

Three dimensional H-point machine State of Play

For details see [GRSG-124-27](#)

Background:

The H-point machine is used to verify the Seat Reference Point of the driver seat (and other seating positions in the car). This SRP is the basis of many prescriptions related to e.g. seat strength/head restraint requirements, seat belt anchorage locations, forward field of vision requirements, rearward visibility, etc. etc.

Described problems:

- inconsistency between different UN Regulations and GTRs about reference to different versions of ISO 6549 and SAE J826.
- inconsistency between different UN Regulations and GTRs about the test procedure to measure the H-point with regard to the settings of the H-point machine
- Available test tools in the market cannot be calibrated according to the old spec => problem for test labs to obtain accreditation to ISO 17025

Proposed way forward:

- Continue with HPM-1 ("Oscar") for Type Approval purpose
- Update M.R.1. to include drawings and specifications of HPM-1 coming from SAE, according the specifications from SAE J826-1995
- Update R.E.3 to include measurement procedure coming from ISO 6549:1999 using upper leg and lower leg setting of 50 percentile.
- Update references in all UN Regulations to latest revision of R.E.3. and to include same test procedure as in R.E.3 to update GTRs.

Possible conflict:

- Copyright issues with ISO and/or SAE. For this, bear in mind that the standards to be used already have been withdrawn by ISO and SAE.