#### TRANSPORT RESEARCH INSTITUTE















# Defin(d)ing the dryport concept

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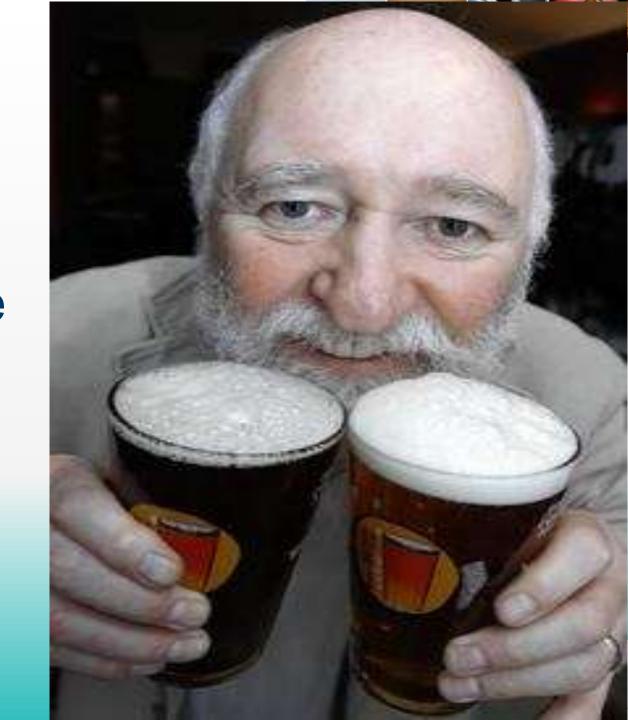
#### "The dead govern the living" - Auguste Comte

- Major infrastructure projects represent long-term commitments and they have far-reaching implications for future transport operations. Legacy obligations exert perhaps the most significant single influence on transport planning.
- A key challenge is to understand <u>shifting notions of</u> <u>infrastructure provision</u> brought about by changing roles of the public and private sectors.
- Developing such infrastructure allows container flows to be bundled on high capacity links so that private operators can then bid on this consolidated traffic.
- "Hope is a good breakfast but a poor dinner" Francis Bacon





Investing in infrastructure is like . . .







#### All sorts of different freight sites

- Transport connection: road, rail, barge
- Role in transport network: intermodal change, load centre, satellite terminal
- Transport only or logistics/warehousing/etc.
- Customs
- ICT, info sharing, flow visibility, planning, forecasting
- Large or small
- Public or private
- The interests of this project have been:
  - Intermodal connection: rail or barge
  - Relations with the port: cooperation and integration



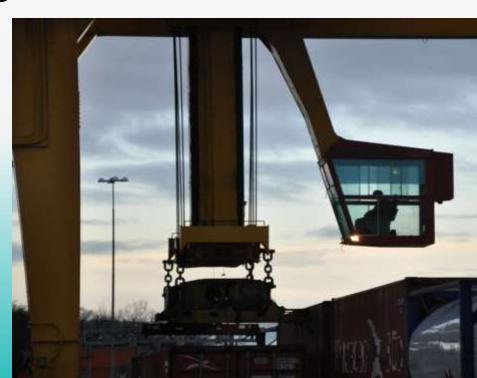






## Trying to define the concept

- Sep 2009: Harlingen meeting conceptual discussion
- Oct 2010: Dryport conference Edinburgh
- Sep 2011: Annual meeting Ipswich
- May 2012: One month to go. Last chance!
- Today's structure:
  - Concept
  - Case studies
  - Discussion
  - Conclusion? Maybe!









#### Background to the discussion

- Increasing role of hinterland access in port development strategies. Fewer captive hinterlands – more competition. Regionalisation.
- Increasing focus on inland terminals.
- Terminology: intermodal terminals, ICDs, inland ports, dry ports, extended gates.
- Many facilities are calling themselves "dry ports".
   What do they mean by this?
- Early UN definition: dry ports were inland sites with customs clearance, with special focus on benefits for landlocked countries. Transport mode not specified.



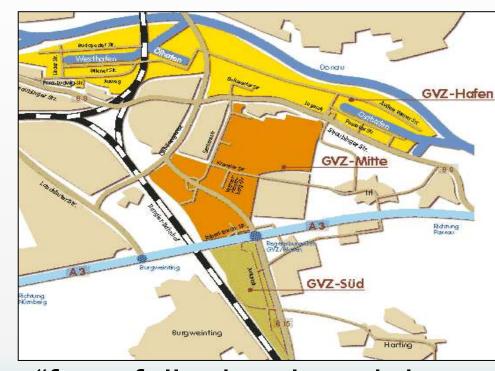




# A dry port concept? (Roso et al., 2009)

"A dry port is an inland intermodal terminal directly connected to seaport(s) with high capacity transport mean(s), where customers can leave/pick up their standardised units as if directly to a seaport."

