Proposal for supplement 12 to 03 series of amendments to UN Regulation No.24 (Diesel Smoke)

Submitted by the Task Force on Automated Vehicles Regulations Screening

This document proposes to amend UN Regulation No.24 to allow type approval of vehicles with Automated Driving Systems. Modifications to the existing text of the Regulation indicated in **bold** for new characters and ~~strikethrough~~ for deleted characters.

I.   Proposal

Paragraph 24.3.1., amend to read:

24.3.1.   The emission of visible pollutants by the vehicle type submitted for approval shall be measured by the two methods described in Annexes 4 and 5 to this Regulation, relating respectively to tests at steady speeds and to tests under free acceleration. If performing these tests on a hybrid electric vehicle **or a vehicle equipped with an ADS[1]** requires a special procedure, this shall be detailed in the service manual (or equivalent media). This special procedure shall not require the use of special equipment other than that provided with the vehicle.

Footnote 1, insert new footnote to read:

"[1] As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.8, https://unece.org/transport/vehicle-regulations/wp29/resolutions"

Annex 5, paragraph 2.4., amend to read:

2.4.   If the test is carried out on a vehicle**,** the gear ~~change control~~ shall be ~~set~~ in ~~the~~ neutral ~~position~~ and the drive between engine and gear-box engaged.

Annex 5, paragraph 2.5., amend to read:

2.5.   With the engine idling, the ~~accelerator control~~**engine speed demand** shall be ~~operated~~**increased** quickly, but not violently, so as to obtain maximum delivery from the injection pump. This position shall be maintained until maximum engine speed is reached and the governor comes into action. As soon as this speed is reached the ~~accelerator~~**engine speed demand** shall be ~~released~~**reduced** until the engine resumes its idling speed and the opacimeter reverts to the corresponding conditions.