Federated Logistics Platforms – The Greek Ecosystem

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Definition of Data Sharing in Logistics

Data sharing in a supply chain is referred to as the extent to which crucial and/or proprietary information is available to other actors of the supply chain for the completion of their daily operations.
The FENIX Approach to Data Sharing

A European FEderated Network of Information eXchange in Future Logistics

• based on the work and recommendations of the Digital Transport and Logistic Forum (DTLF) sub-group 2
• aims to interconnect the different digital platforms and harmonise the services they offer
• ensure interoperability: common protocols for supporting data sharing services
• enable data sharing serving the European logistics community
• facilitate horizontal collaboration
• overcome today’s fragmentation and lack of connectivity around ICT-based systems for logistics decision making
• open-solution, not “privately owned” and technological neutral

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FENIX in Greece

Five operational UCs

(1) Showcase platform interoperability in the Greek Corridor
(2) Combine a variety of rail, road and maritime operational logistics processes

From the 5 UCs, three UCs are operational across the corridor and two in and around important nodes, such as the Port of Piraeus
FENIX GR Federated Platforms

- Three platforms will be Federated
- Nine services brokered through federation currently

Traffic management (UC4)

Greek OBSERVATORY
Transport & Logistics

EPCIS

- Traffic information forecast
- Real time Traffic info & events
- Traffic Management Strategies
- VZK
- T&L Service catalogue
- Digital services inventory
- T&L Dashboard (KPIs & Statistics)
- Plug-in to the FENIX network

PEARL Platform (UC2)

CARGO BUNDLING MARKETPLACE (CBM)

Alas – K&N
(UC2 & UC3)

- Cargo Bundling
- Rail transport availability

FTP

- Alas Visibility Status Reporting System
The **HPCS platform** is enriched with the digitization and automation of the **import/export** port processes of Port of Piraeus from the PCT, to PCDC and to the next transport mode.

**Optimized** through FENIX
- Digital preparation of proof of delivery notes from PCT
- Customs electronic notification for pending customs clearance
- Electronic notifications to stakeholders for pending actions
- Secure entry system of truck drivers to PCDC
- Cargo monitoring and electronic notifications for cargo status

**Brokered** through FENIX
- Piraeus Vessel Schedule
- Piraeus Rail Schedule
- Piraeus Vessel Progress
- Piraeus Gate Traffic

**Services progress (brokered + developed)**
- 100%
- Initial TRL: 7
- Current/Final TRL: 9
- Applied in full-scale since June 2021

**Achievements**
- 30 Freight Forwarder SMEs registered for the FENIX Services
- 600 transactions on a monthly basis
- 3,000 manhours saved on a monthly basis
- 1,800 reduced visits to the port of Piraeus on a monthly basis
Cargo Bundling Marketplace platform providing better visibility on the available shipments to increase the load factor and support modal shift from trucks to rail.

Optimized & Brokered through FENIX
- Cargo Bundling
- Rail transport availability

Achievements
- Cargo Bundling possible in both road and rail scenarios
UC3. Monitoring of status of transport operations

Alas platform is enriched with new features for the provision of visibility to service users from the Piraeus Port to customers and all the intermediate steps of the process.

Optimized & Brokered through FENIX
- Cargo notification
- Alas Visibility Status

Achievements
- Customers on board for pilot testing
- e-POD improvements under consideration as new processes to incorporate in Fenix
- Interoperability tests using GLN location identifiers are being examined between K+N, GS1, PTV and CERTH
AI enabled TRAFFIC Services platform integrate various information from different sources to provide real-time traffic information & traffic forecasts on monitored nodes, as well as short-term traffic strategies to reduce the effects of T&L operations on the urban & suburban areas in the Piraeus area.

Optimized & Brokered through FENIX
- Traffic information forecast
- Real time Traffic info & events
- Traffic Management Strategies
- V2X

Achievements
- Development of the traffic forecasting service
The **Greek Observatory of T&L platform** is a monitoring and collaboration support mechanism providing access to digital services and a mapping of the Greek T&L sector in terms of companies and performance indicators.

**Optimized & Brokered** through FENIX
- T&L Service catalogue
- Digital services inventory
- T&L Dashboard (KPIs & Stats)
- Plug-in to the FENIX network
- Cyprus Portal

**Achievements**
- The Plug-in service (Be Federated) is expected to be tested with external users/service providers
Data Sharing in Logistics Beyond FENIX

The MOSES project has received funding from the European Union's horizon 2020 research and innovation programme under grant agreement No. 861678.

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The Green-C-Ports PEP Platform is build on top of a network of environmental sensors that enable monitoring of environmental conditions and enables their prediction through AI algorithms.

Green-C-Ports utilizes the FENIX Connector to receive data related to vessel arrival and departure times as well as gate traffic, to be used as parameters in the AI predictive algorithm for environmental condition in the area of the Port of Piraeus.
BOOSTLOG Data Sharing Cloud Report

**Recommendations for Horizon Europe 2023-2024 & 2025-2026 programmes**

- Liaison with the new generation of projects
- Looking to the past and learning for the future
- 160-200 projects 1000M € invested

**Enlarge the ecosystem at scale**

- Identifying high priority & potential R&I gaps
- Making R&I results, outcomes and implementation cases visible
- 30+ Implementation cases

**Creating Innovation ecosystem for the logistics sector**

**Innovation Marketplace**

**Industry reports - logistics clouds**
- Urban logistics
- Logistics nodes
- Multimodal freight corridors and transport networks
- Freight and logistics data sharing
- Logistics coordination and collaboration
- Modularization and transshipment

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Smart and Sustainable Mobility for all.

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