

CO-DRIVE

Co-Pilot for an intelligent road and vehicular communication system



Main objectives and aims:

This project aims to validate a pre-industrialisation approach towards a cooperative driving system between User, Vehicle and Infrastructure to suggest an intelligent, secure and calm route, for sustainable mobility.

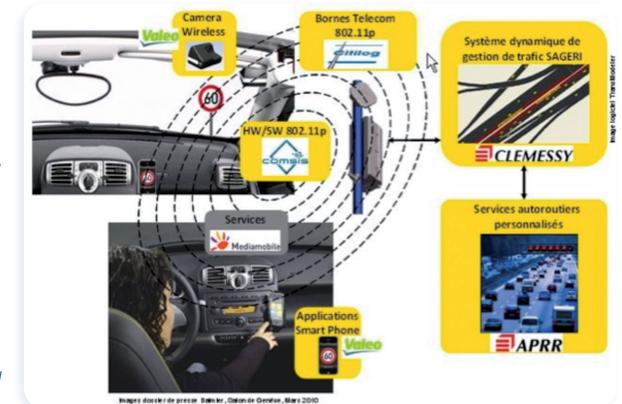
The system will provide:

- A complementary dynamic infrastructure and traffic management tool for the provision of vehicle data and guidance to drivers.
- More reliable, rapid and user-localised services: regulatory speed limits, advisory speed limits for traffic control, local or surrounding area alerts (weather, tailbacks, roadworks, lane closures, accidents...).

Main expected impact:

Once completed, the Co-Drive project will make it possible to:

- 1] list the relevant (vehicle and/or infrastructure) data to be processed along with the different envisaged uses;
- 2] provide a dynamic basis for regulatory and recommended speeds;
- 3] develop a progressive communication gateway for the collection and dissemination of data between vehicles and the infrastructure;
- 4] create modular software components for processing vehicle data to interface with traffic management software with the aim of developing a «Support system for intelligent road management» software package;
- 5] install on the infrastructure manager's traffic management PC a vehicle data management system for transmitting localised, appropriate instructions;
- 6] define the technical specifications to ensure the system is robust (communication, information management, associated components);
- 7] supply the first test methods for cooperative control and command systems;
- 8] create a full demonstration system (vehicle/infrastructure) on the Versailles Satory test site, including a scalable embedded open communication box, a fully equipped electric vehicle, intelligent infrastructure components, a motorway simulation model (vehicles, traffic, incidents, accidents...);
- 9] stipulate the rules governing retrofitted equipment and associated testing norms;
- 10] study the obstacles and solutions related to user, social and legal acceptability of the system.



Duration [36 months

budget [6,6 M€ (Public Funding: 2,8 M€)

Project partners: VALEO, Clemessy, APRR, Mediamobile, Sopemea, Comsis, Civitec, Tecris, Citilog, Navecom, INRIA, IFSTTAR, INSA Rouen, Université de Versailles.

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Project certified by **mov'eo** and

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