



SHIP EFFICIENCY 2017

by STG

6th International Conference
Hamburg, 25 – 26 September 2017

Presentation on:

VLCV – Challenges for Ports and Hinterland Infrastructure

Gunther Bonz

EUROGATE Container Terminal Hamburg GmbH
Germany



**The German Society for Maritime Technology
Schiffbautechnische Gesellschaft e.V.**

ULCV – Challenges for Port and Hinterland Infrastructure

**6th International Conference Hamburg
of Ship Efficiency
25th September 2017**

**Gunther Bonz
President of Feport,
EUROGATE Container Terminal Hamburg**



Few facts regarding FEPORT

- ▶ **Founded in 1993**, FEPORT is the European organisation which represents the interests of the terminal operators and stevedoring companies located out of the seaports of the European Union.
- ▶ **Feport's membership** consists of national and regional sector associations in EU Member States, EFTA and accession countries. In addition, in view of the importance of many recent policy developments, many of the main European terminal operators have joined directly as associate members.
- ▶ **FEPORT Secretariat** ensures that the common interests of terminal operators are heard at European level and that FEPORT members are well informed of developments at European level.





Few facts regarding FEPORT

Country members:

Belgium, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Lithuania, Malta, The Netherlands, Portugal, Romania, Spain, Turkey, Cyprus.

On a country basis, we have a representation of around 1200 companies ie around 80 to 85% of the EU terminal operators who employ more than 200.000 port workers.

Company members:

APM Terminals, Hutchison Europe, DP World, Perrigault SA/Terminaux de Normandie, HHLA, Contship Italia, BLG Logistics, Eurogate, Terminal Link/CMA CGM, GMP, PSA HNN, Europe Terminals, Noatum, Burke Shipping, Luka Koper.

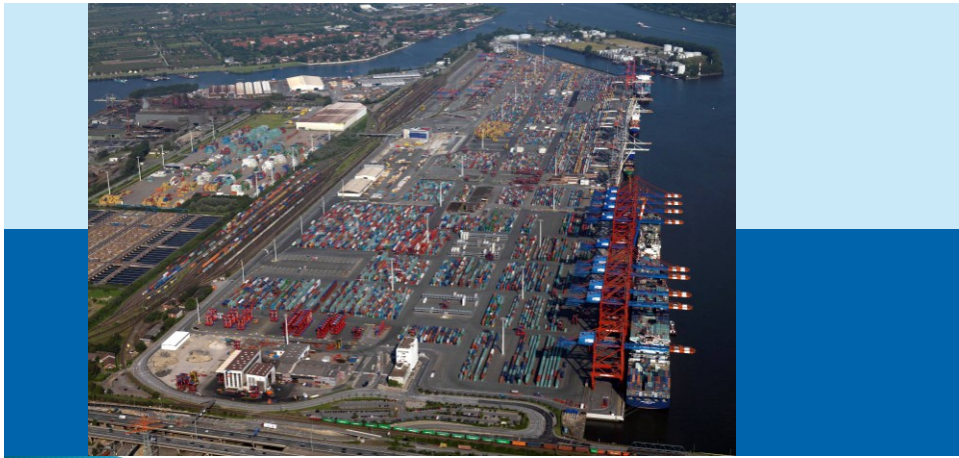
FEPORT members have invested more than 25 Billion Euros over the last 10 years



