

MIMIC

Smart construction logistics

Construction projects contribute to more attractive, sustainable and economically viable urban areas once they are finished. However, transport activities related to construction works have a negative impact on the surrounding community if not handled appropriately. From previous projects, it is seen that construction companies using innovative logistics concepts show less congestion around the sites but also improved productivity and road safety. Thus, there is a need to align the public planning coordinating construction projects with traffic planning to be able to deal with city infrastructure bottlenecks. The ultimate goal is a coordinated planning between the public partner of construction projects, the private construction contractors and developers covering necessary measures for mobility, livability and road safety in the city.



Aim/objective

The aim of MIMIC is to demonstrate how SMART Governance concepts can be used as an aid in the construction and city planning processes to facilitate and support logistics to, from and on urban construction sites to improve mobility and reduce congestion within cities and thereby reduce the negative impact of construction sites on the surrounding community.

Approaches/methods

- Analysis and identification of construction logistics scenarios, both on and off site
- Stakeholder involvement and management throughout the different project phases, through identification of stakeholders and stakeholder objectives in a participatory MAMCA and gaming
- Implementation of a sustainability impact assessment framework to evaluate the economic, social and environmental performance of the construction logistics scenarios
- Enhanced data collection and optimization of construction logistics processes using dynamic data technologies
- Combine these methods into a SMART Governance Concept 2.0
- Deployment of the SMART Governance Concept 2.0 to eliminate functional barriers for implementation
- Transferability and scalability of construction logistics scenarios and the SMART Governance concept 2.0 across European cities

Expected results and impacts

Expected results in MIMIC are to enable a supportive platform for sustainable urban development decision and procurement processes through:

- A SMART Governance Concept 2.0 which provides a structure of tools to be used when deciding how to organize construction logistics in a city/project in co-creation
- Supporting tool to increase the knowledge of construction logistics
- Tool to collect stakeholder needs and criteria of construction logistics
- Tools to assess and evaluate the impact of construction logistics solutions on different stakeholders

MIMIC - Minimizing impact of construction material flows in cities: Innovative co-creation

Duration: 2018–2021

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Budget: 1.250.771€

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Involved Cities: Vienna, Brussels, Oslo, Stockholm/Gothenburg

Making Cities Work Joint Innovation Call

The Making Cities Work call invited municipalities, businesses, researchers, civil society and other stakeholders to build transnational consortia to create challenge-driven innovation projects for European urban areas that have the potential to result in commercially successful services and products.

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