WORKSHOP
ON
CONNECTED CARS & AUTOMATED DRIVING SYSTEMS
TOKYO November 17 - 18, 2014

French SCOOP project
Pilot Deployment
OEM's point of view

Overview

- Why SCOOP@F pilot ?

- What is SCOOP@F pilot ?

- What are the functions used in SCOOP@F

- How V2X contributes to OEM vision & strategy

Why SCOOP@F pilot ?

Background:

- ✓ **Cooperative V2V & V2I direct communications represent a cost effective solution to expand Safety & ADAS sensing domain for vehicles and infrastructures, in the way towards automated road**

- ✓ **V2V & V2I direct communication will make feasible new collaborative functions & services which will be high contributors to the mobuility efficency emprevement due to global system optimisation capabilities**

- ✓ **Car2car consortium has begun to promote V2X technology since 2006 and has defined its gradual integration roadmap (Day One applications)**

- ✓ **ITS-stack standards have been defined since 2010 by EC mandate 453 (ETSI / CEN)**

- ✓ **Low scale national & european F.O.Ts have been completed to validate V2X technologies and standards interoperability from 2011 to 2013,**
 - ✓ **in France by project**
  - ✓ **in Europe by**

Why SCOOP@F pilot ?

Conditions before a mass deployment

- ✓ **V2X applications social impacts have to be evaluated in naturalistic traffic conditions**

- ✓ **Global system capability & gouvernance have to be tested including:**
  - • Security PKI governance, privacy protection
  - • compliance assessments and/or certification process,
  - • The local or central back office needed to supply relevant & consistent public and private information to the connected vehicles

- ✓ **Hybrid V2X communications mixing ITS-G5 & cellular (3G/ LTE) have to be tested on different high/low latency tolerant use cases**

- ✓ **V2X safety / mobility business cases have to be evaluated from a global point of view (infrastructure & OEM)**

- ✓ **First A-sample ITS-G5 components have to be validated / certified before their possible integration in multi-standards on-board radio systems**

What is SCOOP@F pilot ?

A combined C-ITS pilot deployment of infrastructures and vehicles, on 5 French test sites. From 2014 to 2018. This Pilot will be deployed in two phases :
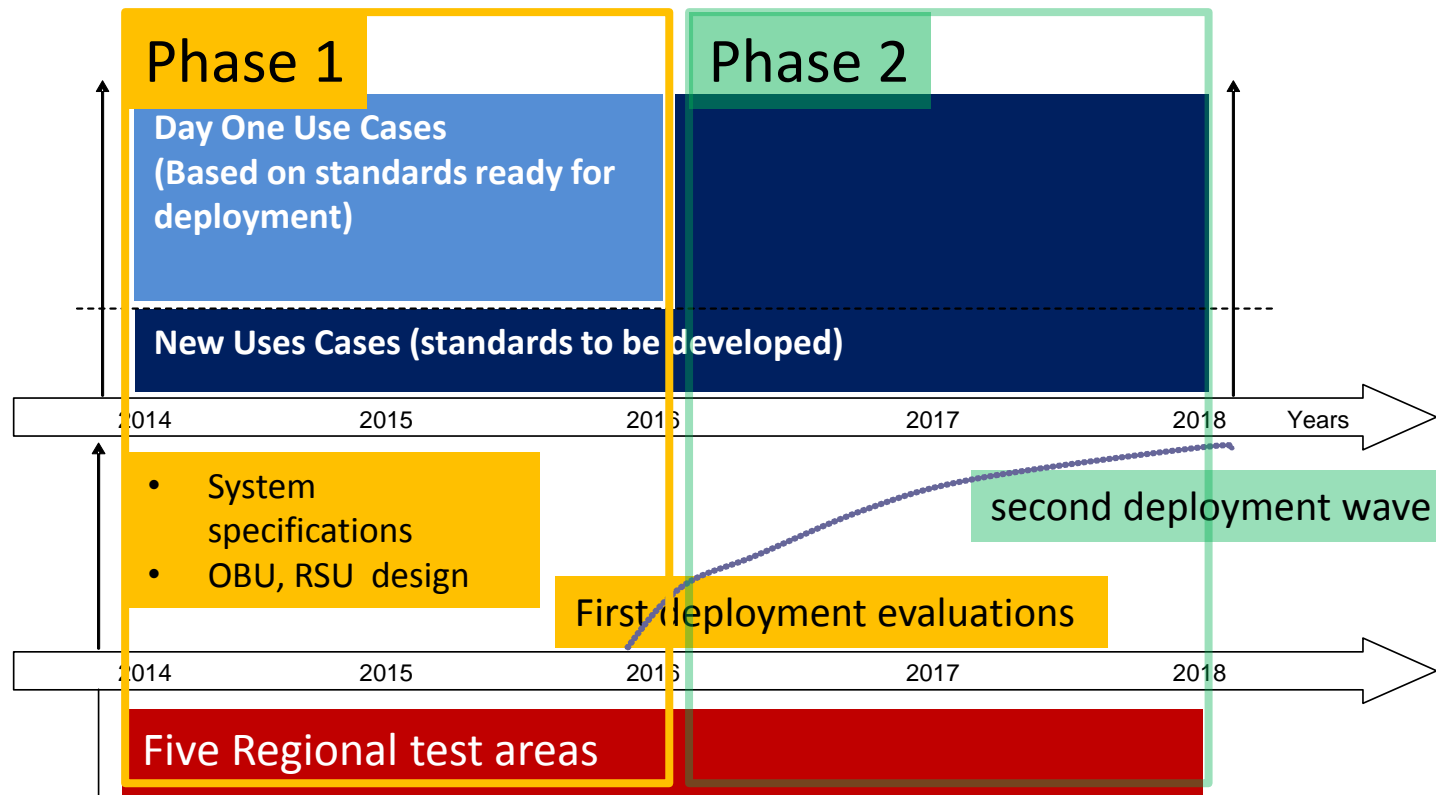
What is SCOOP@F pilot ?