EUROGATE Container Terminal Operator



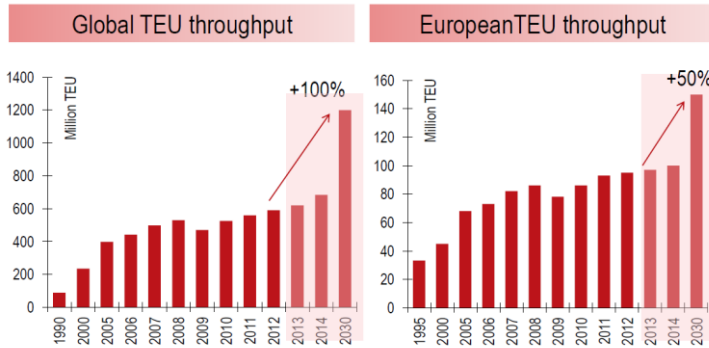
EUROGATE Container Terminal Hamburg



September 17



Port TEU Throughput continues to rise



Source: Drewry Maritime Consultants, Alphaliner, Hamburg Port Authority

FEPORT

Ever-changing market

Container vessel size development

		Length	Draft	TEU
First (1956-1970)	Converted Cargo Vessel	135 m	< 9 m	500
	Converted Tanker	200 m	< 30 ft	800
Second (1970-1980)	Cellular Containership	215 m	10 m / 33 ft	1,000 – 2,500
Third (1980-1988)	Panamax Class	250 m	11-12 m	3,000
		290 m	36-40 ft	4,000
Fourth (1988-2000)	Post Panamax	275 – 305 m	11-13 m / 36-43 ft	4,000 – 5,000
Fifth (2000-2005)	Post Panamax Plus	335 m	13-14 m / 43-46 ft	5,000 – 8,000
Sixth (2006-)	New Panamax	397 m	15.5 m / 50 ft	11,000 – 14,500

Ever-changing market

400m long

Up to 60 m wide

up to 22,000 TEU carrying capacity

What comes next

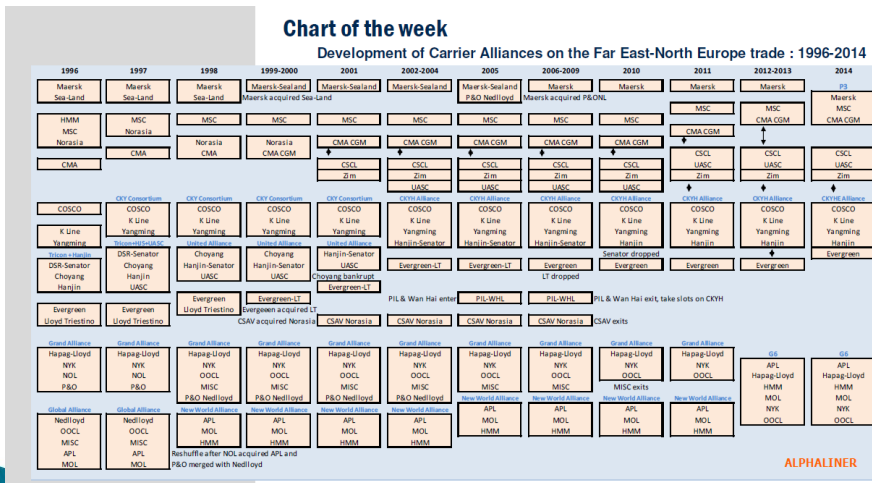
2018 ???
2020 ???



company presentation September 17

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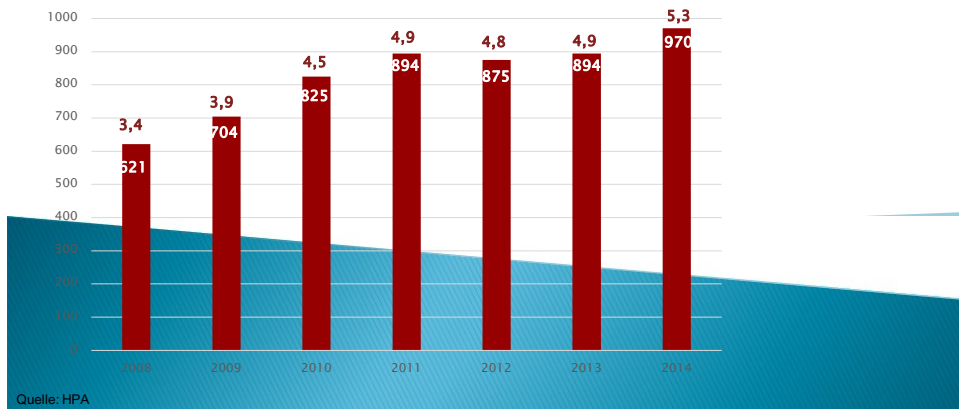
Alliances (since 1996)



