

Container Port Development in North Range

Port Net

9. May 2006

Jan Ninnemann, UNICONSULT Universal Transport Consulting GmbH



- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- Development of Seaborne Traffic in Selected Ports
 - Hamburg
 - Bremerhaven
 - Rotterdam
 - Antwerpen
 - Zeebrugge

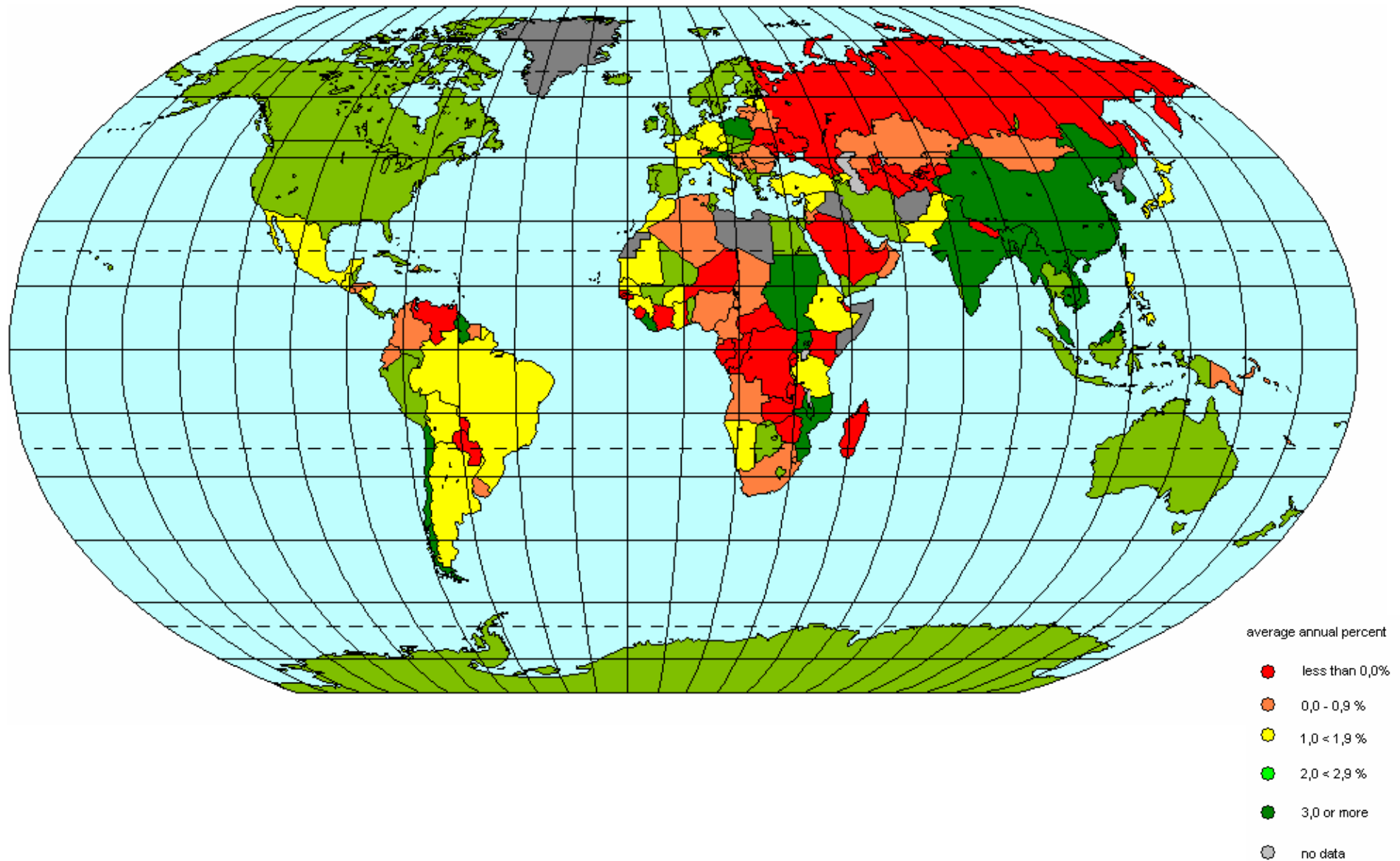
- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- Development of Seaborne Traffic in Selected Ports
 - Hamburg
 - Bremerhaven
 - Rotterdam
 - Antwerpen
 - Zeebrugge

World Economy with Highest Growth Rates since 30 Years (2004: + 4,9 %)

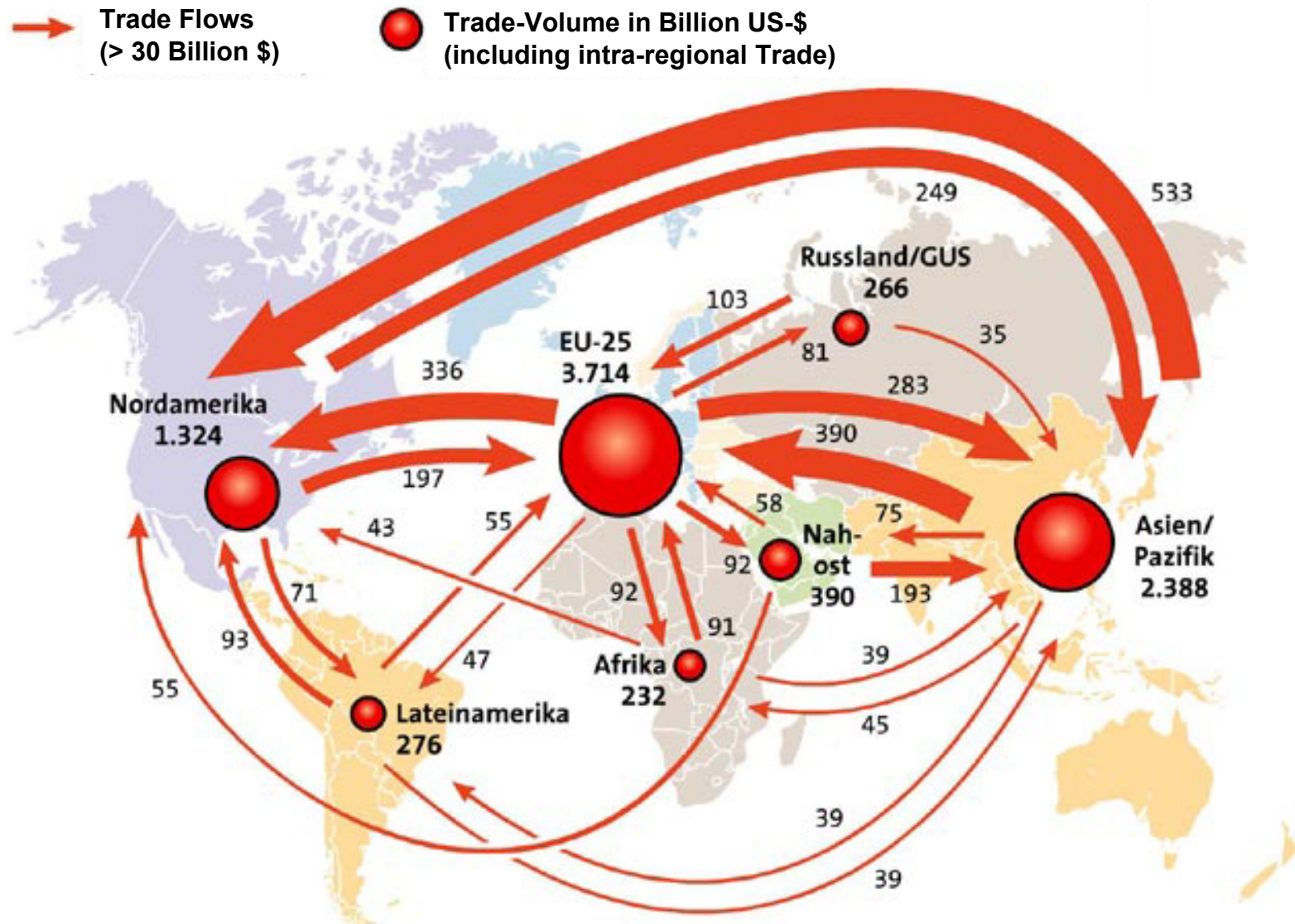
Reasons:

- Advanced Economic Situation in US (GDP Increase of 4,2% in 2004)
- Positive Development in South American New Industrializing Countries (GDP Increase 2004: 5,5 %)
- Growth Dynamic in Asia
 - Growth in Asia (without China) 2004: + 6,3 %
 - China 2004: + 8,5 %
 - Forecasted GDP-Growth China to 2015: 6,4 %

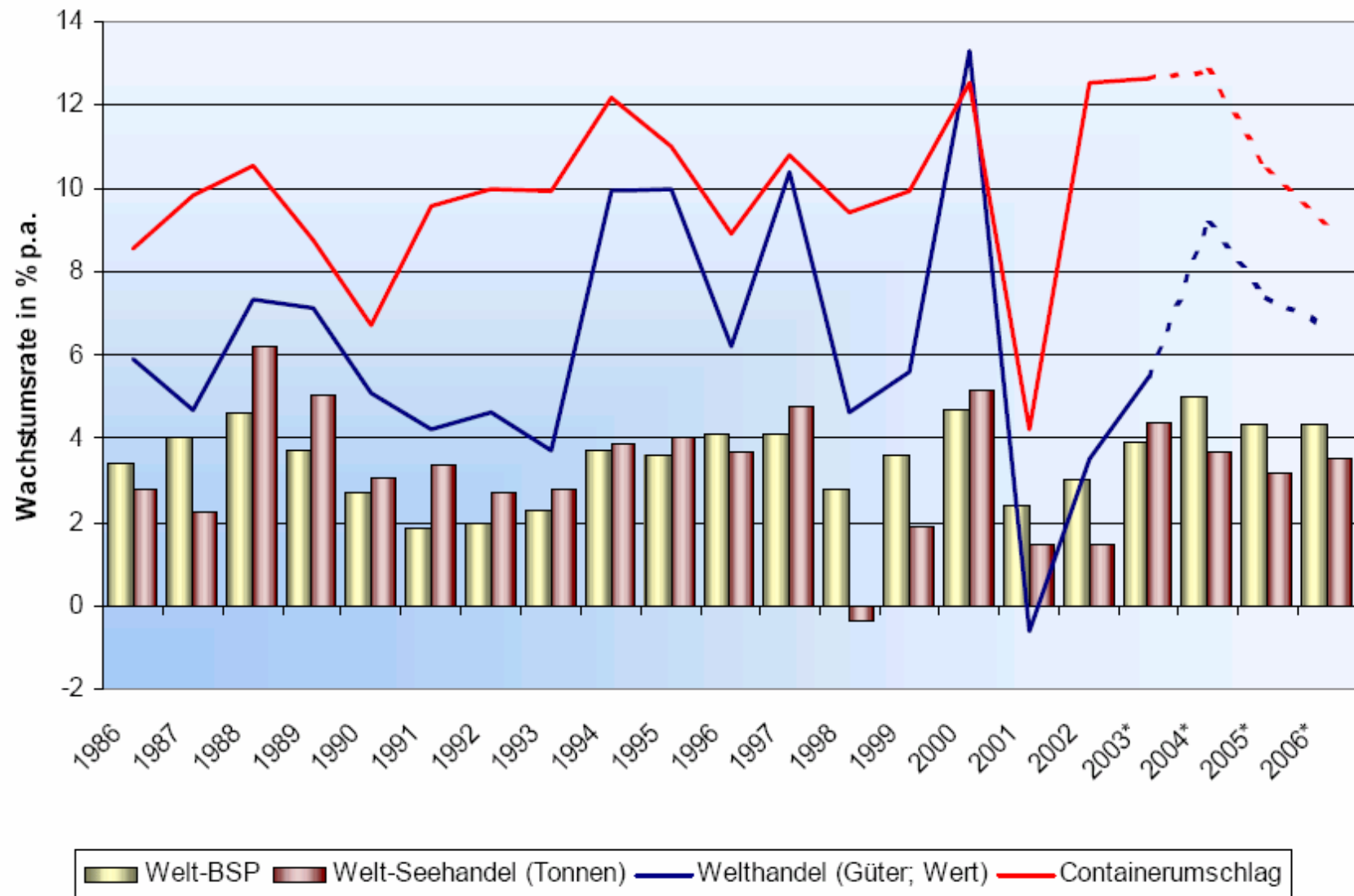
Changes in GDP per Capita (1990-2003)



