

**Draft report of the 29th Session
GRSG informal group on
awareness of Vulnerable Road Users proximity
in low speed manoeuvres (VRU-Proxi)**

Date: Tuesday 14th of March 2023
Venue: Webex meeting
Chair: Mr. Lukasz Rozanski (European Commission)
Secretary: Mr. Johan Broeders (OICA)

1. Welcome and introduction

The Chair welcomed the participants and introduced himself as the new Chair of this Informal Working Group.

2. Adoption of the agenda

Document: [VRU-Proxi-29-01 \(Chair\)](#)

The group adopted the agenda and the running order.

3. Adoption of the report of the 28th VRU-Proxi session (online meeting)

Document: [VRU-Proxi-28-03 \(Chair\)](#)

As no comments were received prior to the meeting and until the end of the week of the 29th session (17th of March 2023) the report has been adopted.

4. Reversing Motion (R158)

Documents: [VRU-Proxi-29-03 \(Secretary\)](#)
[VRU-Proxi-29-05 \(Secretary\)](#)
[VRU-Proxi-29-06 \(Secretary\)](#)

GRSG asked in its 124th session VRU-Proxi to work on a proposal for paragraph 16.1.3.1. concerning the temporary obstruction of the monitor view or rear field of view. Therefore, the Secretary prepared document VRU-Proxi-29-05 containing an explanation of the evolution of the paragraphs 16.1.3.1, 16.1.1.3, 16.1.1.4 and 1.3.3.5 to Annex 9. The latest proposal was drafted by the Secretary in document VRU-Proxi-29-03.

The group discussed the proposals and the following comments were made:

Paragraph 16.1.3.1.:

- The expert from OICA expressed concerns about the second part of the proposed amendments to paragraph 16.1.3.1. as being too restrictive. The logic should be that from the driver position the driver should adjust to a position where the display is

visible, not vice-versa. Looking to the proposed test conditions in Annex 9, it is not clear that this is only applicable in case of a temporary obstruction. It now seems that this condition in 16.1.3.1. is always applicable. Also the approach seems not in line with other UN regulations such as No. 46 and No. 121. The expert proposed to have further discussion about this but acknowledged that this is not feasible anymore for the next GSRG.

Paragraph 16.1.1.3. and 16.1.1.4.:

- The expert from OICA indicated that there is no support for the third part of paragraph 16.1.1.4. regarding the indication to the driver as it seems to limit the technological solutions (e.g. increasing view instead of changing to another view). The expert expects to be able to provide a new proposal for this paragraph in the next session.
- The expert from DE suggested to accept only automated modification of the view and remove the possibility for the driver to control the view manually.

The Secretary questioned whether the text highlighted in blue related to a new series of amendments and transitional provisions shall be maintained. The Chair mentioned to better remove this for now as the need for a new series depends on the final proposed text.

In agreement of the group the Chair decided to submit an Informal Document (only for information purposes) without the blue parts (for now) and with all the other proposed amendments in between square brackets. The proposal shall be considered in the next IWG meeting and the Chair asked OICA to prepare a document with revised proposals for the abovementioned amendments.

5. Moving-off Information System (R159)

This subject has not been discussed as no proposals or comments to the Moving-off Information System Regulation No. 159 were submitted by the group.

6. Direct Vision (R[167])

Document: [VRU-Proxi-29-04 \(ACEA\)](#)
[VRU-Proxi-29-02 \(LDS\)](#)
[VRU-Proxi-29-07 \(LDS\)](#)
[ECE/TRANS/WP.29/GRSG/2023/10](#)

Innovative vehicle designs:

- The expert from ACEA presented VRU-Proxi-29-04 and gave in the first part of the presentation an explanation of the door being a structural part of the cab that is required to meet the cab strength requirements of Regulation No. 29. In case the driver position is relatively close to the front of the cab, the door is a very important structural component and it is not possible to lower the door window significantly as was assumed and stated in previous discussions.
- The expert from LDS indicated with VRU-Proxi-29-07 that some truck manufacturers have already lowered the door window and some also have replaced mirrors by camera monitor systems which improves the direct vision to the sides.

