



[**CLICK TO KNOW MORE**](#)

Next-Gen Technologies Shaping Smart Sustainable Mobility and Modelling

The Amsterdam Port Challenge

Jan Egbertsen, Strategy and Innovation



Geo Spatial World Forum
Rotterdam, 16th May 2024

Historical Amsterdam



Amsterdam Port Area



Part
of the ARA
region



*A long time ago,
in a galaxy far, far away*

Smart ports



Smart Transport Chain

- Ship / train / truck
- Direct impact Port Authority
- Data exchange / ETA / ETD / infrastructure
- Port planning & efficient use port infrastructure
- DIL (data infrastructure logistics)



Smart Supply Chain

- Cargo on board of truck / train / ship
- Market responsibility
- What data can Port Authority provide?

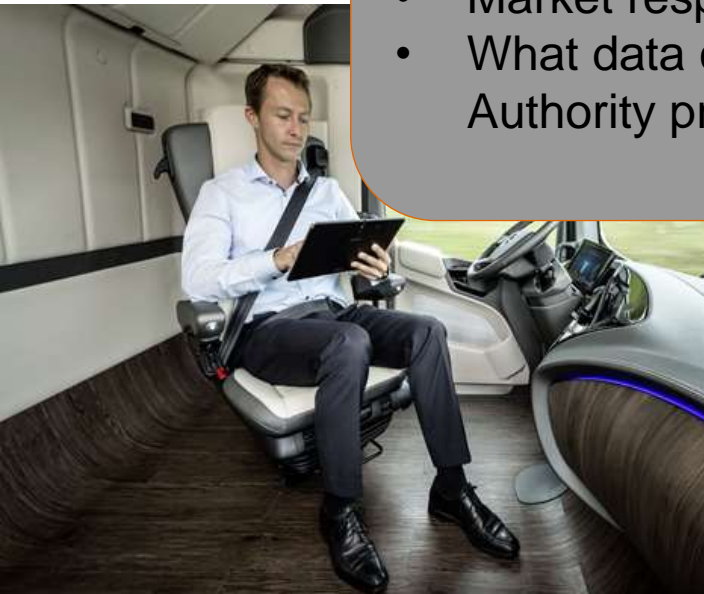
Smart Port Authority

Smart Finance and Documents

- Mainly market responsibility (supply chain finance)
- Portbase systems (customs and harbour dues)

Smart Port Area and Environment

- Lease of land
- Efficient use of existing port area and infra
- Environmental aspects (noise, air quality, CO2)
- Energy sources (H2, electricity)



Port Authority => Port Development Company

Market master



Match maker



Co-creator



- Provide location and conditions for business
- Harbour Master
- Provide network infrastructure
- Efficiency use of scarce resources

- Organize business community and other stakeholders
- Triple helix
- What is their problem and is there a digital solution

- Provide incubator living lab
- Participate in pilots
- SMASH / BO MIRT Zuid / DIL / Portbase

Smart transport planning

Sea and inland ships:

- Core business PoA / Port Call Optimization
- Coöperation transport chain (ETA – ETD) (lock planning, ship owner, tugboat, pilot, terminal)
- Public waiting places barges

Rail:

- Prorail infrastructure manager
- Smart sensors and camera's on port rail infra

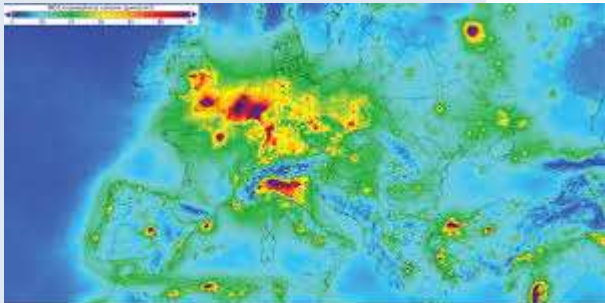
Road

- Several road infrastructure managers (national, province, local)
- PoA role truck parkings



Advanced Technologies

- Smart camera's, sensors
- Lidar, radar
- Drones
- Satellites
- Autonomous ships



According to the Air Quality in Europe report published in 2014 by the European Environment Agency (EEA), 19 EU Member States recorded nitrogen dioxide concentrations above the annual permissible limit, brought from Section 50.



Data driven spatial and mobility solutions for seaports



Be part of a better port



**Port of
Amsterdam**