

# NEXT GENERATION OF TRANSPORT

## MAIN PILLARS

The 3rd SIP–adus  
Workshop on Connected and Automated Driving Systems 2016

Next Generation Transport



3<sup>rd</sup> SIP adus 2016

November 15 -16 2016

Christian Rousseau

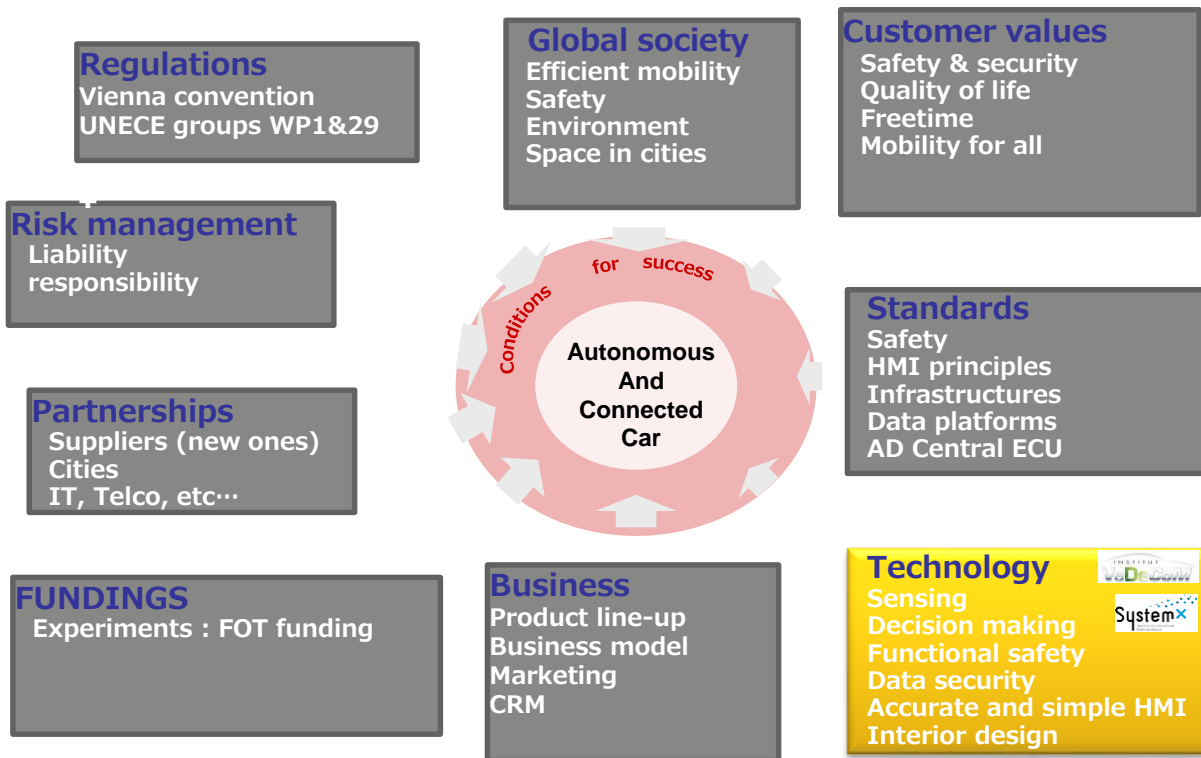
**GROUPE RENAULT**

# MAIN STAKES

- **80 to 90% accidents due to human errors**
- **Too long time in congestion: 78 minutes by day in Ile de France in his car**
- **Limited population access to public and collective transport: 45% in France**
- **30% à 60% delivery time for driving in urban city**

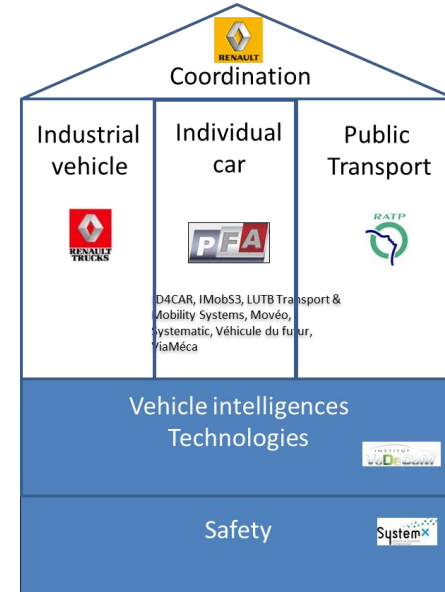


# SUCCESS CONDITIONS FOR CAD LAUNCH



# AUTONOMOUS DRIVING NEW FACE OF FRENCH INDUSTRY PLAN (NFI)

- **Affordable automated vehicles for all by 2020**
- **3 ambitions :**
  - large scale autonomous vehicle experimentation
  - excellence for embedded intelligence technologies
  - key players within critical system safety domain
- **First experimentations on open roads in 2015**



