

SYMBIOZ DEMO CAR

Today to experience tomorrow

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LETI innovation days, Grenoble

05/07/2018

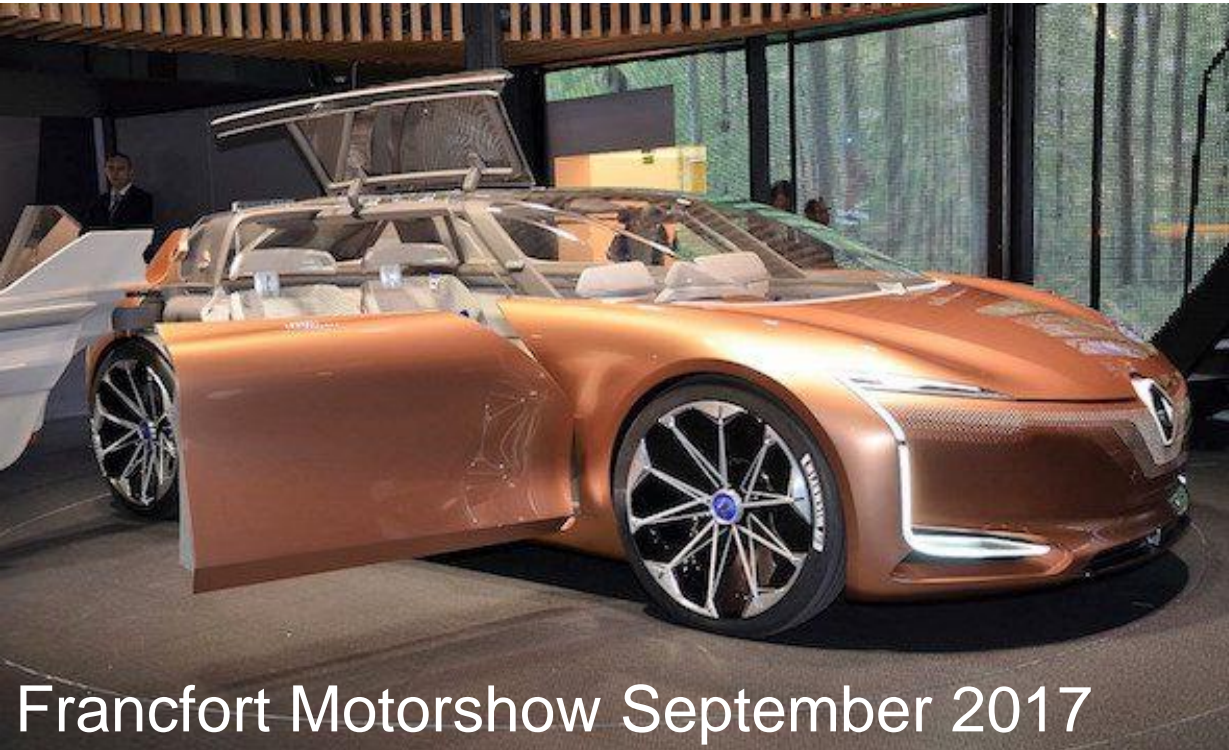
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PROPERTY OF GROUPE RENAULT

GROUPE RENAULT

Symbioz

Concept car

Demo car



Francfort Motorshow September 2017



Open roads December 2017

Symbioz demo car

Brand Vision Concept (BVC) project

Decided mid-2015

Involving 6 major partners



Open roads December 2017



Real autonomous driving functionalities



« MULE CAR »

