Commission Regulation (EU) 2017/2400 of 12 December 2017 implementing Regulation (EC) No 595/2009 of the European Parliament and of the Council as regards the determination of the CO2 emissions and fuel consumption of heavy-duty vehicles and amending Directive 2007/46/EC of the European Parliament and of the Council and Commission Regulation (EU) No 582/2011 (Text with EEA relevance)

## CHAPTER 5

#### CONFORMITY OF SIMULATION TOOL OPERATION, INPUT INFORMATION AND INPUT DATA

#### Article 20

# [<sup>F1</sup>Responsibilities of the vehicle manufacturer, the approval authority and the Commission with regard to the conformity of simulation tool operation]

1 The vehicle manufacturer shall take the necessary measures to ensure that the processes set up for the purposes of determining  $CO_2$  emissions and fuel consumption for all the vehicle groups covered by the licence granted pursuant to Article 7 or the extension to the licence pursuant to Article 8(1) continue to be adequate for that purpose.

[<sup>F2</sup>The vehicle manufacturer shall, on a yearly basis, perform the verification testing procedure set out in Annex Xa on a minimum number of vehicles in accordance with point 3 of that Annex. The vehicle manufacturer shall provide, until 31 December of each year and in accordance with point 8 of Annex Xa, a test report to the approval authority for each vehicle tested, shall keep the test reports for a duration of at least 10 years and shall make them available to the Commission and approval authorities of the other Member States upon request.]

2 The approval authority shall perform, four times per year, an assessment as referred to in point 2 of Annex II in order to verify if the processes set up by the manufacturer for the purposes of determining  $CO_2$  emissions and fuel consumption for all the vehicle groups covered by the licence continue to be adequate. The assessment shall also include verification of the selection of the input information and input data and repetition of the simulations performed by the manufacturer,

 $[F^2$ Where a vehicle fails the verification testing procedure set out in Annex Xa, the approval authority shall start an investigation to determine the cause of that failure, in accordance with Annex Xa. As soon as the approval authority determines the cause of the failure, it shall inform the approval authorities of the other Member States thereof.

If the cause of the failure is linked to the operation of the simulation tool, Article 21 shall apply. If the cause of the failure is linked to the certified  $CO_2$  emissions and fuel consumption related properties of components, separate technical units and systems, Article 23 shall apply.

If no irregularities could be found in the certification of components, separate technical units or systems and the operation of the simulation tool, the approval authority shall report the vehicle failure to the Commission. The Commission shall investigate whether the simulation tool or the verification testing procedure set out in Annex Xa has caused **Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

the vehicle to fail and whether an improvement of the simulation tool or the verification testing procedure is necessary.]

#### **Textual Amendments**

- **F1** Substituted by Commission Regulation (EU) 2019/318 of 19 February 2019 amending Regulation (EU) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO2 emissions and fuel consumption of heavy-duty vehicles (Text with EEA relevance).
- **F2** Inserted by Commission Regulation (EU) 2019/318 of 19 February 2019 amending Regulation (EU) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO2 emissions and fuel consumption of heavy-duty vehicles (Text with EEA relevance).

#### Article 21

#### Remedial measures for the conformity of simulation tool operation

1 Where the approval authority finds, pursuant to Article 20(2), that the processes set up by the vehicle manufacturer for the purposes of determining the  $CO_2$  emissions and fuel consumption of the vehicle groups concerned are not in accordance with the licence or with this Regulation or may lead to an incorrect determination of the  $CO_2$  emissions and fuel consumption of the vehicles concerned, the approval authority shall request the manufacturer to submit a plan of remedial measures no later than 30 calendar days after receipt of the request from the approval authority.

Where the vehicle manufacturer demonstrates that further time is necessary for the submission of the plan of remedial measures, an extension of up to 30 calendar days may be granted by the approval authority.

2 The plan of remedial measures shall apply to all vehicle groups which have been identified by the approval authority in its request.

3 The approval authority shall approve or reject the plan of remedial measures within 30 calendar days of its receipt. The approval authority shall notify the manufacturer and all the other Member States of its decision to approve or reject the plan of remedial measures.

The approval authority may require the vehicle manufacturer to issue a new manufacturer's records file, customer information file and certificate of conformity on the basis of a new determination of  $CO_2$  emissions and fuel consumption reflecting the changes implemented in accordance with the approved plan of remedial measures.

