

**Consortium:**

1. First Technology Safety Systems, FTSS, NL
2. Bundesanstalt für Strassenwesen, BAST, DE
3. Autoliv Research, AUTOLIV, SE
4. Chalmers University, CHALMERS, SE
5. GIE RE PSA-Renault, GIE RE PR, FR
6. Partnership for Dummy technology and development, PDB, DE
7. Continental Safety Engineering, CSE, DE
8. Uniresearch, UNI, NL
9. Universidad Politecnica de Madrid, UPM, ES
10. Institut National de Recherche sur les Transports et leur Sécurité, INRETS, FR
11. Transport Research Lab, TRL, UK

For more information please visit: www.thorax-project.eu

THORAX

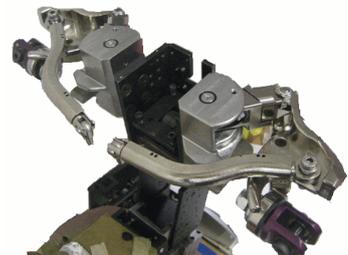
Final Workshop presenting EU FP7 research into Thoracic Injury assessment for Improved Vehicle Safety

On Thursday 25th April 2013 the THORAX project will organise a public workshop. During this workshop results from the THORAX project as well as related THOR dummy activities ongoing in other regions will be presented to invited guests. In line with the activities for the hardware development and evaluations the program

1. Outcome of accident surveys into thoracic injuries
2. Biomechanical studies into dummy specifications, including:
 - Identifying biofidelity requirements for a frontal impact dummy thorax
 - Proposing priorities for dummy thorax updates and design concepts that addressed those priority areas
3. Injury parameters to be assessed in the updated dummy
4. Shoulder – thorax complex development
5. Biomechanical performance of the demonstrator dummies incorporating the updated shoulder – thorax complex
6. Injury risk curve development
7. Sensitivity to restraint system settings and deceleration pulse?



For registration please send e-mail to:
j.heintz@uniresearch.nl
Before 19th April 2013



Contact
Humanetics Europe GmbH
plemmen@humanetics.eu
UNI RESEARCH
c.vanderzweep@uniresearch.nl

Background

Thoracic injuries are one of the main causes of fatally and severely injured casualties in car crashes. Advances in restraint system technology and airbags may be needed to address this problem; however, the crash test dummies available today for studying these injuries have limitations that prevent them from being able to demonstrate the benefits of such innovations. THORAX-FP7 was a collaborative medium scale project under the European Seventh Framework. It focused on the reduction and prevention of thoracic injuries through an improved understanding of the thoracic injury mechanisms and the implementation of this understanding in an updated design for the thorax-shoulder complex of the THOR dummy. The updated dummy should enable the design and evaluation of advanced restraint systems.

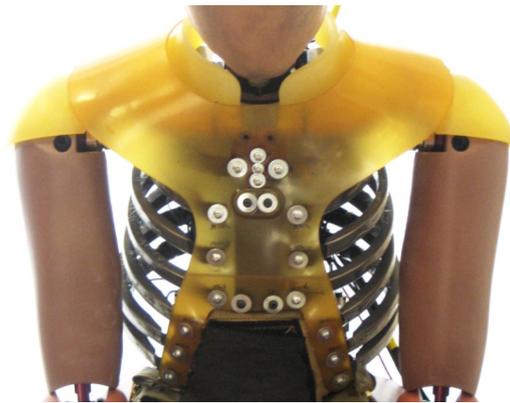
The hardware development involved five steps:

- 1) Identification of the dominant thoracic injury types from field data,
- 2) Specification of biomechanical requirements,
- 3) Identification of injury parameters and necessary instrumentation,

- 4) Dummy hardware development and
- 5) Evaluation of the demonstrator dummy.

All these activities resulted in the definition of new biofidelity and instrumentation requirements for an updated thorax-shoulder complex. Prototype versions were realised and implemented in THOR dummies for testing related to biomechanical performance, injury risk curves developments and restraint sensitivity.

During the workshop results from all these activities will be presented.



Date and venue

Date: 25 April 2013

Time: 10.00 - 16.00 (Welcome, coffee and registration at 9.30)

For registration please send e-mail to:

j.heintz@uniresearch.nl

Bundesanstalt für Straßenwesen - BAST

Brüderstraße 53

D-51427, Bergisch Gladbach, Germany

[How to reach BAST](#)



More news on THORAX can be found on the website
www.thorax-project.eu

Disclaimer: Every effort has been made to ensure complete and accurate information concerning the articles in this newsletter. However, the author(s) and members of the consortia cannot be held legally responsible for any mistake in printing or faulty instructions. The authors and consortia members retrieve the right not to be responsible for the topicality, correctness, completeness or quality of the information provided. This publication solely reflects the author's views. The European Community is not liable for any use that may be made of the information contained herein