Suggestions for further consideration in IWG VRU-Proxi

The text reproduced below was prepared by the experts of the IWG on VRU-Proxi to present suggestions for further consideration for undertaking by the IWG VRU-Proxi.

I. Introduction

According to GRSG-125-21 (Terms of Reference of VRU-Proxi) the IWG VRU-Proxi has a mandate until the GRSG session of October 2024. In the last 34th meeting of the IWG the completion of the tasks according to the Terms of Reference was discussed. The IWG VRU-Proxi came to the following conclusions with respect to the completion of the tasks:

4 (a) Forward Motion, this has been completed by:

- UN Regulation No. 151 (Blind Spot Information System)
- UN Regulation No. 159 (Moving-Off Information System)
- UN Regulation No. 166 (Vulnerable Road Users in Front and Side Close Proximity)

4 (b) Reversing Motion, this has been completed by:

- UN Regulation No. 158 (Devices for means of rear visibility or detection)

4 (c) Direct Vision, this has been completed by:

- UN Regulation No. 167 (Direct Vision)

II. Possible tasks for further consideration in VRU-Proxi

The following suggestions for possible future tasks were tabled in the last 34th meeting of the IWG VRU-Proxi. Some suggestions relate to vehicle use and may require some research activity from Contracting Parties, Industry or on a Pan-UNECE basis. Although the effect of the established UN regulations has not been analysed yet, some thoughts to these suggestions may be given by the experts of VRU-Proxi and GRSG.

- Are camera monitor systems as effective as mirrors – are there any problems with driver use of CMS, for example older drivers who wear varifocal or bi-focal glasses, this suggestion may be considered in Taskforce for e.g. UN Regulation No. 46 (Devices for indirect vision) and No. 158 (Devices for means of rear visibility or detection);

- Is technology available to reduce the detection distance directly in front of the vehicle for the MOIS UN Regulation No. 159, currently 0.8m due to technical limitations;

- Is technology available to improve the detection of cyclists alongside vehicles for UN Regulation No. 151, by considering more relative speeds and reducing the gap between the cyclists and the vehicles;

- Should consideration be given to extending the scope of UN Regulation No. 151 to N1 category of vehicles;

- Should consideration be given to mandating both sensors and a camera where one of these is required for rearward vision, UN Regulation No. 158;

- Should consideration be given to extending the scope of UN Regulation No. 158 to some O category vehicles;

- Should consideration be given to a requirement in UN Regulation No. 46 for Class V and Class VI to be capable of adjustment by the driver while seated in the driving seat;

- How effective are the new UNECE driver vision UN Regulations in reducing collisions with VRUs;

- Is there anything further that can be done to improve safety for pedestrians around buses in relation to driver vision, in addition to the work that is being done by the GRVA IWG on Acceleration Control for Pedal Error;

- VRU-Proxi is considering further work on Separate Technical Units (STU) approvals for the applicable UN Regulations established by VRU-Proxi as remaining task under 4 (d) of the Terms of Reference. As the applicable devices are intended to be type-approved in relation to one or more specified types of vehicle, STU approvals are applicable here instead of component approvals as suggested in the ToRs. This would require an extension of the mandate of the IWG beyond October 2024;

III. Justification

The suggestions listed in this document were tabled in IWG VRU-Proxi and submitted to the experts of GRSG to seek the views of Contracting Parties and Industry on activities to further improve safety of vehicles and provide the drivers with better information on the safety of vulnerable road users around their vehicle. These activities may be considered as possible future work for IWG VRU-Proxi by providing new or updated mandates and Terms of Reference.