Webinar on road safety

Technological solutions from three EU projects
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

**Soteria**

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
  - ...

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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
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 measured 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

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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

Video credits with Onsee, soteria partner
Expected Outcomes

Increased safety for VRUs

- Nudging Engine
- Accident Anticipation Alerts
- Risk Hotspot Detection
- VRU Location Detection

Safe & Green Route Recommendations

Safe Integration of micro-mobility

- Micro-mobility Demand Prediction
- Real-time Protective Equipment Assessment
- Micro-vehicle Safety Monitoring
- Speed Advisory System
- Micro-mobility Hazards Mapper
- Micro-vehicle Sensory Kit

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Main contacts

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Follow Sister Projects' as it is kicking off!

Contact us

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Thank you!