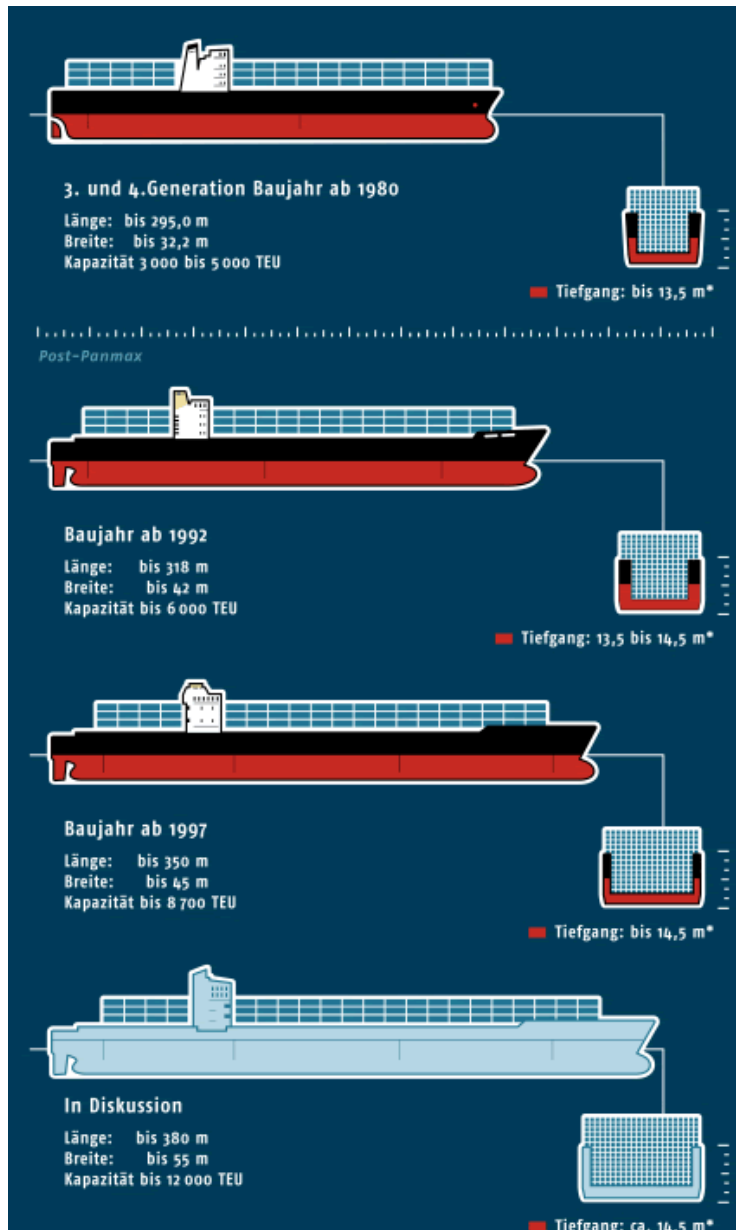
World Trade 2004



Impacts on World Container Traffic



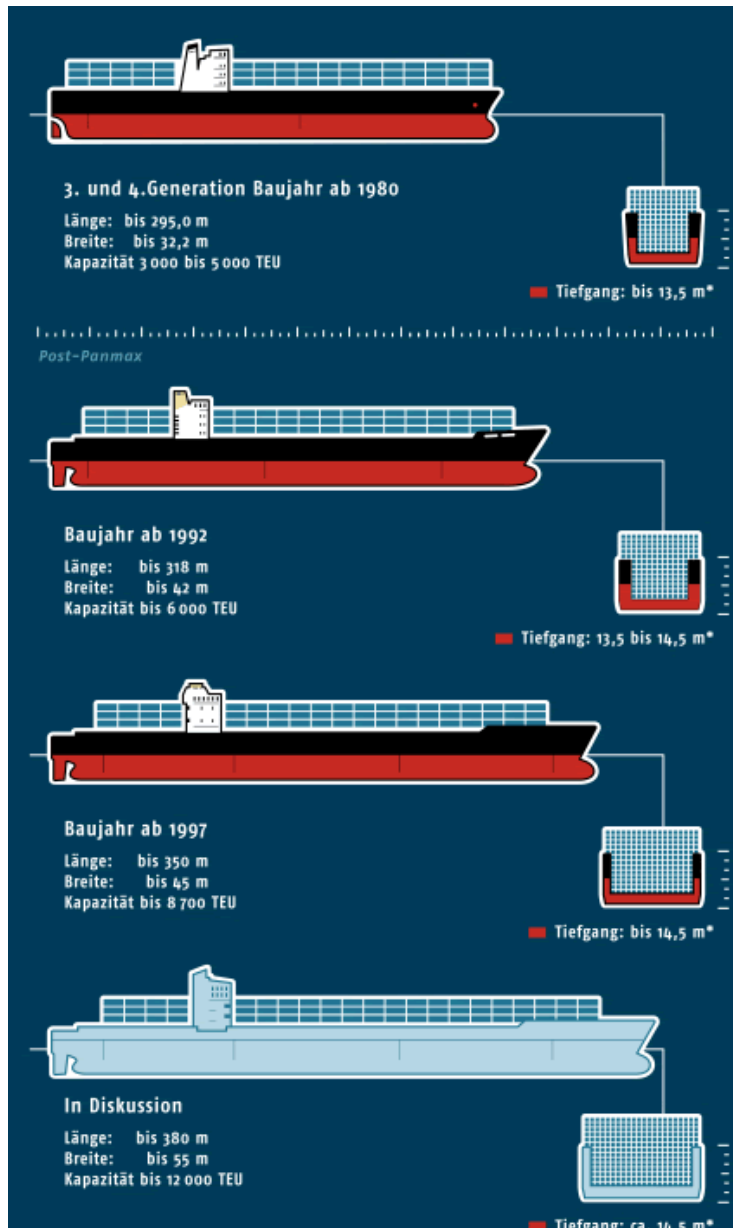
- Productivity growth as a result of increasing containerization (65%)
 - 8 times higher productivity due to fast loading and shorter berthing periods
 - Usage of containers for special purposes (reefer, open-top, etc.)
- Decreasing transport costs due to ship-size development and growing competition on main trade-lines



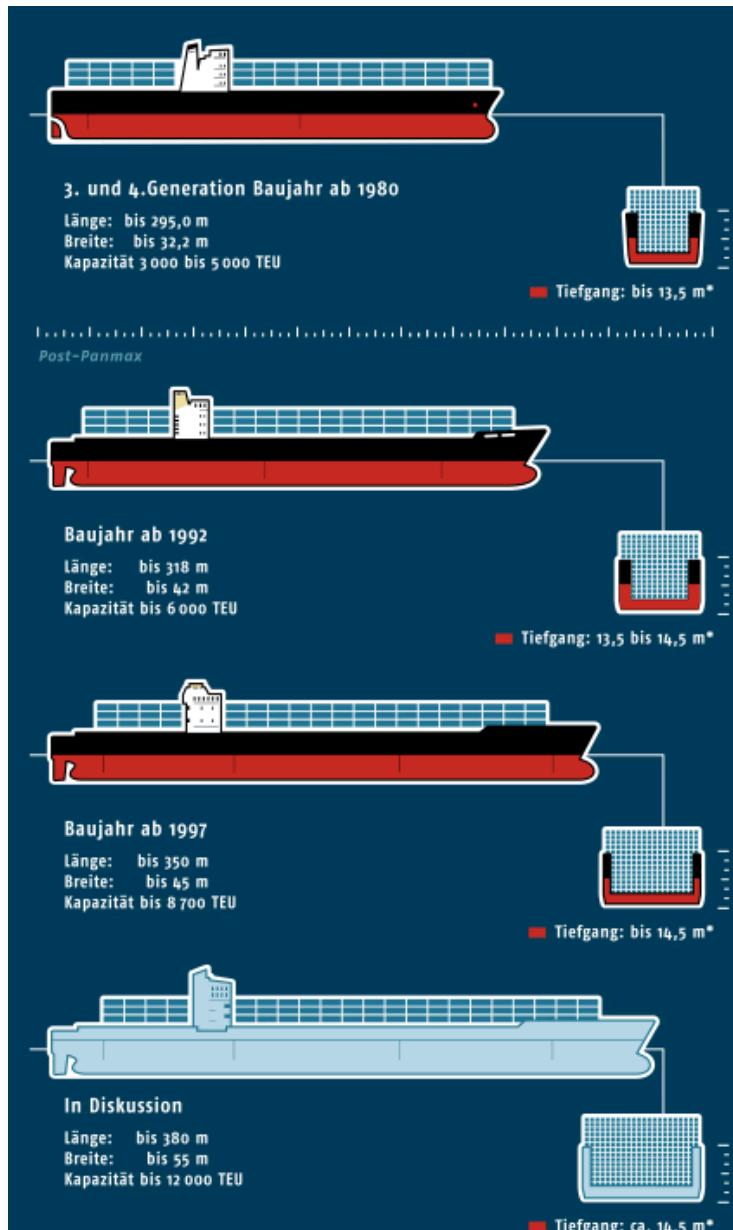
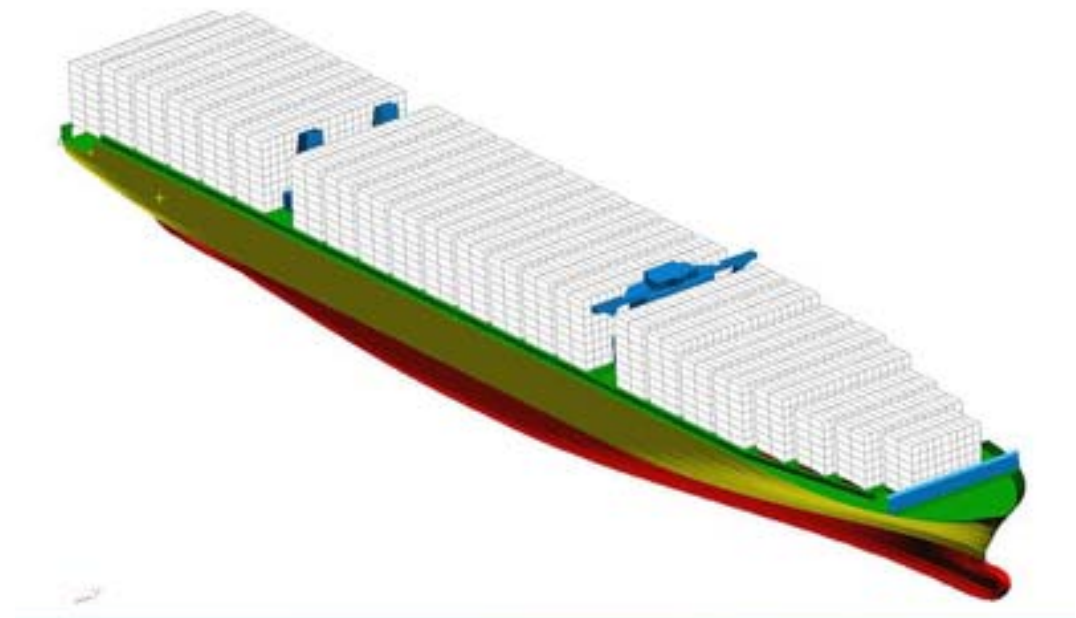
„Tokyo Express“ 1973
3.010 TEU



