Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Automated/Autonomous and Connected Vehicles

Twelfth session
Geneva, 24-28 January 2022
Item 8(c) of the provisional agenda
UN Regulations Nos. 13, 13-H, 139, 140 and UN GTR No. 8:
Clarifications

Proposal to amend UN Regulation No. 13 (Heavy vehicle braking)

Submitted by the experts from the International Organization of Motor Vehicle Manufacturers and the European Association of Automotive Suppliers*

The text reproduced below was prepared by the experts from International Organization of Motor Vehicle Manufacturers (OICA) and from the European Association of Automotive Suppliers (CLEPA). The modifications to the existing text of the Regulation are marked in bold for new or in 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 (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 new paragraph 5.2.1.26.5., to read:

“5.2.1.26.5. If the parking braking system detects a request (generated automatically or by the driver) to apply the parking brake, the actuation of the warning as required in paragraph 2.6. of Annex 8 may be delayed until the parking brake is in a stable state.”

Annex 8, paragraph 2.6., reads (for reference only):

“2.6. When the pressure in the line feeding energy to the spring compression chamber - excluding lines of an auxiliary release device using a fluid under pressure - falls to the level at which the brake parts begin to move, an optical or audible warning device shall be actuated. Provided this requirement is met, the warning device may comprise the red warning signal specified in paragraph 5.2.1.29.1.1. of this Regulation. This provision does not apply to trailers.”

II. Justification

1. Current paragraph 2.6. of Annex 8 requires the park brake warning device to be actuated once the brake parts begin to move, i.e. once the pressure in the park brake chamber falls below a given threshold and the applied parking brake force starts building up. This requirement is implemented for quite some time in Regulation No. 13 and fits quite well to the operation of both pneumatic and electric control transmission of the parking braking system.

2. However, a specific issue exists in the case of an electric control transmission, specifically during the transition between parked (applied) and un-parked (released) states. During this transition between two stable states, the parking brake warning may indeed be already displayed to the driver (while the electric control transmission has not yet reached its new stable -parked- state). The driver may then have a wrong interpretation of the situation (believing the park brake is fully applied).

3. The aim of this proposal is to eradicate this risk of misinterpretation by the driver, by allowing the warning device to be actuated only once the electric transmission of the parking brake is in a stable state securing the park brake application.