**Draft report of the 28th Session of the**

**GRSG Informal Working Group on**

**awareness of Vulnerable Road Users proximity**

**in low speed manoeuvres (VRU-Proxi)**

Dates: 14th of February 2023

Venue: Webex meeting

Chair: Mr. Romain Ladret Piciorus (European Commission)

Secretary: Mr. Johan Broeders (OICA)

1. **Welcome and introduction**

The Chair kindly welcomed the group and informed the members about the intention of the meeting. As announced in the previous meeting the Chair will leave this IWG. The EC is still looking for a new Chair for this IWG but the Chair also requested Contracting Parties to consider taking over as co-chairmanship of this IWG with the European Commission. At this moment no further information can be shared.

1. **Adoption of the agenda**

Document: [VRU-Proxi-28-01 (Chair)](https://wiki.unece.org/download/attachments/192840948/VRU-Proxi-28-01%20%28Chair%29%20Draft%20agenda.docx?api=v2)

The group adopted the agenda and the running order.

1. **Adoption of the report of the 27th VRU-Proxi session (online meeting)**

Document: [VRU-Proxi-27-09 (Chair)](https://wiki.unece.org/download/attachments/192839935/VRU-Proxi-27-09%20%28Chair%29%20Draft%20report.docx?api=v2)

The expert from FR asked for the following corrigendum of the report of the previous meeting concerning the comment from FR in paragraph 5.1 (proposed changes in *italic*):

“The expert from FR mentioned to be not *supportive of this annex as an annex of direct vision regulation. As it is a MOIS+, it should be an annex of MOIS regulation. As it was already discussed by the VRU Proxi group, an active system cannot replace direct vision requirements. A possible way is to consider this system in the framework of TF AVRS to adapt direct vision regulation to SAE automation level 4/5 vehicles by saying for example that automated vehicles level 4/5 are excluded from the scope of direct vision regulation but have to fulfill the MOIS+. ~~really supportive to the proposal at this moment but FR may be open to discuss it and to consider the potential of it for specific vehicles e.g. SAE automation level 4/5 vehicles.~~*”

The proposed corrigendum was accepted by the group and the report will be revised accordingly. As there were no further comments, the revised report was adopted.

The expert from FR also reminded their previous proposition to have this topic discussed in its specific point (ex: *Emergency motion inhibit system*), rather than under “Direct Vision”.

The expert from DE commented that MOIS+ systems that include automated functions cannot be proposed to GRSG. Also considering MOIS+ systems for fully (driverless) automated vehicles does not make sense as the aim of MOIS is to provide information to the driver. It seems to be better to propose such new functionalities not as part of MOIS. In case of automated functions it shall be proposed and discussed in other groups (GRVA).

The expert from ACEA mentioned that concerning ideas for new functionalities it is needed to look at the full scope of future requirements or frameworks like new W&D regulation, GSR III as this may result in conflicting objectives.

1. **Reversing Motion (R158)**

Document: [VRU-Proxi-27-08 (Secretary)](https://wiki.unece.org/download/attachments/192839935/VRU-Proxi-27-08%20%28Secretary%29%20GRSG-123-31e_proposal%20%28based%20on%2026-02%20Rev2%29%2020230116-1%20-%20with%20track%20changes%20updated%20in%20meeting.docx?api=v2)

[ECE/TRANSP/WP.29/2022/123/Rev.1](https://unece.org/sites/default/files/2023-01/ECE_TRANS_WP.29_2022_123_Rev.1E.docx)

As agreed in the previous meeting the proposal is to continue with current adapted text for paragraphs 16.1.1.3, 16.1.1.4, 16.1.3.1 and 1.3.3.5 of Annex 9 as noted in VRU-Proxi-27-08 as an amendment to the adopted Working Document ECE/TRANS/WP.29/2022/123/Rev.1 in WP.29 November 2022 session. It was agreed that the experts from OICA and CLEPA will work on an Informal Document for discussion in the next VRU-proxi meeting as preparation for the GSRG March 2023 session. A Working Document containing this proposal shall be prepared by VRU-Proxi in a later stage for the GRSG October 2023 session.

The expert from OICA expressed that this will be a proposal for a new series of amendments instead of a supplement as more time is needed for vehicles that are already approved or in the approval process to the current series. On request of the expert from CLEPA it was explained that in particular the proposed changes to the modification of the view during the backing event shall not be applicable to type approvals of all registrations (as being effective by EU GSR2 from July 2024). Transitional provisions shall include a paragraph where approvals not affected by the changes shall not be obliged to the new proposals.

The expert from FR agreed and asked for suggested transitional provisions. Assuming adoption of the proposal in WP.29 in November 2023 the expert from OICA motivated to propose September 2024 for new types and September 2026 for all registrations. These proposed dates will be subject of further consideration by the experts from GRSG.

1. **Direct Vision**
   1. **Direct Vision Regulation Phase 2 – New technology neutral method**

Document: [VRU-Proxi-28-02 (ACEA)](https://wiki.unece.org/download/attachments/192840948/VRU-Proxi-28-02%20%28ACEA%29%2020230213_DV_VRU%20Proxi.pdf?api=v2)

[ECE/TRANS/WP.29/GRSG/2023/10](https://unece.org/sites/default/files/2023-01/ECE-TRANS-WP29-GRSG-2023-10e_0.docx)

The expert from ACEA mentioned that the members of the Industry evaluated the proposed thresholds for the front visible volume as presented by LDS in the Taskforce Direct Vision (6.03 m3 for level 1 and 4.45 m3 for level 2 and 3). First evaluations showed that the thresholds turned out to be more severe than the limit values in the current series 00 of regulation R [167]. More explanation was given in VRU-Proxi-28-02.

The expert from LDS explained that the current proposed values had some caveat and mentioned that the method presented in VRU-Proxi-28-02 could be a new way to find equivalence. However, the amount of work of this would push the delivery of a new proposal towards the October 2023 session of GRSG. The expert also proposed to define next to a volumetric value for option 3 also a test of VRU visibility possibly by defining a minimum requirement for the front visible volume between both sides of the vehicle.

The expert from ACEA stated to be not supportive to VRU tests in the protocol as the visibility of these VRUs could potentially exactly be obscured by a component (e.g. the steering wheel or a forward-looking camera that is mounted on the lower part of the windscreen). This could have a significant effect and could disproportionately and therefore unjustly increase the average VRU distance.

Conclusion:

The experts from LDS and ACEA will further discuss about the way forward and new proposals can be discussed in the next meeting. This discussion may also be continued in the Taskforce Direct Vision.

* 1. **Direct Vision Regulation Phase 2 – Vehicles with competing objectives**

This subject has not been discussed in this meeting and has been postponed to the next meeting.

1. **Moving-Off Information System (R159)**

As there were no proposals submitted, this subject has not been discussed during this meeting.

1. **Blind Spot Information System (R151)**

As there were no proposals submitted, this subject has not been discussed during this meeting.

1. **Frontal and Lateral Driver’s Awareness M1/N1**

As there were no proposals submitted, this subject has not been discussed during this meeting.

1. **Component approval**

The expert from DE expressed the concern that more progress is needed for the component approval for the 2nd stage manufacturers. An approach as laid down in Regulation No. 46 could be used for the camera monitor system approval as current Regulation No. 158 regulates only requirements for the camera monitor system for special installations in the vehicle. Point was noted but this subject has not been discussed in further detail and will be postponed to the next meeting.

1. **Next meeting**

29th meeting: [meeting date tbd, meeting location tbd]

1. **Any Other Item**

No other items were discussed in this meeting.