26 July 2017

## Agreement

Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions\*

(Revision 2, including the amendments which entered into force on 16 October 1995)

Addendum 82 – Regulation No. 83

**Revision 5 – Amendment 4** 

Supplement 4 to the 07 series of amendments - Date of entry into force: 22 June 2017

## Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements

This document is meant purely as documentation tool. The authentic and legal binding texts is: ECE/TRANS/WP.29/2016/109.



**UNITED NATIONS** 

<sup>\*</sup> Former title of the Agreement: Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958.

Paragraph 7.1.4.1., amend to read:

- "7.1.4.1. Identical parameters for extending approval are:
  - Engine:
  - (a) Combustion process.

Periodically regenerating system (i.e. catalyst, particulate trap):

- (a) Construction (i.e. type of enclosure, type of precious metal, type of substrate, cell density);
- (b) Type and working principle;
- (c) Dosage and additive system;
- (d) Volume  $\pm 10$  per cent;
- (e) Location (temperature ±50 °C at 120 km/h or 5 per cent difference of maximum temperature/pressure)."

Appendix 6, insert a new paragraph 8.1.1., to read:

"8.1.1. The requirement for a driver inducement system shall not apply to vehicles designed and constructed for use by the rescue services, armed services, civil defence, fire services and forces responsible for maintaining public order. Permanent deactivation of the driver inducement system for these vehicles shall only be done by the vehicle manufacturer."

Annex 2, Addendum, item 2.1.1., amend to read:

"2.1.1. For bi fuel vehicles, the type I table shall be repeated for both fuels. For flex fuel vehicles, when the type I test is to be performed on both fuels according to Table A of this Regulation and for vehicles running on LPG or NG/Biomethane, either mono fuel or bi fuel, the table shall be repeated for the different reference gases used in the test, and an additional table shall display the worst results obtained. When applicable, in accordance with paragraphs 3.1.4. and 3.1.5. of Annex 12 to this Regulation, it shall be shown if the results are measured or calculated."

Annex 4a, Appendix 3, paragraph 1.2.12.6., amend to read:

"1.2.12.6. The HFID shall be used with a constant flow (heat exchanger) system to ensure a representative sample, unless compensation for varying CVS volume flow is made."

Water content	% v/v	max 0.05	EN 12937
Appearance at –7 °C		Clear and bright	

"

Annex 10, Type: Petrol (E10) table, amend to read:

## Annex 11,

Paragraph 3.3.3.1., amend to read:

"3.3.3.1. The reduction in the efficiency of the catalytic converter with respect to emissions of NMHC and  $NO_x$ . Manufacturers may monitor the front catalyst alone or in combination with the next catalyst(s) downstream. Each monitored catalyst or catalyst combination shall be considered malfunctioning when the emissions exceed the NMHC or  $NO_x$  threshold limits provided for by paragraph 3.3.2. of this annex."

Paragraph 3.3.3.4., amend to read:

"3.3.3.4. If active on the selected fuel, other emission control system components or systems, or emission related power train components or systems which are connected to a computer, the failure of which may result in tailpipe emissions exceeding the OBD threshold limits given in paragraph 3.3.2. of this annex."

Paragraph 3.3.4.4., amend to read:

"3.3.4.4. Other emission control system components or systems, or emission-related power-train components or systems, which are connected to a computer, the failure of which may result in exhaust emissions exceeding the OBD threshold limits given in paragraph 3.3.2. of this annex. Examples of such systems or components are those for monitoring and control of air mass-flow, air volumetric flow (and temperature), boost pressure and inlet manifold pressure (and relevant sensors to enable these functions to be carried out)."

Paragraphs 3.3.5. to 3.3.5.2., amend to read:

- "3.3.5. Manufacturers may demonstrate to the Type Approval Authority that certain components or systems need not be monitored if, in the event of their total failure or removal, emissions do not exceed the OBD threshold limits given in paragraph 3.3.2. of this annex.
- 3.3.5.1. The following devices should however be monitored for total failure or removal (if removal would cause the applicable emission limits in paragraph 5.3.1.4. of this Regulation to be exceeded):
  - (a) A particulate trap fitted to compression ignition engines as a separate unit or integrated into a combined emission control device;
  - (b) A  $NO_x$  after treatment system fitted to compression ignition engines as a separate unit or integrated into a combined emission control device;
  - (c) A Diesel Oxidation Catalyst (DOC) fitted to compression ignition engines as a separate unit or integrated into a combined emission control device.
- 3.3.5.2. The devices referred to in paragraph 3.3.5.1. of this annex shall also be monitored for any failure that would result in exceeding the applicable OBD threshold limits."