

**Economic and Social Council**Distr.: General
7 December 2012

Original: English

Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on Brakes and Running Gear (GRRF)****Seventy-fourth session**

Geneva, 19-22 February 2013

Item 9(a) of the provisional agenda

Steering Equipment – Regulation No. 79**Proposal for amendments to Regulation No. 79 (Steering equipment for vehicles)****Submitted by the experts from the European Association of Automotive Suppliers and the International Organization of Motor Vehicle Manufacturers***

The text reproduced below was prepared by the experts from the European Association of Automotive Suppliers (CLEPA) and from the International Organization of Motor Vehicle Manufacturers (OICA) to clarify the levels of braking performance requirements for M₁ and N₁ vehicles in Annex 3 of this Regulation. It is based on document GRRF-73-23. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, 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

Annex 3, paragraphs 2. and 3., amend to read (with the addition of a new row in the tables):

- "2. If an energy source failure occurs, service braking performance on the first brake application shall achieve the values given in the table below.

Category	V (km/h)	Service braking (m/s ²)	F (daN)
M ₁	80 100	5.8 6.43	50
M ₂ and M ₃	60	5.0	70
N ₁ ^{1,2}	(i)	80	70
	(ii)	100	50
N ₂ and N ₃	60	5.0	70

3. After any failure in the steering equipment, or the energy supply, it shall be possible after eight full stroke actuations of the service brake control, to achieve at the ninth application, at least the performance prescribed for the secondary (emergency) braking system (see table below).

In the case where secondary performance requiring the use of stored energy is achieved by a separate control, it shall still be possible after eight full stroke actuations of the service brake control to achieve at the ninth application, the residual performance (see table below).

SECONDARY AND RESIDUAL EFFICIENCY

Category	V (km/h)	Secondary braking (m/s ²)	Residual braking (m/s ²)
M ₁	80 100	2.9 2.44	1.7 -
M ₂ and M ₃	60	2.5	1.5
M₃	60	2.5	1.5
N ₁ ^{1,2}	(i)	70	1.3
	(ii)	100	-
N ₂	50	2.2	1.3
N ₃	40	2.2	1.3

¹ The applicant shall select the appropriate row (i) or (ii) and this choice shall be subject to the agreement of the Technical Service

² Information: The values in row (i) are aligned with the corresponding provisions in UN Regulation No. 13, the values in row (ii) are aligned with the corresponding provisions in UN Regulation No. 13-H

II. Justification

1. In UN Regulation No. 79, values for requirements of the braking system for M₁ vehicles still are in line with the former requirements of UN Regulation No. 13.
 2. UN Regulation No. 13 is no longer used for M₁ vehicles.
 3. Consequently, the values mentioned in the requirements on braking systems for M₁ vehicles should be aligned with the current values specified in UN Regulation No. 13-H.
 4. The value for "Residual Braking" performance should be deleted, because it does no longer exist in UN Regulation No. 13-H.
 5. N₁ vehicles are regulated in both UN Regulation Nos. 13 and 13-H. This proposal leaves the choice of the values to the applicant, depending on whether the braking system of the vehicle is approved according to UN Regulation No. 13-H or UN Regulation No. 13. The choice of the manufacturer must be duly justified such that the Technical Service can validate it.
 6. The headings of the columns (units in brackets) and the rows have been improved.
-