Commission Delegated Regulation (EU) 2020/22 of 31 October 2019 amending Annexes I and III to Regulation (EU) 2019/631 of the European Parliament and of the Council as regards the monitoring of CO2 emissions from new light commercial vehicles type-approved in a multi-stage process (Text with EEA relevance)

# COMMISSION DELEGATED REGULATION (EU) 2020/22

# of 31 October 2019

amending Annexes I and III to Regulation (EU) 2019/631 of the European Parliament and of the Council as regards the monitoring of CO<sub>2</sub> emissions from new light commercial vehicles type-approved in a multi-stage process

(Text with EEA relevance)

#### THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO<sub>2</sub> emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011<sup>(1)</sup>, and in particular Articles 7(8) and 15(8) thereof,

# Whereas:

- (1) Since 1 September 2019 all light commercial vehicles are subject to a new regulatory test procedure for measuring CO<sub>2</sub> emissions and fuel consumption, the Worldwide Harmonised Light Vehicles Test Procedure (WLTP) set out in Commission Regulation (EU) 2017/1151<sup>(2)</sup>, replacing the New European Driving Cycle (NEDC) set out in Commission Regulation (EC) No 692/2008<sup>(3)</sup>. A new methodology for determining the CO<sub>2</sub> emissions and fuel consumption from category N1 vehicles which are type-approved in a multi-stage process has therefore been established and is set out in Annexes I and II to Regulation (EU) No 510/2011 of the European Parliament and of the Council<sup>(4)</sup>.
- (2) In view of the repeal of Regulation (EU) No 510/2011 from 1 January 2020, it is necessary to ensure that the same methodology is set out in Regulation (EU) 2019/631.
- (3) According to point 2 of Part B of Annex III to Regulation (EU) 2019/631, the specific emissions of CO<sub>2</sub> of a multi-stage vehicle are to be allocated to the manufacturer of the base vehicle. In order to allow the base vehicle manufacturer to plan effectively and with sufficient certainty its compliance with its specific emissions targets, a methodology should be set up that ensures that the CO<sub>2</sub> emissions and mass of the completed vehicles that will be allocated to that manufacturer are known at the moment of the production and sale of the base vehicle whether complete or incomplete, and not only at the moment when the final stage manufacturer places the completed vehicle on the market.

- (4) A specific methodology for determining the CO<sub>2</sub> emissions of an incomplete base vehicle is therefore provided according to which the interpolation method provided for in Regulation (EU) 2017/1151 should be used. The CO<sub>2</sub> emissions and the mass values thus determined should be as representative as possible of the specific CO<sub>2</sub> emissions and mass in running order that will be determined for the completed vehicle. In order to ensure consistency, the calculation of the base vehicle manufacturer's specific emission target should therefore take into account the mass values determined pursuant to this methodology.
- (5) The base vehicle manufacturer should report the input values used for the interpolation method as well as the resulting CO<sub>2</sub> emissions and mass of incomplete base vehicles to the Commission. At the same time, Member States should continue to report to the Commission the specific emissions of CO<sub>2</sub> and mass in running order of the completed vehicles.
- (6) On the basis of those reported data, the Commission should continuously assess the representativeness of the monitoring CO<sub>2</sub> emissions of the base vehicle and inform the manufacturers of any divergences found. In the case of a significant and continued divergence between the average of the monitoring CO<sub>2</sub> values of the base vehicles and the average of the specific emissions of CO<sub>2</sub> of the completed vehicles, the values for the completed vehicles should be used for the purposes of determining whether manufacturers comply with their specific emissions targets.
- (7) In order to take into account that Regulation (EU) No 510/2011 is repealed with effect from 1 January 2020, it is appropriate to ensure that this Regulation enters into force as close as possible to that date.
- (8) Annexes I and III to Regulation (EU) 2019/631 should therefore be amended accordingly,

### HAS ADOPTED THIS REGULATION:

Article 1

Annexes I and III to Regulation (EU) 2019/631 are amended in accordance with the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the seventh 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, 31 October 2019.

For the Commission

The President

Jean-Claude JUNCKER

#### **ANNEX**

Annexes I and III to Regulation (EU) 2019/631 are amended as follows:

(1) in point 4 of Part B of Annex I, the definition of ' $M_{\alpha}$ ' is replaced by the following:

Mø is the average of the mass (M) of the new light commercial vehicles of the manufacturer registered in the relevant target year in kilograms (kg);

Where,

- in the case of a complete vehicle, M is the mass in running order of that vehicle
- in the case of a complete base vehicle related to a completed vehicle, M is the mass in running order of that base vehicle
- in the case of an incomplete base vehicle related to a completed vehicle, M is the monitoring mass  $(M_{mon})$  of that base vehicle, determined in accordance with the following formula:

 $M_{mon} = MRO_{base} \times B_0$ 

Where,

MRO<sub>base</sub> is the mass in running order of the base vehicle

concerned

B<sub>0</sub> is as defined in point 1.2.4(a) of Part A of Annex III.;

- (2) in Annex III, Part A is amended as follows:
  - (a) point 1.2 is replaced by the following:
    - 1.2. Completed vehicles registered as N1 vehicles
    - 1.2.1. Reporting by Member States

The format set out in Section 2 of Part C shall be used for the reporting of data relating to completed N1 vehicles.

