# International research seminar

## A couple of insights and reflections from the AVS 2020

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16 Septembre 2020

Atelier prospectif
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# A general mood far from the show of Las Vegas…

- Political issues: is it worth it?
- Implementation time: start with what works now and stop making promises for the next (couple of) decade(s)
- Revenues: a clear shift towards a service-based approach, but big uncertainties on business models

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# Accountability / Responsibility

**Who (which institution - Fed, State, Cty -) is in charge of what?**
**If there is a crash, who is responsible?**

1. Uber crash (Tempe, 2018) :
   a. a lack of safety culture in the company,
   b. a need for a federal regulatory framework for testing and deployment (AV Bill?)
2. Mock Trial : the whole fleet of AV L4 trucks of a transportation company have been hacked, and caused a lot of crashes on Californian roads. Who is responsible? The trucks manufacturers or the transportation company?
3. A critical factor for AV's safety is the OD. Their "fuzzyness" appears as one of the major causes for (future) crashes. Who is in charge of real time information on the status of OD? Is the NHTSA definition of OD relevant?

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# Deal and cope with existing roads, but gradually design new generation of infrastructures

**How to conceal “no-regret” strategies for cities and territories, while there is an urge to commit …?**

1. The *jungle* is bad for business and innovation : federal legislation, to be or not to be?
2. Digital - Physical : tech companies may want to lead the pack but needs the old physical world made of roads
3. Plug and Drive : “that’s our challenge to create as impactful and easily adopted that wifi”
4. Role of infrastructure : physical, digital, data, legal

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# AV economic model

**Are “personal” AV’s or even AV Taxis (economically) feasible?**
**Are AV Trucks L4  with driver  (economically) feasible?**

1. Shark debate on the AV Taxi economic model
    a. Personal AV’s or On demand AV could be adapted to rural ou exourban areas
    b. In urban areas, another model could prevail on the long run : FAVES - Fleet of AV’s Electric and Shared. FAVES would be the only sustainable configuration of AV MaaS (along with mass transit public transportation)
    c. The FAVES MaaS could be run by private or public institutions
    d. Could FAVES resist without public subsidies?
2. AV trucks
    a. AV trucks L4 could reach rentability even with a driver

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thank you !

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# Key and hot topics

- 29 July, Mock Trial: AV Cyberattack
  - 3 acteurs : OEM (Trucks), LA Express, Class action des victimes
  - Robomobilité seulement si connectivité, d'où risque de cyber-piratage, mais il y a d'autres modèles opérationnels pour les mises à jour logicielles
  - Qui autorise le déploiement des services de robocamions ?
- The Dedicated road to deployment : what are the priorities ?
  - Niveau fédéral pour poser un cadre commun technologique et réglementaire
    - première étape sur les corridors européens ?
  - Dilemma : choisir un système technologique aujourd'hui au risque qu'il soit imparfait et l'améliorer de manièlre incrémentale, ou attendre 10-15-20 ans pour voir quelle est la meilleure technologie
  - standards for public infrastructures for interoperability
- No-regret options for policy making
  - Upgrade motorways and regional road to AV-ready subnetwork
- Automated truck fleets
  - Monitoring des drivers
  - More planned and more structured : from ware to ware
- Uber Crash
  - monitoring du driver
- Projet européen CoExist :
- Shark debate : interrogations sur le modèle économique du robotaxi → concept de flotte partagée
- Recherche sur les ODD : aujourd'hui, c'est très qualitatif, s'appuyer sur des données quantitatives (traffics, comportements)

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