The relation between port competition and hinterland connections

The case of the 'Iron Rhine' and the 'Betuweline'

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THE RELATION.....

- The strength of a maritime logistics chain depends on its weakest link
- What about the hinterland transport link?
- Two new hinterland railway projects as a case

OVERVIEW PRESENTATION

- Critical issues in port competition
- Relationship between port competition and hinterland transport
- A case: Iron Rhine (Antwerp) and Betuweline (Rotterdam)
- Conclusion

CRITICAL ISSUES ON PORT COMPETITION

- Trends in the maritime logistics chain
- Shipping companies
- Land-side developments
- Port authorities

TRENDS IN THE MARITIME LOGISTICS CHAIN

- Global ports as engines of economic growth
- Embedded in a highly competitive environment
- International trade has expanded enormously
- Worldwide redistribution of the use of labour and capital
- Integration + globalisation of markets
- Strategic partnerships: shipping companies, terminal operators and port authorities

=> Effect on trade and the use of ports

TRENDS IN THE MARITIME LOGISTICS CHAIN (ctd)

- Will economic growth persist?
- And if it does, will it continue to translate into greater demand for maritime transport?
- Or will economic growth manifest itself in services rather than in industrial output?
- Will scale increases on the basis of horizontal and vertical integration also continue?
- What are the likely consequences of the deployment of ever-larger vessels?

TRENDS IN THE MARITIME LOGISTICS CHAIN (ctd)

- What kind of timeframe may shipping companies be looking at in their search for new partnerships?
- And which strategies may the other market players deploy in response?
- Will shipping companies become the dominant players and thus be able to impose their will upon other parties, including port authorities and terminal operators?

SHIPPING COMPANIES: RATIONALISATION, MERGERS AND SCALE INCREASES

- Deploying additional capacity at a lower operational cost per slot
- A mixed fleet as a means of spreading risks
- Additional cost control through mergers and takeovers, and capacity reduction
- Strategic alliances, new partnerships, rerouting of vessels

SHIPPING COMPANIES (ctd)

- Potential result: changes in direct port calls, with significant implications for hinterland transport projects
- Issue of concern: where will the increase in container vessel size stop? (cf. negotiation power in talks with port authorities, trade-off with terminal costs and hinterland transport costs,....)

LAND-SIDE DEVELOPMENTS

Crucial issue:

The economic benefits shipping companies seek through far-reaching scale increases and the corresponding cost reduction should not be wasted through time and cost bottlenecks on the quay, in the terminal or during hinterland transport

LAND-SIDE DEVELOPMENTS (ctd)

- European ports: will further expansion leads to overcapacity?
- Terminal operators: concentration movement as a buffer against vertical integration
- However, potential threat to shipping companies, as reduced competition may lead to lower productivity growth, longer vessel-handling times and higher rates
- Potential response: dedicated terminals

PORT AUTHORITIES IN A NEW ROLE

- The market power of port authorities is decreasing
- One remaining strong trump card: the power to grant concessions and to determine the duration

THE RELATIONSHIP BETWEEN PORT COMPETITION AND HINTERLAND TRANSPORT

- <u>Substantial maritime growth</u>, but the competitive balance between ports may result in relative shifts in freight flows (cf. improved hinterland transport services)
- <u>No increasing profit</u> margins: shipowner will pressurise other links in the logistics chain (e.g. hinterland modes)

THE RELATIONSHIP BETWEEN PORT COMPETITION AND HINTERLAND TRANSPORT (ctd)

- <u>Overcapacity</u>, followed by rationalisation, can/will result in changes in ports of call, loops and frequency of services
- <u>Additional pressure on other market players</u>: hinterland transport operators as a potential target for vertical integration

