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Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Automated/Autonomous and Connected Vehicles****Eighteenth session**

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Item 8(c) of the provisional agenda

**UN Regulations Nos. 13, 13-H, 139, 140 and UN GTR No. 8:
Clarifications****Proposal for a supplement to the 13 series of amendments to
UN Regulation No. 13 (Heavy Vehicle Braking)****Submitted by the expert from Germany***

The text reproduced below was prepared by the expert from Germany and is based on informal document GRVA-17-17. It is aimed at clarifying provisions of the type-IIA test for the test mass of vehicles authorized to tow trailer(s). The modifications to the existing text of the Regulation are marked in bold for new characters and strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), 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 4, paragraph 1.8.1.2., amend to read:

- “1.8. Type-IIA test (endurance braking performance)
- 1.8.1. Vehicles of the following categories shall be subject to the Type-IIA test:
- 1.8.1.1. Vehicles of category M₃, belonging to Classes II, III or B as defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3).
- 1.8.1.2. Vehicles of category N₃ which are authorized to tow a trailer of category O₄. ~~If the maximum mass exceeds 26 tonnes, the test mass is limited to 26 tonnes or, in the case where the unladen mass exceeds 26 tonnes, this mass is to be taken into account by calculation.~~
- 1.8.1.3. Certain vehicles subject to ADR (see Annex 5).”

Annex 4, paragraph 1.8.2.1., amend to read:

- “1.8.2.1. The performance of the endurance braking system shall be tested at the maximum mass of the vehicle or, **in the case of a motor vehicle authorized to tow a trailer at the maximum mass** of the vehicle combination **but not exceeding 44 tonnes.**
- If the maximum mass of a motor vehicle of category N₃ which is authorized to tow a trailer and which is not subject to ADR (see Annex 5) exceeds 26 tonnes, the test mass of this motor vehicle of category N₃ shall be 26 tonnes. In the case where the unladen mass of this motor vehicle of category N₃ exceeds 26 tonnes, this mass is to be taken into account by calculation.”**

II. Justification

1. Test provisions have been shifted from the scope, paragraph 1.8.1. and its subparagraphs, to the section describing the test conditions, paragraph 1.8.2. and its subparagraphs.
 2. The original text of the regulation, with regard to the mass to be tested, could potentially be misinterpreted.
 3. The endurance brake, braking only the towing vehicle, but not acting on the trailer, must withstand the mass of the full vehicle combination in order to ensure traffic safety. The test therefore needs to cover the mass of the combination, not just the mass of the towing vehicle.
 4. To clarify that, the test mass of vehicles authorized to tow trailer(s) of Category O₄ shall be tested with the mass of the whole combination.
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