Informal document GRVA-02-13

Transmitted by Co-Chairs of VMAD

2nd GRVA, 28 January – 1 February 2019 Provisional agenda item 5 (a)

Report of the Group on Validation Method for Automated Driving (VMAD) to GRVA

January 2019 Geneva

Background

First GRVA (September 2018, Geneva)

- Two subgroups of the Task Force on Automated Vehicle Testing ("AutoVeh") called "SG-1" and "SG-2" presented ToRs of both groups (GRVA-01-07 and GRVA-01-11).
- GRVA agreed that the groups continue to work until the next GRVA session, and suggested that the group should refine the ToRs to develop the novel innovative concept to verify the compliance with technical requirements and to demonstrate the validity of the new approach.

176th WP29 (Nov 2018, Geneva)

 WP29 has identified seven priority topics for automated and connected vehicles including "new assessment/test methods".

3rd Subgroup meetings (Oct 2018, Niigata, Japan)

- Participation from Canada, China, Japan, Korea,
 Netherlands, Sweden, Singapore, UK, US, AAPC, Cieca,
 Cita, Clepa, OICA and Uber
- 2. Presentations on aproaches and guidelines by China, Netherlands, Japan, AAPC, OICA, Uber
- 3. General conclusion: there is convergence in safety elements included in the guidelines in general and validation method in particular
- 4. ToR: fruitful discussion in response to GRVA suggestion, resulting in ONE compact and comprehensive revision with new name VMAD (Validation Method for Automated Driving).

1st VMAD meeting (Jan 2019, Hang Zhou, China)

- Participation from Canada, China, EC, France, Japan, Korea, Netherlands, Russian Federation, UK, AAPC, Cieca, Cita, Clepa, OICA, SAE and Intel/Mobileye
- Presentation on comparison of existing guidelines for AD
- 3. Presentations on identification of different topics for work
 - Applicable Traffic scenario
 - Examples of validation AD by Intel/Mobileye
 - Multi pillar approach

Outcome of 1st VMAD

- Tentatively categorized common guidance safety elements of existing guidelines under new assessment/test methods and other topics such as functional requirements
- Agreed initial roadmap including working on a traffic scenario and envisaging a multi-pillar approach for developing validation methods building from the three-pillar basis

Actions for next meeting 1+2 April, Washington DC

- Refine list of guidance safety elements of existing guidelines under new assessment/test methods, and define candidates elements
- Discuss traffic scenario database parameters
- Consider candidate elements of new assessment/test methods
- Discuss organization of work streams

Request to GRVA

- Approve the ToR
- Endorse the Q&A
- Take notice of recent VMAD activities including the one on existing guidelines
- Give guidance to come up with an overall view on AD activities