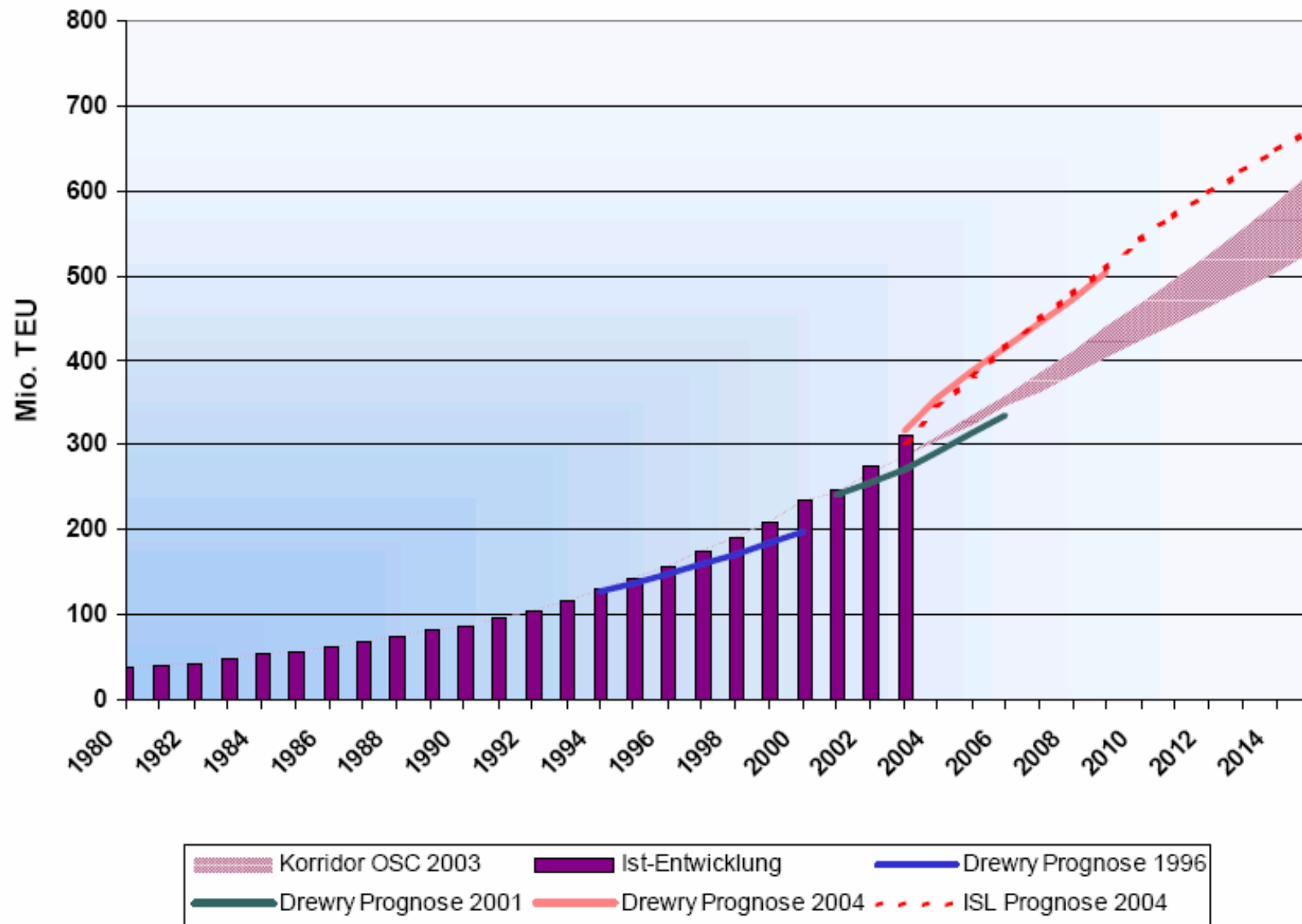
„Colombo Express“ 2005 8.749 TEU



GL-Draft 13.000 TEU



Forecast World-Containerthroughput



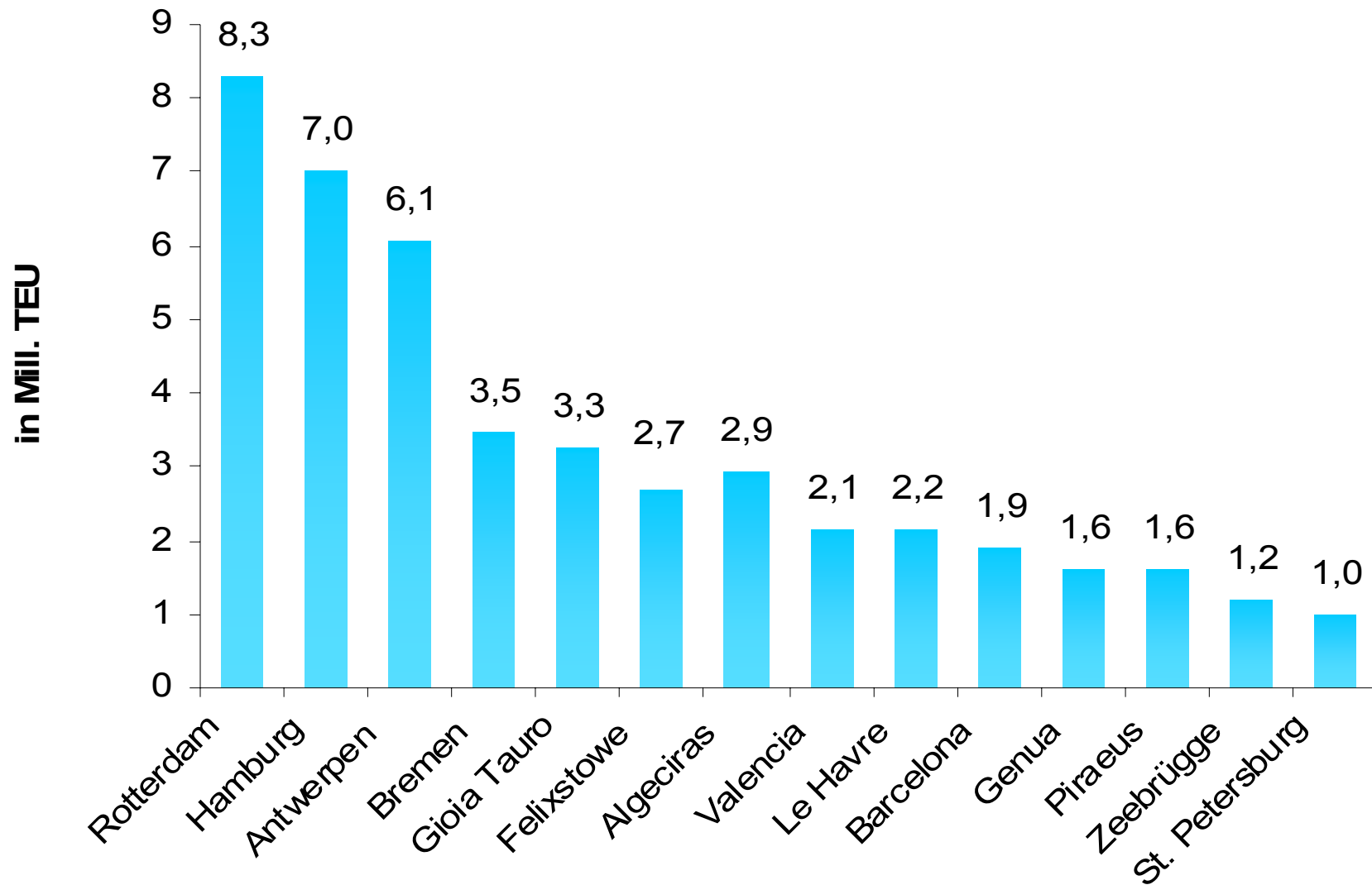
Containerthroughput by Regions (1.000 TEU)

	1995	2000	2002	2003	2004	2005 (p)	2010 (p)
North America	22.160	30.824	34.212	37.469	40.979	43.744	57.629
Western Europe	32.016	51.707	57.350	62.702	70.560	76.370	110.429
North Europe	21.562	31.661	34.403	37.337	42.033	44.787	62.981
South Europe	10.454	20.047	22.947	25.365	28.527	31.583	47.448
Eastern Europe	797	1.080	1.726	2.076	2.924	3.520	7.173
Fareast	41.178	71.096	87.541	103.285	120.043	137.274	224.929
Southeastasia	20.975	34.320	41.105	45.436	51.946	57.532	88.350
Middle East	6.703	11.092	13.642	16.125	19.840	21.773	30.898
Middle-/South-America	10.015	17.802	19.212	21.313	25.162	27.890	39.309
Oceania	3.397	5.019	6.023	6.483	7.366	7.542	10.516
Southeast Asia	3.231	5.481	6.586	7.158	8.524	9.714	14.229
Africa	4.670	7.150	8.454	9.661	11.239	12.371	16.180

	2000-2005	2005-2010
Western Europe	+ 47,7 %	+ 44,6 %
Fareast	+ 93,2 %	+ 63,9 %
Southeastasia	+ 67,6 %	+ 53,6 %

- Introduction
- Development of World Economy and World Container Throughput
- **Development of Seaborne Traffic in North-Range**
- Development of Seaborne Traffic in Selected Ports
 - Hamburg
 - Bremerhaven
 - Rotterdam
 - Antwerpen
 - Zeebrugge

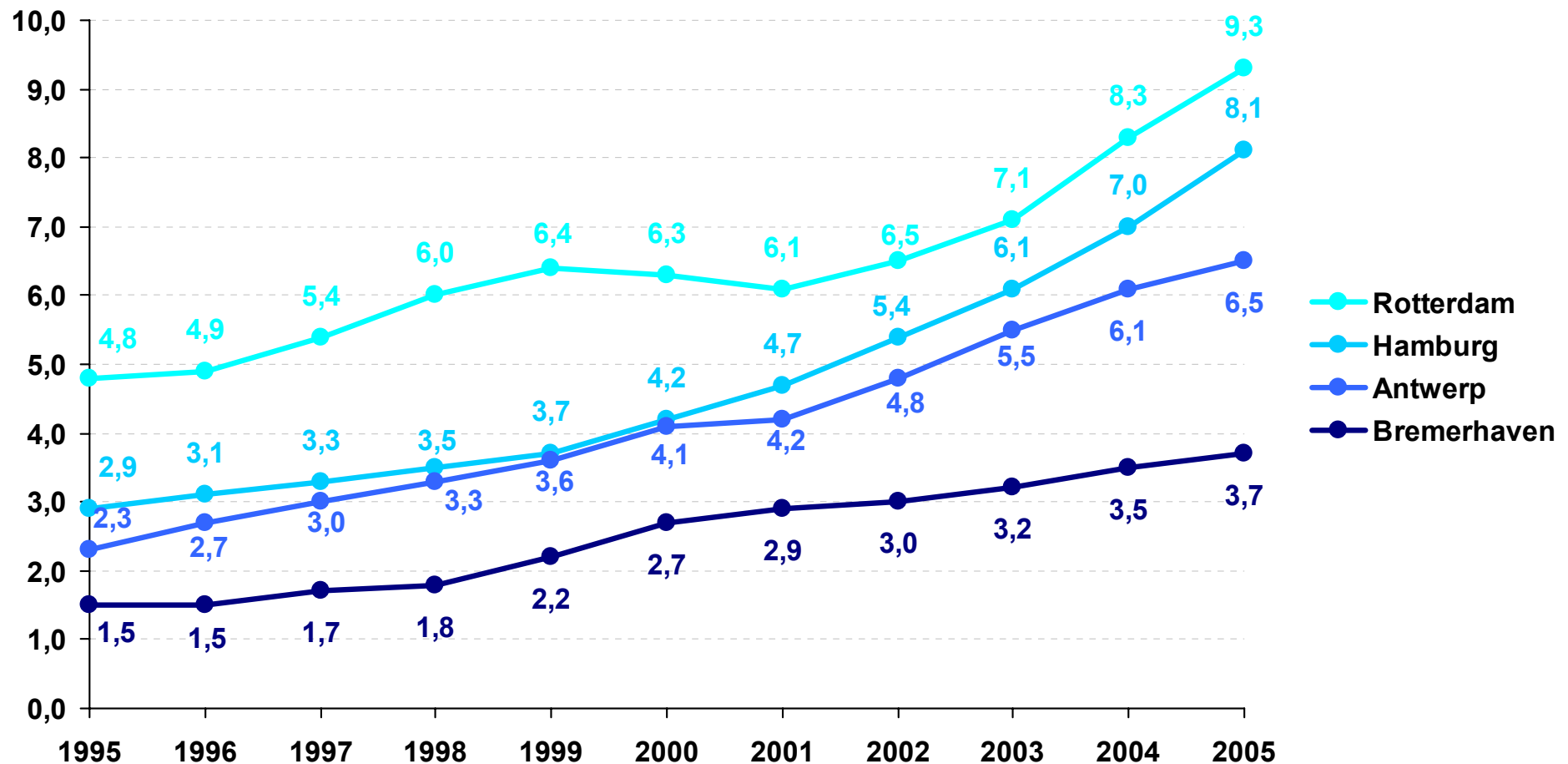
Containerthroughput in Europe (2004)



