



# Press Release

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## YoGoKo provides hybrid communication solutions for pilot deployments of Cooperative ITS services


Autonomous driving & V2X are challenging transport and mobility. Vehicles are already connected devices, however in the very near future they will also interact directly with each other and with the roadside infrastructure. In Cooperative Intelligent Transport Systems (C-ITS), vehicles communicate with their environment, increasing the quality and reliability of information available about the vehicles, their location and the road environment.

YoGoKo's communication solutions for connected & cooperative mobility enable the exchange of information between vehicles and the roadside infrastructure, while providing performant connectivity to the cloud. Contrary to existing dedicated and narrowed solutions designed to meet a specific need, YoGoKo has developed a unified communication platform simultaneously addressing the connectivity needs of various types of applications: road safety, traffic efficiency, data collection and processing, fleet tracking and management, remote diagnosis and monitoring, access control, software over-the-air updates, Internet access and other added-value applications and services. The unified communication platform combines hybrid communication technologies as needed to provide extended & secure connectivity. It manages communications, data, and services and avoids the development of solutions in non-interoperable silos and facilitates the deployment of innovative services.

YoGoKo solutions are currently deployed in pilot deployments of Cooperative ITS services (e.g. SCOOP@F) and in various connected autonomous vehicle programs (e.g. VEDECOM, AUTO C-ITS).

### SCOOP@F - Hybrid communication solutions provided by YoGoKo

One of the main objectives of the current deployments of Cooperative ITS services is to optimize the management of traffic and road information, and to improve road safety for users and road maintenance employees through the vehicle-to-vehicle and inter-vehicle and road infrastructure information exchange (V2X), as well as connectivity to the control center.



**Projet SCOOP**  
véhicules et routes connectés  
connected vehicles and roads

**Pilot deployment of Cooperative ITS services**

- Road maintenance vehicles & coaches
- Unified communication system combining V2X & connectivity
- Road safety, traffic efficiency, fleet management

SCOOP@F is the largest pilot deployment in Europe of C-ITS services based on V2X communications technologies (ITS-G5). The large-scale deployment of 3000 vehicles and 2000 kilometres of French roads equipped with V2X communication technologies is undergoing since end of 2017. SCOOP@F aims at validating in real traffic conditions a set of initial C- ITS services (e.g. hazardous location notifications) between vehicles and the roadside infrastructure. The objective is to optimize the management of traffic and road information, and to improve road safety for users and road maintenance employees, thanks to V2X information exchange. Renault and PSA are each commercialising a limited series of 1000 new vehicles equipped with the ITS-G5 access technology whereas hundreds of vehicles belonging to regional road authorities are retrofitted with V2X communication capabilities.





YoGoKo's unified communication system deployed in SCOOP@F's road maintenance vehicles and coaches combines multiple access technologies. The combination of hybrid communication technologies allows to collect and transfer information to the control center even in the absence of roadside ITS stations.



## Hybrid communication management with YoGoKo box and embedded software stack

### YoGoKo proves to be a key actor in the C-ITS ecosystem.

- YoGoKo is taking part in the SCA project (Secure Cooperative Autonomous systems) within SystemX (a French institute for technological research) currently addressing security and privacy challenges associated with the deployment of autonomous vehicles. The project is a continuity of the ISE project (ITS SEcurity), completed in June 2017, which developed the PKI (Public Key Infrastructure) needed by SCOOP@F to ensure authentication of data and location privacy of users in Cooperative ITS services.
- YoGoKo took part in several interoperability tests. In the Netherlands in July 2017 tests were organised by InterCor (Interoperable Corridors), with the objective to verify cross-border interoperability for the InterCor common specifications for the first generation (Day1) C-ITS services using V2X standards based on the ITS-G5 access technology. Late 2016, YoGoKo participated in experiments organized by ETSI to test interoperability on top of the ETSI security architecture and managed to perform certificate requests to the PKI trust center server developed by the ISE project.
- YoGoKo is involved in the AUTO C-ITS project (Autonomous driving pilot on roads in Lisbon, Madrid & Paris) as provider of the communication system used by Inria. The aim of this H2020 European project is to facilitate the deployment of autonomous vehicles by ensuring interoperability and promoting the use of C-ITS technologies that will enable vehicles, users and the road infrastructure to share information more efficiently.
- YoGoKo solutions were used in the world-first cross border driverless vehicle demonstration performed by VEDECOM between France and Germany during the ITS European Congress in Strasbourg in 2017.

By taking active part in standardization activities and major pilot deployments, YoGoKo is helping the emergence of truly interoperable and cooperative solutions for transport and mobility.

### C-ITS - Towards widespread deployment

The second stage of SCOOP@F under preparation will implement new services and further develop hybrid communications technologies. SCOOP@F test sites will be integrated into the C-ROADS pan-European C-ITS pilot deployment. Initially launched by the European Commission to link C-ITS deployment initiatives co-funded by the EU, the C-ROADS platform now intend to harmonize C-ITS deployment activities across Europe. This will be done through joint technical specifications and cross-site interoperability testing.

