



TRACKSS

Technologies for Road Advanced
Cooperative Knowledge Sharing Sensors

TRACKSS....

- ◆ pushes forward the state of the art in infrastructure and in-vehicle sensing technologies for more safety and efficiency in road transport, improving their performance and cost-efficiency
- ◆ implements advanced knowledge sharing capabilities in infrastructure and in-vehicle sensors, making them *cooperative entities*
- ◆ enables improved situation awareness for all key players – humans and systems- involved in transport
- ◆ paves the way to a new generation of Cooperative Transport Systems



More Information:

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Description of the work

Autonomous vehicles or infrastructure bound systems for safety and efficiency are now showing their limits of application. Cooperative transport systems are the new paradigm with the different actors involved in Intelligent Transport Systems—humans and machines- interacting among each other in order to meet their individual goals while at the same time maximizing the safety and efficiency of the overall system.

However, existing stand alone sensing technologies are not adequate and for smarter, cooperative systems, better input data is required. **Smarter systems demand smarter sensors and cooperative systems require cooperative sensors.**

These innovative sensors need to incorporate improved sensing capabilities with the capacity to share information

TRACKSS tackles this challenge by working on both in-vehicle sensors and infrastructure sensing technologies.

TRACKSS develops:

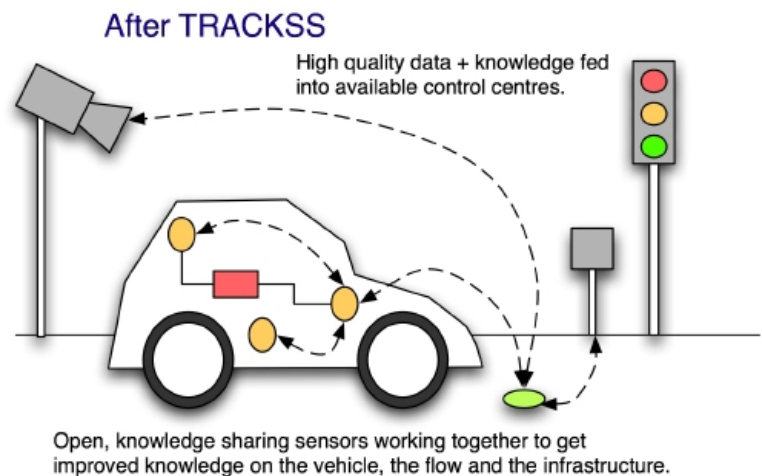
- ◆ **In-vehicle sensors:** advanced ice detection, high-dynamic high-resolution CMOS camera with subwindowing technique, mmWave pedestrian detectors.
- ◆ **infrastructure sensing technologies,** improved loops, laser scanners, smart video cameras, smart dust or remote sensing.

TRACKSS integrates into these sensors knowledge sharing capabilities to enable their optimal integration into the Cooperative Transport Systems environment.

TRACKSS implements a number of tools – including a Data Fusion Module, a Decision Support System, etc.- to enable the management and operational exploitation of cooperative sensors.

TRACKSS validates its results in three scenarios with different characteristics and levels of complexity: a closed test track, a crossing section and an urban network .

Project Acronym:	TRACKSS
Project Reference:	IST-2004-027329
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Start Date:	01/01/2006
Duration:	30 months
End Date:	30/06/2008
Project Cost:	4.427.186 €
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Participants:

The project consortium includes 15 partners with a strategic balance between industry, research centres and traffic authorities. These partners are: ETRA I+D (ES), BOSCH (D), CRF (I), UNIVERSITY OF NEWCASTLE (UK), MOVIQUITY (ES), ITACA (ES), INRETS (FR), TRW (UK), DLR (D), TRL (UK), AYUNTAMIENTO DE VALENCIA (ES), CDV (CZ), KTI (HU), CITILOG (FR) and LCPC (FR). The project is coordinated by ETRA Investigación y Desarrollo (ETRA I+D).