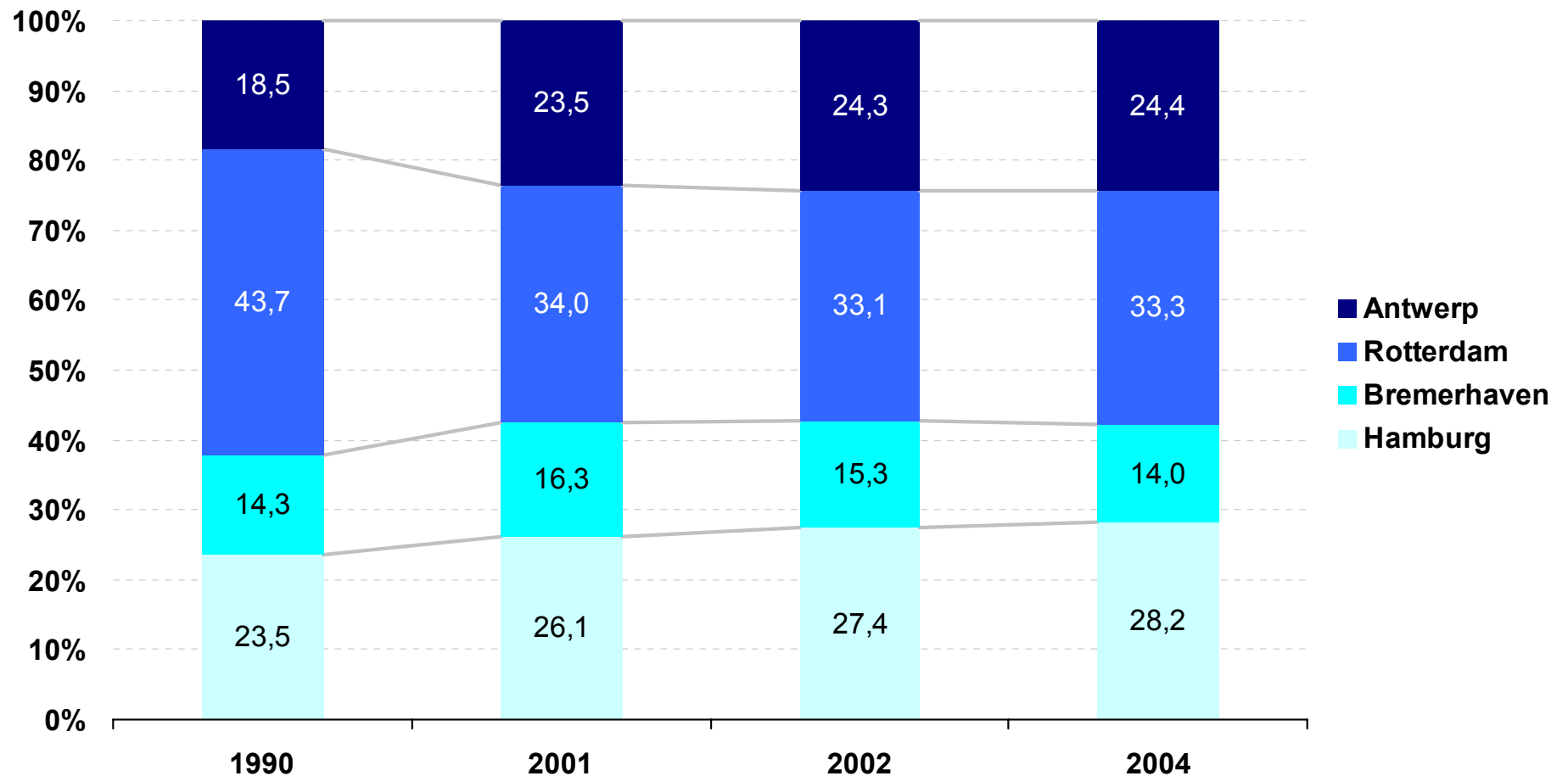
Overview North-Range



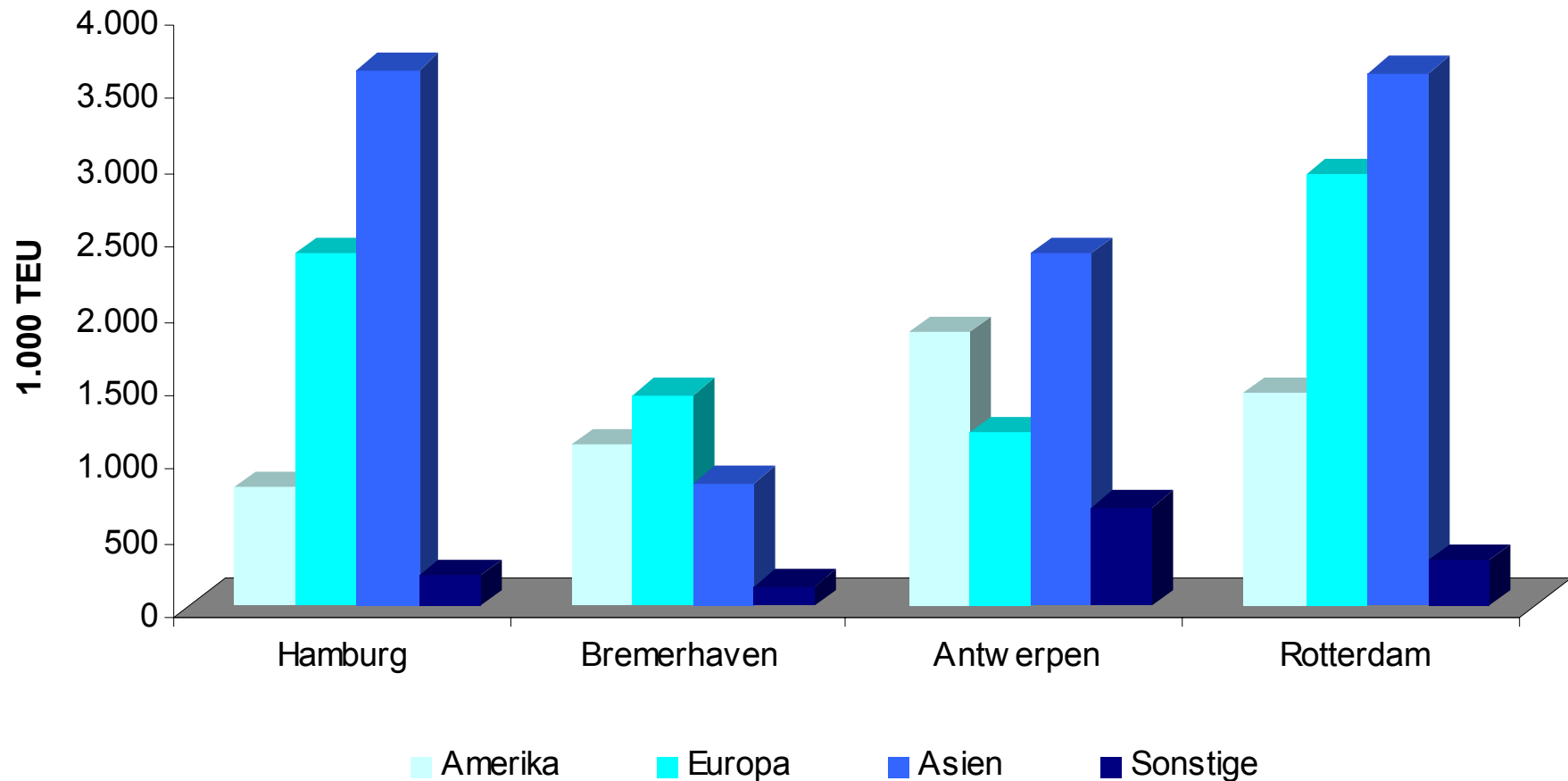
Containerthroughput Northrange in Mio. TEU