The vehicle identification number referred to in point (o) of point 1.1 shall not be made public.

1.2.1.1. Completed vehicles type-approved in accordance with Regulation (EC) No 692/2008

Member States shall for calendar year 2020 record the following detailed data with regard to:

- (a) the incomplete base vehicle: the data specified in points (a), (b), (c), (d), (e), (g), (h), (i), (n) and (o) of point 1.1, or, instead of the data specified in points (h) and (i), the default added mass provided as part of the type-approval information specified in point 2.17.2 of Annex I to Directive 2007/46/EC;
- (b) the complete base vehicle: the data specified in points (a), (b), (c), (d), (e), (g), (h), (i), (n) and (o) of point 1.1;
- (c) the completed vehicle: the data specified in points (a), (f), (g), (h), (j), (k), (l), (m) and (o) of point 1.1.

Where any of the data referred to in points (a) and (b) of the first subparagraph cannot be provided for the base vehicle, Member States shall provide data with regard to the completed vehicle instead.

1.2.1.2. Completed vehicles of category N1 type-approved in accordance with Annex XXI to Regulation (EU) 2017/1151

For each new completed vehicle registered in 2020 and subsequent calendar years, Member States shall as a minimum report the detailed data specified in points (a), (f), (g), (h), (o), (p) and (r) of point 1.1.

1.2.2. Reporting by manufacturers

For each new completed vehicle of category N1, type-approved in accordance with Annex XXI to Regulation (EU) 2017/1151 registered in 2020 and subsequent calendar years, the manufacturer of the related base vehicle shall report to the Commission by 28 February each year, starting from 2021, the following data relating to the base vehicle:

- (a) where the completed vehicle is based on an incomplete base vehicle:
  - (i) vehicle identification number;
  - (ii) vehicle family identifier as referred to in paragraph 5.0 of Annex XXI to Regulation (EU) 2017/1151;
  - (iii) monitoring CO<sub>2</sub> emissions determined in accordance with point 1.2.4;
  - (iv) frontal area, specifying the applicable option as referred to in point 1.2.4(c);
  - (v) rolling resistance, as referred to in point 1.2.4(b);
  - (vi) monitoring mass, determined in accordance with point 4.1 of Part B of Annex I;
  - (vii) mass in running order;
  - (viii) mass representative of the vehicle load as defined in point 1.2.4(a);
- (b) where the completed vehicle is based on a complete base vehicle:
  - (i) vehicle identification number;
  - (ii) vehicle family identifier as referred to in point (a)(ii) of this paragraph;
  - (iii) specific CO<sub>2</sub> emissions of the base vehicle;

### (iv) mass in running order.

1.2.3. Calculation of the average specific emissions of CO<sub>2</sub> and the specific emission target

The Commission shall use the values reported by a base vehicle manufacturer in accordance with point 1.2.2 to calculate its average specific emissions of  $CO_2$  and the specific emission target in the calendar year in which the related completed vehicle is registered, except where the conditions referred to in point 1.2.5 are met in which case the data for the completed vehicles shall be used.

Where the data referred to in point 1.2.2 is not reported by the manufacturer of the base vehicle, the specific CO<sub>2</sub> emissions reported by the Member States in accordance with point 1.2.1 with regard to the related completed vehicle shall be used for the calculation of the average specific emissions of CO<sub>2</sub> and the specific emissions target of the manufacturer concerned.

1.2.4. Calculation of the monitoring CO2 emissions in the case of incomplete base vehicles

A manufacturer shall, starting from calendar year 2020, calculate the monitoring  $CO_2$  emissions for each of its individual incomplete base vehicles in accordance with the interpolation method referred to in points 3.2.3.2 or 3.2.4 of Sub-Annex 7 to Annex XXI to Regulation (EU) 2017/1151, using the same method as that applied for the EC type-approval of the base vehicle with regard to its emissions, where the terms shall be as defined in those points with the following exceptions:

(a) Mass of the individual vehicle

The term 'TM<sub>ind</sub>' referred to in points 3.2.3.2.2.1 or 3.2.4.1.1.1 of Sub-Annex 7 to Annex XXI to Regulation (EU) 2017/1151 shall be replaced by the base vehicle default mass, DM<sub>base</sub>. Where DM<sub>base</sub> is lower than the test mass of vehicle low, TM<sub>L</sub>, of the interpolation family, TM<sub>ind</sub> shall be replaced by TM<sub>L</sub>. Where DM<sub>base</sub> is higher than the test mass of vehicle high, TM<sub>H</sub>, of the interpolation family, TM<sub>ind</sub> shall be replaced by TM<sub>H</sub>.

