

AEOLIX

Motivation and challenges

Addressing needs and requirements

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ERTICO - ITS Europe



Co-funded by the Horizon 2020 Work programme





Partnership 100+

Mobile Network Operators



Research



Service Providers



Suppliers



Traffic & Transport Industry



Users



Vehicle Manufacturers



Public Authorities



* Non-shareholder

Roadmap on freight transport and logistics

Objective 1

- Develop necessary interfaces for an integrated syncromodal freight transport system.

Objective 2

- Deploy C-ITS services for freight and logistics by specifying, using and fostering interoperable and complementary communications technologies.

Objective 3

- Promote the potential of new innovative trends such as big data, Internet of Things and automation for Freight and Logistics

Objective 4

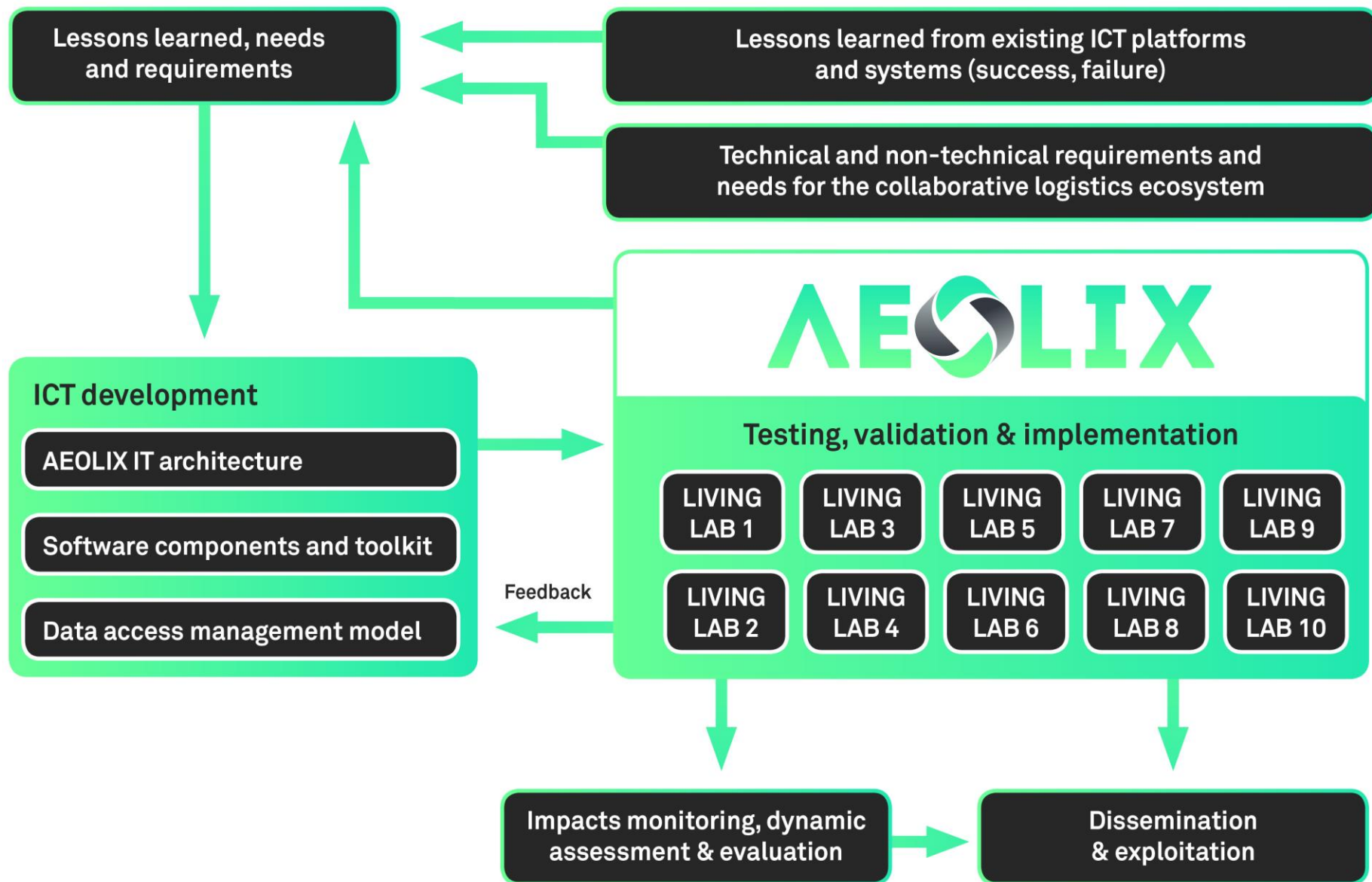
- Develop user awareness and promote the use and benefits of ITS and their associated monetary benefits (business models) to logistics stakeholders



