

1st PROS Workshop
Brussels, 18 December 2012



Road Safety Research Priorities in Europe Proposals from the DaCoTA project

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Road Safety in the 2020 society and economy context

- Limited resources for increased needs
- More technologies everywhere for everybody
- More older drivers on the roads
- More complex and demanding urban mobility
- Priorities of the carbon economy



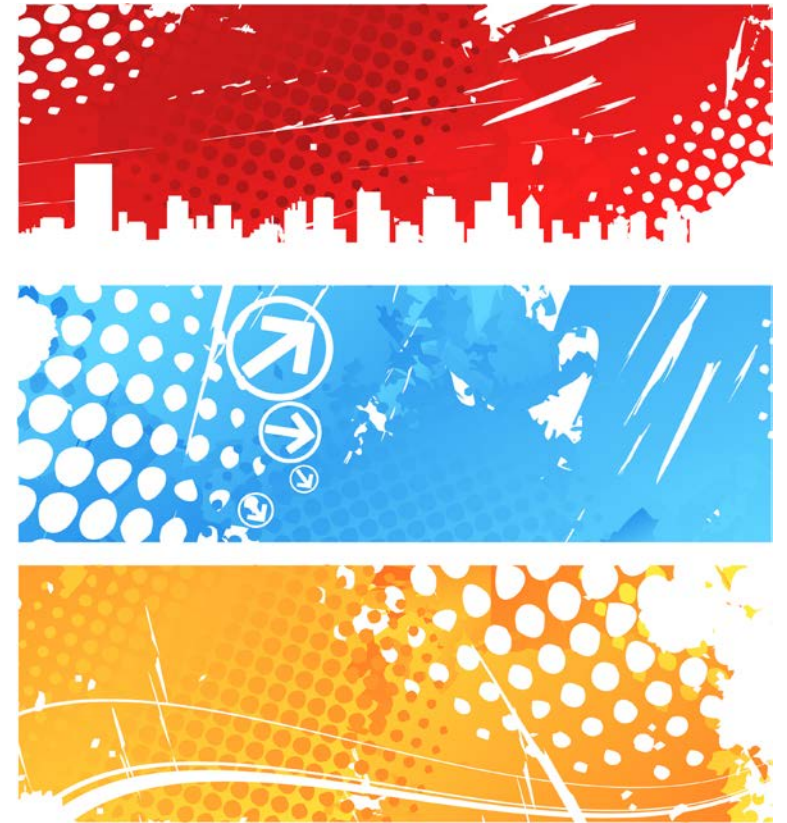
Priority road safety issues in the DaCoTA project



Road Safety Research Priorities in Europe

Proposals from the DaCoTA project

- Research tools
- Road user behaviour
- Vehicle technology
- Infrastructure
- Road safety management



