

**PORT-NET Workshop  
Antwerp, June 2009**

# **Antwerp's view on extended gateways: from 'mainport' to 'chainport'**

**Goedele Sannen  
Strategy and Development**



**Development**

**World port, centrally located in Europe**

**Role of a Port Authority**

**Hinterland strategy**



**Port of  
Antwerp**

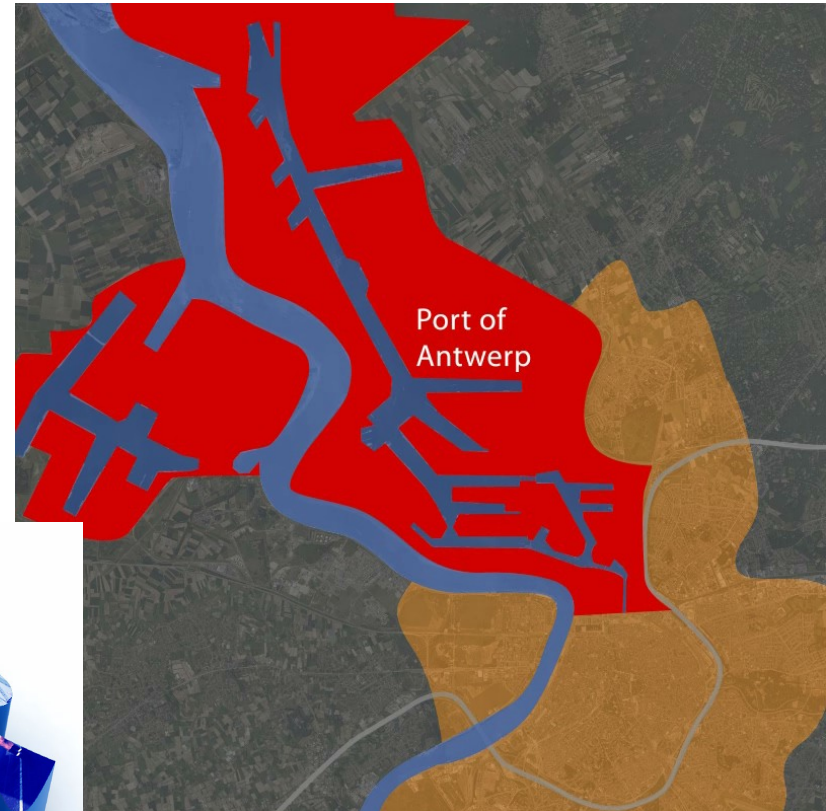
# The Port of Antwerp today

- Total area: 13,057 ha
- Quay length: 160 km
- Railway: 1,055 km
- Roads: 392 km
- Covered storage space: 530 ha

