Proposal for revised terms of reference for the Informal Working Group on Acceleration Control for Pedal Error (ACPE)

I. Proposal

A. Terms of Reference

- 1. The Informal Working Group (IWG) has developed a draft regulatory proposal to make a new UN-Regulation for Acceleration Control for Pedal Error (ACPE) for M₁ vehicles. This original text of the regulation is expected to be adopted at the 19th session of GRVA (June 2024), then endorsed by WP.29 at their 194th session in November 2024.
- 2. For the constructing 01 Series of the regulation, the IWG shall:
 - a. review the test procedure and requirements
 - b. develop test procedures and requirements to capture moving-off and creeping scenarios
 - c. consider the behaviour of ACPE toward pedestrian target
- 3. The IWG shall furthermore consider whether to include vehicles of category N1 in the scope of the regulation
- 4. In particular the IWG shall address the following issues:

(a) Take account of existing data and research in making its regulatory proposals. It should consider pre-existing standards, Regulations from other territories and NCAPs for making its proposals.

(b) Define state of the art performance requirements, especially for collisions involving objects, vehicles and/or pedestrians, activation speed, and the trigger of activation (e.g. detecting objects, detecting collision, operation speed of acceleration pedal) based on the results from the action item above.

- 5. The IWG shall take account of developments and work in cooperation with other subsidiary Working Parties (GRs) of WP.29 and their IWGs. The IWG shall check the coexistence with road traffic conventions (1949 Geneva convention and 1968 Vienna convention), if necessary
- 6. Text shall, to the fullest extent possible, be performance based and technology neutral.
- 7. The IWG will deliver an 01 series amendment of the UN Regulation for the January 2025 session of GRVA.
- 8. The IWG shall also consider the feasibility of drafting further amendments to the regulation, in particular operation at higher vehicle speeds, and will request to further extend the mandate of the IWG if necessary.
- 9. After completing the tasks above, as desired by the Contracting Parties of the 1998 Agreement, the IWG will develop a Global Technical Regulation compatible with the 1998 Agreement for consideration and possible adoption by 1998 Agreement.

B. Rules of Procedure

- 1. The IWG shall report to GRVA and is open to all participants of WP.29.
- 2. Two Co-Chairs (Japan and Germany) and a Secretary (OICA) will manage the IWG.

- 3. The Co-Chairs may invite experts (at their discretion), including nonparticipants 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 group 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.

II. Justification

- 1. During the development of the draft UN Regulation on ACPE, the IWG identified that there are accidents in other cases than the test procedure defined within JNCAP. For example, when vehicles 'creep' when the brake pedal is released. It is therefore proposed to revise the test procedure in an 01 series to address this issue.
- 2. The IWG also identified that collisions with pedestrians represent a significant number of the incidents resulting from pedal misapplication. However, there remain open questions about the scope of pedestrian requirements, and an appropriate test procedure to verify these. Therefore, such requirements were not included in the original version of the draft UN Regulation.
- 3. The IWG therefore agreed that the IWG should continue to discuss about pedestrian targets, moving off requirements, creeping tests, and any other necessary refinements to the draft UN Regulation for inclusions in an 01 series of amendments to be submitted to the January 2025 session of GRVA.
- 4. There is a challenge with ACPE operating at higher speeds due to the interaction with AEBS and the issue of differentiating between a pedal misapplication and an intended AEBS override by the driver. However, accident data does show a significant proportion of pedal misapplications occurring in moving vehicles. Therefore, it is appropriate for the IWG to consider the feasibility of regulating ACPE at higher speeds.