

## **Proposal for amendment to UN Regulation No. 158 (Reversing motion)**

The text reproduced below was prepared by the experts from the IWG VRU-Proxi. The modifications to the current text of the UN Regulations are marked in bold for new or strikethrough for deleted characters.

### **I. Proposal**

*Insert new paragraph 15.1.2., to read:*

« **15.1.2. The requirements in paragraph 15. shall not apply during a remote control manoeuvring and a remote controlled parking as defined in UN Regulation No. 79.** »

*Annex 9 Paragraph 1.3.3.2., amend to read:*

« 1.3.3.2. Vehicle load.

The vehicle is in running order as defined in the consolidated Resolution on the Construction of vehicles (R.E.3) (ECE/TRANS/WP.29/78/Rev.6, paragraph 2.2.5.4.), **plus for M1 and N1 vehicles one front seat passenger (75 kg).** »

*Annex 9 Paragraph 2.1., amend to read:*

« 2.1. Test conditions

- (a) The vehicle shall be left in a parked parking status until it is ensured that all electronic systems are deactivated; or for a minimum of 30 minutes.
- (b) It is permissible for the test person or equipment to be already situated within the vehicle.
- (c) Ensure the vehicle gear selector is **not in reverse gear** ~~in neutral or forward gear~~.
- (d) The test may start with opening the driver door. Once the door is opened, it shall be closed again. »

*Annex 9, Paragraph 3.2., amend to read:*

« 3.2. Extract photographic data.

- (a) Using the photograph, measure the apparent length, of a 50 mm delineated section of the in-photo ruler, along the ruler's edge,

closest to the rear-view image and at a point near the horizontal centre of the rear-view image.

- (b) Using the photograph, measure the horizontal width of ~~the coloured band~~ at the upper portion of each of the three test objects located at positions G, H, and I in Figure B.
- (c) Define the measured horizontal widths ~~of the coloured bands~~ of the three test objects as dG, dH, and dI. »

*Annex 10 Paragraph 1., amend to read:*

« 1. Rear horizontal area detection

~~Audible warning~~ **The Detection** systems shall fulfil the test as specified in paragraph 1.3.1. in this Annex. However, if ~~audible warning~~ **the detection** systems fulfil the test as specified in paragraph 1.4. in this Annex, the test as specified in paragraph 1.3.1. in this Annex shall be considered to be satisfied. »

## **II. Justification**

1. New paragraph 15.1.2: proposal to clarify the understanding of means of vision or awareness functioning when remote functions are in operation: During remote functions according to UN Regulation No. 79, the actuation is made by remote control in close proximity to the vehicle. In such conditions the means of vision or awareness to be provided are not relevant.
2. Amendment of Annex 9 Paragraph 1.3.3.2: vehicle load harmonized with UN-R46.
3. Amendment of Annex 9 Paragraph 2.1: the test method will assess the performance of the system when the reverse gear will be selected/engaged. That is why it was stated in the test conditions that the vehicle gear selector is in neutral or in forward gear. But it is also true for a position that is not the reverse gear.
4. Amendment of Annex 9 Paragraph 3.2.: Annex 9 - §3 defines the methodology to measure the object size shown in the monitor. The coloured band is not defined in the regulation, is not needed to specify the requirement, and may be confused with the painted patch used to check the visibility of the poles in the first row. For improved clarity, we propose to delete such a reference.
5. Amendment of Annex 10 Paragraph 1.: Annex 10 describes the test method to be used to assess the performance of the detection system. In the annex 10, there is no test with regard to the type of signals used by the detection system. Therefore, limiting the test to the audible warning system is too restrictive and not relevant. The test should be performed on detection systems.