"used much more consciously"



"for a fully developed dry port concept the seaport or shipping companies control the rail operations"















#### Practical approach:

- Development process
- Operational issues
- Relations with ports



#### Conceptual approach:

- Dryport concept
- Other kinds of definitions



#### Holiday approach:

- Weather
- Good pubs nearby





# Spain

- Azuqueca, Coslada (Madrid), Zaragoza
- Driven by public port authorities, heavy marketing but what is the reality?
- In conjunction with regional authorities and private operators
- Load centres for inland region
- Ports retain minority shareholdings
- Az & Cos have logistics parks next door, Zar is located inside a logistics park. "Co-location".







# Venlo, NL: "extended gate" concept

 Driven by private port terminal operator ECT, Rotterdam



- Integrated container management system, directed by the inland terminal. "Terminal haulage".
- Joint venture with logistics park operator.
- Probably best example of the dryport concept but they don't call it that.
- Duisburg also.







# "Dry ports" in Belgium/France

- Spain: Two of the three sites are called "dry ports". Terminal operator separate from train operations. Some port investment.
- <u>Dry Port Muizen</u>: Terminal operator separate from train operations. No port involvement.
- Dry Port Mouscron/Lille: Terminal operator controls train operations. No port involvement.
   Smaller of two sites operated by Delcatrans (based in Rekkem, BL).
- None of these fit the dryport definition









# Italy: freight villages

- Distinctive model of freight villages or interporti
- Mostly developed by PPPs, driven at regional level
- Main business is the logistics park, but all have an intermodal terminal on site. This is required to be recognised by the national government.
- Struggle to achieve good links with ports, except where the port needs them (e.g. Genoa). Most successful FVs are in the north as they have intra-European rail traffic.









# Rickenbacker (Columbus, Ohio)

- PPP
- Linked to newly upgraded Heartland Corridor (PPP, half cost from federal funds)
- Provides economic development opportunities to peripheral region



- Restructuring of rail corridors in USA to avoid Chicago (use of Ohio and Memphis)
- Intermodal terminal located in logistics park









#### Alameda Corridor

- Short distance (20 miles), high capacity (triple track, double stack) rail corridor
- PPP. Ports bought the rail lines to consolidate on high capacity short distance corridor.
- Ports were motivated to build the corridor due to congestion problems.
- But: only one of the two railroads has access to a transloading warehouse and marshalling track space nearby. Therefore BNSF doesn't use the corridor as much as it otherwise would.















#### Alameda Corridor









### Summary of key issues from case studies

- Some are just intermodal terminals, while some have logistics as well.
- Some are driven by port actors and others by inland actors.
- In Europe, intermodal operations struggle to compete with road due to short distance, complex load patterns and industry fragmentation.
- Most terminals have some level of public funding, usually the local or regional authority where the site is built.
- In the USA, the industry is vertically integrated and intermodal terminals focus on throughput rather than logistics (so more like ports).
- Rare to have high level of cooperation with port
- Real integration (e.g. extended gate or the full dryport concept) faces many institutional and operational issues

UROPEAN REGIONAL







#### I promised a short conceptual bit . . .

- Conflicting models (broadly defined):
  - 1. Outside-In: port-driven (port authority or terminal operator), operational focus, potential for extended gate/satellite terminal. This is where the dryport concept fits in. "Consciously used".
  - 2. <u>Inside-Out</u>: public-sector driven, logistics-oriented, policy focus, potential load centre.
  - 3. These two drivers do not always align.
- <u>BUT</u>: beware of over-simplification. It is a complex process involving partnerships between ports, rail, terminals, 3PLs, local and regional govts, communities, etc.





### Port-inland integration?

- Port actors can be motivated (forced?) to integrate inland to overcome <u>operational</u> issues such as congestion (e.g. LA/LB).
- <u>Strategic</u> involvement is less successful (e.g. Spain).
- Inside-Out strategies for logistics poles do not always align with operational or strategic aims of port actors.
- Potential exists for <u>closer relations between transport</u> and <u>supply chain functions</u> (e.g. Venlo).
- Whether these two functions can truly be integrated is a question that will need to be answered before true integration of port and inland flows can be achieved.







#### Conclusions? Ask the Thurmanator . . .

- Good marketing is vital.
- Infrastructure is important but without understanding of operations it is useless.
- Consolidation is key.
- May require restructuring.
- Be realistic. Is the demand there?















# Discussion?

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