13th - 16th of November 2019 | The Drivery - Berlin, Germany



Report on the

2nd International Urban Mobility Dialogue

The 2nd International Symposium & Workshop on Realizing Smart Urban Mobility Solutions

13th-16th of November 2019 The Drivery, Berlin, GERMANY

www.smartcity-dialogues.com

organized and operated by



Modern mobility is facing a phase of its rapid change. What we see in the streets is not simply congestions, but truly lack of well-managed transport flows and struggle for influence in terms of the street space, fulfilled with various types of vehicles – moving and parked – as well as pedestrian flows which become even more complicated due to the active development of micro-mobility solutions.



Perhaps the urban ecosystems with the mobility as one of the key elements require thoughtful structurization and simplification and this can be reached only by constructive and practical decisions being elaborated by all the stakeholders, involved into the mobility sphere. Thus we get on the edge of the world-wide efforts in this respect and provide a prominent platform for them — International Smart City Dialogue on Urban Mobility, which has just celebrated its second edition (13th-16th of November 2019) in Berlin. It is already not only an event, but a community of responsible and creative minds, as well as a tool for governmental structures, commercial players and scientific cohort to match and compile their efforts for the smart and sustainable mobility change.



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This year we got deep insights on mobility challenges in the cities of Poland, South Africa and Iran, as well as practical reflections on the relevant urban context in Berlin (Germany), Abuja (Nigeria), Brno (Czech Republic), Koprivnica (Croatia), Casablanca (Morocco) and - in a distant format note – Saint-Petersburg (Russia).









In order to fulfil the expectations of almost 130 people registered in the list, and to ensure their engagement, we varied the more or less standard lecture slots by **the all-get-involved dialogue sessions**. The essence of those discussions is the exclusive product, served by the UMD concept, along with the networking and general overviews.

Thus we are happy to provide you with the ideas and conclusions as something tangible that you can use for your effective networking with the UMD experts.

Session 01: E-Charging Infrastructures



As we move towards the future with electrically powered vehicles, one of the challenges to be overcome is to provide an adequate charging infrastructure. Beside of necessary private investments, cities will need to provide guidelines and frameworks for building up an effective infrastructure. Regulations for the use of public parking spacefort, widely distributed charging points, the stability of power networks

and access to distribution points will need to be defined and managed by cities. There are many options available, such as widely distributed individual charging points, centralized battery swapping stations and the use of hydrogen. At the moment, it is still unclear, which of many options will dominate in our future citiescapes. In this dialogue session we discussed the possibilities provided by widely distributed individual charging points and by centralized battery swapping stations. Both options provide solutions for different needs of differing users. Individual charging points can become a solution at home, in parking garages and in public spaces – and may likely serve the needs of many individual vehicle owners, whereas battery charging stations offer many advantages to vehicle fleets, where charging time must be minimal and cost effective. The consensus is that we likely need both solutions, as they address different needs in different user segments. It was proposed that political decision makers should be wary of too quickly emphasizing or favoring one type of solution over others until the market, users, technology providers and vehicle manufacturers have collectively determined which options are the most effective and will solve the needs of the largest number of users.



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Session 02: Asian Mayors' Forum and African Dialogue Session

Within the session, beside of comprehending the speeches on the specific features of mobility in South African, Nigerian as well as a row of Asian cities, we looked deep into the roots of the hurdles that prevent the European companies from starting and developing their businesses over there. The possible solutions for the challenge can be found through intensifying the technologies' and know-how transfer with the local decision-makers which should be mutually fulfilled with the better transparency in the local framing conditions for business. As well as that many African and Asian regions still require to develop mobility

systems as such, which at the same time can become good opportunities for investments. As a consequence it makes sense to search for them and the best recommended way to do so is to create a good motivation of a project based on the local public needs, as well as to collaborate with a local commercial or public partner as the fastest way to approach the governmental entities and get the things done.



Session 03: Investment Climate for large Infrastructural Projects



One hundred years ago the major changes were carried out by the governmental authorities and the latest inventions such as subways, trams and buses were centrally organized and introduced across the board by investing the taxpayers' money. In the 21st century the innovations mainly come from the start-ups and in some cases – from corporations. And practically, they

don't choose the official way, but rather **exhaust the public space with their ideas and invention**s as far as they can. While the players are directly involved into different streams of mobility developments on a daily basis and at the same time are asserting their own interests with all their might, the state authorities try to pay attention to all the parties concerned by using sometimes highly complex planning procedures. The question then arises: **If mobility has to be improved, who is finally responsible for that?** Is it the non-profit but inefficient state authorities to be relied on – along with the understanding of unavailable tax money to be required in this case? Or do we grant the private market with our hopes until it comes up with profitable solutions? But if so, we should keep in mind that in this case there is always a risk for them to run out of capital - sometimes right in the initial stage - due to the low investments in start-ups.