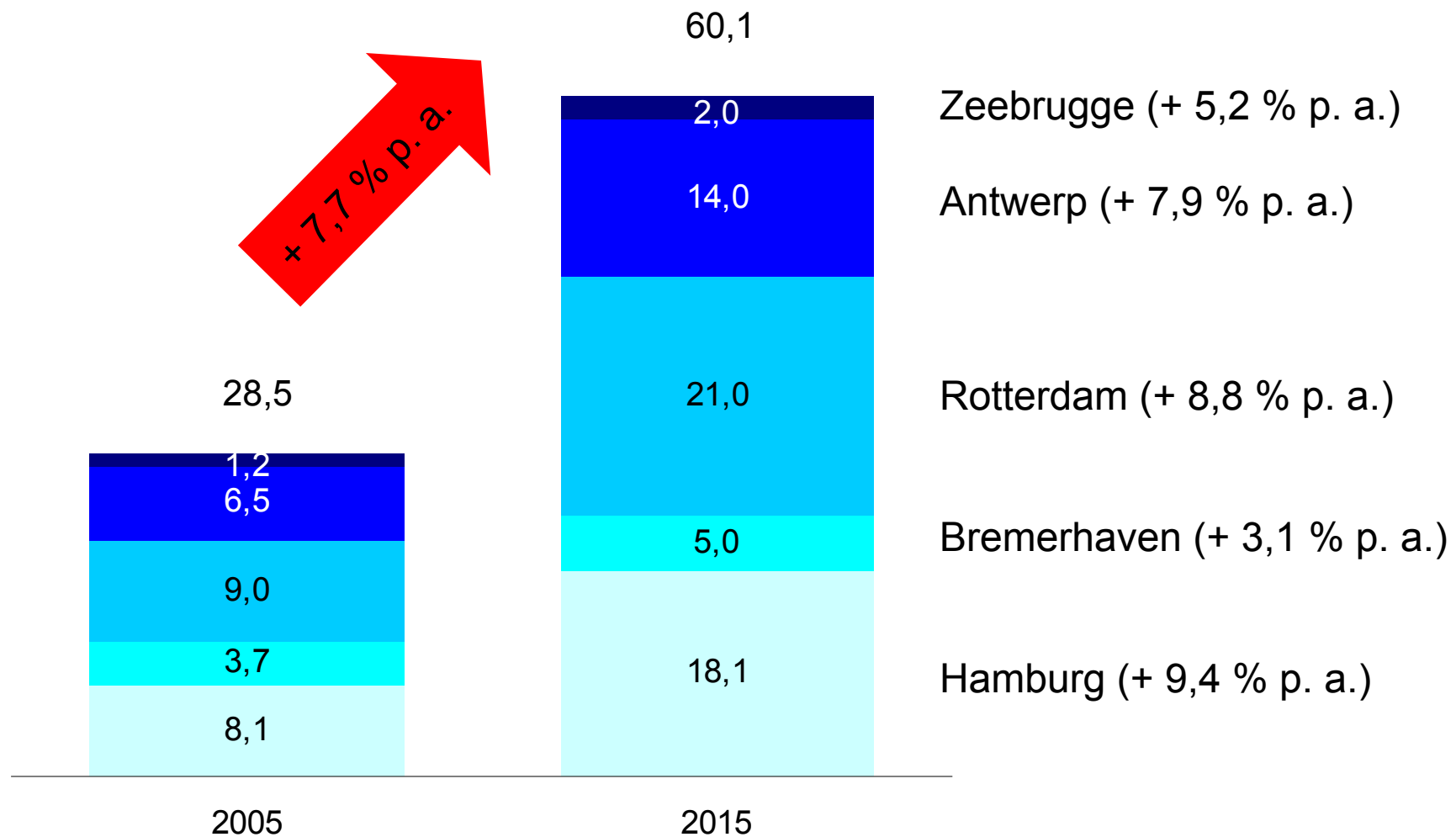
Market Shares Northrange



Throughput in Selected Ports by Continent



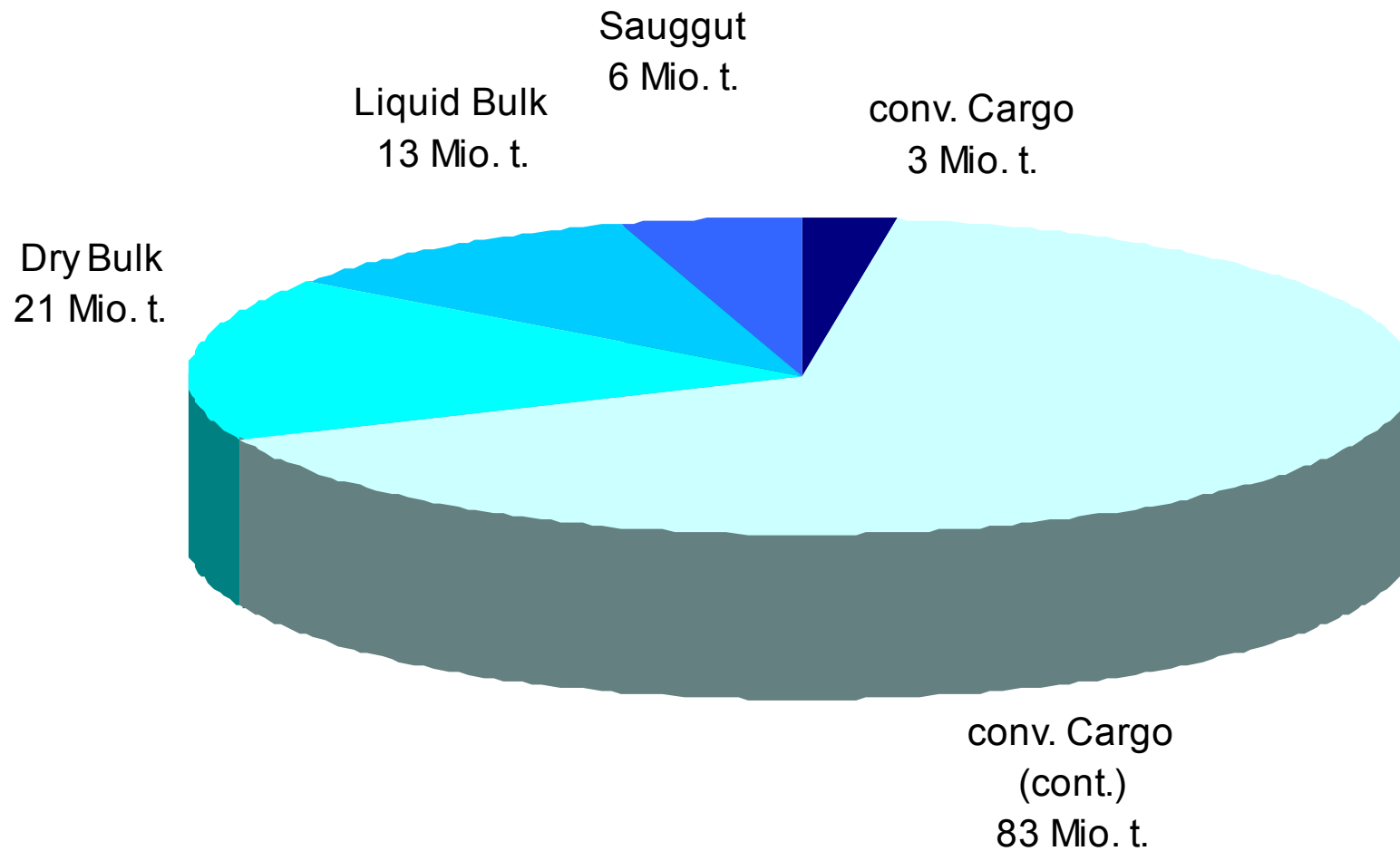
Forecast Northrange 2015 (ISL, Drewry, OSC)



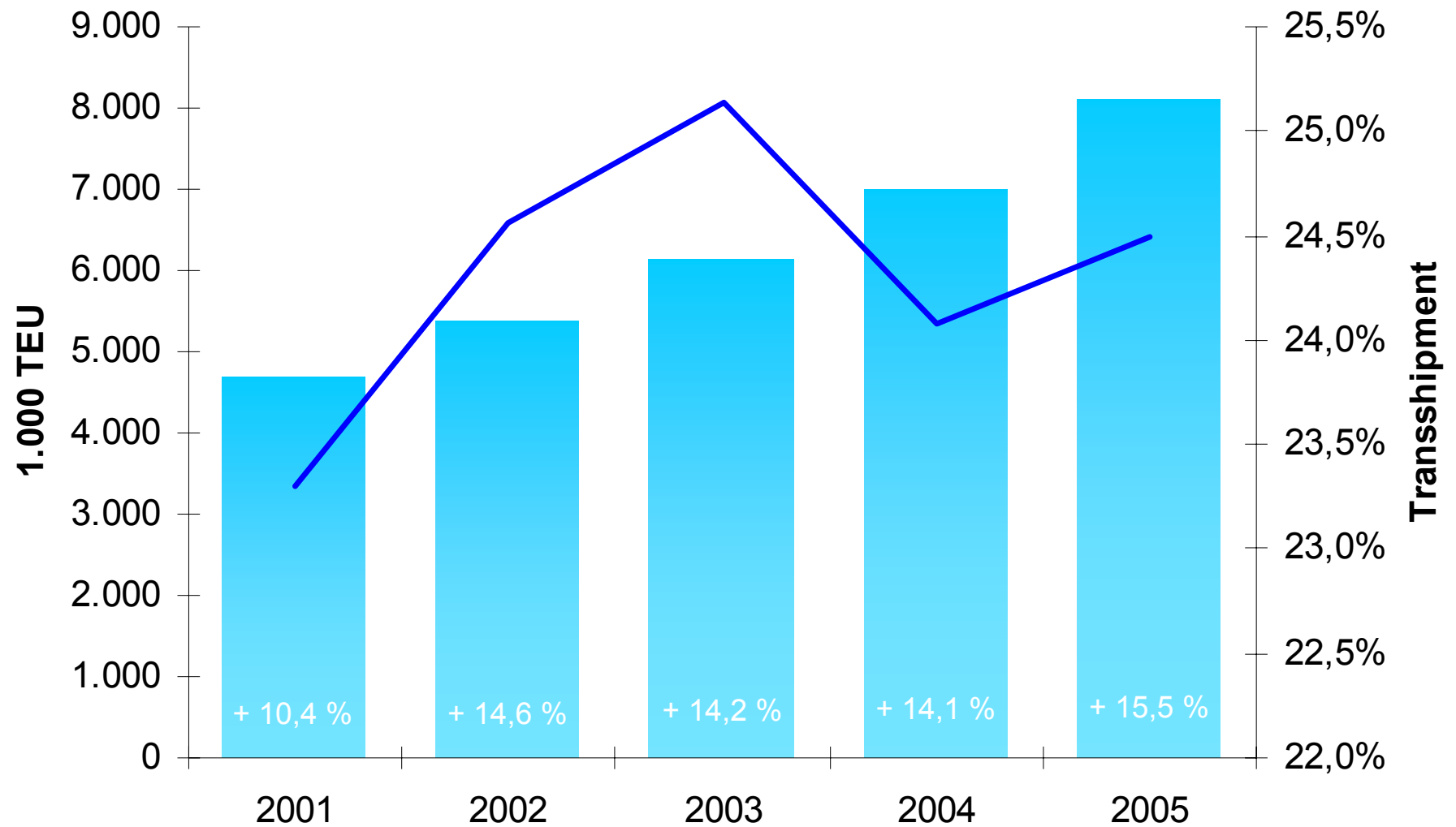
- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- **Development of Seaborne Traffic in Selected Ports**
 - Hamburg
 - Bremerhaven
 - Rotterdam
 - Antwerpen
 - Zeebrugge

Total Throughput Hamburg in Mio. t. (2005)

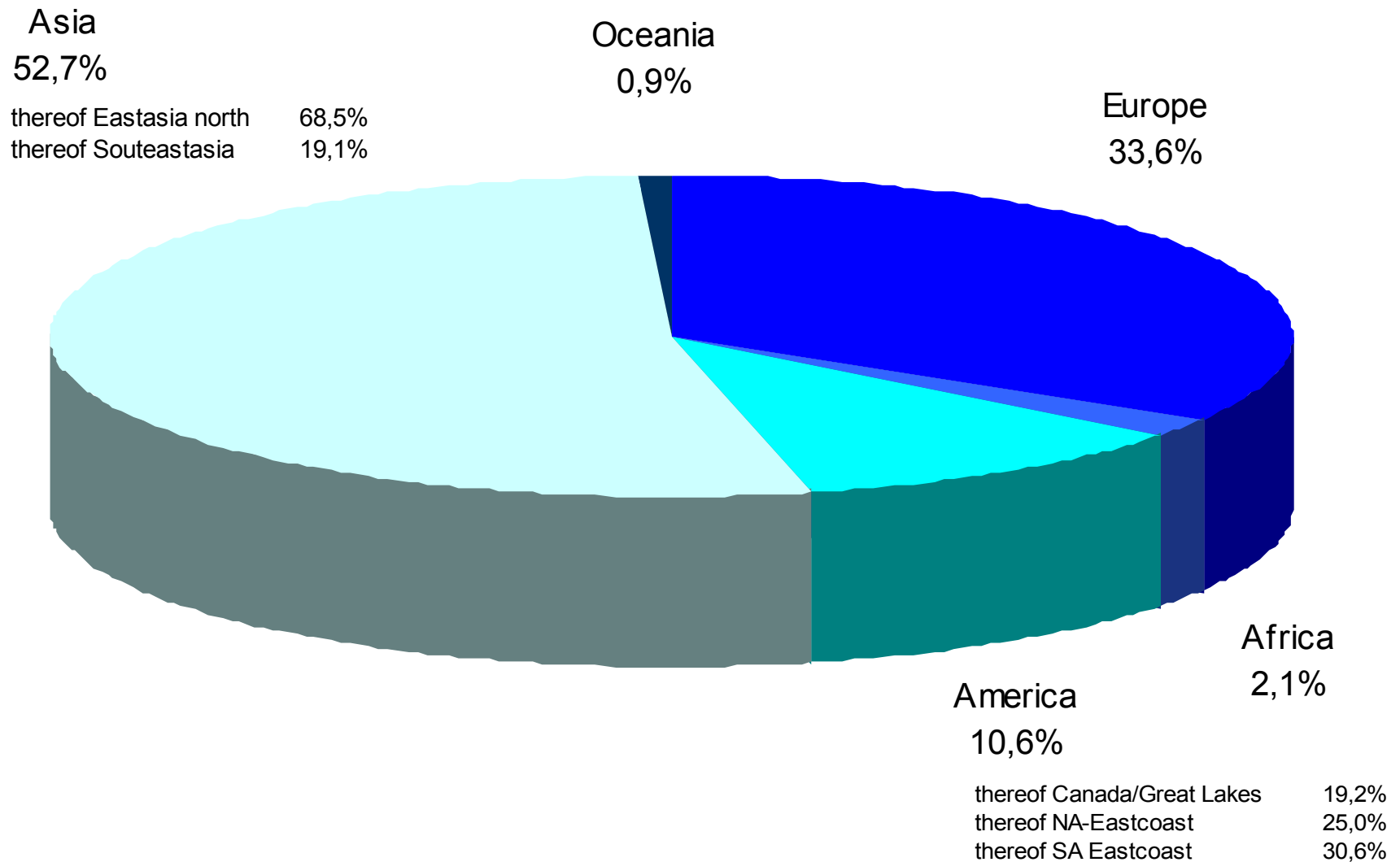
Total Throughput Hamburg 2005: 126 Mio. t.