Phase 1 : Consortium and budget

Financing :   **13 M€ (Phase 1)**   **50% from DG MOVE TEN-T**

Lead by :   **MEDDE**

Partners :
(phase 1)

    Road Operators

    Car Makers

    Tests & Validations
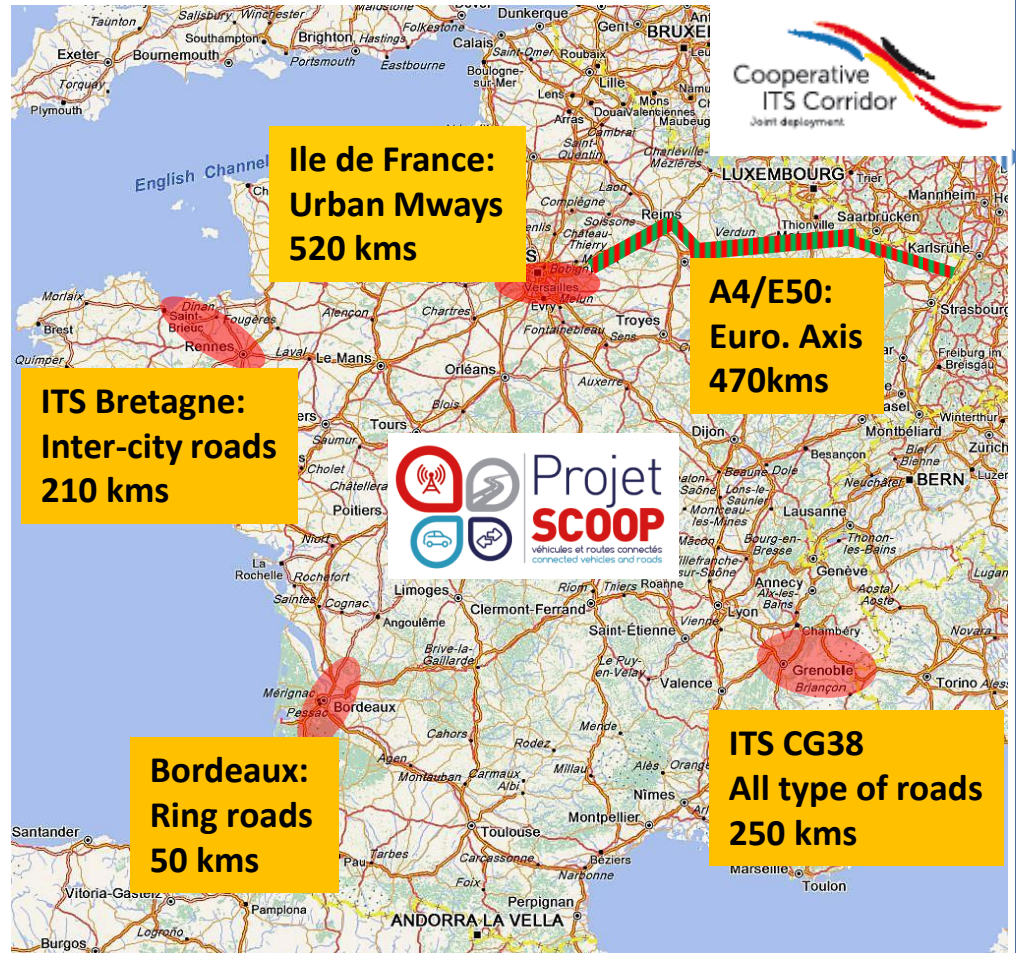
    Sites