**Logistics**

**Industry**

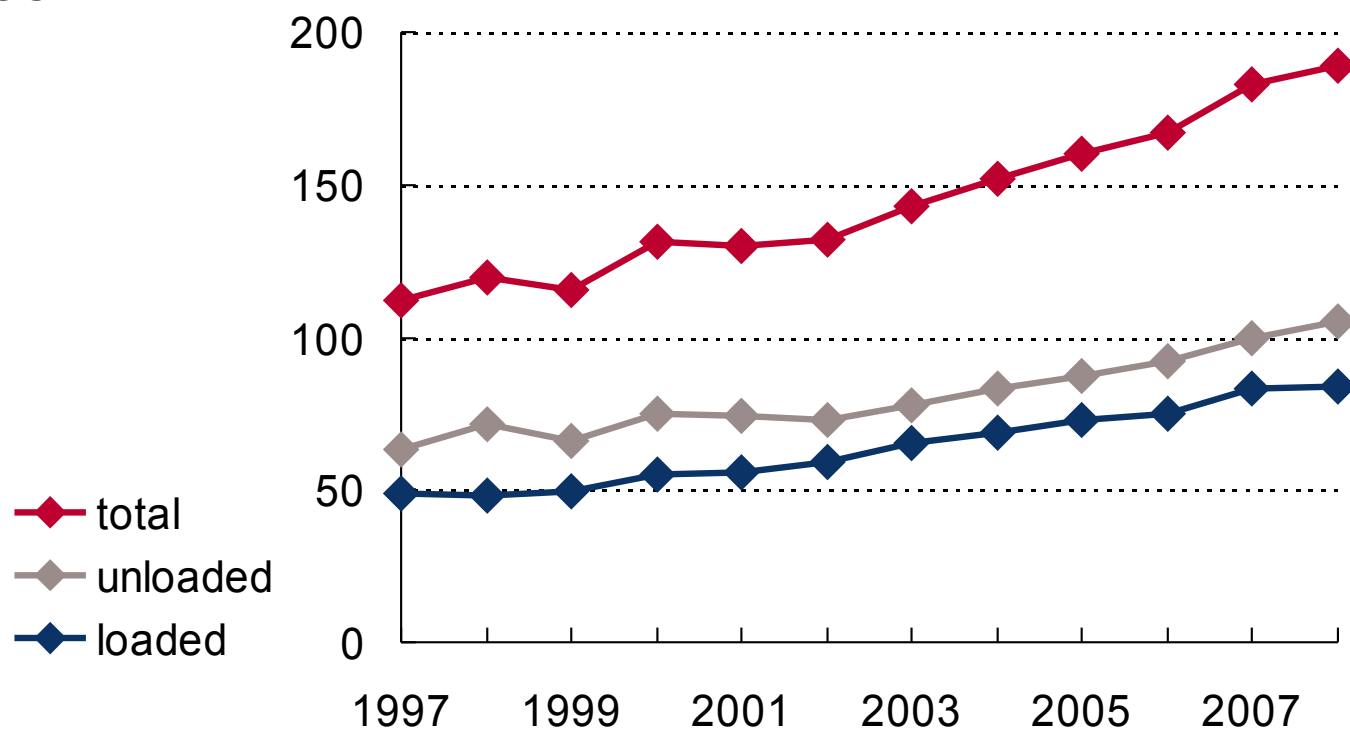
**Cargo handling**





# Maritime cargo transport 2008

190 million tonnes



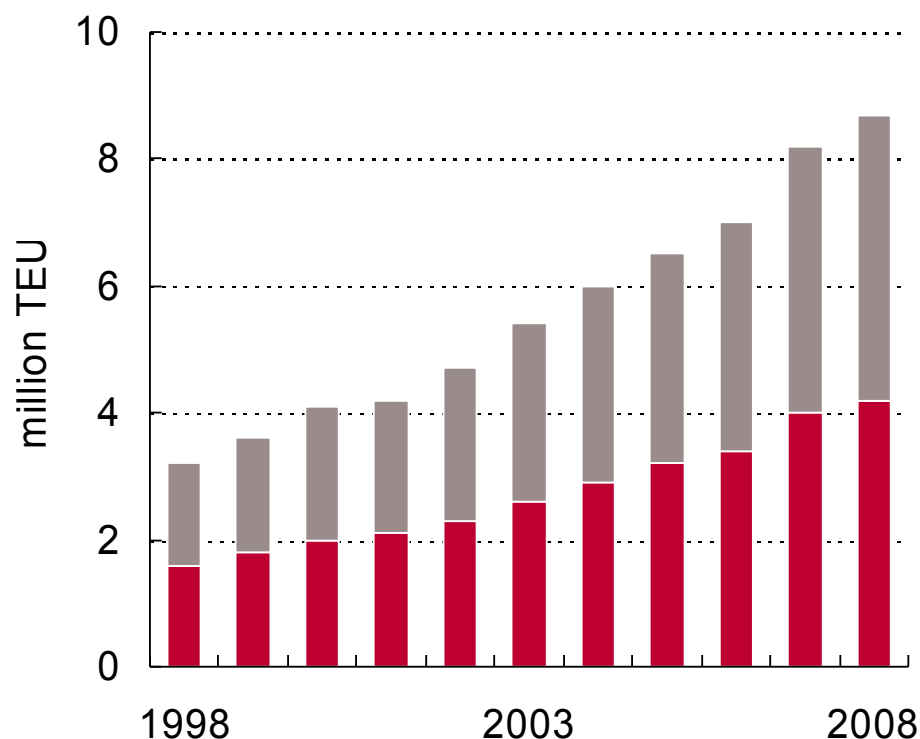
# Second largest European port



# Containers

- Total volume: 8.7 million TEU
- Average annual growth: 9%
- Exceptional growth in 2007: 14%

