



<u>COG</u>nitive <u>Logistics Operations through secure, dynamic and ad-hoc collaborative networks</u>

Project Pitch Presentation

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<u>COG</u>nitive <u>Logistics Operations through secure,</u> dynamic and ad-hoc collaborative networks



Project Coordinator

cmit

Technical Coordinator

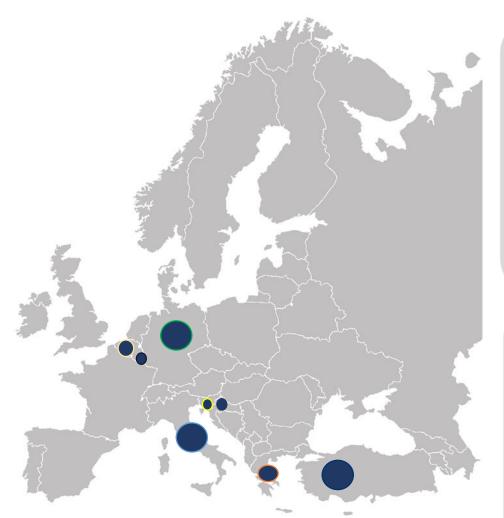
Singular Logic 7

Scientific Coordinator



Project Funding: 5mio €

Start Month: June 2018 End Month: May 2021 Duration: 36 months











Pilots









Associations

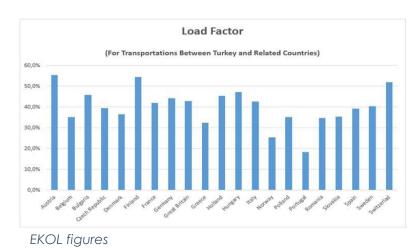




Challenges in Collaborative Logistics



Load factor optimization



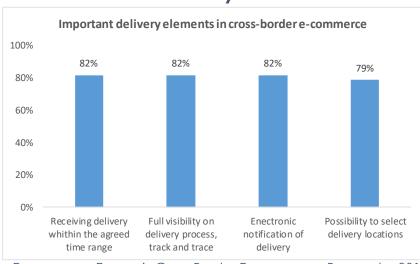
Dynamic response to events and ad-hoc orders

- Ad-hoc deliveries/ returns
- Missed deliveries
- ~25% of the total delivery requests for EKOL Logistics is on the fly.

Flexibility

- (re)schedule deliveries
- Knowledge generation from big data (events, missed deliveries, traffic, etc.)

The growth of ecommerce and Cross-country deliveries



Ecommerce Europe's Cross-Border E-commerce Barometer 2016

- Common information models
- Alignment of tools and delivery processes

"Cargo Hitchhiking" Tool

IoT and Analytics technology

Merge/consolidate deliveries

Identify "nearby" opportunities

Create ad-hoc collaborations

 Tools to identify possible collaborations in real-time and along the route

"Cognitive Logistics Advisor" tool

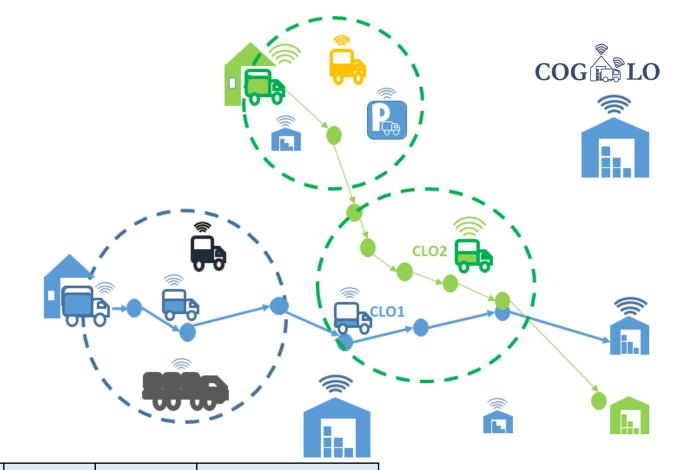
- Big data/ Deep learning
- Cognitive Logistics Object (CLO)

Secure, private and trusted networks

- Security and Privacy aware policies
- Blockchain infrastructure for traceability, transparency and trust

How it works

- 1 A CLO is always aware of its status
- The CLO (truck, warehouse, Parking spot, etc.) joins different fixed or ad-hoc social networks
- The CLO constantly communicates with its fellow CLOs to negotiate alternatives in case of an event



Pilots	Cross- country	Multi- modality	Collaborative urban logistics
Posta Slovenia + Croatia Post Cross country Logistics	X		
Hellenic Post a) 3PL collaborations b) City region Courier Express Parcels		Х	X
EKOL + Trieste Port Operator Intra-Terminal Operations & multi-modality	X	X	

Benefits

- Increased load factor
- Reduced costs
- Reduced deliveries improved assets utilization
- Improve delivery times
- Reduce Network Density: Point-to-point distance
- Improve responsiveness:
 - Average response time (call-to-pickup)
 - Pickup time-window width
- Improved customer satisfaction





Get in touch...



www.cog-lo.eu



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