Challenges

- Many digital platforms on freight transport and logistics
 - EC FP & H2020 Projects solutions
 - Port Community systems & Cargo Community System (CCS)
 - e-Customs platforms
 - Single Window platforms
 - Proprietary ICT /ITS Solutions
- Open standards and EU initiatives
 - UBL/XML, EDIFACT, GS1, Open Data Standards, DATEX II
 - ITS Directive, RIS, eMaritime
 - (ETPs), such as ALICE, ERTRAC, ERRAC, Waterborne

Objectives



CONNECTION THROUGH PLUGIN APIs

**LOGISTICS
ACTOR 1**

Existing Platform
and/or System 1

**LOGISTICS
ACTOR 2**

Existing Platform
and/or System 1

...

**LOGISTICS
ACTOR *n***

Existing Platform
and/or System *n*

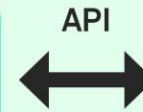
AEOLIX
LOGISTICS BUSINESS
COMMUNITY



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INFRASTRUCTURE

including configurable dashboard for each
logistics actor as user interface



TOOLKIT

Third Parties



**INFORMATION
OBJECTS**

e.g. ramp, cargo,
shipping order,
status

**SENSORS &
CONNECTED
DEVICES**

e.g. GPS,
temperature,
shock, humidity

**DATA
MANAGER**

Import
Export
Rules
Store

**CORE
SERVICES**

Data
Processing
Data Linking
Message
Transformation
Routing
Geocoding

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BASE LAYER

Multi/syncromodal Transport

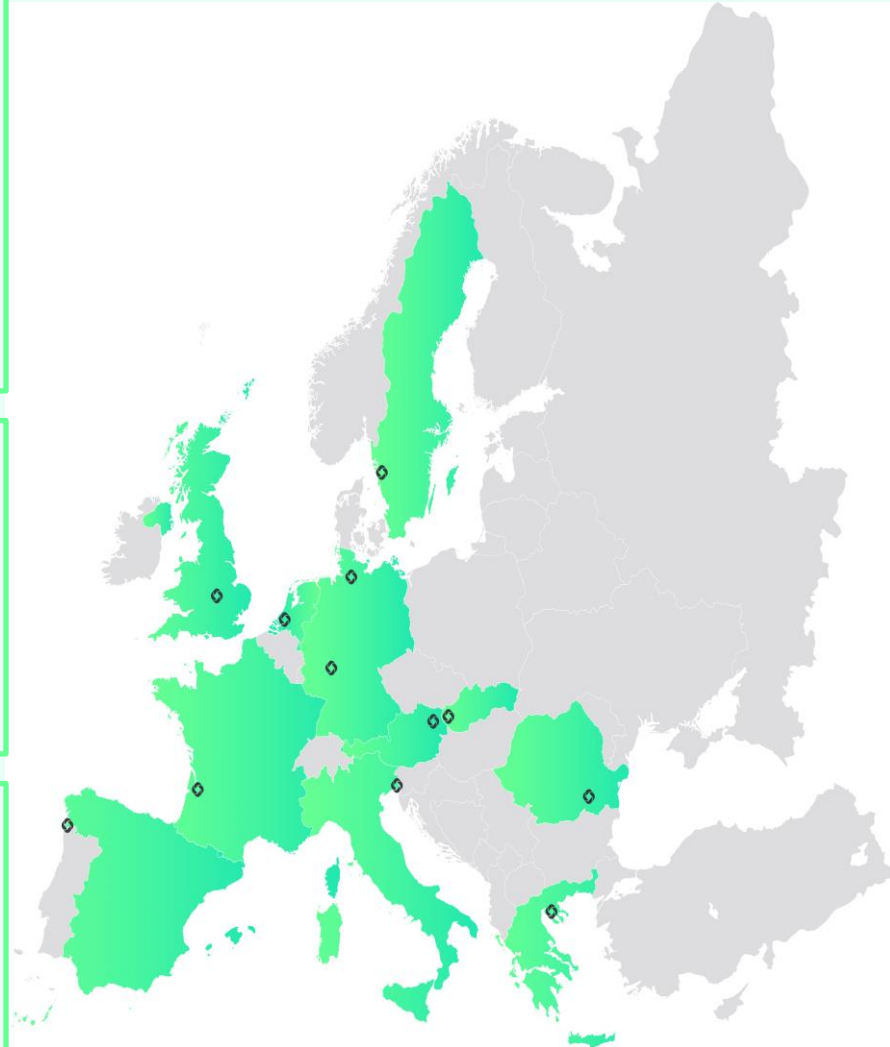
- Thessaloniki-Balkans & central Europe via rail/road
- Gothenburg-Hamburg, Bratislava load control centre, Trieste to three TEN-T corridors (Scandinavian-Mediterranean, Mediterranean, Baltic-Adriatic)
- Urban Bordeaux & Atlantic Corridor
- UK - Continental EU - China logistics
- Bucharest-Vienna: Inland waterway

