



Systematic and orchestrated deployment of solutions in complex urban environments for ageing and vulnerable societies

Webinar on road safety

Technological solutions from three EU projects



Funded by
the European Union



It was estimated that, in 2018, **70% of the total fatalities in urban areas involved Vulnerable Road Users (VRUs)**. This percentage is 34% on rural roads and motorways.

Call **HORIZON-CL5-2021-D6-01-06**

- 50% reduction of serious injuries & fatalities by 2030
- Concepts and guidelines for safe inclusion of VRUs in the transport system: people with disabilities, the elderly, children
- Better prediction of all road users behaviour & use of new modes of transport, improving road users' health and quality of urban environment
- Promotion of modal shift to active and clean modes of transport

soterio

aims to accelerate the attainment of the European Commission's **Vision Zero** goal for VRUs through a framework of tools and services.





A consortium of **16 partners** from **7 European countries** joined forces towards the co-creation of road safety solutions and road infrastructure designs for **VRUs** and micro-mobility.

+4 VRU groups

- Elderly people
- Teenagers
- Baby | Toddler prams
- Wheelchairs
- ...







+6 types of micro-vehicles

- Powered two-wheelers
- Moped
- Bicycles
- E-bicycles
- Scooters
- E-scooters
- ...



Objectives



-  Assemble interactive **Living Labs in 8 European cities** for the co-creation of safety-centric public spaces
-  Develop **traffic simulation models**, supported by advanced accident analysis using diverse data sources including wearable devices and explainable-AI
-  Facilitate the safe travelling of VRUs by means of interconnected **services nudging VRUs towards risk-free routes**
-  Design of **micro-mobility situational awareness advisory systems**
-  Deploy SOTERIA solutions **diverse EU urban contexts & social conditions** to gather qualitative and quantitative results for their assessment
-  Accelerate the uptake of SOTERIA's results through **road safety training and policy recommendations** documenting lessons learnt

Network of 8 European cities



Living Lab #1 – Oxfordshire, United Kingdom

Safe & inclusive integration of micro-mobility to current mobility paradigms



Living Lab #2 – Saxony, Germany

VRUs safety applications for generation Z



Living Lab #3 – Madrid, Spain

Safe & shared mobility services for improving user well-being and clean urban environment



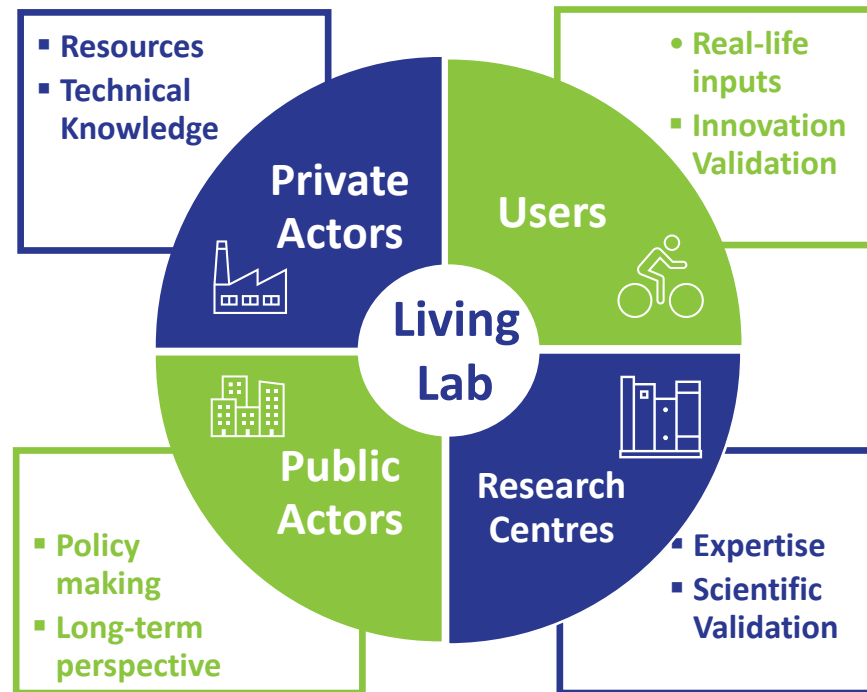
Living Lab #4 – Chania/Igoumenitsa, Greece

