Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Pollution and Energy

Eighty-sixth session
Geneva, 30 May–2 June 2022

Item 3(a) of the provisional agenda

Light vehicles: UN Regulations Nos. 68 (Measurement of the maximum speed, including electric vehicles), 83 (Emissions of M₁ and N₁ vehicles), 101 (CO₂ emissions/fuel consumption), 103 (Replacement pollution control devices) and 154 (Worldwide harmonized Light vehicles Test Procedures (WLTP))

Proposal for a new Supplement to the 01 series of amendments to UN Regulation No. 101 (CO₂ emissions/fuel consumption)

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers*

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA). This document aims to ensure consistent type-approval test conditions with the introduction of the 08 series of amendments to UN Regulation No. 48. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

---

* In accordance with the programme of work of the Inland Transport Committee for 2022 as outlined in proposed programme budget for 2022 (A/76/6 (Sect.20), para 20.76), 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.
I. Proposal

In the 01 series of amendments

Paragraph 5.1.2., amend to read:

"5.1.2. The daytime running lamps of the vehicle as defined in paragraph 2. of Regulation No. 48 shall be switched on during the test cycle if the vehicle is required to be equipped with daytime running lamps as indicated in paragraph 5.22. of Regulation No. 48. The vehicle tested shall be equipped with the daytime running lamp system that has the highest electrical energy consumption among the daytime running lamp systems, which are fitted by the manufacturer to vehicles in the group represented by the type approved vehicle. The manufacturer shall supply appropriate technical documentation to the Type Approval Authorities in this respect.

The vehicle to be tested shall be equipped with the daytime running lamp system that has the highest electrical energy consumption of the daytime running lamp systems, which are fitted by the manufacturer to vehicles in the group represented by the type-approved vehicle. The manufacturer shall supply appropriate technical documentation to the type-approval authorities in this respect.

The daytime running lamps as defined in paragraph 2. of Regulation No. 48 shall be switched ON during the test cycle."

Add a new paragraph 5.1.2.1. to read:

"5.1.2.1. Where the rear position lamps and other lamps according to paragraph 5.11. of the 08 series of amendments of UN Regulation No. 48 are switched OFF when the ambient light conditions outside the vehicle exceed 7,000 lux (as defined in paragraph 6.19.7.5. of 08 series of amendments of UN Regulation No. 48), a function replicating the ambient light conditions outside the vehicle exceeding 7,000 lux may be incorporated into the vehicle’s dynamometer operation mode."

II. Justification

1. The new 08 series of UN Regulation No. 48 is aiming to introduce the possibility to switch OFF rear position lamps and other lamps when ambient light conditions outside the vehicle are above 7,000 lux in order to avoid unnecessary fuel consumption.

2. The vehicle settings for the dynamometer operation shall be independent of the light conditions in the laboratory. Thus, a trip is proposed to represent ambient light conditions with an illuminance of above 7,000 lux.

3. The text in paragraph 5.1.2. is aligned with modifications done on paragraph 3.2.7. of Annex 4A – Type I test in UN Regulation No. 83.