This Communication is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°957258

IOTWeek

Dublin —— June 20-23, 2022

Project Ecosystem around DataPorts

Mr. Ignacio Lacalle Úbeda (UPV – Researcher)

GLOBAL VISION:

IoT TODAY AND BEYOND

IOTForum

What are the common motivations?

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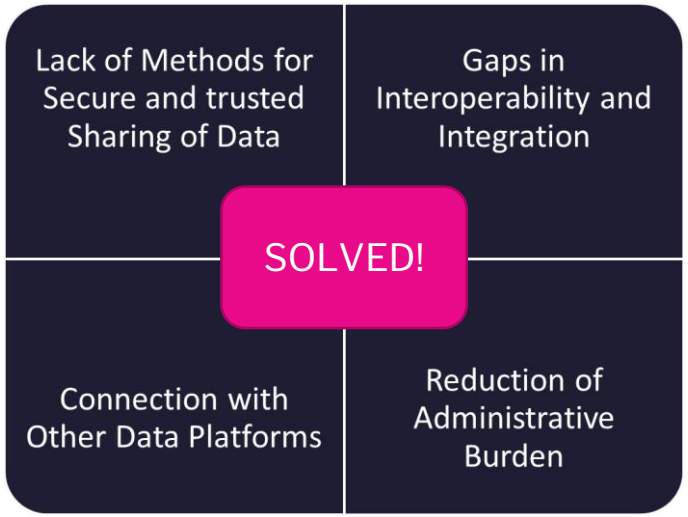
DataPorts as ecosystem creator – “traits”

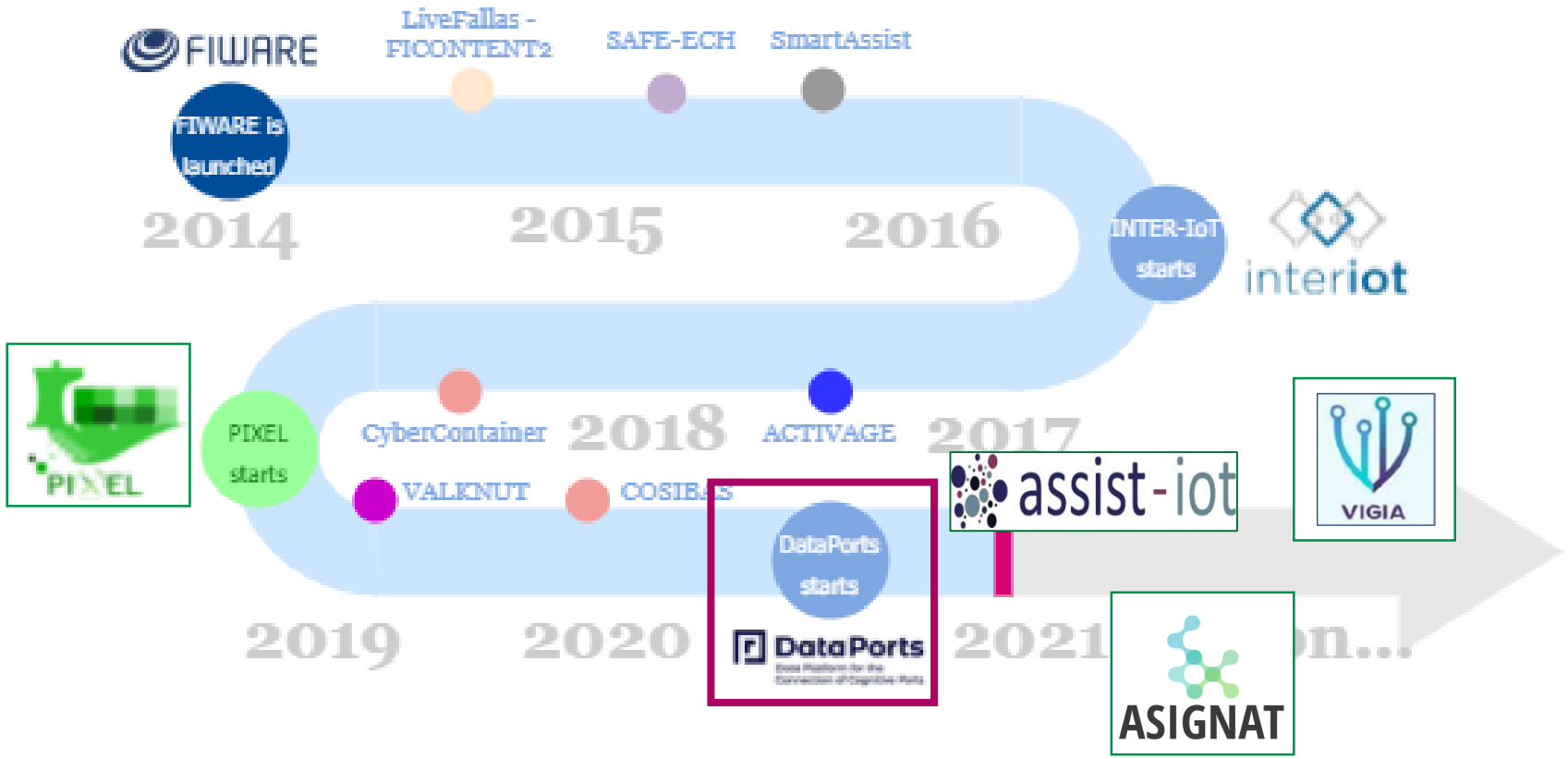
- Semantic Approach for Data Sharing
- Trust & Security in Data Sharing
- Data Trading using Blockchain
- Novel Cognitive and AI-Based Services

