Commission Implementing Decision (EU) 2018/2079 of 19 December 2018 on the approval of the engine idle coasting function as an innovative technology for reducing CO2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (Text with EEA relevance)

COMMISSION IMPLEMENTING DECISION (EU) 2018/2079

of 19 December 2018

on the approval of the engine idle coasting function as an innovative technology for reducing CO_2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council

(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 Article 12(4) thereof,

Whereas:

(1) The manufacturers Audi AG, BMW AG, FCA Italy S.p.A., Ford Motor Company, Hyundai Motor Europe Technical Center GmbH, JLR Jaguar Land Rover LTD, Opel Automobile GmbH, PSA Peugeot Citroën, Groupe Renault, Robert Bosch GmbH, Toyota Motor Europe NV/SA, Volvo Cars Corporation and Volkswagen AG (the 'applicants') submitted a joint application for the approval of an engine idle coasting function as an eco-innovation on 21 March 2018.

(2) The application has been assessed in accordance with Article 12 of Regulation (EC) No 443/2009 and Commission Implementing Regulation (EU) No 725/2011[(2)].

(3) The application refers to the engine idle coasting function to be used in vehicles of category M_1 with a conventional powertrain (non-hybrid thermal engine). The basic principle of that innovative technology is to decouple the combustion engine from the drivetrain and prevent deceleration caused by engine braking. The function should be automatically activated in the predominant driving mode, which is the mode automatically selected when the vehicle is switched on. Thus coasting can be used to increase the rolling distance of the vehicle in situations where no propulsion or a slow reduction of speed is needed. When 'coasting', the kinetic and potential energy of the vehicle is directly used to overcome driving resistance and, as consequence, to decrease fuel consumption. To obtain less deceleration the engine is decoupled from the drivetrain by opening a clutch. This is done automatically by the control unit of the automatic transmission or by means of an automated clutch in case of a manual gearbox. During the coasting phases the engine is running at idle speed.

(4) By Implementing Decisions (EU) 2015/1132[3] and (EU) 2017/1402[4], the Commission approved applications by, respectively, Porsche AG concerning a coasting function intended for use exclusively in Porsche S-segment vehicles of category M_1 (sport coupé) and by BMW AG concerning an engine idle coasting function intended for use exclusively in BMW vehicles of category M_1 with a conventional powertrain and automatic transmission. The engine idle coasting function which is the subject of the current applications is intended for use in any vehicle of category M_1 with a conventional powertrain and an automatic or manual transmission.

(5) The applicants have provided a methodology for testing the CO_2 reductions from the use of the engine idle coasting function, which includes a modified NEDC test cycle to offer the possibility for the vehicle to coast. In order to determine the CO_2 savings achieved, the vehicle fitted with the engine idle coasting function should be compared with a baseline vehicle where the coasting function is not installed, not available in the predominant driving mode or disabled for testing purposes. In order to achieve a robust comparison the baseline vehicle should be tested on the standard NEDC under hot start conditions, while the modified conditions applicable for the vehicle equipped with the eco-innovation should be taken into account by a conversion factor being applied for the calculation of the CO_2 savings. It is considered appropriate to maintain the conversion factor at the value of 0,960 in line with the conversion factor set out in Implementing Decisions (EU) 2015/1132 and (EU) 2017/1402.

(6) A key element in determining the CO_2 savings is the proportion of the distance travelled by the vehicle over which the coasting function is activated, taking into account that the coasting function may be deactivated in other driving modes than the predominant driving mode. In order to take into account the diversity of the vehicles on the market, it is considered appropriate to establish a usage factor that is representative of the rate of activation of the technology for a wide range of vehicles in real world conditions. Based on data provided by the applicants, it is clear that the activation of the engine idle coasting technology is dependent of certain speed limits that may vary between different vehicles. Based on the database provided, it is appropriate to consider the coasting function to be active at speeds above 15 km/h.