The future of Life On Board



CONCEPT CAR

Electric
Autonomous
Connected



DEMO CAR



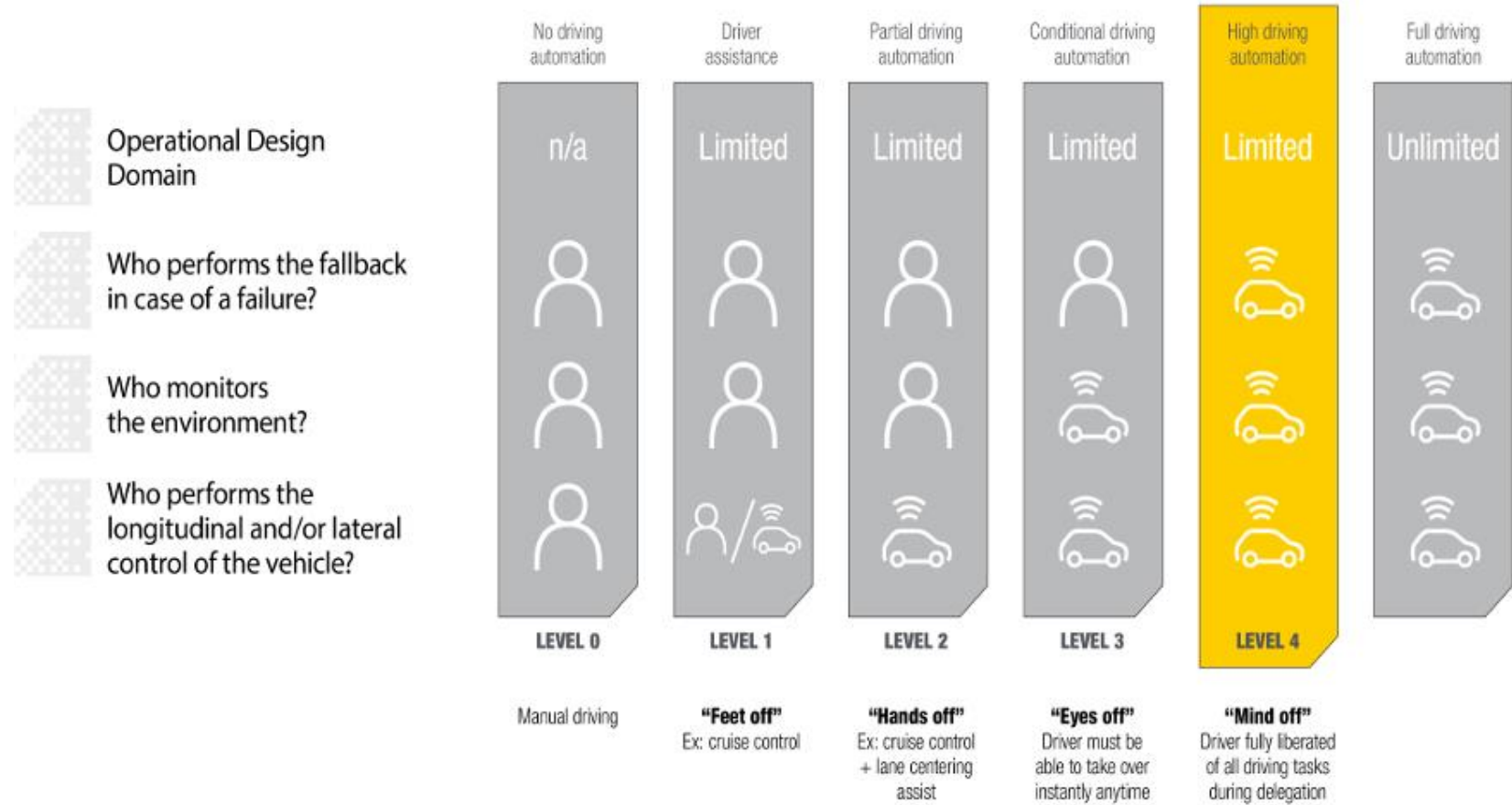
A global experience, on highway, in real traffic conditions

