

# SAM PROJECT

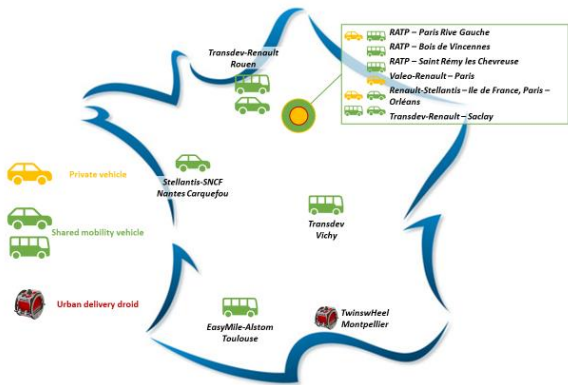
## Sécurité et Acceptabilité de la conduite et de la Mobilité autonome



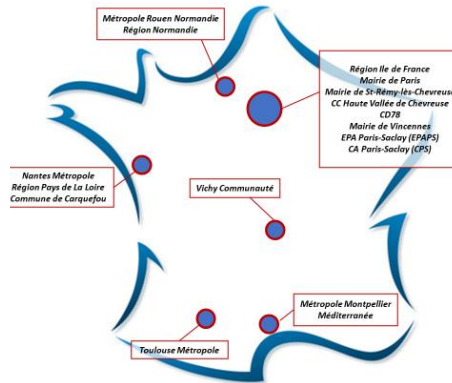
# SAM in a nutshell

## Experiments to demonstrate the Safety and Acceptability, and assess the socio-economic impacts of automated Mobility

- National Strategy for Automated Mobility - 2019-2022
- 16 large-scale demonstrations



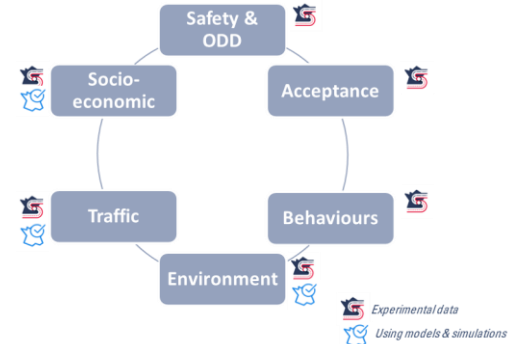
Variety of vehicles and use cases



15 local governments or administrations



### industrial and academic partners



A mix of experimental data and models/simulations



# Real life data to calibrate simulation tools

- A numerical simulation methodology based on real scenarios for AV safety validation
  - How can virtual simulation data match experimental records ? How can they be used to evaluation processes/models
  - Define a method combining a 3D representative environment with digital models of vehicles, sensors and autonomous driver to get close to reality
- Combination of tools to assess the impact of upscaling scenarios
  - Environment effects : Emissions (IFPEN) and air quality (Cerema)
  - Traffic and service efficiency (VEDECOM)



# Lessons learned and existing limitations

## Lessons learned with SAM FOTs

- Instantiation of research questions requires interaction with the local partners
- A need to organize networking and knowledge transfer between existing and potential demonstration sites : Collège des Territoires
- Increase awareness, share knowledge and create common frameworks and references

## Current limitations

- Capability of the technology : vehicles, infrastructure, supervision
- Services tested are still too limited (density, fleet, performance..)
- Some issues cannot be addressed for technical and regulatory reasons (willingness to pay..)



# The next step : How to test a real service ?

## The criteria for a real test

- Technological readiness : Speed of operation
- Service quality up to standards of competition and market expectations : vehicle density and user-friendly service design
- Operational rules : ODD, no attendant on board, supervised operations
- Provide a real answer to local mobility needs
- Full integration in the transport system (data, pricing and ticketing, time schedule, access, transport data..)
- Fully address accessibility issues
- Replicability criteria



Thank you for your attention

[contact@projet-sam.org](mailto:contact@projet-sam.org)

SAM Coordinator : [jean-francois.sencerin@pfa.fr](mailto:jean-francois.sencerin@pfa.fr)

SAM global methodology and impact assessment: [nadege.faul@vedecom.fr](mailto:nadege.faul@vedecom.fr)