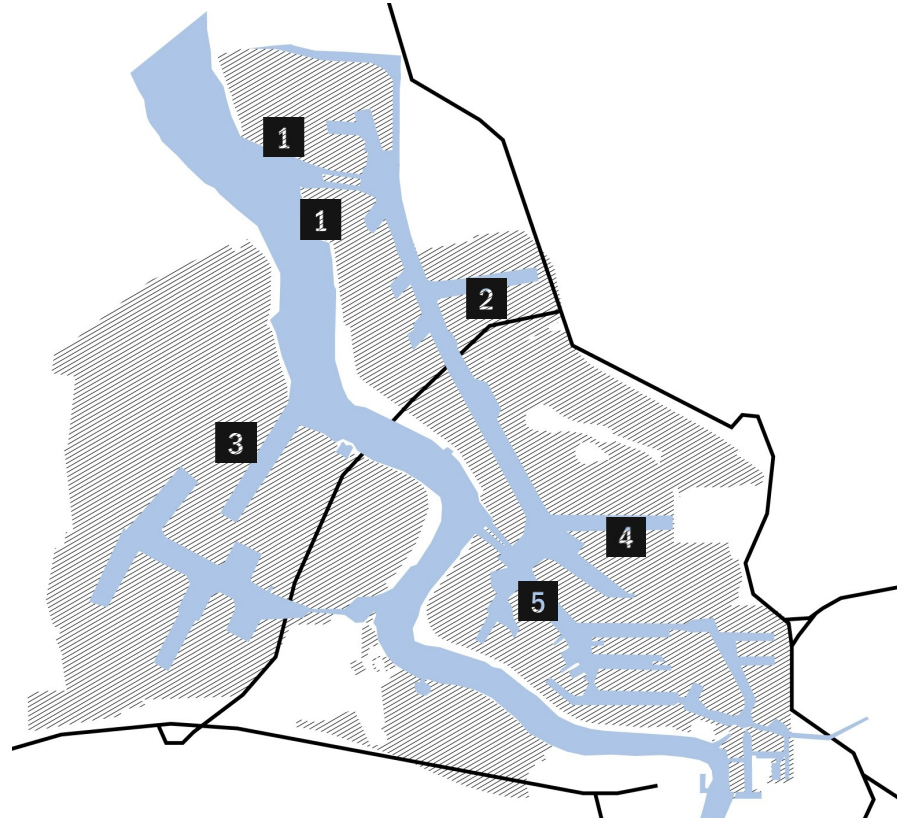
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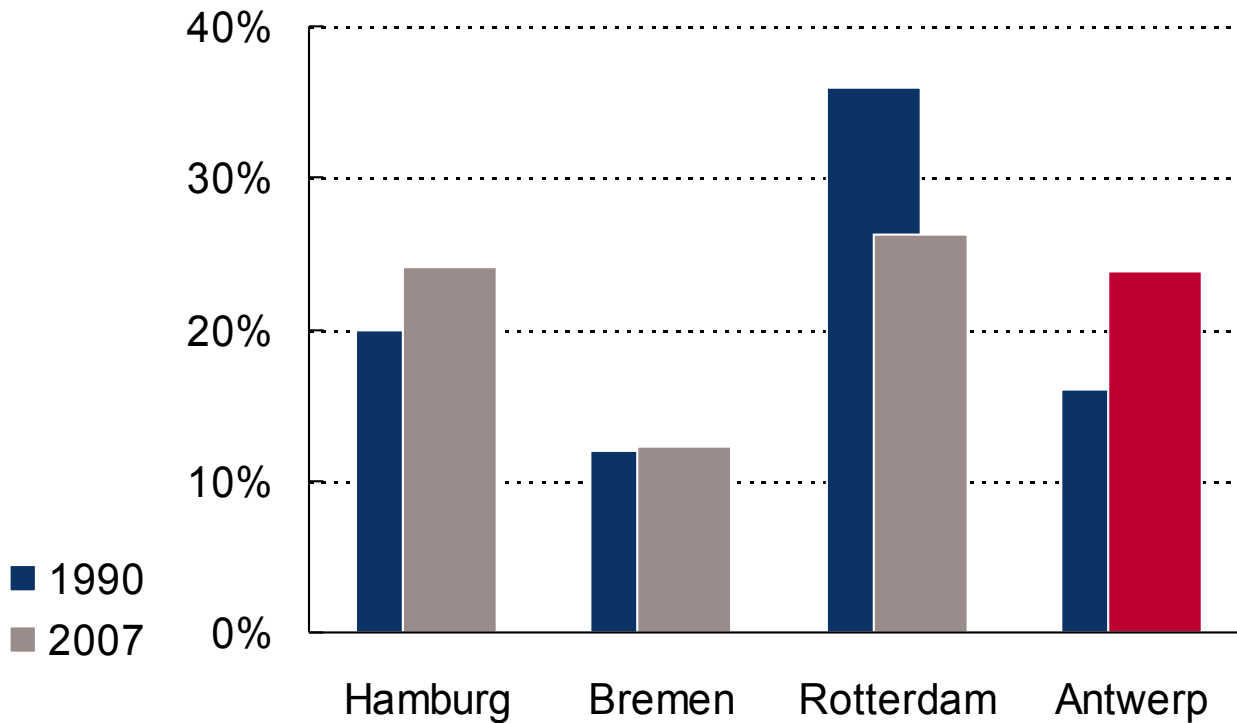
# Containers: terminals

- 1** North Sea and Europa terminal
- 2** Delwaide dock MSC Terminal
- 3** Deurganck dock
- 4** Churchill dock
- 5** Hansa dock