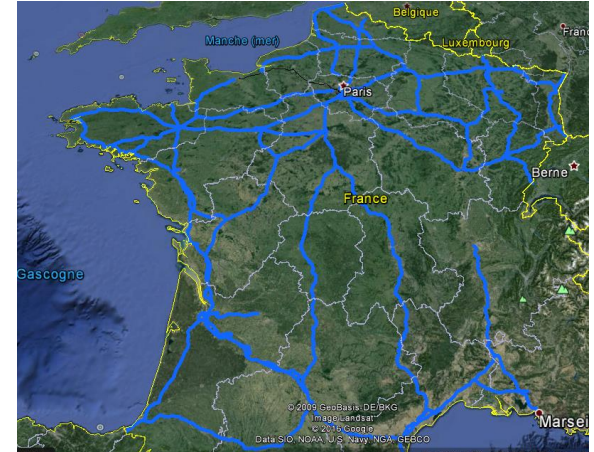
# FRENCH STATUS

## Progress

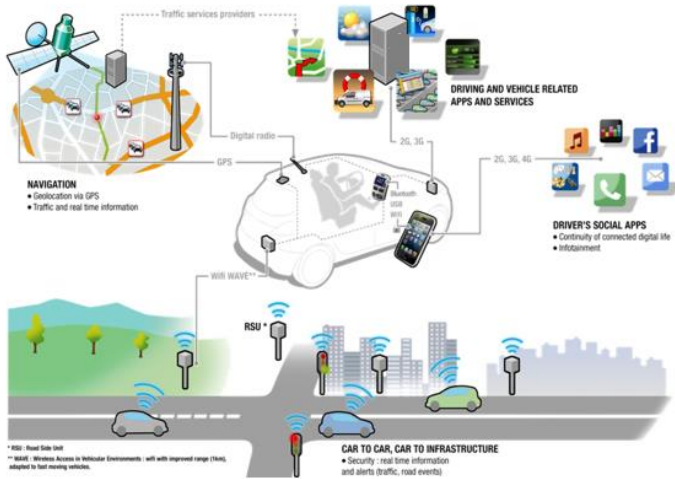
- Research objectives defined
- 5 demonstrations @ ITS Bordeaux
- > 10 000 Kms available
- 15 experimentations
- New legal framework for AD experimentation

## Perspectives

- Large scale demonstration by 2018



# Two complementary services : connected and automated



Connected Vehicle

**2 automation strategies**  
 shift of driving task from human to the system

**"something everywhere"**

Improve the automated driving systems available in conventional vehicles so that human drivers can shift more of the dynamic driving task to these systems.

**"everything somewhere"**

Deploy vehicles without a human driver and gradually expand this operation to more contexts.