What is SCOOP@F pilot ?

Phase 1 : Deployment areas

Five tests sites :

- **Ile de France**
- **East corridor E50 (Sanef)**
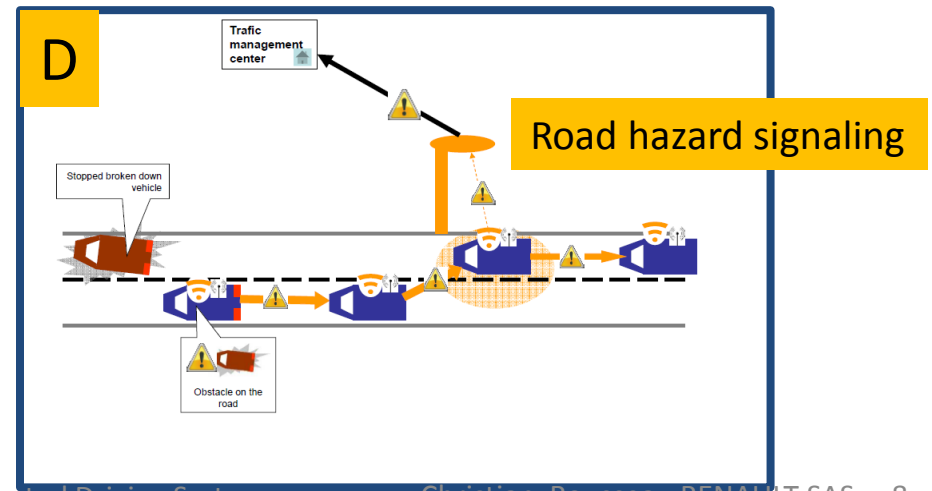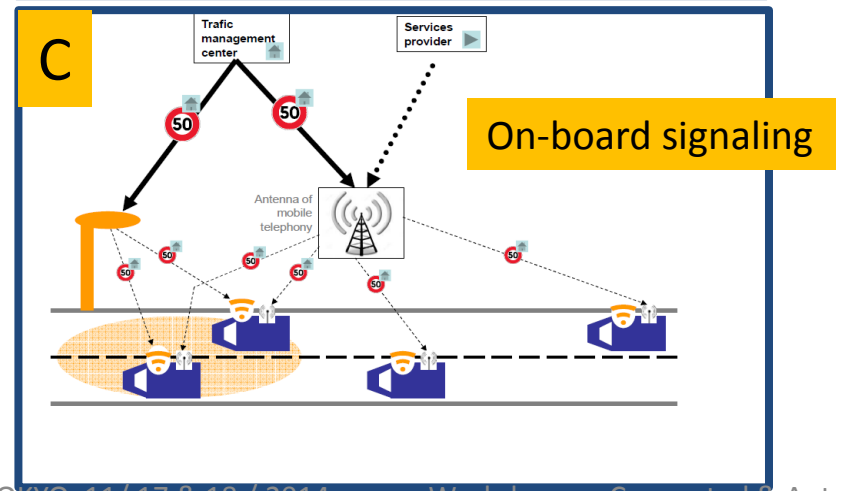- **Bretagne**
- **Bordeaux**
- **Isère**

