

## GRVA – 12<sup>th</sup> session

The Working Party on Automated/Autonomous and Connected Vehicles (GRVA) met ON January 2022 (24<sup>th</sup> to 28<sup>th</sup>) held in mix format: hosted in Geneva and online.

Topics discussed:

- Artificial Intelligence in vehicles
- Automated/autonomous and connected vehicles
  - Functional Requirements for Automated and Autonomous Vehicles  
GRVA requested the secretariat to submit GRVA-12-13 to WP.29 for information (in March 2022).
  - Validation Methods for Automated Driving  
GRVA requested the secretariat to submit GRVA-12-12 to WP.29 for information (in March 2022) and for consideration and vote at its June 2022 session, subject to final review by GRVA at its May 2022 session.
  - Event Data Recorder / Data Storage Systems for Automated Driving  
GRVA received a progress report (GRVA-12-33) by the IWG on Event Data Recorder (EDR) / Data Storage System for Automated Driving (DSSAD) on the current activities of the group.
  - Automated Lane Keeping Systems  
GRVA reviewed GRVA-12-51 and GRVA-12-51/Rev.1 prepared during the week and requested the secretariat to submit GRVA-12-52 (based on formal documents ECE/TRANS/WP.29/GRVA/2022/3, ECE/TRANS/WP.29/GRVA/2022/4 and informal documents GRVA-12-34, GRVA-12-35, GRVA-12-20/Rev.1 (including square brackets) to WP.29 and AC.1 for consideration and vote at their June 2022 sessions, subject to final review by GRVA at its May 2022 session.  
The purpose of such documents are the extension of the scope of UN Regulation N. 157 to allow higher speeds (up to 130 km/h), lane change manoeuvres and the introduction of commercial vehicles.
  - Other business
    - ISO Standards
    - external signalling for automated vehicles.
    - pros and cons of specific light signalling for automated driving.
- Connected vehicles
  - Cyber security and data protection + Software updates and over-the-air issues

The expert from Japan, Co-Chair of the IWG on Cyber Security and OTA issues, presented ECE/TRANS/WP.29/GRVA/2022/5, a proposal prepared by the group for recommendations on uniform provisions concerning cyber security and software updates, suitable for the Contracting Parties to the 1998 and/or 1958 Agreements. The experts from China, Italy and the United States of America supported the document. GRVA adopted it and requested the secretariat to submit it to WP.29 for consideration and vote at its June 2022 session.

Following discussions on the appropriateness of vehicles of categories R, S and T being included within the scope of Regulation UN N. 155 and 156, GRVA agreed

to keep the three Categories S, R and T in the scope of UN Regulation No. 156 and to resume consideration of this item at the next session in order to develop a road map for their future inclusion in UN Regulation No. 155.

- Data and vehicle communications

The expert from CITA presented GRVA-12-14/Rev.1, giving an overview of the content in GRVA-12-11/Rev.1 and GRVA-12-40, regarding remote access to in-vehicle data. He recalled various models and technical solutions presented to WP.29 and GRVA to enable such access, e.g. to third parties and for sovereign use cases such as Periodic Technical Inspection or Market Surveillance. He proposed a role for GRVA in that field, i.e. to prepare the design of vehicles so as to enable data collection, transmission and guaranty authenticity (no repudiation) of the data. He called on for the establishment of an ad hoc group that would perform a full assessment, possibly using the assessment template proposed in GRVA-12-40.

GRVA agreed to further discuss the role of GRVA with regards to remote access to in-vehicle data at its May 2022 session and consider approaching AC.2 and WP.29 in June 2022 for further guidance regarding future proceedings concerning that matter.

- Advanced Driver Assistance Systems and UN Regulation N. 79

- Advanced Driver Assistance Systems

The expert from the Russian Federation, Co-Chair of the Task Force on Advanced Driver Assistant Systems (ADAS), introduced GRVA-12-18 with a status report of the activities performed by the group. He emphasised his intention to speed up the process and suggested the creation of a drafting group. He mentioned the reduced participation in recent meetings, with a usual attendance of 80 experts dropping recently to 50 experts and called for more engagement. He reported on the two workstreams of the group, on UN Regulation No. 79 and on a new regulation on a subset of ADAS that the group calls Driver Control Assistance Systems (DCAS). He detailed items from the current group's discussions.

The outcome of the work done by the task force on boundaries between ADAS and ADS received comments from the European Commission, France, FIA and OICA. GRVA agreed to resume consideration of this item.

