

Submitted by the experts from VRU-Proxi Informal Working Group

Informal document No. GRSG-119-xx  
(119<sup>th</sup> GRSG, 06-09 October 2020  
agenda item xx)

## **Proposal for amendments to Regulation No. [xxx] (devices for reversing motion and motor vehicles with regard to the driver's awareness of vulnerable road users behind vehicles)**

The text 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 devices for reversing motion and motor vehicles with regard to the driver's awareness of vulnerable road users behind vehicles. The modifications to the existing text of the draft Regulation (see GRSG-118-05) are marked in bold for new or strikethrough for deleted characters.

### **I. Proposal**

*Contents*, amend to read:

"1. Scope .....	.....
I. Devices for Reversing <del>motion</del> <b>safety</b> .....	.....
...	...
7. Modification of the type of device for <b>reversing safety</b> <del>indirect vision</del> and extension of approval ...	.....
...	...
II. Installation of devices for reversing <del>motion</del> <b>safety</b> .....	.....
...	...
Annexes	
1 Information document for type approval of a device for reversing <del>motion</del> <b>safety</b> .....	.....
2 Information document for type approval of vehicle with respect to the installation of devices for reversing <del>motion</del> <b>safety</b> .....	.....
3 Communication concerning the approval or refusal or extension or withdrawal of approval or production definitively discontinued of a type of device for reversing <del>motion</del> <b>safety</b> , pursuant to Regulation No. [XXX] .....	.....
4 Communication concerning the approval or refusal or extension or withdrawal of approval or production definitively discontinued of a type of vehicle with regard to the mounting of devices for reversing <del>motion</del> <b>safety</b> , pursuant to Regulation No. [XXX] .....	.....“

*Part I*, amend to read:

“Part I           Devices for Reversing ~~motion~~ **safety**”

*Paragraph 2.1.*, amend to read:

“2.1.           “*Devices for reversing ~~motion~~ **safety***” means devices intended to give a clear view of the rear of the vehicle within the fields of vision defined in paragraph 15.2. **or intended to detect objects in the field of detection defined in paragraph 15.3.**

These can be conventional mirrors, Rear-View Camera System, **detection systems** or other devices ~~able to present information about the field of vision to the driver.~~”

*Paragraph 7*, amend to read:

“7. Modification of the type of device for reversing ~~motion~~ **safety** and extension of approval”

Insert the new paragraph 12.9., to read:

**“12.9 “Starting prevention device” means a device which prevents the vehicle being driven away from rest when a door is not fully closed;”**

Insert the new paragraph 15.1.1., to read:

**“15.1.1.1 For vehicles having a starting prevention device, the backing event starts after deactivation of the starting prevention device “**

*Part II*, amend to read:

“Part II Installation of devices for Reversing ~~motion~~ **safety”**

*Paragraph 12.3.1.*, amend to read:

“12.3.1. Type of device for reversing ~~motion~~ **safety;”**

*Paragraphs 15.2.1.5. and 15.2.1.6.*, amend to read:

~~“15.2.1.5. Via a device of detection system that complies with this Regulation except for the field of detection (e.g. very short range); or~~

15.2.1.6.5. Via a combination of devices of paragraphs 15.2.1.3, ~~and 15.2.1.4. and 15.2.1.5.~~ except a combination of RVCS and mirror(s) or close-proximity rear-view mirror.

**15.2.1.6. In case the devices or their combinations do not fulfil the complete field of vision, a detection system can be used to cover the remaining field of vision.”**

*Paragraph 15.4.*, amend to read:

“15.4. Devices for reversing ~~motion~~ **safety”**

*Paragraph 16.1.1.3.*, amend to read:

“16.1.1.3. Deactivation

The rear-view image shall remain visible during the backing event until either, the driver modifies the view, or the vehicle direction selector is no longer in the reverse position **or the backing event is finished.**

Modifying the view means to switch to any other camera views.

The view can be manually switched off when the vehicle is not moving rearward.

The system may be switched off when the vehicle detects a coupling by means of a coupling device.

**It is allowed not to show the rear-view image if the reversing speed exceeds [6 km/h]. ”**

*Paragraph 17.1.*, amend to read:

“17.1. System activation

The system shall be activated when the backing event starts. If proper functioning cannot be effected, either the system shall automatically shut off or the driver shall be able to deactivate the system manually.

The detection system shall remain active as long as **either** the vehicle direction selector is in the reverse position **or the backing event is not ended**.

In case the vehicle can detect coupling with a coupling device, the system may be switched off.

*Annex 1*, amend to read:

“Annex I Information document for type approval of a device for reversing ~~motion~~ **safety**”

*Annex 2*, amend to read:

“Annex II Information document for type approval of vehicle with respect to the installation of devices for reversing ~~motion~~ **safety**”

*Annex 3*, amend to read:

“Annex III Communication concerning the approval or refusal or extension or withdrawal of approval or production definitively discontinued of a type of device for reversing ~~motion~~ **safety**, pursuant to Regulation No. [XXX]”

*Annex 4*, amend to read:

“Annex IV Communication concerning the approval or refusal or extension or withdrawal of approval or production definitively discontinued of a type of vehicle with regard to the mounting of devices for reversing ~~motion~~ **safety**, pursuant to Regulation No. [XXX]”

*Annex 4, Paragraph 2*, amend to read:

“2.Close-proximity rear-view mirrors and devices for reversing ~~motion~~ **safety**”

## II. Justification

1. “Reversing motion” was replaced by “reversing safety”. Both wordings are used in the regulation. We propose to harmonize the wording and to use "devices for reversing safety", as the devices in question do not provide motion but safety.

2. Justification for paragraph 2.1: This regulation requires to provide means of vision or means of detection. It should be reflected in the definition regarding “devices for reversing safety”

3. Justifications for paragraphs 15.2.1.5. and 15.2.1.6.: We propose this modification in order to clarify the original intention agreed previously in the informal working group: the required field of vision may be covered by a combination of devices defined in 15.2.1.3. or 15.2.1.4. and a detection system (with a shorter range than the one required to cover the field of detection).

4. Justifications for paragraphs 16.1.1.3. and 17.1.: clarifications that do not add requirements.

5. Justifications for paragraphs 16.1.1.3.: optional requirement proposed to be added to take into consideration some manufacturer strategies regarding driver distraction when driving backward

6. Justifications for paragraphs 12.9. and 15.1.1.1.: The starting prevention device definition is aligned with UN-R107. This additional requirement optimizes the requirements between this new regulation and UN-R107.