

Marie Skłodowska Curie Action –Postdoctoral Fellowship 2023
(MSCA-PF-2022)

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Department /Institute /Centre	Name	Transport Research Centre (TRANSyT)	
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	Province	MADRID	
Research Area		<u>Social Sciences and Humanities (SOC)</u> <u>Economic Sciences (ECO)</u> <u>Information Science and Engineering (ENG)</u> Environment and Geoscience (ENV)	Life Sciences (LIF) Mathematics (MAT) Physics (PHY) Chemistry (CHE)
Brief description of the Centre/Research Group		<p>The Transport Research Centre (TRANSyT) from UPM is the most influential research institution in Spain in the field of transport economics and planning. It has more than forty members including scholars, postdoctoral researchers, Ph.D. students and administrative staff. It has an active participation in research projects funded by the EU and national programs, an also by private and public institutions.</p> <p>TRANSyT does research in different mobility related fields such as: transport modelling, transport economics, transport planning, sustainability assessment of mobility policies; environmental, impacts of the transport, local and regional sustainable transport strategies, urban transport and mobility management, information technology solutions, big data for transport, freight modelling and logistics, etc.</p>	
Project description		<p>People’s demand for e-commerce has been accelerated by the social measures imposed by COVID-19. E-commerce prompts significant impacts, both positive and negative, in the operation of Urban Freight Transport (UFT) and people’s mobility habits. First, adapting to consumers’ needs and shorter delivery windows has forced UFT operators towards less sustainable practices, e.g. greater traffic volumes, atomization of deliveries, lower vehicle occupancy, etc. In addition, e-commerce is motivating important changes in people’s mobility habits, e.g. changes in shopping trips or preference for home deliveries. These effects, both from the supply and demand sides, may have important implications for urban sustainability as they impact on multiple aspects such as congestion, air pollution, climate change, road safety, etc.</p> <p>Given the increasing penetration of e-shopping among the population, many questions arise regarding changes in urban mobility and sustainability. However, previous research contributions have left aside important drivers of e-commerce such as impact on people’s mobility habits (e.g. induced demand); impact on congestion and accidents; usage of empirical data; assessment of regulatory and governance measures to make e-commerce more sustainable; use of advanced methods, etc.</p>	



Expression of Interest – UPM Supervisor

	<p>The goal of this project is to identify, characterize and quantify the impact of e-commerce on the mobility patterns of individuals (demand) and UFT operators (supply) in the aftermath of COVID-19. It will also analyze the main reasons driving customers' preferences and behaviors towards last-mile delivery solutions. To achieve this goal, a variety of data sources (big data, surveys, interviews with experts, etc.) and methodologies (machine learning, structural equation modelling with latent variables, Bayesian networks, sentiment analysis, focus groups, etc.) will be used. This research intends to understand the impact of e-commerce on mobility and sustainability from the demand and supply sides, based on quantitative and qualitative techniques, and the identification of KPIs to characterize those impacts.</p>
Applications: documents to be submitted and deadlines	<p>Letter of motivation. Letters of reference. Curriculum Vitae. Deadline: 30/04/2023</p>