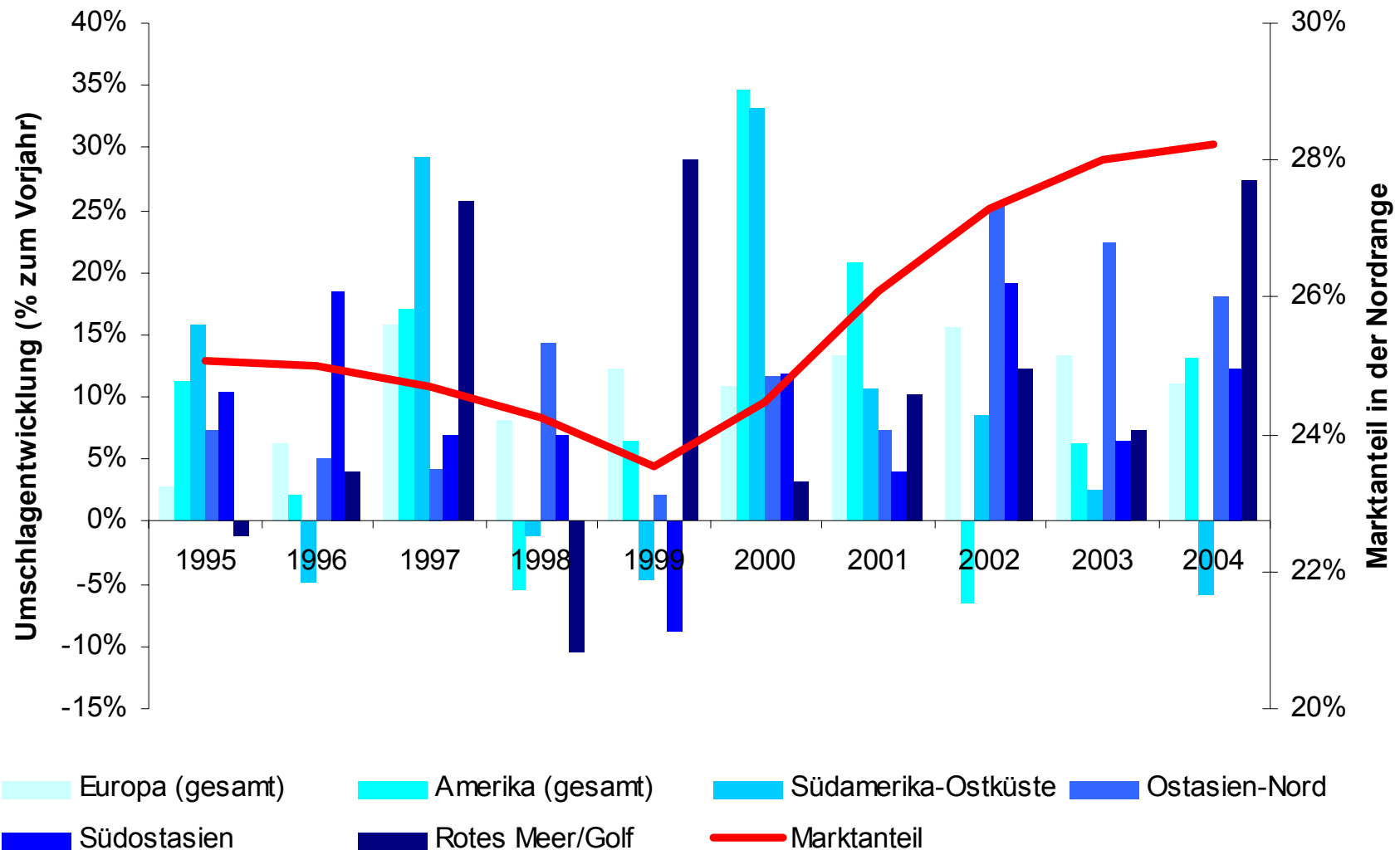
Container Throughput Hamburg (2001-2005)



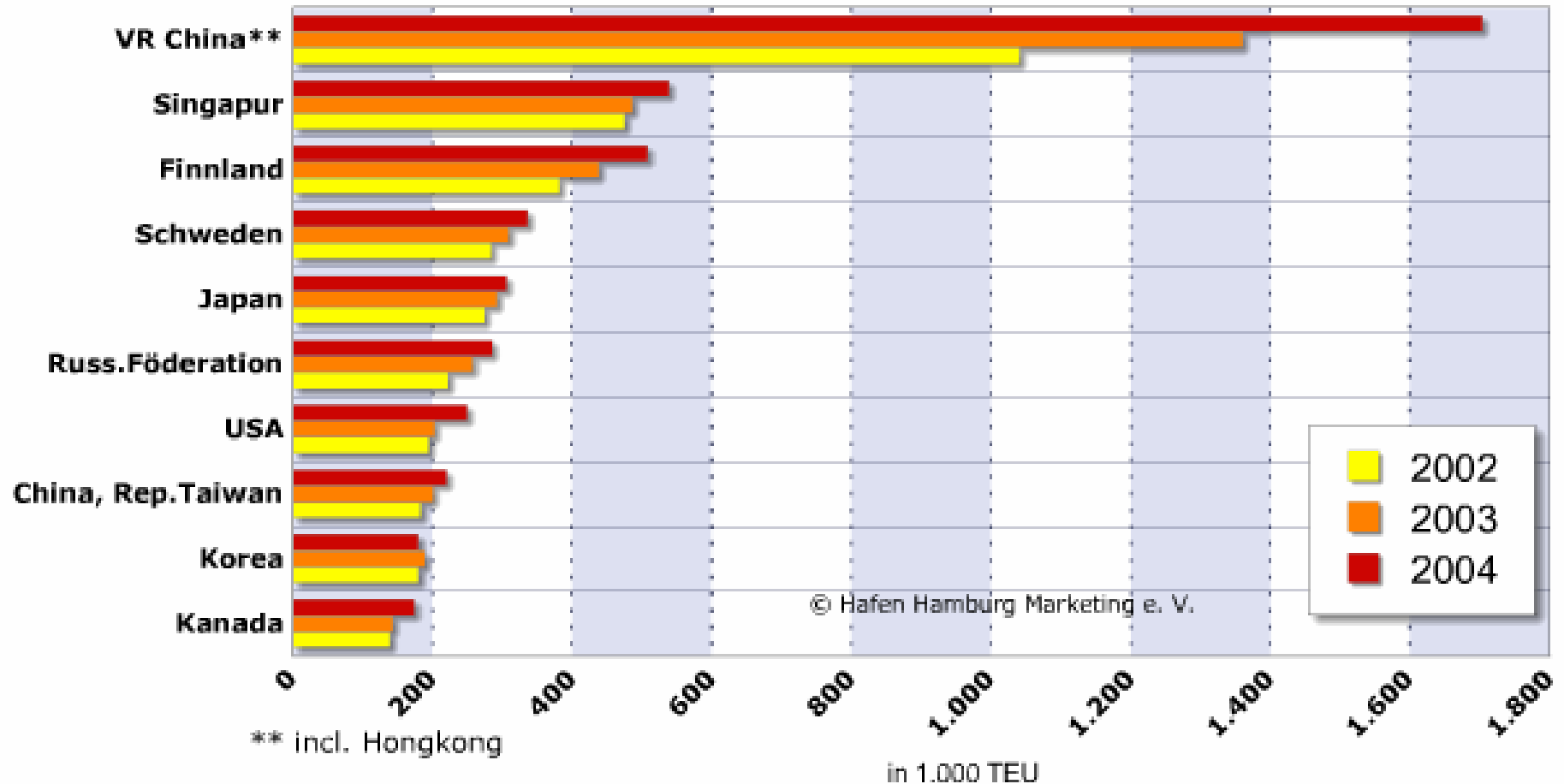
Containerthroughput by Continent (2004)



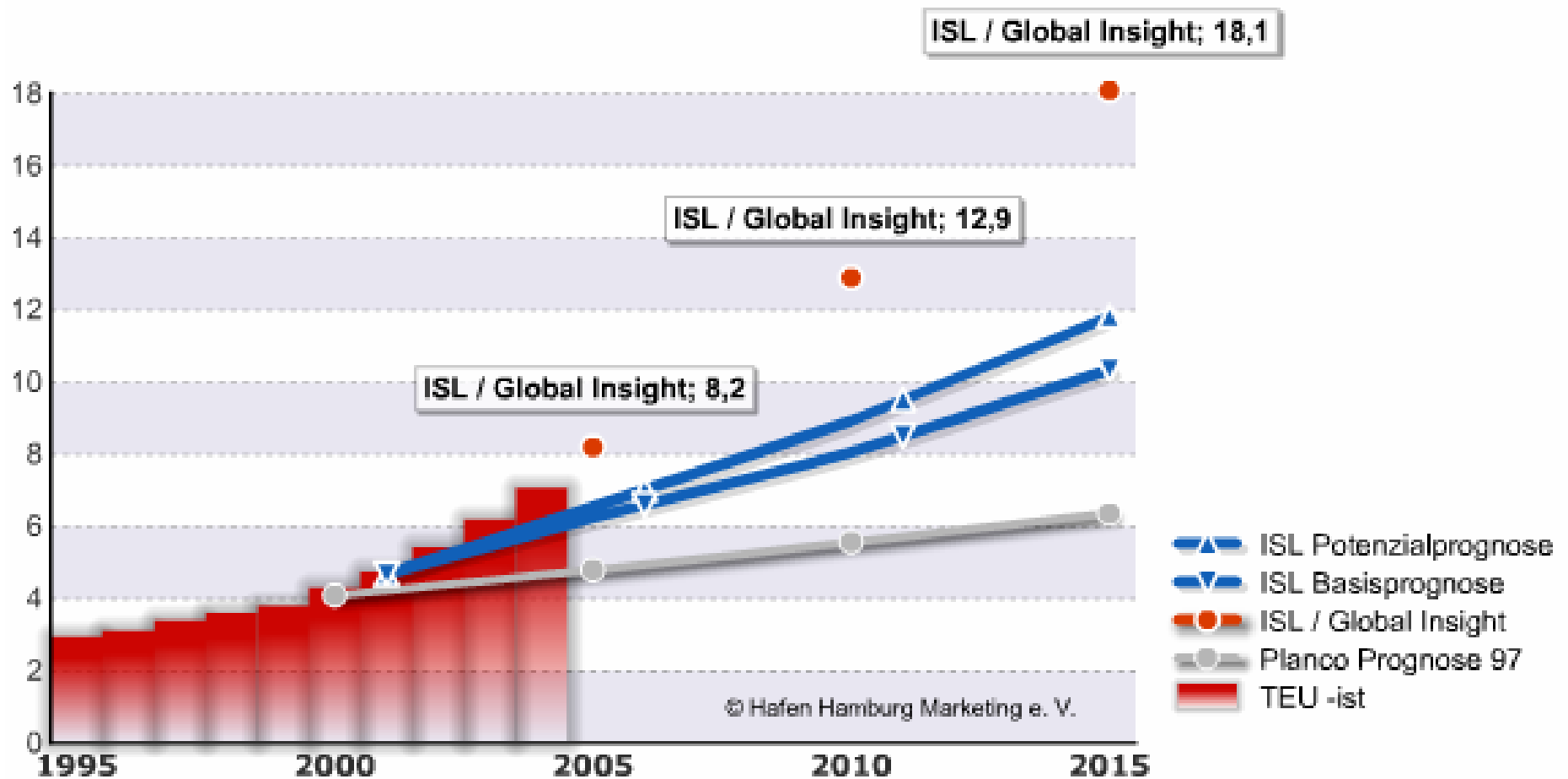
Market Share, Throughput by Region (1995-2004)



