In answer to the global urbanisation challenge, JPI Urban Europe and the National Natural Science Foundation of China (NSFC) agreed to work towards a long-term cooperation programme in the area of sustainable urbanisation, with different topics addressed in time. For the second call in this programme, the ERA-Net Cofund Urban Accessibility and Connectivity Sino-European call, the strategic themes of ‘Sustainable Urban Logistics in the Age of Digitisation’ and ‘Strengthening Climate-neutral Mobility’ have been selected.

This call requests proposals from a wide variety of academic disciplines addressing the current challenges around urban transportation and logistics, both from a perspective of understanding current developments, and from the perspective of developing new and innovative solutions to address the challenges. Disciplines may include, but are not limited to management, economics, civil and industrial engineering, operations research, psychology, computer science, and urban planning.
Call topics

Theme 1: Sustainable Urban Logistics in the Age of Digitisation

Urban transport and logistics operations are part of complex supply chains that serve billions of urban dwellers with their daily needs. With the world population migrating more and more into cities, cities growing in population and in space, and agricultural, construction, and manufactured goods being sourced further away, the urban transport and logistics systems have become part of supply systems that are increasingly longer and slower to respond. At the same time, transportation and logistics systems within cities are becoming more fragmented and responsive.

This theme includes the following challenges:
• Impact of micro-delivery platforms;
• Effects of platforms on the well-being of crowdsourced riders; psychological fatigue of crowd sourced riders;
• Design of urban multi-modal logistics systems;
• Optimisation, analysis and systems design of last mile deliveries;
• Freight vehicle parking planning and allocation in dense urban environments;
• Models including consumer behavioral responses to delivery innovations such as parcel lockers, drones and autonomous vehicles;
• Design and operation of multi-tier urban distribution networks;
• Integration of transport and logistics operations;
• Regulatory frameworks for transport, suppliers and (online) retailers;
• The coupling between urban mobility and energy.

Theme 2: Strengthening Climate-neutral Mobility

Long-time urban issues linked to transportation include traffic congestion, carbon footprint, air pollution, road safety and land consumption. In a context of growing and expanding urban entities, most of these problems remain, but several key parameters of urban development are currently challenged, shaken by uncertain societal trends and new technologies, calling for a renewed research effort. To address the current environmental and societal issues we currently find – either in academic literature or in practice – no alternative to an urban model associating density and public transport, as opposed to an urban sprawl and car oriented model that performs negatively regarding most sustainable urban development indicators. And yet so many transformations are currently occurring in the urban and mobility realms, that there is room for investigating the dominant urban doctrines.

This theme includes the following challenges:
• Peri-urbanisation (in the light of COVID-19) and the impact of this trend on the shape of urban entities, human mobility, job-housing, functional construction, urban design and housing policies;
• Old and new transportation modes;
• Urban development revisited and tactical urbanism initiatives;
• Mobility efficiency in resilient multi-mode traffic.

Who can apply?

Research organisations, urban government authorities, companies and commercial organisations, civil society and consumers.

Participating countries:
Belgium, China, Denmark, France, The Netherlands, Poland, Portugal, Romania and Slovenia.

For any questions regarding the call, please contact the call secretariat:

Berry Bonenkamp, NWO – Dutch Research Council // E-mail: b.bonenkamp@nwo.nl
Elena Simion, UEFISCDI - Executive Agency for Higher Education, Research, Development and Innovation Funding // Email: elena.simion@uefiscdi.ro
SHEN Jie, NSFC – National Natural Science Foundation of China // E-mail: shenjie@nsfc.gov.cn

www.jpi-urbaneurope.eu