4 The manufacturer shall be responsible for the execution of the approved plan of remedial measures.

5 Where the plan of the remedial measures has been rejected by the approval authority, or the approval authority establishes that the remedial measures are not being correctly applied, it shall take the necessary measures to ensure the conformity of simulation tool operation, or withdraw the licence.

#### Article 22

#### Responsibilities of the manufacturer and approval authority with regards to conformity of CO<sub>2</sub> emissions and fuel consumption related properties of components, separate technical units and systems

1 The manufacturer shall take the necessary measures in accordance to Annex X to Directive 2007/46/EC to ensure that the CO<sub>2</sub> emissions and fuel consumption related properties of the components, separate technical units and systems listed in Article 12(1) which have been the subject of certification in accordance with Article 17 do not deviate from the certified values.

Those measures shall also include the following:

- the procedures laid down in Appendix 4 to Annex V as regards engines;
- the procedures laid down in point 7 of Annex VI as regards transmissions;
- the procedures laid down in point 5 and 6 of Annex VII as regards axles;
- the procedures laid down in Appendix 6 to Annex VIII as regards body or trailer air drag;
- the procedures laid down in point 4 of Annex X as regards tyres.

Where  $CO_2$  emissions and fuel consumption related properties of a member of a component family, separate technical unit family or system family have been certified in accordance with Article 15(5), the reference value for the verification of the  $CO_2$  emissions and fuel consumption related properties shall be the one certified for this family member.

Where a deviation from the certified values is identified as a result of the measures referred to in the first and second subparagraphs, the manufacturer shall immediately inform the approval authority thereof.

2 The manufacturer shall provide, on an annual basis, testing reports containing the results of the procedures referred to in the second subparagraph of paragraph 1 to the approval authority which certified the  $CO_2$  emissions and fuel consumption related properties of the component family, separate technical unit family or system family concerned. The manufacturer shall make the test reports available to the Commission upon request.

3 The manufacturer shall ensure that at least one in every 25 procedures referred to in the second subparagraph of paragraph 1, or, with an exception for tyres, at least one procedure per year, relating to a component family, separate technical unit family or system family is supervised by a different approval authority than the one which participated in the certification of  $CO_2$  emissions and fuel consumption related properties of the component family, separate technical unit family or system family concerned pursuant to Article 16.

4 Any approval authority may at any time perform verifications relating to the components, separate technical units and systems at any of the manufacturer's and vehicle manufacturer's facilities in order to verify whether the  $CO_2$  emissions and fuel consumption related properties of those components, separate technical units and systems do not deviate from the certified values.

The manufacturer and the vehicle manufacturer shall provide the approval authority within 15 working days of the approval authority's request with all the relevant documents, samples and other materials in his possession and necessary to perform the verifications relating to a component, separate technical unit or system.

**Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

#### Article 23

## Remedial measures for the conformity of CO<sub>2</sub> emissions and fuel consumption related properties of components, separate technical units and systems

 $[^{F1}1]$  Where the approval authority finds, pursuant to Articles 20 and 22, that the measures taken by the manufacturer to ensure that the CO<sub>2</sub> emissions and fuel consumption related properties of the components, separate technical units and systems listed in Article 12(1) and which have been the subject of certification in accordance with Article 17 do not deviate from the certified values are not adequate, the approval authority shall request the manufacturer to submit a plan of remedial measures no later than 30 calendar days after receipt of the request from the approval authority.]

Where the manufacturer demonstrates that further time is necessary for the submission of the plan of remedial measures, an extension of up to 30 calendar days may be granted by the approval authority.

2 The plan of remedial measures shall apply to all the component families, separate technical unit families or system families which have been identified by the approval authority in its request.

3 The approval authority shall approve or reject the plan of remedial measures within 30 calendar days of its receipt. The approval authority shall notify the manufacturer and all the other Member States of its decision to approve or reject the plan of remedial measures.

The approval authority may require the vehicle manufacturers who installed the components, separate technical units and systems concerned in their vehicles to issue a new manufacturer's records file, customers information file and certificate of conformity on the basis of the  $CO_2$  emissions and fuel consumption related properties of those components, separate technical units and systems obtained by means of the measures referred to in Article 22(1).

