



Distr.: General 11 April 2019

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

178th session
Geneva, 25-28 June 2019
Item 4.8.1 of the provisional agenda
1958 Agreement:
Consideration of draft amendments to
existing UN Regulations submitted by GRVA

Proposal for Supplement 1 to the 04 series of amendments to UN Regulation No. 78 (Motorcycle braking)

Submitted by the Working Party on Automated/Autonomous and Connected Vehicles*

The text reproduced below was adopted by the Working Party on Working Party on Automated/Autonomous and Connected Vehicles (GRVA) at its second session (ECE/TRANS/WP.29/GRVA/2, para. 55). It is based on ECE/TRANS/WP.29/GRVA/2019/7 as amended by Annex VI to the report. 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 June 2019 sessions.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, Cluster 3.1), 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.

Supplement 1 to the 04 series of amendments to UN Regulation No. 78 (Motorcycle braking)

Insert a new paragraph 2.31., to read:

"2.31. "*Braking Signal*" means a logic signal indicating when illumination of the stop lamp is required or allowed as specified in paragraph 5.1.17. of this Regulation".

Insert a new paragraph 2.32., to read:

"2.32. "*Electric Regenerative Braking System*" means a braking system which, during deceleration, provides for the conversion of vehicle kinetic energy into electrical energy and is not part of the service braking system."

Insert a new paragraph 5.1.17. and its sub-paragraphs, to read:

- "5.1.17. Generation and de-activation of the braking signal to illuminate stop lamp(s) as defined in UN Regulation No. 53 shall only be under the following conditions:
- 5.1.17.1. Application of any service brake by the rider shall generate a braking signal that will be used to illuminate the stop lamps.
- 5.1.17.2. In addition, in case of vehicles powered solely by electric powertrain equipped with electric regenerative braking systems as defined in paragraph 2.32. of this Regulation, which produces a retarding force upon release of the accelerator control, the braking signal shall be generated also according to the following provisions:

Vehicle decelerations	Signal generation
$\leq 0.7 \text{ m/s}^2$	The signal shall not be generated
$>0.7~m/s^2$ and $\le1.3~m/s^2$	The signal may be generated
> 1.3 m/s ²	The signal shall be generated

In all cases the signal shall be de-activated at the latest when the deceleration has fallen below 0.7 $m/s^2.*''$

Insert a footnote *, to read:

"* At the time of type approval, compliance with this requirement shall be confirmed by the vehicle manufacturer."