



**Co-operative Systems in
Support of Networked
Automated Driving by 2030**

Project Facts

www.autonet2030.eu

Total Budget: 4.6 MEUR

EU Funding: 3.35 MEUR

Duration: 36 months

Start date: 1st November 2013

End date: 31st October 2016

Contract n°: 610542

Project Coordinator: Institute of communication & Computer Systems (ICCS)

Partners n°: 9

Countries: Greece, Slovakia, Germany, Italy, Sweden, France, United Kingdom, Switzerland

Call Identifier: FP7-ICT-2013-10

MOTIVATION & OBJECTIVES

Triggered by the so-far limited convergence between sensor-based automation and cooperative V2X communications, the project seeks to research and validate procedures & algorithms for 802.11p-based interaction control among co-operative vehicles focusing on:

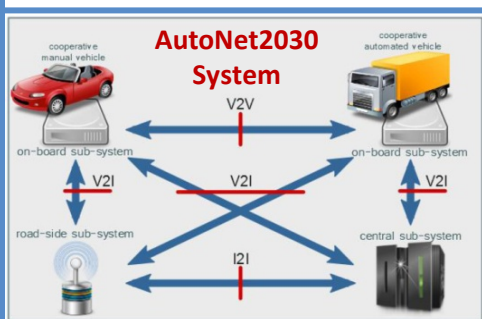
- Cooperative decentralised control system to realise fully-automated vehicles & drive the advised maneuvering of manually-driven vehicles.
- V2X-message-based communications to (feed ETSI ITS standardization and) enable automated maneuver planning & traffic flow optimization.
- Onboard sensor-based architecture to enable reliable positioning and lane-keeping automation.

Contact

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TECHNICAL APPROACH

- Research & specifications of cooperative maneuvering control algorithms & information sharing.
- Specification & standardisation of required enhancements to existing cooperative communication protocol standards.
- Development of perception processing modules & multi-source data fusion specifications.
- HMI specifications & implementation for advised maneuvering.
- Realistic test-track- & simulation- based evaluation.



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 610542.



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Consortium

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FIELD TESTING & PILOT ACTIVITIES

- Vehicle integration and field-testing across test-tracks in Sweden, Italy and France;
- Final demo: realistic showcase of scenarios with associated customer and societal value;
- Combination of automated and manually-driven vehicles in both urban & highway settings;
- Maneuvering for lane-change, merging and fail-safe intersection management.



EXPECTED RESULTS & IMPACT

- Demonstration of inherently safe cooperative maneuvering control algorithms;
- Standardized use of 5.9 GHz V2X communications at the service of automated driving;
- Shape the path for cost-optimized and widely deployable vehicle automation;
- **IMPACT:** Assist in increasing the user-acceptance level of automated driving technology.



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