DataPorts
Data Platform for the Connection of Cognitive Ports



Projects as part of the Ecosystem

SATRD



Interaction with PIXEL – "the project"

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"Port IoT for Environmental Leverage"

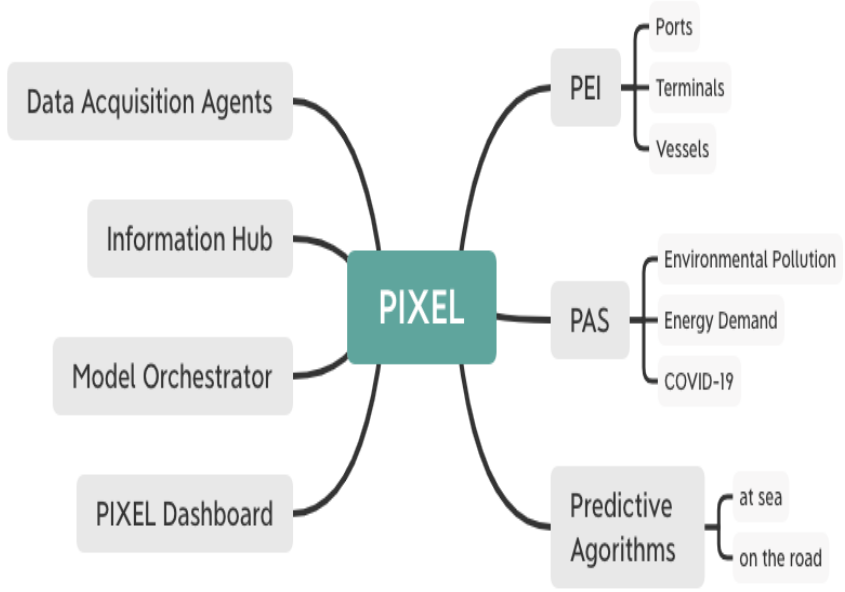
Reduction of environmental impact of port activities

Reduction of operational and infrastructural costs

Improvement of logistics efficiency in multimodal hubs

Better Port-City **integration**

Less dependency on different technology providers when **attempting digitalisation**



