



Special Session

Co-designing inclusive and sustainable urban mobility through collaboration and innovation

Description:

This special session showcases how collaborative innovation and inclusive design can accelerate the transition toward sustainable and equitable urban mobility in Europe. Drawing on insights and tools from the Horizon Europe project **ELABORATOR**, the session highlights how digital technologies, participatory planning, and evidence-based experimentation foster real change in cities.

Contributions will explore how gender-sensitive mobility planning in Trikala addresses inequities and safety concerns among vulnerable groups; how the **Superbarrio** gamification tool enables citizens to co-design accessible public spaces; and how the **Zaragoza Living Lab** applies participatory toolkits and data analytics to guide tactical urbanism. The session will further emphasize the role of **stakeholder collaboration** in implementing sustainable mobility interventions and present lessons from the **Trikala pilot** and the **simulation of mobility measures** across six European cities.

Together, these examples demonstrate how digital co-creation, intersectional inclusion, and policy experimentation can generate scalable solutions for resilient, data-driven, and climate-neutral transport systems — aligning with CSUM tracks on *Active, Shared and Inclusive Mobility*, *Emerging Technologies for Sustainable Mobility*, and *Policy Innovation and Collective Governance*.

Session Moderator:

- **Jason Sioutis**, project manager, Institute of Communication and Computer Systems (ICCS)

Topics and Presenters:

Gender-Inclusive Urban Mobility: Insights from Trikala

- **Eva Grigoriadou**, Executive Director & Research Lead, URBANA
- **Evelina Faliagka**, Urban Planner - Project Manager, URBANA

TRACK 4: Active, Shared and Inclusive Mobility

TRACK 5: Policy Innovation and Collective Governance

The sub-session on inclusivity will focus on 3 key points:

1) Inclusivity in Urban Mobility

- Sustainable urban mobility requires equity and inclusion, recognizing gendered mobility patterns.

2) ELABORATOR Inclusion Plan

- Uses a gender+ and intersectional lens to identify mobility inequities affecting vulnerable road users (VRUs).
- Merges quantitative and qualitative approaches to align measurable data with lived experiences.

3) Trikala Case Study

- Surveys and co-creation workshops highlighted complex trip-chains, high car dependence, and safety



concerns, among younger women, caregivers, and women living in rural areas.

- Workshop insights guide strategic guidelines and updates to Trikala's strategic mobility plans.

Co-design public space through digital gamified tool to achieve safe, sustainable and accessible mobility: Superbarrio case study

- **Andrea Conserva**, European projects Senior Expert & Researcher, IAAC

TRACK 1: Emerging technologies for sustainable mobility

TRACK 4: Active, Shared and Inclusive Mobility

The sub session will focus on the results from the workshops carried out in the project using Superbarrio. Superbarrio is a digital tool, developed by IAAC, in the context of Superblock Barcelona in 2017. In the following years the tool has been adapted to different topics. In the conference, Superbarrio – MoveYourCity version, developed on the topic of mobility will be shown. The interface of the tool is organised in three areas: 3D realistic environment of the pilot neighborhood, catalogue of physical solutions to improve mobility, impact indicators. The session will include an interactive demonstration of how Superbarrio can be used in a co-design process for the urban public space using tablets and which are the visualisation graphics that can be achieved.

Toolkits to Boost Street Experiments: insights from Zaragoza

- **Felipe Del Busto**, PhD student, Project Manager, CIRCE technology center

TRACK 1: Emerging technologies for sustainable mobility

TRACK 4: Active, Shared and Inclusive Mobility

TRACK 5: Policy Innovation and Collective Governance

The sub session explores how participatory and analytical tools fostered co-creation and evidence-based decision-making in Zaragoza's Living Lab within the ELABORATOR project. It highlights the **Superbarrio game**, used in schools to engage children and families in identifying mobility needs and proposing safer, more inclusive streets, and the **Labkit**, a data collection toolkit supporting on-site measurements of traffic, comfort, and environmental conditions. Together, these tools enhanced citizen engagement and provided actionable data for the **design of tactical urbanism interventions**, the **development of micro-pedestrian models**, and the **evaluation of impacts**, demonstrating how gamification and sensor-based evidence can drive more informed, participatory urban transformations.

