## Proposal for amendments to the 06 series of amendments to Regulation No. 83 (Emissions of $M_1$ and $N_1$ vehicles)

The text reproduced below was prepared by the expert from the European Commission to provide clarifications and correct errors in the 06 series of amendments to Regulation No. 83.

## I. Proposal

Paragraph 7.1.4.1., amend format of text 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)."

Paragraph 1.2.12.6. of Appendix 3 to Annex 4a, 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 CFV or CFO CVS volume flow is made."

Paragraph 7.5.2. of Annex 7, amend to read:

"7.5.2. The inspector may test these vehicles by application of <del>paragraph 8.2.5. of this Regulation paragraph 7.1. of this annex."</del>

Paragraph 3.3.3.1. of Annex 11, amend to read:

"3.3.3.1. The reduction in the efficiency of the catalytic converter with respect to emissions of THC NMHC and NO<sub>x</sub>. 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<sub>x</sub> threshold limits provided for by paragraph 3.3.2. of this annex. By way of derogation the requirement of monitoring the reduction in the efficiency of the catalytic converter with respect to NO<sub>x</sub> emissions shall only apply as from the dates set out in paragraph 12.1.4."

Paragraph 3.3.3.4. of Annex 11, 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. of Annex 11, 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)."

Paragraph 3.3.5. of Annex 11, 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 emission **OBD threshold** limits given in paragraph 3.3.2. of this annex."

## II. Justification

The amendment to the format of the text in paragraph 7.1.4.1. is to improve accuracy and align with the equivalent text in paragraph 2.1.1. of Annex 13. The terms "Engine" and "Periodically regenerating system" should both be sub-headings and not just part of the list of elements, as they are currently in paragraph 7.1.4.1.

The amendment to paragraph 1.2.12.6. of Appendix 3 to Annex 4a to change "CFV or CFO flow" to "CVS volume flow" is correct inaccurate terminology.

The amendment to paragraph 7.5.2. of Annex 7 is to correct a cross-referencing error that remains in the 06 series of amendments.

The amendment to paragraph 3.3.3.1. of Annex 11 is to correct an error. The reference should be to emissions of 'non-methane hydrocarbons' (NMHC) and not 'total hydrocarbons' (THC). It is NMHC for which the limits are provided in the tables in paragraph 3.3.2. of Annex XI.

The amendments to paragraphs 3.3.3.4. and 3.3.4.4. of Annex 11, to replace "limits" with "OBD threshold limits" is to provide absolute clarity that this is a reference to the OBD threshold limits and not the emissions limits in Table 1 in paragraph 5.3.1.4. of the Regulation.

The amendment to paragraph 3.3.5. of Annex 11 is to provide absolute clarity that this is a reference to the OBD threshold limits and not the emissions limits in Table 1 in paragraph 5.3.1.4. of the Regulation.