

CoMoSeF

Developing and deploying vehicle-to-vehicle communication systems to improve road condition information systems



INSPIRATION

Drivers often face various problems due to inaccurate information on weather conditions, such as sudden icy or foggy road conditions or road incidents. In Luxembourg, the management of winter weather conditions is a hot topic both politically and in the public arena. In addition, traffic information is not updated with the required frequency needed to plan appropriately and improve the efficiency of traffic.

However, new vehicle-to-vehicle communication systems have the potential to address these problems by allowing vehicles to share data on weather and other road conditions in real-time using nomadic devices. CoMoSeF will build on the work done in earlier projects Carlink and WiSafeCar in which Luxembourg Institute of Science and Technology (LIST) was a partner, as well as the ongoing project MOEBIUS, to develop and deploy systems to significantly improve road condition information systems and eliminate existing problems and challenges.

Innovation

Involving multiple partners in different countries around Europe, a range of co-operative mobility solutions, devices and applications that are feasible for large scale deployment will be developed. CoMoSeF will bring existing and emerging sensors, services and communication solutions closer to the market and create the necessary business models to support them.

Researchers from Luxembourg Institute of Science and Technology (LIST) will manage the Luxembourg pilot, which will focus on warning drivers about winter weather conditions and traffic accidents, offering new multi-modal itinerary recommendations for dealing with the problems. They will focus on deploying a service platform on top of the wireless communication platform developed in the earlier WiSafeCar project. Mobility services will then be deployed on top of this service platform.

Impact

CoMoSeF will result in a number of new traffic and transport services. It will also evaluate different vehicle-to-vehicle communication solutions with the potential to be further developed into commercial products by software providers. Some applications currently envisaged are weather and traffic warning systems for commuters, dynamic car-sharing and carpooling applications and taxi fleet management solutions.

Partners

Mobisoft Oy (FI) , Finnish Meteorological Institute (FI) , Infotripla Oy (FI) , Taipale Telematics (FI) , HITEC Luxembourg (LU) , Centria (FI) , VTT (FI) , Broadbit (SK) , Technical University of Cluj-Napoca (RO) , AROBS Transilvania Software (RO) , Poznan University of Technology (PL) , UBRIDGE (KR) , ISBAK (TR) , POST Luxembourg (LU) , IKUSI (ES) , CBT (ES) , Innovaia Association (ES) , Koc Sistems (TR)

Financial Support

CELTIC-PLUS

Contact

5, avenue des Hauts-Fourneaux
L-4362 Esch-sur-Alzette
phone: +352 275 888 - 1 | LIST.lu

Dr Djamel KHADRAOUI (djamel.khadraoui@list.lu)
© Copyright April 2025 LIST

LUXEMBOURG
INSTITUTE OF SCIENCE
AND TECHNOLOGY

