

Proposal for a new supplement to UN Regulation No. 13

The text below was prepared by the experts from the Netherlands. The modifications to the existing text of the Regulation are marked in **bold** for new or ~~strike through~~ for deleted characters.

I. Proposal

Paragraph 4.5 of Annex 15., amend to read:

“4.5. TYPE-II **AND TYPE-IIA** TEST (DOWNHILL BEHAVIOUR TEST):

4.5.1. This test is required only if, on the vehicle-type in question, the friction brakes are used for the Type-II **or Type-IIA** test.

4.5.2. Brake linings for power-driven vehicles of ~~category~~ **categories M₃ and N₃** (except for those vehicles required to undergo a Type-IIA test according to paragraph 1.6.4. of Annex 4 to this Regulation) ~~and category N₃, and trailers of category O₄~~ shall be tested according to the procedure set out in paragraph 1.6.1. of Annex 4 to this Regulation.

Brake linings for power-driven vehicles of category M₃, N₃ required to undergo a Type-IIA test according to paragraph 1.6.4. of Annex 4 to this Regulation and only complying with this requirement by application of provisions of par. 1.8.2.5 of Annex 4 to this Regulation, shall be tested following the procedure and requirements of-paragraph 1.8.2.5 (b) of Annex 4 to this Regulation”

II. Justification

1. This amendment is to clarify the need to apply, when relevant, the Type IIA test in Annex 15 for alternative brake lining purposes.

2. During the September 2020 GRVA session document GRVA/2020/36 as modified by informal GRVA-07-73_rev1 was adopted, essentially reflecting the possibility to use, in case of vehicles with regenerative braking possibilities and under certain conditions, for Type IIA endurance test purposes the friction brake as alternative to the regular endurance brake.

3. At the time, the procedure and requirements of Annex 15 on alternative brake lining have not been amended and refer only to the Type 0, I, II and III test but not to the Type IIA test.

4. In case of a manufacturer making use of the above standing Type IIA test applying a certain (‘standard’) brake lining and this manufacturer later on wants to apply an alternative brake lining, it can make use of the existing procedure as described in Annex 15. However, this Annex only refers to the Type O, I, II and III test and not to the Type IIA test.

5. Based on 1.3 of the same Annex 15 it is possible to demand additional tests according to Annex 4 – so also Type IIA - however in such case the test needs to be executed twice so with and standard an alternative brake lining which is double work:

“1.3. The Technical Service responsible for conducting approval tests may at its discretion require comparison of the performance of the brake linings to be carried out in accordance with the relevant provisions contained in Annex 4 to this Regulation.”

6. To overcome such double work and to ensure a level playing field, it is proposed to clarify the need to use the Type IIA test, when relevant, in Annex 15.

7. Finally some minor corrections are proposed to par. 4.5.2. It seems more appropriate to apply the text in brackets (‘except for those vehicles required to undergo a Type-IIA test according to paragraph 1.6.4. of Annex 4 to this Regulation’) to both vehicle categories M₃ and N₃. Category O₄ is proposed to be deleted since there is no type II or IIA test defined for this category.