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World Forum for Harmonization of Vehicle Regulations

Working Party on Brakes and Running Gear

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Item 3(d) of the provisional agenda

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

Clarifications

Proposal for amendments to Regulation No. 13

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 4 and Annex 13 to Regulation No. 13 and to lower the risk of the test driver. It is based on informal document No. GRRF-66-05-Rev.1, 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 4, para. 1.2.9., amend to read:

"1.2.9. For vehicles as described in paragraph 1.2.8., fitted with an electric regenerative braking system of category A, behaviour tests defined in paragraph 1.4.3.1. of this annex shall be carried out on a track with a low adhesion coefficient (as defined in paragraph 5.2.2. of Annex 13). **However, the maximum test speed shall not exceed the maximum test speed specified in para. 5.3.1. of Annex 13 for a low adhesion surface and the relevant vehicle category.**"

B. JUSTIFICATION

This document aims to lower the maximum test speed resulting from the current text of paragraphs 1.2.9. and 1.4.3.1. of Annex 4 to Regulation No. 13.

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), tests on a surface with a low adhesion would be necessary at various speeds, the highest being equal to 80 per cent of the maximum speed of the vehicle.

In Annex 13 (Anti-lock systems) paragraph. 5.3.1., all test speeds on a surface with a low adhesion are limited from 70 km/h to 120 km/h depending on the vehicle category.

There is no reason to perform the tests in paragraph 1.2.9. at higher speeds. Higher test speeds on a surface with a low adhesion endanger the test driver unnecessarily.

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