Commission Delegated Regulation (EU) No 134/2014 of 16 December 2013 supplementing Regulation (EU) No 168/2013 of the European Parliament and of the Council with regard to environmental and propulsion unit performance requirements and amending Annex V thereof (Text with EEA relevance)

CHAPTER I

SUBJECT MATTER AND DEFINITIONS

Article 2

Definitions

The definitions of Regulation (EU) No 168/2013 shall apply. In addition, the following definitions shall apply:

- (1) 'WMTC stage 1' refers to the World harmonised Motorcycle Test Cycle laid down in UNECE Global Technical Regulation No 2⁽¹⁾ used as alternative type I emission test cycle to the European Driving Cycle as of 2006 for category L3e motorcycle types;
- (2) 'WMTC stage 2' refers to the World harmonised Motorcycle Test Cycle laid down in the amended UNECE Global Technical Regulation No 2⁽²⁾ which is used as compulsory type I emission test cycle in the approval of Euro 4 compliant (sub-)categories L3e, L4e, L5e-A and L7e-A vehicles;
- (3) 'WMTC stage 3' refers to the revised WMTC referred to in Annex VI(A) of Regulation (EU) No 168/2013 and is equal to the World harmonised Motorcycle Test Cycle laid down in the amended UNECE Global Technical Regulation No 2⁽³⁾ and adapted for vehicles with a low maximum design vehicle speed, which is used as the compulsory type I emission test cycle in the approval of Euro 5 compliant L-category vehicles;
- (4) 'maximum design vehicle speed' means the maximum speed of the vehicle determined in accordance with Article 15 of this Regulation;
- (5) 'exhaust emissions' means tailpipe emissions of gaseous pollutants and particulate matter;
- (6) 'particulate filter' means a filtering device fitted in the exhaust system of a vehicle to reduce particulate matter from the exhaust flow;
- (7) 'properly maintained and used' means that when selecting a test vehicle it satisfies the criteria with regard to a good level of maintenance and normal use according to the recommendations of the vehicle manufacturer for acceptance of such a test vehicle;
- (8) 'fuel requirement' by the engine means the type of fuel normally used by the engine:
 - (a) petrol (E5);
 - (b) liquefied petroleum gas (LPG);
 - (c) NG/biomethane (natural gas);

- (d) either petrol (E5) or LPG;
- (e) either petrol (E5) or NG/biomethane;
- (f) diesel fuel (B5);
- (g) mixture of ethanol (E85) and petrol (E5) (flex fuel);
- (h) mixture of biodiesel and diesel (B5) (flex fuel);
- (i) hydrogen (H_2) or a mixture (H_2NG) of NG/biomethane and hydrogen;
- (j) either petrol (E5) or hydrogen (bi-fuel);
- (9) 'environmental performance type-approval' of a vehicle means the approval of a vehicle type, variant or version with regard to the following conditions:
 - (a) complying with Parts A and B of Annex V to Regulation (EU) No 168/2013;
 - (b) falling into one propulsion family according to the criteria set out in Annex XI;
- (10) 'vehicle type with regard to environmental performance' means a set of L-category vehicles which do not differ in the following:
 - (a) the equivalent inertia determined in relation to the reference mass, in accordance with Appendices 5, 7 or 8 to Annex II;
 - (b) the propulsion characteristics set out in Annex XI regarding propulsion family;
- (11) 'periodically regenerating system' means a pollution control device such as a catalytic converter, particulate filter or any other pollution control device that requires a periodical regeneration process in less than 4 000 km of normal vehicle operation;
- (12) 'alternative fuel vehicle' means a vehicle designed to run on at least one type of fuel that is either gaseous at atmospheric temperature and pressure, or substantially non-mineral oil derived;
- (13) 'flex fuel H₂NG vehicle' means a flex fuel vehicle designed to run on different mixtures of hydrogen and natural gas or biomethane;
- (14) 'parent vehicle' means a vehicle that is representative of a propulsion family set out in Annex XI;
- (15) 'pollution-control device type' means a category of pollution-control devices that are used to control pollutant emissions and that do not differ in their essential environmental performance and design characteristics;
- (16) 'catalytic converter' means an emission pollution-control device which converts toxic by-products of combustion in the [^{F1}exhaust] of an engine to less toxic substances by means of catalysed chemical reactions;
- (17) 'catalytic converter type' means a category of catalytic converters that do not differ as regards the following:
 - (a) number of coated substrates, structure and material;

