

# EqOP Workshop WAD

Summary and conclusions

# Link to wiki page with presentations uploaded

- [EqOP 1st workshop - Transport - Vehicle Regulations - UNECE Wiki](#)

# Two goals for this workshop

- Short-term goal
  - Identify "low hanging fruits" and update regulation to benefit the female population according to terms of reference for EqOP.
- Long-term goal
  - Develop a robust regulation that leads to higher safety for all
  - Identify and fill knowledge gaps

# Short-term – low hanging fruits

- The priority of the IWG regarding rear impact protection should be to eliminate poor design of backrests and head restraints:
  - Extended geometric requirements for the head restraint (e.g. as proposed by CLEPA) could reduce the possibility of head restraints optimised for a specific ATD.
  - The addition of quasi-static or drop tests to the test procedure could promote uniform load distribution throughout the backrest and head restraint and result in more robust seat design.

# Summary of discussion

- Recent improvements to the seat design are possibly under-represented in the current accident statistics.
- The injury risk increases with an incorrect height adjustment of the head restraint or an excessive distance between the head and the head restraint.
  - Misuse?
- A forgiving design of the backrest and head restraint should be targeted.

- The dynamic test is consequently rarely used. The dynamic performance test (optional) described in UN-ECE R17 is considerably more complex and potentially poses robustness problems throughout the vehicle's life cycle (CoP).

- Instead of drop tests as used by Volvo, quasi-static loading could be used to promote uniform load distribution throughout the back rest and head restraint.
- Dynamic assessment with ATDs of various sizes offers the highest potential for improvement, but poses other risks, such as a lengthy development process and robustness of the dummy/test procedure itself and needs further research.

# Longer term

- Learn from analyzing the data from rear-end impact to identify important areas and next steps for robust and inclusive regulation.
- Virtual crash tests have to be verified with physical tools.
  - Will it be possible to manage without having all the physical tools?