

# FENIX Initiative: Multimodal transport of waste

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- Founded 2014, Zeebrugge, Belgium
- Dematerializing paper freight documents.
  - e-CMR, DG Annex
  - Transport of Waste, Annex VII
  - Transport of non- or contaminated soil
  - ...
- Stop thinking “Documents”, think about optimizing your processes

# European Federated Network of Information eXchange in LogistiX

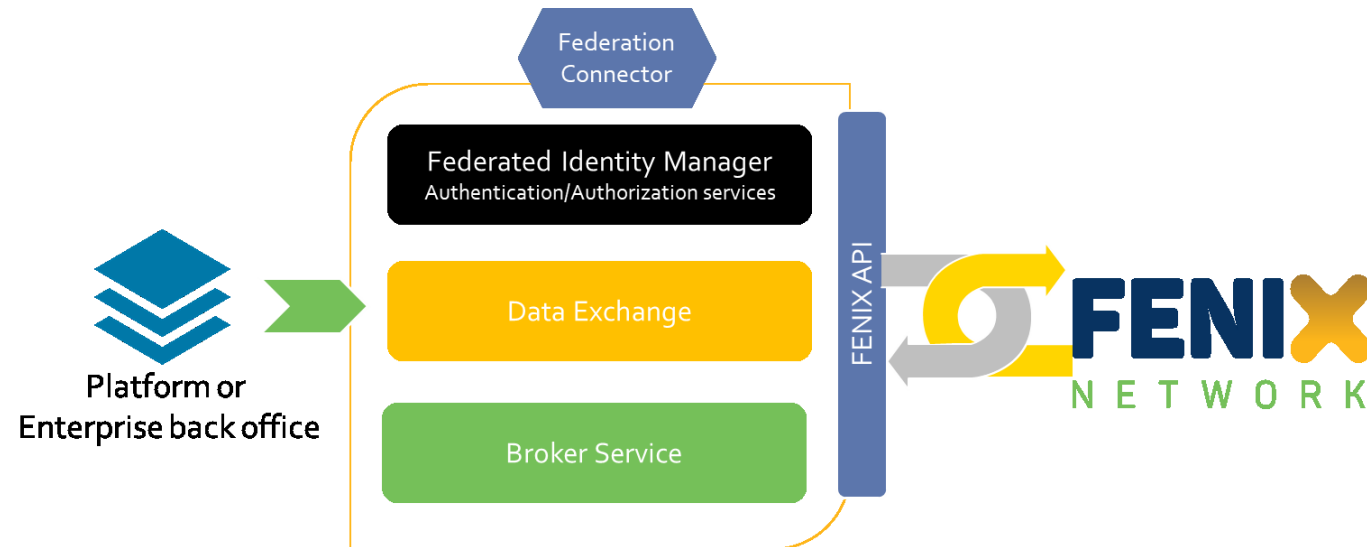
support transportation services

<https://fenix-network.eu/>

# FENIX Connector

“Federation Connector” specification which fits in the business processes based on:

- Identity Management
  - Trust, mutual authentication
- Data exchange
  - Request/Response
  - Publish/Subscribe
- Broker / Catalogue
  - Discoverability



