

TRL contract with EC: Provision of information for the development of frontal impact legislation: Mervyn Edwards March 2009



Objectives, Client and Timescales

<u>Objective</u>

 Gather and evaluate all available information related to a potential update of Regulation 94, in particular that relevant to the review currently being performed by a GRSP informal working group

<u>Client</u>

DG Enterprise and Industry, European Commission

<u>Timescales</u>

Sept 2008 to April 2009



Potential options to improve legislation

Main Options

- 1. No change.
- 2. Replace the current R94 ODB test with a Progressive Deformable Barrier (PDB) test
- 3. Add a full width high deceleration test to the current R94 ODB test procedure
 - Rigid or deformable barrier?
- 4. Combination of options 2 and 3



Potential options to improve legislation

Supplementary options

- Dummy related
 - Incorporate the THOR-Lx, and possibly the THOR upper leg, as a retro-fit to the Hybrid III dummy
- Other
 - Extend the scope of the Directive to include N1 vehicles, in particular those less than 2.5 tonnes, and all M1 vehicles
 - Add a steering wheel movement lateral displacement limit of 100 mm to current vertical and horizontal limits
 - Add an appropriate footwell intrusion criterion and associated limit
 - Assess rear seated positions



Considerations for evaluation of potential options

- Whether the option will address the needs identified in the accident studies
- Potential for unintended consequences
- Potential for further development to include measures to assess and control compatibility
- Relationship with present international requirements
- Issues that require further investigation to ensure suitability for regulatory application
- Cost-benefit

