

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

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Department /Institute /Centre Name (datos del centro/departamento donde estaría ubicado el investigador a contratar)	Transport Research Centre (TRANSyT)
Address	ETSI de Caminos, Canales y Puertos. Calle Profesor Aranguren 3.
Province	MADRID
Research Area (en base a las 8 áreas científicas establecidas en MSCA. Se podrán seleccionar entre una y tres áreas científicas por EOI)	Social Sciences and Humanities (SOC) Economic Sciences (ECO) Information Science and Engineering (ENG)
Brief description of the Centre/Research Group (Max. 1600 caracteres con espacio: información sobre el centro / grupo de investigación / personal científico, destacando los aspectos más relevantes de los mismos. Incluir URL si es posible.)	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. 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.
Project description (Max. 1800 caracteres con espacio: breve descripción sobre el proyecto /línea de investigación en el que se acogería al investigador/a Marie S.Curie.)	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. 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.



	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.
Applications: documents to be submitted and deadlines (Indicar qué documentación deberá remitir el /la investigador/a interesado/a al centro para establecer el contacto: CV, letter of motivation, letter of references, etc., así como la fecha límite para el envío de la misma. Recomendado: Hasta finales de abril 2022)	Letter of motivation. Letters of reference. Curriculum Vitae. Deadline: 9th May 2022