GECKO

GOVERNANCE FOR NEW MOBILITY SOLUTIONS

F. Regulation review

GECKO stakeholder focus group series

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20/05/2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824273.

The rest of the week

	Monday	Tuesday	Wednesday	Monday
AM	A1. Learning from GECKO	C1. Regulating passenger urban air mobility, drone last-mile delivery, hyperloop C2. Regulating bike sharing, e-scooter sharing, micro-mobility	E1., 2 and 3. business model of new mobility services and technologies, future scenarios and regulatory responses	
PM	B1. Regulating ride-hailing, TNC, MaaS platforms, MaaS, carpooling, on-demand ride sharing B2. Regulating connected and automated vehicles B3. Regulating big data for fleet management and logistics, cooperative traffic management, crowd shipping	D1. Big data and sustainable business model innovation	**F1. regulation performance indicator overview**	G1. Summary and lessons

Regulation categories

- General safety
- Data sharing and ownership
- Data security and protection standards
- Data Integration and interoperability
- Checks of mobility devices
- Insurance and liability
- Contracts
- Impact on vulnerable road users
- Equity and accessibility

	B1: Regulating ride-hailing, TNC, MaaS platforms, MaaS, carpooling, on-demand ride sharing	B2: Regulating connected and automated vehicles	C1: Regulating passenger urban air mobility, drone last-mile delivery, hyperloop	C2: Regulating bike sharing, e-scooter sharing, micro-mobility
General safety	social issues should be included, such as the driver conditions. "to what extent is safety (physical and social) part of the business models of providers of innovative mobility services?" linked to the pressure to drive (or deliver) as much as possible	Demonstrate that an autonomous vehicle is safe – without the driver and the supervisor	Hyperloops: The evacuation procedures, safety case have to be considered. Aviation safety standards are higher than railways. => Objective to have the safest system in the world. Level of failure not accepted	At the city level a single approach should be applied, and different zones/areas should not adopt different approaches. This would also benefit the people using these vehicles. A general law setting the definition of these types of vehicle, by using broad rules on speed limits and weights and power, could be helpful. Then general regulations could be applied to all such vehicles and services that fall in the scope of the definition. Standardisation could also be helpful, where umbrella categories and terms are defined at the national level and do not fluctuate with regions and cities.
Data sharing and ownership			Similar to railways. Ownership depending a lot of the public/private transport operator. To offer a good environment to passengers who travels hundreds of km (500-1500 km inland transportation)	
Data security and protection standards		Liability Demonstrate that an autonomous vehicle is safe – without the driver and the supervisor Cyberattacks aspect How society is/will adapt, difficult to do a forecast for 2040	Major priority in the future due to the major potential impacts.	
Data Integration and interoperability	Making sure the systems that track the data can be built/executed.	Provide guidance to cities to make sure they are well integrated with existing PT services.		
Checks of mobility devices			Insuring that the public administration approves the solution whose standards have to be defined at the worldwide level. This should not be defined at the country level!	
Insurance and liability	Making sure insurance and liability is considered in the offer by the operator to the authority. Looking at the passenger perspective (how to include the aspect linked to "quality" in contracts?): Whom do they turn to if the service doesn't work as it was supposed to?	Liability How society is/will adapt, difficult to do a forecast for 2040	Hyperloop: To decide the level of automation for the vehicles. Fully autonomous vehicles, controlled direction, etc. Level of insurance in each case. UAM : Level of automation is also key. Financial aspects that require fully automated vehicles. But higher requirements in terms of liability: e.g. the decision-making process (like for autonomous cars). Airlines have insurance for passengers. => Part of regulatory framework for the operators. Insurance to cover people on the ground?	
Contracts	New forms of contracts can be needed for flexible mobility services such as on-demand ride sharing. The responsibility that operators have and the risks they share, should be factored in for determining subsidies, taxes etc. to level the playing field.			There is usually a lack of clarity on who is responsible for these topics in local authorities and departments. Many times, MoUs and contracts with cities lack a mandated contact point whom operators can deal with.
Impact on vulnerable road users		General low speed limit for everything, which is also a way to reduce the need for segregation (easy to operate also technically).		
Equity and accessibility	Accessibility: regulate to keep a cap on the service in the city centre and making sure it reaches outside the centre. Public authorities need to question if they subsidise services outside the city centre to reduce the need for private vehicle ownership. Incentives can be used to address this. Graz car sharing is an example of expanding their service to outside the city centre. Question of how public mobility is: should cities subsidise privately offered services?			

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Shared issues?

Hyperloop: Safety regulations adapted from both air (vehicles) and rail (infra)

Urban air mobility: At what level are vehicle design standards set?

Autonomous vehicles: perception of safety is as important as actual safety

Hyperloop and CAV: degree of automation determines level of insurance needed (and level of regulation)

Shared bikes: Should the public sector subsidise the private service provider to ensure equitable access?

Thank you for your interest and attention

Bonnie Fenton, Rupprecht Consult; Maris Meta, Fit Consulting

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