Partner Search Form

ERA-NET Cofund Urban Accessibility and Connectivity Sino-European call by JPI Urban Europe and the National Natural Science Foundation of China (NSFC)

Applicants looking for project partners can generate a “Partner Search Form” describing the profile of the organization they want to collaborate with.

The completed partner search form can be sent to the Call Secretariat who will publish it on the JPI Urban Europe website and on the LinkedIn Group as well. **Send the filled in form to: klara.broms.seving@iqs.se**

Date: 2022 March 15

Section 1 – I am looking for:
☐ A partner for my project
☑ A project to join

Section 2 - Call Information: which topic(s) do you address?
☑ Theme 1: Sustainable Urban Logistics in the Age of Digitisation
☐ Theme 2: Strengthening Climate-neutral Mobility

Section 3 - Your Organisation
Organisation name and location: Harbin Institute of Technology, Shenzhen
Contact person: Zuopeng Xiao
E-mail: xiaozuopeng@hit.edu.cn
Website:
Description of the organisation (max. 100 words): Harbin Institute of Technology (HIT) is one of the top 10 universities in China and ranked among the top 1% of universities in the world. Established in 1921, HIT is one of the most prestigious universities under the Project 985 and Double First Class University Plan.HIT Shenzhen Campus(HITsz) is located in the city of Shenzhen, a top-4 tier-1city in China. Ecommerce here have been developing rapidly during the last 15 years, with a penetration of 30% in the total of $137-billion retailing and wholesaling sales. A lot of innovative last-mile delivery solutions have been proposed to meet the demands of online shopping.

Section 4 - Free Keywords:
Micro-delivery platform; collection-and-delivery point; responsiveness; 15-mins city

Section 5 - Project Description

(Topic 1： Impact of micro-delivery platforms, such as meal delivery and personal shoppers, on the overall efficiency, sustainability, security of transportation and logistics in urban environments)

Fulfilling massive instant-delivery demands is crucial for supporting modern everyday life that heavily relies on shopping online and ordering meals online. A number of players have engaged in this expanding on-demand delivery market and produced several innovative solutions. Both digital consumers, delivery riders, and other players have expectations and also urgent demands on the responsiveness of instant delivery.

What kind of roles could urban planning and city logistics play in face of the above expectations? Considering the idea of 15-mins city has been embraced by a growing number of cities, is it possible to integrate the instant delivery responsiveness into this general idea related to life quality and public facilities configurations.

Targeting this research question, this project aims to:

1) delineate the self-contained community structure of everyday instant delivery;
2) evaluate the responsiveness within each delivery community;
3) simulate the locations of the micro-delivery platform, warehouses, arranges on the rider fleet and riding routing;
4) optimize the solutions under different constraints, including time cost, environmental cost, and economic costs.

I have collaborations with Meituan, the largest instant delivery giant in China, and collected almost 350,000 delivery trajectories in a Chinese city. I am eager to have partners which could cooperate together and move the above research idea by this data set. The community structure could be delineated by the algorithm of Louvin. This multiple-objectives decision could be solved by the Pareto frontier model and determine the optimal solutions.

Section 6 - Partner Profile Sought

Type of organisation: Research organisations, urban public authorities, or civil society organisations.

I could network an urban public authorities, a civil society organisations, and a business entity in China.

Required Skills and Expertise (if applicable): Dedication to this project.

No specific requirements.