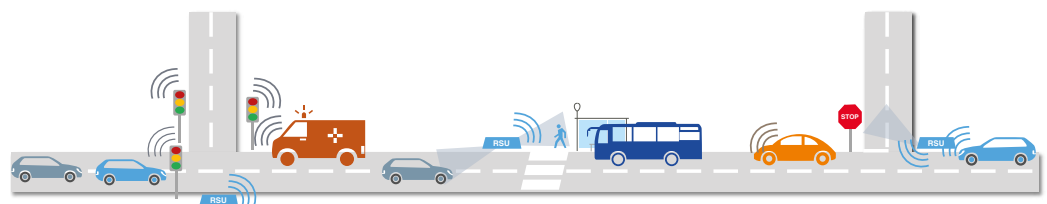
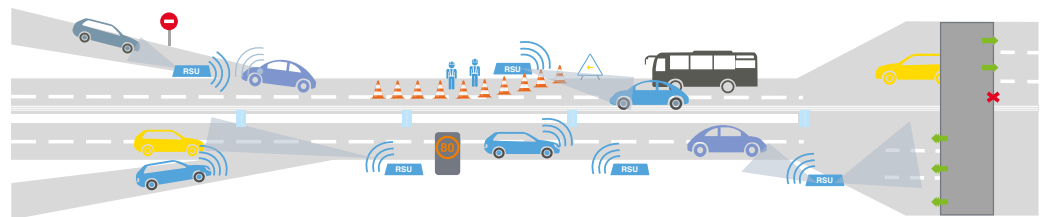


PAC V2X

AUGMENTED PERCEPTION
BY V2X COOPERATION

OBJECTIVES

The project called PAC V2X, which means augmented perception by V2X cooperation, is part of the development of cooperative STIs. It aims to increase the perception of cooperative and potentially automated vehicles in environments (intersections, coastal highways, curved roads, etc.) and situations (traffic or infrastructure masking) that do not allow to obtain an efficient level of perception towards collision avoidance, by the simple use of their own sensors. This increase in perception will be achieved through V2X cooperation between vehicles and roadside units (RSU), with autonomous perception capabilities (radars, cameras), strategically positioned and with the ability to communicate their perceptions to vehicles through the diffusion of standard messages.



USE CASES

- Collision risk alert including traffic light violation and wrong way driving;
- Lane merge assist including motorway access and roadwork area;
- Lane change assist including overtaking with limited perception when bus is occluding the way;
- Traffic control at high conflict zone including traffic scheduling assist at intersection and motorway tolling assist;
- Contextual speed adaptation.

PARTNERS

RESEARCH INSTITUTES



COMPANIES



PAC V2X SYSTEM

PAC V2X System includes:

- 📡 Sensors equipped Road Sides Units
- 📡 4 types of vehicles
 - Basic vehicles: no communication, no perception
 - Cooperative vehicles: standard communication capabilities (such as SCOP@F vehicles sets)
 - PAC V2X cooperative vehicles: communication with PAC V2X message
 - PAC V2X automated vehicles: perception and communication capabilities
- 📡 Servers and supervision systems
- 📡 Vulnerable road users

