

XIII Scientific and Technical Conference
CITY TRANSPORT PROBLEMS IN CONGESTED ENVIRONMENT
POZNAN 2021

HORIZON 2050 - BETTER TRANSPORT & BETTER CITY

AN OPEN LETTER

Starting preparations to organise the 13th Conference in Poznań, we ask for active cooperation in its substantive shape. This time, in addition to the traditional topics, we suggest focusing on issues of urban development using new transport technologies, new forms and new instruments of urban mobility policy. We would like to discuss, among others, applications of artificial intelligence, popularization of vehicle sharing, especially a system of autonomous vehicles on demand, management of mobility services (MaaS), internet of things (IoT), etc. The development in these fields indicates a potential for a radical transformation in systemic components of the transport structure over the next few decades.

On-demand vehicle sharing system reduces the number of privately owned cars. If these vehicles are autonomous, the reduction can be estimated up to even 80%. In addition to its many advantages, it is in fact a cheap taxi, capable of effectively taking over passenger flows from weak components of mass public transport. It therefore becomes a powerful component of an innovation stream in the global marketplace. This power poses a threat to maintain a significant part of external costs burdening public budgets of cities. **In order to deal effectively with the problems of unsustainable mobility, it is therefore necessary to undertake and develop an effective implementation of the innovation stream.** This requires appropriate preparation of the law, institutions and instruments on local markets. Of key importance is an evolution of business and functional architecture of urban transport, combined with changes in payment and management systems enabling empowerment of on-demand shared transport in mass public transport structures. Their optimization requires to use highly advanced intelligent measures in network management and access control to protected areas (ITS + MaaS + logistics of sharing operations). In order to advisable join the wave of changes in the right time, being well prepared and with a proper infrastructure, it is necessary to think over and prepare for tomorrow's problems today.

The complexity of technological innovations requires an integration of intellectual potential, currently scattered across many scientific disciplines. What's more - it has to be done within local academic communities, with participation of specialists from municipal institutions and local authorities. It has to be noted that even in small academic environments there are specialists with knowledge on the progress of technology in the area of their scientific discipline, who participate or thoroughly follow the development within narrow specializations. Therefore our intention is, through your brokerage, to involve in the Conference as wide group of partners as possible, eligible for such potential cooperation, and take the first step in this field. This is also how we imagine a cooperation of authors' teams on the key topic of the Conference. Let us pay attention to plans supporting innovation dedicated to sustainable mobility initiatives in the next distribution of the EU budget funds.

The above objectives of the Conference will be addressed in items A and B, and partially also C, of the Conference program. Articles submitted, or additionally ordered, in these categories should have an overview nature (B), or expand these theses for discussion within a Platform for Border Problems (A). As the border problems of urban transport we recognize fundamental drivers of unsustainable mobility, overcoming of which does not seem realistic with the currently used technical, economic, legal and organizational measures. Attempts to solve such defined border problems should lead to

construction of a vision of a transport system with the use of a stream of innovations in a purposeful, effective and consistent manner.

The theme of the Conference: Horizon 2050, actually is connected to economic lifetime of currently designed transport facilities. In each following decade they will function in a changing reality. Meanwhile we have increasing doubts even about the methods used to model today's reality. We are all aware of a need to verify methods of studying transport behaviour, travel modelling, forecasting and planning of city development and transport. These issues should dominate the topics covered by point C of the program. We therefore warmly invite all supporters of the series of travel modelling conferences in Cracow, being particularly interested in welcoming advocates of journeys into a distant future, i.e. the subject of long-term forecasting or traffic planning in the normative approach (cf. the XIIth Conference). We hope for progress in an alternative approach to four stage modelling, such as activity modelling or modelling based on analysis and synthetic models. Let us pay attention to an issue that is extremely important due to the revitalization of urban structures and the need to reduce travel distances, e.g. prefer walking and cycling. Moreover, let us not forget about the pandemic experiences, including an impact of the internet on mobility and distribution of goods, and the consequences of the low flexibility of public transport as it currently stands. There is an urgent need to change and standardize mobility measures, for example the modal division of travel, which today is completely inadequate to the needs of urban policy, planning and development management. Proper management is impossible without proper measurement. Mobility measures responding to the simulation and optimization process in transport tasks are important for the structural aspects of traffic modelling and forecasting.

Apart from the key topics, we would like to maintain the nature of the Conferences held so far, also in broadly understood traffic engineering and in planning of transport systems. We are preparing the XIIIth Conference for June 23-25. Our intention is to continue the meetings in Rosnówko: if it will not be possible in the traditional form, we will organize it in a hybrid form. This means that for guests participating online via Internet links, the publication of the conference articles must adequately precede the date of its commencement. We will use this advance to inaugurate the Platform (A) with a short and synthetic presentation of the theses articulated in the publications in order to use the time for a full and unhindered discussion.

We will present a collective summary of the conference articles in *Annals of Traffic Engineering and Transport Planning*. This publication does not limit the authors' rights to reuse their articles in another, highly scored scientific and technical publication. Proposals for submitting the article to such editorial offices, of course, in consultation with the authors, will also be presented to the media partners of the Conference.

Ladies and Gentlemen:

We are open to suggestions, ready to clarify doubts and consider alternative proposals. Let us stay healthy. Sincerely yours

on behalf of the organizers, the secretaries of the Scientific Committee of the Conference

Prof. DSc Eng. Andrzej Szarata

DSc Eng. Andrzej Krych