



WP4 Consortium Members:

An overview of key
contributions and roles

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This project is funded from the European Union's Horizon 2020 research and innovation programme under grant agreement No 860274

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ROLE IN WP4

EUR will lead:

- WP4 Steering innovation & building capacity towards EGTN. It will provide Open Source Libraries as part of the Transferability Framework and Capacity Building Programme.
- Subtask ST4.1.3, ST4.2.2, ST4.3.3, ST4.4.3, and ST4.5.2.

OTHER ROLES

EUR will also lead:

- T1.4 and its subtasks in WP1 (EU-Global T&L Networks [EGTN]) related to Simulation-based analysis of T&L and ICT innovations (ST.1.4.1, ST.1.4.2, ST.1.4.3).
- Deliverables D1.8 (v1) and D1.9 (final version) Simulation-based analysis of T&L and ICT innovation technologies.

EUR participates in Living Lab 2: Sychromodal dynamic management of TEN-T & intercontinental flows promoting rail transport. For that will lead the ST3.2.3 Sychromodality on Blockchain platform.

EUR's main contribution by now is the deliverable D1.8.

KEY CONTRIBUTIONS TO PLANET

EUR will extend its research in Simulation-based analysis of T&L innovation technologies and will develop new sychromodality models utilising blockchain technologies which will be used by industry and for further research.

ERASMUS UNIVERSITY



Rotterdam School of Management, Erasmus University (RSM/EUR) founded in 1913 is an international knowledge institute for critical thinking and academic training, driven by a strong focus on current social issues.

RSM is the largest business school in the Netherlands and consistently ranked among the top 10 business schools in Europe. RSM is placed among the 1% of schools worldwide with Triple Crown accreditation. With 197 senior researchers and 88 PhD students RSM is one of the world's largest and most cited business school faculty.

ROLE IN WP4

PAN will lead:

- T4.1 Recommendations for TENT-T interfacing to Global Trade Routes. Within this task, research recommendations that will help building a continuing effort in applied research projects toward the EGTN will be delivered.
- Subtasks ST4.1.1, ST4.1.4 and ST.4.2.1.

OTHER ROLES

PAN will also lead:

- T1.2 TEN-T focused modelling and simulation so as its subtasks ST1.2.1. and ST1.2.2.
- S1.1.4 Model extensions and customization implementation, and ST1.5.1 Defining the EGTN vision for 2030.
- Deliverables D1.4 (v1) and D1.5 (final version) Simulation based impact of new trade routes on the TENT- T and disadvantaged regions.

PAN leads and participates in Living Lab 2: Synchronodal dynamic management of TEN-T & intercontinental flows promoting rail transport. To that end, it also leads:

- T3.2 LL2: China–Rotterdam/USA focusing on rail transport so as it related subtasks ST3.2.1, ST3.2.2 and ST3.2.6.
- D3.3 LL2 Specification and Baseline measurements and D3.4 LL2 EGTN Solution description and test results.

PAN's main contribution by now is the deliverable D1.4.

KEY CONTRIBUTIONS TO PLANET

- Panteia will develop **new models and knowledge** to extend its capability on modelling TEN-T support to be used in its consultancy engagements supporting decision makers to formulate, monitor and evaluate strategies for addressing the impact of new trade routes on infrastructure development.

PANTEIA



Panteia (PAN) is a consultancy firm, which supports policy and decision makers, helping them to formulate, monitor and evaluate strategies for effective policy in different fields. These fields comprise economy, transport, labour market, health and education. To do so, they apply unique knowledge bases and innovative methods, supported by independent market and policy research. Together with their clients they aim to contribute to sustainable, social and economic progress. Panteia's offices are staffed by specialists who focus on specific fields of research.

ROLE IN WP4

WI will lead:

- T4.2 Briefing EGTN reports including the inclusion of disadvantaged regions. This task addresses policy makers and focuses on inclusive accessibility highlighting disadvantaged regions into the international trading system.
- ST4.2.3 Develop a policy briefing on the benefits of improved technology in freight operations and its impact on low carbon freight transport, targeted at decision makers and public authorities.
- Deliverable D4.2 Briefing reports for public authorities and guide on the inclusion of disadvantaged regions into the international trading system.

KEY CONTRIBUTIONS TO PLANET

- The Wuppertal Institute will contribute to the PLANET project by bringing in a cross-sectoral perspective work on sustainability transformation pathways. The WI will particularly support the project on developing country perspective.
- Has longstanding experience with a multitude of national, European and international projects on sustainable transport.
- Has a long record of experience with ex-ante and the ex-post evaluation of transport, energy and climate policies – as well as the design and evaluation of carbon reduction and energy efficiency strategies, programmes and services.

