## Proposal for amendments to ECE/TRANS/WP.29/GRPE/2019/8 and to the 06 and 07 series of amendments to UN Regulation No. 83 (Emissions of M1 and N1 vehicles)

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) to:

- a) correct errors in Working Paper 2019.08, and
- b) expand 2019.08 to add clarity in the special provisions, and
- c) resolve a current contradiction of requirements concerning the provision of SCR reagent consumption data via the serial port of the standard diagnostic connector.

## I. Proposal

a) As a correction of Working Paper 2019.08, Amend the key to Annex 3, Table A3/1, to read:

## "Emissions standard key

- A Emission requirements according to the limits in Table 1 of paragraph 5.3.1.4. of this Regulation, but allowing **complying with** the preliminary values for particulate numbers for PI vehicles as detailed in footnote 2 to that table **and using any applicable reference fuel**;
- B Emission requirements according to the limits in Table 1 of paragraph 5.3.1.4. of this Regulation, including **complying with** the final particulate number standards for PI vehicles **in the table without reference to footnote 2** and use of E10 and B7 reference fuel (where applicable)."
- b) As an expansion of the proposal contained in 2019.08,

Amend Paragraph 12.2., delete the existing papagraphs 12.2.1., 12.2.2., 12.2.3. and 12.2.4. and insert a new paragraph 12.2.1. to read:

- "12.2. New type Latest level of approvals
- 12.2.1. From the entry into force of this supplement [number to be inserted] the approval characters ZD, ZE and ZF shall be considered to be the latest level for the purposes of mutual recognition for their respective vehicle categories.
- 12.2.1. Contracting Parties applying this Regulation shall, from the 1 September 2014 for vehicles of category M or N1 (Class I) and 1 September 2015 for vehicles of category N1 (Classes II or III) and category N2, grant an ECE approval to new vehicle types only if they comply with:
  - (a) The limits for the Type I test in Table 1 of paragraph 5.3.1.4. of this Regulation; and

- (b) The Preliminary OBD threshold limits in Table A11/2 of paragraph 3.3.2.2. of Annex 11 to this Regulation.
- 12.2.2. Contracting Parties applying this Regulation shall, from the 1 September 2015 for vehicles of category M or N1 (Class I) and 1 September 2016 for vehicles of category N1 (Classes II or III) and category N2, grant an ECE approval to new vehicles only if they comply with:
  - (a) The limits for the Type I test in Table 1 in paragraph 5.3.1.4.; and
  - (b) The preliminary OBD threshold limits in Table A11/2 of paragraph 3.3.2.2. of Annex 11 to this Regulation.
- 12.2.3. Contracting Parties applying this Regulation shall, from the 1 September 2017 for vehicles of category M or N1 (Class I) and 1 September 2018 for vehicles of category N1 (Classes II or III) and category N2, grant an ECE approval to new vehicle types only if they comply with:
  - (a) The limits for the Type I test in Table 1 of paragraph 5.3.1.4.; and
  - (b) The final OBD threshold limits in Table A11/1 of paragraph 3.3.2.1. of Annex 11 to this Regulation.
- 12.2.4. Contracting Parties applying this Regulation shall, from the 1 September 2018 for vehicles of category M or N1 (Class I) and 1 September 2019 for vehicles of category N1 (Classes II or III) and category N2, grant an ECE approval to new vehicles only if they comply with:
  - (a) The limits for the Type I test in Table 1 of paragraph 5.3.1.4.; and
  - (b) The final OBD threshold limits in Table A11/1 of paragraph 3.3.2.1. of Annex 11 to this Regulation.

Amend Paragraph 12.3.1. to read

- 12.3.1. Contracting Parties applying this Regulation may continue to grant approvals to those vehicles which comply with any previous series of amendments, or to any level of this Regulation, provided that the vehicles are intended for sale or for export to countries that apply the relating requirements in their national legislations. Any level of this regulation shall be understood to mean any approval character in Table A3/1, regardless of the applicability of the OBD standards."
- c) As an amendment to Regulation 83.06 and .07,

Amend Appendix 6, paragraph 5.2. to read:

"5.2. Average reagent consumption and average demanded reagent consumption by the engine system shall be available via the serial port of the standard diagnostic connector. Data shall be available over the previous complete 2,400 km period of vehicle operation or at the request of the manufacturer in accordance with the standard listed in paragraph 6.5.3.2. (a) of Annex 11, Appendix 1."

## II. Justification

1. The existing text of the Regulation requires a general compliance with ISO 15031-5 or SAE J1979 for the transmission of data via the serial port of the standard diagnostic connecter. These standards however only foresee the provision of this average reagent

- consumption over a period of 48 hours of vehicle operation or 15 litres of consumption whichever is the longer.
- 2. It is therefore not possible to be compliant with both the content of paragraph 5.2. and the demanded standards.
- 3. The insertion of the proposed text would permit compliance with the demanded standards whilst protecting the approvals (and approvability) of specifications designed for compliance with the requirements of this paragraph.
- 4. Attempts are being considered to amend the SAE standard (and thus automatically the ISO) which would also make current EU and UN-ECE vehicles compliant worldwide but this is a parallel action rather than an alternative.

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