Collaboration as a key to successful improvement of sustainable urban transport

- **Merja Penttinen**, Principal Scientist, Technical Research Centre of Finland

TRACK 4: Active, Shared and Inclusive Mobility

TRACK 5: Policy Innovation and Collective Governance

How to accommodate various needs in sustainable urban transport? Based on learnings in ELABORATOR project collaboration can be said to be a key. Collaboration is needed in local level: to include the needed stakeholder and decision makers into the planning early enough to gain the needed understanding for every organization, including the needed, sometimes time-consuming, permissions for various interventions. In addition, the involvement of users, people with various needs, e.g. visually impaired, gives totally new insight to what is needed to make the environment really accessible for all. In ELABORATOR we have successfully shared the best practices and lessons learned continuously among the partner cities and with the observer cities, to enable the learning from other cities through this collaboration.



Safe and Inclusive Streets in Trikala: ELABORATOR's Smart Solutions

- **George Gorgogetas**, ICT Electrical Engineer, e-Trikala

TRACK 1: Emerging technologies for sustainable mobility

TRACK 2: Climate-Neutral and Resilient Transportation Systems

This sub-session will present the methodology and interventions implemented in the city of Trikala. Through the Trikala Living Lab, the city is implementing interventions such as smart crossings, park-and-ride stations, bike lane redesign with sensors, and integration of the SMARTA2 app, while conducting participatory workshops with citizens, women, cyclists, and vulnerable groups.

The project directly supports Trikala's Sustainable Urban Mobility Plan (SUMP) and Climate City Contract, contributing to reduced traffic and emissions, improved safety, and stronger citizen engagement.

ELABORATOR demonstrates that even a small or medium-sized city like Trikala can lead Europe's transition toward cleaner, safer, and more people-centered urban mobility.

Simulating and upscaling the interventions in 6 different European cities

- **Alexandros Liazos**, Project manager – PhD candidate, ICCS

TRACK 1: Emerging technologies for sustainable mobility

TRACK 2: Climate-Neutral and Resilient Transportation Systems

TRACK 5: Policy Innovation and Collective Governance

This sub-session presents the simulation activities developed within the ELABORATOR project. The simulations aim to assess, compare, and upscale selected mobility interventions implemented across six European cities – Trikala, Helsinki, Milan, Copenhagen, Issy-les-Moulineaux, and Zaragoza. Using Aimsun Next's microscopic and mesoscopic modeling capabilities, a wide range of interventions, including public space reconfigurations, signal optimization, vehicle movement restrictions, and accessibility monitoring, are virtually tested and evaluated. The results provide valuable insights into road safety, traffic efficiency, and environmental impacts, supporting evidence-based decision-making and enabling the transferability of successful measures between cities. The presentation will also highlight the role of simulation as a bridge between local experimentation and broader policy design, contributing to the creation of more sustainable, accessible, and resilient urban mobility systems.



Moderator



Jason Sioutis, Experienced Electrical Engineer with a project management background in ICT, sustainable energy, construction and sales. He obtained his MSc in Electrical and Computer Engineering with a focus on Energy systems and Telecommunications from Patras University in 2013 and in 2018 he acquired the title of the MBA from the IE Business School of Madrid. He has a history of working with multinational and diverse teams displaying high analytical skills and adaptability to meet the needs of the team and the project. He possesses wide knowledge over information technology and market technology trends and has extensive project management experience in the above-mentioned sectors.

Gender-Inclusive Urban Mobility: Insights from Trikala



Eva Grigoriadou, Eva Grigoriadou is an architect and researcher whose work lies at the intersection of inclusive urban design, gender-sensitive spatial practices, and participatory approaches to transforming public space. Since 2019, she has been the Executive Director and Research Lead of URBANA, a civil non-profit based in Athens, Greece. URBANA is an interdisciplinary team of architects, planners and social scientists dedicated to advancing public space equity, care infrastructures, and community-led urban change.