Equipments:

- **2400 OBUs (vehicles)**
- **300 RSU (fixe station)**
- **100 RSU (mobile station)**
- **Data centers, servers**

Ile de France: Urban Mways 520 kms

A4/E50: Euro. Axis 470kms

ITS Bretagne: Inter-city roads 210 kms

Bordeaux: Ring roads 50 kms

ITS CG38 All type of roads 250 kms

What is SCOOP@F pilot ?

Phase 1: Four groups of Day one Use cases

A — Collection of data

B — Road works warning

C — On-board signaling

D — Road hazard signaling

How V2X contribute to OEM vision ?
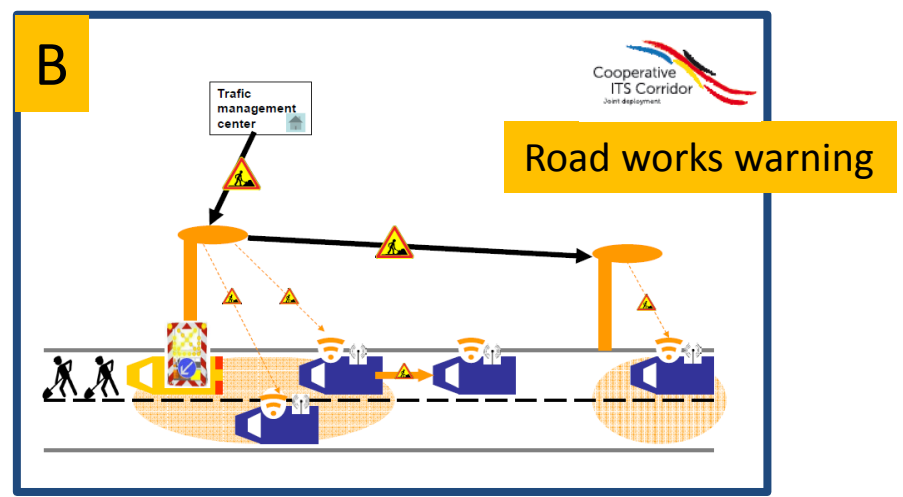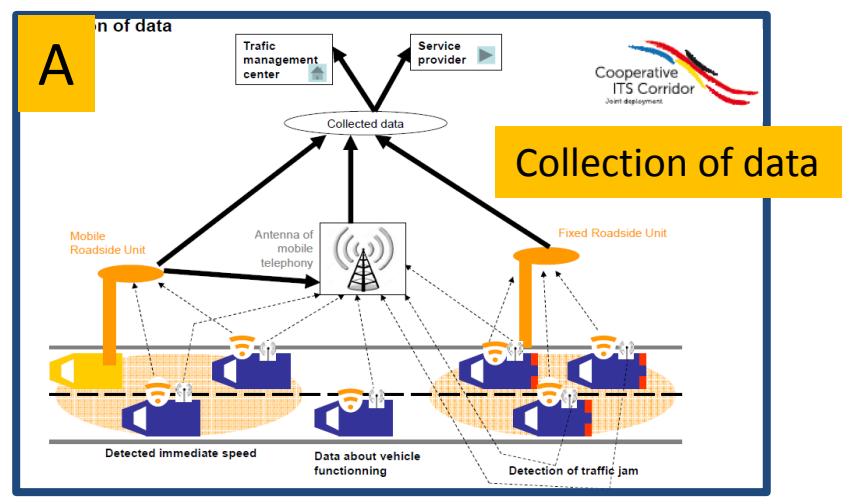
« Cars are part of the problem and thus have to be part of the solution » Carlos Ghosn

More vehicle connectivity and automation for :

- a significantly better traffic management and fluidity in urban areas as well as on highways
- an improve road safety,
- new usages of personal mobility

  (automatic parking, cooperative platooning, car sharing, ride sharing …)

To speed up the dissemination of new services and new types of vehicles in an integrated and cooperative mobility system