

Special Interest Group on Electro Mechanical Brakes (EMB) and Brake By Wire (BBW)

I. Proposal

A. Terms of Reference

1. The Special Interest Group (SIG) shall develop a draft regulatory proposal to amend UN-Regulations Nos. 13 (UN R13) and 13-H (UN R13-H) for M and N vehicles as follows and shall contain of two subgroups:

Subgroup 1, UN R13

Subgroup 2, UN R13-H

Both subgroups shall be coordinated by SIG on Electro Mechanical Brakes (EMB) ensuring that the amended requirements on EMB & Brake-by-wire are harmonized/coordinated among UN R13 and UN R13-H.

2. In particular the Subgroup 1 shall address the following items:
 - (a) Full EMB
 - (b) Clarification of purely Electric Control transmission w. pneumatic energy transmission.

Base for the work shall be documents presented to the Working Party on Automated/Autonomous and Connected Vehicles (GRVA) in former meetings, e.g. GRVA-15-17 and the GRVA Workshop held in Brussels on 29-30 March 2023.

3. In particular the Subgroup 2 shall address the following items:
 - (a) Electro-mechanical-braking systems
 - (b) Electro-hydraulic-braking systems
 - (c) Electro-mechanical/electro-hydraulic braking systems

Base for the work shall be documents presented at the GRVA Workshop held in Brussels on 29-30 March 2023.

4. The regulatory text shall, to the fullest extent possible, be performance based and technology neutral.
5. The SIG shall deliver the complete regulatory text for Electro Mechanical Brakes requirements as amendments to UN-Regulation No. 13 for the [May 2024] session of GRVA and for UN-Regulation No. 13-H for the [May 2024] session of GRVA.

B. Rules of Procedure

1. The SIG shall report to GRVA and is open to all participants of the World Forum for Harmonization of Vehicle Regulations (WP.29).
2. One Chair and a secretary will manage the SIG.
3. The Chair may invite experts (at their discretion), including non-participants of WP.29, on demand.
4. The working language of the SIG will be English, and the meetings set up as Hybrid meetings.
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 SIG in advance of all scheduled meetings.
7. Decisions will be reached by consensus. When consensus cannot be reached, [the Chair] of the group shall present the different points of view to GRVA. [The Chair] may seek guidance from GRVA as appropriate.
8. The progress of the SIG will be reported routinely to GRVA – wherever possible as an informal document and presented by [the Chair].
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. CLEPA/OICA has a strong interest in amending the existing regulations to allow for the introduction of new braking technologies with identical safety level and further developing the regulations towards performance requirements for Electro Mechanical Brakes (EMB) and Brake By Wire (BBW). We particularly consider that Electro Mechanical Brakes (EMB) for Heavy Duty Vehicles as well as passenger vehicles is a significant and effective technology to fit for conventional and electrical vehicles.
-