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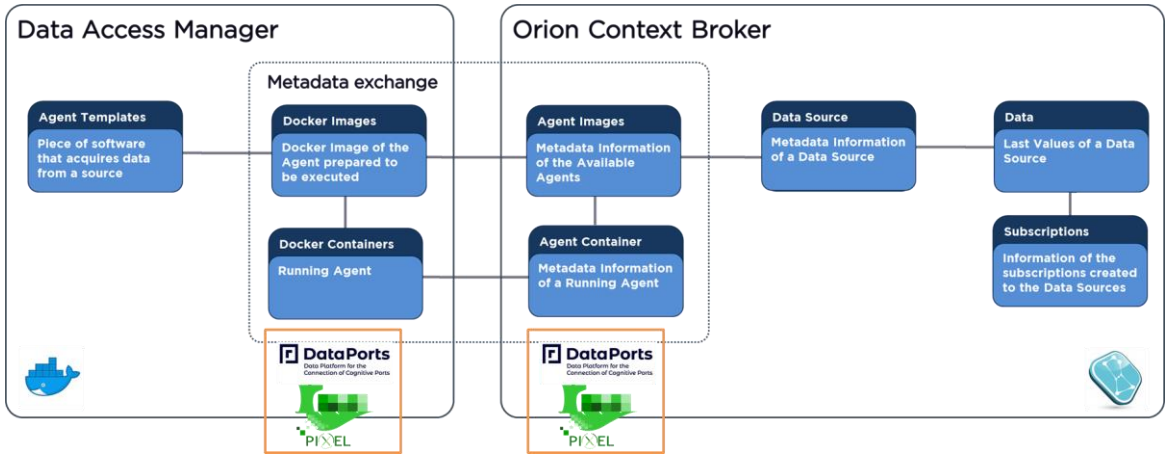
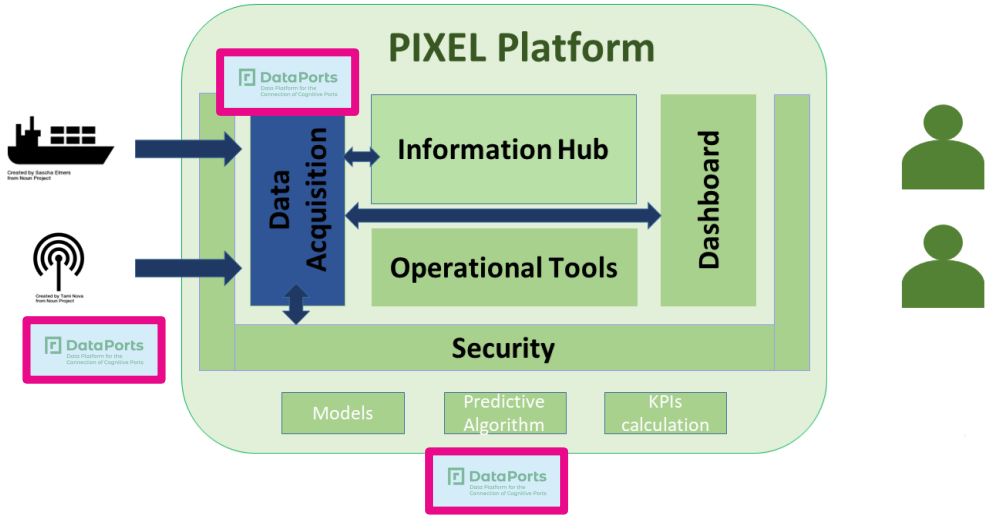
Call: H2020-MG
Topic: MG-7.3-2017
Type of action: RIA
Duration: 41 months
Start date: 1 May 2018
End date: 30 September 2021
Partners: 15
Countries: 7

Interaction with PIXEL – "the ecosystem"





Thessaloniki port

Use cases

- Data driven app for strategic and real time decisions
- Mobile app for port users (passengers)
- Traffic at Entry Gates
- Port Environmental Index
- Terminal Simulation

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DataPorts
Data Platform for the Connection of Cognitive Ports
PIXEL

Interaction with ASSIST-IOT – "the project"

