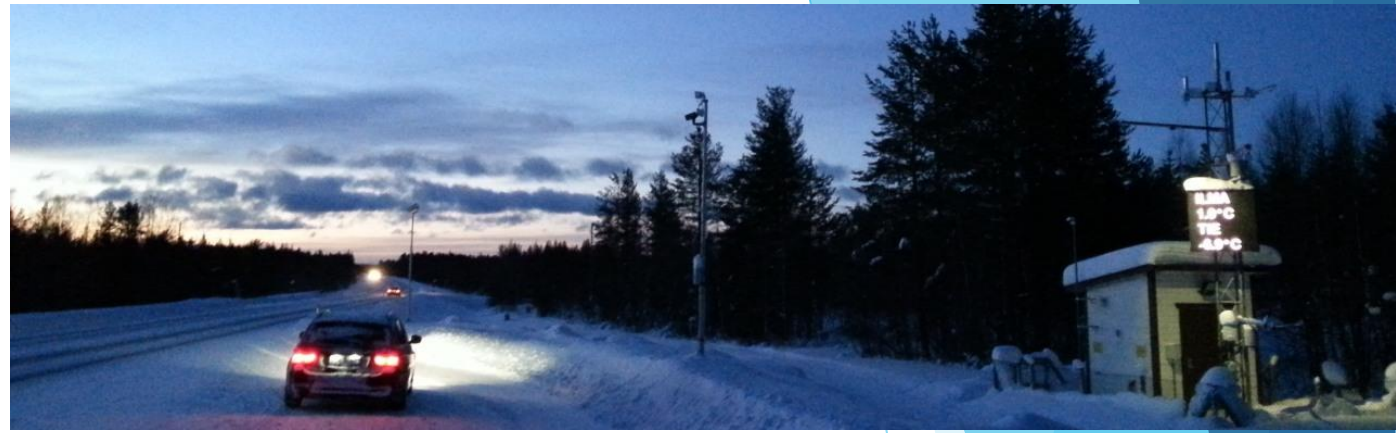


OBJECTIVE AND TARGET

SafeCOP project addresses safety-related issues in cooperating cyber-physical systems.

These systems, characterised by wireless communications, multiple stakeholders, and variable operating environments, are called Cooperative Open Cyber-Physical Systems (CO-CPS).



Vehicle and Roadside Unit Interaction

The communication between a vehicle and a roadside weather station (RWS) is conducted with IEEE 802.11p communication. The RWS provides to vehicles certain observational data and it receives, in return, other data which are then used to enhance RWS.

Within the SafeCOP project, **IoT cloud has been exploited to provide RWS data to vehicles.** In particular, instead of exchanging data between traffic actors, all the data get collected into the IoT cloud, and delivered back as location-based services.

In this context, friction and temperature data have been collected and sent to the cloud. Every time a given vehicle travels within the vicinity area of an RWS, or in the vicinity area of other geographically-labeled service data (generated by another vehicle), it will receive the up-to-date data.

