

UNECE GRSP IWG Equitable Occupant Protection (EqOP) Task Force – Virtual Crash Testing

Minutes of the 11th meeting.

On-line meeting on the 17th of November 2025 with 29 participants.

Adoption of the agenda

Agenda approved.

Adoption of the minutes of last meeting

Minutes of the 10th meeting were approved.

Discussion on the value of HBM to close equity issues and whether it will be possible to use HBMs in regulations within the next 10 years, i.e., from 2037.

The OICA expert made a presentation on the Proof of Concept. A central point concerns determining the best tools to address equity, comparing the value of standardized numerical ATDs against HBMs. OICA asserts that any VT approach must demonstrate a clear benefit in terms of safety and should be introduced as an alternative method for Type Approval. Due to the lack of clear standardization for HBMs, the PoC should focus on numerical ATDs, leaving further HBM exploration to other entities like NCAP programs and standardization topics to ISO. The proposed TA process itself is complex, requiring both an initial full physical vehicle test and correlating physical sled tests to validate the required virtual simulations, suggesting the VT introduction will paradoxically lead to an increase in both physical and numerical tests.

The chair recalls the potential benefits of HBMs and that HBMs is in the scope of the PoC. We decided a year ago to start the discussion on using HBM for injury assessments. It is the highest level of VT according to our defined route of the PoC and we have several fallbacks if we conclude that it is not possible to use HBMs in regulation (in 10 years). The chair reminds every one of the diagram in the PoC, also reflected in the master document, and the criteria we have set for taking one step back to a lower level. The chair highly recommends sticking to this plan. NB, it is in the scope of the Terms of Reference.

The chair opened the Miro Board with the purpose of guiding the continued discussion. [LINK MIRO BOARD](#) The provided new diagram of the Miro Board has the purpose of outlining a framework for assessing the readiness and application of HBMs within regulatory testing. It sketches how HBMs can effectively be used to close equity issues and compares it with the possibilities that we have using ATDs. Within the next meeting the readiness of the HBM for these applications within a regulatory framework should be evaluated.

The other diagram focuses on the possibilities to evaluate risk of specific injury types where equity issues were identified, from the head and neck to the abdomen and lower extremities. The aim is likewise to evaluate what is feasible and in which time frame.

Ultimately, the discussed assessment shall propose feasible regulatory solutions that will involve either setting standards based on relative comparisons among load cases or establishing a comprehensive absolute injury risk assessment.

The expert from China intervened and discussed the role of HBM in testing safety performance of reclined seating. The chair responded that the topic of different occupant postures is important for the EqOP work, whereas the specific issues of deep reclined seating, mostly connected with automated driving, may not be of primary importance for the IWG EqOP. However, the chair encouraged China to continually provide an update on the topic, regarding the use of the HBMs.

Next steps

The task force will continue the discussion on the two topics in the next meeting.

1. Determine value of HBM to close equity issues.
2. Determine if it will be possible to use HBMs in regulations within the next 10 years.

Next meeting

Next meeting will be an online meeting on the 11th of December 2025, 12:00 – 14:00 CET.