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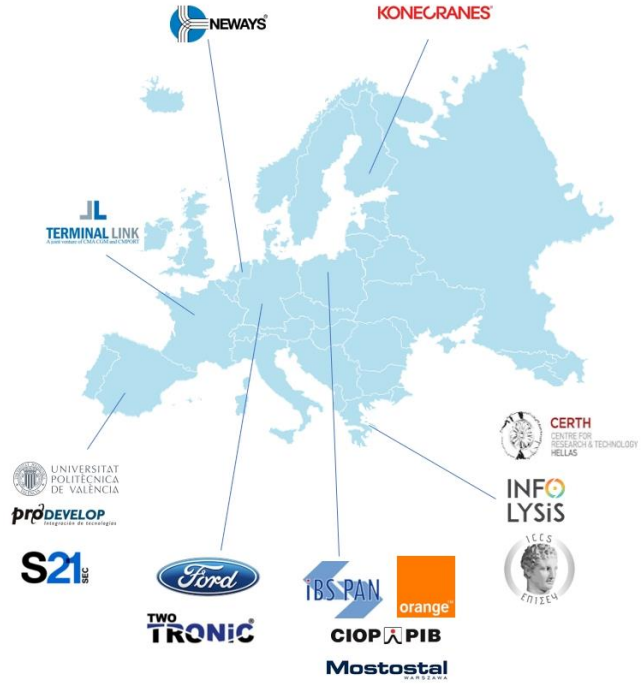
"Architecture for Scalable, Self-*, human-centric, Intelligent, Secure, and Tactile next generation IoT"

Multi-plane-oriented architecture

- To be integrated as:
  - Modularity and adaptability
  - Scalable
  - Decentralised
  - Human-centric
  - Interoperable ecosystem



• Supported by **key enablers** atop a smart network infrastructure, with low latency capabilities.
• Transferring **intelligence closer to the edge**.

assist-iot

Call: H2020-ICT-2020-1
Topic: ICT-56-2020
Type of action: RIA
Duration: 36 months
Start date: 1 November 2020
Partners: 15
Countries: 7

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Interaction with ASSIST-IOT – "the ecosystem"

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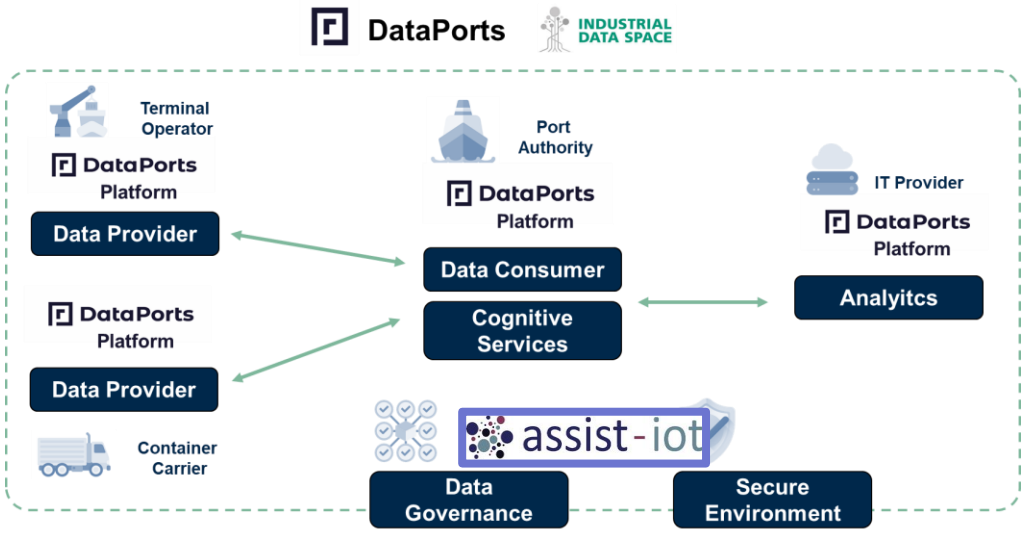

