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| Submitted by the experts from  The Russian Federation and the European Commission | Based on Informal document GRVA-08-08  8th GRVA, 14-16 December 2020  Provisional agenda item 4a |

Proposal for establishing a new Task Force

on Advanced Driver Assistance Systems

(the TF on ADAS)

I. Background

1. 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 innovation opportunities.

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](https://www.unece.org/fileadmin/DAM/trans/doc/2020/wp29grva/GRVA-05-49e.pdf)).

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.

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. During the 8th session, GRVA agreed that the European Commission and the Russian Federation should invite GRVA participants to discuss and determine if a Task Force or other working body be formed to address any issues with UN Regulation No. 79 that need to be investigated and developed with regard to ADAS. If needed, GRVA will evaluate draft Terms of Reference for a proposed Task Force or other body on ADAS at its next session.

6. 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 has proposed two parallel work streams: (i) continue work to improve and adapt UN Regulation No.79, and (ii) consider the development of a new generic approach to the development of regulatory provisions 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 ADAS continues to play in the near future in various operational environments (highway, interurban & urban).

7. The development of the new ADAS UN Regulation may affect the content of UN Regulation No. 79, possibly leading to the partial removal of the ADAS provisions of the Regulation.

8. Reference documents: 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

1. The Task Force (TF) should focus on Advanced Driver Assist Systems (ADAS) for Vehicle Longitudinal and Lateral Control, and shall address the simplification of UN Regulation No. 79 and develop the new ADAS UN Regulation with a focus on ADAS systems up to of level 2[[1]](#footnote-2).

2. The scope of the new UN Regulation shall in principle aim to cover vehicles of Categories M, N and O, yet technical system restrictions may require limitations

3. The TF on ADAS shall address the following issues:

* + 1. Outline the use-cases that are expected to be available for the market now and in the next years.
    2. Review and solve current issues on ADAS systems in Regulation No. 79 and other relevant regulations, in particular taking into consideration existing proposals for ACSF of Category A (RCP), Category B1 (lane keeping) and Category C (lane changes and RMF).
    3. Propose the definition, classification and scope of functions of ADAS, clarifying the difference of ADAS to automated driving or conventional technologies.
    4. Consider and develop generic performance and assessment requirements for ADAS, as well as combinations of multiple ADAS, for which a manufacturer is applying for an approval.[[2]](#footnote-3) General principles to identify differences and help distinguish between assistance systems and automated driving functions may be considered as a method to derive generic requirements. Based on the outlined use-cases and on the review of current issues in Regulation No. 79, consider and propose specific requirements that may be relevant for specific use-cases in addition to the generic approach.
    5. As for ADAS, where the driver is responsible for safe driving but is assisted in the driving task, the TF on ADAS will pay special attention to HMI (i.e., principles for informing the driver about the function’s awareness/intent), driver engagement (e.g. monitoring the driver state and ensuring the driver’s engagement in vehicle control), driver overreliance (including mode confusion with automated systems and misuse), consumer information and functional limitations.
    6. Find and propose the right balance between high-level functional requirements and specific performance requirements.

4. Based on the findings from item 3, the TF on ADAS shall consider the development of a new draft UN Regulation focusing on ADAS systems for vehicle longitudinal and lateral control. If appropriate, the TF on ADAS may also consider the removal of ADAS provisions from UN Regulation No.79 as a result of the new ADAS regulation, in order to avoid redundant requirements for a given function/system.

5. In developing its proposals, the TF on ADAS shall take into account existing data, research results, legislation and voluntary standards available.

6. TF ADAS shall take full account of developments and work in full cooperation with other informal working groups of GRVA.

7. The regulatory text shall, to the fullest extent possible, be performance-based and technology-neutral. The technical specification will attempt to be developed in a neutral manner to the compliance assessment system: type approval and self-certification.

B. Rules of Procedure

1. The TF on ADAS shall report to GRVA and is open to all participants of WP.29.

2. Two Co-Chairs and a Secretary will manage the TF.

3. The working language of the TF will be English.

4. All documents and/or proposals must be submitted to the TF 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.

5. An agenda and related documents will be communicated to all TF members in advance of all scheduled meetings by the means of publication on the dedicated UNECE website.

6. 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.

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

C. Deliverables and Timings

1. As a first phase of activities, the TF on ADAS shall deliver regulatory texts intended to:

* 1. Finalize pending proposals to UN Regulation No. 79 taking into account existing proposals, for consideration and potential adoption by GRVA at the June 2021 session;
  2. Develop a first proposal for a new UN Regulation and/or amendments to UN Regulation No. 79 for the evaluation and potential approval of new ADAS, which will be submitted for consideration by GRVA at the September 2021 session, and;
  3. Finalize the new UN Regulation and related amendments to UN Regulation No. 79 for review and possible adoption by GRVA at the February 2022 session.

2. If desired by the Contracting Parties of the 1998 Agreement, the TF on ADAS could develop a Global Technical Regulation compatible with the 1998 Agreement for consideration and possible adoption by GRVA at the September 2023 session as a second phase.

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1. As defined in ECE/TRANS/WP.29/1140 [↑](#footnote-ref-2)
2. Similar approach to what is being developed by FRAV/VMAD for automated vehicles   
    (from SAE level 3). [↑](#footnote-ref-3)