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World Forum for Harmonization of Vehicle Regulations
Working Party on Brakes and Running Gear

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Regulations Nos. 13 and 13-H (Braking) – Electronic stability control

Proposal for amendments to Regulation No. 13 (Heavy vehicle braking)

Submitted by the experts from the International Organization of Motor Vehicle Manufacturers *

The text reproduced below was prepared by the experts from the International Organization of Motor Vehicle Manufacturers (OICA) to improve the wording of document ECE/TRANS/WP.29/GRRF/2011/8 from Japan proposing to mandate vehicle stability function on N3 vehicles with 4 axles. It is based on informal document GRRF-68-06 distributed during the sixty-eighth session of the Working Party on Brakes and Running Gear (GRRF). The modifications to the existing text of the Regulation are marked in bold for new 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 the performance of vehicles. The present document is submitted in conformity with that mandate.
I. Proposal

Paragraph 5.2.1.32., amend to read:

"5.2.1.32. Subject to the provisions of paragraph 12.4. of this Regulation, all vehicles of the following categories shall be equipped with a vehicle stability function:

(a) M₂, M₃, N₂ 12/;
(b) N₃ 12/ having no more than 3 axles;
(c) N₃ 12/ with 4 axles, with a maximum mass not exceeding 25 t and a maximum wheel diameter code not exceeding 19.5.

The vehicle stability function shall include roll-over control and directional control and meet the technical requirements of Annex 21 to this Regulation."

II. Justification

1. OICA welcomes the proposal from Japan to improve road safety by introducing vehicle stability function (EVSC) on certain 4 axle vehicles which are typical for some specific markets e.g. Japan. The target population is light/medium weight N₃ vehicles, which have a low chassis in order to limit the maximum vehicle height to 3.8 m. This is achieved via the use of 4 axles and a limited tyre/wheel height, i.e. wheel diameter code ≤19.5.

2. As this kind of vehicle is typical in some specific markets, the amendment to the regulation should not provoke undesired interferences with the well justified exemption from the EVSC requirement of other N₃ vehicles with 4 axles, for technical reasons in some territories where the Regulation N°13 is in application.

3. This proposal is elaborated to ensure that the amendment only applies to N₃ vehicles with 4 axles where the equipment of EVSC is justified for safety reasons.

4. Some special vehicles equipped with 4 axles, having a maximum mass above 25 tonnes or a wheel diameter code above 19.5 but not falling into the definition of “Special Purpose Vehicles”, e.g. vehicles with fixed piercing machines or chaff-cutters, are not justified to be equipped with EVSC.

5. Other 4 axle vehicles are transformed from 3 axle vehicles in order to limit the maximum permissible axle mass, which is required in certain territories e.g. for passing bridges. In case of EVSC, this transformation of the vehicle would require an adaptation of the EVSC data set for each individual transformation, which is technically very difficult to achieve. All those vehicles have a maximum mass above 25 tonnes or a wheel diameter code above 19.5 and are usually not involved in EVSC relevant accidents.