Proactivity-based & micro-vehicle centric measures for unprotected VRUs



Co-creation & Social Innovation

Living Labs



VRU Behaviour Analysis & Training

- Perceived vs Actual Safety
- Mobility Needs Definition
- Road Safety Training

Modelling & Simulations

- Micro-level Intersection & Manoeuvre Analysis
- Intersection Supporting Multi-modality & Micro-vehicle Corridors Risk Analysis

Solutions Co-creation

- Public Space Designs
- Infrastructure Interventions

Tapping into data riches for road safety



VRU Behaviour Data



Best Practices Knowledge Base



Infrastructure Data



Police Accident Reports



GIDAS Accident Database



Traffic Data



Mobility Data



Near-Miss Data



Connected Vehicle Data



Cellular Network Data

Road Safety Improved with Data Analytics & AI

Risk Heatmaps

Accident Hotspots

Near-miss Hotspots

Advanced Accident Analysis

Accidents Involving VRUs

Causes Taxonomy

Explainable AI

Accident Frequency Prediction

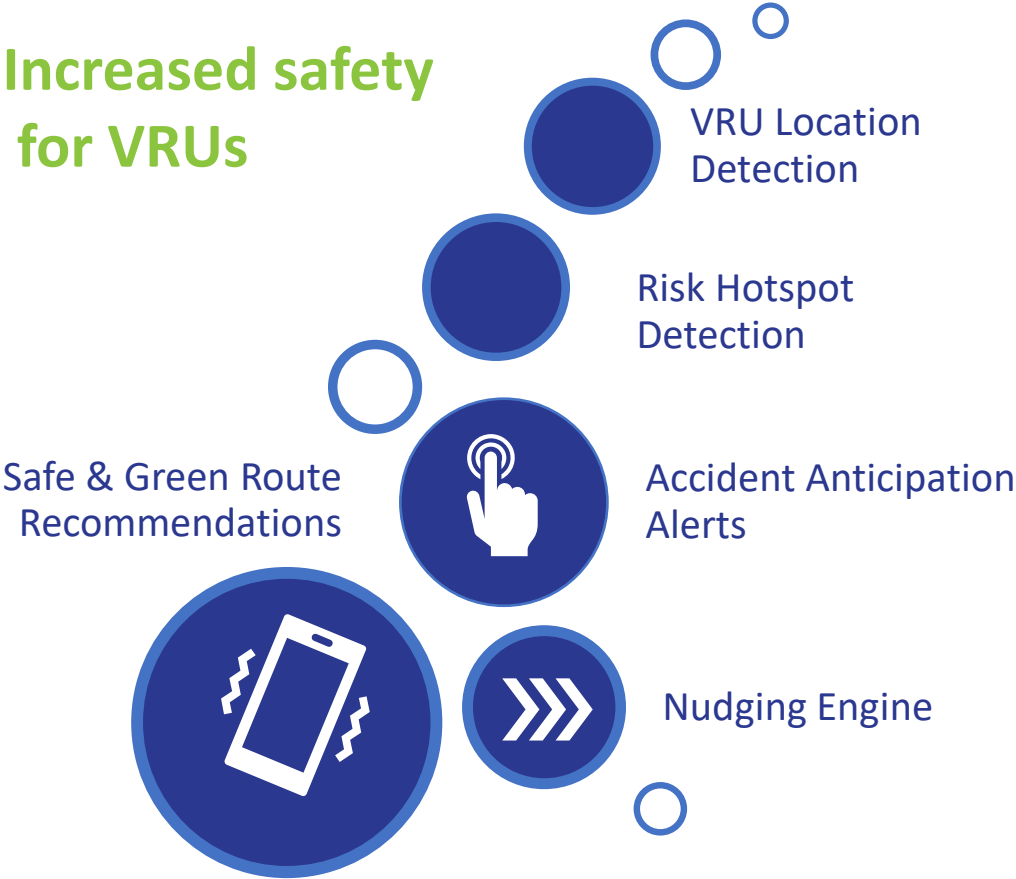
Accident Pattern Detection



Expected Outcomes



Increased safety for VRUs



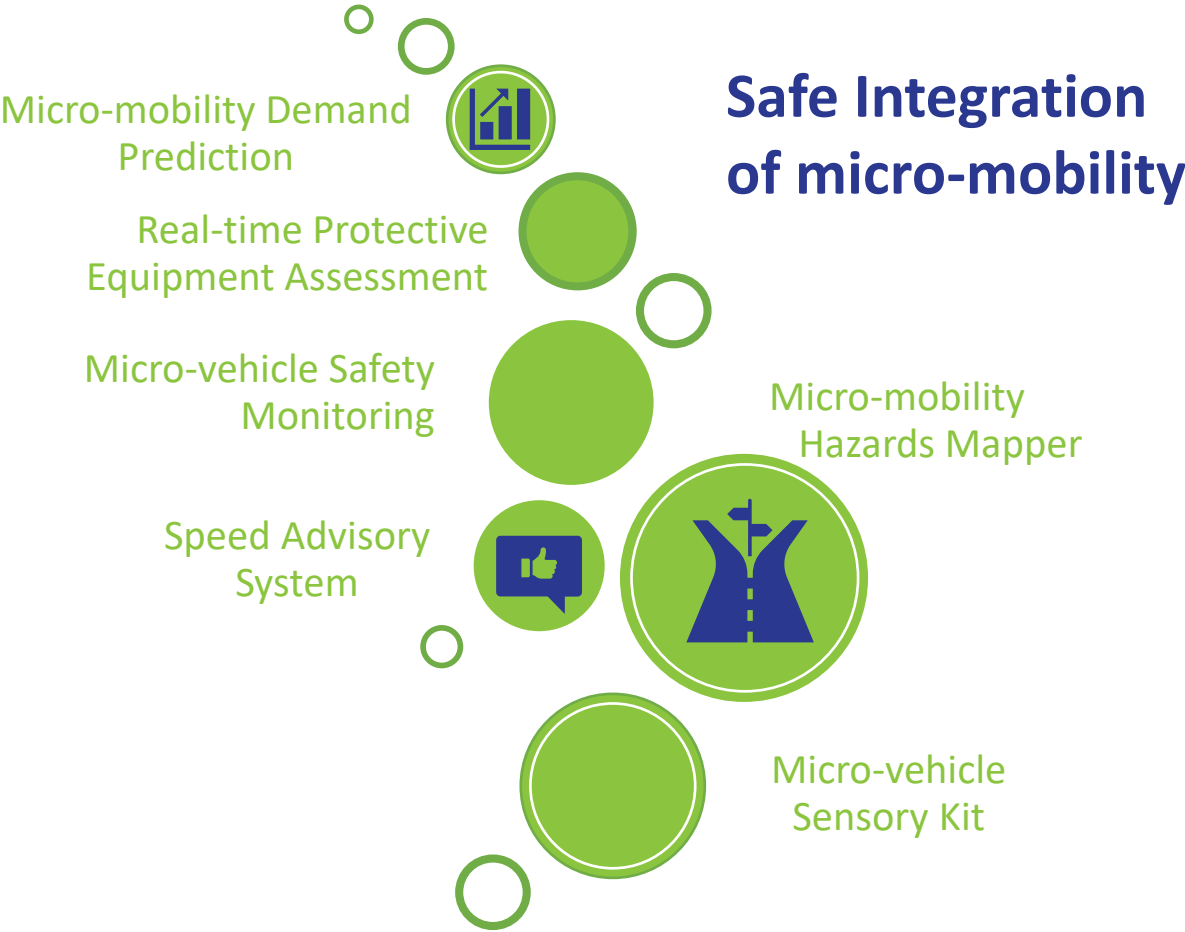
Micro-mobility Demand Prediction

Real-time Protective Equipment Assessment

Micro-vehicle Safety Monitoring

Speed Advisory System

Safe Integration of micro-mobility





Project Partners





Main contacts



Project Manager

Marina Georgiou

Netcompany-Intrasoft, Luxembourg

Scientific & Technical Manager

Panagiotis Georgakis

University of Wolverhampton, United Kingdom

Dissemination & Communication Manager

Dorine Karvouniari-Matzakou

Netcompany-Intrasoft, Luxembourg

Coordinator

Netcompany-Intrasoft

Duration

1 November 2022 – 30 April 2026

EU-Funding

€ 3,319,325.01

Website

<https://soteriaproject.eu>



Follow **soTerior** as it is kicking off!



Contact us



Thank you!

soTerioro