Changes to legislation: There are currently no known outstanding effects for the Commission Delegated Regulation (EU) No 134/2014, Article 2. (See end of Document for details)

- (b) type of catalytic activity (oxidising, three-way, or of another type of catalytic activity);
- (c) volume, ratio of frontal area and substrate length;
- (d) catalytic converter material content;
- (e) catalytic converter material ratio;
- (f) cell density;
- (g) dimensions and shape;
- (h) thermal protection;
- (i) an inseparable exhaust manifold, catalytic converter and muffler integrated in the exhaust system of a vehicle or separable exhaust system units that can be replaced;
- (18) 'reference mass' means the mass in running order of the L-category vehicle determined in accordance with Article 5 of Regulation (EU) No 168/2013 increased with the mass of the driver (75 kg) and if applicable plus the mass of the propulsion battery;
- (19) 'drive train' means the part of the powertrain downstream of the output of the propulsion unit(s) that consists if applicable of the torque converter clutches, the transmission and its control, either a drive shaft or belt drive or chain drive, the differentials, the final drive, and the driven wheel tyre (radius);
- (20) 'stop-start system' means automatic stop and start of the propulsion unit to reduce the amount of idling, thereby reducing fuel consumption, pollutant and CO₂ emissions of the vehicle;
- (21) 'powertrain software' means a set of algorithms concerned with the operation of data processing in powertrain control units, propulsion control units or drive-train control units, containing an ordered sequence of instructions that change the state of the control units;
- (22) 'powertrain calibration' means the application of a specific set of data maps and parameters used by the control unit's software to tune the vehicle's powertrain, propulsion or drive train unit(s)'s control;
- (23) 'powertrain control unit' means a combined control unit of combustion engine(s), electric traction motors or drive train unit systems including the transmission or the clutch;
- (24) 'engine control unit' means the on-board computer that partly or entirely controls the engine or engines of the vehicle;
- (25) 'drive train control unit' means the on-board computer that partly or entirely controls the drive train of the vehicle;
- (26) 'sensor' means a converter that measures a physical quantity or state and converts it into an electric signal that is used as input to a control unit;
- (27) 'actuator' means a converter of an output signal from a control unit into motion, heat or other physical state in order to control the powertrain, engine(s) or drive train;

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- (28) 'carburettor' means a device that blends fuel and air into a mixture that can be combusted in a combustion engine;
- (29) 'scavenging port' means a connector between crankcase and combustion chamber of a two-stroke engine through which the fresh charge of air, fuel and lubrication oil mixture enters the combustion chamber;
- (30) 'air intake system' means a system composed of components allowing the fresh-air charge or air-fuel mixture to enter the engine and includes, if fitted, the air filter, intake pipes, resonator(s), the throttle body and the intake manifold of an engine;
- (31) 'turbocharger' means an exhaust gas turbine-powered centrifugal compressor boosting the amount of air charge into the combustion engine, thereby increasing propulsion unit performance;
- (32) 'super-charger' means an intake air compressor used for forced induction of a combustion engine, thereby increasing propulsion unit performance;
- (33) 'fuel cell' means a converter of chemical energy from hydrogen into electric energy for propulsion of the vehicle;
- (34) 'crankcase' means the spaces in or external to an engine which are connected to the oil sump by internal or external ducts through which gases and vapour can escape;
- (35) 'permeability test' means testing of the losses through the walls of the non-metallic fuel storage and preconditioning the non-metallic fuel storage material prior to fuel storage testing in accordance with Number C8 of Annex II to Regulation (EU) No 168/2013;
- (36) 'permeation' means the losses through the walls of the fuel storage and delivery systems, which is generally tested by determination of the weight losses;
- (37) 'evaporation' means the breathing losses from the fuel storage, fuel delivery system or other sources through which hydrocarbons breathe into the atmosphere;
- (38) 'mileage accumulation' means a representative test vehicle or a fleet of representative test vehicles driving a predefined distance as set out in points (a) or (b) of Article 23(3) to Regulation (EU) No 168/2013 in accordance with the test requirements of Annex VI to this Regulation;
- (39) 'electric powertrain' means a system consisting of one or more electric energy storage devices such as batteries, electromechanical flywheels, super capacitors or other, one or more electric power conditioning devices and one or more electric machines that convert stored electric energy to mechanical energy delivered at the wheels for propulsion of the vehicle;
- (40) 'electric range', means the distance that vehicles powered by an electric powertrain only or by a hybrid electric powertrain with off-vehicle charging can drive electrically on one fully charged battery or other electric energy storage device as measured in accordance with the procedure set out in Appendix 3.3. to Annex VII;
- (41) 'OVC range' means the total distance covered during complete combined cycles run until the energy imparted by external charging of the battery (or other electric energy storage device) is depleted, as measured in accordance with the procedure described in Appendix 3.3. to Annex VII;