AUTONOMOUS DRIVING

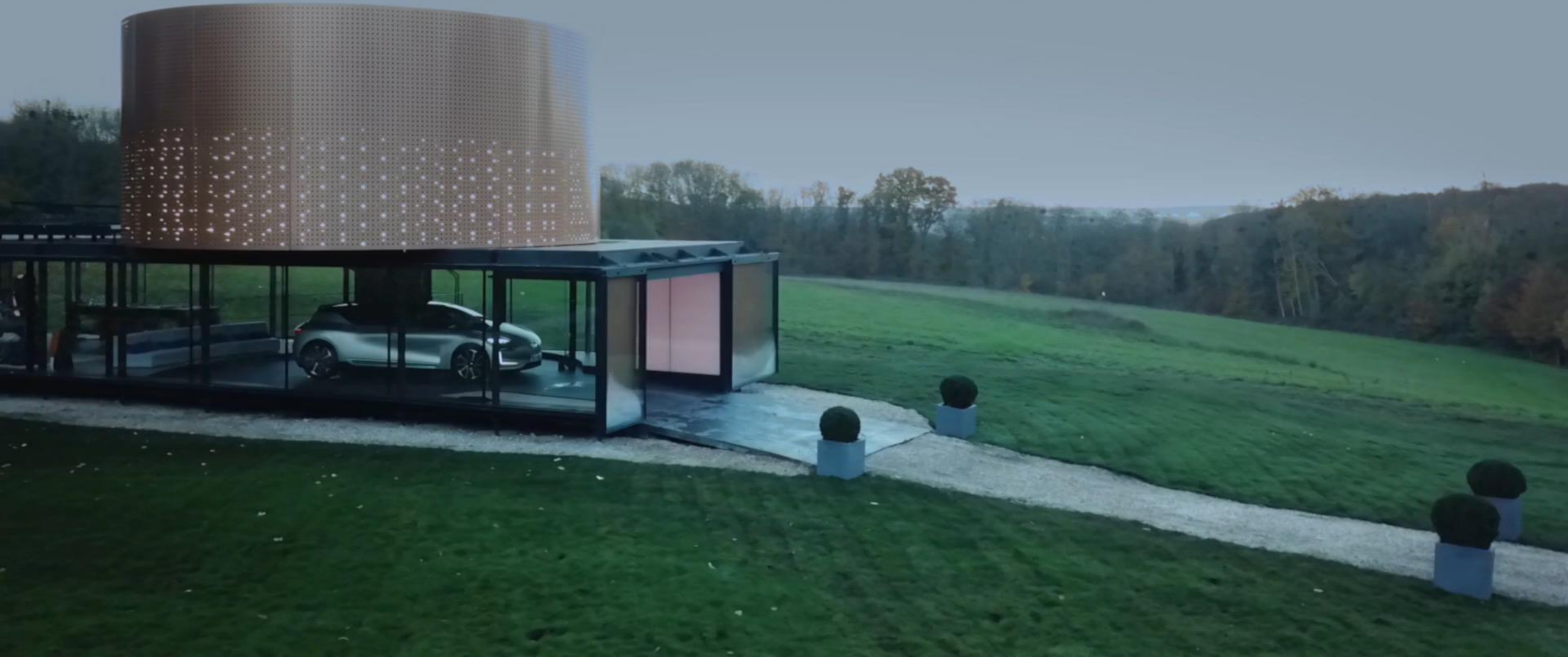
« MIND OFF », LEVEL 4

SAE LEVELS

of driving automation



RENAULT SYMBIOZ DEMO CAR: EXPERIENCE TOMORROW TODAY



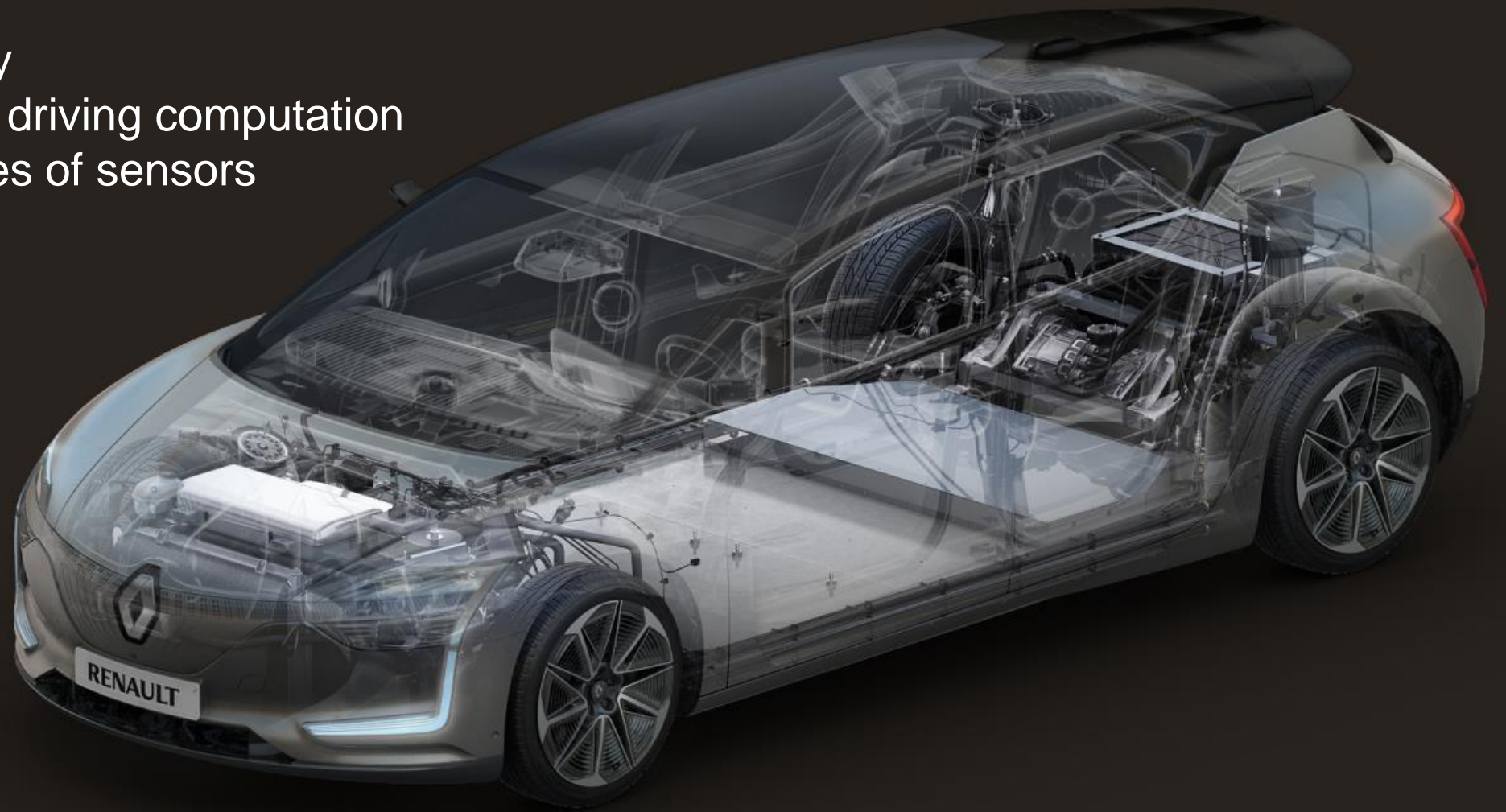
SAFETY OF EXPERIMENTATIONS