(7) The information provided in the application demonstrates that the criteria referred to in Article 12 of Regulation (EC) No 443/2009 and the conditions referred to in Articles 2 and 4 of Implementing Regulation (EU) No 725/2011 have been met for a range of vehicles of category M_1 with a conventional powertrain equipped with automatic or manual transmissions. Moreover, the application is supported by verification reports established by independent and certified bodies in accordance with Article 7 of Implementing Regulation (EU) No 725/2011.

(8) Based on the information provided with the current joint application, and taking into account the experience gained from the assessment of the application on the approval of the Porsche AG coasting function in the framework of Implementing Decision (EU) 2015/1132, from the assessment of the application on the approval of the BMW AG engine idle coasting function in the framework of Implementing Decision (EU) 2017/1402, and from an internal study evaluating the relative coasting

distance, usage factors and CO_2 savings for the coasting technology[(5)], it has been satisfactorily demonstrated that the engine idle coasting function meets the criteria referred to in Article 12 of Regulation (EC) No 443/2009 and that it can provide a reduction in CO_2 emissions of at least 1 g CO_2/km in accordance with Article 9 of Implementing Regulation (EU) No 725/2011 for vehicles of category M_1 with a conventional powertrain. It is therefore for the type approval authority to verify that the 1 gCO_2/km threshold referred to in Article 9 of Implementing Regulation (EU) No 725/2011 is met and to certify the actual CO_2 savings for vehicle versions of category M_1 fitted with the engine idle coasting function.

(9) Against that background, the Commission finds that no objections should be raised as regards the approval of the innovative technology in question.

(10) Any manufacturer should, in order to have the CO_2 savings from the engine idle coasting function certified, provide a verification report from an independent and certified body confirming the compliance of the fitted vehicle with the conditions specified in this Decision together with the application for certification to the type approval authority.

(11) If the type approval authority finds that the engine idle coasting function does not satisfy the conditions for certification, the application for certification of the savings should be rejected.

(12) This Decision should apply in relation to the test procedure referred to in Annex XII to Commission Regulation (EC) No 692/2008[(6)]. With effect from 1 January 2021, innovative technologies are to be assessed in relation to the test procedure laid down in Commission Implementing Regulation (EU) 2017/1151[(7)]. This decision shall apply for the calculation of the average specific emissions of a manufacturer until and including the 2020 calendar year.

(13) For the purposes of determining the general eco-innovation code to be used in the relevant type approval documents in accordance with Annexes I, VIII and IX to Directive 2007/46/EC of the European Parliament and of the Council[(8)], the individual code to be used for the innovative technology should be specified,

HAS ADOPTED THIS DECISION:

(**1**) OJ L 140, 5.6.2009, p. 1.

(**2**) Commission Implementing Regulation (EU) No 725/2011of 25 July 2011 establishing a procedure for the approval and certification of innovative technologies for reducing CO_2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 194, 26.7.2011, p. 19).

(**3**) Commission Implementing Decision (EU) 2015/1132 of 10 July 2015 on the approval of the Porsche AG coasting function as an innovative technology for reducing CO_2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 184, 11.7.2015, p. 22).

(**4**) Commission Implementing Decision (EU) 2017/1402 of 28 July 2017 on the approval of the BMW AG engine idle coasting function as an innovative technology for reducing CO_2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 199, 29.7.2017, p. 14).

(**5**) 'Evaluation of the relative coasting distance, usage factors and CO_2 savings for the coasting technology', a study by Directorate-General for Climate Action of the European Commission, https://publications.europa.eu/en/publication-detail/-/publication/9673ca61-9abc-11e8-a408-01aa75ed71a1/language-en
The report is based on specific real driving testing conditions and vehicles without the coasting function installed. The results are only representative of the coasting technology potential under specific conditions and can only be considered as a supporting document.

(**6**) 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).

(**7**) 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).

(**8**) Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive) (OJ L 263, 9.10.2007, p. 1).

Changes to legislation:
There are currently no known outstanding effects for the Commission Implementing Decision (EU) 2018/2079, Introductory Text.