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 transitional and 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,

As an amendment to Regulation 83.07

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,

Insert a new paragraph 12.2.5. to read:

12.2.5. 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."

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 also be understood to mean any approval character in Table A3/1."
- 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.
- 5. The footnotes to the table of test requirements and the table of emissions limits are causing inflexibility in the recognition of some of the approval levels in the series of amendments 07.
- 6. These footnotes were introduced correctly to protect the EU from having to accept vehicle approvals which were not compliant with local legislation.
- 7. However:
 - (a) The EU is currently not subject to mutual recognition in UN Regulation No. 83 due to the WLTP transitional provisions
 - (b) This working paper, if adopted at GRPE 78 in January 2019 would proceed to WP.29 in June of 2019 and would not enter into force before September 1st 2019, after which time the approval codes being amended will no longer be valid for first registration of vehicles in the EU. 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.
- 8. These amendments provide the flexibility for contracting parties to issue approvals to different levels within the 07 series of amendments by defining levels within the Table of approval characters in Table A3/1.
- 9. Only the final emissions and OBD standards would be subjected to mutual recognition. By default, without notification on the part of the contracting party, the final emissions and OBD standards would apply. However, should a contracting party wish to accept other levels of emissions standards and OBD standards within the 07 series of amendments then they can elect to do so. Type approval authorities can differentiate between the implementing stage (different levels) of the 07 series of amendments through compliance with Schedule 4 of the 1958 agreement (see informal document 78-06)

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