Workshop on Field Data

Informal Working Group on Equitable Occupant Protection
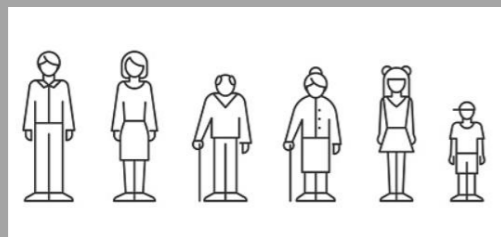
EqOP IWG

EqOP Approach

0.) Field data study

Identify which loading scenarios in the field cause <u>significant differences in injury risks for different groups of the population</u> and review how those are currently assessed in regulations
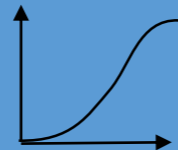
- gender
- age
- body height
- BMI

1.) Use available tools (already currently used in regulations) to address problems identified in 0.)

Change wordings in regulations

Change requirements in regulation with available tools:

a) Change what is required / voluntary?
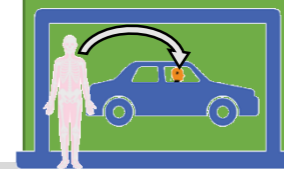
b) Change injury criteria

c) Change test conditions (speed, barrier, angle...)

2.) Use alternative test tools to address problems identified in 0.)

Which injury mechanisms can be predicted additionally compared to currently available tools, where problem in the field are observed?

Which alternative physical test tools are suitable for this?

What can be simulated what currently can't be tested?

Aim of the review of the working table

- Prepare version of the working table which can be uploaded to UNECE Website (supposed to be a living document)

- After collecting and digesting the received information, the structure of the table was updated

- Todo: Fill in remaining empty cells (marked light red)

- All eyes are needed to ensure we got everything right

Key take away messages from field data studies

- Injury risk depends on
    - crash severity
    - vehicle crashworthiness (e.g. rating result, vehicle size, age of the vehicle (market introduction))
    - seat position (driver vs. passenger / front vs. rear)
    - age of occupant
    - BMI of occupant
    - gender / sex
    - stature of occupant? (Only available in a few studies)
- Relevance different for different injury and crash types (not one group at highest risk in general) and statistical models applied
- Interaction of parameters often different for females and males
    - Difference between males and females more often reported for younger groups, age distribution for fatality injured occupants
    - Interaction of BMI and gender (different body shapes, fat distributions, belt fits)
    - Crash severity (females more likely to be in smaller and struck car)
    - Females more likely to be passenger (front and rear)

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