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World Forum for Harmonization of Vehicle Regulations

Working Party on Brakes and Running Gear

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Geneva, 2-5 February 2010

Item 3(d) of the provisional agenda

**REGULATIONS Nos. 13 AND 13-H
(Braking)**

Clarifications

Proposal for amendments to Regulation No. 13-H

Submitted by the expert from the Netherlands *

The text reproduced below was prepared by the expert from the Netherlands to align the maximum prescribed test speeds in Annex 3 and Annex 6 to Regulation No. 13-H and to lower the risk of the test driver. It is based on informal document No. GRRF-66-04, distributed at the sixty-sixth session of the Working Party on Brakes and Running Gear (GRRF). The modifications to the existing text of the Regulation are marked in bold characters.

* In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance performance of vehicles. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Annex 3, para. 1.2.9., amend to read:

"1.2.9. For vehicles as described in paragraph 1.2.8. above, fitted with an electric regenerative braking system of category A, behaviour tests (**Type-0**) ~~defined in paragraph 1.4.3.1. of this annex~~ shall be carried out **at various speeds, the lowest being equal to 30 per cent of the maximum speed of the vehicle and the highest being equal to 80 per cent of that speed** on a track with a low adhesion coefficient (as defined in paragraph 5.2.2. of Annex 6). **However, if the maximum speed of the vehicle is greater than 150 km/h, the maximum test speed shall be 120 km/h.**"

B. JUSTIFICATION

This document aims at lowering the maximum test speed resulting from the current text of paragraphs 1.2.9., 1.4.3.1. and 2.1.1.(B) of Annex 3 to Regulation-No.-13-H.

For electric vehicles with the motor permanently connected to the wheels and a regenerative braking system of category A (Regenerative Braking Systems are not part of the service braking system), a high speed test of 80% V_{max} (≤ 160 km/h) on a surface with a low adhesion would be necessary.

In Annex 6 (Anti-lock systems) all test speeds on a surface with a low adhesion are limited to 120 km/h. There is no reason to perform the tests resulting from paragraph 1.2.9. at higher speeds. Higher speeds on a surface with a low adhesion endanger the test driver unnecessarily.

Therefore, paragraph 1.2.9. of Annex 3 needs to be amended. As a result of the discussion of the sixty sixth session of GRRF, the erroneous reference to paragraph 1.4.3.1. of Annex 3 has been replaced by the relevant text of paragraph 1.4.3.1 of Annex 4 to Regulation No. 13.

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