

## How to connect collaborative and automated mobility

### 10 principles from the College for Collaborative Mobility

The results of an expert-debate at the cocomo2018 in Berne, Switzerland

#### 1. Automation needs Sharing – not vice versa

Automation holds the potential to help improve the collaborative use of cars, mainly by facilitating easier access. Yet, in order to utilize this potential in the future, co-mobility needs better policies, already today. Only by establishing a strong shared mobility culture in the present, will tomorrow's AVs be public rather than private vehicles.

#### 2. Social acceptance: an important factor in marrying collaborative and automated mobility

Just as „trust“ is the social glue that gets the share economy growing, it is the key for a successful provision of shared and autonomous vehicles on our future roads. It is not the technology as such, which guarantees that AVs can play a major role in a transport system based on shared vehicles and rides, but rather the social acceptance of the very service that is enabled by that technology.

#### 3. Getting it right: bringing science to the politics of shared and automated transport

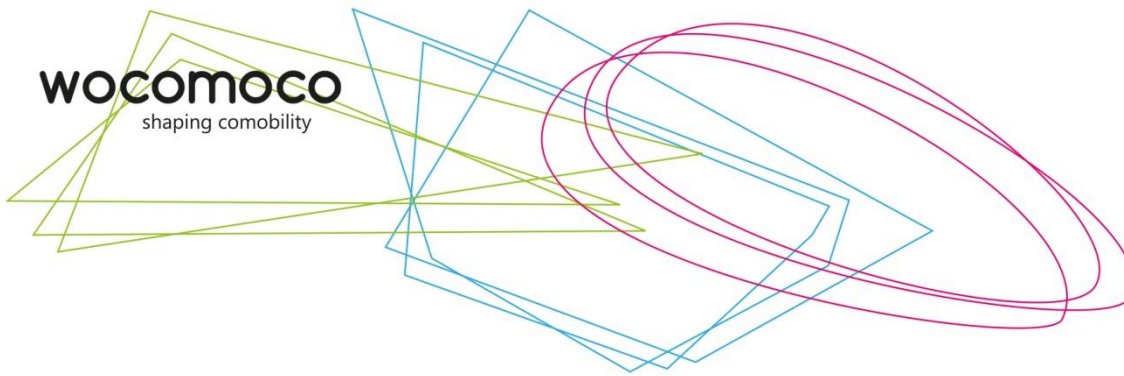
The promises of salvation currently made by AVs need more scientific scrutiny in order to be politically relevant, especially with regards to their role in helping to boost co-mobility. In a sector increasingly driven by inventiveness, entrepreneurship and risk capital, policy-makers need to be both: on the one hand, more flexible, courageous and willing to experiment with the array of new technologies and services. On the other hand, they need to be more science-based in their efforts to regulate the AV/SV-nexus in line with the transport sector's overarching sustainability goals.

#### 4. Changing the economics of transport: towards a new financial paradigm for shared AVs

Financing tomorrow's physical and digital transport infrastructure, integrating transportation's external costs, levying transport taxes, etc. are core mechanisms in transport policy-making that will all have to be modified in order for shared and autonomous vehicles to be successfully integrated. Policy-makers need to pave the way for a more economically efficient and environmentally sound transport-system, in which sharing and automation can deliver on their promises by establishing the principles of a use-based mobility pricing.

#### 5. Between public and private: defining the new roles of traditional means and modes

How and where can which means of transport best serve people's mobility needs and society's wealth and wellbeing? This question needs to be addressed and answered in order to arrive at a new social consensus that reflects the changing culture of mobility, where the private car is no longer seen as the sole means of transport that guarantees maximum autonomy, and public transport is per se seen as more sustainable. The notions of collective and public transport, on the one hand, and private individual transport, on the other hand, will no longer reflect the reality in a new world of transport governed by publically shared, privately operated, fully automated shuttles.



## **6. Aggregation and integration: weaving a new web of transport services**

The best way in overcoming a divided world of public *versus* private transport policy views, and help bring about a colossal change in everyday mobility, is to make transport users an offer they can't resist. This requires that users can chose from array of on-demand services supplied by a large number of different transport companies and mobility providers. Here as well, legislators and regulators need to get involved in order to avoid that market-driven considerations are the mere criteria for creating cross-modal mobility-platforms and mobility-as-a-service offerings.

## **7. Cities lead the way: redefining public procurement in the age of shared AVs**

The transformative and disruptive powers of shared and autonomous vehicles will first materialize in metropolitan areas. Already now cities are the hotspots of semi-automated ride-hailing services and highly-automated shuttles, for instance operated by Post Auto in Switzerland. In order for these services to gain momentum and be integrated in existing public transport services, public procurement needs to be adapted and make collaborative mobility an integral part of any tendering procedure in urban transport.

## **8. Data-driven Mobility: making sure that the digital transformation serves the greater good**

Both, the markets of shared mobility and the rise of automated vehicles is largely driven by the business-perspectives of transportation's digitalization and the vested interests of ICT-giants and venture capital firms. For shared and automated mobility to grow sustainably, the data generated by private companies needs to be utilizable for public authorities in order to help improve transport and urban planning, while at the same time data-protection rights of users need to be guaranteed.

## **9. AV x EV x SV: the new trinity in transport**

It is crucial that collaboration and automation, as two major trends currently reshaping the transport sector, are closely intertwined with the third "revolution" in transport, that is to say electrification. Electric cars do not only offer a more energy-efficient and climate-friendly form auf automobility, they also provide the systemic and material fundament for an analogous motor-vehicle formerly filled with liquid fossil fuels into a digital device, electrically propelled by binary bits and bytes.

## **10. Beyond a tech-driven utopia: making space for active mobility in tomorrow's wiser cities**

Mobility is more than transporting a person quickly and efficiently from A to B. Instead, the act of travelling is often a bodily activity, with people walking or cycling. Especially in cities, which aim at greater liveability, active modes need to co-exist next to motorised, shared and automated transport services. A collaborative use of automated vehicles, therefore, needs to make cities both smarter and wiser, in that they help to allow for more (electrically supported) active forms of mobility.