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Port added value in regional development and sustainable logistics

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Endowed by Groningen Seaports

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Port life cycle Model

Throughput



Design and introduction

- Basic functions
- No standardisation in freight
- Few suppliers and customers
- Local focus



Growth

- growth towards private sector
- Hinterland becomes important
- Distribution and storage facilities



Maturity

- increase in number of terminals
- International competition
- Port authority
- Vision on usage and selling of land
- Role in a network
- Hinterland network

time

Port-Cooperation

> Partners?:

- Other ports, shippers, transport companies, logistics service providers, governmental organisations, industry, environmental organizations

> Forms:

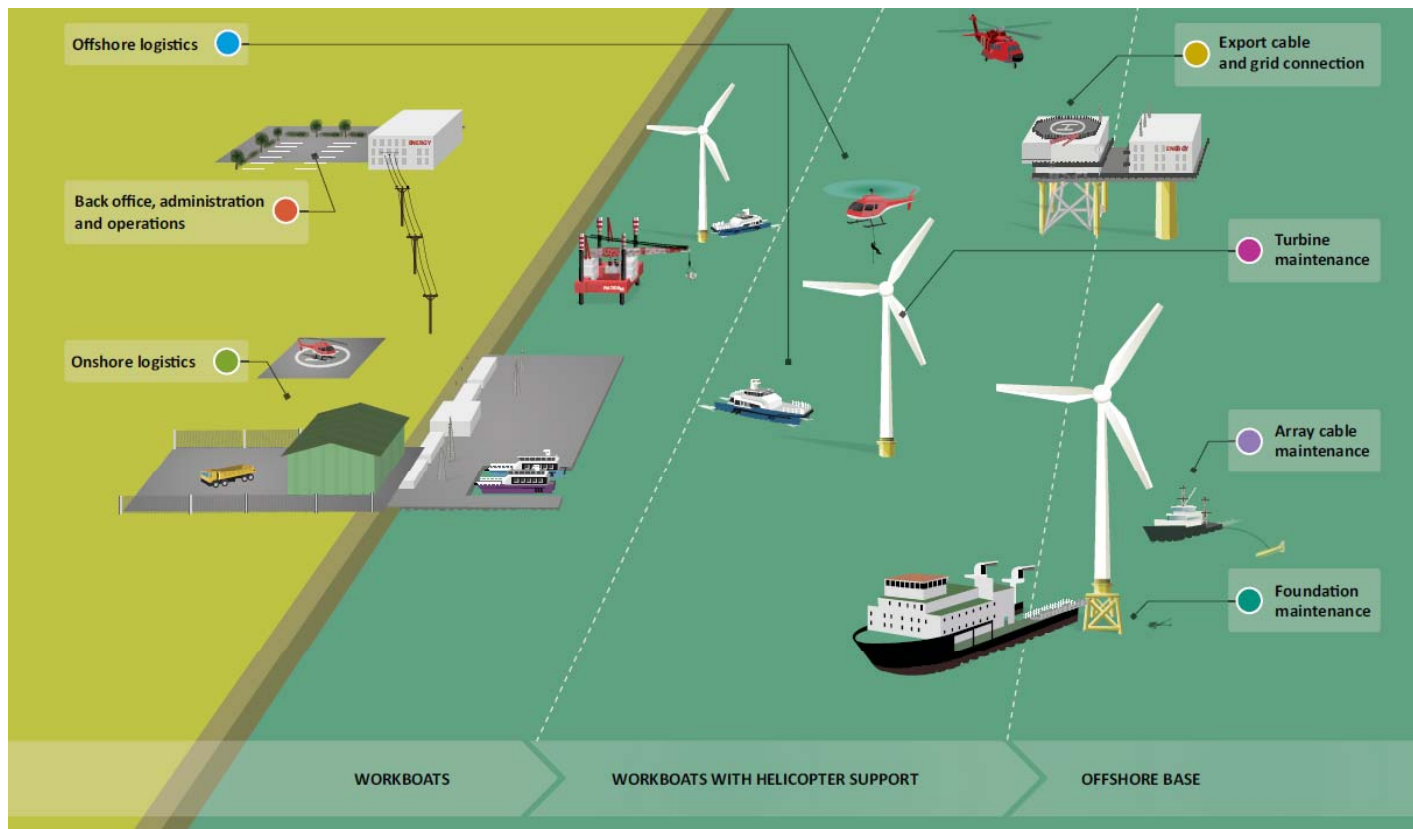
- Industrial symbiose, closed loop SCs (re-usages water, heat and so on)
- Shared logistics services (Portbase)
- Extended gate