SECURED ARCHITECTURE

Duplicated systems:

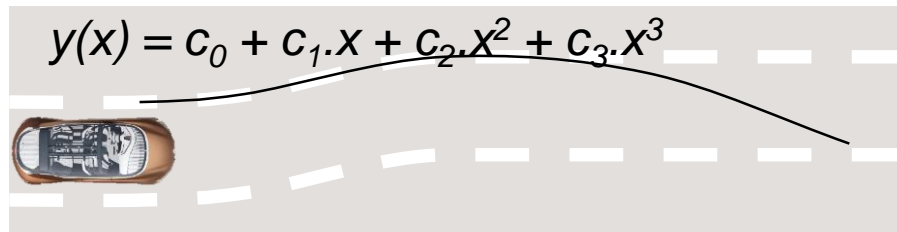
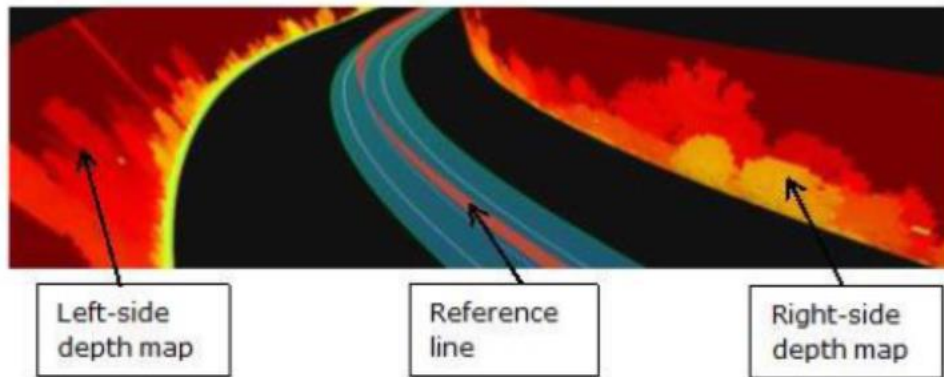
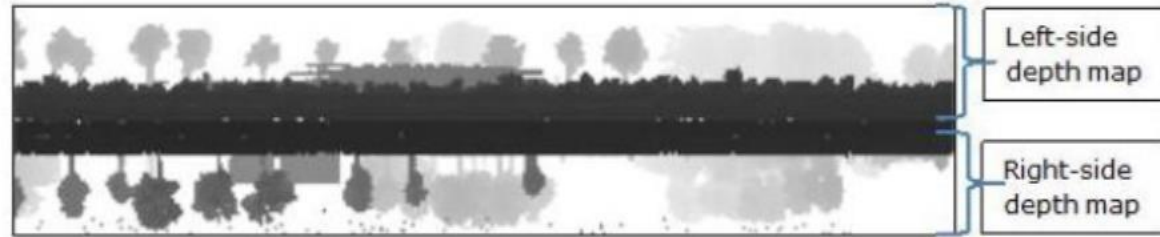
- Braking
- Steering
- Power supply
- Autonomous driving computation
- 4 technologies of sensors



