Informal document GRVA-09-16 9th GRVA, 1- 5 February 2021 Agenda item 6(a)

Draft Meeting Minutes of the Preliminary meeting of the [Task Force on Advanced Driver Assistance Systems] (TF ADAS)

Date: 19 January 2021

Co-Chairs: Mr. Andrei Bocharov (Russian Federation) and Mr. Antony Lagrange (EC)

Secretary: Mr. Marc Van Impe (AVERE)

Participants: Total about 90+ participants

1. Welcome and Introduction

- Mr. Andrei Bocharov introduced himself as co-Chair for the group and opened the meeting, welcoming the participants.
- Mr. Antony Lagrange introduced himself as the Co-Chair of the group.

2. Approvals

- The agenda for the meeting (TF ADAS-00-01- Draft Agenda for the Preliminary Meeting of TF ADAS v2) was introduced and approved without comments.
- The United States commented that this session should not be considered as the first meeting of TF on ADAS until GRVA has confirmed the creation of the Taskforce.

3. Industry Presentation

- OICA/CLEPA presented an overview on current issues in UN Regulation No. 79, examples of use-cases and functions that are expected to appear and proposed work process based on two work-streams. One work-stream would focus on defining a new approach to regulating ADAS, while the other work-stream would focus on adapting UN Regulation No. 79. OICA/CLEPA raised various use-case examples (i.e. the Risk Mitigation Function) to clarify that these functions may not fit the classification scheme UN Regulation No.79.
- The Chair noted that we should keep in mind that we are talking about assistance functions and not automated driving, and requested industry to provide an overview of use-cases in written form by the next TF ADAS session.
- Sweden noted the importance of a proper definition of ADAS due to the importance of driver involvement. In addition, Sweden stressed the importance of a proper safety evaluation of such systems, which should be referenced in the Terms of Reference of TF ADAS. At a minimum, added safety risks should be prevented.
- The Co-Chair echoed the Chair's proposal and requested whether industry can provide a complete usecase list.
- OICA commented that further guidance is needed and that it may not be possible to provide a complete
 list, but that OICA will aim to provide input by the next meeting. CLEPA provided a supporting
 comment to OICA regarding the difficulty of preemptively defining use-cases.
- AAPC agreed with OICA and CLEPA and stressed the importance of defining the difference between ADAS versus ADS. If a variety of applications is not allowed, this may result in performance which is not desirable. AAPC argued that set specifications may end up disrupting traffic, in turn impacting the

- behavior of other road users which in turn can affect road safety. If an audit is considered appropriate, a very clear basis for the audit needs to be defined.
- US supported previous comments on the need to clearly define the boundary between SAE level 2 and 3 systems. In addition, the US stressed that the interaction with FRAV and VMAD need to be clearly defined.
- The Chair confirmed that this is the aim.
- China informed the Taskforce that they have recently defined national standards for ADAS, which includes definitions for ADAS and up to 34 use-cases. China is willing to submit this information to help clarify the boundary between ADAS and ADS, in addition between ADAS and conventional functions.
- The Co-Chairs welcomed this offer.
- The UK commented that the regulation should be such that it does not stifle innovation, but that it also should not be an open door for anything to be approved. Provisions in this area need to be well defined, which is especially challenging when defining a common approval regime. The UK would be open to consider specific use-cases.
- OICA supported UK's statement, starting that industry is fully aware of its responsibility to maintain traffic safety. OICA however commented that a general approach or principles can be defined in such a way that they ensure that minimum safety requirements are met.
- Norway introduced their presentation (tentatively Presentasjon_ADAS_driver_information_No) which touched on the variety of implementation of HMI in existing ADAS systems on the market and related distraction factors. Norway recalled its good accident rate performance relative to other markets and stressed that vehicles are becoming increasingly complex, highlighting a fatality last year due to an inattentive driver. Driver distraction and misunderstanding are important issues to consider and the focus should rather be on emergency ADAS which properly functions at times when drivers need these systems the most. Norway introduced the concept of system-specific training where drivers would have to certify their ability to properly use the ADAS system. This certification could be done by the manufacturer.
- The Chair commented that indeed customer information should be tackled. The arrangement of controls is a subject of GRSG so collaboration might be necessary. HMI is already an objective outlined in the Terms of Reference.
- The Co-Chair, commenting on the OICA/CLEPA presentation, emphasized the need to understand better what the scope of work should be and again requested industry to provided further insight into use-cases by the next session.
- Japan appreciated the presentation from Norway and shared the concern that overreliance is an issue impacting safety. Comfort ADAS may decrease or may as well improve safety. This can be discussed in this Taskforce, possibly based on technical data (e.g. accidentology). Japan asked all participants to submit technical data to TF ADAS for consideration.
- The Netherlands stressed that lack of harmonization of HMI is an important issue to be considered by this Taskforce.