WUPPERTAL INSTITUT



The **Wuppertal Institut Für Klima Umwelt, Energie GmbH (WI)** Institute's research programme begins by taking an interdisciplinary approach and working towards systems understanding. The WI collaborates with a multitude of universities and institutes around the world. A scientific International Advisory Board supports the Institute in defining fundamental research strategies as well as ensuring the quality and independence of its research.

ROLE IN WP4

KNT will lead:

- T4.3 Open Source Libraries and Transferability Framework. Konnecta will provide open-source libraries that will contain learning courses aiming to offer easy transferability of the EGTN components to any public or business stakeholder.
- ST4.3.2 Electronic Visualisation Library.
- Deliverable D4.3 Electronic Visualisation Library of outputs from WP1-WP2 and WP3.

OTHER ROLES

KNT will also lead:

- T2.5 EGTN Distributed Ledgers and Smart Contracts.
- ST2.5.1 Interfaces to multiple Proprietary Blockchain Systems for Seamless Global Trade and ST5.2.2 EGTN Smart Contracts.
- Deliverables D2.15 (v1) and D2.16 (final version) Integration and Interoperability of proprietary Blockchain Systems for Seamless Global Trade Workflows v1, so as D2.17 (v1) and D2.18 (final version) EGTN smart contracts and associated PI motivated workflows in the context of SLA management.

KNT's main contribution by now are the deliverables D2.15 and D2.17.

OTHER ROLES

- Konnecta has applied blockchain and smart contracts in the design of distributed verification of information and the decentralisation of digital functions. Blockchain is combined with other state-of-the art technologies to automate legal and operational processes and to streamline cooperation between heterogeneous entities.
- Konnecta also possesses several software tools as well as AI-enabled cloud infrastructure on well-established providers.

KONNECTA



Konnecta (KNT) is an IT Consultancy and Solutions SME that specialises in the field of Connected Intelligence Application Systems, providing enterprise grade solutions and middleware for Enterprise Connectivity, Data integration, Artificial Intelligence (AI), Digital Trust and Digital Intelligence.

It is represented by a prominent team of experts in software engineering with extensive applied experience in AI, Blockchain, and Model-driven development, offering services in the areas of: Enterprise ICT; Cloud-based Interconnectivity solutions; Smart Visualisation and Intelligent Discovery; Service Oriented Architectures and Web Services; Augmented Analytics; etc.

ROLE IN WP4

ZLC will lead:

- T4.4 PI-facilitating technology Roadmaps (blockchain, ML, Hyperloop, AVs iMLUs, 5G, EGNOS, 3DP). ZLC leads the creation of the PI-facilitating technology Roadmaps for EGTN, considering disruptive logistics concepts and technologies.
- ST4.3.1 Learning material requirements, ST4.4.1 Consolidation of results from previous road mapping initiatives, ST4.4.2 Impact documentation of technological areas on the PI will document impact of each identified technology area to the future of the PI, and ST4.4.5 Workshops definition, execution and follow up.
- Deliverable D4.4 PI-facilitating technology Roadmaps for EGTN.

OTHER ROLES

ZLC will also lead:

- WP3 PLANET Living Labs.
- T3.4 Generic Use Case and EGTN Impact Assessment.
- Deliverables D3.7 (v1) and D3.8 (final version) EGTN Generic use case.

ZLC's main contribution by now is the deliverable D3.7.

KEY CONTRIBUTIONS TO PLANET

- ZLC has a wide experience in the participation in European projects related to SCM, logistics and urban freight, being ranked as the Spanish entity with most EU funded projects in the field.
- It is a founding member of ALICE ETP and has a strong network of contacts and collaborators involving relevant European and international contacts in the logistics and transport sector.

ZARAGOZA LOGISTICS CENTER



Zaragoza Logistics Center (ZLC) is a research and educational institute affiliated to the Massachusetts Institute of Technology (MIT) and the University of Zaragoza. Specialized in logistics and supply chain management, ZLC is the Spanish center of the MIT Global SCALE Network, an international alliance of 6 leading research centers dedicated to the development of supply chain excellence through innovation.

