

# interactive



Accident avoidance by active intervention for Intelligent Vehicles

[www.interactIve-ip.eu](http://www.interactIve-ip.eu)

## Evaluation Methodology for Active Safety Systems in interactIve

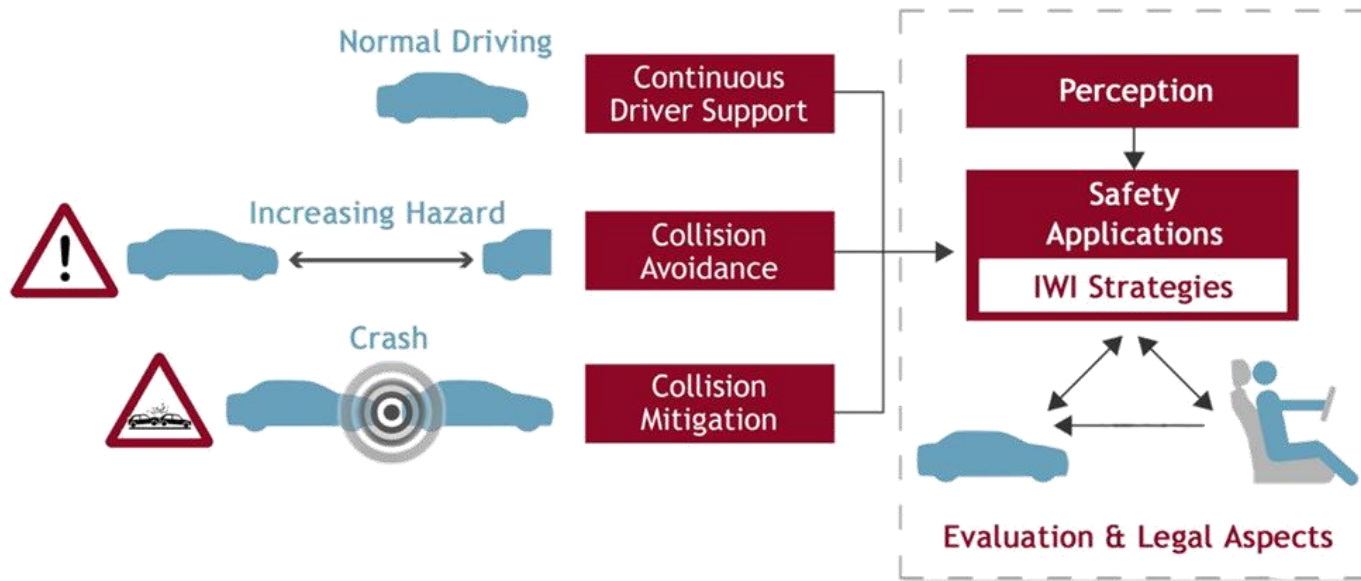
Felix Fahrenkrog, Adrian Zlocki, Lutz Eckstein  
Institut für Kraftfahrzeuge, RWTH Aachen University  
9th ITS Europe Congress, Dublin



# interactiVe

## Objectives:

- Create an **innovative** model and platform for enhancing the **perception** of the driving situation
- Extend range of possible scenarios and usability of ADAS by multiple **integrated functions** and **active interventions**
- Improve **decision strategies** for active safety and driver-vehicle-interaction
- Develop solutions for **collision mitigation** that can improve the market in-take within **lower-class vehicle segments**
- Further encourage the application of **standard methodologies** for the **evaluation** of ADAS



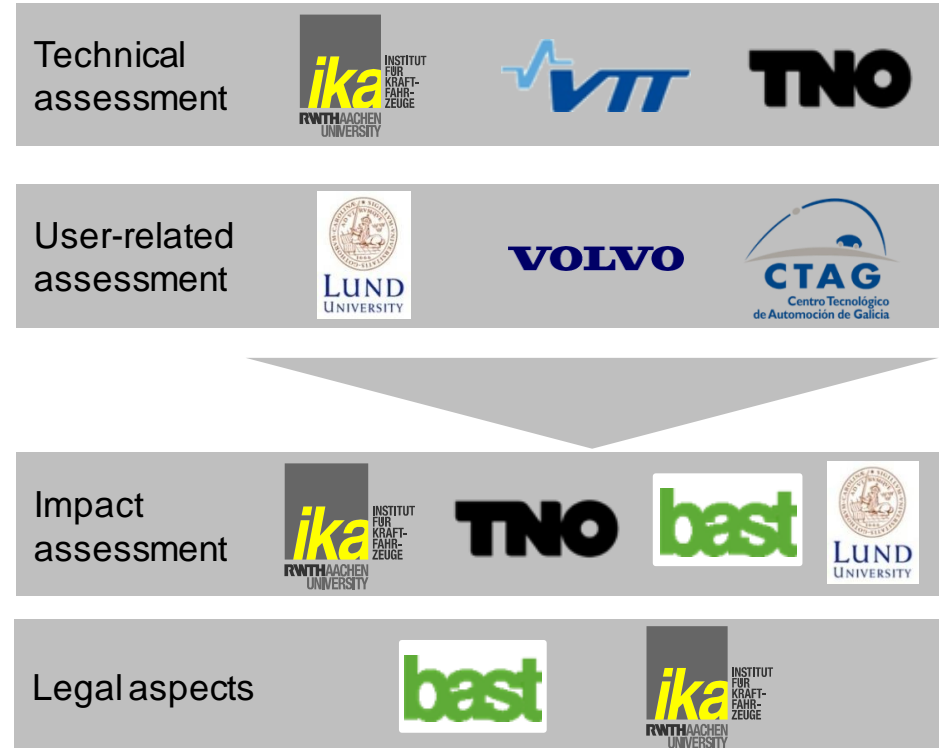
# SP7 “Evaluation and legal aspects” - Overview