Evelina Faliagka, Evelina Faliagka is an architect and urban planner with a focus on highlighting the gender perspective in urban planning and the design of inclusive cities for all. She studied architecture at the University of Thessaly and holds a Master's degree in Urban Design from TU Berlin. At URBANA, she contributes to national and EU research projects, as well as the design and implementation of participatory urban design projects.

Co-design public space through digital gamified tool to achieve safe, sustainable and accessible mobility: Superbarrio case study



Andrea Conserva, Andrea Conserva is an urban innovation expert and European project manager with over a decade of experience in advanced architecture, sustainable urban transformation, and digital technologies. At the Advanced Architecture Group of IAAC in Barcelona, he coordinates Horizon Europe projects and contributes to academic activities as a thesis advisor for the Master in Advanced Architecture. His work combines expertise in energy modeling, urban regeneration, nature-based solutions, and participatory co-design, integrating emerging digital tools for resilient and inclusive cities. He holds an MSc in Architectural Engineering from Politecnico di Milano and is currently pursuing a PhD in Architecture and Design at the University of Genoa, focusing on digital co-design tools for urban innovation.

Toolkits to Boost Street Experiments: insights from Zaragoza



Felipe Del Busto. Civil Eng. and Environmental Eng. specializing in sustainable and smart mobility, with over a decade of experience managing large-scale R&D projects across Europe and Latin America. Since 2017, he has served as Project Manager at CIRCE Research Centre in Zaragoza, leading initiatives under Horizon Europe and H2020 focused on decarbonising transport, energy efficiency, and urban sustainability. He has developed Sustainable Urban Mobility and Climate Action Plans for EU cities, coordinated electromobility strategies, and contributed to the EU Cities Mission for climate neutrality.

Felipe also holds an MSc in Urban Management, a postgraduate degree in GIS and Urban Data, and is pursuing a PhD in Civil Transport Systems at Universidad Politécnica de Madrid. Fluent in Spanish, English, and Portuguese, he combines technical expertise with strong leadership in research, policy, and innovation for climate-aligned urban mobility

Collaboration as a key to successful improvement of sustainable urban transport



Merja Penttinen, M-Sc. (tech) works as a Principal Scientist at VTT, where Penttinen has served in various expert and management roles in the field of transport since 1996. Penttinen specializes in intelligent transport systems, automated driving, sustainable urban mobility, and safety. Currently, Penttinen leads work packages in two major EU-funded projects and acts as VTT's project manager. Penttinen has also worked three years at Nokia, specialized in usability and user experience design. In addition to the research, Penttinen works as a professional coach for endurance athletes.

Simulating and upscaling the interventions in 6 different European cities



Alexandros Liazos is a graduate Rural, Surveying and Geoinformatics Engineer from the National Technical University of Athens (2020) and holds a Master's Degree in Management Science and Technology from the Athens University of Economics and Business (2022). Since January 2023, he has been working as a Project Manager and Researcher, specializing in traffic simulations, accessibility in rural and urban areas, and transport network resilience. He is a member of the Smart Mobility Applied Systems (SMAS) team, part of the I-SENSE Group within the Institute of Communication and Computer Systems (ICCS), and is also affiliated as a PhD candidate, with the Laboratory of Transportation Engineering at the School of Rural, Surveying and Geoinformatics Engineering, NTUA).

Trikala Pilot Use Case



George Gorgogetas, a seasoned project management professional with 16 years of experience in software project management, program management, and web development. He has worked on various projects, including research and development of new digital products, website design and implementation, technical support, and business analysis. George has also organized workshops and conferences as a company representative and project presenter. With a degree in Electrical and Computer Engineering from Aristoteleion Panepistimion Thessalonikis, George has developed strong technical skills in Linux, Cloud Computing, and Web Development. He is based in Trikala, Greece.