4. Overview of current issues on ADAS SAE level 2 systems in UN Regulation No. 79

- The Chair presented reference materials with regard to the differences between level 0 (where there is no automation such as in the case of AEBS), driver assistance (level 1 and 2) and automation (from level 3). (Tentatively 1st TF ADAS Meeting Presentation-rev.9)
- Sweden, in response to the presentation, commented that it does not object to the content, however, does object to the use of "concerns" in the header used in the presentation.
- The Co-Chair proposed to replace "concern" with "issues".
- The Netherlands agreed with Sweden and supported to use of "issues" or "questions"

5. Overview of current issues on ADAS SAE level 2 systems in UN Regulation No. 79

- The Secretary introduced the draft Terms of Reference (tentatively GRVA-08-08e-Draft TOR TF ADAS v2 Clean) to the Taskforce, outlining the various changes that were made based on the comments received from various stakeholders.
- The US indicated its concern with the deliverables and timing, and the ambition to resolve existing UN Regulation No. 79 proposals by June GRVA session. The US asked for a clarification of what would constitute the second versus first phase, and requested a reference to FRAV/VMAD and other groups.
- The Chair clarified that by June the ambition is to resolve pending discussions, and to finalize the work on a 1958 Agreement-compatible document by February 2022. The second phase might constitute the development of a Global Technical Regulation.
- AAPC commented that the Terms of Reference outline an ambitious plan containing two very different activities and phases. AAPC additionally commented on the difference between a Taskforce and an Informal Working Group which should be considered if relevant. AAPC suggested it might be appropriate to maintain a Taskforce for the first phase and an Informal Working Group for the second. Lastly, AAPC commented that the mention of the objective to define a classification for ADAS may not be appropriate. Close collaboration between working groups is required as there might be overlap on various topics (e.g. HMI).
- The Chair recommended AAPC to submit written comments to the draft Terms of Reference to amend the text as would be appropriate.
- The UK requested clarity on why limitations for the O Category of vehicles were mentioned.
- The Secretary responded that this was a textual mistake in the document.
- China thanked the Chairs and Secretary for adopting the majority of its comments. China suggested some minor, editorial improvements and suggested the removal of the mention of longitudinal and lateral control in paragraph 1 of section A so that other, new systems may be considered.
- Japan also thanked the Chairs and Secretary for integrating most comments, though asked the Taskforce to maintain reference to longitudinal and lateral control. In addition, Japan stressed the importance of encouraging all contracting parties, whether under the 1958 or 1998 agreement, to share technical and accidentology data.
- The Chair suggested that the reference to HMI as an issue to consider in the Terms of Reference may be sufficient to resolve China's concern.
- Germany thanked the Chairs and Secretary for including most of their comments. Germany's submitted comments were intended to stress the need for a generic approach. A new UN Regulation may be an outcome to consider equally to further amendments to UN Regulation No. 79. Germany also supports earlier statements from Sweden that a definition of ADAS is needed and that the safety evaluation should be considered within the scope.

