



Round Table Discussion | First Lead Topic | May 20, 2022 | 2:30 PM

SUSTAINABLE MOBILITY PLANNING AND PUBLIC TRANSPORT SYSTEMS

01

Sustainable Mobility: A Chance for Livable Cities

Prof. Dr. Meike Jipp | German Aerospace Center (DLR)

02

Clean Drive for a Clean City: City Cleaning Electrified

M. Sc. Fabian Schott | Stadtreinigung Hamburg

03

Smart Roads as a Strategic Issue for Tomorrow's Cities

Prof. Dr. Nicolas Hautière | Université Gustave Eiffel

04

A Boost for Urban Sustainability: Optimizing Electric Transit Bus Networks in Rotterdam

Prof. Dr. Pieter van den Berg | Rotterdam School of Management

++ ADDITIONAL ROUND TABLE TOPICS FOR DISCUSSIONS ++

05

Underground Transportation of Goods into Urban Areas

The underground transportation of goods into urban areas is one possibility to relieve the transport infrastructure of cities by separating goods transport from passenger transport. The systems of underground transportation usually use autonomous caps transporting goods on pallets through subterranean pipes. The presentation gives an overview of the existing systems of underground transportation and a logistical evaluation of the different systems gained from a feasibility study. From this, logistical challenges are derived for delivery time and reliability, delivery quality and flexibility as well as delivery readiness and information provision. Possible fields of application for systems of underground transportation and their pros and cons are discussed with the audience in this round table discussion.

Prof. Dr. Carsten Deckert | Hochschule Düsseldorf

06

Planning for urban air mobility (freight and passenger operations, citizen acceptance, use cases)

The next forthcoming innovation in transport joins land and air transport in the metropolitan environment. Urban air mobility aims to make connections faster and greener. However, although there is the technical and regulatory capacity for technology delivery, cities and their citizens are not ready yet for the implementation of mobility in the third dimension for freight and passengers. There is the need to better comprehend citizen perspectives while also building the capacity of Local Authorities to plan for urban air mobility successful implementation and include it in their SUMP.

Prof. Dr. Sofia Kalakou, Pedro Sebastião.



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07

Transport Transition to Sustainability - a Berlin Example

The transport transition to sustainability is intended to reduce the share of private car use, promote active and public mobility, and make cities more livable. Taking Lausitzer Platz in Berlin as an example, the DLR project „Integrated mobility for livable places“ is investigating approaches and effects of sustainable mobility planning in an urban neighborhood. The project includes simulations of the traffic effects on the surrounding streets and parking search traffic as well as resulting emissions of air pollutants and noise, and the development of design approaches and the conception of sustainable mobility services.

We want to invite visitors to discuss with us a) measures and concepts to achieve a local transport transition of people and logistics and b) methodological challenges and examples regarding the investigation and evaluation of local activities in the field of sustainable transport planning and urban living.

Dr. Kerstin Stark (Dr. Julia Schuppan), DLR

08

Mobility-O-Mat – A UX-based Mobility Concept for Commercial Quarters

Comprehensive change of mobility behavior often fails due to a poor user experience (UX) and missing products or business models. By analyzing concrete user requirements and possibilities in high-density urban business areas, like e.g. the Carlswerk / I/D Cologne / Schanzenstraße in Köln Muelheim, we propose a user-centered, community-driven reward system to improve the acceptance and use of ridesharing/carpooling in a diverse group of stakeholders.

A car carrying 4 passengers at full capacity has actually a lower CO2 emission per passenger-kilometer than average public transport. To promote this effect, our concept follows a gamification approach that connects employees from different companies with businesses and stakeholders in the area. People that share the same route can team-up and compete against other teams to win prizes sponsored by local businesses, like goods, food, or activity vouchers. Also, special parking spots for carpoolers could give an additional incentive.

With our poster, we inform about our concept and the user-centered development, which includes several prototypes combining digital mobile technology and business model innovation.

Prof. Dr. Jonas Schild, Konstantin Bantle, Alina Busch, Fabian Vitt | TH Köln