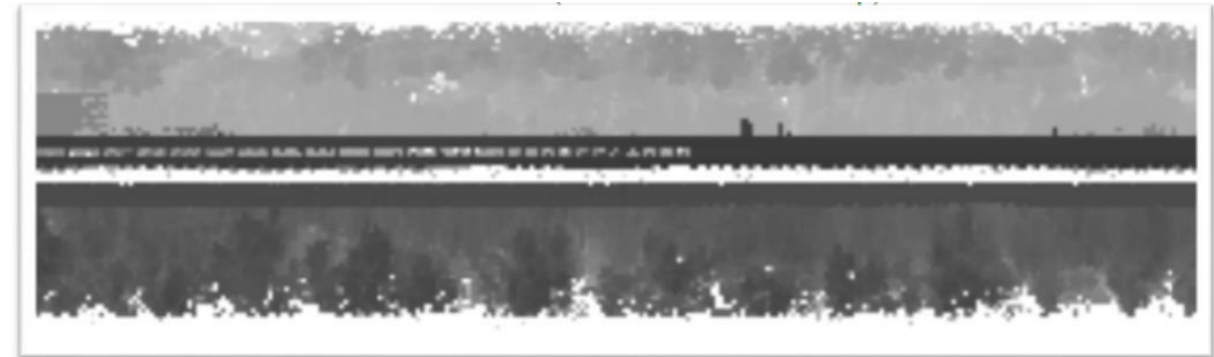
HIGH DEFINITION LOCALIZATION & MAP

=> road side real time monitoring

In theory

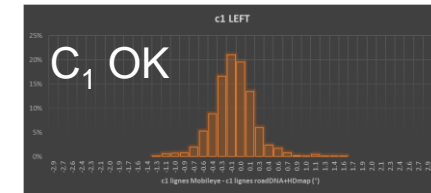
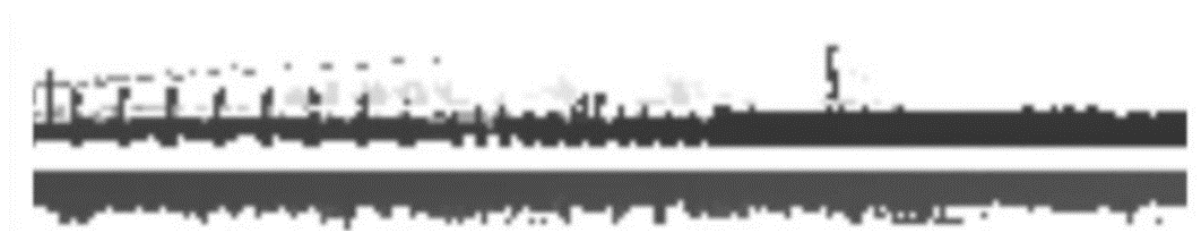