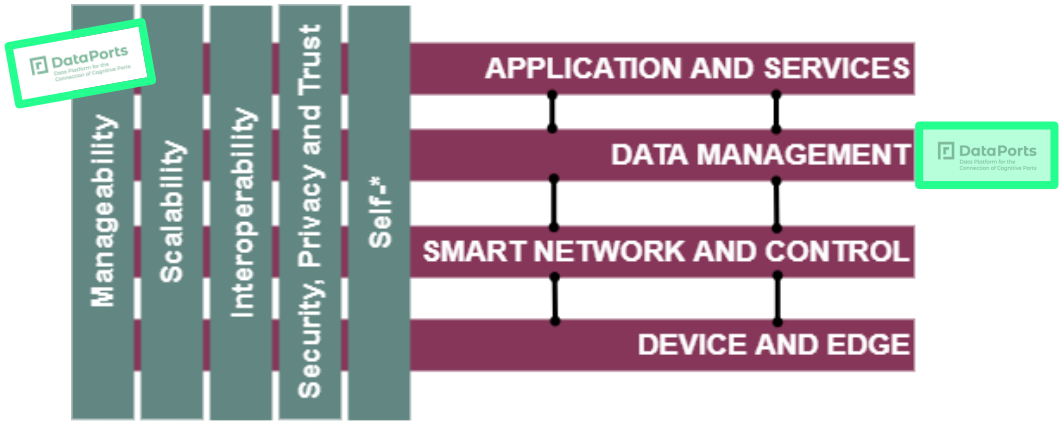

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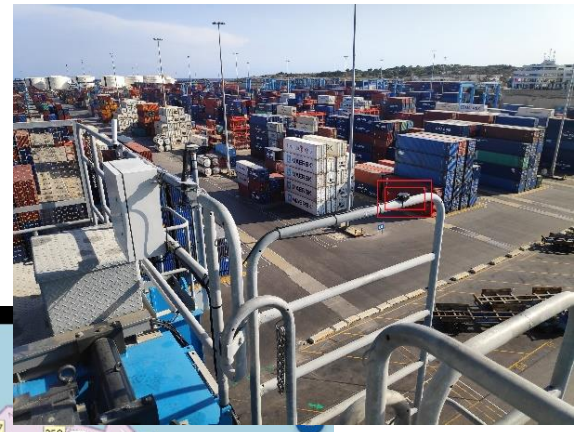

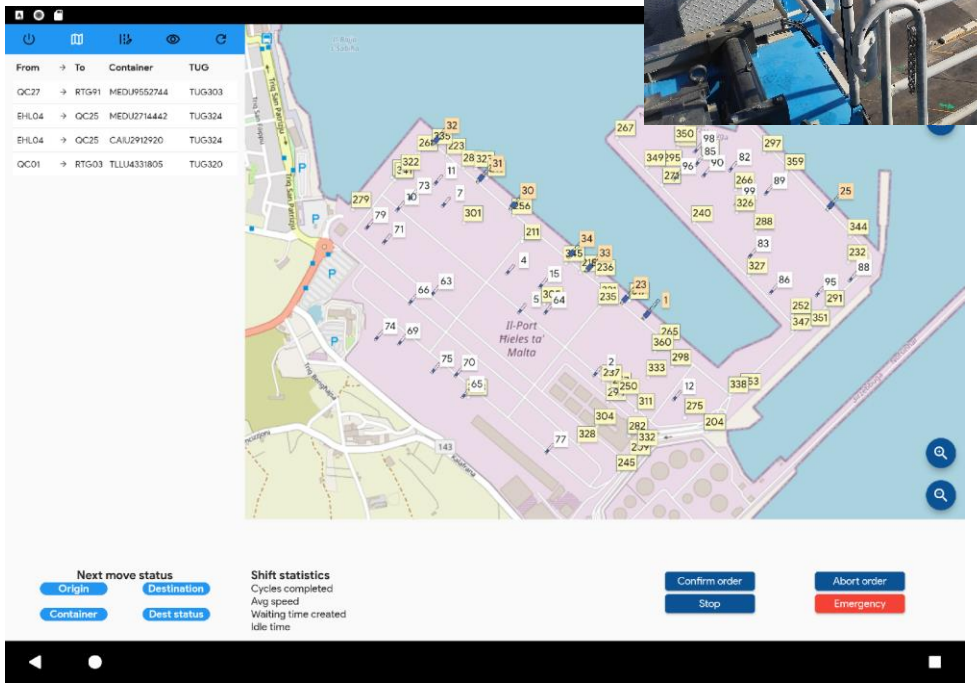

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Interaction with VIGIA – "the project"

