Commission Implementing Regulation (EU) 2018/2043 of 18 December 2018 amending Implementing Regulation (EU) 2017/1153 to clarify the WLTP test conditions and provide for the monitoring of type approval data (Text with EEA relevance)

COMMISSION IMPLEMENTING REGULATION (EU) 2018/2043

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO_2 emissions from light-duty vehicles[(1)], and in particular the first subparagraph of Article 13(7) thereof,

Whereas:

(1) In order to take into account the difference in the level of CO_2 emissions determined under the New European Test Cycle (NEDC) and those determined under the new Worldwide Harmonised Light Vehicle Test Procedure (WLTP), a methodology for correlating the CO_2 emission values has been put in place through Commission Implementing Regulation (EU) 2017/1153[(2)] with regard to passenger cars.

(2) The correlation methodology is to deliver results that ensure that the reduction requirements set out in Regulation (EC) No 443/2009 are of comparable stringency under the old and the new test procedures. Approval authorities and technical services should therefore, together with manufacturers, strive to ensure that WLTP and NEDC tests that are carried out for the purpose of this Regulation are performed under test conditions that are comparable and coherent with the objective of this Regulation.

(3) For that purpose, it is necessary to clarify certain aspects of the WLTP test conditions that should apply for the correlations performed in view of providing WLTP and NEDC monitoring CO_2 emissions data for vehicles newly registered in 2020. Those clarifications should apply without prejudice to the procedure and requirements set out in Commission Regulation (EU) 2017/1151[(3)] and without affecting the validity of any type approvals granted on that basis.

(4) It is also necessary to determine the difference in 2020 between CO_2 emission values declared by the manufacturers for the purpose of the emissions type approval and those measured pursuant to Regulation (EU) 2017/1151. Manufacturers should therefore be required to calculate and report to the Commission the WLTP CO_2 emission values

Changes to legislation: *There are currently no known outstanding effects for the Commission Implementing Regulation (EU) 2018/2043. (See end of Document for details)*

for all new passenger cars registered in the calendar year 2020 using the measurement values for vehicle H and L as input to the interpolation method.

(5) For a limited number of interpolation families, only vehicle H measurement values will be available in 2020. The number of those families should be closely monitored and the Commission should consider excluding those families from the calculation of the 2020 reference data, should there be a significant increase in the number of such families as compared to the 2018 situation.

(6) The transparency in the emissions testing should be improved, and data on the WLTP tests as well as on the correlation results should therefore be made available to the Commission. This will allow the Commission to swiftly identify and address issues and possible inconsistencies relating to the implementation of the procedures. For that reason, the input data matrix should be completed for each WLTP test performed and be transmitted to the Commission in its entirety as part of the correlation tool data exchange. To ensure confidentiality, the input data file should be encrypted in view of the transmission.

(7) The measures provided for in this Regulation are in accordance with the opinion of the Climate Change Committee,

HAS ADOPTED THIS REGULATION:

Article 1

Implementing Regulation (EU) 2017/1153 is amended as follows:

(1) The following Article 7a is added:

Article 7a

Reporting of WLTP measurement results

1 Manufacturers shall calculate the combined CO_2 value for each new passenger car registered in 2020 in accordance with the formula set out in the second subparagraph of paragraph 3.2.3.2.4 of Sub-Annex 7 to Annex XXI to Regulation (EU) 2017/1151, where the terms $M_{CO2\text{-}H}$ and $M_{CO2\text{-}L}$ shall, for the interpolation family concerned, be replaced by the values $M_{CO2,C,5}$ taken from the entries 2.5.1.1.3 (vehicle H) and 2.5.1.2.3. (vehicle L) of the EC type-approval certificate as indicated in the model set out in appendix 4 to Annex I to Regulation (EU) 2017/1151.

Where the combined CO_2 emissions of the individual vehicle are determined by reference to vehicle H only, the manufacturers shall provide the $M_{CO2,C,5}$ value taken from the entry 2.5.1.1.3 (vehicle H) of the EC type approval certificate.

The manufacturers shall submit those CO_2 emission values, together with the $M_{CO2,C,5}$ values used for the calculation, to the Commission at the latest three months following receipt of the notification by the Commission of the provisional data for 2020 by uploading that data on the manufacturer's account in the Business Data Repository of the European Environment Agency.

2 Where the data referred to in paragraph 1 is not submitted within the deadline indicated, the Commission shall take the value recorded in entry 2.5.1.2.3. of the EC

type-approval certificate and consider that value as the combined CO_2 emissions for the purposes of paragraph 1 for all new registered vehicles in the interpolation family for which the type approval certificate was issued, and, where applicable, the value indicated in entry 2.5.1.1.3 for those families where only vehicle H measurements are available.

3 The Commission shall monitor the number of interpolation families for which the CO_2 emissions are determined by reference to vehicle H only for each manufacturer, and shall, in the case of an increase in the number of such families as compared to the situation in 2018, assess the impact of that increase on the calculation referred to in paragraph 1, and where appropriate, exclude those families from that calculation.