DM<sub>base</sub> shall be determined in accordance with the following formula:

$$DM_{base} = MRO_{base} \times B_0 + 25 \text{ kg} + M_{VL}$$

Where,

 $MRO_{base}$ 

is the mass in running order

of the base vehicle as defined in point 3.2.5 of Annex XXI to Regulation (EU) 2017/1151;  $B_0$ is the body mass value of 1,375;  $M_{VL} \\$ is the mass representative of the vehicle load, which means 28 per cent of the maximum vehicle load, where maximum vehicle load is defined as the technically permissible maximum

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mass minus the mass in running order of the base vehicle multiplied by  $B_0$ , minus 25 kg.

The value of  $B_0$  shall be adjusted by 31 October 2021 on the basis of the mass in running order of the incomplete base vehicles for all completed vehicles registered in calendar years 2018, 2019, and 2020, calculated in accordance with the below formulas. The new  $B_0$  value shall apply from 1 January 2022 until 31 December 2024.

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Formula 1:
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Where,

is  $A_i$ the value  $A_{y}$ as calculated in Formula 2 for the relevant calendar year is  $n_i$ the number of incomplete base

> vehicles related to

completed vehicles registered in the calendar year

Formula 2:

,

Where,

 $A_{y}$ 

is the average of the ratio between  $M_{\rm fi}$ and  $M_{bi} \\$ for each of the calendar years 2018 to 2020; is the

mass in

 $M_{\rm fi}$ 

running order of the incomplete base vehicle increased by the default added mass as defined in Section

5 of Annex XII Regulation (EC) No 692/2008;  $M_{bi}$ is the mass in running order of the incomplete base vehicle; is n the number of incomplete base vehicles related completed vehicles registered in the calendar year.

(b) Rolling resistance of the individual vehicle

The rolling resistance of the base vehicle shall be used for the purposes of point 3.2.3.2.2.2 or 3.2.4.1.1.2 of Sub-Annex 7 to Annex XXI to Regulation (EU) 2017/1151.

(c) Frontal area

In the case of an incomplete base vehicle that belongs to a road load matrix family, the manufacturer shall determine the term 'Af' referred to in point 3.2.3.2.2.3 of Sub-Annex 7 to Annex XXI to Regulation (EU) 2017/1151 in accordance with one of the following options:

(i) frontal area of the representative vehicle of the road load matrix family, in m<sup>2</sup>;

- (ii) the mean value of the frontal area of vehicle high and vehicle low of the interpolation family, in m<sup>2</sup>;
- (iii) the frontal area of the vehicle high of the interpolation family, in case the interpolation method is not used, in m<sup>2</sup>.

In the case of an incomplete base vehicle that does not belong to a road load matrix family, the frontal area value of vehicle high of the interpolation family shall be used.

# 1.2.5. Representativeness of the monitoring CO2 value

The Commission shall each year assess the representativeness of the average of the monitoring  $CO_2$  emissions reported by the base vehicle manufacturer as compared to the average of the specific emissions of  $CO_2$  of the related completed vehicles registered in the relevant calendar year. The Commission shall inform the manufacturer of the base vehicle of the divergence found between those values.

In case a divergence by 4 % or more is found during each of two successive calendar years, the Commission shall use the average of the specific emissions of CO<sub>2</sub> of the completed vehicles in the following calendar year to calculate the average specific emissions of CO<sub>2</sub> of the base vehicle manufacturer or the pool in that year.;

# (b) point 2 is replaced by the following:

2. The details referred to in point 1 shall be taken from the certificate of conformity issued by the manufacturer of the relevant light commercial vehicle or be consistent with it. For those details that are not available in the certificate of conformity, details shall be taken from the type approval documentation or from the information reported by the base vehicle manufacturer pursuant to point 1.2.3. Member States shall put the necessary measures in place to ensure adequate accuracy in the monitoring procedure. Where the certificate of conformity specifies both a minimum and a maximum mass for a light commercial vehicle, the Member States shall use only the maximum figure for the purpose of this Regulation. In the case of bi-fuelled vehicles (petrol/gas) the certificates of conformity of which bear specific CO<sub>2</sub> emission figures for both types of fuel, Member States shall use only the figure measured for gas.

- (1) OJ L 111, 25.4.2019, p. 13.
- (2) Commission Regulation (EU) 2017/1151 of 1 June 2017 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 Commission Regulation (EC) No 692/2008 (OJ L 175, 7.7.2017, p. 1).
- (3) Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (OJ L 199, 28.7.2008, p. 1).
- (4) Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles (OJ L 145, 31.5.2011, p. 1).