ROLE IN WP4

ILIM will lead:

- T4.5 Recommendations for PLANET standardisation. This task anticipates the transformation of learnings and best practices into a set of standards. The tasks will draw from the results of previous WPs, and will feed into other parts of the project, such as WP5 on dissemination.
- Deliverable D4.5 Recommendations for PLANET standardisation.

OTHER ROLES

ILIM will also lead:

- Deliverable D6.2 Project Quality Handbook and annual quality reviews.

ILIM leads and participates in Living Lab 3: IoT for Silk Road Route – reliable, transparent and fully connected corridor from China to the EU. To that end, it also leads:

- T3.3 LL3: IoT for Silk Road Route to EU the Poland focus e-commerce parcels.
- Subtasks ST3.3.1 LL AS-IS analysis and detailed specification and plan, ST3.3.2 Installation and technical validation of the PLANET Cloud-based Open EGTN Infrastructure in the LLs, ST3.3.3 Testing, and ST3.3.4 Analysis and results.
- Deliverable D3.5 LL3 Specification and baseline measurements.

ILIM's main contribution by now are the deliverables D6.2a and D6.2b.

KEY CONTRIBUTIONS TO PLANET

- IoT solutions based on use of wireless sensor networks (DASH7 – LPWSN) that enables monitoring of transport parameters in real time.
- EPCIS (event database and GS1 standard) enables business partners to share information about the physical movement and status of products as they travel throughout the supply chain.
- Methodology for business processes optimization based on BPMN 2.0 standard enabling analysing of activities performed and resources used towards its improvement.

ILIM



LUKASIEWICZ - Institute of Logistics and Warehousing (ILIM) is widely acknowledged as a centre of competence in logistics and digitalization.

It is a R&D unit where logistics is perceived as both a subject of research as well as the field of practical application. The Institute's main areas of competence embrace logistics and supply chain management including optimisation and designing of logistics processes, logistics networks, hubs, smart city and e-commerce logistics. Moreover, we develop solutions in the field of IoT digitalising supply chains and introducing identification technologies RFID/barcodes.

ROLE IN WP4

CERTH will lead:

- ST4.1.2 Future implications for TEN-T's connections with global networks as a result from global trends: The work will focus on TEN-T connectivity with global networks. Expected focal points include seaports, border crossings and transshipment facilities between the EU and third countries and customs procedures. Thus, particular points of attention are identified for post-2023 CEF and H2020 calls concerning interconnectivity between TEN-T and other (global) networks.

OTHER ROLES

CERTH will also lead:

- WP1 EU-Global T&L Networks [EGTN].
- T1.5 EGTN Reference Specification.
- Deliverables D1.10 EGTN Reference Specification (v1) and D1.11 (final version), D3.10 EGTN impact assessment.
- ST1.3.2 Analysis and preliminary impact assessment of EU policy initiatives affecting EGTN with reference to DTLF, ST1.5.2 EGTN physical layer specification and ST1.5.4 EGTN governance layer specifications.

CERTH's main contribution by now is the deliverable D1.10.

KEY CONTRIBUTIONS TO PLANET

- CERTH has a long participation history in EU-funded projects mainly acting as Project Coordinator or Work Package Leader.
- By utilizing cutting-edge know-how and accumulated professional experience on state-of-the-art research and innovation, we methodically approach the particularities of the parameters of PLANET project with the aim of assessing the impacts of future scenarios in the development of the Green EU-Global Integrated T&L network [EGTN] and give answers to fundamental questions regarding the three interacting layers of EGTN structure: physical, technological and governance.

CERTH



CERTH
CENTRE FOR
RESEARCH & TECHNOLOGY
HELLAS

The Centre for Research and Technology Hellas (CERTH), founded in 2000, is a leading research centre in Greece, with high participation in competitive research grants. The Hellenic Institute of Transport (HIT) is one of CERTH's five Institutes, devoted to the promotion and undertaking of transport research. Its main mission is to provide state-of-the-art research and create innovation in the field of transport at a national, European and international level, addressing issues related to transport policy, planning, management, operations and infrastructure.

ROLE IN WP4

NEWOPERA will lead:

- ST4.4.4 Incorporation of PI-facilitating technologies into current roadmaps. This subtask will assess development needs of current roadmaps of rail and water modes for incorporating PI technologies and exploiting their potential for contributing to EGNT.

OTHER ROLES

NEWOPERA will also participate in Living Lab 2: PI and Blockchain for optimised door-to-door Asia-Europe corridors.

NEWOPERA will also lead ST3.2.4 Synergies TEN-T and intercontinental rail flows.