Total capacity: 14 million  
TEU/year



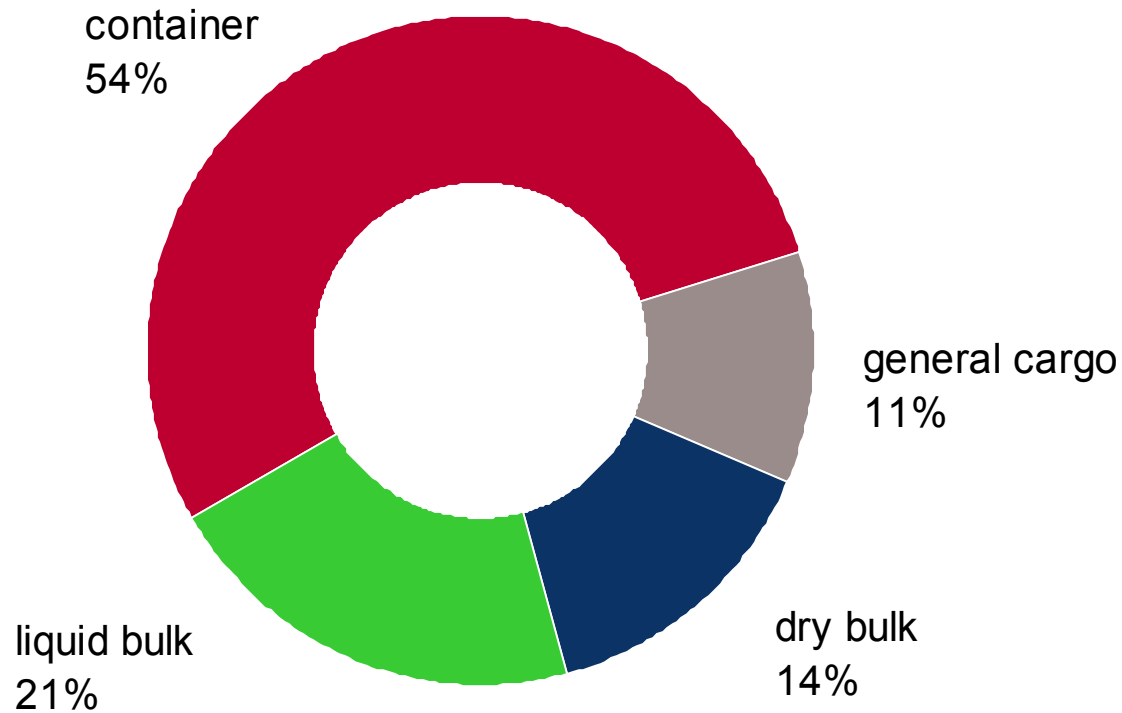
# Containers: European market shares



3rd port in Europe & fast growing



# Maritime cargo transport 2008



Expected container share of 69% in 2030

# Development

## World port, centrally located in Europe

## Role of a Port Authority

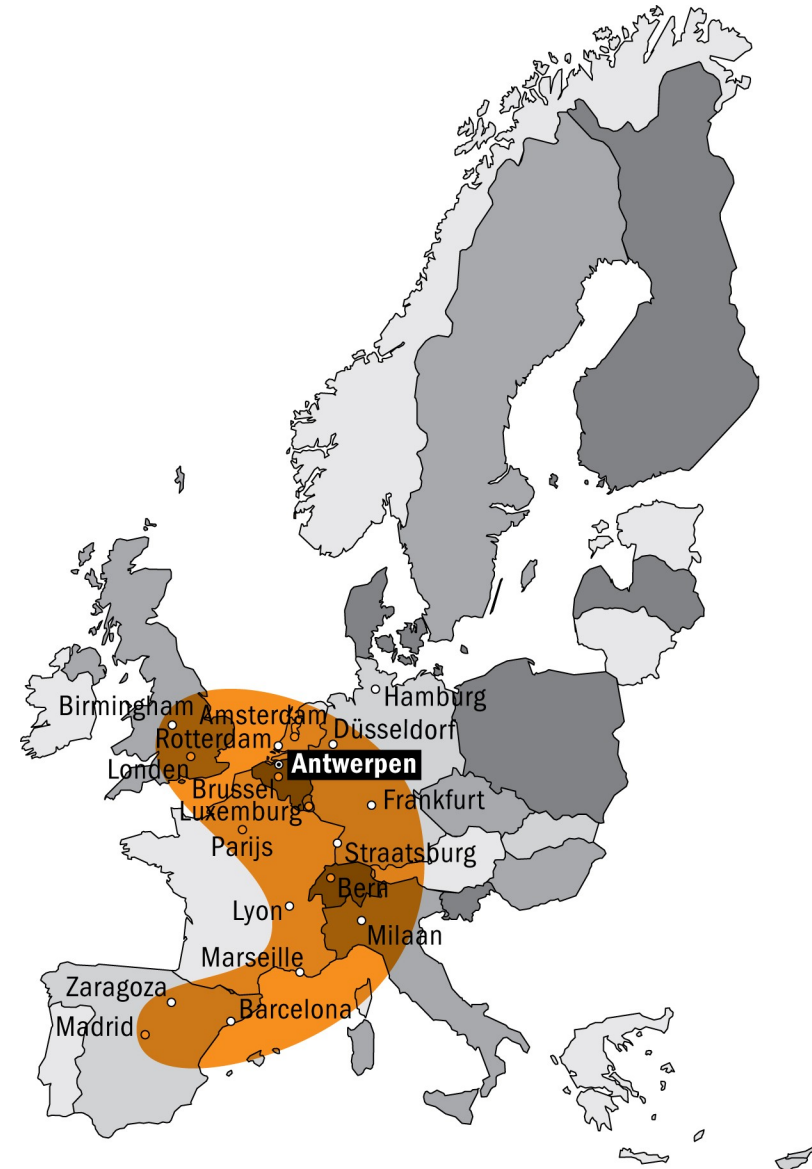
## Hinterland strategy



**Port of  
Antwerp**

# Location in the heart of Europe

- Antwerp is located in the heart of Europe
- The “banana” contains the main European centres of production and consumption
- 60% of the European purchasing power is within 500 km from Antwerp