- The expert from ACEA stated that it is not impossible to lower the door window line but that the lowering is limited. Also, removing mirrors may something that needs to be done anyway to achieve the combined volume level but on the other hand the monitors on the A-pillars will reduce the view again to a certain extent.
- The expert from FR asked to what amount the view will be obstructed by the dashboard. The expert of ACEA responded that there is always an instrument cluster in front of the driver that causes obstruction but on the passenger side the obstruction could somewhat be reduced depending on the design and structure.
- The expert from LDS presented VRU-Proxi-29-02 and reminded the group that there could no equivalence be found between option 3 (with a volume to the outer boundaries of the assessment volume) and the current series 00. The expert explained the alternative approach where the front visible volume is reduced to both sides planes of the vehicle. For this method provisional equivalent limit values have been determined based on a sample of 15 vehicles resulting in 0.441m³ for Level 1 vehicles and 0.114m³ for Level 2 and 3 vehicles. As just a part of the full sample of vehicles was considered here no further information concerning correlation or variation was provided. The expert asked the members to first reflect on this proposal before starting the analysis of the full sample.
- The expert from OICA expressed the concern that this might discriminate some vehicles and it needs further consideration.
- The expert from ACEA presented the second part of VRU-Proxi-29-04 containing a new proposal for innovative cab designs where the limit values for the front visible volume depend on the distance between the A-pillars. The proposal is to lower the limit value for more narrow cab designs according the positions of the A-pillars.
- The expert from LDS responded to be positive towards the proposal and expressed that there is a potential to complement option 3 although some further reflection would be needed. The expert from ACEA indicated that intention of this proposal is not to complement option 3 but to replace option 3.
- The expert from UK welcomed the proposal and asked how to deal with angled A-pillars. The expert from ACEA explained that the aim was initially to present the idea and, in case of positive feedback, further details could be worked out later.

Conclusion:

- The group agreed to continue the discussion on the proposal from ACEA in more detail in the Taskforce Direct Vision together with the expert from LDS and other interested parties.

Working Document ECE/TRANS/WP.29/GRSG/2023/10 as submitted to GRSG 125th session:

- The Chair asked the position of group concerning withdrawing of the current Working Document that has been submitted to GRSG session in April 2023. There was consensus in general to withdraw the document and to work on a more proper proposal for GRSG session in October 2023. IWG shall ask GRSG to allow extension from April 2023 to October 2023 for the subject mentioned at point 4 (c) Amendments in the Terms of Reference. The new proposed Terms of Reference will be submitted as Informal Document to GRSG session in April 2023.

Vehicles with competing objectives and direct vision challenges:

- This topic has not been discussed during this session. The discussion, probably based on initial proposals from SE, shall be continued in the Taskforce Direct Vision.

Emergency Motion Inhibit System (EMIS):

- The expert from DE explained that are currently no updates on the development of the EMIS proposal. The expert mentioned that DE is making thoughts to set up a small Taskforce for further detailed discussions as the proposed system could be regulated as alternative for vehicles with competing objectives. This Taskforce has not yet been started as DE is currently in a process is to check if there is willingness / agreement by the other CPs. The expert mentioned to be hopeful to have more info in the next IWG meeting.
- There was a discussion whether this system shall belong to the interest of GRSG, GRVA or both GRs. As the current proposal is not requiring active safety elements the group concluded that it can be considered for GRSG only, GRVA involvement would not be needed anymore.

7. Blind Spot Information System (R151)

This subject has not been discussed as no proposals or comments to the Blind Spot Information System Regulation No. 151 were submitted by the group.

8. Frontal and Lateral Driver's Awareness M1/N1 (R[166])

This subject has not been discussed as no proposals or comments to the Frontal and Lateral Driver's Awareness for M1/N1 category of vehicles Regulation No. [166] were submitted by the group.

9. Component approval

The group discussed about the implementation of Component Approvals in regulations that were drafted by the IWG VRU-Proxi. The previous Chair from EC had the intention to discuss this with EC DG-GROW but it is not clear if this discussion took place. The new Chair will check the status within DG-Grow.

The Chair proposed to set up a Taskforce to discuss the Component Approvals. The expert from CLEPA indicated to be willing to participate. The Secretary was asked to send an email with a request to the members of this IWG if there is interest to participate in this Taskforce.

10. Next meeting

30th meeting: [meeting dates TBD, meeting location TBD]. For the next meeting a Doodle will be sent to the members.

11. Any Other Item

No other items were discussed during this IWG meeting.