> Co opetition

> Sustainable logistics

	Focus Level	Ways of Co-opetition
Customers 	<i>Customer Focused</i>	Collective Marketing Price Agreements
Seaport 	<i>Organization Focused</i>	Joint Venture Knowledge Sharing
Suppliers	<i>Supplier Focused</i>	Collective Lobbying

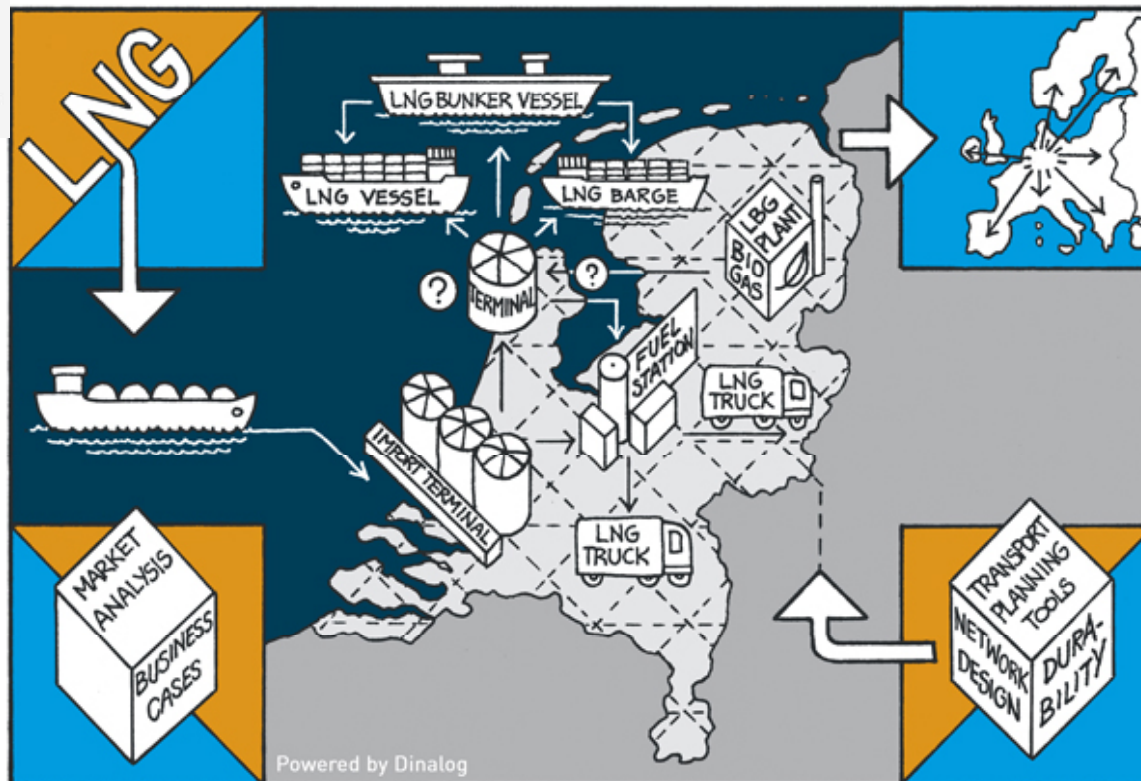
Example: Logistics for offshore wind farms



Example: Design of LNG Networks



FEEDERLINES



Stichting Ubbo
Emmius Fonds



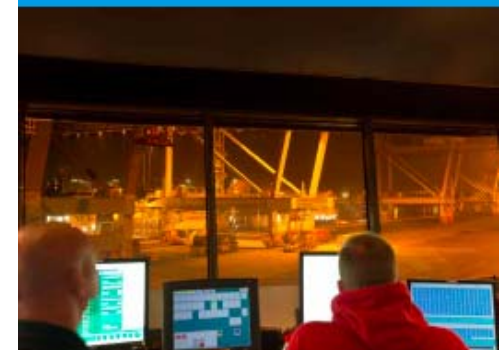


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Ports and their hinterland networks Synchronomodal Transport