Source: Cushman & Wakefield, 2006

# The “banana” has become a “drop”

-  Concentration of European wealth
-  CEE manufacturing crescent



Source: Cushman & Wakefield, 2008



# Night shot of the European “banana”



**Port of  
Antwerp**



# Development

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Port of  
Antwerp

# Ports live in a turbulent world



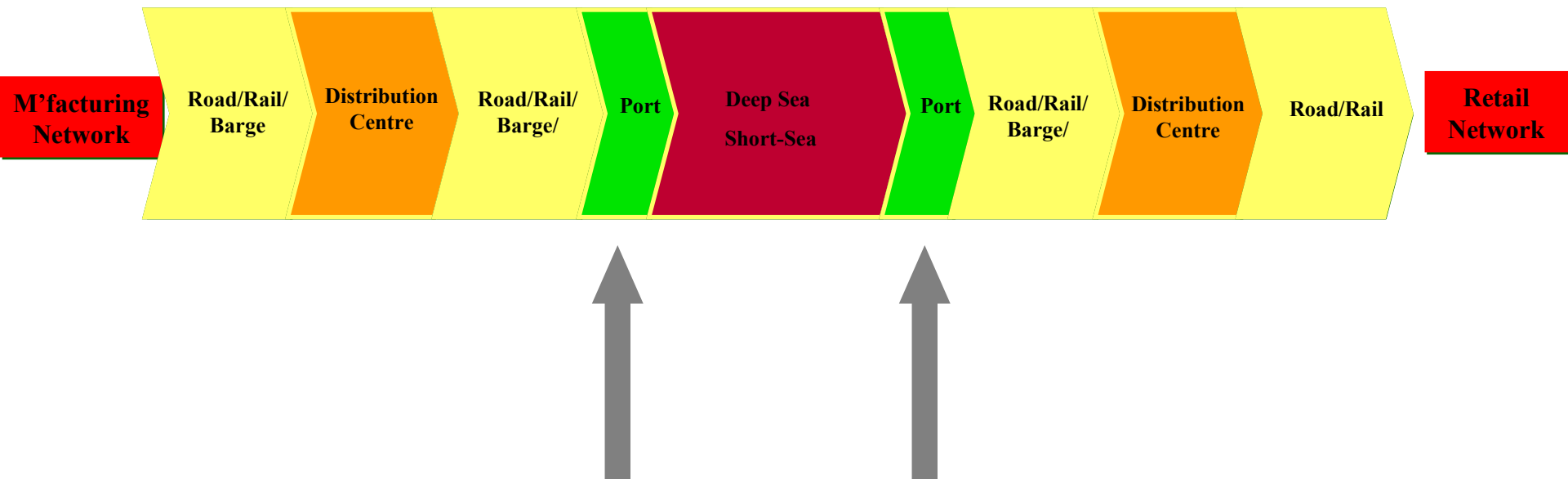
- Logistics environment is changing
- Port competition is changing
- New role for port authorities
- Building **cooperative networks between ports and inland ports**

