Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Pollution and Energy

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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 05, 06 and 07 series of amendments to UN Regulation No. 83 (Emissions of M₁ and N₁ vehicles)

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 allow measurement equipment compliant with the technical requirements of UN Regulation No. 154 to be used for test to UN Regulations No. 83 and 101. 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

Annex 4a

Appendix 1, Paragraph 1., amend to read:

"1. Specification

1.1. General requirements

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

1.1.1. The dynamometer shall be capable of simulating road load within one of the following classifications: ..."

Appendix 2, Paragraph 1.2., amend to read:

"1.2. General requirements

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

..."

Appendix 3, Paragraph 1., amend to read:

"1. Specification

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

..."

Appendix 4, Paragraph 1., amend to read:

"1. Specification

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

..."

Appendix 5, Paragraph 1., amend to read:

"1. Specification

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

..."

Appendix 6, Paragraph 1., amend to read:

"1. Object
The method described in this appendix makes it possible to check that the simulated total inertia of the dynamometer is carried out satisfactorily in the running phase of the operating cycle. The manufacturer of the dynamometer shall specify a method for verifying the specifications according to paragraph 3. of this appendix.

In case of the equipment that meets UN Regulation No. 154 requirements, this application may not be required.”

Annex 7

Paragraph 4., amend to read:

"4. Test equipment for evaporative test

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

4.1. Chassis dynamometer

The chassis dynamometer shall meet the requirements of Appendix 1 to Annex 4a to this Regulation.

…"

Appendix 1, Paragraph 1., amend to read:

"1. Calibration frequency and methods

For test and measurement equipment that is compliant with the technical requirements of UN Regulation No. 154 original series or later version, the requirements on the technical equipment described in UN Regulation No. 154 may be followed, in all other cases the following requirements shall apply:

…"

II. Justification

1. For OICA as well, we would like to make the following proposals in consideration of further operational efficiency.

2. In fact, the UN Regulation No. 154 equipment has been updated and regulated based on the UN Regulation No. 83 equipment, an example is shown below,

3. As reference, no modification on UN Regulation No. 101 is necessary since UN Regulation No. 101 refers UN Regulation No. 83 for equipment requirement.

4. Examples of differences in technical requirements between UN Regulations Nos. 83 and 154 can be found in GRPE-85-10