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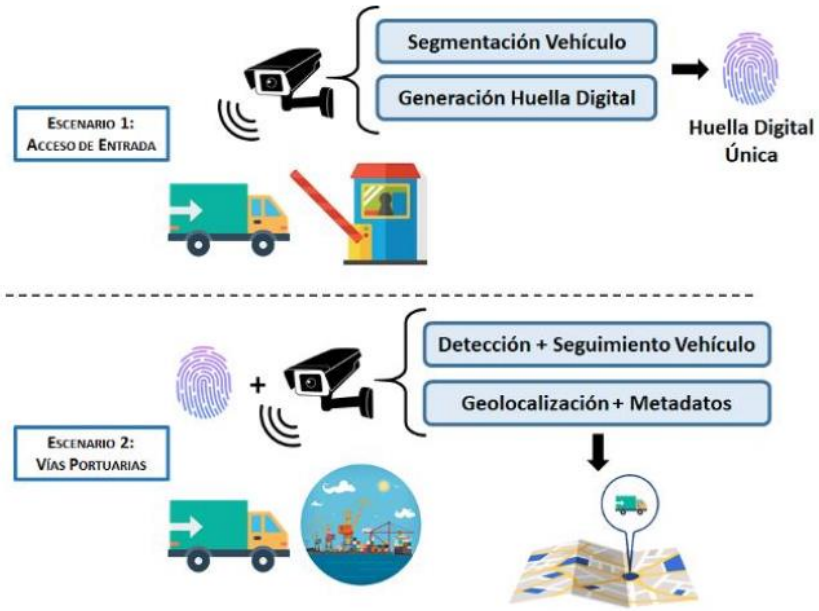
"Vigilancia mediante visión e inteligencia artificial en áreas industriales"



VIGIA

Goal: Holistic Access control to critical port infrastructures over a federated, DLT-based platform performing AI and DL over tracked vehicles.

Call: AVI 2021
Topic: Proyectos Estratégicos en Cooperación
Type of action: Industrial R&D
Duration: 25 months
Start date: 1 September 2021
Partners: 4
Countries: 1

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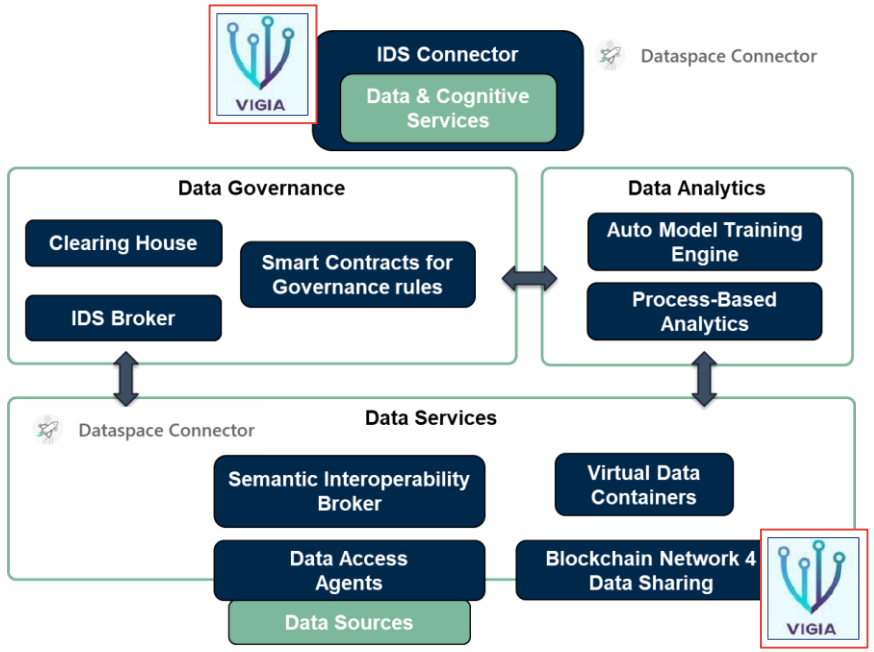
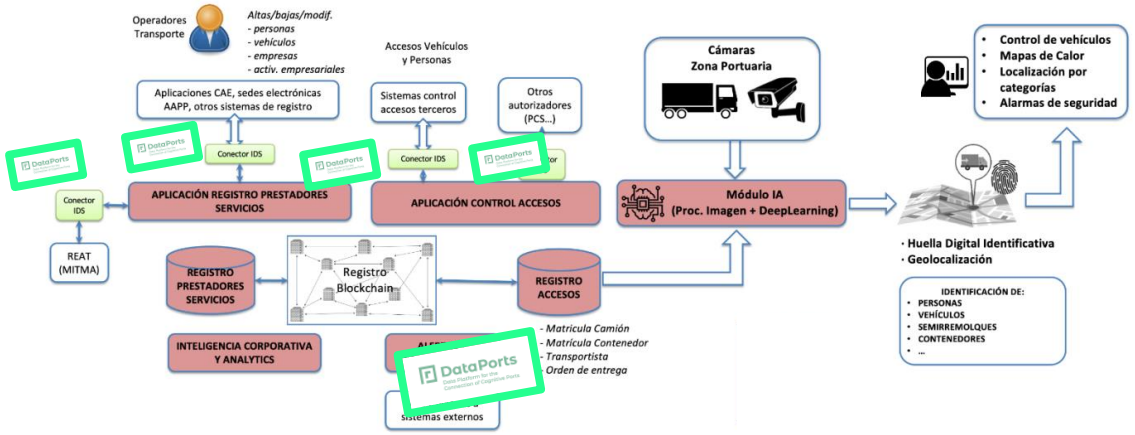
Una manera de hacer Europa

