



Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on General Safety Provisions****121st session**

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Item 4 (d) of the provisional agenda

Awareness of the proximity of Vulnerable Road Users:**UN Regulation No. 159 (Moving Off Information Systems)****Proposal for amendments to Regulation No. [159] (Moving Off Information System for the Detection of Pedestrians and Cyclists)****Submitted by the experts from VRU-Proxi Informal Working Group (VRU-Proxi)***

The text was reproduced below was prepared by the experts from the VRU-Proxi Informal Working Group (VRU-Proxi) to amend the new UN Regulation on uniform provisions concerning the approval of motor vehicles with regard to the Moving Off Information System for the Detection of Pedestrians and Cyclists. The modifications to the existing 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 2021 as outlined in proposed programme budget for 2021 (A/75/6 (Sect.20), para 20.51), 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 5.2.2.3.3., amend to read:

"5.2.2.3.3. When performing a turning maneuver, the MOIS detection strategy may be adjusted. It is not required to adjust the sensors to the steering angle. The detection adjustment strategy shall be explained in the information referred to in paragraph 6.1. The Technical Service ~~shall~~ **may** verify the operation of the system according to the strategy."

Paragraph 5.5.1., amend to read:

"5.5. System initialization

5.5.1. If the MOIS has not been **initialized** ~~calibrated~~ after a cumulative driving time of 15 seconds above a speed of 0 km/h (~~including stationary phases~~), information of this status shall be indicated to the driver. This information shall exist until the system has been successfully **initialized** ~~calibrated~~."

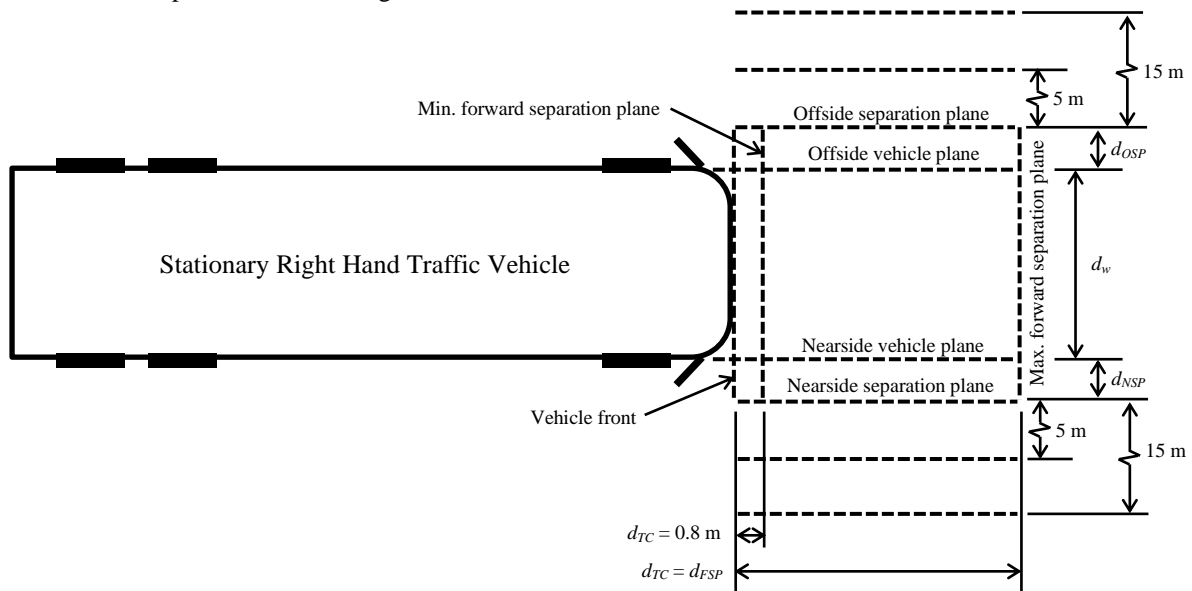
Paragraph 5.8.3., amend to read:

"5.8.3. The MOIS failure warning signal shall be activated with the activation of the vehicle master control switch. This requirement does not apply to ~~collision failure~~ **failure** warning signals shown in a common space ~~to the failure warning signal~~."

Appendix 1, amend to read:

"Appendix 1

Figure 1
Set Up for Static Crossing Tests



Where the following definitions apply:

d_w vehicle width.

~~$d_{25\%}$ a distance relating to 25% of the vehicle width.~~

d_{NSP} the distance from the nearside vehicle plane to the nearside separation plane, defined as 0.5 m.

d_{OSP} the distance from the offside vehicle plane to the offside separation plane, defined as 0.5 m.

d_{TC} the forward separation distance for each test case.

d_{FSP} the distance from the vehicle front to the maximum forward separation plane.

~~d_{LPI} the distance relating to the last point of information (LPI).~~

Table 1
Test Cases for Static Crossing Tests

Test Case	Soft Target (<i>T</i>)	Test Case Distance (d_{TC}) /m	Crossing Direction (<i>c</i>)	Soft Target Speed (<i>v</i>) /km/h	Distance to Last Point of Information (d_{LPI}) /m
1	Child Pedestrian	0.8	Nearside	3	d_{NSP}
2	Adult Pedestrian	d_{FSP}	Nearside	3	d_{NSP}
3	Adult Cyclist	0.8	Offside	3	d_{OSP}
4	Adult Cyclist	d_{FSP}	Nearside	5	d_{NSP}
5	Adult Pedestrian	0.8	Offside	5	d_{OSP}
6	Child Pedestrian	d_{FSP}	Offside	5	d_{OSP}

Where the following definitions apply:

d_{NSP} the distance from the nearside vehicle plane to the nearside separation plane, defined as 0.5 m.

d_{OSP} the distance from the offside vehicle plane to the offside separation plane, defined as 0.5 m.

d_{TC} the forward separation distance for each test case.

d_{FSP} the distance from the vehicle front to the maximum forward separation plane.

d_{LPI} the distance relating to the last point of information (LPI)."

II. Justification

1. Justifications for paragraph 5.2.2.3.3.: MOIS focuses on straight driving situations. As the testing procedure is not defined, this part of the requirement may lead to too many testing.
2. Justifications for paragraph 5.5.1.: In VRU-Proxi#14, we agreed to use the word initialisation instead of calibration to be in line with the wording used in the AEB regulation. The MOIS (and the AEB) needs driving situations to initialise the system.
3. Justifications for paragraph 5.8.3.: 5.8 deals with failure warning signals.
4. Justifications for Appendix 1.: clarifications of the definitions listed for the table 1 and figure 1.