Enhancing Supply Chain Efficiency within Europe

The Port of Antwerp Case

Jan Van Dessel
Rail / Road Consultant Intermodality & Hinterland
10 december 2012
The Antwerp Port: Keyfigures

13.057 ha total surface
1.073 ha development area
620 ha covered warehouses
900 companies
80 kilometres inland location
16.0 metres depth of the river Scheldt (access for largest container carriers)
187 million tonnes maritime traffic (2011, 2nd port of Europe)
8.7 million TEU container transhipment
45 sea going vessels a day
168 barges a day
220 freight trains a day
149,326 total employment
1st petrochemical centre of Europe
17 billion total added value
How to handle the growing cargo volumes to the hinterland?

Between 2010 and 2020 a growth from 180 million tonnes up to 265 million tonnes is forecasted (+50%)

Source: ECSA 2011
How to handle the growing cargo volumes to the hinterland?

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

Sustainability drives the port of Antwerp towards an enhanced and more efficient organisation of the supply chain

→ Active Modal Split Policy

→ Collaboration with hinterland hubs
Active Modal Split Policy

Development modal split

<table>
<thead>
<tr>
<th>Year</th>
<th>Barge (Modal Share)</th>
<th>Rail (Modal Share)</th>
<th>Road (Modal Share)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>56</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>2020</td>
<td>42</td>
<td>15</td>
<td>43</td>
</tr>
</tbody>
</table>

Modal split comparison between today and 2020.
Active Modal Split Policy

Strategy to increase the share of rail & barge transport to 57%

1. Development of infrastructure
   → Liefkenshoek rail tunnel
   → Albert Canal adapted to 4 layer-container transport

2. Optimise market conditions for a competitive rail and barge offer
   → Open access cleaning-, repair- and tankservice for rail equipment
   → Education of locomotive drivers (bottleneck profession)
   → Barge Traffic System (BTS)

3. Facilitating new railway connections
   → Neutral platform for rail users of the port of Antwerp
   → Connect Antwerp via rail to China and UK
   → Premium Barge Service intra port transport by barge
Active Modal Split Policy
Daily barge connections with EU hinterland

Connected to the European waterway network by Scheldt-Rhine canal and Albert canal

Over 200 container shuttles per week to 67 destinations in Europe

85 barge operators offer regular, even daily, services between Antwerp and the European hinterland

All container barge sailings on Inland Waterways Departure list: www.portofantwerp.com
Active Modal Split Policy  
Large variety of rail connections

Antwerp is located on a junction of international lines

Each terminal is connected to the railway network

250 loaded cargo trains daily

More than 200 regular shuttle services from Antwerp to 70 destinations in 19 countries

Container rail services: portofantwerp.com/connectivity
Collaboration with hinterland hubs

What?
Tight collaboration between port and hub in the hinterland

Why?
Hinterland hubs take over groupage and distribution function of seaport

How?
– Optimisation of barge and railway network
– Supporting logistics platforms in the natural hinterland of Antwerp (for ex. Liège, Genk, Venlo, Duisburg, etc.)
Supply chain & hinterland strategy Antwerp port: three geographical layers

Tier 1: Intraport
- Strong emphasis on increasing efficiency and avoiding congestion
- Trimodal approach

Tier 2: Core hinterland network
- High density and frequency intermodal network to/from most important destinations in “core hinterland”
- barge 1th choice

Tier 3: Hinterland corridors
- Development of specific (rail)corridors to number of strategic destinations
- rail 1th choice