# The 'traditional' role of landlord port authorities

- Co-ordinate port development and manage basic infrastructure
- Lease out port land to private terminal operators
- Provide some additional services in the port
- Promote the port
- Deal with externalities, such as environment and safety
- Revenue base = land dues/concession fees and port dues

⇒The port area is the central focus: performance of the port in a narrow sense

# New role for port authorities



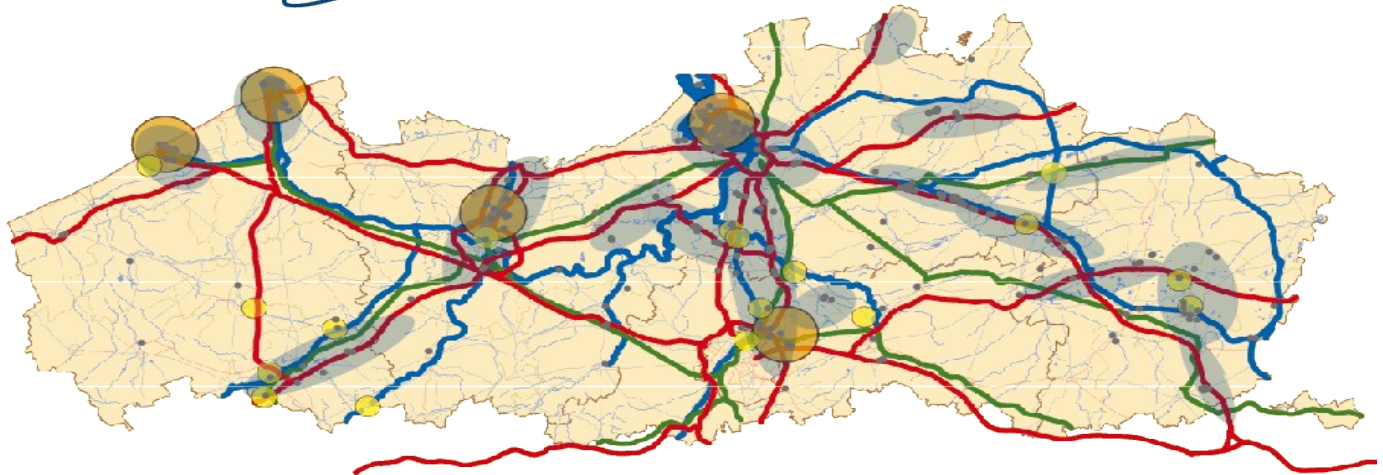
Seaports need to reach into the chain in both directions  
**'Anchor' logistics actors with decision power**  
**Enhance integration of the port in broader networks**



# 'Extended gateway' concept

- Locate logistics activities at their most appropriate location (port or hinterland)
- Basic criterium: **minimal total logistic cost**
- Consider the hinterland as a multimodal network with gateways and transfer points
- Bundling and clustering of flows