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Session 04: Berlin Mobility Talk



The discussion was generated by various points of view, formed around 8 theses on the subjects of small electric vehicles and electric vehicle infrastructure coming along. Pretty fast it became apparent that the subject of electric vehicle electrification and charging infrastructure is a secondary priority for the implementation of the mobility turnaround, as this is no longer a technological challenge and only require rapid

and consistent actions from the political side. Rather, the distribution of the available road space is to be discussed next to the different forms of mobility. So far, there are no clear statements, there is no North Star, which is clearly named and upon which the action can be based. How much space should public transport, private transport, delivery traffic, bicycle traffic and pedestrians have in the future? This understanding would allow the actual goal of the mobility change to be deduced and the cooperative atmosphere to be formed, because the aggression on the streets is the expression of precisely this distribution struggle around the street space.

Session 05: The Paradox of Traffic Management

What can be done by cities to reduce urban traffic congestion? One solution is **Artificial Intelligence based real-time navigation systems which distribute traffic optimally**, thus reducing congestion. These solutions need only a small amount of data providers at any given time in order for algorithms to manage traffic. Yet, where does this information come from? Who owns the data? How secure is it? Another question considered is



whether a reduction in congestion could actually result in an increase in individual vehicle use, which runs counter to the idea of reducing the number of cars, buses and trucks on the road to improve quality of life in our cities. Our discussions showed that **even in the future where there will (and should) be less conventional vehicle traffic on the roads, managing streams of traffic, including last-mile vehicles, delivery robots, bicycles and others will continue to be important. Traffic management solutions are paving a path towards this future while enabling commuters with a more effective and efficient travel path today.**

Session 06: Open Data Ecosystem in Mobility

Above all planning, there is a basis both for companies and for public institutions: data. And that is becoming increasingly important. Where the state does not collect data, private actors come into play, whether as data traders or out of interest in their own projects? However, the public is not required to have access to them. **But data itself may be not informative**



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enough, unless we get provided with its analysis and interpretation. As other debates in public discourse show, objective figures are sometimes evaluated very subjectively and are made suitable only for someone's own agenda. Therefore, Open Data not only overwhelms many end-consumers (users), but also harbors the dangers, mentioned above. A responsible handling of data, its reduction to the minimum and



the consequences' adequate estimation can be decisive for a fair handling in a long run.

Excursion to the newly installed Battery Swapping System



Being undertaken as one of the official program items, the visit to the first in Europe Battery Swapping System, just installed at the Westhafen Berlin, gave another impulse for the debates on the topics of e-mobility. Long charging time and potential risk of the urban e-networks' overload within the classical e-mobility approach on one hand and the questions on sustainability with respect to the batteries themselves on the

other formed the divarication for the proper discussions. Nevertheless, the battery changing solution brought in from China by the InfraMobility GmbH and being first tested as a pilot project for taxis, contains huge potential to reform and diversify the still young and unpenetrated e-mobility market.

At the same time - whatever we discuss - we should stay in the understanding that behind all the technologies, decisions and developments there are people, so that the human factor should never be **neglected in our reflections**. In this respect we also got a few amazing inputs, which are exceptionally useful for whomever you can imagine - marketers and engineers, producers and users, urban planners, state decisionmakers and others. Thus we enjoyed the evening guest lecture by neuroscientist and visionary think-tank designer Dr. Arndt Pechstein, as well as that learned on human factors in autonomous vehicles' industry from Meike Jipp (DLR) and the experts on the subsequent panel discussion, led by Dr.-Ing. Bernd Stary (academus) and investigated the social meaning of production, use, and disposal of goods in general and in the transport industry







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in particular together with Mr. Luca Silipo (GEODIS).

Beside of learnings and disputes the UMD kept its unique entertainments' formats, specially offered for its audience. Thus we made the already known "playground" for trying new vehicles again availbale for our guests. Ultimately comfortable and functional cargo-bike Loadster by citkar, environmentally

friendly and stylish scooters by Simple Mobility, retro cars with complete up-to-date reboot by The Drivery and the model of the first Synchrotrain presented by Mr. Stahn (Synchrotrain) became our highlights this year. And as academus believes in friendships more than in anything else, we have also organized two beautiful evenings – welcome prosecco reception and a boat tour with the official UMD dinner served on board for our UMD Family.

Herewith we would like to express our warm gratefulness to all the entities and individuals, lecturers, guests, academus staff and our professional moderators, who were with us and made the 2nd UMD become the second success in its history. We express our special appreciation to the Governing Mayor of Berlin Mr. Michael Mueller for his personal patronage on the event, as well as the UMD official sponsors, partners and supporters – Graphmasters, citkar, Woonivers, Der Tagesspiegel, Deutsche Bahn, Asian Mayors' Forum, BRICS Real Estate, Polis Network, Women in Mobility, INFRADianba, Transportation Growth Initiative Nigeria, FIWARE and The Drivery.









Following our values and the intentions to unite the enthusiasts from all around the globe for friendly communication and practical brain-storming on the sore points of the day, we stay available for any further assistance in growing new seeds, planted within the UMD days in November'19.

Let's meet again at the 3rd Urban Mobility Dialogue

Urban Mobility Dialogue

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