

UNECE IWG EqOP Task Force Virtual Crash-Testing

IWG EqOP - TF VCT; 8th Meeting

Action Items from previous meeting

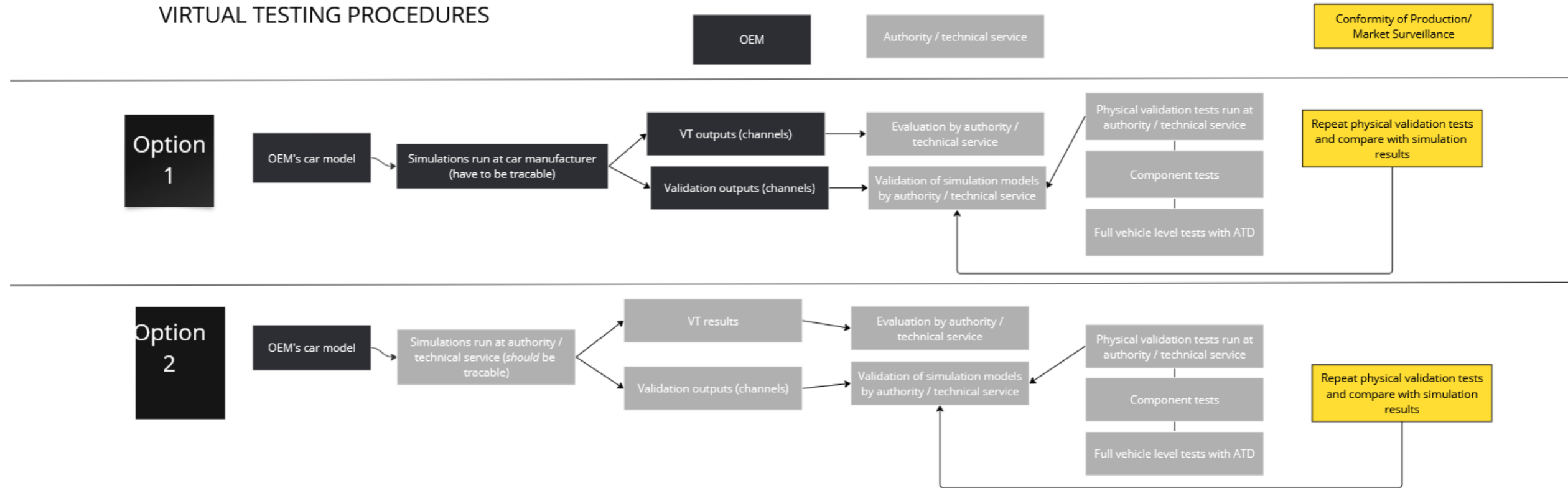
- All: Send an email to Corina / Philipp if you can volunteer for a task related to the workplan together with estimated time frame until next meeting
- Corina: Make Master document available
- All: review decision list and Master Document until 3rd of April
- Corina: Start drafting the protocol of the procedure

Proof of Concept

- 0.) Document general requirements on VCT procedure which have been defined so far in report form (Decision list, Master Document)
- 1.) What is needed to make level 3 (injury assessment with HBM) possible? (Review concepts from previous meetings) (tracability → IIHS)
- 2.) Develop protocol of a testing procedure + requirements of all involved tools in written form (option 1 + 2 on next slide) (experience from Euro NCAP on ISO scores, procedures)
- 3.) Collect inputs for cost benefit analysis - how much reduction in injury risk can be achieved with the introduction for the population in the field? → Autoliv,
- 4.) Check with all contracting parties feasibility of the introduction of the procedure developed in 2) → ANSYS, (experience from CATARC on ISO scores, option 1&2), inspire from UN R152 (France)
- 5.) Check with industry feasibility of the introduction of the procedure developed in 2) → Humanetics, Autoliv, BMW, ANSYS

Virtual Testing Procedure

VIRTUAL TESTING PROCEDURES



Proof of Concept Use Case

Work on UN R137 – additional simulations in vehicle sled environment to check robustness of the restraint system

- Check injury risk for different body shapes representing females and males
- Open possibility to go for lower speeds / additional body regions
- Define thresholds considering aging population

Criteria to evaluate the proof of concept

- Is safety benefit large enough that it is worth the effort (currently difficult to estimate the costs)?
- Is the procedure trustworthy enough for regulations?
 - Define criteria? Decision by CPs? Compare with other “best practice” regulations (GRVA – credibility assessment, emissions)?
- Are the simulation models good enough?
 - Predictive (ISO Score threshold?)
- Can the industry follow the procedure?
 - What is needed that they could follow?
- Can the contracting parties follow the procedure?
 - What is needed that they could follow?
- Is it feasible within the next ten years?

7 Next meeting

4th of June 12:00 CEST

Agenda:

Are simulation models good enough?

- Presentation of ISO scores from virtual testing at China NCAP (CATARC)
- Validation of Airbag Models (Autoliv)
- Validation of HIII Simulation models?

Status of draft protocol (Corina)

Next steps



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