Proposal for establishing a new Task Force on Advanced Driver Assist Systems for Vehicle Longitudinal and Lateral Control (TF ADAS)

I. Background

- A number of amendment proposals to the ACSF provisions in UN Regulation No. 79 (Steering equipment) presented by various submitters at the previous GRVA sessions including several significant amendments to ACSF of Category B1 (Lane-keeping) and C (Lane change) provisions aimed at addressing limited performance, safety concerns and negative customer feedback, etc.
- 2. GRVA has been divided on these amendments for more than a year already with a lack of progress towards resolution. On the one hand, some Contracting Parties are willing to remove provisions that they consider to be design restrictions, as highlighted by the representatives of AVERE and OICA whereas some other Contracting parties highlighted the inerrant risks posed by the automation Level 2 technologies in particular driver overreliance. (See the last slide of GRVA-05-49).
- 3. AC.2 at its 134th session held on 9 November 2020 discussed the possibility to take relevant provisions out of UN Regulation No.79 and to develop a new UN Regulation on Advanced Driver Assistant Systems (ADAS). AC.2 invited GRVA to further discuss and seek consensus, especially taking into account: (i) Human Machine Interface (HMI) related provisions and (ii) Driver Overreliance, as a safety concern (AC.2-134-08).
- 4. At the WP.29 182nd session, EC submitted the proposal (WP.29-182-17) to amend the WP.29 Programme of Work for 2021 (ECE/TRANS/WP.29/2020/1/Rev.2) to include a new item addressing the simplification of UN Regulation No. 79 and elaborating the new ADAS UN Regulation.
- 5. The industry is concerned with the lack of progress in addressing the issues of further development of ACSF provisions in UN Regulation No. 79 and believes that a new generic approach to the development of regulatory provisions is needed in the form of a new UN Regulation to cover not only existing, but new driver assisting technologies to be introduced on the market in the next few years Industry has consistently indicated a need to recognize the important role that more capable level 2 systems will play in the near future in various operational environments (highway, interurban & urban).
- 6. The development of the new ADAS UN Regulation may affect the content of UN Regulation No. 79, possibly leading to the removal of the ADAS provisions of the Regulation.
- Reference documents: Preparatory note for the AC.2 informal meeting on 23 October 2020, AC.2-134-04-08/Rev.1, WP.29-182-17, ECE/TRANS/WP.29/1155, GRVA-05-49, GRVA-07-23, FRAV-06-04, FRAV-06-05.

II. Proposal

A. Terms of Reference

- The Task Force should focus on Advanced Driver Assist Systems for Vehicle Longitudinal and Lateral Control (TF ADAS) and shall develop a new draft UN Regulation focusing on ADAS systems of level 2¹ not covered UN Regulations.
- 2. The scope of the new UN Regulation shall cover M and N category vehicles.
- 3. The TF ADAS shall address the following issues:
 - a. Outline the use-cases that are expected to be available for the market now and in the next years.
 - b. Review current issues on ADAS level 2 systems in Regulation 79.
 - c. Consider and develop generic performance and assessment requirements for ADAS irrespective of the ADAS system that is regulated². Based on the outlined use-cases, consider and propose specific requirements that may be relevant for specific use-cases in addition to the generic approach.
 - d. As for ADAS, the driver is part of the safety concept, the TF will pay special attention to HMI (i.e., principles for informing the driver about the function's awareness/intent), driver engagement (monitoring the driver state), driver overreliance (including mode confusion/misuse) and consumer information.
 - e. Find and propose the right balance between higher-level functional requirements and specific performance requirements.
- 4. Also, TF ADAS shall consider removing ADAS from UN Regulation No.79 as a result of the new ADAS regulation.
- In developing its proposals, TF ADAS should take into account existing data, research and voluntary standards available in the Contracting Parties and Industry.
- 6. The regulatory text shall, to the fullest extent possible, be performance-based and technology-neutral. The technical specification shall be developed possibly neutral to the compliance assessment system: type approval and self-certification.
- 7. TF ADAS shall deliver a regulatory text for the new UN Regulation and related amendments to UN Regulation No. 79 for the review and possible adoption by GRVA at its September 2021 session.

B. Rules of Procedure

- 1. TF ADAS shall report to GRVA and is open to all participants of WP.29.
- 2. Two Co-Chairs and a Secretary will manage TF ADAS.
- 3. The working language of TF ADAS will be English.
- 4. All documents and/or proposals must be submitted to the TF ADAS Secretary in a suitable digital format in advance of one week of the meeting. The group may refuse to discuss any item or proposal submitted later.
- An agenda and related documents will be communicated to all TF ADAS
 members in advance of all scheduled meetings by the means of publication on
 the dedicated UNECE website.
- Decisions will be reached by consensus. When consensus cannot be reached, the Co-Chairs shall present the different points of view to GRVA. The Co-Chairs may seek guidance from GRVA as appropriate.

¹ As defined in ECE/TRANS/WP.29/1140

² Similar approach to what is being developed by FRAV/VMAD for automated vehicles (from level 3).

7. The progress of TF ADAS will be reported routinely to GRVA – wherever possible as an informal document and presented by the Co-Chairs.

C. Organizational matters

- 1. The first online one-day 3-hour TF ADAS meeting will be scheduled in the week of 18 January 2021.
- 2. The information concerning the first TF ADAS meeting will be distributed to all GRVA delegates.