4 The manufacturer shall be responsible for the execution of the approved plan of remedial measures.

5 The manufacturer shall keep a record of every component, separate technical unit or system recalled and repaired or modified and of the workshop which performed the repair. The approval authority shall have access to those records on request during the execution of the plan of the remedial measures and for a period of 5 years after the completion of its execution.

6 Where the plan of remedial measures has been rejected by the approval authority, or the approval authority establishes that the remedial measures are not being correctly applied, it shall take the necessary measures to ensure the conformity of  $CO_2$  emissions and fuel consumption related properties of the component family, separate technical unit family and system family concerned, or withdraw the certificate on  $CO_2$  emissions and fuel consumption related properties.

### **Textual Amendments**

**F1** Substituted by Commission Regulation (EU) 2019/318 of 19 February 2019 amending Regulation (EU) 2017/2400 and Directive 2007/46/EC of the European Parliament and of the Council as regards the determination of the CO2 emissions and fuel consumption of heavy-duty vehicles (Text with EEA relevance).

Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) 2017/2400. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. View outstanding changes Changes and effects yet to be applied to the whole legislation item and associated	
_	Signature words omitted by S.I. 2022/1273 reg. 82(18)
_	Annex 5 Appendix 6 point 1.3 substituted by S.I. 2022/1273 reg. 83(4)(b)(i)
_	Annex 5 Appendix 6 point 1.4.1 image substituted by S.I. 2022/1273 reg. 83(4)(b)
	(iii)(aa)
_	Annex 5 Appendix 6 point 1.5.1 image substituted by S.I. 2022/1273 reg. 83(4)(b)
	(iv)(aa)
-	Annex 5 Appendix 4 point 7.4 word substituted by S.I. 2022/1273 reg. 83(4)(a)
-	Annex 5 Appendix 6 point 2.1 word substituted by S.I. 2022/1273 reg. 83(4)(b)(v)
-	Annex 5 Appendix 6 point 1.4.1 words omitted by S.I. 2022/1273 reg. 83(4)(b)(iii)
	(bb)
-	Annex 5 Appendix 6 point 1.5.1 words omitted by S.I. 2022/1273 reg. 83(4)(b)(iv)
-	Annex 5 Appendix 6 point 1.4 words substituted by S.I. 2022/1273 reg. 83(4)(b)(ii)
-	Annex 5 Appendix 6 point 2.1 table words substituted by S.I. 2022/1273 reg. 83(4)
	(b)(vi) Annex 10 Appendix 4 point 1.1 word substituted by S.I. 2022/1273 reg. 83(8)(d)(i)
-	Annex 10 Appendix 1 words substituted by S.I. 2022/12/3 reg. 83(8)(c)
	Annex 10 Appendix 4 point 1.1 table words substituted by S.I. 2022/12/5 feg. 85(8)(C) Annex 10 Appendix 4 point 1.1 table words substituted by S.I. 2022/12/5 feg. 83(8)
	(d)(ii)
_	Annex 7 Appendix 5 point 1.3 substituted by S.I. 2022/1273 reg. 83(6)(c)(i)
_	Annex 7 Appendix 5 point 1.4.1 image substituted by S.I. 2022/1273 reg. 83(6)(c)
	(iii)(aa)
_	Annex 7 Appendix 1s. 1 point 000.5 word substituted by S.I. 2022/1273 reg. 83(6)
	(b)(ii)
-	Annex 7 Appendix 1 words inserted by S.I. 2022/1273 reg. 83(6)(b)(i)(aa)
-	Annex 7 Appendix 1 words omitted by S.I. 2022/1273 reg. 83(6)(b)(i)(bb)
-	Annex 7 Appendix 5 point 1.4.1 words omitted by S.I. 2022/1273 reg. 83(6)(c)(iii)
	(bb)
-	Annex 7 Appendix 5 point 1.4 words substituted by S.I. 2022/1273 reg. 83(6)(c)(ii)
-	Annex 7 Appendix 5 point 2.1 words substituted by S.I. 2022/1273 reg. 83(6)(c)(iv)
-	Annex 7 Appendix 5 point 2.1 table words substituted by S.I. 2022/1273 reg. 83(6)
	(c)(v) Amon $\frac{1}{2}$ substituted by $\frac{1}{2}$ = $\frac{2}{2}$ (2)(2)(1)(2)
-	Annex 8 Appendix 8 point 1.3 substituted by S.I. 2022/1273 reg. 83(7)(d)(i) Annex 8 Appendix 8 point 1.4.1 image substituted by S.I. 2022/1273 reg. 83(7)(d)
-	Annex 8 Appendix 8 point 1.4.1 image substituted by S.I. 2022/1273 reg. 83(7)(d) (iii)(22)
	(iii)(aa) Annex 8 Appendix 4 table 11 word omitted by S.I. 2022/1273 reg. 83(7)(c)(i)
_	Annex 8 Appendix 4 table 11 word omitted by S.I. $2022/1273$ reg. $83(7)(c)(1)$ Annex 8 Appendix 4 table 13 word omitted by S.I. $2022/1273$ reg. $83(7)(c)(1)$
	Annex 8 Appendix 4 table 15 word omitted by S.I. $2022/1273$ reg. $83(7)(c)(i)$ Annex 8 Appendix 4 table 15 word omitted by S.I. $2022/1273$ reg. $83(7)(c)(i)(aa)$
	Annex 8 Appendix 4 table 15 word omitted by S.I. $2022/1273$ reg. $83(7)(c)(ii)(ab)$ Annex 8 Appendix 4 table 15 word omitted by S.I. $2022/1273$ reg. $83(7)(c)(ii)(bb)$
_	Annex 8 Appendix 1s. 1 point 000.6 word substituted by S.I. 2022/12/5 reg. 83(7)
	(b)(ii)
_	Annex 8 Appendix 8 point 2.1 word substituted by S.I. 2022/1273 reg. 83(7)(d)(iv)
-	Annex 8 Appendix 1 words inserted by S.I. 2022/1273 reg. 83(7)(b)(i)(aa)
-	Annex 8 Appendix 1 words omitted by S.I. 2022/1273 reg. 83(7)(b)(i)(b)
-	Annex 8 Appendix 8 point 1.4.1 words omitted by S.I. 2022/1273 reg. 83(7)(d)(iii)
	(bb)
-	Annex 8 Appendix 8 point 1.4 words substituted by S.I. 2022/1273 reg. 83(7)(d)(ii)
-	Annex 8 Appendix 8 point 2.1 table words substituted by S.I. 2022/1273 reg. 83(7)
	(d)(v)

