

5G-LOGINNOV Project



5GLOGINNOV

Project Fact Sheet



H2020 Innovation Action with **36 months duration** (started September 2020)

Consortium:

- **15 members** (BE, ES, FR, IT, RO, GR, SI, DE)
- **Sectors involved:** Logistics, Automotive and Telecom Industry, Infrastructure operators, Research Institutes, SMEs and Start-Ups
- **3 LLs** (Athens-Piraeus, Hamburg, Luka Koper)

Total budget: 7,926,474.29



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Project Partners



Overview 1/2



- 5GLOGINNOV supports the new generation of 5G-CAD terminals, new type of IoT-5G connectivity devices through technical solutions, business models and priority scenarios by deploying new CAD and Logistics as a Service in real-life port-city areas.
- 5GLOGINNOV's central innovation is to build a first-class European industrial supply side for **5G core technologies and new IoT-5G devices** (e.g. slicing, eMBB, uRLLC, mMTC, MEC, 5G-NR) with global market footprints.
- The project will have a strong impact in the **logistics industry**, as the innovative use cases deployed in the three Living Labs will test and evaluate **5G-enabled services during the project**.

Overview 2/2



- The project has a strong interest in the emergence of new market players, such as SMEs and start-ups, taking advantage of the growing adoption of distributed cloud computing technologies in 5G networks and making possible open innovation at service level in the logistics and Industry 4.0 sectors
- 5G-LOGINNOV contributes to the emergence of global standards and globally harmonised frequency bands for 5G in the context of related developments at the level of global bodies like 3GPP, ITU and 5G standards (Rel. 16/17)
- Being part of the third 5G PPP phase implies supporting the development of a "lead" market involving cooperation models with key vertical sectors contributing to the wider policy objectives of industry digitisation in the Digital Single Market.

Objectives 1/2



- **Develop and Deploy** Next Generation ports & logistics hubs operation system architecture integrated in 5G networks at three main ports in Europe: Athens (GR), Hamburg (DE) and Koper (SI) utilising new types of 5G IoT sensors and devices
- **Optimise** ports & logistics hubs operation and maintenance, for reducing their operational costs with innovative concepts and use cases
- **Reduce** significantly ports & logistics hubs operation emissions (CO2/NOX) and regulate the resulting freight traffic on the future 5G logistics corridor in EU including CAM truck platooning management

Objectives 2/2



- **Regulate** the freight traffic generated by ports & logistics hubs on the future 5G logistics corridors in EU and integration of future Connected and Automated truck platoons-as 5GLOGINNOV Green Truck Initiative according to the EU Green Deal programme
- **Boost** ports & logistics hubs operation & maintenance innovation with involvement of new market actors including SMEs and Start-ups
- **Support standardisation** of 5G enabled Next Generation ports & logistics hubs operation system to ensure interoperability, platform openness and operation harmonisation around future 5G Logistics x-border corridors
- **Support adoption** and take up of 5G enabled Next Generation ports & logistics hubs operation system in Europe and beyond

LL Piraeus-Athens

Greece

- **Partners involved:** ICCS, PCT, VODAFONE

- **Use Cases**

- **UC2/3: Optimal selection of yard trucks**

- Installation of a 5G access point on yard trucks, 5G latency, precise localization services, etc.

- **UC4: Optimal surveillance cameras and video analytics**

- Installation of connected 4K surveillance cameras
 - AI/ML solution for container seal presence, human presence detection, social distancing

- **UC7: Predictive Maintenance**

- 5G access point installed on yard vehicles
 - AP will collect and forward in real time with low latency telemetry data over the 5G network



LL Hamburg Germany



- **Partners involved:** T-System, Continental, Swarco, Tec4U
- **Use Cases**
 - **UC8/9:** 5GLOGINNOV Floating Truck & Emission Data (FTED)
 - **UC10:** 5GLOGINNOV 5G GLOSA & Automated Truck Platooning (GTP)
 - **UC11:** 5GLOGINNOV dynamic control loop for environment sensitive traffic management actions (DCET)

LL Luka Koper

Slovenia

- **Partners involved:** ININ, Telecom Slovenia, Luka Koper port
- **Use Cases**
 - **UC1:** 5G-LOGINNOV Management and Network Orchestration platform (MANO)
 - **UC5:** 5G-LOGINNOV Automation for ports: port control, logistics and remote automation
 - **UC6:** 5G-LOGINNOV 5G mission critical communications in ports



Thank You Very Much!



Website: 5g-loginnov.eu

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