Intelligent Hubs

- Sea ports: Hamburg, Gothenburg, Bordeaux, Trieste
- Railway hubs: Hamburg, Trieste Northamptonshire
- Inland waterway (barge) terminals: Bucharest Vienna
- Cities: Bordeaux, Gothenburg
- Virtual freight centres: Thessaloniki Industrial Area

Network Optimisation

- The whole logistics network, incl. ports, inland transport (road, train, barge) in The Netherlands, Germany and Spain
- All sites that will cover multi/ synchronomodal transport





AEOLIX innovation areas

Interoperability

Interfaces with any logistics information systems

Support continued development of standardized formats

Technical

Distributed open system through configurable plugin APIs.

Demand driven from users rather than supply driven

Legal

Data access, privacy, identification, authentication

Secure, Resilient and Trusted environment procedures

Business

Enable low-complexity and low-cost connectivity

Business models and public-private governance

Communities

Open to all stakeholders across modes, within and across related supply chains.

Towards a Single European Transport Area

Consortium



PROJECTS



CHALMERS



viadonau

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Associated partners

- **Standardisation Bodies:** CEN, ETSI, GS1
- **Networks :** ITS Germany, TTS Italy, ITS UK, ITS HELLAS, ITS Germany, CLECAT, Business Region Goteborg; Wolfsburg, Cluster Canario (CCTL), TLF
- **Users:** a-PAK, Road Cargo Sweden, Greenery Zuid Europa, Gecoinsa; Movelco Mobility, LTS, CABLERIAS Group
- **Technological companies:** XEROX, Go Swift, R-IPS, Portbase, Tjörns Bilservice AB, Consenso, Kaleido Ideas & Logistics; Little Electric Car España; Exla Plásticos,
- **Public Authorities :** US/DOT, French Ministry of Transport, German Ministry of Transport, Italian Ministry of Transport, Romanian Border Police, Romanian Naval Authority (RNA), Hessen Traffic Management, City of Hamburg, Port of Gothenburg, Port of Vienna, Swedish Maritime Administration, Trieste Marine Terminal, Transporte Augusto, Swedish customs, Traffic Swedish Administration
- **Research Centres and test facilities:** Transport planning and research Institute (MOT) China, VIGOTEC



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Exchange Innovation Platform
community



Where to find us next!

- Demonstration showing innovative technologies for freight and logistics (CO-GISTICS CIP)
- Port of the Future event
- Special Interest Sessions

Meet in Asia Pacific for the world's leading transport technology event in 2016



10-14 OCTOBER 2016
MELBOURNE, AUSTRALIA





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