Special Interest Group on UN-R 157-9th meeting

- Date and time: 7 & 8 October 2021, 12.00-15.00 (CET/ Geneva time)
- Attendance: Leadership (EC, UK, DE), Group attendees (~60)

Summary:

- Adoption of the notes of 8th meeting postponed to next meeting, to give participants more time to review the notes. Agenda of 9th meeting approved without changes.
- Highlights and outcomes of the 11th GRVA session (September 2021) reported: SIG presented a summary of recent activities and work progress (GRVA-11-32). Furthermore, SIG, together with IWG EDR/DSSAD, presented a revised amendment for the DSSAD-part in the UN-R 157 scope extension proposal for heavy duty vehicles (GRVA-11-08), which was adopted by GRVA and will be sent to WP.29 for consideration in the November 2021 meeting (as amendment of the working document WP.29/2021/143).
- Lane change (LC) and speed increase:
 - a. Higher speed (UNR 157-09-03):

Revised consolidation of the agreed points. Remaining open items were not discussed in the meeting due to focus on lane change.

b. Lane Change (UNR157-08-04)

Industry presented their ideas on types of lane crossing manoeuvres and proposal how to regulate and construct them (UNR157-09-05). This initiated a discussion regarding the general understanding of all participants. <u>Group conclusion:</u> As first step, the requirements for regular and MRM lane change would be settled, since there was clear agreement for those. Then as second step, the evasive lane crossing and lateral offset lane crossing would be consider once a clearer picture had evolved as to whether those types of lane crossings are needed.

Discussions were resumed using document UNR157-08-04, skipping the definitions for now and starting with the requirements for the lane change procedure (LCP):

- O JP's proposal to extend the side and rearward detection in para. 5.3.6.5. along with new para. 7.1.1.1. and 7.1.1.2. were discussed and will be resumed in next meeting.
- o JP presented a national study on MRM LC (UNR157-08-10). Objective of the study, conducted on a simulation of an expressway with two lanes, was to understand the collision avoidance behaviour of the driver in the vehicle behind an ALKS-vehicle performing MRM LC. Results of the study led to JP's proposal to create requirements that the deceleration rate should not be more the 2m/s² during a LC and that any increase in deceleration rate should not happen for 2s after a LC. These requirements would be for a regular lane change and MRM lane change. Industry raised concerns that this may prevent a manoeuvre from happening that could leave the vehicle in a worse situation (e.g. in dense traffic). Group conclusion: JP proposal to be incorporated alongside exemption provision related to the traffic conditions.
- o JP suggested some changes to the terminology used in the section covering 'the assessment of the target lane when there is an approaching vehicle'. UK also questioned what is meant by 'in principle' and were concerned it introduced ambiguity to the text. <u>Group conclusion:</u> Leadership would revise the section to incorporated JP's suggestions and UK's concern.

Leadership will prepare a revised version of the lane change document for the upcoming meeting, incorporating all discussion results of this meeting. Intention is to work to finalise regular and MRM LCPs and cover evasive lane change and remaining open issues in the next meeting.

c. Horizontal

JRC, leading the 'task force on testing', briefly presented an update of the current exchange with experts on track testing (UNR157-09-04). Due to time constraints no indepth discussion took place in the meeting. JRC announced further meetings of the 'task force' and invited all interested members to join. Further updates on track testing as well as public road tests expected in next SIG meeting.

- Consideration of amendments clarifying current UN-R157:

- a. Open issue on "detectable collisions": Topic will be revisited as soon as revised proposal has been provided.
- b. No new revision of proposal GRVA/2021/2 was provided by OICA; topic will be revisited as soon as input has been provided.
- c. Improvement in the audit and in-use requirements: Proposals by JRC/EC proposals for this topic were not discussed due to time constraints.
- AOB: No discussion.

Action points for next meeting:

• Everyone requested to review proposals on lane change (forthcoming for next meeting) and speed increase and contribute with further input.

Next meetings:

- 8th & 9th November 2021 (09.00-12.00 CET)
- 9th & 10th December 2021 (12.00-15.00 CET)
- To be confirmed: 17th & 18th January 2021 (09.00-12.00 CET)