UIC partner of the newly launched EU-funded project “ODYSSEUS”
Better protection, faster identity verification at the border with EU-funded project “ODYSSEUS”.

(1 March 2023) The newly launched ODYSSEUS European project is expected to improve border crossing experience for travelers and border authorities’ staff, while maintaining security and monitoring of movements across land and sea EU external borders. The aim of this project is to support the safety and integrity of the European space, reducing illegal movements of people and goods across those borders, and protecting fundamental rights of travelers.

ODYSSEUS also aims to enhance customs and supply chain security through better prevention, detection, deterrence, and fight of illegal activities, involving flows of goods across EU external border crossing points and through the supply chain, minimising disruption to trade flows.

The new project will provide a holistic framework for improving border checks performed by the authorities and facilitate travelling for citizens. A combination of strong multi-behavioral and biometric continuous user identity verification mechanisms will ensure the identification of the citizens, allowing them to cross the border without any interruption or queue. In the meantime, a novel luggage and baggage check will allow citizens’ vehicles and cargos to be remotely checked on the land border in terms of goods and thus speed up the border check processes in a secure and reliable manner. The ODYSSEUS platform will be applicable for both land and water scenarios including on the road, in a maritime port, and in the train.

The ODYSSEUS solution will be tested, validated, and demonstrated in three real operational scenarios selected for their high societal, economic and security impact on the EU citizens and the Border Authorities. The foreseen scenarios include seamless border crossing on Land, Sea, and Train. Pre-pilot activities will also take place, including ODYSSEUS technical verification, pilot planning and setup as well as end-user recruitment.

WHAT ARE THE MAIN OBJECTIVES OF THE PROJECT?
• **DESIGN and DEVELOP** a unifying platform that enables seamless, fully non-stop border crossing in a highly secure manner, assisting Law Enforcement Agencies (LEA) with automated, reliable, and accurate border checks, while improving the travelling experience for EU citizens in a privacy-preserving way.

• **ADVANCE** the identification and control capabilities of Border Authorities through robust and reliable identity verification mechanisms introducing an EU mobile (virtual) passport protected by continuous behavioral authentication.

• **IMPROVE** border control checks without stopping cargos and vehicles through safe, unobtrusive, and portable screening based on X-ray backscatter technology, UAV-assisted image processing and AI-based data analytics.

• **VALIDATE** the effectiveness of the proposed ODYSSEUS platform through its demonstration in real-life environments with the active engagement and training of security practitioners in two diverse landscapes and various operational environments (inside a train, on the road, onboard a ship in a port area).

• **SPEED UP** the rapid uptake by relevant security stakeholders of the ODYSSEUS innovations through wide communication, scientific dissemination and targeted commercial exploitation activities coupled with contributions to relevant standardisation bodies.

ODYSSEUS is a 3-year, Horizon funded project that began in January 2023 and will last until December 2025. It involves 14 partners from Romania, Portugal, Greece, Cyprus, Belgium, Czech Republic, Italy, France, Bulgaria, Slovakia, Moldova, and the United Kingdom. SIMAVI, VISB, QBE, TEL, RAPI, ACCELI, SQD, THALES, ISIG, IGPF, CDBP, BBA, IGPF MAI and UIC. SIMAVI will lead the consortium and the project activities, to successfully accomplish the project objectives and Key Performance Indicators.

The **ODYSSEUS project** has received funding from European Union’s Horizon Europe Innovation Programme under Grant Agreement N°101073910. The project has a duration of 36 months, with total budget of 4.59 million euro, of which 3.45 million euro are funded by the European Union.

The project **kick-off meeting** took place in Bucharest on January 26th and 27th, 2023, and welcomed over 20 attendees committed to working together to develop prototype technologies, illustrate use cases, and produce a valuable and deployable solution.

In ODYSSEUS, **UIC acts as an overarching representative of rail end-users** though its Security Division and Platform. UIC will help collect the needs and requirements of the railway sector with respect to border security and define the rail use cases. UIC Security Division will also lead the pilot at the train border with a particular focus on seamless passenger identity verification. Finally, UIC will facilitate the project results exploitation in its European region.

Further information can be found at: [www.odysseusproject.eu](http://www.odysseusproject.eu) which is currently under construction but will be online soon.
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CONTACT

FOLLOW ODYSSEUS JOURNEY AND KEEP UP WITH NEW DEVELOPMENTS AND UPCOMING RESULTS.

Join ODYSSEUS’s community on Twitter (@odysseus_heu) & on LinkedIn (@odysseusproject-heu).

For further information about this project, please contact Grigore Havarneanu (UIC Security Research Advisor and main contact point at UIC): havarneanu@uic.org

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www.uic.org

#UICrail

UIC is the worldwide organisation for the promotion of rail transport at a global level and collaborative development of the railway system. It brings together some 200 members on all 5 continents, among them rail operators, infrastructure managers, railway service providers, etc. UIC maintains close cooperation links with all actors in the rail transport domain around the world, including manufacturers, railway associations, public authorities and stakeholders in other domains and sectors whose experiences may be beneficial to rail development. UIC's main tasks include understanding the business needs of the rail community, developing innovation programmes to identify solutions to those needs, as well as preparing and publishing a series of documents such as reports, specifications, guidelines and IRS that facilitate the implementation of the innovative solutions.