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**1958 Agreement – Consideration of draft amendments
to existing Regulations submitted by GRRF**

Proposal for Supplement 2 to the 01 series of amendments to Regulation No. 131 (Advanced Emergency Braking Systems (AEBS))

Submitted by the Working Party on Brakes and Running Gear*

The text reproduced below was adopted by the Working Party on Brakes and Running Gear (GRRF) at its eightieth session (ECE/TRANS/WP.29/GRRF/80, para. 7. It is based on ECE/TRANS/WP.29/GRRF/2015/18 as amended by Annex II to the report and ECE/TRANS/WP.29/GRRF/2013/13. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration at their March 2016 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2014–2018 (ECE/TRANS/240, para. 105 and ECE/TRANS/2014/26, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Introduction of the Regulation, amend to read (including the addition of new references to the existing Footnote 1):

"Introduction

The intention of this Regulation is to establish uniform provisions for Advanced Emergency Braking Systems (AEBS) fitted to motor vehicles of the categories M₂, M₃, N₂ and N₃¹ primarily used under monotonous highway driving conditions.

While, in general, those vehicle categories will benefit from the fitment of an AEBS, there are sub-groups where the benefit is rather uncertain because they are primarily used in other conditions than highway conditions (e.g. buses with standing passengers i.e. Classes I, II and A¹, category G vehicles¹, construction vehicles, etc.). Regardless from the benefit, there are other sub-groups where the installation of AEBS would be technically difficult or not feasible (e.g. position of the sensor on vehicles of category G¹, construction vehicles mainly used in off-road areas and gravel tracks, special purpose vehicles and vehicles with front mounted equipment, etc.). In some cases there may be a possibility of false emergency braking events because of vehicle design constraints.

In addition, systems intended for vehicles not equipped with a pneumatic rear-axle suspension require the integration of advanced sensor technology to take into account the variation of the pitch angle of the vehicle.

The system shall automatically detect a potential forward collision, provide the driver with a warning and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating the severity of a collision in the event that the driver does not respond to the warning.

The system shall only operate in driving situations where braking will avoid or mitigate the severity of an accident, and shall take no action in normal driving situations.

In the case of a failure in the system, the safe operation of the vehicle shall not be endangered.

The system shall provide as a minimum an acoustic or haptic warning, which may also be a sharp deceleration, so that an inattentive driver is made aware of a critical situation.

During any action taken by the system (the warning and emergency braking phases), the driver can, at any time through a conscious action, e.g. by a steering action or an accelerator kick-down, take control and override the system.

The Regulation cannot include all the traffic conditions and infrastructure features in the type-approval process. Actual conditions and features in the real world should not result in false warnings or false braking to the extent that they encourage the driver to switch the system off."

Amend paragraph 5.1.2., to read:

"5.1.2. The effectiveness of AEBS shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by fulfilling the technical requirements and respecting the transitional provisions of Regulation No. 10 by applying:

- (a) The 03 series of amendments for vehicles without a coupling system for charging the Rechargeable Electric Energy Storage System (traction batteries);

- (b) The 04 series of amendments for vehicles with a coupling system for charging the Rechargeable Electric Energy Storage System (traction batteries)."
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