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### World Forum for Harmonization of Vehicle Regulations

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

# **Proposal for Supplement 1 to Regulation No. 130 (Lane Departure Warning System (LDWS))**

### 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. 6). It is based on ECE/TRANS/WP.29/GRRF/2015/17 as amended. It also contains the text adopted at the seventy-fifth session of GRFF (ECE/TRANS/WP29/GRRF/75 para. 9), based on ECE/TRANS/WP.29/GRRF/2013/13 as amended. 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.

Insert a new introduction, to read:

#### "Introduction

The intention of this Regulation is to establish uniform provisions for Lane Departure Warning Systems (LDWS) fitted to motor vehicles of the categories  $M_2$ ,  $M_3$ ,  $N_2$  and  $N_3^{-1}$  primarily used under highway conditions.

These vehicle categories will benefit from the fitment of a LDWS, especially in the field of monotonous driving situations. The benefit of such system installation is to support a distracted or drowsy driver by warning if the vehicle is unintentionally leaving the lane.

While, in general, those vehicle categories will benefit from the fitment of a LDWS, there are subgroups 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, off-road vehicles<sup>1</sup>, construction vehicles, special purpose vehicles, etc.). Regardless from the benefit, there are other subgroups where the installation of LDWS would be technically difficult (e.g. on vehicles equipped with split windshields, asymmetrical cabs, windshield of high thickness, front hood vehicles, vehicles with front mounted equipment, etc.).

The system shall automatically detect unintentional drift of the vehicle out of its travel lane and warn the driver.

The system shall provide a warning, so that an inattentive driver is made aware of a critical situation.

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 to the extent that they encourage the driver to switch the system off."

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

<sup>&</sup>lt;sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.3, para. 2 www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html