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AUTONOMOUS SYSTEMS WORKSHOP

Stakes from Development to Exploitation

June 24th, 2021



AGENDA OF THE WORKSHOP

- | | | | |
|-----------------|---|---|--------------|
| • 14h00 – 14h10 | : Introduction |  | G. Le Calvez |
| • 14h10 – 14h40 | : Trustworthy AI for Industry |  | J. Chiaroni |
| • 14h40 – 15h00 | : SW defined cars : HPC from the Cloud to the Dashboard |  | E. Lalardie |
| • 15h00 – 15h20 | : Why a local global infrastructure is a prerequisite |  | G. Tourpe |
| • 15h20 – 15h40 | : Data Challenges in Training, Validation and Production |  | E. Orlotti |
| • 15h40 – 16h00 | : Questions / Answers (use « Questions » from the Platform) | | |

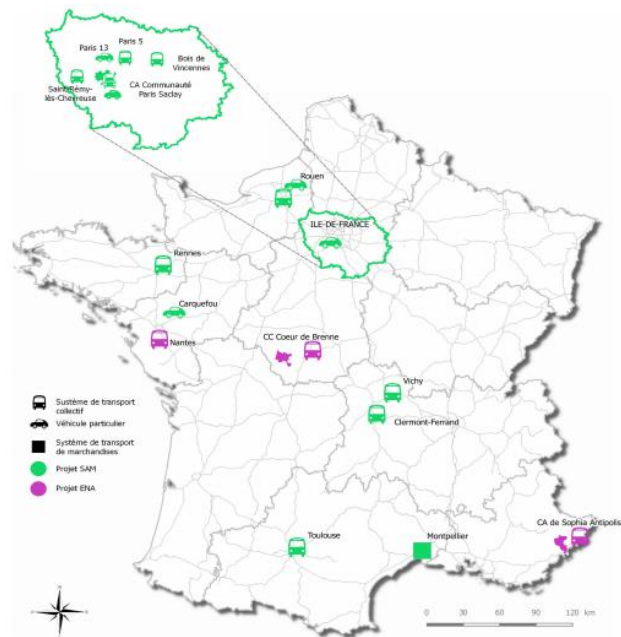
AUTONOMOUS SYSTEMS ...



URBAN AUTOMATED DRIVING



Territoires pour le programme national d'expérimentations du véhicule routier autonome



MTE - DGST Stratégie Nationale Véhicules Autonomes - 24 avril 2019
Sources: IGN - RBL

EXPERIMENTATION PHASE : KEEP LEARNING

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STILL AT STAKE : DEVELOPMENT

- Multiplicity of Driving Environments → Exhaustivity ? (→ ODD)
- Automated vehicles have learned a lot ...but still need to !
- Artificial Intelligence : New Paradigm for Mobility Services
- Controlled Process : In Situ → Development → “Safety Verification in Use Case” → Deployment

NEED FOR :

- DATA COLLECTION (actual / diversity) → IMPROVEMENT THROUGH MACHINE LEARNING
- SMOOTH TRANSITION FROM DEVELOPMENT ENV. TO EMBEDDED ENV.
- SAFETY VERIFICATION IN THE USE CASE → FRAMEWORK (Public Authorities)
- SAFETY – SECURITY THROUGH THE PROCESS / RESILIENCE

AUTONOMOUS SYSTEMS WORKSHOP

Questions / Answers

Questions / Answers

1. We notice new comers from different domains compared to “legacy” stakeholders, promoting “breakthrough approaches”. How do you see the evolution or “confrontation” between these two worlds that address the autonomous systems ? (esp. in mobility field)
2. “Continuous evolution” is key in the process to maintain services (corrections, maintenance, new features ...). How can the related impact and constraints be managed efficiently ? (time- and cost-wise)
3. Trend is mentioned to increase the level of embedded storage or processing power: this will lead to a redistribution of treatments inboard and off board. From your point of view, can you see a roadmap to handle this ? (timing, impact on embedded energy, thermal and volume impact ...)
4. Digital Twin : as overall “inboard / off board” architecture is evolving, do you see how remote digital twins could be used (in real time) to secure or improve the performance of the autonomous systems ? How would this impact / ease the homologation scheme ?

22-23-24 JUNE | DIGITAL EVENT



Merci pour votre attention.
Thank you for your attention.

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