- OICA indicated its support for the deliverables and timing, as well as the parallel work streams that have been outlined. OICA recommended amending item 4 to account for the proposed generic approach. In addition, OICA stressed the importance of preserving existing approvals and that a clearer picture is needed of what is considered as ADAS, taking into account existing regulated systems. Longitudinal control should be considered only as part of the steering-related intervention of the system.
- OICA additionally indicated that ADAS levels and definitions are defined in table of automation approved by WP.29 (ECE-TRANS-WP29-1140e). OICA asked whether a hands-off/eyes on-system would still be considered an ADAS? The generic approach should encompass all ADAS systems coming to the market. OICA is open to either the amendment of UN Regulation No.79 or the development of a new UN Regulation, whichever would be most appropriate.
- Sweden requested the Terms of Reference to better reflect the importance of developing a definition of ADAS. In addition, Sweden requested the inclusion of a reference to the safety evaluation.
- China supports Japans call for the submission of any accidentology data to the Taskforce. In addition, China believes that warning and control systems should be considered within the scope of the Terms of Reference, and will provide a list of use-cases by the next session in order to facilitate a decision on whether a reference to longitudinal and/or lateral control should be maintained.
- The Netherlands thanked the Co-Chairs and Secretary for implementing most comments, and will submit amendments touching on HMI with respect to paragraph 3.e) of Section A.
- The Russian Federation proposed several corrections to item 3 f) as the objective of this item was not sufficiently clear.

6. Sources of regulatory topics

- The Chair briefly presented an overview of reference materials that can be considered in future sessions in order to define ADAS systems, touching on documents from i.e. FRAV, VMAD, WP.29 and SAE standards.
- The FRAV Secretary commented that some clarifications were introduced to FRAV-09-05 which may be relevant to consider.
- Sweden commented that if the Taskforce is able to reach consensus on an ADAS definition, a reference to the SAE levels of automation may not be required.
- The Chair asked Sweden to submit proposals.
- Norway stressed that a clear differentiation between SAE level 2 and level 3 is needed from a regulatory point of view. The missing topic in the SAE materials is responsibility. Norway pointed out that in a level 2 system, the driver is responsible to take over, while in a level 3 system the manufacturer is responsible.
- OICA commented that the multi-pillar assessment approach may not be relevant for ADAS, unless specific elements are cherry-picked from VMAD.
- The Co-Chair confirmed that the WP.29 document (ECE-TRANS-WP29-1140e) is a very good basis for discussion.
- Japan outlined its support to study FRAV and VMAD documents, which may aid in understanding the safety improvements that an ADAS introduces. Japan also requested a reference to UN Regulation No. 157 with respect to ALKS, as monitoring the driver state may be relevant input in respect to driver engagement. Japan requested an action item for all parties to collect data.

 Sweden thanked the Co-Chair and agreed that ECE-TRANS-WP29-1140e is a good improvement on the SAE differentiation. More discussion of the definition will be needed.

7. **AOB**

- The Co-chairs confirmed that a report to GRVA will be prepared. The meeting's documents and minutes will be shared with the Taskforce members. The Co-Chairs additionally asked all participants to review the materials outlined in the various documents.
- The Co-Chairs requested all stakeholders to submit any comments to the Terms of Reference by Friday if possible, by the 26th of January at the latest.

8. List of Action Items

- The following action items were outlined:
 - o Input on the Terms of Reference to be provided ASAP, at the latest by the 26th of January
 - o All participants are encouraged to share technical/accidentology data on ADAS which are in operation or available to market
 - o All participants are requested to share available regulatory documents & standards with the taskforce for review
 - All: Review WP.29/1140 and SAE J1630 as a potential basis for defining ADAS, and provide improvements where needed
 - o All: Clarify ADAS use-cases and issues with UN Regulation No. 79. Clarify any regulatory vagueness with regard to the approval of ADAS.

9. Next meeting

• The next meeting will tentatively take place on the 18th of February 2021.