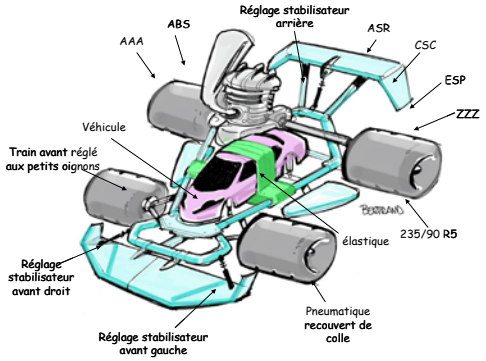
DaCoTA

WP5
Safety & eSafety



Thierry Hermitte
LAB

EUROPEAN COMMISSION Directorate-General for Mobility and Transport

Project co-financed by the European Commission, Directorate-General for Mobility and Transport

WP5 - Aim and Objectives

Aim : **How does the technology contribute to the road safety**

Objective :

To develop methodologies and approaches that will enable future evaluation of the safety impact of emerging intelligent technologies.

How:

1) Identify and update the user's needs in term of accident risk prevention and injury risk prevention

2) Identify and update how current technology can address these needs

3) Assess the potential benefits of the relevant safety applications (not only the safety benefits)

WP5 – Our targets

Need to improve the activity of evaluation to take into account different (but complementary) viewpoints

Point of view of the technology : state of art (up to date) of the evaluation tools/methodologies available

Point of view of the driver : are the technologies answer to the driver needs?

Test procedures : are the technologies do what we expect it to do ?

Driver's needs and validation of the technologies

Are the safety functions address the real users' needs ?

Are the safety functions able to compensate the situational conditions in which these needs are met ?

Driver's needs and validation of the technologies

Catalogue of safety systems

1) proposing a common frame giving the relevant characteristics
2) looking at how could we have information on car models and their safety equipments

→ Deliverable D5.2 (available)

Driver' needs analysis:

1) To improve the methodology starting in TRACE project
2) To take into account other type of road users (PTW, Pedestrian, etc.)
3) Identification of the accident data parameters needed to perform this type of analysis

On the way:
Case by case analysis based on Human Functional Failure model on a selection of safety systems (27 systems and 300 in-depth accident cases)
Results will be available in deliverable **D5.5 « driver' needs & validation of the technologies »**

Evaluation

How to capitalize our expertise, knowledge ?

How to take into account the complexity in road safety ?
(changes in user's behavior, regulations, stakeholder' requirements, market, unpredicted changes, etc)

Evaluation

Determination of a general evaluation model

Need to build up the knowledge
Need to take into account the multidisciplinary activities in road safety
Need to take into account the complexity in road safety
(changes in user's behavior, regulations, stakeholder requirements, market, unpredicted changes, etc)
Need to improve tools and methods with the challenges brought by the future new technology
Need to be able to create new adapted indicator

Proposal of a general evaluation model
→ Deliverable D5.4 - **Determination of a general evaluation model** available

Methods and tools

Review of the existing methods and best practices including socio-economical aspect
(statistics & epidemiology)

Useful Data

What are the relevant data that we need to carry out evaluations at European level ?

Real World and procedures

Are the currently used technological system test procedures relevant to real road accident problems ?

Are there any new test procedures which could be more appropriate to assess the safety performance of the technology ?

Real World and procedures

Real world and procedures

List of the existing test procedures
→ Deliverable D5.3 **Review of the existing evaluation procedures related to safety systems** Available

Guidelines for future test procedures

Provide recommendations to assist in the development of the benchmarks of safety systems to respond effectively to the reality of the problems that they are supposed to avoid.