



ROUEN NORMANDY AUTONOMOUS LAB

Rouen FOT, in Normandy

Overview and content (update: Jan 11th 2018)

Main partners involved

GROUPE RENAULT

Expertise: automotive industry

Vehicles: 2 Renault ZOE with their AD



Expertise: mobility, public transport

Project Leader

Vehicles: 1 shuttle Lohr + 2 ZOE with TD/Delphi AD

Remote control for all vehicles

Dispatch: backend, client app, client dispatch v1

TD ATS team + TCAR (Transdev operator in Rouen)



Expertise: Insurance

Objectives

- **Develop an autonomous transportation system:**
 - > Provide first-mile / last-mile service at the end of public transportation (Tramway and Fast bus)
 - > On Open Road
 - > With electric vehicles: 4 ZOE (Renault) + 1 shuttle (Transdev)
 - > Operating on fixed routes on weekdays
 - > With quality of service, security and operational safety levels at least equivalent to the current transportation systems.
- **Objectives for Transdev:**
 - > Test the new shuttle (Lohr / Transdev / Delphi) on open roads
 - > Develop and test a complete supervision system including dispatch and remote control, using information coming from the vehicles and the roadside units
 - > Test operation with metro mode, bus mode and on-demand mode.
 - > Operate a mixed fleet of vehicles and AD providers.



Zenith

Residential
Neighborhood

Terminus Fast
bus F1

3

Technopôle
Madrillet



Commercial center

2

INSA

3 Loops, increasing
difficulty

Open roads

Pedestrian crosswalks

Insertion in roundabouts

University Campus

Esigelec

1



EVAPS (Eco-mobility using Autonomous Vehicles on Paris-Saclay) – Saclay FOT

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GROUPE RENAULT

Expertise: automotive industry

Project leader

Vehicles: 2 Renault ZOE with their AD

Remote control for the 2 ZOE



Expertise: mobility, public transport

Vehicle: 1 shuttle Lohr with TD/Delphi AD

Remote control for the shuttle

Dispatch: backend, client app, client dispatch v1



Expertise: research institute in autonomous & electric vehicles

Intelligent infrastructure (roadside units & sensors) and communications

Studies on public acceptability and feedback surveys



Expertise: safety & cyber security

System of system analysis

Safety & cybersecurité analysis



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Objectives

- **Develop an autonomous transportation system:**

- > In suburban areas, between a train station (Massy), a residential area (Camille Claudel) and a campus (Polytechnique / Paris-Saclay)
- > Using a dedicated lane (TCSP Massy-Saclay)
- > With electric vehicles: 2 ZOE (Renault) + 1 shuttle (Transdev)
- > Operating on a fixed route service at off-peak times (incl. at night)
- > With quality of service, security and operational safety levels at least equivalent to the current transport systems.

- **Objectives for Transdev:**

- > Develop and test a new shuttle (Lohr / Transdev / Delphi)
- > Develop and test a complete supervision system including dispatch and remote control, using information coming from the vehicles and the roadside units
- > Test interaction between vehicle and roadside sensors
- > Test dispatch operation with metro mode, bus mode and on-demand mode.

Service area

2 ZOE on-demand single ride

1 shuttle (metro/bus mode), at night

