



PROJECT ACRONYM AND TITLE: Optimization of Urban Delivery Models through Simulation Analysis (OPUS)

FUNDING PROGRAMME: Call for funding of Institutional research projects of the University of Rijeka financed from source 581 – Recovery and Resilience Mechanism (University of Rijeka, Institutional Research Projects)

PERSON RESPONSIBLE: Mladen Jardas

Project total cost 21.335,77 EUR

SUMMARY AND OBJECTIVE: Modern urban delivery systems face numerous challenges, including growing demand for timely deliveries, traffic congestion, increased harmful emissions, and stricter environmental standards. This project aims to explore and develop innovative solutions for optimizing delivery activities in urban areas using simulation tools. The goal is to understand the dynamics of existing delivery flows, identify key issues, and propose sustainable models that meet the needs of all stakeholders – from transporters and businesses to urban planners and residents. Through simulations in specialized software tools, the project will analyze different delivery scenarios, including the use of consolidation centers, electric vehicles, and the reorganization of delivery routes. The focus will be on reducing negative environmental impacts and increasing the efficiency of logistics processes. The project also includes collaboration with stakeholders to ensure the application of multi-criteria decision-making methods that consider economic, ecological, and social aspects. The research results are expected to provide concrete guidelines for improving urban logistics through the integration of modern technologies and sustainable practices. This will not only improve the quality of life in urban areas but also lay the foundation for further development of scientific methods in the field of simulation and optimization of logistics systems.

| Start date | End date |
|----------------|-------------------|
| 1 October 2025 | 30 September 2029 |