Where we play

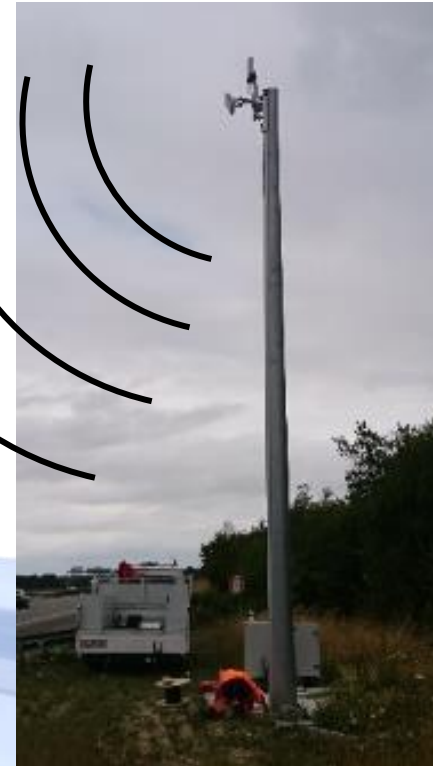
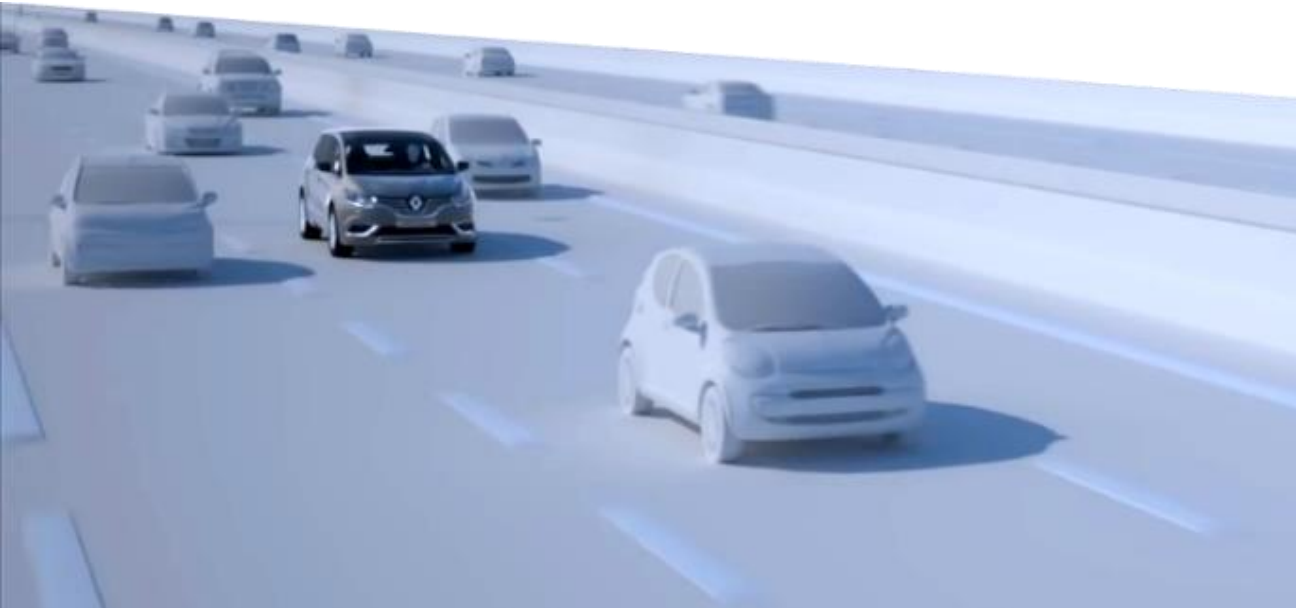


What's in the map

What's is seen by the car



I2V



- Wifi G5 long range (european SCOOP project)
- 4 antennas installed on purpose
- Tollgate and roadworks scenarios