# **FENIX Pilot: Multimodal transport of Waste**



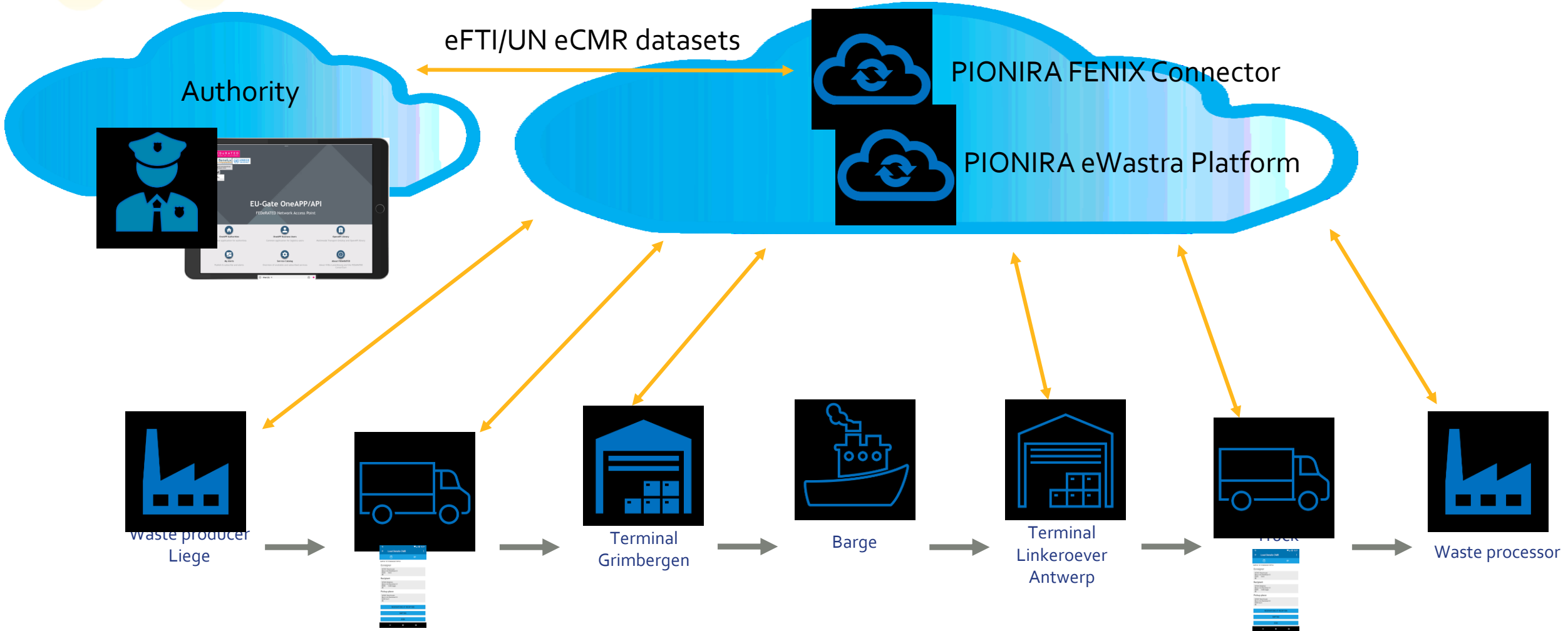
# Goals

- Dematerializing paper freight documents for the transport of waste.
- Multimodal transport
- Data sharing between stakeholders using FENIX enabled platforms
- Can we use FENIX for B2A?
  - Depending on the role of the control authority
    - Extract the eCMR dataset (UN/CEFACT eCMR datamodel)
    - Extract the WSR dataset (eFTI datamodel)
  - Integration as e-CMR/eFTI platform within the EU eFTI exchange environment and FEDeRATED network of platforms

# Challenges

- eFTI still work in progress
- Involving key stakeholders
  - Waste producer
  - Waste processing plant
  - Carriers
  - *Terminals*
  - *Barge operators*
  - *Rail operators*
  - Authorities

