

PART I**CRUCIAL ISSUES IN CONTEMPORARY
TRANSPORTATION SYSTEMS****Guest editor: Szymon WIŚNIEWSKI*****FOREWORD**

When we assume that a transport system is a constituent within the general socio-economic system, we may state that there are relationships between the transport system and other systems (subsystems) which impact the global shape of the socio-economic world. The issue of transportation is researched in numerous scientific disciplines, including geography (Śleszyński, 2014; Weber and Kwan, 2003), spatial and land management (Bruinsma and Rietveld, 2012), and transportation engineering (Sierpinski, 2010). Moreover, it constitutes an important part of professional activities focusing on spatial planning at a local (Noworól, 2007) and regional (Śleszyński, 2009) levels, and related to the evaluation of a given location in regard to the profitability of conducting business activities there (Kornicki, 2011). When described by geographers, space is characterised by three fundamental properties: diversity, resistance, and possessing boundaries. The first two have a major influence on the demand for transport, which is a response to the spatial incompatibility between the elements necessary for the socio-economic system to function properly. Thus, spatial diversity generates conditions for the

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development of transport, while the resistance of space – which is not always identical everywhere – determines if there are any journeys, and if so, what mode of transport and route are chosen. In this context, the third property of space, i.e., its boundaries, may take various forms since borders can constitute firm barriers in transportation or they can be set arbitrarily only for the sake of research procedures. The aforementioned arbitrariness exists as studies need to display transport-related phenomena in particular territorial units or it may be one of the methodological assumptions which enable the researcher to demonstrate spatial phenomena in narrower spatial aspects.

The articles in this issue of *European Spatial Research and Policy* cover an extensive spectrum of transport-related problems, which perfectly illustrates how diversely the issues of transport and its infrastructure are perceived in Europe. The authors focused on such topics as the implementation of electric public transport, its transformation in post-Soviet countries, the accessibility of its infrastructure, but also on transport behaviours and sea container transport. Bezruchonak conducted a synthetic review of electric bus technologies available on the market and provided a spatial analysis of the deployment of various vehicles of that type in Europe. His study indicates that appropriate legislative solutions and clear strategic planning, combined with effective co-operation between local authorities and regional decision-makers, are major factors facilitating the dissemination of innovative technologies and public support related to electric transport. The author also scrutinised other crucial elements regarding the implementation of zero-emission transport, e.g. the conditions for its infrastructural construction. The case study is of the transport system in Minsk, on the example of which the author illustrated the barriers in the implementation of electric transport within the urban space and develops guidelines for the strategy of sustainable mobility.

The issue of transport in a post-Soviet city was also discussed by Radzimski and Gadziński, whose article focuses on the analysis of the travel behaviours of residents. The study was based on information obtained through a questionnaire and on data retrieved from GPS logfiles recorded in Poznań. The authors proved that the proximity of public transport and cycling infrastructure seems to be one of the most essential factors determining transport behaviours. What is more, their accessibility also has an influence on the preferences regarding the selection of the location of one's home. Nevertheless, commuting by car still plays a leading role in the modal division of city journeys.

Michniak and Székely analysed the accessibility of public transport in Slovakia. The results indicated a decrease in connectivity within the network of direct bus and train connections, and a drop in the number of direct connections between Slovakian regional centres in 2003–2017. The authors stated that the phenomenon was a result of a growing level of motorisation, an increase in the importance of individual car transport, an extension of the motorway network, and the liberalisation of the public transport market.

The article in which Rudakevych, Sitek and Soczówka presented the changes introduced within the urban transportation system in Ukraine after 1991 identified the conditions for the system in reference to the transportation policy, with a particular focus on legal and financial aspects. In this context, the quoted statistical data for the period of 25 years was of exceptional value, since it enabled them to apply a synthetic indicator. On the basis of such a vast diagnostic material, the authors listed the challenges faced by electric urban transport in Ukraine.

The main subject of the article by Serry was the development of the container transportation system in the region of the Baltic Sea. The study focused primarily on the most recent organisational transformations and operational conditionings for this branch of the cargo transportation industry. The author proved that within the last decade, the maritime transport in the region has undergone considerable changes. Geopolitical transformations have contributed to the development of new Baltic harbours and terminals, and to the demarcation of new export routes for petroleum, gas, and streams of containers.

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