

**Draft report of the 33rd Session
GRSG informal group on
awareness of Vulnerable Road Users proximity
in low speed manoeuvres (VRU-Proxi)**

Date: 3rd and 4th of April 2024
Venue: Webex meeting
Chair: Mr. Lukasz Rozanski (European Commission)
Secretary: Mr. Johan Broeders (OICA)

1. Welcome and introduction

The Chair welcomed the group and explained the goals of the meeting.

2. Adoption of the agenda

Document: [VRU-Proxi-33-01 Rev2 \(Chair\)](#)

The Chair explained the agenda and the running order of the meeting. The agenda was adopted by the group.

3. Adoption of the report of the 32nd VRU-Proxi session (online meeting)

Document: [VRU-Proxi-32-04 \(Chair\)](#)

The report of the last meeting was provided by the Secretary and the Chair asked the group if there were any comments. As the report was published just before the meeting the Chair proposed to give the members additional 10 days for providing comments to the Secretary. During this period no comments were received and the agenda was considered to be adopted.

4. Direct Vision (R167)

Document: [VRU-Proxi-33-02 \(UK\)](#)
[VRU-Proxi-33-04 \(LDS\)](#)
[VRU-Proxi-33-06 \(UK\)](#)
[VRU-Proxi-33-07 \(LDS\)](#)
[VRU-Proxi-33-08 \(UK\)](#)

The Chair explained the status with regard to the UK proposal concerning the requirement for the Subsection Frontal Visible Volume (SFVV). The discussion of the proposal was postponed to the 33rd meeting and a dedicated CP meeting was organized on the 22nd of February 2022. In this meeting, a consensus was reached on the SFVV, subject to changes concerning the lead time, and the coverage of HCT vehicles.

The expert from LDS presented VRU-Proxi-33-04 and explained the update of the work that

was done on the SFVV:

- The expert from OICA stated that more time is needed to have a look into the proposal. Furthermore the Terms of Reference need to be updated and agreed by GRSG.
- The Chair mentioned that GRSG in fact requested VRU-Proxi to consider the UK proposal meaning that a mandate from GRSG was already given.
- The expert from OICA raised the issue of the correlation coefficient not being close to 1.0 and proposed to use the deviation as a tolerance for the limit value. The expert from the UK mentioned that this may be considered but need to be discussed first. *After the meeting the expert from LDS noticed that the report contained an error; after solving this the correlation coefficient was close to 1.0 which disproved the concern from OICA.*
- The expert from OICA asked if also SFVV plots could be established to justify L2 and L3 vehicles. The expert from LDS agreed and would work on an update before the next day of the VRU-Proxi meeting (VRU-Proxi-33-07).
- The expert from OICA stated that there may only be a risk when the A-pillars are moved to the rear. The expert from the UK responded that the solution should also consider other OEMs over the world.

The expert from UK tabled VRU-Proxi-33-02 including an update of Working Document GRSG/2024/6 addressing the exemption of HCT vehicles for the SFVV and paragraph 12.5 for vehicles that are not affected by the proposed changes.

- The expert from OICA stated that first the effect of the 00 series shall be investigated before amending the existing regulation.
- The expert from SE expressed that more analysis may be needed to justify the proposed changes and withheld a position for now but would provide position prior to the next GRSG.
- The expert from LDS explained that vehicles are existing that can meet the front visible volume of 1.0 m³ but not passing the SFVV requirements. The Chair reminded that the need for SFVV has already been discussed in length and the existence of the regulatory gap was not contested during these discussions.
- The expert from the UK asked whether the group could agree with the proposed dates for the Transitional Provisions. The expert from OICA indicated that it is difficult to answer as the Industry has not studied yet on the proposal. There are concerns as 2 at the OEMs, the design changes to meet the 00 series have already been started.
- The expert from UK argued that it is not acceptable to wait until the effect of the 00 series is clear and it is obvious that the SFVV requirement is needed to get sufficient direct vision in front of the vehicle.

The Chair concluded that the CPs in the VRU-Proxi group can generally support the Informal Document from UK but with some reservation from D and SE (position withheld subject to further internal consultations). The Chair asked the experts from D and SE to provide position before next GRSG. The expert from UK will adapt the proposal with the latest updates and will provide it to group (VRU-Proxi-33-08). The group may be able to provide comments before the deadline of 5th of April 2024 COB.

5. Reversing Motion (R158)

Document: [VRU-Proxi-33-09 \(ROK\)](#)

The expert from the ROK explained an issue concerning a difference between rear view camera and detection systems. In paragraph 1.3.4. of Annex 9 the status of the rear hatch and trunk lids is defined but in case of detection systems these conditions are not mentioned in Annex 10. The expert from J mentioned that the regulation is focused on normal driving conditions meaning that the test shall be performed with closed tailgate or trunk lid. However the expert from J agreed to add the conditions for the rear hatch and trunk lid also to the test conditions of the detection system.

The Chair asked the expert of ROK to submit an Informal Document for the next session of GRSG in April 2024.

6. Vulnerable Road Users in Front and Side Close Proximity (R166)

Document: [ECE/TRANS/WP.29/GRSG/2024/12 \(Japan\)](#)
[VRU-Proxi-33-05 \(Japan\)](#)
[VRU-Proxi-33-03 \(ROK\)](#)

The expert from Japan has submitted GRSG/2024/12 to the April session of GRSG. The expert introduced VRU-Proxi-33-05 as amendment to GRSG/2024/12 with a proposal to implement the impact test requirements for external mirrors and camera monitor systems in Regulation No. 166 to get consistency with Regulation No. 46. Furthermore, the proposed changes from ROK regarding the addition of the direct view by ambinocular vision in Figure 4 as laid down in VRU-Proxi-33-03 were included in the latest proposal from J as well.

The proposal from J was supported by the group. J will submit a new Informal Document to the April 2024 session of GRSG.

7. Any Other Item

Document [GRSG-125- 21\(ToR IWG VRU-Proxi\)](#)

The Chair discussed the future of the IWG VRU-Proxi and asked if the tasks according to the Terms of Reference could be considered as completed. Regarding the tasks as defined in paragraph 4 of the ToR the following was concluded:

- 4 (a) Forward Motion:
 - All tasks completed, no further amendments needed
- 4 (b) Reversing Motion:
 - All tasks completed, no further amendments needed
- 4 (c) Direct Vision Phase 1 Base Regulation
 - All tasks completed, no further amendments needed
- 4 (c) Direct Vision Phase 2 Innovative vehicle designs and competing objectives
 - All tasks completed, no further amendments needed
- 4 (d) General issues (Component Approvals)
 - Unclear if there is still interest from suppliers for Component Approvals, the expert from UK proposed to remove and re- initiate if needed with a new work item proposal from GRSG. The Chair decided to postpone the Component Approval discussion to the next VRU-Proxi meeting.
 - The Chair asked if there are other future IWG tasks that shall be proposed to GRSG.

There was no response from the group, the Chair will report this to GRSG. However, the CPs and the industry were asked to reflect on this issue and to come with proposals, if any, to the next IWG meeting.

8. Next meeting

The next meeting will be scheduled after the next GRSG April 2024 session and prior to the GRSG October 2024 session. A Doodle poll will be send out to find the most appropriate dates.
