Call for Sessions

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Is Automated Driving a new opportunity for sustainable mobility or just "same same but different"? And what could TA contribute to an anticipatory governance of this transition?

Owner: Torsten Fleischer and Jens Schippl, ITAS@KIT. Contact: Torsten.Fleischer@kit.edu

Description of the topic:

Mobility systems are among the decisive factors for the quality of life and economic development in modern societies. Technical developments and their consequences, but also organizational or social innovations or planning have always been and still are of great social interest and therefore always subject to technology assessment (TA), foresight and related activities. For many decades, there have been debates about what future mobility will (and should) look like, what consequences it might have and how these consequences should be assessed. The concept of "sustainable development" has been an integral part of them - even though there are often very different ideas about what a sustainable transport system should look like and how it can be achieved.

One element of these disputes concerns the question of what role technology can, may or should play in a sustainable transport system. A wide range of technologies are under consideration, just recently joined by the automation of driving tasks in road vehicles, so-called automated or even "autonomous" driving. All major automobile manufacturers, prominent companies in the IT sector, numerous start-ups and many universities and public research institutions are working on technologies and concepts for this. According to the protagonists' expectations, automation and networking of future modes of transport could contribute to ensuring greater safety in road traffic, facilitating access to mobility and - in combination with low-emission or locally emission-free drive technologies - reducing the negative side effects of mobility. Increasing the efficiency of the transport system, greater comfort for users and new mobility options for groups of people who are still or again excluded from individualized motorized mobility for reasons of age or health are further promises typically formulated. As a longer-term development goal, the aim is not only to comprehensively automate (road) vehicles, but also to develop them to such an extent that they can actually become independent participants in road traffic without direct human support. Whether, and if so to what extent, this can be achieved within what timeframe is a matter of controversy today. If this could be realized, however, automation could enable completely new solutions and thus even lead to a transformation of the entire current mobility system towards more sustainability.

This is contrasted by other, equally plausible positions that automated driving might stabilize the current preferences for highly individualized private cars, prolonging the strong dependency on and commitment to car mobility and leading to cities even more flooded by private cars and further urban sprawl. Some researchers argue that these trends could only be broken by strong political interventions and an active governance of a target-oriented implementation of automated driving.

There are still many open questions in this context, such as on the extent to which vehicle automation changes actual mobility behavior, whether humans are willing and able to learn to communicate with driving robots in everyday traffic in the future or whether human driving of motor vehicles will be

prohibited in the future for safety reasons. Nevertheless, in the sense of anticipatory governance, defined as 'a broad-based capacity extended through society that can act on a variety of inputs to manage emerging knowledge-based technologies while such management is still possible' (Guston, 2008), it seems advisable to deal with these possible consequences at an early stage, among other things in order to enable social positioning and to inform political decision-making processes.

The session intents to investigate and discuss the opportunities and challenges for anticipatory governance of automated driving and potential specific roles for TA in this context. In order to make this a relatable experience, this will structured around two different, somewhat antagonistic transition scenarios that are based on different "incarnations" of automated driving technologies and services leading to different "sustainability outcomes".

Input:

Three input papers (ca. 10 min each), two presented by the organizers and one by an invited speaker (more see "format").

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Expected duration:

1.5 to 2 hours, depending on the design of the overall schedule of the program (one "time slot")

Format:

Interactive. Three presenters will provide input papers (approx. 10 minutes per input) to stimulate and encourage a debate about various aspects of two transition scenarios that are based on different "incarnations" of automated driving technologies and services. This will be followed by a structured discussion with the participants of the session about the scenarios themselves as well as about the opportunities and challenges for anticipatory governance to develop governance approaches that reap the benefits of one scenario and avoid the negative developments identified in the other scenario. We are thinking about a fishbowl style format but are still considering other interactive options. One or two of the organizers will also serve as moderators.