

**Economic and Social Council**Distr.: General
13 July 2022

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Automated/Autonomous and Connected Vehicles****Fourteenth session**

Geneva, 26-30 September 2022

Item 9(b) of the provisional agenda

Motorcycle braking:**UN Regulation No. 78****Proposal for a supplement to the 05 series of amendments to
UN Regulation No. 78 (Motorcycle braking)****Submitted by the expert from the International Motorcycle
Manufacturers Association***

The text reproduced below was prepared by the expert from International Motorcycle Manufacturers Association (IMMA) with the aim to further align the stop lamp signal provisions in UN Regulation No. 78 with UN Regulation No. 13-H. It is based on informal document GRVA-13-15. The modifications to the existing 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 2022 as outlined in proposed programme budget for 2022 (A/76/6 (part V sect. 20) para 20.76), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.



I. Proposal

Insert a new paragraph 2.34., to read:

“2.34. **“Automatically commanded braking”** means a function within a complex electronic control system where actuation of the braking system(s) or brakes of certain axles is made for the purpose of generating vehicle retardation with or without a direct action of the driver, resulting from the automatic evaluation of on-board initiated information.”

Paragraph 5.1.17.2., amend to read:

“5.1.17.2. In addition, in case of vehicles equipped with **automatically commanded braking and/or** electric regenerative braking systems, which produces a retarding force (e.g. upon release of the accelerator control), the braking signal shall be generated also according to the following provisions ⁴:

<i>Vehicle deceleration by automatically commanded braking and/or regenerative braking</i>	<i>Signal generation</i>
$\leq 1.3 \text{ m/s}^2$	The signal may be generated
$> 1.3 \text{ m/s}^2$	The signal shall be generated

(...)”

Paragraph 5.1.17.3., amend to read:

“5.1.17.3. Once generated, the signal shall be kept as long as a deceleration demand by the **automatically commanded braking and/or** electric regenerative braking persists. However, the signal may be suppressed at standstill **or when the deceleration demand falls below 1.3 m/s² or that value which generated the signal, whichever is lower.**

The signal shall not be generated when retardation is solely produced by the natural braking effect of the engine, air-/rolling resistance and/or road slope.”

II. Justification

1. The aim of this proposal is to further align the stop lamp signal provisions in UN Regulation No. 78 with UN Regulation No. 13-H, to keep a consistent stop lamp behaviour across different vehicle categories and therefore avoid confusion to road users driving behind a braking vehicle, regardless of its category. In particular:

(a) To enable the activation of the stop lamp when the vehicle deceleration is caused by the automatically commanded braking.

(b) To align the criteria in paragraph 5.1.17.2. with the latest amendments to paragraph 5.2.22.2. of UN Regulation 13-H, as adopted at the twelfth session of GRVA in January 2022 (ECE/TRANS/WP.29/GRVA/2022/10 as amended by GRVA-12-24).