

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

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.

Within the vehicle categories mentioned above, the following vehicles shall be excluded from the requirement to be equipped with a vehicle stability function:

- a. **Vehicles of category G;**
- b. **Special purpose vehicles;**
- c. **Mobile machinery (a power-driven vehicle which is specifically designed and constructed to perform work and which, because of its construction characteristics, is not suitable for transporting goods or carrying passengers other than equipment and fluids, or operators/crew, necessary for its operation);**
- d. **Hydro-static driven vehicles in which the hydraulic drive system is also used for braking and auxiliary functions;**
- e. **N2 vehicles**
 - **with a gross vehicle mass between 3.5 and 7.5 tonnes, a non-standard low-frame chassis, more than 2 axles and hydraulic transmission, or**
 - **N2 tractors for semi-trailer with a gross vehicle mass (GVM) between 3.5 and 7.5 tonnes;**
- f. **Class I and Class A buses of categories M2 and M3, articulated buses and articulated coaches;**
- g. **Vehicles of Category N converted from vehicles which in their original state have already a braking system type approval which did not require the installation of a vehicle stability function.**

~~12/ Off road vehicles, special purpose vehicles (e.g. mobile plant using non standard vehicle chassis, mobile cranes, hydro static driven vehicles in which the hydraulic drive system is also used for braking and auxiliary functions, N2 vehicles which have all of the following features: a gross vehicle mass between 3.5 and 7.5 tonnes, a non standard low frame chassis, more than 2 axles and hydraulic transmission), Class I and Class A buses of categories M2 and M3, articulated buses and coaches, N2 tractors for semi trailer with a gross vehicle mass (GVM) between 3.5 and 7.5 tonnes, shall be excluded from this requirement.~~

II. Justification






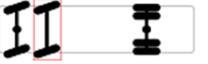
Footnote 12 in Regulation N°13 has in practice led to several discussions between the vehicle manufacturers and the authorities. In many practical cases, the correct interpretation of this footnote is unclear, i.e. the question remained whether a vehicle submitted for type approval is exempted or not from the requirement to be equipped with a vehicle stability function.

For this reason, this proposal aims at clarifying the current list of exemptions set up in current footnote 12. Except for the new item g (converted vehicles), this proposal is just a clarification of the current footnote 12 and does not change the content of the requirements.

GRRF at its 71st session broadly supported a clarification of the wording of Footnote 12.

1. **Vehicles of category G:** this wording aims at replacing the current wording “off-road vehicles”. It is indeed already defined in the RE.3 (document TRANS/WP.29/78/Rev.1 as last amended, paragraph 7 of Annex 7) as “*vehicles of categories M and N satisfying the requirements of this paragraph*” where the requirements are e.g. all-wheel-drive or vehicles with at least 50% of the axles are driven axles, one differential locking mechanism, climbing capabilities, approach, departure and ramp angles, etc. The consequence of such change is an improvement of the clarity of the possible exemptions, in addition to a more consistent approach as there is now a reference to a definition currently existing in the UNECE framework.
2. **Special purpose vehicles:** no change to the current wording.
3. **Mobile machinery:** this wording covers mobile plants, mobile cranes, etc. by proposing a more generic term derived from the definition of mobile machinery in paragraph 16 of article 3 in the Framework Directive (Directive 2007/46/EC).
4. **Hydro-static driven vehicles :** no change to the current wording
5. **N2 vehicles** with some clear conditions:
 - **with a gross vehicle mass between 3.5 and 7.5 tonnes, a non-standard low-frame chassis, more than 2 axles and hydraulic transmission:** per Supplement 5 to the 11 Series of Amendments (document WP29/2010/64) - no change to the current wording.
 - **N2 tractors for semi-trailer with a gross vehicle mass (GVM) between 3.5 and 7.5 tonnes:** no change to the current wording
6. **Class I and Class A buses of categories M2 and M3, articulated buses and coaches:** no change to the current wording, save the clarification that coaches are exempted only when articulated.

7. Vehicles of Category N converted from vehicles which in their original state have already a braking system type approval not requiring being equipped with EVSC

Type	wheelbase (basic) current prod.	wheelbase (new) converted	Problem	ESP (mand.)
70S/80S	18.D20/D26 4x4 BL 	26.D20/D26 6x4/4 BLL 	exp. loss of exemption due to loss of "G"-state*	07/2013 (ECE) 11/2014 (GSR)
73S/90S	35.D20/D26 8x4H-6 BL 	26.D20/D26 6x4H BL 	exp. loss of exemption due to 4-axle veh., no dataset available	07/2013 (ECE) 11/2014 (GSR)
52S/80S	18.D20/D26 4x4 BB 18.D20/D26 4x4 BL 	25.D20/D26 6x4/4 BLB 25.D20/D26 6x4/4 BLL 	exp. loss of exemption due to loss of "G"-state*	07/2013 (ECE) 11/2014 (GSR)

* "AWD"-EVSC (veh. with transfer case) not available