Sveučilište u Rijeci, Pomorski fakultet
University of Rijeka, Faculty of Maritime Studies

Financira Europska unija
NextGenerationEU

PROJECT ACRONYM AND TITLE: **Application of digital technologies in the improvement of micromobility (DigMobil)**

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: **Adrijana Agatić**

Project total cost	**13.190,06 EUR**

SUMMARY AND OBJECTIVE:

The project will research and demonstrate the possibilities of applying digital technologies to understand and improve micromobility. Currently, micromobility has been considered mainly in the context of urban mobility using, for example, electric vehicles. There is a lack of systematic approach, i.e. a comprehensive scientific research on the movement (mobility), preferences and habits (Mobility Pattern) of residents in the context of micromobility in order to develop a digital traffic model that will examine the possibilities of digital technologies to understand and improve micromobility. Digital technologies: artificial intelligence (AI), Internet of Things (IoT), machine learning (ML), neural networks, unmanned aerial vehicles, location technologies, 4G and 5G network technologies, etc., can be applied to micromobility analytics, in development of traffic models and in the planning, organization and application of micromobility activities and to achieve sustainable development of the urban entity through advanced micromobility. A comprehensive research will be conducted: analysis of the application of digital technologies in micromobility (digital maturity), analysis of the movement (mobility) of residents in microlocations within urban entity, analysis of residents' preferences, analysis of the application of digital technologies in traffic modeling, development of a digital traffic model based on activities (ABM-Activity Based Modeling) to understand and improve micromobility, analysis of the impact of the application of digital technologies in the sustainable development of the urban entity. In addition to the ABM method, the research will apply multi-criteria analysis methods, statistical methods, digital technologies and computer tools for traffic modeling based on artificial intelligence (AI). The project will create a digital traffic model and methodological framework for the application of digital technologies to understand and improve micromobility.

Start date	End date
1 October 2025	30 September 2028