Proposal for amendments to Regulation No. 131

Note: This document is based on ECE/TRANS/WP.29/GRRF/2015/18 proposed by OICA. The modifications introduced by GRRF are marked in red.

I. Proposal

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

0. Introduction (for information)

The intention of this Regulation is to establish uniform provisions for advanced emergency braking systems (AEBS) fitted to motor vehicles of the categories M\textsubscript{2}, M\textsubscript{3}, N\textsubscript{2} and N\textsubscript{3} primarily used under monotonous highway driving conditions.

While, in general, those vehicle categories will benefit from the fitment of an advanced emergency braking system, 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 A\textsuperscript{1}, category G vehicles, 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 G\textsuperscript{1}, construction vehicles mainly used in off-road areas and gravel tracks, and special purpose vehicles and vehicles with front mounted equipment, etc.). In some cases if there may be is a possibility of false emergency braking event because of vehicle design constraints, compliance with mandatory fitment of AEBS should be waived.

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. Contracting Parties wishing to apply this Regulation to these vehicles should provide adequate time for this.

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.\textsuperscript{9}