## SP7 role in interactive:

- Definition of a **test and evaluation framework** for each application with respect to human factors and technical performance
- Development of test scenarios, procedures, and **evaluation methods**
- **Provision of tools** for evaluation like equipment, test catalogues, questionnaires or software and **support for testing**
- Analysis of **legal aspects** for broad exploitation of the applications

## Evaluation for interactive is divided into:

- **Technical assessment** (e.g. full function performance, safety logic,)
- **User-related assessment** (Driver behaviour, function usage and trust/acceptance)
- **Impact assessment** (Change in traffic safety with respect to the number of fatalities and reduction of the severity of injuries )

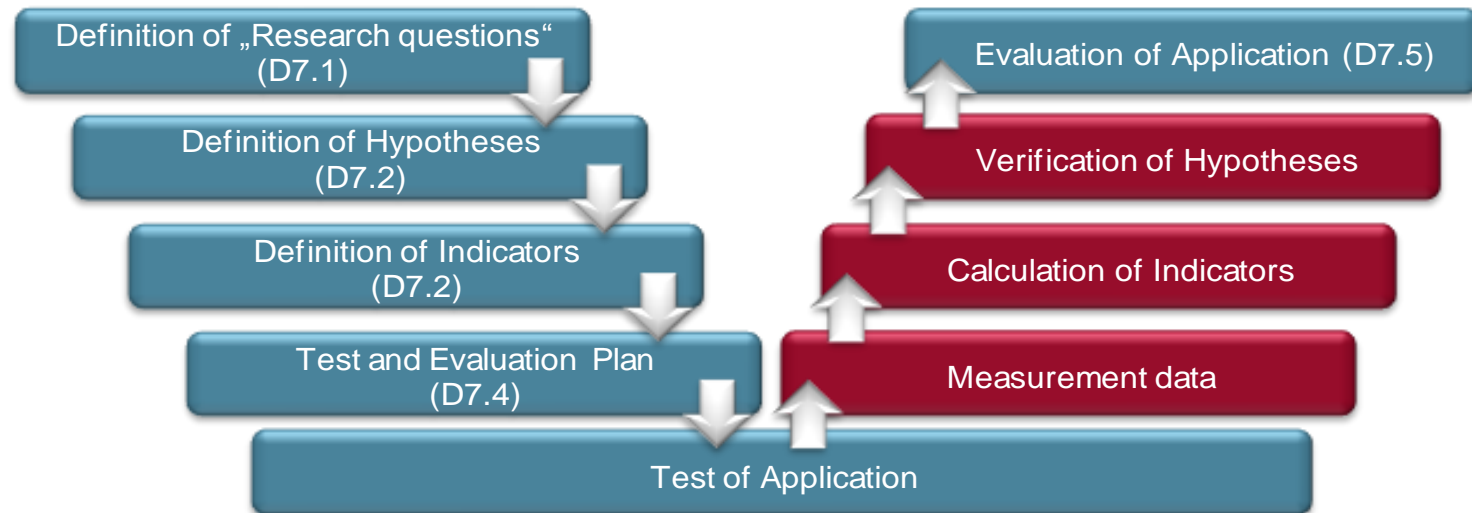


# SP7 “Evaluation and legal aspects” - Methodology

Methodology for the evaluation bases mainly on the PReVAL methodology:

- Step 0: System and function description
- Step 1: Expected impact and hypotheses
- Step 2: Test scenario definition
- Step 3: Evaluation method selection
- Step 4: Measurement plan
- Step 5: Test execution and analysis

Assessment of the whole functions (not components)



# interactive



Accident avoidance by active intervention for Intelligent Vehicles

[www.interactive-ip.eu](http://www.interactive-ip.eu)

Thank you.

Co-funded and supported  
by the European Commission



Felix Fahrenkrog, Adrian Zlocki, Lutz Eckstein  
Institut für Kraftfahrzeuge, RWTH Aachen University

Phone: +49 241 80 25627  
[Fahrenkrog@ika.rwth-aachen.de](mailto:Fahrenkrog@ika.rwth-aachen.de)