Main Trading Partners – Seaborne Traffic



Forecast Container Traffic until 2015

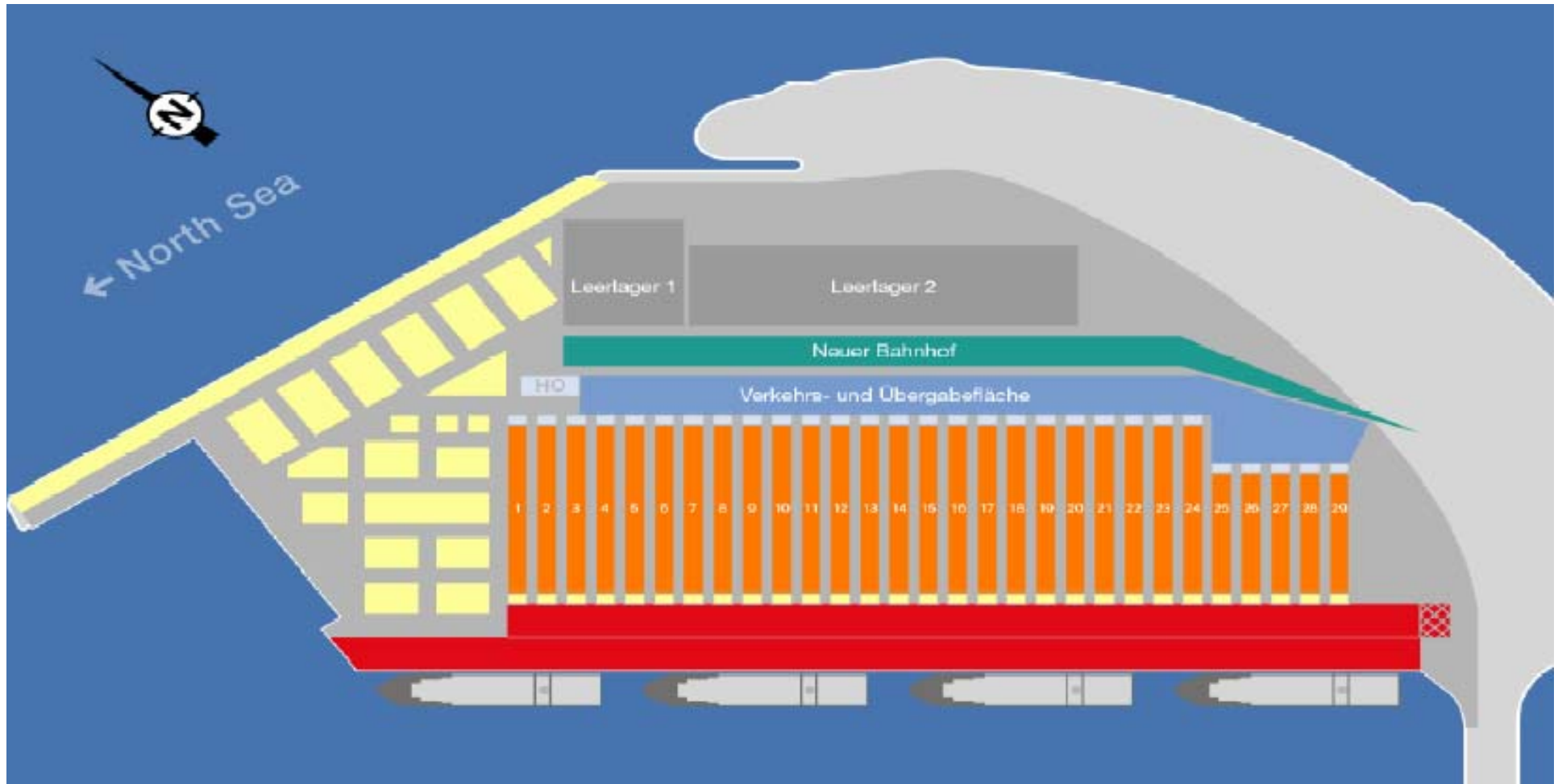


Containerterminal Burchardkai (CTB)



- Biggest Terminal within Port of Hamburg
 - Area 1,6 Mio. qm
 - Capacity 2,6 Mio. TEU
- Throughput 2004: 2,56 Mio. TEU
- Target: 5,2 Mio. TEU (+ 7% p.a.)
- Redesign of Terminal-Yard
- Extension of Berth 2-6 for Vessels > 8.000 TEU

CTB Extension until 2015





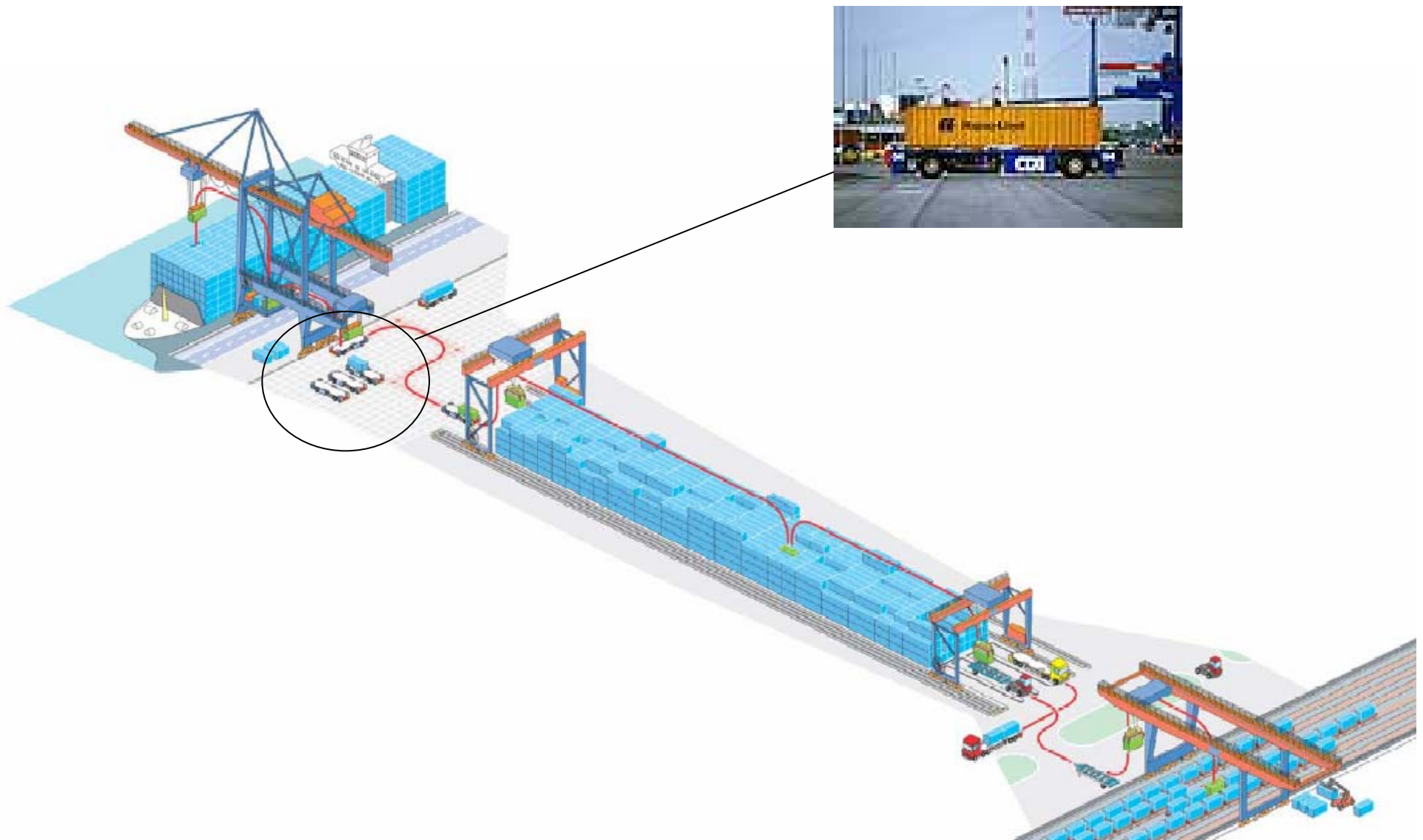
- Most Modern Terminal in Port of Hamburg

- 25,1 % Share of HLCL

Terminal Throughput:

- 2002: 138.000 TEU (Opening 6/2002)
- 2003: 874.000 TEU
- 2004: 1.256.000 TEU
- Capacity Extension until 2015: 3 Mio. TEU