- (42) '[^{F1}maximum thirty minutes speed' of a vehicle means the maximum achievable vehicle speed measured during 30 minutes as a result of the 30 minute power set out in UNECE regulation No 85⁽⁴⁾;]
- (43) 'propulsion unit performance type-approval' of a vehicle means the approval of a vehicle type, variant or version with regard to the performance of the propulsion units as regards the following conditions:
 - (a) the maximum design vehicle speed(s);
 - (b) the maximum continuous rated torque or maximum net torque;
 - (c) the maximum continuous rated power or the maximum net power;
 - (d) the maximum total torque and power in the case of a hybrid application.
- (44) 'propulsion type' means the propulsion units whose characteristics do not differ in any fundamental respect as regards maximum design vehicle speed, maximum net power, maximum continuous rated power and maximum torque;
- (45) 'net power' means the power available on the test bench at the end of the crankshaft or equivalent component of the propulsion unit at the rotation speeds measured by the manufacturer at type-approval, together with the accessories listed in Tables Ap2.1-1 or Ap2.2-1 of Appendix 2 of Annex X, and taking into account the efficiency of the gearbox where the net power can only be measured with the gearbox fitted to the propulsion;
- (46) 'maximum net power' means the maximum net power output from propulsion units that include one or more combustion engines, under full engine load operation;
- (47) 'maximum torque' means the maximum torque value measured under full engine load operation;
- (48) 'accessories' means all apparatus and devices listed in Table Ap2.1-1 or Ap2.2-1 of Annex X.

Textual Amendments

F1 Substituted by Commission Delegated Regulation (EU) 2016/1824 of 14 July 2016 amending Delegated Regulation (EU) No 3/2014, Delegated Regulation (EU) No 44/2014 and Delegated Regulation (EU) No 134/2014 with regard, respectively, to vehicle functional safety requirements, to vehicle construction and general requirements and to environmental and propulsion unit performance requirements (Text with EEA relevance). Changes to legislation: There are currently no known outstanding effects for the Commission Delegated Regulation (EU) No 134/2014, Article 2. (See end of Document for details)

- (1) 'Measurement procedure for two-wheel motorcycles equipped with a positive or compression ignition engine with regard to the emissions of gaseous pollutants, CO₂ emissions and fuel consumption (UN document reference ECE/TRANS/180/Add2e of 30 August 2005)' including amendment 1 (UNECE document reference ECE/TRANS/180a2a1e of 29 January 2008).
- (2) The WMTC stage 2 is equal to the WMTC stage 1 amended by corrigendum 2 of addendum 2 (ECE/TRANS/180a2c2e of 9 September 2009) and corrigendum 1 of amendment 1 (ECE/TRANS/180a2a1c1e of 9 September 2009).
- (3) In addition, the corrigenda and amendments identified in the environmental effect study referred to in Article 23 of Regulation (EU) No 168/2013 will be taken into account, as well as corrigenda and amendments proposed and adopted by UNECE WP29 as continuous improvement of the worldharmonised test cycle for L-category vehicles.
- (4) [^{F1}OJ L 326, 24.11.2006, p. 55.]

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Changes to legislation:

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