

TRACE - Towards the integration and harmonization of logistics operations

A smart new integrated platform that enables stakeholders to optimize shared logistic operations in terms of costs, emissions, time and fuel requirements.

Logistics industry is facing continuous and significant challenges during the recent years. The trend is the adoption of intelligent services for increasing the performance of the provided systems and synchromodal operations.

At the EU level, synchromodality in logistics operations is unknown in most regions of Europe. The main objectives of synchromodal operations and the integration of heterogeneous logistics services is the reduction of current transfers in order to reduce the carbon footprint while securing the uninterrupted deliveries and the resilience to any disruptive event. From an environmental perspective, a systemic synergic approach in logistics, hinterland and transport could significantly promote the environmental performance of freight transport.

The TRACE project is a 3-year project, funded under the Horizon Europe Research and Innovation Program, that provides an integrated solution that supports the synchro-modal logistics paradigm.

TRACE targets to the integration of heterogeneous logistics services offering a universal platform with functionalities related to planning, scheduling, optimization and events management as well as the use of blockchain technology to facilitate the real time conclusion of smart contracts and financial operations, thus becoming one of the first attempts to provide an "intelligent cover" upon the current logistics frameworks.

To achieve this, innovative Al-driven practices along with blockchain technology and specialized infrastructure will be employed to setup the basis for a higher level of trust, security, automation, transport productivity and efficiency.

The next three years, TRACE will provide large scale demonstrators in Greece, Italy and Slovenia with different needs and mobility patterns. In these demonstrators, different logistics networks will interact and collaborate with each other and fulfill the goals of the stakeholders while minimizing the costs, fuel and energy consumption.

TRACE is an ambitious project and bears significant innovation potential. It is expected to enhance the "interoperability" of logistics operations and create new pathways for innovative business models upon the current infrastructure.

TRACE was launched in June 2023 by a Consortium of 28 partners from all over Europe and is coordinated by the National and Kapodistrian University of Athens, Greece.





Contact Details

TRACE Project Coordinator (National Kapodistrian University of Athens)
Prof. Stathes Hadjiefthymiades - shadj@di.uoa.gr
Dr. Sarantis Paskalis - paskalis@di.uoa.gr

TRACE Communications & Dissemination Manager (INCITES CONSULTING SA)
Theodoros Rokkas - trokkas@incites.eu

TRACE at a glance

EU grant: 7,743,673.25€

Project Duration: 3 years (Start Date: 1 June 2023)

Project Coordinator: National Kapodistrian University of Athens

Website: https://trace-horizon.eu/

Consortium:

1. ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON, Greece

- 2. ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS, Greece
- 3. NETCOMPANY-INTRASOFT SA, Luxembourg
- 4. PANEPISTIMIO THESSALIAS, Greece
- 5. ROBOTNIK AUTOMATION SLL, Spain
- 6. TECHNISCHE UNIVERSITAET WIEN, Austria
- 7. BLOCKCHAIN 5.0 OU, Estonia
- 8. A.C CODEWHEEL LTD, Cyprus
- 9. UNISYSTEMS LUXEMBOURG SARL, Luxembourg
- 10. ISTITUTO DI SOCIOLOGIA INTERNAZIONALE DI GORIZIA, Italy
- 11. ACS TACHIDROMIKES IPIRESIES, Greece
- 12. INCITES CONSULTING SA, Luxembourg
- 13. EPSILON INTERNATIONAL LTD, Malta
- 14. POLYTECHNEIO KRITIS, Greece
- 15. COSMOTE KINITES TILEPIKOINONIES MONOPROSOPI AE, Greece
- 16. UNIVERZA V MARIBORU, Slovenia
- 17. UNIVERSITA DEGLI STUDI DI MODENA E REGGIO EMILIA, Italy
- 18. COMUNE DI MODENA, Italy
- 19. DIFLY SRL, Italy
- 20. AV LIVING LAB, INOVATIVNE TEHNOLOGIJE DOO, Slovenia
- 21. ONE LESS VAN SRL, Italy
- 22. URBICO S.R.L., Italy
- 23. SIDROCO HOLDINGS LIMITED, Cyprus
- 24. POSTA SLOVENIJE DOO, Slovenia
- 25. HELLENIC TRAIN ANONYMI SIDIRODROMIKI ETAIREIA, Greece





- 26. FONDAZIONE ISTITUTO SUI TRASPORTI E LA LOGISTICA, Italy
- 27. CSEM CENTRE SUISSE D'ELECTRONIQUE ET DE MICROTECHNIQUE SA RECHERCHE ET DEVELOPPEMENT, Switzerland
- 28. UNIVERSITY OF GLASGOW, UK