Road user behaviour

Vulnerable road users

Young: still at highest risk

Elderly: ageing population

Pedestrians: still often overlooked

Cyclists: still often overlooked

PTWs: an emerging problem in several countries

Fit to drive

Driving under the influence of substances

Driver distraction

Driver fatigue

Definitions, measurement, causes and effects

Changing behaviour

Enforcement

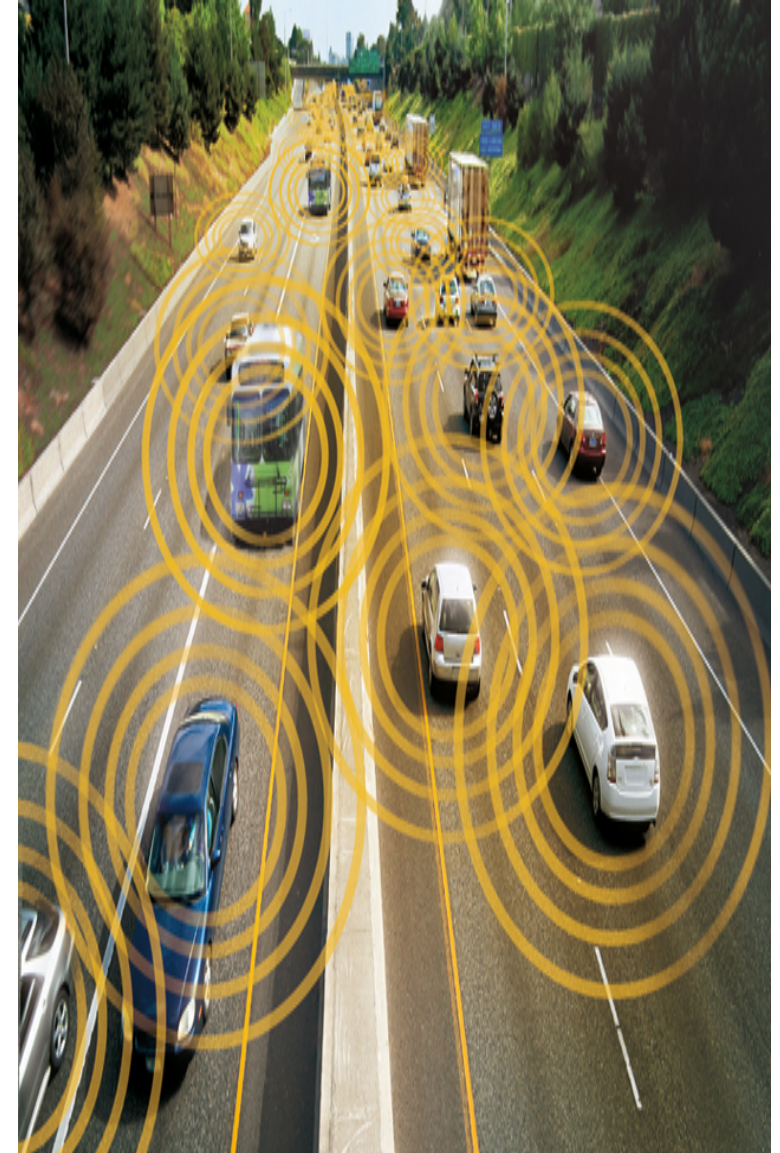
Campaigns

Education



Vehicle technology

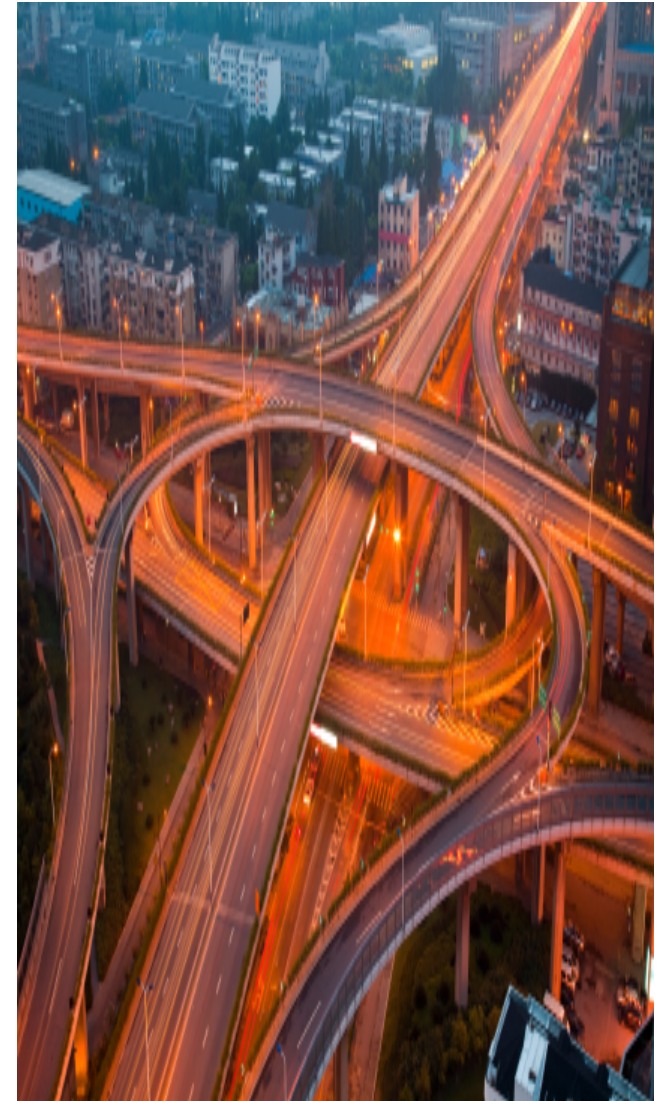
- V2V and V2I communication and co-operative systems
- Design of vehicle safety in terms of integrated safety
- Better understanding of and support in the pre-crash phase
- Improved pedestrian and 2-wheeler detection systems for accident avoidance
- Systems for the protection of (motor)cyclists
- Autonomous vehicles and road safety



Infrastructure

- Smart infrastructure
- Road Safety Infrastructure management techniques
- Self-explaining roads, forgiving infrastructure, roadside treatment
- Road infrastructure uniformity across Europe
- Road safety infrastructure measures/investments

- European digital road map including driver support
- Integration of road safety into transport / traffic / urban plans
- Infrastructure and traffic arrangements for PTWs
- Conception and design for elderly, vulnerable and users with specific needs



Road Safety Management

- Road Safety Culture
- Strategies and Policies
- Programmes and measures

- Linking road safety management with road safety performance
- Monitoring implementation and effectiveness
- Efficiency assessment and cost-benefit
- Crash Modification Factors
- Standardisation and transferability

- European Road Safety Foresight
- Developing and developed countries



Research Tools



- Full operation of an EU Road Safety Observatory (data, knowledge, methods)
- Exposure surveys for all road users (veh-kms, person-kms)
- Surveys for driver behaviour, attitudes, perceptions
- Surveys for Road Safety Performance Indicators

- Data harmonization and database interconnections (police, traffic, health)
- Multilevel and time series analysis and forecasting

- Large scale experiments for all road users: Accident in-depth investigations, Naturalistic Driving Studies, Driving Simulator Experiments

All road users include: passenger cars, pedestrians, cyclists, PTWs, HGVs

Selected priorities

Priority road safety issues

- Self explaining road environment (incl. the vehicle)
- Young drivers
- Cycling and Power Two Wheelers
- Quantifying road user behaviour (incl. exposure and safety performance indicators)
- Understanding causes (accidents, causes)
- New technologies and their effectiveness

Research Tools

- A solid European Road Safety Observatory
- Monitoring performance
- Analysing impact of social changes on road safety
- In-depth accident investigation
- Naturalistic Driving



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