PASS THROUGH TOLLGATE IN AUTONOMOUS DRIVING



1

S.n.a.d

Waldner

2

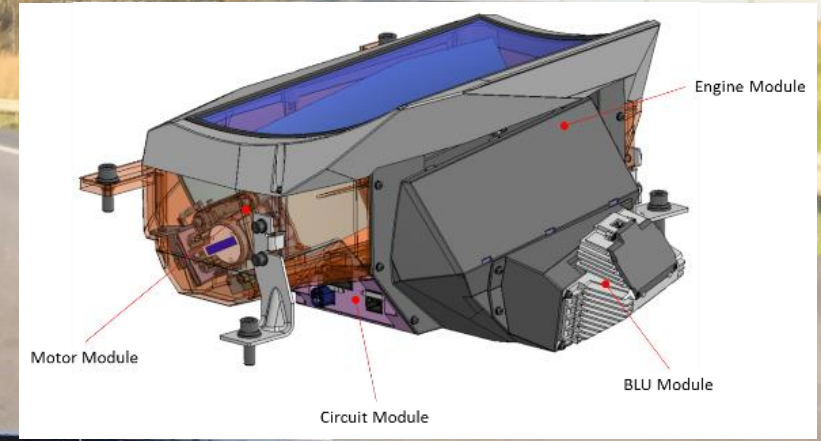
3

4

Parking

5

SHOW PATH INTENTION IN AUTONOMOUS DRIVING



AUGMENTED REALITY ON WINDSHIELD (real view)



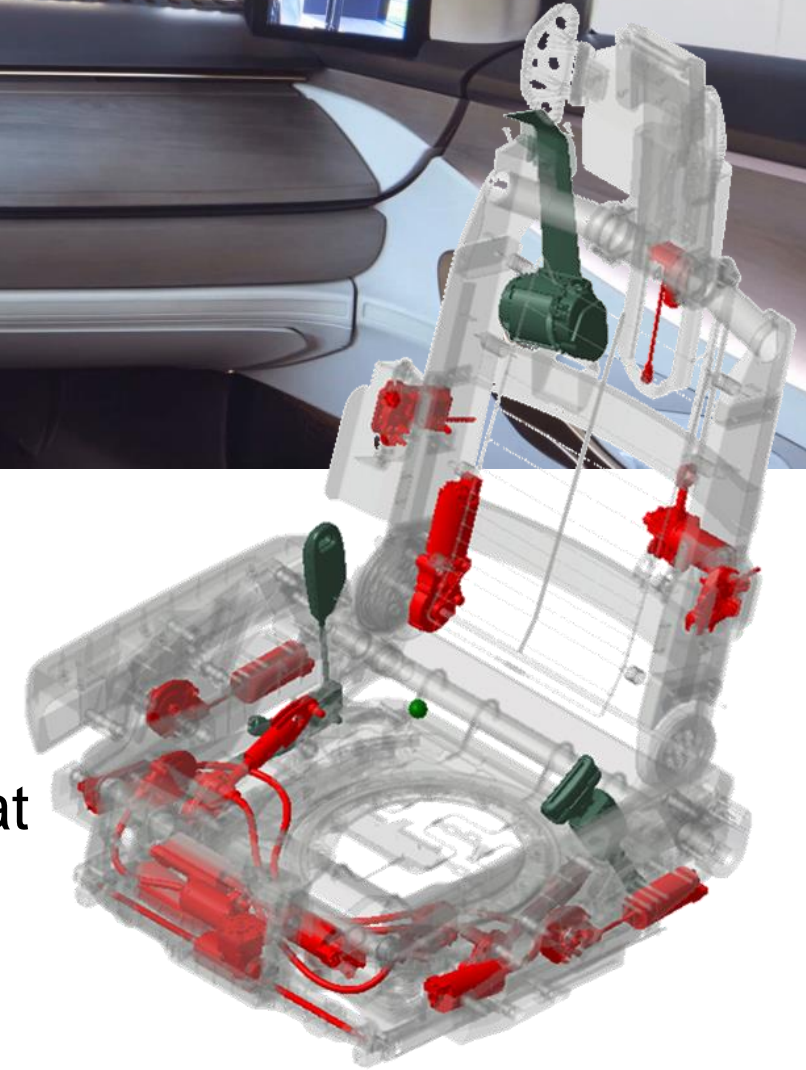
LIFE ON BOARD



Multi-sense modes

« Levity » seat

Configurable cockpit





ON-BOARD VIRTUAL REALITY EXPERIENCE

- Radical illustration of « mind-off »
- Connected to vehicle
 - dynamics
 - surrounding objects





~600



>16000 km



>500



THANK YOU

