Good morning, and thank you for inviting me to share my views. As Secretary General of POLIS, I represent European cities and regions working together on sustainable urban mobility and innovation. So, what role do cities see for automation in their future mobility ecosystem, and what role could or should they play themselves in their roll-out?

Cities' mobility policies and goals are very much driven by the challenges they face and need to address in the transport field, improving air quality, reducing congestion through modal shift, making our roads safer, and decarbonizing transport.

Addressing these challenges in an integrated way, while also meeting the needs and expectations of users, requires a systems approach that looks at public transport and active travel as the backbone of a sustainable urban mobility ecosystem and shifts away from car use in urban cores. The SUMP helps cities to adopt such an integrated approach. It allows cities to develop and implement a long-term vision and to roll out integrated packages of measures that mutually reinforce each other and ideally tick several of the aforementioned policy boxes. It also provides the right framework to smartly integrate innovation in such a way that it supports policy goals rather than undermines them.

Many transport innovations have been coming our way over the past years. Depending on how cities govern innovation and establish regulatory frameworks that maximise opportunities and mitigate negative externalities, these new technologies may or may not be delivering on the big promises they bring along.

This is no different for automation. It will be important for cities to define the role of AVs as part of an overarching SUM vision and to set the right framework and regulatory conditions. Cities are becoming better equipped to deal with disruptions and in the meantime, it has become clear that for automation we are no longer talking about a revolution, but rather an evolution. There will be a long transition phase, which in itself will also bring along specific challenges.

When it comes to the potential role of AVs in cities, we must realise that the urban fabric is way more complex than the highway environment, characterized by a mix of different road users and vehicles, different types of roads and streets, and many unwritten rules and human interactions and interpretations between road users.

Will AV's ever be ready and fully equipped to deal with that – and do better, and when will they? This question remains unanswered. Deployment promises of some years ago remain unmet, and it turns out that full automation is much harder than expected. This uncertainty about timing, maturity, and deployment scale is challenging for cities. A realistic timetable is needed that will help them to plan better.

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Our message is anyhow that cities should plan today for what will arrive tomorrow. It is important to define a clear vision for AVs, with realistic and measurable targets, that will enable effective expectations management.

Back in 2018, POLIS published a position on automation in cities, pointing out opportunities and potential pitfalls, and most of these still stand today. At one end of the spectrum, where the private car remains an important mode of transport and the introduction of AVs is not managed, some studies suggest there may well be a shift from sustainable modes to AVs, leading to an increase in kms travelled. At the other end of the spectrum, where the growth of AVs goes hand in hand with a rise in shared mobility, to complement high-capacity public transport and active travel, there is potential for a drop in private car use and ownership.

When vehicles can drive themselves without the intervention of a driver, it has been suggested that a significant amount of on-street and off-street parking could become redundant. The demands of active travel, bus priority, air quality and the public realm have meant that the level of on-street parking is diminishing rapidly in any case. Vehicle automation may further accelerate this process.

Travel time is often cited as a benefit of automated vehicles, since car occupant(s) would be able to spend the trip doing other things. One of the possible effects however is that trips could become longer as people move further away from their workplace. This would encourage greater car use to and within cities, leading to a further increase in km travelled.

Potential road safety benefits are a key driver for AV developments. The removal of driver distraction with vehicles that detect and avoid collisions and are programmed to comply with traffic rules hold great appeal among road authorities. In practice, ensuring compliance may not be simple because the rules, regulations and road signs have adapted to local circumstances over the years.

The safe interaction of automated vehicles with other road users, especially pedestrians and cyclists, is paramount. Ensuring the necessary level of safety may mean that automation is not able to deliver its full potential in terms of efficiency. On the other hand, reduced speed limits and related traffic calming measures can help AVs to function well. By the time AVs will be deployed, 30 kph will have become the new norm in urban cores.

In short, new mobility solutions should respond to the real needs of cities and that is why it is so important to strengthen their involvement. POLIS invests a lot in facilitating a dialogue with the industry & research sector, as well as other levels of government, to make sure the voice of cities and regions is heard in the automation debate and deployment. We have been involved in many EU-funded R&I projects in the field and are an active member of the CCAM research partnership and of ERTRAC.

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Next to pilots, support tools as developed in European projects are instrumental, including models to assess the likely impact of new technologies, recommendations for enabling regulatory frameworks, and a holistic assessment of the impact of AVs on the overall mobility system and on modal shift.

POLIS contributed to the development of an AV readiness framework for cities, through the CO-EXIST project. "Automation-readiness" is the capability of making informed decisions about the comprehensive deployment of AVs in a mixed road environment. This requires:

- clear awareness of the technology underpinning AVs, the different functional uses and the impacts of different scenarios.
- institutional capacity
- a strategic approach linking AVs to policy goals as well as user needs.

So what role and responsibilities should LA take up in the roll-out of AVs? The main lever they can work with is urban space, which they are in charge of. They can regulate access to space through UVARs, they can reallocate space to certain modes, they can put a price on space, and they can manage and repurpose parking.

It is important to understand that adapting urban road infrastructure to the needs of automated driving is not politically nor financially desirable for cities, given their focus on reducing car use and increasing public transport and active travel. No major changes will be made to physical infrastructure, maybe rather to the way we use that infrastructure.

It will be important to focus on low-hanging fruits first, such as the digitalization of road infrastructure and traffic regulations, and better maintenance of existing infrastructure. Investment in and planning for infrastructure should be future-proof, as it is not changed overnight. If infrastructure investments and changes are made, they need to bring benefit to both today's and tomorrow's transport systems, e.g. the digital transition, improved road markings and surfaces, separate bike lanes, bring short-term as well as AV benefits.

The second lever is the licensing of services – for public transport, taxis, ride-hailing, etc. The operators also have a key role to play here because they are purchasing the rolling stock. It is important however that cities do have these competencies, and it may not yet be like that in all cases, so also a change in governance structures could be required.

Local authorities should be involved in or at the very least consulted on decisions regarding the operation of driverless vehicles on public roads in their territory. Good cooperation between different levels of government will be key to enable the paradigm shift on the institutional level as well, and to rightly frame the potential of AVs for different use cases. There seems to be an artificial divide when looking at AVs and urban transport, with a focus on shuttles and robotaxis, but no discussion on passenger cars in that

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context. We need to look at the full picture and try to get a grip on automation in its different dimensions.

It won't be easy, we face complexity and uncertainty, and the transition will be long, but change is happening. We need to move beyond repeated piloting, and work on that integrated approach, where automation plays a relevant and meaningful role and supports the sustainable urban mobility ecosystem of tomorrow. This requires capacity building, appropriate policy approaches, decision-support tools, advanced multimodal network management, future-proof infrastructure, and full integration with SUMP.

That way our cities can become automation-ready. "Automation-readiness", should not be misunderstood as a blind endorsement of AVs, but rather as an empowerment of local authorities to critically review the anticipated technological changes and shape the future according to their expectations.

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