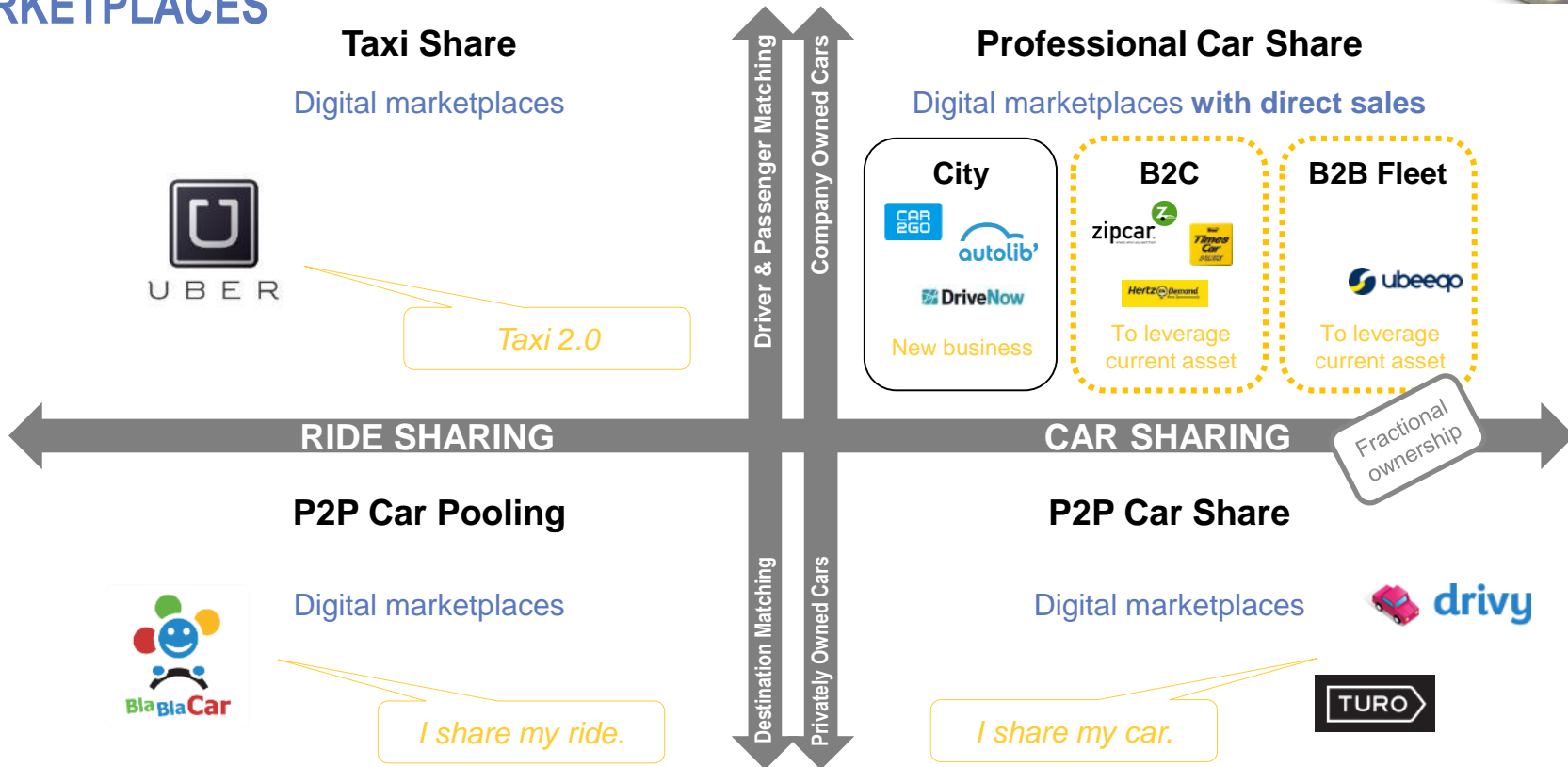
Automated Vehicle



# NEW SERVICES FOR NEXT GENERATION PEOPLE AND GOODS

- **MULTI MODAL Transportation services for people and goods**
- **VEHICLES SHARING**
- **TRANSPORT ON DEMAND**
- **AUTOMATED SCHUTTLE**
- **ROBOT TAXI**

# ON-DEMAND MOBILITY: A NEW KIND OF CAR CONSUMPTION ON DIGITAL MARKETPLACES

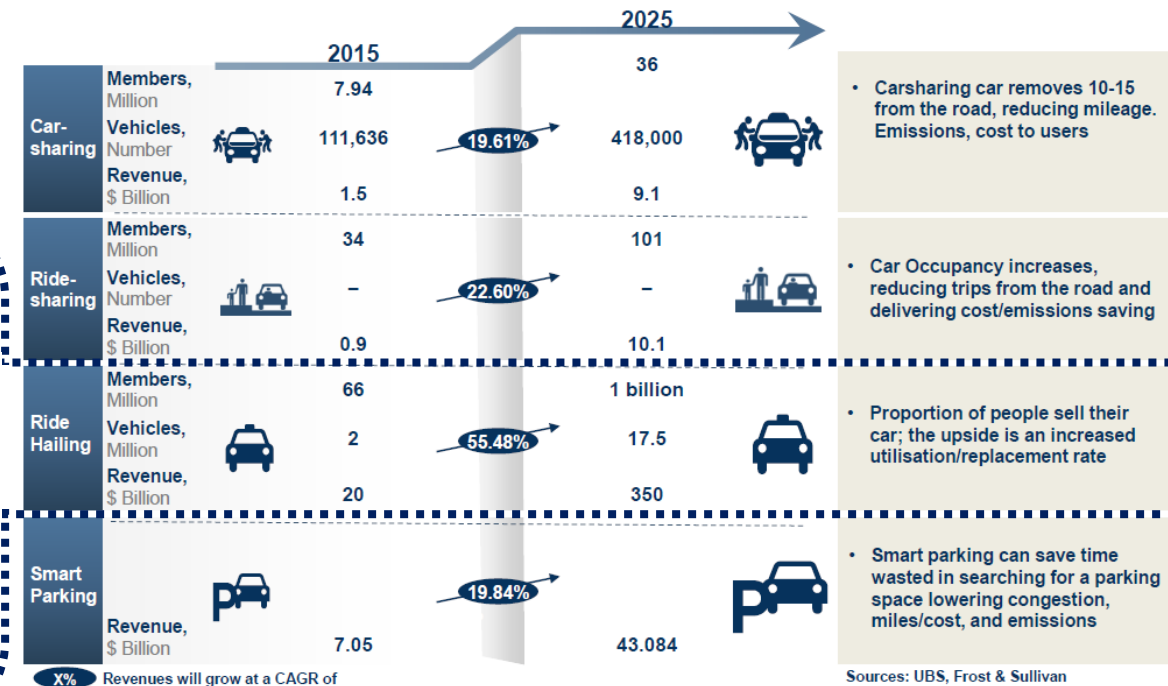




# WHAT WILL BE THE WINNER BUSINESS MODEL IN 10-15 YEARS?

## Sizing the Potential Uptake of New Mobility Services

New Mobility business models are already billion dollar revenue potentials, but will become more sustainable and profitable once integrated with several other mobility platforms, and eventually autonomous



On-demand mobility  
Ride hailing → robot vehicle

2025 key business model

- The strongest growth
- Highest income per vehicle
- Prices' decrease (opportunity)
- Profitable & sustainable

# Time scale of an industrial REVOLUTION

KP1: APPLIED FASTER BY PUBLIC TRANSPORT OPERATIONS.