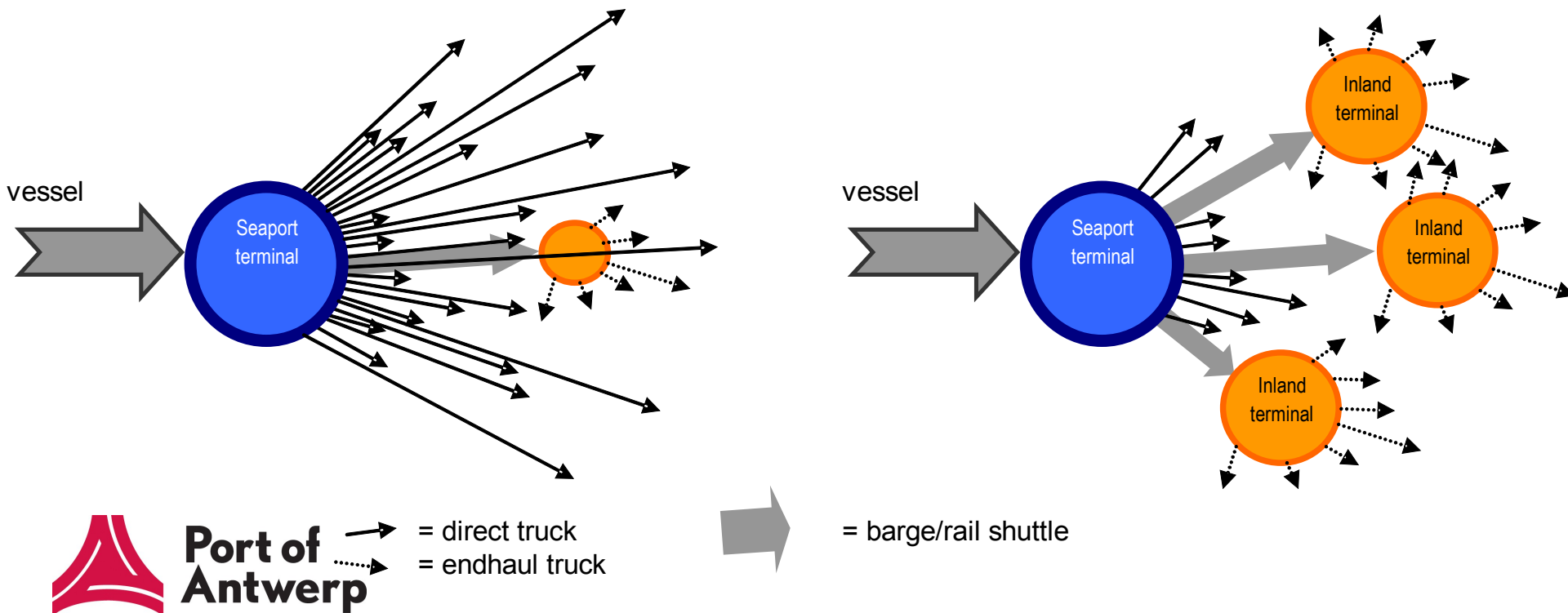
*EXTENDED*  
Gateway





# Network of terminals

- International gateways are the junction of the network
- Creation of added value within the network
- Intermodal connectivity and collaboration amongst companies is of utmost importance
- Improved spatial planning, labour spread, mobility, sustainability...



# Development

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Port of  
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# Antwerp strategy: intermodal and hinterland initiatives: **goals**

## *Core business*

### **Enlarging flows**

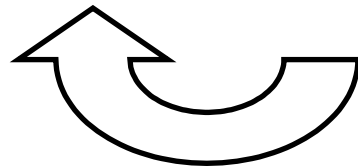
- Anchoring traffic (mainly in natural hinterland) ...
- ... and gaining (mainly in 'competitive' areas)
- Anchoring shipping lines/loops
- Creation of added value in logistics

### **Optimizing chain efficiency**

- Improving competitiveness towards other ports (intermodal connectivity)
- Reducing costs
  - For users
  - For port
- Improved sustainability, spatial planning, mobility

### **Enlarging perimeter of port**

- Guarantee port activities (because: land in port is tight) / Offering alternative location



- Indirect traffic effect
- Positive branding effect

# Antwerp strategy: intermodal and hinterland initiatives: **solutions**

## *Core business*

### **Enlarging flows**

- Improving intermodal solutions
  - Existing network
  - New links
  - For all modes
  - Bundling ('extended gateways')
- Commercial actions
  - Promotion

### **Optimizing chain efficiency**

- Mainly intra port!
- Creation of consolidation hubs
- Enforcing inland terminals/ operators towards co-operation
- Ensuring capacity

### **Enlarging perimeter of port**

- Enlargement of port area
  - FI./B.
  - Elsewhere
- 'Participation' in terminals

# Advantages of a collaboration for the partners

## “Win-win” for the seaport and the inland hub

- Anchoring of trade flows
- Better knowledge of the local markets
- Joint marketing
- More than a “friendship agreement”: financial partnership is real engagement! Sharing benefits & costs & risks
- Important/primordial role for the local partner(s): know-how, added value and employment in the area, modal shift potential
- Alternative location for logistic companies that don't need to be established in a port (land is tight in the port)



# Partnership with inland hubs: pilot project

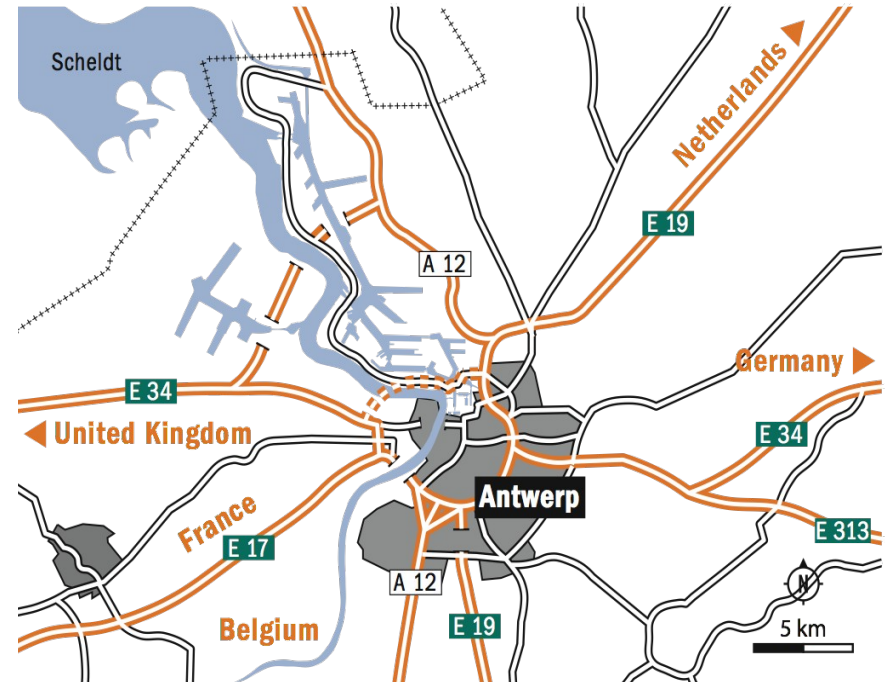
## Tri-logiport (Liège)

