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|  | United Nations | ECE/TRANS/WP.29/2023/10 | |
| _unlogo | **Economic and Social Council** | | Distr.: General  20 December 2022  Original: English |

**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations**

**189th session**

Geneva, 7-9 March 2023

Item 4.7.2 of the provisional agenda

**1958 Agreement:**

**Consideration of draft amendments to existing**

**UN Regulations submitted by GRVA**

Proposal for a Supplement 2 to the 05 series of amendments to UN Regulation No. 78 (Motorcycle braking)

Submitted by the Working Party on Automated/Autonomous and Connected Vehicles[[1]](#footnote-2)\*

The text reproduced below was adopted by the Working Party on Automated/Autonomous and Connected Vehicles (GRVA) at its fourteenth session (see ECE/TRANS/WP.29/GRVA/14, para. 109). It is based on ECE/TRANS/WP.29/GRVA/2022/26. 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 2023 sessions.

*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:

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| *Vehicle deceleration by automatically commanded braking and/or regenerative braking* | *Signal generation* |
| ≤ 1.3 m/s² | The signal may be generated |
| > 1.3 m/s² | The signal shall be generated |

An appropriate measure (e.g. switch-of-hysteresis, averaging, time delay) shall be implemented in order to avoid fast changes of the signal resulting in flickering of the stop lamps."

*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."

1. \* In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect.20), para 20.6), 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. [↑](#footnote-ref-2)