

SAFESPOT

Cooperative systems for road safety
"Smart vehicles on smart roads"



Motivation and Objectives

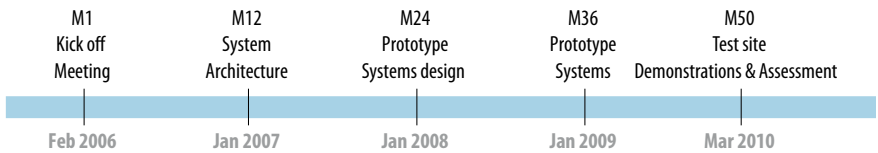
The number of road accidents is still unacceptably high, few years ago a number of EUCAR Working Groups cooperated to evaluate the opportunity that new wireless communication technologies were offering to the development of cooperative systems.

The SAFESPOT Integrated Project designs cooperative systems based on vehicle to vehicle and vehicle to infrastructure communication to improve road safety. The core aim is the development of the technological building blocks and of the related enabling technologies to enable the future implementation of cooperative systems for road safety.

SAFESPOT will prevent road accidents with its Safety Margin Assistant that detects in advance potentially dangerous situations. SAFESPOT is testing its applications in six European countries involving vehicles and road infrastructures.

Project plan, Milestones and Deliverables

The figure conveniently summarises the SAFESPOT results.



Technical Approach and Achievements

SAFESPOT applications are based on vehicle to V2V and V2I communication to:

- improve the range, quality and reliability of the safety-related information available to vehicles
- provide drivers an "extended co-operative awareness" via a real time reconstruction of the driving context and environment
- give more time and space to drivers and on-board systems to react safely and appropriately to risky situations

SAFESPOT developed the core technologies to enable the exchange of geo-referenced safety messages and to update in real time navigation maps with relevant attributes for a safe and efficient driving.

Achievements

- SP1: modular in vehicle sensing platforms to detect potentially dangerous driving situations
- SP2: road infrastructure sensing platforms to be installed in "black spots" road sections
- SP3: core technologies: vehicle ad hoc network, local dynamic maps, vehicles' relative positioning
- SP4: cooperative systems applications based on vehicle to vehicle communications
- SP5: cooperative systems applications based on vehicle to infrastructure communications
- SP6: deployment strategies to plan future perspectives of cooperative systems
- SP7: key role to design the Common European Architecture for Cooperative Systems



Organisational Information

Budget	38 M€	EC Funding	20.5 M€
Duration	48 months	Start	February 2006
DG	Information Society and Media	Priority Area	ICT for Transport
Coordinator	Roberto Brignolo, CR FIAT	Contact	roberto.brignolo@crf.it
Partners	52 partners among them DAIMLER, RENAULT, VOLVO, Piaggio, Magneti Marelli, Bosch, Continental, TNO, MIZAR, COFIROUTE, ANAS,...		
Website	www.safespot-eu.org		