- Development of a tri-modal container terminal + added value activities
- Ideal location along the Albert Canal
- **EIG between APA, PAL and SPI (regional investment company):**
  - Joint promotion
  - Prospection of candidates
  - No exploitation



# Port policy towards the hinterland: Infrastructure - Road transport

- The port is surrounded by highways
- Direct connection to surrounding countries
- Merely 40 km from Brussels, the European capital



# Road infrastructure: Closing of the ringroad around Antwerp



Oosterweel connection

# Rail transport

- Antwerp is located on a junction of international lines
- 1,100 km of railway tracks in the port
- Each terminal is connected to the railway network
- 220 loaded cargo trains daily





# Rail infrastructure Investments Left Bank

## Liefkenshoek railway tunnel

- 8 km railway between LB en RB
- Operational December 2013





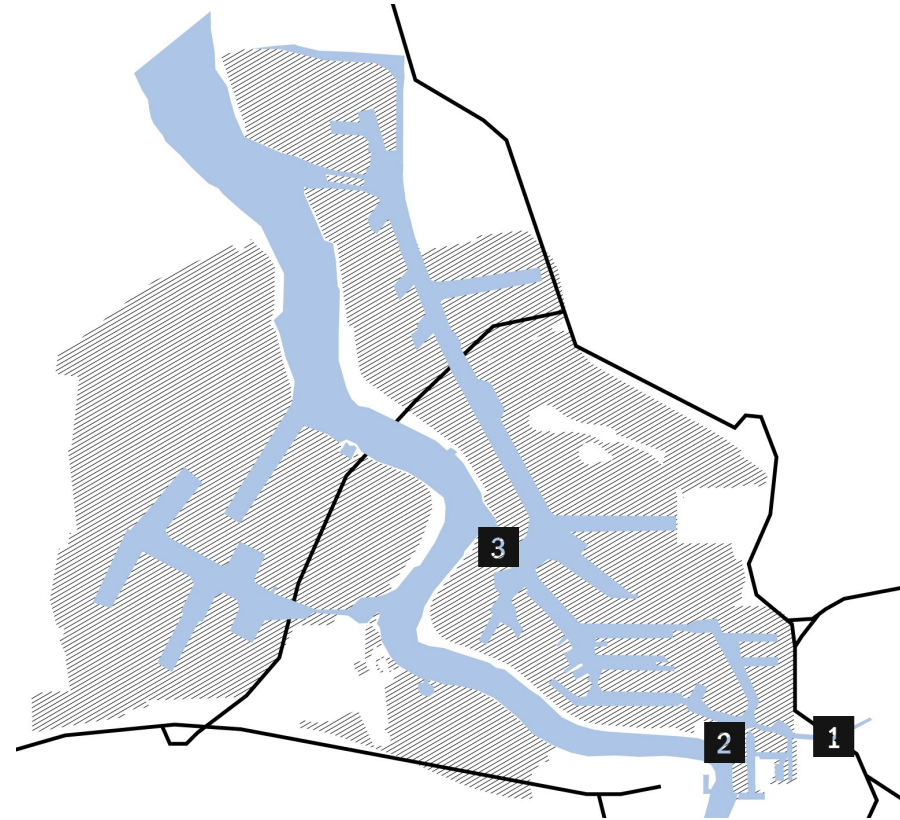
# Barge transport

- Connected to the European waterway network by Scheldt-Rhine canal and Albert canal
- Main inland terminals within easy reach: Liège, Duisburg, Ludwigshafen, Basel, Lille, etc.



# Improving barge infrastructure

- 1** Enlarging capacity Albert canal (4 layers of containers)
- 2** Renovation Royerslock (2013)
- 3** Renovation Van Cauwelaertlock (2008-2011)



# Conclusions

- Success of a port will depend on the ability to integrate the port effectively into the supply chain networks
  - Transport corridors function as the glue between nodes with a central function for gateways
  - Co-operation: both parties are involved: co-designership and co-makership
- Offering as a MAINport an integrated product in the total supply CHAIN!



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