Partituur naar de top

Adviesrapport Topteam Logistiek

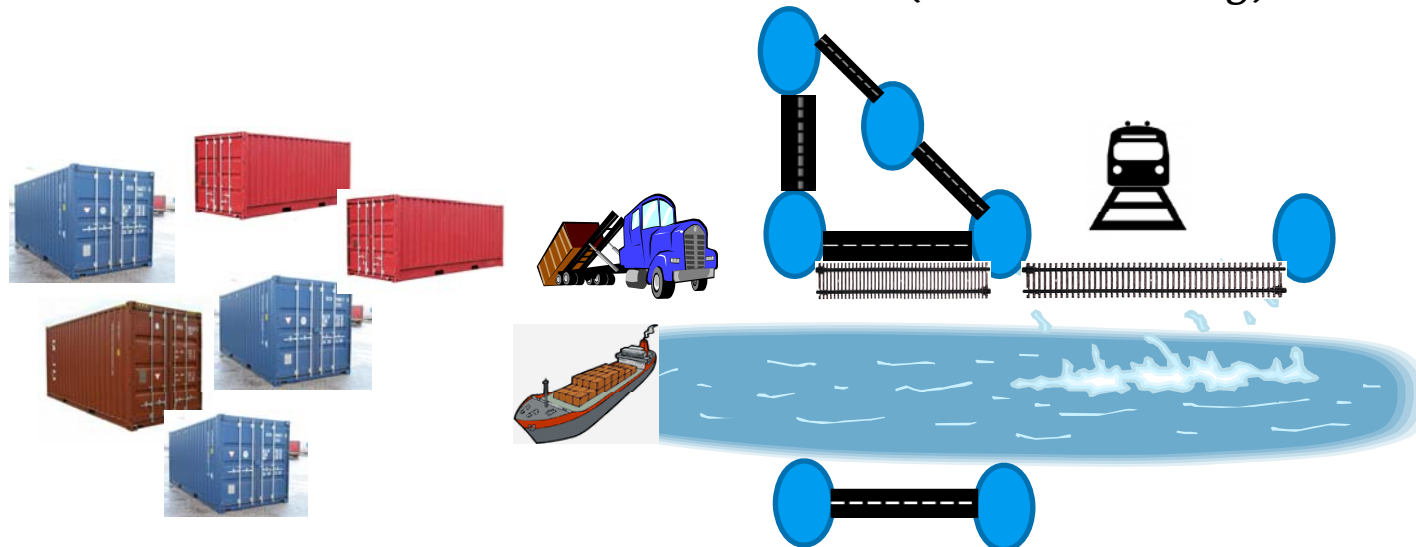


Designing transport networks

- > **Intermodal transport:** Moving products from A to B using different types of modes. Choice will be made up front.
- > **Synchromodal transport:** moving products from A to B, choice for a mode of transport can be made any time based on real-time information. (source: Topteam Logistiek)

Interpretation

- > **Synchromodal transport means**
 - a shipper agrees with a LSP on the delivery of products at specified costs, quality, and sustainability
 - A shipper gives the LSP the freedom to decide on how to deliver according to these specifications.
 - LSP can deploy different modes of transportation flexibly.
 - LSP makes decision to switch to different modes of transportation based on actual circumstances such as traffic information, instant availability of assets or infrastructure and all other factors that might change requirements .
- > So that, actual transport of goods can easily and seamlessly be shifted between different modalities (*source: dinalog*)



Example

- > Disruption river Rhine
 - January 13, 2011 – February, 14 2011
 - Queue of 400 ships after 3 weeks.
 - Costs: 50 million euro (source: nos, October 6, 2011)
 - owner tanker: 10 million
 - Inland skippers: 14 million euro
 - Carriers a.o.: 26 million euro
 - Reputational damage: ???? Euro
 - Solutions: search for other ways of transport and/or suppliers

First pilots show

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Resultaten pilot 'Synchromodaal transport' veelbelovend

14-06-2012 Synchromodaal transport leidt niet alleen tot economische winst, maar kan ook zorgen voor minder voertuigbewegingen over de weg. Dit is de conclusie van de eerste pilot 'Synchromodaal transport Rotterdam-Moerdijk-Tilburg', die eind vorig jaar is gelanceerd door minister Schultz van Haegen van Infrastructuur en Milieu en minister Verhagen van Economie, Landbouw en Innovatie. De resultaten van de pilot werden gisteren in Moerdijk overhandigd aan minister Schultz van Haegen.

- > Road: 19% (57%)
- > Inland shipping 46% (33%)
- > Rail 35% (10%)
- > 3.5 million road kilometers were avoided in 2011-2013
- > Savings of 3000 ton CO₂



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Innovative concept for future sustainable logistics: Physical Internet Initiative

www.physicalinternetinitiative.org

Idea of Physical Internet Initiative

- > Original idea of Montreuil, Ballot and Meller.
- > The way **physical objects** are **moved, stored, realized, supplied and used** throughout the world is economically, environmentally and socially **inefficient and unsustainable (B. Montreuil)**.
- > Organize logistics similar to how information exchange on the Internet is organized.
- > PI initiative extends synchromodality by
 - individual containers,
 - their contents,
 - door-to-door.