AUTONOMOUS DRIVING: A REVOLUTION FOR MOBILITY

REMI BASTIEN

AGVP PROSPECTIVE AUTONOMOUS DRIVING



AUTONOMOUS DRIVING MORE AND MORE ON STAGE







Zetsche used this year's Consumer Electronic Show in Las Vesas to debut the troit in January, Marchionne was saked

FOUR HIGH STAKES FOR MOBILITY

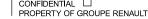
- 90% accidents due to human errors
- 78 minutes each day in car, in lle de France
- 45% of french population with access to public transport
- 30% to 60% delivery time for driving in urban city











MAJOR CHANGE STARTS FROM LEVEL 4 (SAE)

Authorised by Vienna convention Not yet authorised by Vienna convention Driver does not need Driver Driver **Driver must** Driver is not **System** to monitor the continuously continuously monitor the required during performs the dynamic driving task performs the performs the defined use lateral and dvnamic nor the driving **longitudinal** longitudinal or driving task environment at all **longitudinal** case Driver times: however he and lateral lateral dynamic and the driving dynamic driving must be attentive to dvnamic driving task environment at task in all and follow system's System requests / warnings to driving task all times situations performs the resume the dynamic encountered driving task. lateral and during the **longitudinal** System performs entire journey. dvnamic **Automation** longitudinal and No driver System driving task in ateral driving task required. performs all situations in in a defined use **longitudinal** a defined use case. Recognizes The other and lateral its performance case. driving task is driving task in imits and performed by a defined use requests driver to the system No intervening esume the case dynamic driving vehicle system ask with sufficient active time margin. Level 4 High Level 5 Level 1 Level 0 Level 2 Level 3 **Partial Assisted** Conditional **Driver Only** Automation Automation Automation Automation *terms acc. to SAE J3016

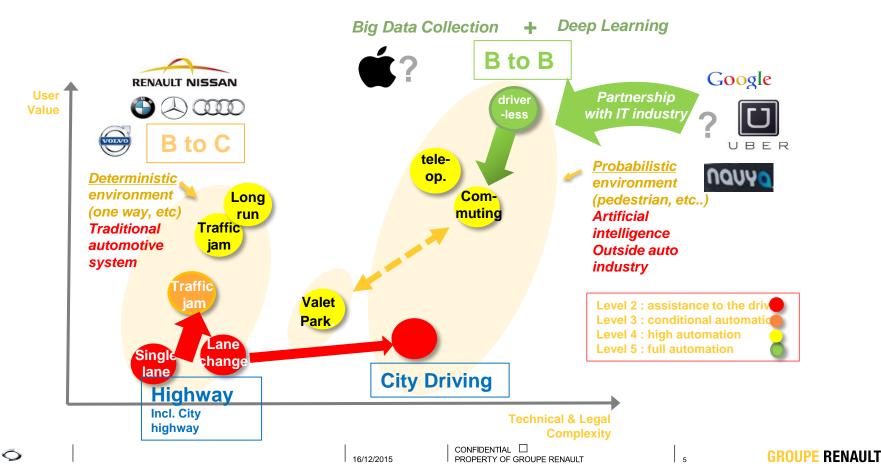








TWO MAJOR FIELDS FOR AUTOMOTIVE CAR MAKERS



VALUE OF AUTONOMOUS DRIVING

AUTONOMOUS DRIVE



MANUAL DRIVE

SAFETY BENEFIT



DRIVING PLEASURE

STRESS-FREE BENEFIT





FREE TIME BENEFIT





NEXT TWO: our vision for AD







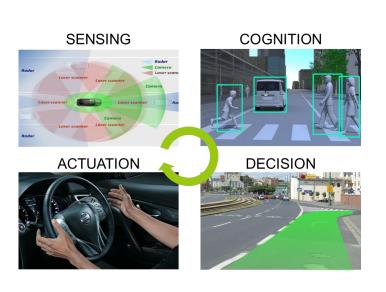




PLAN OF TECHNOLOGY DEVELOPMENT

Core technologies

Platform enhancement



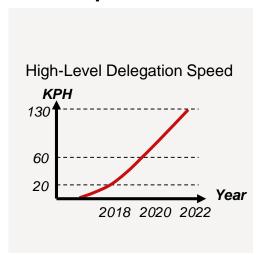
Redundancy







Response time







SUCCESS CONDITIONS: SOCIAL ACCEPTANCE & EXPERIMENTATION

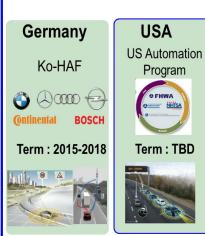
Social acceptance

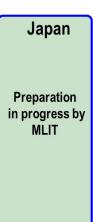
- Regulations
- Product Liability
- Infrastructure
- Insurance
- Consumer awareness
- Driver Education

Experimentation

Proof by FOT on certified roads





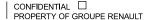




CONCLUSION

- Autonomous Driving is a major breakthrough in the usages
- The acceptance by the society is the key issue beyond technology
- Mobility becomes a system of system, and AD will play a key role.
- RENAULT in the Alliance is in the race for AD





THANK YOU FOR YOUR ATTENTION!