SHIPPING COMPANIES' BEHAVIOUR

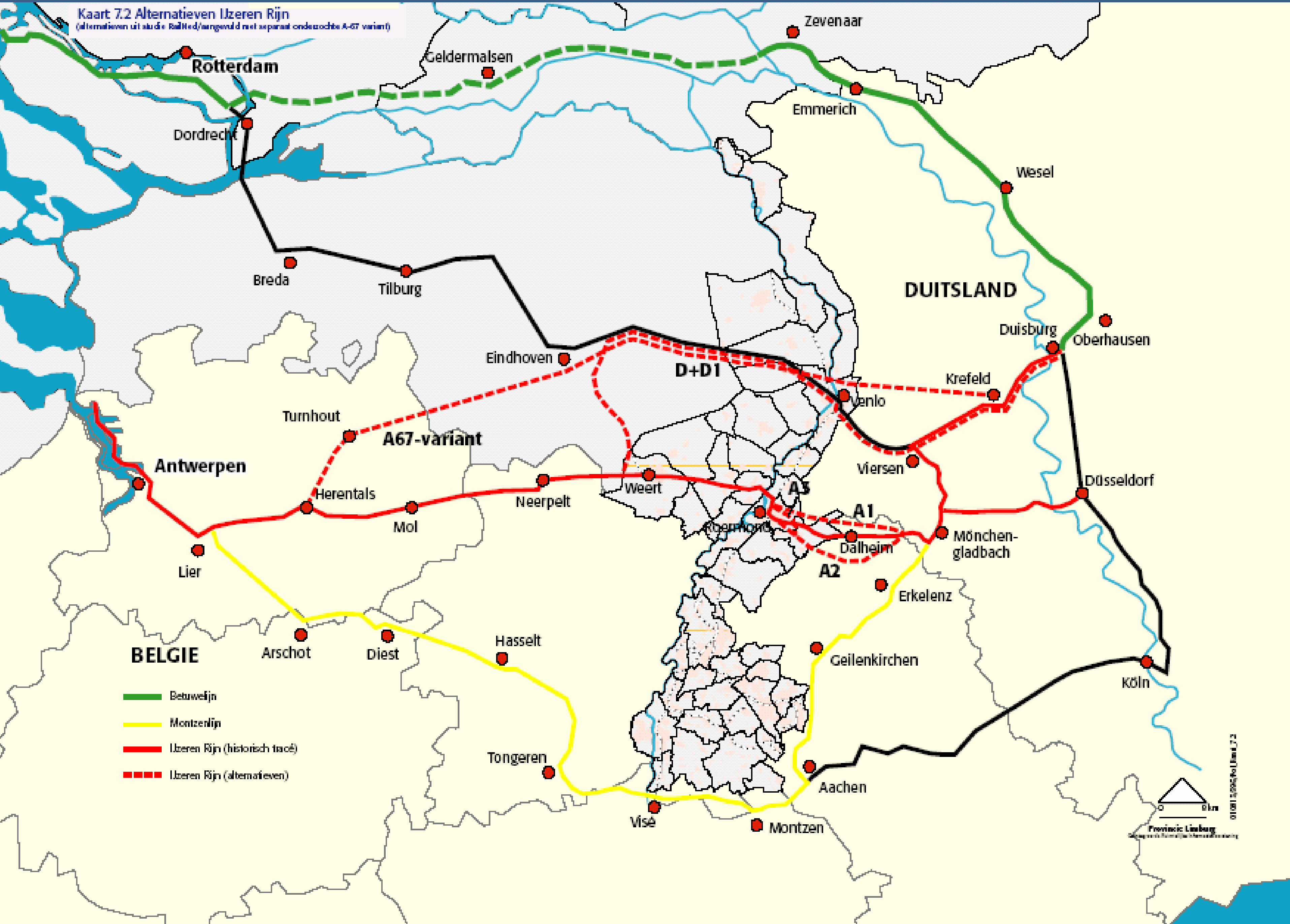
- Aversion to any potential time loss
- They will opt first and foremost for seaports and terminals that are free of bottlenecks
- Hence the importance of having enough free and directly available capacity

A SIMULTANEOUS MODEL

- Hinterland transport is largely dependent upon the strategic decisions and the success of other market players, but it can also contribute to the success of specific maritime logistics chains

A CASE: IRON RHINE AND BETUWELINE

- Within Hamburg-Le Havre range
- Two railway links to the German hinterland
- Illustration of port competition on the battlefield of hinterland transportation
  - Offering additional capacity
  - Lower costs with impact on modal split


Kaart 7.2 Alternatieven IJzeren Rijn
(alternatieven uit studie RailNed/aangevuld met separaat onderzochte A-67 variant)
Zevenaar
Geldermalsen
Rotterdam
Emmerich
Dordrecht
Wesel
Breda
Tilburg
DUITSLAND
Duisburg
Oberhausen
Eindhoven
D+D1
Krefeld
Venlo
Turnhout
A67-variant
Antwerpen
Viersen
Herentals
Weert
A3
Düsseldorf
Neerpelt
A1
Mol
Roermond
Mönchen-gladbach
Dalheim
Lier
A2
Erkelenz
Hasselt
BELGIE
Arschot
Diest
Geilenkirchen
Köln
Betuwelijn
Montzenlijn
IJzeren Rijn (historisch tracé)
IJzeren Rijn (alternatieven)
Tongeren
Aachen
Visé
Montzen
0
Provincie Limburg

IRON RHINE AND PORT OF ANTWERP

- Rail transport in and around the port close to maximum capacity
- Iron Rhine is one of three crucial railway projects for the port
- Capacity: between 9.4 and 12.3 million tons (2020)
- Without the Iron Rhine, there is a danger that the port of Antwerp will reach its rail freight limits towards the hinterland

BETUWELINE AND PORT OF ROTTERDAM

- Capacity problems on the railway infrastructure
- Transnational priority project in EU
- Annual capacity: 74 million tons
- Strategy: ‘try to be the first’

PUTTING BOTH RAIL PROJECTS TOGETHER

- Both railways provide additional rail capacity to and from Germany
- Important signal to the users of ports
- New lines free capacity on other routes
- Link to new European Union member states
- Crucial (new) links in the port competition game, within and outside the H-LH-range

CONCLUSION

- Free capacity is the key to success: in maritime throughput, in hinterland transportation services, and their combination
  - To attract new cargo flows and to retain current flows, because shipping companies opt for ports with no congestion and no bottlenecks
  - New hinterland projects must therefore be regarded in the broader context of (control over) the total maritime logistics chain