Annex 2 Appendix 2s. 2 point 2 omitted by S.I. 2022/1273 reg. 83(2)(b)(ii) Annex 2 Appendix 2 words inserted by S.I. 2022/1273 reg. 83(2)(b)(i) Annex 6 Appendix 7 point 1.3 substituted by S.I. 2022/1273 reg. 83(5)(e)(i) Annex 6 Appendix 7 point 1.5 image substituted by S.I. 2022/1273 reg. 83(5)(e)(iii) \_ (aa) Annex 6 Appendix 7 point 2.1 word substituted by S.I. 2022/1273 reg. 83(5)(e)(iv) Annex 6 Appendix 1 words omitted by S.I. 2022/1273 reg. 83(5)(c) Annex 6 Appendix 7 point 1.5 words omitted by S.I. 2022/1273 reg. 83(5)(e)(iii)(bb) Annex 6 Appendix 2 point 8 words substituted by S.I. 2022/1273 reg. 83(5)(d) Annex 6 Appendix 3 point 8 words substituted by S.I. 2022/1273 reg. 83(5)(d) Annex 6 Appendix 4 point 8 words substituted by S.I. 2022/1273 reg. 83(5)(d) Annex 6 Appendix 5 point 8 words substituted by S.I. 2022/1273 reg. 83(5)(d) Annex 6 Appendix 7 point 1.4 words substituted by S.I. 2022/1273 reg. 83(5)(e)(ii) Annex 6 Appendix 7 point 2.1 table words substituted by S.I. 2022/1273 reg. 83(5) (e)(v) Art. 3(5) omitted by S.I. 2022/1273 reg. 82(4)(a) Art. 3(16) words substituted by S.I. 2022/1273 reg. 82(4)(b) Art. 3(20) words substituted by S.I. 2022/1273 reg. 82(4)(c) Art. 10(1a) inserted by S.I. 2022/1273 reg. 82(8)(b) \_ Annex 10a para. 3(f) words inserted by S.I. 2022/1273 reg. 83(9)(a) Annex 10a para. 3(f) table words substituted by S.I. 2022/1273 reg. 83(9)(b)(c) Art. 12(8) inserted by S.I. 2022/1273 reg. 82(10) \_