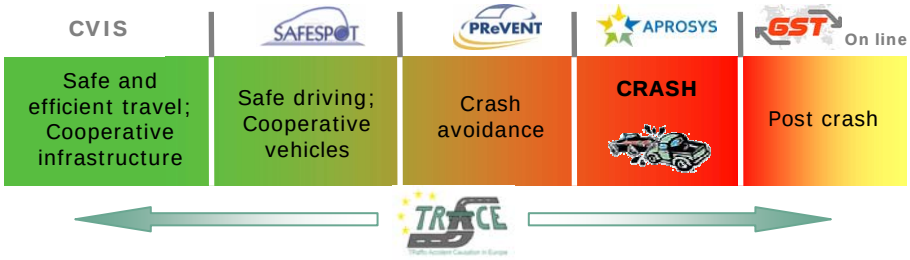
# Accident Causation Analysis and the Evaluation of the Safety Benefits of Technologies.

# The TRACE Project




## Figures

- **9** Work Packages
- with **34** sub tasks
- providing **40** deliverables

- over a **2** year duration
- involving **352** man months of work

- For an overall budget of **€4m**

## Objectives

- The identification and the assessment (in terms of saved lives and avoided accidents), among possible technology-based safety functions, of the most promising solutions that can assist the driver or any other road users in a normal road situation or in an emergency situation or, as a last resort, mitigate the violence of crashes and protect the vehicle occupants, the pedestrians, and the two-wheelers in case of a crash or a rollover.
- The determination and the continuous up-dating of the etiology, i.e. causes, of road accidents (as well as the causes of injuries) and the assessment of whether the existing technologies or the technologies under current development address the real needs of the road users inferred from the accident and driver behaviour analyses.

## Orientations

- Provide a comprehensive and understandable definition of accident causation at the end of the project
- Provide the scientific community, the stakeholders, the suppliers, the vehicle industry and the other Integrated Safety program participants with a global overview of the road accident causation issues in Europe and promising solutions based on technology
- Make this overview comprehensive, understandable and operational
- Improve the multidisciplinary methodologies in analyzing the influence of human factors and also the statistical methodologies used in risk analysis and evaluation
- Generate summary documents with vulgarized figures, statistics, results, or any kind of outcomes that can be used for the identification, validation of the relevance and the evaluation of expected or observed effectiveness of safety functions based on technology
- Support, if needed and requested, participants of Integrated Projects and STREPs under the umbrella of the Integrated Safety Program
- Establish links with the other projects about road safety (especially SafetyNet and eIMPACT)

## Partners

AZT – Germany
BASt – Germany
CIDAUT – Spain
IDIADA – Spain

IVT – Germany
LMS – Greece
TNO – The Netherlands
VSRC – UK

BASC – UK
CDV – Czech Republic
ELASIS – Italy
INRETS – France

LAB – France
LMU – Germany
TUBS – Germany
VWAG - Germany

In addition to the 16 full partners listed above, project participants also include 7 subcontractors, 8 observers and a “Wise Guys” scientific committee made up of experts representing the different domains covered by the project.

## Organization

- Evaluation of existing & promising safety devices 1
- Update the knowledge about accident causation survey 2




## Research challenges

- A Diagnosis of traffic safety problems at the European Level with 3 research angles (Road Users – Types of Situations – Risk Factors)
- 3 kinds of analysis : Descriptive statistics – In-Depth analysis – Risk Analysis
- Evaluation of the most promising technologies : ex ante and ex post
- Methodological improvements in Human factors Analysis and Statistical Analysis
- Rely on a set of various accident and exposure databases

## Expected Outcomes

- Operational and methodological reports
- Descriptive and analytical statistics about accident causation
- Qualitative reports on accident causation mechanisms from road user, factor and accident scenario perspectives
- Cooperation with other projects (especially eIMPACT and SafetyNet)

## eIMPACT and TRACE

eIMPACT
Assessing the Impacts of Intelligent Vehicle Safety Systems

Sixth Framework Programme

eIMPACT is a Specific Targeted REsearch Project (STREP) that will assess the socio-economic effects of relevant Intelligent Vehicle Safety Systems, or IVSS, including their impact on traffic safety and efficiency. It will also provide an indication of the prospects for introducing IVSS, taking into account these impacts, policy options and stakeholder roles. eIMPACT is part of the EU's Sixth Framework Programme for Information Society Technologies and Media and, with a budget of some € 2.4 million, will run for two years and finish in December 2007.
As well as cooperating with related 6th Framework projects, eIMPACT has a formal collaborative agreement with TRACE, in work related to understanding, modeling and quantifying the safety impact of systems.
In order to optimize the European Commission's follow-up and coordination of the projects, both projects are now under the supervision of EU Project Officer, Fabrizio Minarini. Kerry Malone, TNO, coordinates eIMPACT. See www.eimpact.info or contact Dr. Malone for more information kerry.malone@tno.nl.

## Contacts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