Πανευρωπαϊκή αρχιτεκτονική για ανταλλαγή πληροφοριών και δεδομένων στον τομέα των logistics: η εμπειρία του AEOLIX

A pan-European Architecture for the exchange of information and data in the logistics sector: The case of AEOLIX project

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TREDIT S.A
An industry in transformation: Consolidation
We need a ""Trusted data network"

Data push model
- Model enables real time information to interested parties ensuring automated logistics processes in the logistics stakeholders apps / systems

Open
- Data is not stored in any central database but is produced and maintained in original data format by its owner
- Each owner of the data pipeline decides who can participate and how (producing data, reading...)

Data from legacy systems
- Data easy to use and consume for legacy systems exposing AEOLIX core services as API / Rest services

Data Privacy assurance, authentication and security mechanisms
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Data architecture
- Built upon existing recognised industry and European standards and has proven reference data implementations
- Visible and recognised as a trust Label within industry and public authorities.
- Validated through compliance testing and certification
AEOLIX end to end visibility network

- **AEOLIX network**
  - cloud-based
  - multi-enterprise
  - “many-to-many”

- Captures and streams data real-time

- Automatically translates “data format” from different IT systems

- Giving organisations the ability to rapidly respond to issues through a customised dashboard.
AEOLIX Toolkit

Core logistics services to support and implement the business needs of AEOLIX end-users. Examples of services offered in the toolkit are: E-CMR, routing, planning services for road and intermodal service, ETA service, CO₂ monitoring, dangerous goods transport management, and more. Toolkit services can be used via the AEOLIX connectivity engine by applications, services and sensors or interplay with other toolkit elements.

AEOLIX Dashboard

An intelligent, user configurable web application, which serves as a dedicated portal to the AEOLIX Platform. It manages and enables access to end-to-end logistics visibility by sharing data of the logistics partners via the Connectivity Engine (CE). It enables intelligence to be added to the data from within the dashboard and enables access and mobilises applications from the toolkit.

AEOLIX Connectivity Engine

Responsible for providing the connectivity and interoperability services and supporting seamless data exchanges between organisations and services. These technical services provide the architectural setup; (1) connecting the end-user with its many business partners and systems in their networks; (2) allows for interoperability and governance services; the information exchange between different systems; partner/ system interactions and data sharing management rules.
Logistics Living Labs

AEOLIX is testing, validating and demonstrating the collaborative logistics ecosystem in a number of living labs which cover all the nine TEN-T corridors.

Living Lab 1:
Intermodal Logistics Management – Port of Hamburg, Frankfurt/Rhein-Main area (Germany)

Living Lab 2:
Termi Lab – NTEX terminal network, hauliers, customs operatives (Sweden and around the North Sea)

Living Lab 3:
Multimodal Information Exchange and Collaboration – Thessaloniki (Greece)

Living Lab 4:
Intermodal e-Customs – Trieste (Italy)

Living Lab 5:
Inland Waterway Danube – The Danube Countries

Living Lab 6:
Intelligent Port and City – Port of Bordeaux (France)

Living Lab 7:
FMCG Logistics – Malmö intermodal terminal, COOP central DC in Bro (Sweden)

Living Lab 8:
UK - Europe – Far Eastern Logistics Control Enhancement – Northampton (UK) and mainland Europe

Living Lab 9:
Cross Chain Collaboration – Rotterdam, Venlo (Netherlands), Duisburg (Germany), Milano (Italy)

Living Lab 10:
Collaboration in automotive Industry – Galicia (Spain)

Living Lab 11:
Mondelez Load Control Centre Connectivity – Bratislava (Slovakia)
Partners – 1st Generation Community

- CERTH / HIT (Leader)
- Transeuropean Consultants for Transport, Development and Information Technology - TREDIT S.A.
- Greek International Business Association (SEVE)
- Hellenic Federation of Road Transports (OFAE)
- Thessaloniki Chamber of Commerce and Industry (TCCI)

2nd Generation Community

- Expanded to the members of TCCI (15 members confirmed i.e.)
- Expanded to the members of OFAE (9 members - truck drivers & companies)
- Expanded to the members of SEVE (6 members - Exporters to Balkan and North-East Europe)
Two different scenarios
- Virtual Freight Center (VFC)
- Cargo bundling marketplace and monitoring

Virtual Freight Center
- Support companies that facing difficulties providing warehousing facilities due to the variable demand.
- AEOLIX will support to the information exchange between the relevant actors through demand-supply matching, booking management and warehousing analytics.

Cargo bundling marketplace and monitoring
- Support road transport operators to better utilize their transport capacities by avoiding empty or half-empty journeys.
- AEOLIX will improve the visibility among the logistics service providers and will allow them to utilise innovative logistics services.
Data sharing to improve the visibility among the relevant actors and provide Innovative services in their supply chain.

Multiple alternatives for exporting companies to choose for their products in the lower available cost.

Cargo transport requests, as well as truck transport monitoring data are being routed through AEOLIX CE. All this data is being collected (via subscription to AEOLIX) in one single platform developed within LL3 (LL3 Dashboard).

Road transport operators have better visibility on the available shipments in the greater area of Thessaloniki, thus increasing their load factor and avoiding travelling empty kilometers.
PoD and Monitoring

**Proof Of Delivery Monitoring**

![Image of Proof Of Delivery Monitoring interface](image_url)

**Search Criteria**
- From Date: 22/10/2018 00:00
- To Date: 31/10/2018 23:59
- Received from HD
- Vehicle with HD
- Code: 

**Search Results**

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**Notes:**
- PoD - Proof Of Delivery
- AEOLIX
- TESTFEST

**Contact Information:**
- AEOLIX
- TESTFEST

**Status:**
- Active
- Inactive
Expected Benefits

- Enhanced supply chain visibility
- More efficiency and better resilience
- Fewer costs less administrative burden
- New business opportunities
- Automation of data flow
- Optimised choice of transport services
- Better transport and event management
- Increased load factors
- Fewer CO₂ emissions
- Interoperability in line with EU standards
Ευχαριστώ για την προσοχή σας!

Ερωτήσεις;

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