

Proposal for an Informal Working Group on Validation Methods for Automated Driving (VMAD)

I. Terms of Reference

1. [ECE/TRANS/WP29/2019/34, as amended by WP.29-178-10e] (Framework Document) contains the strategic vision for the activities of WP29, GRVA and its Informal Working Groups (IWGs) with respect to automated vehicles. This framework document directs GRVA and its IWGs to use the issues, topics and deliverables from that document as guidance to inform further discussions, activities and outcomes.
2. These ToR implement the arrangements foreseen in the Framework Document and agreed by WP29.
3. As noted in document [ECE/TRANS/WP29/2019/34], the IWG shall:
 - Develop assessment methods, including scenario's, to validate the safety of automated systems, based on a multi pillar approach including auditing, simulation, virtual testing, test track testing, real world testing;
 - Do this in line with the following principles/elements d. assessment method/test for Object Event Detection and Response and f. Validation for System Safety.
4. The IWG shall take full account of developments and work in full cooperation with other subsidiary Working Parties (GRs) of WP.29 and their IWGs.
5. The IWG should take into account existing data, research and standards available in the contracting parties in developing its proposals.
6. Among the deliverables foreseen (and to be foreseen) in the Framework Document and to be developed by the IWG are:
 - a. New assessment /Test method of Automated Driving (AD).
 - b. Requirements to be applied to the safety aspects of electronic control systems ("CEL").
 - c. Proposals for validating new test and assessment methods, (including CEL) when applied to Automated Lane Keeping Systems of SAE levels 3/4 compatible with a New UN Regulation for Contracting Parties to the 1958 Agreement.
 - d. Review of the existing and upcoming methods and a proposed way forward for the assessment of AD.
7. The IWG may request to work in phases on the different work items.

8. The text shall, to the fullest extent possible, be performance based and technology neutral and be prepared in a neutral form such that it can be adapted for use under the 1958, 1997 and 1998 Agreements.

II. Rules of Procedure

1. The IWG shall report to GRVA and is open to all participants of WP.29.
 2. [Co-Chairs] and a Secretary will manage the IWG.
 3. The [co-chairs] may invite experts (at their discretion), including non-participants of WP.29, to assist in the development of technical standards.
 4. The working language of the IWG will be English.
 5. All documents and/or proposals must be submitted to the Secretary of the relevant group in a suitable electronic format in advance of the meeting. The group may refuse to discuss any item or proposal which has not been circulated five working days in advance to the meeting.
 6. An agenda and related documents will be circulated to all members of the IWG in advance of all scheduled meetings.
 7. Decisions will be reached by consensus. When consensus cannot be reached, the [Co-Chairs] of the groups shall present the different points of view to GRVA. The [Co-Chairs] may seek guidance from GRVA as appropriate.
 8. The progress of the IWG will be reported routinely to GRVA – wherever possible as an informal document and presented by the [Co-Chairs].
 9. All documents shall be distributed in digital format. Meeting documents should be made available to the Secretary for publication on the dedicated website.
 10. Final decision on proposals rests with WP.29 and the Contracting Parties.
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