# UNECE GRSP IWG Equitable Occupant Protection (EqOP) Task Force 3 – Virtual Crash Testing

Draft minutes of the 2nd meeting.
On-line meeting, January 31<sup>st</sup> & February 1st, 2024.
25 participants.

### Adoption of the agenda & minutes of last meeting

Agenda was approved by the participants.

No comments received for the minutes of the last meeting.

#### Building Blocks identified in the first workshop.

The chair showed the slides created during the first workshop, which showed the connections between the identified topics of Occupant model, Car model, FE software in the validation process for homologation purposes. (see <u>EqOP-TF VCT WS-02-02e</u>, slide 4). Based on this first sketch, the identified topics were arranged a sequence to allow for a discussion of requirements for a VT process. The group discussed the proposed requirements in the process chart, which were modified accordingly online.

## **Current research on Virtual Testing.**

NHTSA shared their thoughts on virtual testing and how to use it for their purposes (see <u>EqOP-TF VCT WS-02-03e-A Pathway Towards Virtual Testing-NHTSA</u>). Additionally, a short outlook on the planned project with UMTRI was given.

CATARC presented their current research activities in the field of VT (see <u>EqOP-TF VCT</u> WS-02-04e-Research progress of virtual testing in China-CATARC).

During the discussion of the results of the first workshop, some participants asked to an overview of current activities on virtual testing. Therefore, the chair showed an overview, starting with the timeline for EqOP TF3-VT, followed by activities from NCAPS and other groups (see <u>EqOP-TF VCT WS-02-02e</u>, slides 5-10).

#### Requirements for Virtual Crash Testing.

The group further discussed the proposed requirements for VT and the processes behind these: difference between NCAP and regulation as well as the need for high confidence in the validity of the models were discussed in detail.

Based on these discussions possible approaches to address the identified requirements were put into a process sketch during the meeting (see *EqOP-TF VCT WS-02-02e*, *slide 13*). The example of the DPPS process and use of generic models was shown (see <u>IWG-DPPS-25-05 Documentation of Generic Vehicle Models 20230904 CK</u>).

It was agreed that a common understanding of words, phrases and definitions would be necessary for the future. A possible first basis could be the definitions drafted by HBM4VT (see <u>EqOP-TF VCT WS-02-02e</u>, slide 15).

# Next steps for the group.

The chair again highlights the timeline of EqOP: proof of concept till 2027, all details and use on specific topics come afterwards.

- Define wording/glossary.
- Sketch general process (started today)
- Requirements for occupant and vehicle models
- Processes to combine models into load case scenarios.
- Requirements for FE software and output/documentation

## Next meeting.

Online meeting on 12<sup>th</sup> April 2024 12:00 – 14:00 CET.