UNIÓN EUROPEA

Interaction with VIGIA – "the ecosystem"





Valencia Port

Use cases

- Tracking of goods and transport operations
- Data Analytics Sharing Platform with the Port Authority
- Entrance gates access
- Tracking of trucks

ITI INVESTIGATE TO INNOVATE

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VIGIA

Interaction with ASIGNAT – "the project"

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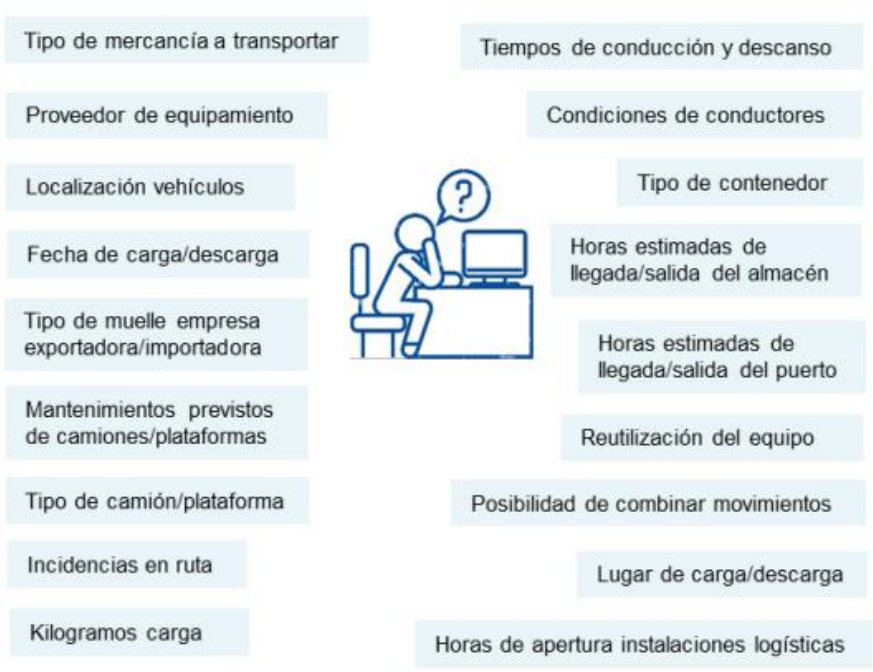
"Arquitectura de Gemelos Digitales y Servicios de Aprendizaje Automático para la Planificación en el Transporte Terrestre de Mercancías"



ASIGNAT

Goal: Development of a Digital Twin to simulate and optimise the assignment of tándem driver-truck over a monitored logistic fleet.

