



Economic and Social Council

Distr.: General
10 July 2023

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Automated/Autonomous and Connected Vehicles

Seventeenth session

Geneva, 25-29 September 2023

Item 6(b) of the provisional agenda

Advanced Driver Assistance Systems and UN Regulation No. 79:

UN Regulation No. 79 (Steering equipment)

Proposal for a supplement to the 03 series of amendments to UN Regulation No. 79 (Steering equipment)

Submitted by the expert from Australia*

The text reproduced below was prepared by the expert from Australia to address cross-referencing issues in UN Regulation No. 79 with respect to UN Regulation No. 130 (Lane Departure Warning System). It is based on discussions surrounding informal document GRVA-16-10/Rev.1 during the sixteenth session of the Working Party on Automated/Autonomous and Connected Vehicles (GRVA). 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 2023 as outlined in proposed programme budget for 2023 (A/77/6 (part V 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.

I. Proposal

Paragraph 5.6.2.2.3., amend to read:

"5.6.2.2.3. When the system reaches its boundary conditions set out in paragraph 5.6.2.3.1.1. of this Regulation (e.g. the specified maximum lateral acceleration $a_{y,max}$) and both in the absence of any driver input to the steering control and when any front tyre of the vehicle starts to cross the lane marking, the system shall avoid sudden loss of steering support by continuing to provide assistance to the extent possible as outlined in the safety concept of the vehicle manufacturer and shall clearly inform the driver about this system status by an optical warning signal and additionally by an acoustic or haptic warning signal.

For vehicles of categories M₂, M₃, N₂ and N₃, the warning requirement above is deemed to be fulfilled if the vehicle is equipped with a Lane Departure Warning System (LDWS) fulfilling the technical requirements of UN Regulation No. 130, **the original version (00 series of amendments)**."

Annex 8

Paragraph 2.1., amend to read:

"2.1. Lane markings

The lane markings on the road used for the tests shall be in line with one of those described in Annex 3 of UN Regulation No. 130, **the original version (00 series of amendments)**. The markings shall be in good condition and of a material conforming to the standard for visible lane markings. The lane-marking layout used for the tests shall be recorded in the test report.

The width of the lane shall be minimum 3.5 m, for the purpose of the tests of this annex. At the manufacturer's discretion and with the agreement of the Technical Service, a lane with a width of less than 3.5 m may be used, if the correct function of the system on roads with wider lanes can be demonstrated.

The test shall be performed under visibility conditions that allow safe driving at the required test speed.

The vehicle manufacturer shall demonstrate, through the use of documentation, compliance with all other lane markings identified in Annex 3 of UN Regulation No. 130, **the original version (00 series of amendments)**. Any of such documentation shall be appended to the test report."

II. Justification

1. This draft supplement to the 03 series of amendments to UN Regulation No. 79 accompanies the formal document based on informal document GRVA-16-10/Rev.1 proposing to amend UN Regulation 130 (Lane Departure Warning System) to include Australian lane marking identifications to ensure vehicles will be designed for operation in the Australian market.

2. As UN Regulation No. 79 includes references to UN Regulation No. 130 for performance specifications of the lane departure warning system and lane markings, this is an opportune time to address cross-referencing issues as raised by OICA during the sixteenth session of the Working Party on Automated/Autonomous and Connected Vehicles (GRVA).

3. Paragraph 7. of the *General Guidance for United Nations regulatory procedures and transitional provisions in UN Regulations* (document ECE/TRANS/WP.29/1044/Rev.3) states that 'Reference to the provisions of another UN Regulation shall indicate the version of that UN Regulation, with the understanding that any later version will be equally acceptable'.

4. Currently, UN Regulation No. 79 does not specify the version of UN Regulation 130 it refers to, hence it is proposed to include the term '00 series of amendments' to meet the

requirements of the Guidance document. This allows manufacturers to test their lane departure warning systems fitted to vehicles not intended for supply to Australia to lane markings in either the 00 series of amendments or later series of amendments to UN Regulation No. 130.
