

Proposal for supplement [3] to 08 series of amendments to UN Regulation No.83 (Emissions of M1 and N1 vehicles)

Submitted by the Task Force on Automated Vehicles Regulations Screening

This document proposes to amend UN Regulation No. 83 to allow type approval of vehicles with Automated Driving Systems. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Annex 1, paragraph 2.6. amend to read:

- "2.6. Mass of the vehicle with bodywork and, in the case of a towing vehicle of category other than M1, with coupling device, if fitted by the manufacturer, in running order, or mass of the chassis or chassis with cab, without bodywork and/or coupling device if the manufacturer does not fit the bodywork and/or coupling device (including liquids, tools, spare wheel, if fitted, and driver, and, for buses and coaches, a crew member if there is a crew seat in the vehicle)⁷ (maximum and minimum for each variant). **For vehicles of category X and category Y the driver's mass shall not be included: "**

Annex 1, paragraph 3.4.3. amend to read:

- " **[Selectable ~~O~~operating]** mode-switch: with/without⁹"

Annex 2, paragraph 1.9.2. amend to read:

- " **[Selectable ~~O~~operating]** mode-switch: with/without¹"

Annex 4, paragraph 5.7.2., amend to read:

- "5.7.2. The following checks shall be carried out: OBD checks (performed before or after the test), ~~visual checks for~~ **lit-indication of malfunction indicator from the OBD system or lamps**, checks on air filter, all drive belts, all fluid levels, radiator and fuel filler cap, all vacuum and fuel system hoses and electrical wiring related to the after-treatment system for integrity; checks on ignition, fuel metering and pollution control device components for maladjustments and/or tampering."

Annex 4, Appendix 1, paragraph 1., amend to read:

- "1. Fuel tank level (full / empty). Is there **an indication active of low fuel level** ~~fuel reserve light ON~~? If yes, refuel before test."

Annex 4, Appendix 1, paragraph 2., amend to read:

- "2. Are there any warnings ~~lights on the instrument panel~~ activated indicating a vehicle or exhaust after-treatment system malfunctioning that cannot be resolved by normal maintenance? (~~M~~**malfunction Indication-Light**, ~~E~~**Engine S**~~ervice~~ **Indication**, etc?) If yes, the vehicle cannot be selected."

Annex 4, Appendix 1, paragraph 1 3., amend to read:

- "3. Is there **an indication active of low reagent level** ~~SCR light on~~ after engine-on? If yes, the ~~AdBlue~~**reagent** should be filled ~~in~~, or the repair executed before the vehicle is used for testing."

Annex 4, Appendix 5, paragraphs 18. and 19., amend to read:

- “18. ~~[Driver-Selectable]~~ mode(s) used during the TA tests (pure ICE) or for charge sustaining test (NOVC-HEV, OVC-HEV, NOVC-FCHV).
19. ~~[Driver-Selectable]~~ mode(s) used during the TA tests for charge depleting test (OVC-HEV).”

Annex 5, paragraphs 2.3. and 2.4. amend to read:

- “2.3. In the case of vehicles with manually-operated or semi-automatic-shift gearboxes, the test shall be carried out with the gear-~~lever~~ in the "neutral" ~~position~~ and with the clutch engaged.
- 2.4. In the case of vehicles with automatic-shift gearboxes, the test shall be carried out with the gear-~~selector~~ in either the "neutral" or the "parking" ~~position~~.”

II. Justification

1. The document introduces changes required to incorporate vehicles with Automated Driving Systems into the existing Regulation.
2. Vehicle categories X and Y are sub-categories which are introduced in R.E.3 by the Task Force on Automated Vehicle Categorisation (TF-AVC) under GRVA and do not have a driver position. The driver mass is therefore not part of the mass in running order.
3. All references to driver actions are taken out of the Regulation and written in a way that it allows for vehicles with and without a driver into the scope of the Regulation.
4. Driver messages and warnings are edited in way that it would be suitable for vehicles with and without a driver.