

## Coordination of work on Automated Driving Systems

### I. Items for discussion

#### A. ADS light signalling

1. AC.2 was expected, at its 140<sup>th</sup> session, to provide recommendations regarding the collaboration between GRVA and GRE on light-signalling for Automated Driving Systems (ADS), as agreed at its November 2021 and March 2022 sessions.

2. GRE performed preparatory work dealing with potential light-signalling requirements for autonomous vehicles. GRVA adopted a position on this matter (GRVA-14-15/Rev.3) based on the preparatory work performed by the IWG on FRAV. The summary reads:

- GRVA does not recommend mandatory requirements for additional light-signalling devices under WP.29 beyond those requirements established for manually driven vehicles.
- GRVA believes that existing light-signalling devices may be suitable (if permitted) to signal initiation of an automated fallback response designed to place the ADS vehicle in a minimal risk condition
- GRVA recommends the establishment of uniform provisions for a light signal to communicate the ADS operational status under certain conditions, should it be required or permitted by an individual Contracting Party
  - GRVA recognises that it remains the prerogative of the Contracting Party to regulate the use of such a signal
- GRVA notes that means other than light-signalling may be suitable to achieve safety needs
- GRVA recommends continued monitoring of research into ADS signalling and the safety of interactions between other road users and ADS vehicles

**3. AC.2 recommends that WP.29 endorses this position (see WP.29-188-10) and recommends that GRE analyses research and establishes high level principles. AC.2 also recommends that GRBP reflects on this item from the audible signalling point of view.**

#### B. Mandate extension of the GRVA informal working groups on FRAV, VMAD and CS/OTA

4. WP.29 extended the mandates of the IWGs on FRAV and VMAD at its June 2022 session and agreed to consider a draft amendment proposal to update Table 1 in the Framework Document on Automated Vehicles (FDAV).

5. GRVA discussed the deliverables of the IWGs as reflected in GRVA-14-51/Rev.2.

6. GRVA also noted that the mandate of the IWG on Cyber Security and (OTA) software updates issues would expire in November 2022. GRVA recommends to WP.29 to extend the mandate of the group to address recent questions related to the interpretation documents regarding UN Regulations Nos. 155 and 156 as well as to address an amendment proposal to UN Regulation No. 155 (CS and CSMS) tabled by the experts from SAE International (GRVA-14-06).

**7. AC.2 requested the secretariat to prepare the amendment proposal to FDAV based on GRVA-14-51/Rev.2 and to include the mandate extension of the IWG on CS/OTA until November 2023/2024**

### **C. UN GTRs and UN Regulations screening, with regard to ADS**

8. The GRs established Task Forces in order to perform these screenings. GRVA received questions for guidance and clarifications from the GRSG task force, and provided some advice (GRVA-14-54/Rev.1). This document includes (i) information on the vehicles of relevance for screening (Vehicles equipped with an ADS, incl. dual mode vehicles, vehicles without manual driving capabilities and vehicles with or without occupants), (ii) guidance on keywords that could be screened (e.g. driver, seating position, seat etc.) and a recommendation to consult GRVA if a GR would consider introducing ADS related terminology in their deliverables.

**9. AC.2 noted this coordination between the different GRs.**

### **D. Proposal for addressing V2V**

10. GRVA discussed the proposal from the expert from China to address Vehicle to Vehicle (V2V) communication and data interaction (GRVA-14-20). GRVA was favourable to this request and agreed to consult WP.29 on the modalities to perform this work. It was noted that there might be the need to coordinate with other GRs, as GRVA would only deal with data collection and transmission related performance requirements applicable to wheeled vehicles and having relevance for automated/autonomous and connected vehicles. A question is also if the ITS group should take a role with regard to such activity.

**11. AC.2 recommends that WP.29 discusses this topic and invites the IWG on ITS to perform preparatory activities and to explore the potential role of WP.29**

### **E. Specific vehicle category for Automated Driving Systems**

12. GRVA discussed the proposal from the experts from OICA and CLEPA to define new vehicle categories for ADS (GRVA-14-31). GRVA took note of this proposal and agreed that coordination with GRSG would be needed, as GRSG is maintaining R.E.3 and S.R.1, the two documents containing vehicle categories and related definitions.

**13. AC.2 recommends that GRSG and GRVA liaise on the necessity to develop a draft including these new categories (or subcategories).**

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