Call: AVI 2021
Topic: Proyectos Estratégicos en Cooperación
Type of action: Industrial R&D
Duration: 25 months
Start date: 1 September 2021
Partners: 4
Countries: 1

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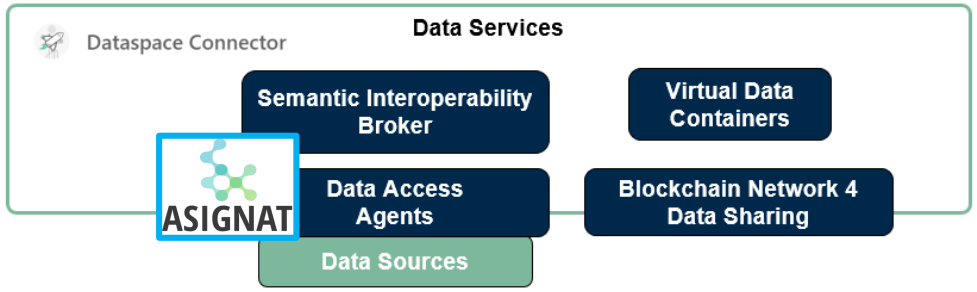
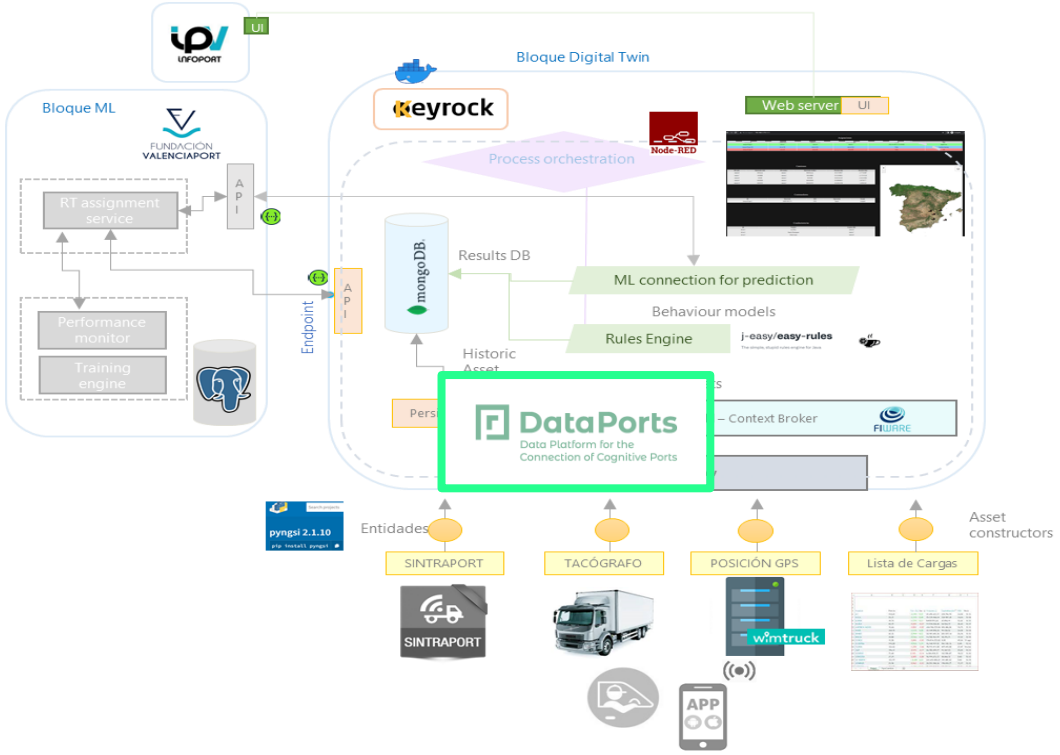
Interaction with ASIGNAT – "the ecosystem"





Valencia Port

Use cases

- Tracking of goods and transport operations
- Data Analytics Sharing Platform with the Port Authority
- GPS truck fleet monitoring
- Road transport assignment smart (AI) recommendation

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Thank you!

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Find more:

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iotweek.org