# Pilot overview





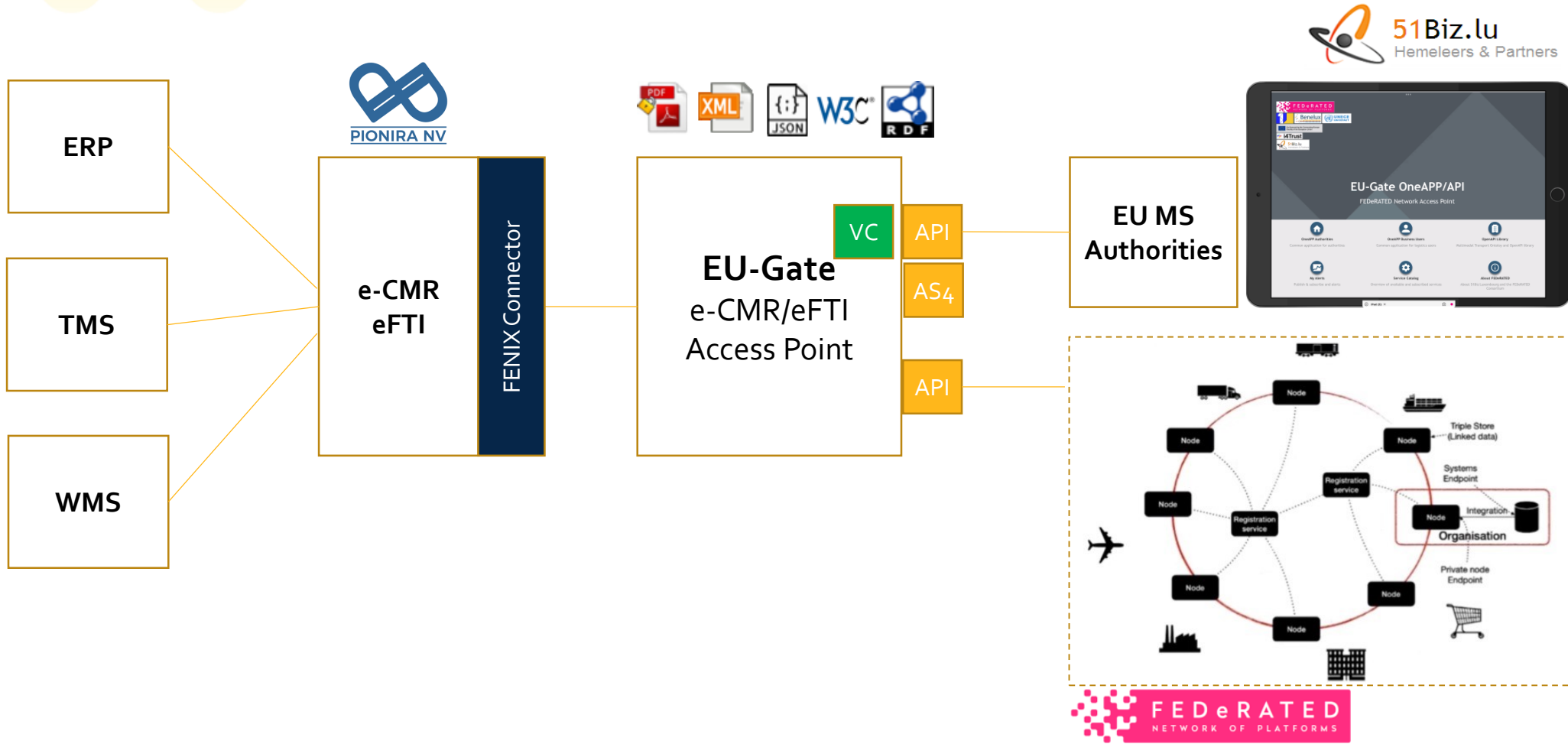
# FENIX for B2B: Operational benefits

- End-to-end visibility for connected parties
- Real-time notifications using FENIX publish/subscribe
- Better reliability and predictability
- Customer centric notifications
- Reduce errors
  - Loss of paper documents
  - Wrong documents at last mile pickup
  - Wrong container delivered during last mile

# FENIX for B2A Possibilities

- FENIX Connector as an access point for eFTI nodes
- Can we use the FENIX Connector in a B2A communication?
  - Secure communication
  - Mutual trust between parties
  - eFTI Service discoverability via the catalogue (Broker)
  - Inspection Resource endpoints:
    - Query by document number
    - Query by transport means identification number
  - UN/CEFACT eCMR and eFTI Waste Shipping Receipt datasets

# OneAPP for Authorities



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# Thank you for your attention



[www.fenix-network.eu](http://www.fenix-network.eu)

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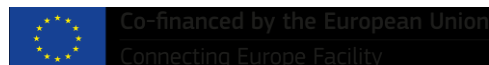
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