▶ 10

Development of vessel size in the port of Hamburg

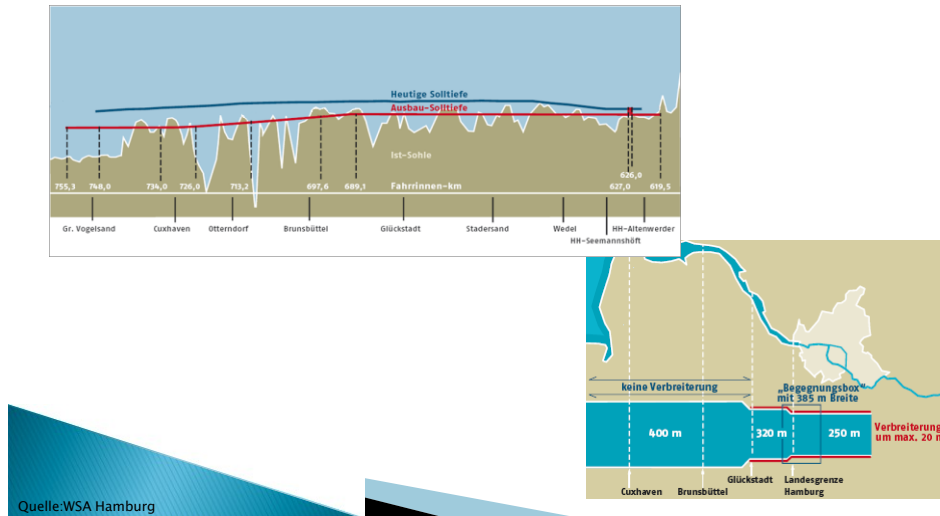
Ultra-Large-Vessels in Hamburg (length >330 m or width > 45 m) per day



Challenge: requirements for bypassing



Further deepening and widening of the River Elbe



Port Authority: owner of land and quaywall,
Infrastructure

Terminal Operator: Superstructure

Challenge: new technical requirements,
new investments
prolongation of contracts/concessions



Challenge: Peaks

- ▶ **2010:** 3.000 moves per call,
- ▶ 2 vessels per day
- ▶ (5–6 days during the week)
- ▶ **2016:** up to 11.000 moves per day,
- ▶ 2 vessels per day (2–3 days per week)
- ▶ 0 vessels (2–3 days)

Challenge: labour shifts,
terminal space,
hinterland

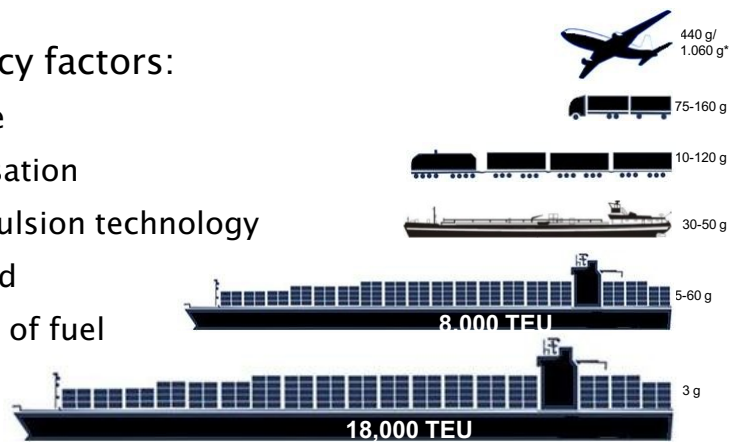
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CO2 emission comparison of transport mode

Efficiency factors:

- Seize
- Utilisation
- Propulsion technology
- Speed
- Type of fuel

CO2 emission in gr/tkm



*Freight vs. Passenger plane on route Frankfurt - Shanghai

Best Practice in EU-Ports

- ▶ Copenhagen
 - ▶ Introduction of eco-driving reduces fuel consumption by 12% p.a.
- ▶ Rotterdam
 - ▶ Dutch program „Lean and Green“ reduces carbon emission by 21% / TEU (2009-2013)
- ▶ Hamburg
 - ▶ By using renewable energy sources and modern technologies savings of 43 mio kWh and a reduction of 47,000t carbon emissions p.a. („Environmental Partnership Hamburg“)

Example: Hamburg



Are we on the right track with proper priorities?!



Thank you for your attention!

