Proposal for Supplement 11 to the 03 series of amendments to UN Regulation No. 24 (Visible pollutants, measurement of power of C.I. engines (Diesel smoke))

Submitted by the Working Party on Pollution and Energy*

The text reproduced below was adopted by the Working Party on Pollution and Energy (GRPE) at its eighty-ninth session (ECE/TRANS/WP.29/GRPE/89, para. 46). It is based on ECE/TRANS/WP.29/GRPE/2023/18, GRPE-89-18 as amended by Annex IV of the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration at their November 2023 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
Part I, paragraph 8.3.1., amend to read:

"8.3.1. An engine which has not been run in shall be subjected to the test under free acceleration prescribed in annex 5 to this Regulation.

The engine shall be deemed to conform to the approved type if the absorption coefficient determined does not exceed by more than 0.5m⁻¹ the figure shown in the approval mark or document for that engine (see paragraph 8.1. above). On the request of the manufacturer, the reference fuel may be used rather than commercially available fuel."

Annex 4, paragraph 3.2., amend to read:

"3.2. Fuel

The fuel shall be the reference fuel whose specifications are given in Annex 6 to this Regulation.

In the case that testing for Engine Power according to UN Regulation Nos. 85 and/or testing for emission of gaseous and particulate pollutants according to UN Regulation No. 49 is conducted at the same time as testing to this Regulation, at the request of the manufacturer the fuel for testing emission of gaseous and particulate pollutants may be used for testing to this Regulation."

Annex 5, add new paragraph 1.5. to read:

"1.5. Fuel

The fuel used shall be commercially available. In any case of dispute, the fuel shall be the reference fuel whose specifications are given in Annex 6 to this Regulation."

Annex 10, paragraph 9.1., amend to read:

"9.1. The net power indicated by the manufacturer shall be accepted if it does not differ by more than ± 2 per cent for maximum power and more than ± 4 per cent at the other measurement points on the curve with a tolerance of ± 2 per cent for engine speed, or within the engine speed range (X₁ min⁻¹ - 2 per cent) to (X₂ min⁻¹ +2 per cent) (X₁ < X₂) from the values measured by the technical service on the engine submitted for testing."