



**FI-07-06**

# Frontal Impact Regulation - Improving Occupant Protection

7th Meeting IG R94  
Geneva 07 Dec 2009

Richard Damm



# Content

- Subject and Target
- Accident Situation
- Regulation
- Steps forward
- Summary



# Subject and Target

- Frontal Impact Accidents
- Occupant Protection
- Light cars
- Heavy cars
- Improve the safety for occupants
  - in single car accidents and
  - in car to car accidents



# Accident Situation

- Increased safety in single car accidents
  - improved compartment resistance
- Higher injury risk for small occupants (female?, stature?)
- Higher injury risk for old(er) occupants
- Low progress in safety in car to car accidents

- geometric incompatibility
- stiffness incompatibility



# Regulation

## Aims of amending the Frontal Impact

### Reg.:

- Address occupant loadings
  - demand better restraint systems
- Address geometric alignment of front structures
  - basis for distribution of crash forces
- Stiffness alignment shall not be on the agenda at this time



# Steps Forward (1)

Points, that shall be covered by Frontal Impact Reg.:

- Offset Test
- Full Width Test
- 5th percentile dummy
  - with improved thorax
- 50th percentile dummy
  - with improved thorax
- Requirements for geometric alignment
  - Phase 1 (short-term)
  - Phase 2 (medium-term)



## Steps Forward (2)

How do we align the schedule of the Informal Group on Frontal Impact with the schedule of activities going on to look at and answer open items?

ToRs of IG R94 state 47th GRSP session (May 2010) as target completion date.

How are we going to proceed in common?





# Summary

Necessity to work on and improve the Frontal Impact Regulation.

Open Items have still to be answered.

Status and Schedule of the Group have to be adjusted.

Discussion on plans for future progress has to take place.