of different types, such as terminology and numbering, have been detected and need to be corrected.
- (13) Delegated Regulation (EU) 2017/654 should therefore be amended and corrected accordingly,

HAS ADOPTED THIS REGULATION:

#### *Article 1*

#### *Amendments to Delegated Regulation (EU) 2017/654*

Delegated Regulation (EU) 2017/654 is amended as follows:

- (1) the following Article 20a is inserted:

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<sup>9</sup> Commission Delegated Regulation (EU) 2017/654 of 19 December 2016 supplementing Regulation (EU) 2016/1628 of the European Parliament and of the Council with regard to technical and general requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery (OJ L 102, 13.4.2017, p. 1).

*‘Article 20a*

**Transitional provisions**

1. Notwithstanding the application of the provisions of this Regulation, as amended by Commission Delegated Regulation (EU) 2018/ [OJ Please insert the number of this Regulation], approval authorities shall, until 31 December 2018, also continue to grant EU type-approvals to engine types or engine families in accordance with this Regulation, in its version applicable on [OJ Please insert the date immediately preceding the date of entry into force of this Regulation].";
2. Notwithstanding the application of the provisions of this Regulation, as amended by Commission Delegated Regulation (EU) 2018/ [Please insert the number of this Regulation], the Member States shall, until 30 June 2019, also permit the placing on the market of engines based on an engine type approved in accordance with this Regulation, in its version applicable on [OJ Please insert the date immediately preceding the date of entry into force of this Regulation].";
  - (2) Annex I is amended in accordance with Annex I to this Regulation;
  - (3) Annex II is amended in accordance with Annex II to this Regulation;
  - (4) Annex III is amended in accordance with Annex III to this Regulation;
  - (5) Annex IV is amended in accordance with Annex IV to this Regulation;
  - (6) Annex V is amended in accordance with Annex V to this Regulation;
  - (7) Annex VI is amended in accordance with Annex VI to this Regulation;
  - (8) Annex VII is amended in accordance with Annex VII to this Regulation;
  - (9) Annex VIII is amended in accordance with Annex VIII to this Regulation;
  - (10) Annex IX is amended in accordance with Annex IX to this Regulation;
  - (11) Annex XIII is amended in accordance with Annex X to this Regulation;
  - (12) Annex XV is amended in accordance with Annex XI to this Regulation.

*Article 2*

*Corrections to Delegated Regulation (EU) 2017/654*

Delegated Regulation (EU) 2017/654 is corrected as follows:

- (1) Article 4 is replaced by the following:

**‘Article 4**

**Methodology for adapting the emission laboratory test results to include the deterioration factors**

The emission laboratory test results shall be adapted to include the deterioration factors, comprising those related with the measurement of the particle number (PN) and with gaseous-fuelled engines, referred to in Article 25(1)(c) of Regulation (EU) 2016/1628, in accordance with the methodology laid down in Annex III to this Regulation.’;

- (2) Annex I is corrected in accordance with Annex XII to this Regulation;
- (3) in Annex II, point 3.3.2. is replaced by the following:

- (4) ‘3.3.2. The initial assessment and verification of product conformity arrangements may also be carried out in cooperation with the approval authority of another Member State, or the appointed body designated for this purpose by the approval authority.’;
- (5) Annex III is corrected in accordance with Annex XIII to this Regulation;
- (6) Annex IV is corrected in accordance with Annex XIV to this Regulation;
- (7) Annex V is corrected in accordance with Annex XV to this Regulation;
- (8) Annex VI is corrected in accordance with Annex XVI to this Regulation;
- (9) Annex VII is corrected in accordance with Annex XVII to this Regulation;
- (10) Annex VIII is corrected in accordance with Annex XVIII to this Regulation.

### *Article 3*

#### *Entry into force*

This Regulation shall enter into force on the twentieth day following that of 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, 18.5.2018

*For the Commission*  
*The President*  
*Jean-Claude JUNCKER*