(2) Annex I is amended as follows:

(a) The following points 2.2a. and 2.2.b. are inserted:

2.2a. WLTP test conditions

In order for the WLTP test to be considered relevant in accordance with point 2.2 and for the purpose of determining the input data set out in point 2.4, the test conditions set out in Annex XXI to Regulation (EC) No 2017/1151 shall apply, with the following precisions:

(a) The correction of the WLTP test results for CO_2 mass emissions in accordance with Appendix 2 to Sub-Annex 6 to Annex XXI to Regulation (EU) 2017/1151 shall apply to all such test results notwithstanding the provisions in point 3.4.4.(a) of that Appendix;

(b) Without prejudice to the requirements of Regulation (EU) 2017/1151, if the test vehicle is fitted with technologies that influence its CO_2 performance, including but not limited to those referred to in entries 42 to 50 of the input data matrix set out in point 2.4, and which are intended to function during the test, those technologies shall be operating during the vehicle test, regardless of the test procedure applied, i.e. NEDC or WLTP;

(c) If the test vehicle is equipped with automated transmissions, the same driver-selectable mode shall be used, regardless of the test procedure applied. Where the best-case and worst-case modes are used for the WLTP tests in accordance with point 1.2(c) of Appendix 6 to Sub-Annex 8 to Annex XXI to Regulation (EU) 2017/1151, the worst-case mode shall be used as input to the correlation tool as well as for any NEDC physical test;

(d) If the test vehicle is equipped with manual transmissions, the term $n_{min_drive_set}$ shall be as defined by the formula set out in point (k) (3) of paragraph 2 of Sub-Annex 2 to Annex XXI to Regulation (EU) 2017/1151.

With the approval of the approval authority or, where applicable, the technical service, the manufacturer may calculate the gear shifting points differently, provided that this is justified in view of the drivability of the vehicle, and that the additional power safety margin applied in accordance with point 3.4 of Sub-Annex 2 to Annex XXI to Regulation (EU) 2017/1151 does not exceed 20 %.

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The conditions referred to in points (a) to (d) shall apply for the purpose of the correlation performed pursuant to this Regulation, and shall be without prejudice to the provisions laid down in Regulation (EU) 2017/1151 and to type approvals granted pursuant to that Regulation.

2.2b. Applicability of the WLTP test conditions

The precisions referred to in point 2.2a.(a) to (d) shall apply in accordance with the following:

(a) For new vehicle types, from the entry into force of this Regulation;

(b) For existing vehicle types, manufacturers shall, with regard to those vehicle types that cover vehicles placed on the market in 2020, provide the approval authority with evidence on the basis of which the approval authority shall confirm whether the test conditions referred to in points (a) to (d) of point 2.2a. have been met in the WLTP approval tests.

The confirmation shall indicate the interpolation family identifier, and the confirmation with regard to each of the test conditions referred to in points (a) to (d). The approval authority shall issue the confirmation to the manufacturer and shall ensure that the confirmation is recorded and can be made available without delay at the request of the Commission.

Where the approval authority cannot confirm that one or more of the test conditions referred to have been complied with, the manufacturer shall ensure that a new WLTP test, or, where applicable, test series, in accordance with Sub-Annex 6 to Annex XXI to Regulation (EU) 2017/1151 are performed under the supervision of an approval authority or, where applicable, technical service, applying the test conditions set out in point 2.2a.(a) to (d), for the interpolation family in question, including a new correlation in accordance with this Regulation.

The manufacturer may, in the case where only the test condition referred to in point 2.2a.(a) is not met, correct that value in the input matrix without the need for a new WLTP test.

The approval authority or, where applicable, the designated technical service shall record the results of the re-testing or correction and the correlation in accordance with paragraph 5 of Annex I, and the complete correlation file based on the re-testing in-put data shall be transmitted to the Commission in accordance with point 3.1.1.2 by 30 April 2021 at the latest.

(b) point 2.4 is amended as follows:

(i) the following sentence is added to the first paragraph:

The input data matrix shall be filled in for each WLTP test performed.

(ii) Table 1 is amended as follows:

— in entry 56, the text in the column ‘Remarks’ is replaced by the following:

Array: OBD and chassis dynamometer data, 1Hz for OBD and 10Hz for the chassis dynamometer, resolution 0.1 km/h

— in entry 57, the text in column ‘Remarks’ is replaced by the following:

Array: 1Hz. Theoretical calculated gear shift to be provided for vehicle H and L (if applicable)

— in entry 61, the text in the column ‘Remarks’ is replaced by the following:

Array: 1Hz (sampling frequency of the instrument 20Hz), 0.1 A resolution, external measurement device synchronised with the chassis dynamometer

— Entry 67 is replaced by the following:

67	K_i Regenerative Factor multiplicative/ additive for vehicle H and L	—	Appendix 1 to Sub-Annex 6 to Annex XXI to Regulation (EU) 2017/1151	*For vehicles without periodically regenerating systems this value is equal to 1.*

— The following new entries are added:

69	Fuel heating value	kWh/l	Appendix 2 to Sub-Annex 6 to Annex XXI to Regulation (EU) 2017/1151	*Value according to the Table A6.App2/1 in Regulation (EU) 2017/1151*
70	Fuel consumption of WLTP test for vehicle H and L	l/100km	Paragraph 6 of Sub-Annex 7 to Annex XXI to Regulation (EU) 2017/1151	*Non-balanced fuel consumption of Type 1 test*
71	Nominal REESS voltage	V	According to DIN EN 60050-482	*For low voltage battery as*