Proposal for revised Terms of Reference and Rules of Procedure of the GRSG informal working group on awareness of Vulnerable Road Users proximity in low speed manoeuvres (VRU-Proxi) (para. 16)

I. PROPOSAL

A. Terms of Reference

1. The informal working group (IWG) shall **consider:** develop a draft regulatory proposal that will enhance the driver's ability to detect vulnerable road users (VRU). It shall consider:

- (a) the need for further amendments to UN Regulations Nos. 151, 158, 159 and 166, and the approval of vehicles with regard to the direct Field of Vision (FOV) of the vehicle driver,
- (b) the approval of systems for the detection of VRU and their installation on the vehicles,
- (c) the approval of devices for indirect vision, and their installation on the vehicles.

It The consideration shall not cover intervening systems such as those intervening on the braking system or the steering system.

The IWG shall primarily focus on low speed manoeuvres in any direction based on accident data.

2. When developing the regulatory proposal, the The IWG should take into account existing technology, data and research. Furthermore, it should consider preexisting standards as well as national and international legislations covering the same scope. The IWG shall take account of the delay between the enforcement of the regulation and its effect on the field.

3. The group shall focus on vehicles of categories M and N.

The IWG shall consider the relevance of addressing the vehicles of category O.

- 4. The target completion dates for the work of the IWG shall be:
 - (a) Forward motion:
 - Vehicle turning:
 - Completion of the proposal by Germany on new provisions for Blind Spot Information Systems (BSIS): 115th session of GRSG (October 2018); Status: completed in per UN Regulation No. 151.
 - Possible completion of alternative testing procedure, depending on the evaluation of the feasibility of the alternative testing procedure, to be decided by the IWG: [123rd] session of GRSG (April 2022). Status: completed per UN Regulation No. 151
 - Vehicle driving straight or taking off from standstill (M2, M3, N2, N3): 118th session of GRSG (April 2020) e.g. CMS or detection system; Status: completed **in per** UN Regulation No. 159.
 - Vehicle taking off from standstill (M1, N1): Completion of the proposal by Japan on new provisions for awareness of VRU: [123rd]

session of GRSG (April 2022); Status: completed per UN Regulation No. 166;

- (b) Reversing motion (e.g. Camera Monitoring Systems (CMS) or detection system): 118th session of GRSG (April 2020); Status: completed **in per** UN Regulation No. 158.
- (c) Direct vision:
 - Phase 1: Base regulation [23rd] session of GRSG (April 2022).
 - Phase 2: Amendments
 - Amending the alternative testing method for innovative vehicle designs (e.g. aerodynamic narrow A-pillar designs) possibly by replacing paragraph 5.3. (October 2023 or earlier if possible)
 - For vehicles with competing objectives (e.g. improved direct vision versus high capacity transport, high efficiency, new powertrain technology, impact on freight industry) with direct vision challenges an alternative approach could be considered. It shall be limited to Level 3 for N3 category of vehicles and shall be based on quantified data. (October 2023 or earlier if possible)

Status: completed per UN Regulation No. 167

(d) General issues (e.g. component approvals) regarding point (a), (b) and (c) until the [128th] session of GRSG (October 2024).

The group shall continue to work on:

- i. Completing draft regulatory proposals for Separate Technical Units (STU) approvals for the following regulations (if applicable):
 - UN Regulation No. 151;
 - UN Regulation No. 158;
 - UN Regulation No. 159;
 - UN Regulation No. 166.

A status report will be provided to the October 2025 session of GRSG.

- ii. Considering the need for the following extensions of the scope concerning the following regulations:
 - UN Regulation No. 151: N1 category of vehicles;
 - UN Regulation No. 158: O category of vehicles (if applicable).

A status report will be provided to the October 2025 session of GRSG.

- iii. Considering the need for further improvements of the established regulations of this group:
 - Assessment of the collective effect of UNECE driver vision UN Regulations in reducing collisions with VRUs;
 - Introduction of new or enhanced technologies in relation to UN Regulations No. 151 and No. 158;
 - Combination of a camera and a detection system in relation to UN Regulation No. 158;
 - Further requirements for pedestrian safety around buses, in relation to driver vision.

A status report will be provided to the October 2025 session of GRSG.

Taking note of paragraph 2 of these Terms of Reference, the proposals reports generated by the group regarding points 4(d)ii and 4(d)iii shall include consideration of

- (a) any cost-benefit analyses of the safety benefits of the proposals in addition to
- (b) the safety effects already established by the latest versions of the applicable UN Regulations and their combination.

Remark (not to implement in ToR): R46 and R158 (with regard to CMS effectiveness) subjects are considered to be first taken up in the GRSG Taskforce R46,

5. The IWG is expected to propose to GRSG a draft regulatory proposals on the approval of Separate Technical Units. Furthermore, a report on the need for further amendments to the Regulations in question shall be provided. driver's visibility and system detection of VRU. The adoption process remains under the responsibility of GRSG, WP.29 and AC.1 in line with the administrative procedures as defined in the 1958 Agreement.

The IWG is expected to take into account the work performed by other Working Parties subsidiary to WP.29.

B. Rules of Procedure

1. The IWG is a subsidiary body of GRSG and is open to all Contracting Parties to the Agreements administered by WP.29, vehicle manufacturers and their suppliers, Technical Services and the participants of all Working Parties (GRs) subsidiary to WP.29.

Additional experts may attend on a case by case basis, invited per a consensual decision of the IWG. These experts shall not be part of the decision process.

2. A Chairman and a Secretary will manage the IWG.

- (a) The chairmanship shall be under the responsibility of European Commission;
- (b) The secretariat shall be under the responsibility of OICA.
- 3. The working language of the IWG will be English.

4. All documents and/or proposals shall be submitted to the Secretary of the group in a suitable electronic format in advance of the meeting. The group may refuse to discuss and endorse any item or proposal which has not been circulated 10 working days prior to that meeting.

5. An agenda and related documents will be made available on the website by the Secretary, in advance of all scheduled meetings.

6. Decisions will be reached by consensus. When consensus cannot be reached, the Chair of the group shall present the different points of view to GRSG. The Chair may seek guidance from GRSG, as appropriate.

7. The progress of the IWG will be routinely reported to GRSG – wherever possible as an informal document and presented by the Chair, the Secretary or their representative(s).

8. All working documents should be distributed in digital format. Meeting documents should be made available to the Secretary for publication on the website of WP.29.

II. JUSTIFICATIONS

- 1. Completing draft regulatory proposals for Separate Technical Units (STU) approvals: the supplying Industry may need a regulatory tool to approve separate technical units to some of the VRU-Proxi regulations because the same technology can sometimes be fitted to various families or categories of vehicles. Such mechanism will help streamlining the approvals of vehicles and hence the introduction of safety technologies on the market.
- 2. Extensions of the scope of established UN Regulations:
 - a. the accidentology may reveal a need to include N1 category vehicles within the scope of UN Regulation No. 151;
 - b. the accidentology may identify the benefit of including some categories of trailers in the scope of UN R158.
- 3. Regarding further improvements of the established regulations the group may be keen to:
 - a. assess the collective effect of the of UNECE driver vision UN Regulations in reducing collisions with VRUs;
 - b. evaluate the introduction of new or enhanced technologies in in UN Regulations No. 151 and No. 158;
 - c. assess the need for a combination of a camera and a detection system in relation to UN Regulation No. 158;
 - d. set requirements for direct vision for the drivers of buses.