

The e-commerce growth and last-mile delivery create huge challenges for the stakeholders (e-clients, e-trade services, transport companies (especially CEP), local governments, and inhabitants). Last-mile delivery is costly, inefficient and exerts a heavy environmental impact. It significantly contributes to worsening the quality of life in the cities, causing congestion, noise, habitat loss, degradation of infrastructure, or blocking lanes and sidewalks. In view of global warming, the EU has introduced European Green Deal, assuming the reduction of CO<sub>2</sub> emissions by 90% in transport by 2050 compared to 1990 levels. To achieve this aim, a 55 % reduction of car CO<sub>2</sub> emissions is required by 2030, and by 2035 all new cars will be zero-emission vehicles. Issues related to the last mile deliveries are discussed in various scientific articles; however, they rarely refer to stakeholder collaboration which is considered a critical success factor in implementing city logistic solutions. The only way to achieve the environmental objectives within green last-mile deliveries on the e-commerce market is through the cooperation of stakeholders, establishing collaboration and relations, and finding out how they contribute to implementing eGLMD. **The issues above identify the literature and cognitive gap** and comprise the main motivation for the research on stakeholders' relations and their cooperation concerning green last-mile deliveries on the e-commerce market (eGLMD). The **scientific objective** of the project is the identification of eGLMD stakeholders in terms of types (for example, regulator, controller, partner, passive, and dependent) and the construction of a universal tool to diagnose eGLMD stakeholder' relations based on network relations features such as strength, reciprocity and proximity. The tool will enable us to picture the direction and strength of relations. The **cognitive objective** is to determine the relationships and strength between the eGLMD stakeholders based on 4 case study research in cities such as Rotterdam, Gothenburg, Wrocław and Košice, to find out what activities are undertaken by green last-mile e-commerce stakeholders in cities and how the stakeholders (regulator, controller, partner) cooperate in selected European cities towards the implementation of eGLMD. The final objective is to a set of recommendations for developing stakeholder relations conducive to implementing green last-mile e-commerce deliveries in European mission cities requiring improvement within this area. Subsequently, the identified good practices will be possible to implement in other EU cities, particularly in Eastern and Central Europe countries.

The proposed research fits the primary research area, mainly focusing on a system approach to management. Its goal is to increase knowledge regarding green last-mile e-commerce delivery, obtained from the cooperation of various stakeholders (regulator, controller, partner). The research will also contribute to the development of stakeholder theory, especially by delivering **an innovative tool** for diagnosing the relations (their strength and direction) of green last-mile stakeholders on the e-commerce market in cities, which may support the implementation of green last-mile delivery on the e-commerce market (by a local government, e-commerce services and CEP companies). Another **significant value of the project** is the fact that the challenges regarding the organisation of green last-mile e-commerce deliveries in a city such as Wrocław or Košice (a less prepared city to become climate neutral) are examined from the European perspective. The case studies of cities such as Rotterdam, Gothenburg, comprise a selection of frontrunner cities mature in terms of planning and implementing city logistics solutions. The whole project consists of 6 stages: (1) The update of the literature review, (2) The creation of the research tool based on the literature and an expert study (3) Case study research in 4 cities. (4) Conducting a comparative analysis of the case studies (5). Establishing a set of recommendations for developing stakeholder relations conducive to implementing green last-mile e-commerce deliveries in European mission cities requiring improvement within this area. The research methodology will combine qualitative and quantitative methods, such as expert study, semi-structured interviews, case studies. The qualitative data will be analysed by means of Stakeholder Analysis and quantitative by means of tools for Social Network Analysis. The research will also be of significant importance for the **development of civilisation**. The project will contribute to a better understanding of the strength and direction of the stakeholders' relations and identify good practices regarding their cooperation, which is necessary if green last-mile initiatives are meant to be successfully implemented. Thus, it should help local governments formulate and implement city logistics measures within the area of green last-mile delivery on the e-commerce market. In addition, the publication of articles in foreign journals, including, in particular, the world rank (from the JCR list), co-authored with international scientists, and the participation in prestigious international conferences, at which the results of the research will be presented, constitutes the **additional results of the project**.