- UN Regulation No. 79 (Steering equipment)

The expert from OICA recalled the purpose of ECE/TRANS/WP.29/GRVA/2021/11 (aimed to include truck-trailer data transmission in the Automatically Commanded Steering Functions (ACSF) of Category C provisions in UN Regulation No. 79) and introduced a revised proposal (GRVA-12-19). GRVA adopted GRVA-12-19 and requested the secretariat to edit it and to submit it, as draft supplement for the 03 and 04 series of amendments to UN Regulation No. 79, to WP.29 and AC.1 for consideration and vote at their June 2022 sessions.

The expert from OICA introduced ECE/TRANS/WP.29/GRVA/2022/6, introducing clarifications and correcting omissions. GRVA adopted it as amended by GRVA-12-43 and requested the secretariat to submit it, as draft supplement for the 03 and 04 series of amendments to UN Regulation No. 79, to WP.29 and AC.1 for consideration and vote at their June 2022 sessions.

- Advanced Emergency Braking Systems

GRVA received a report (GRVA-12-09/Rev.1) from the expert from Germany, Co-Chair of the IWG on AEBS for heavy duty vehicles, on the progress made by the group to upgrade UN Regulation No. 131. He presented ECE/TRANS/WP.29/GRVA/2022/7 (amended by GRVA-12-08), proposing to adjust the performance requirements in UN Regulation No. 131 to the current state of the art.

GRVA requested the secretariat to submit ECE/TRANS/WP.29/GRVA/2022/7 as amended by GRVA-12-49 (reproduced in GRVA-12-50/Rev.1), to WP.29 and AC.1 for consideration and vote at their June 2022 sessions.

GRVA adopted the document GRVA-12-45 (based on GRVA-12-29) and requested the secretariat to submit it, as amendment to ECE/TRANS/WP.29/2022/18, ECE/TRANS/WP.29/2022/19 and ECE/TRANS/WP29/2022/20, to WP.29 and AC.1 for consideration and vote at their March 2022 sessions.

- UN Regulations Nos. 13, 13-H, 139 and 140 and UN GTR No. 8

o Electronic Stability Control

The expert from France reported on recent crashes involving concrete mixer trucks, such vehicles being currently exempted from the electronic stability requirements. He presented GRVA-12-07, proposing to remove the exemption for concrete mixers trucks.

GRVA agreed to resume consideration of the French proposal and requested the secretariat to distribute GRVA-12-07 with an official symbol at the next GRVA session in May 2022.

o Electromechanical brakes

No relevant decisions

o Clarifications

The expert from CLEPA introduced ECE/TRANS/WP.29/GRVA/2022/9, with an amendment proposal to UN Regulation No. 13, aimed at resolving problems with installation of stronger spring brake actuators in trailers to realize higher deceleration in the case of emergency braking caused by a cut of the supply line between towing vehicle and trailer.

GRVA adopted ECE/TRANS/WP.29/GRVA/2022/9 and requested the secretariat to submit it as draft supplement to the 11 and 12 series of amendments to UN Regulation No. 13 to WP.29 and AC.1 for consideration and vote at their June 2022 sessions.

The expert from OICA presented GRVA-12-35, recalling the purpose of ECE/TRANS/WP.29/GRVA/2022/10, aimed at clarifying paragraph 5.2.22.2. in UN Regulation No. 13-H, which dealt with deceleration thresholds generating braking light signal in the case of regenerative braking and/or automatically commanded braking. GRVA adopted ECE/TRANS/WP.29/GRVA/2022/10 as amended by GRVA-12-24 and requested the secretariat to submit it as draft supplement to UN Regulation No. 13-H to WP.29 and AC.1 for consideration and vote at their June 2022 sessions.

- Motorcycle braking

o UN Global Technical Regulation No. 3

GRVA agreed to keep GRVA-12-15 on the agenda as a reference document until its

next GRVA session in May 2022

- UN Regulation No. 90
  - GRVA requested the secretariat to submit the document, as amended by GRVA-12-16 as a supplement to the 02 series of amendments to UN Regulation No. 90, to WP.29 and AC.1 for consideration and vote at their June 2022 sessions.
  
- Exchange of views on guidelines and relevant national activities
  - The expert from Germany provided information on the first approval issued according to UN Regulation No. 157 (GRVA-12-31). He provided details on the time and workload needed to perform the full assessment as required by the regulation.
  
- Revision 3 of the 1958 Agreement
  - Implementation of relevant provisions in Revision 3 to the 1958 Agreement
    - GRVA reviewed GRVA-12-28, containing a list of UN Regulations prepared by the secretariat in consultation with the experts from OICA, for which the use of Unique Identifier should be prevented.
    - GRVA agreed to keep GRVA-12-28 on the agenda until its next session in May 2022.