KEY CONTRIBUTIONS TO PLANET

- The Nodes are integral part of the TEN T infrastructure, the places where the EGNT implementation and technology are applied and executed.
- The Nodes have been essential part of NEWO expertise their adequacy for exploiting the rail network capacity. The assignment of the Nodes to TENT network according to the traffic attraction zones, is fundamental according to the new volumes projected needs to be handled for the EGNT fulfilment.

NEWOPERA



NEWOPERA is a NON profit association engaged in research, innovation, technology development of freight transport, logistics, systems focused on rail leveraging the existing network. “Carry more with the existing resources”. It pioneered” the dedicated EU rail freight network” leading to TEN T with NEWOPERA project and promoted with TIGER the industrial CTS distribution via Dry Ports before Giant CTS vessels. It tested in operational condition the 1500m long train 72 wagons, 220 TEUs, 4036 Tons. It promoted projects for wagons design innovation.

ROLE IN WP4

GS1 Poland will lead:

- ST4.5.1 Standardization preparation. This subtask will provide an analysis of the opportunities and benefits arising from using smart contract in the supply chain and associated technologies, particularly blockchain. Will identify and analyse existing standards for smart contract, with particular focus on solutions dedicated to the flows of goods in international supply chains. The analysis will include implementations and problems encountered. The subtask will also deliver an inventory of ongoing/anticipated EGTN design and deployment activities in the various LL's with focus on standardisation of smart contracts in supply chains.

OTHER ROLES

GS1 Poland will also participate in Living Lab 3: PI and Blockchain for optimised door-to-door Asia-Europe corridors - Mediterranean Corridor.

KEY CONTRIBUTIONS TO PLANET

- GS1 Polska cooperates with GS1 Member Organizations in the whole world and benefits from their experience in the application of specific, detailed GS1 solutions.

GS1 Poland



The **GS1 Polska Foundation** is in charge of organizing, coordinating and administrating article numbering and Auto-ID work throughout Poland. GS1 Poland has been dedicated to promoting the GS1 System, the globally adopted, open and cross-industry standard for supply chain management, since it joined GS1 as a Member Organization on behalf of Poland in March 1990.

It is the only institution authorized to accept companies from Poland and EU into the GS1 System and to assign to them the rights to use GS1 codes.

ROLE IN WP4

INLECOM will lead:

- ST4.5.3 Provide recommendations for PLANET standardization. Based on the results of the previous subtasks, smart contract standardization recommendations will be delivered.

OTHER ROLES

INLECOM will be the project coordinator and Project Manager of Project Steering Team.

INLECOM will also lead:

- WP6 Project Management.
- WP7 Deliverables on Ethics and has already presented its associated deliverables.
- Deliverables D2.1 Open EGTN Platform Architecture (v1) and D2.2 (final version). So as the related task T2.1 Cloud-based Open EGTN ICT Infrastructure Architecture.
- Deliverables D6.1 Project management handbook — management plan, D6.3 Initial Data management plan, D6.4 Data set made available and D6.5 Innovation management report and Patent Filings.
- And the subtasks ST1.5.3, ST2.1.1, ST2.1.2, ST2.1.3.

INLECOM's main contribution by now are the deliverables D2.1, D6.1a, D6.3, D7.1, D7.2, D7.3, D7.4.

KEY CONTRIBUTIONS TO PLANET

- INLECOM provides consultancy services in the strategic use of advanced and emerging ICT technologies to the transport and logistics industries.
- In addition, it intends to define and prototype new services for the implementation of EGTN framework in the broader T&L market.
- INLECOM has formalized the Open EGTN ICT Infrastructure Architecture and is currently developing specialized capabilities for interoperable blockchain solutions for the diverse T&L stakeholder communities of the project.

INLECOM

The logo for INLECOM, featuring the word "inlecom" in a lowercase, sans-serif font. The logo is centered within a white circle that is partially enclosed by a green, curved shape resembling a stylized 'C' or a partial ring.

INLECOM is a European SME with offices and consultants in Belgium, Greece, UK, Ireland, Spain, and Italy. It has established a unique holistic view of the ICT domain as well as become a leader in Digital Ecosystem Platforms & Technologies, through an extensive research programme including a library of process models, domain entities, ontologies, and client-facing solutions.

It is also a highly successful coordinator of multiple EU research projects, with a team of PMI-Certified Project Managers currently coordinating numerous high profile H2020 projects, in the areas of T&L, IoT, Security, Big Data and Cloud technologies.