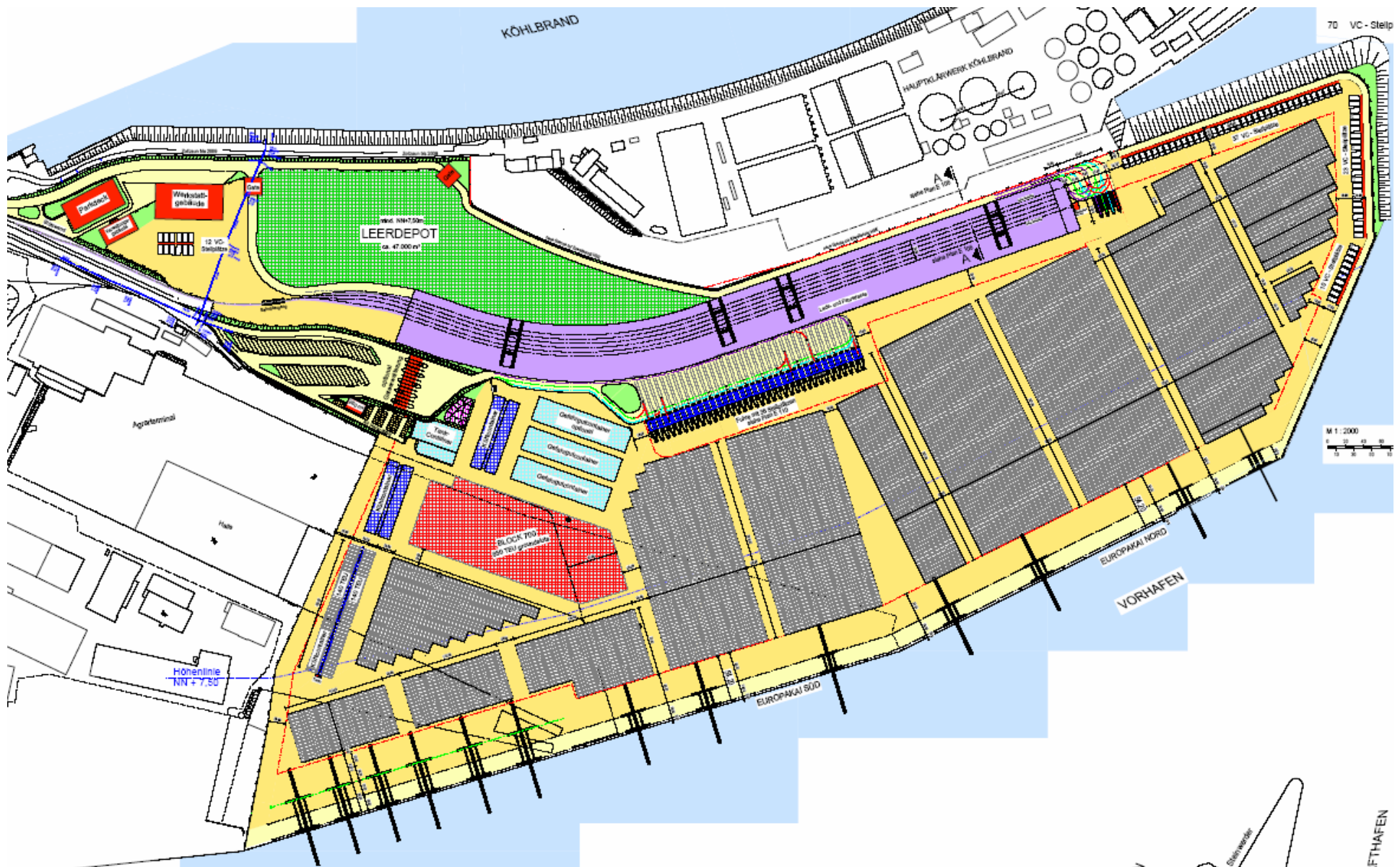
Processing at CTA





- Smallest Containerterminal of HHLA
- Current Capacity: 950.000 TEU
- Throughput 2005: 850.000 TEU
- Growth expectation: + 20 % p. a.

CTT Extension Plans



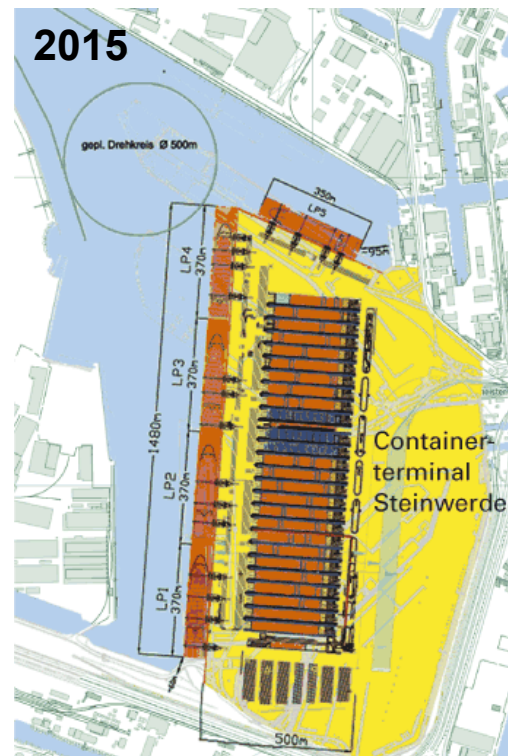


Total Throughput:

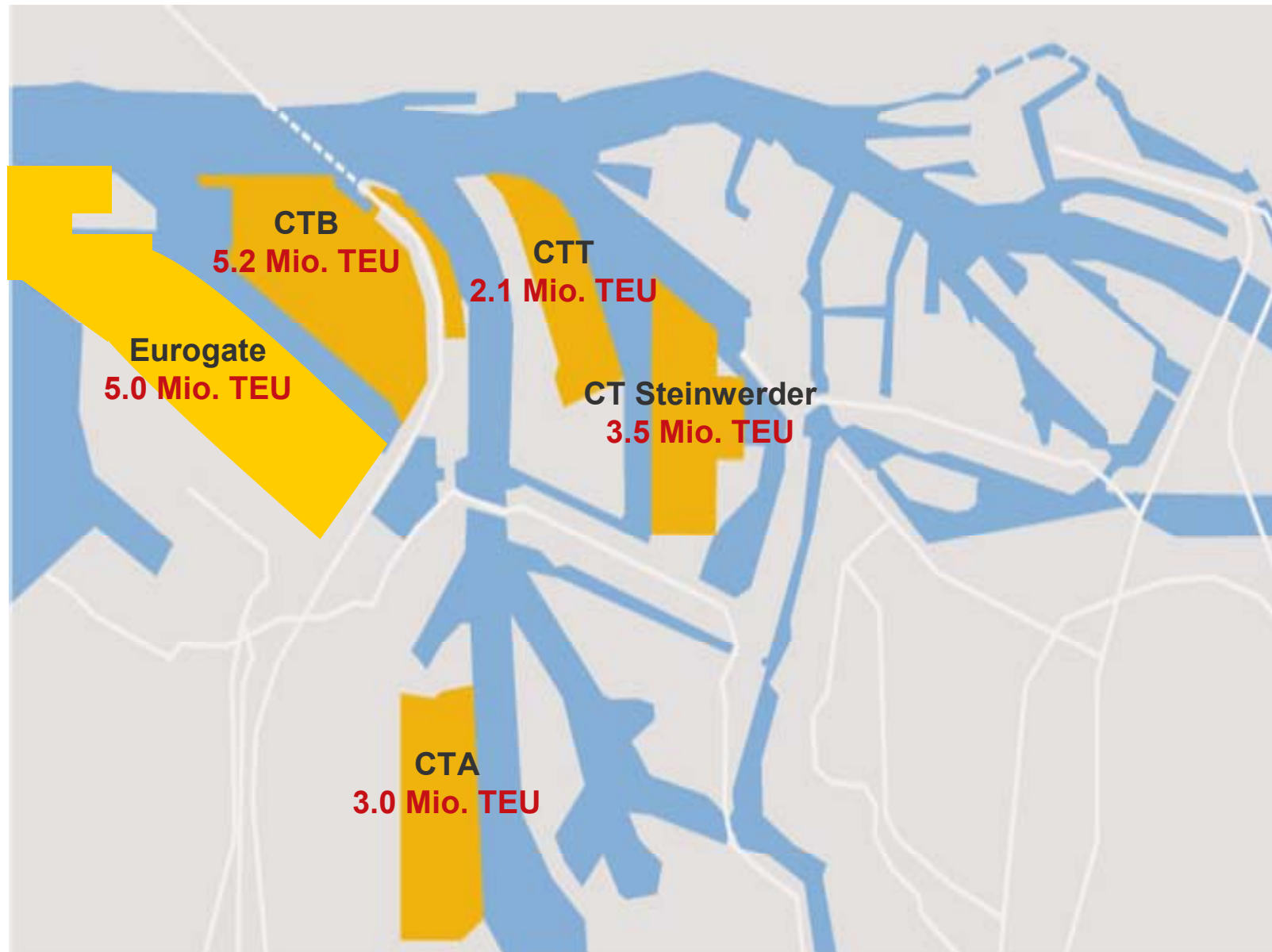
- **2003:** 2,05 Mio. TEU
- **2004:** 2,27 Mio. TEU
- **2005:** 2,70 Mio. TEU (+ 16,2%)
 - Modernization berth 1 – 3 until 2008 (Depth 16,7 m)
 - West-Extension directed towards Petroleumhafen and Unterelbe (Bubendey-Ufer)
 - Estimated capacity after extension: 5 Mio. TEU

Further Plans: Container Terminal Steinwerder

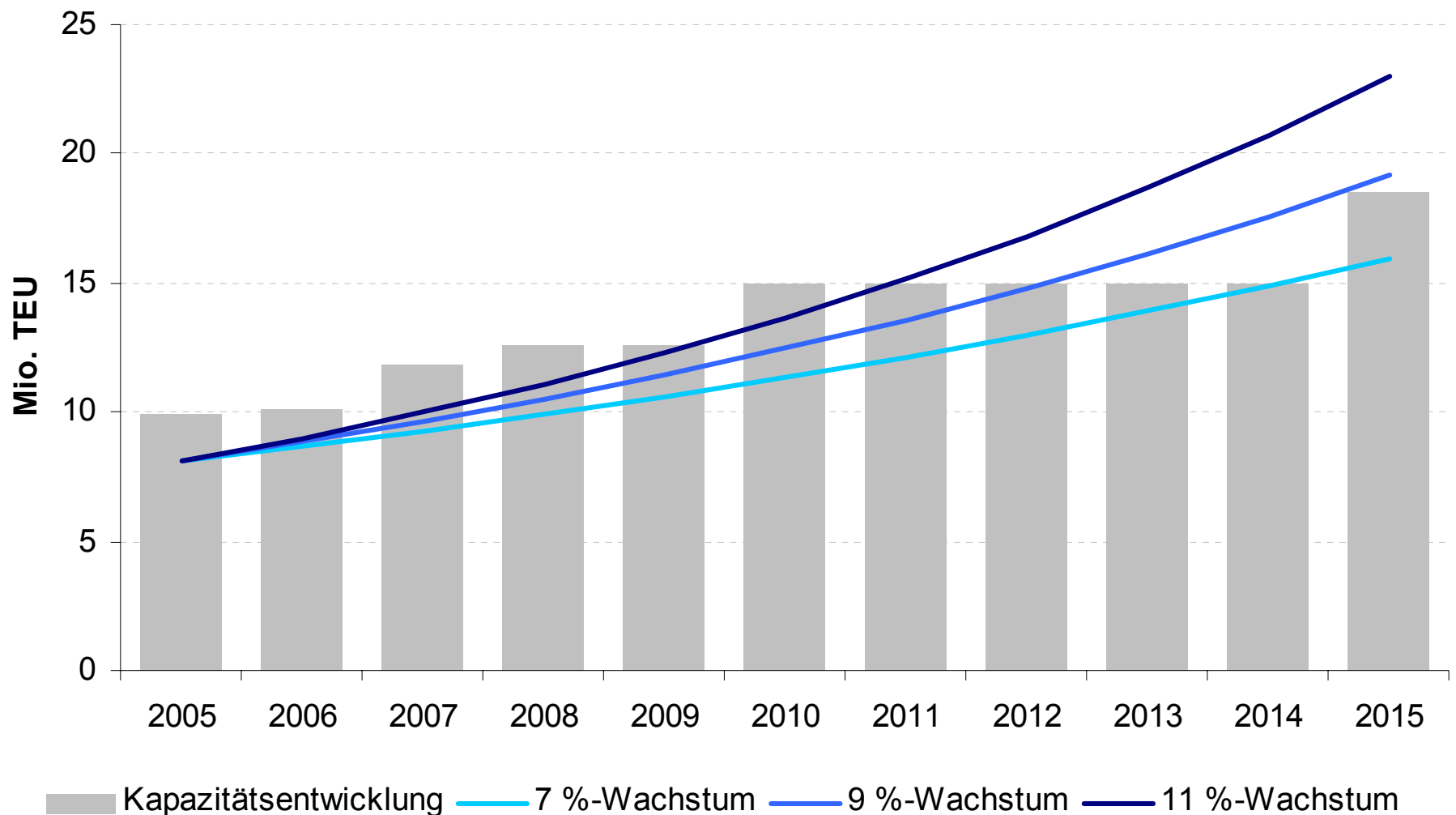
- Location: „Mittlerer Freihafen“ between Kuhwerder Hafen und Oderhafen/Travehafen
- Estimated capacity: 3 to 3.5 Mill. TEU
- Scheduled realization until 2015



Port Extension Hamburg (until 2015)

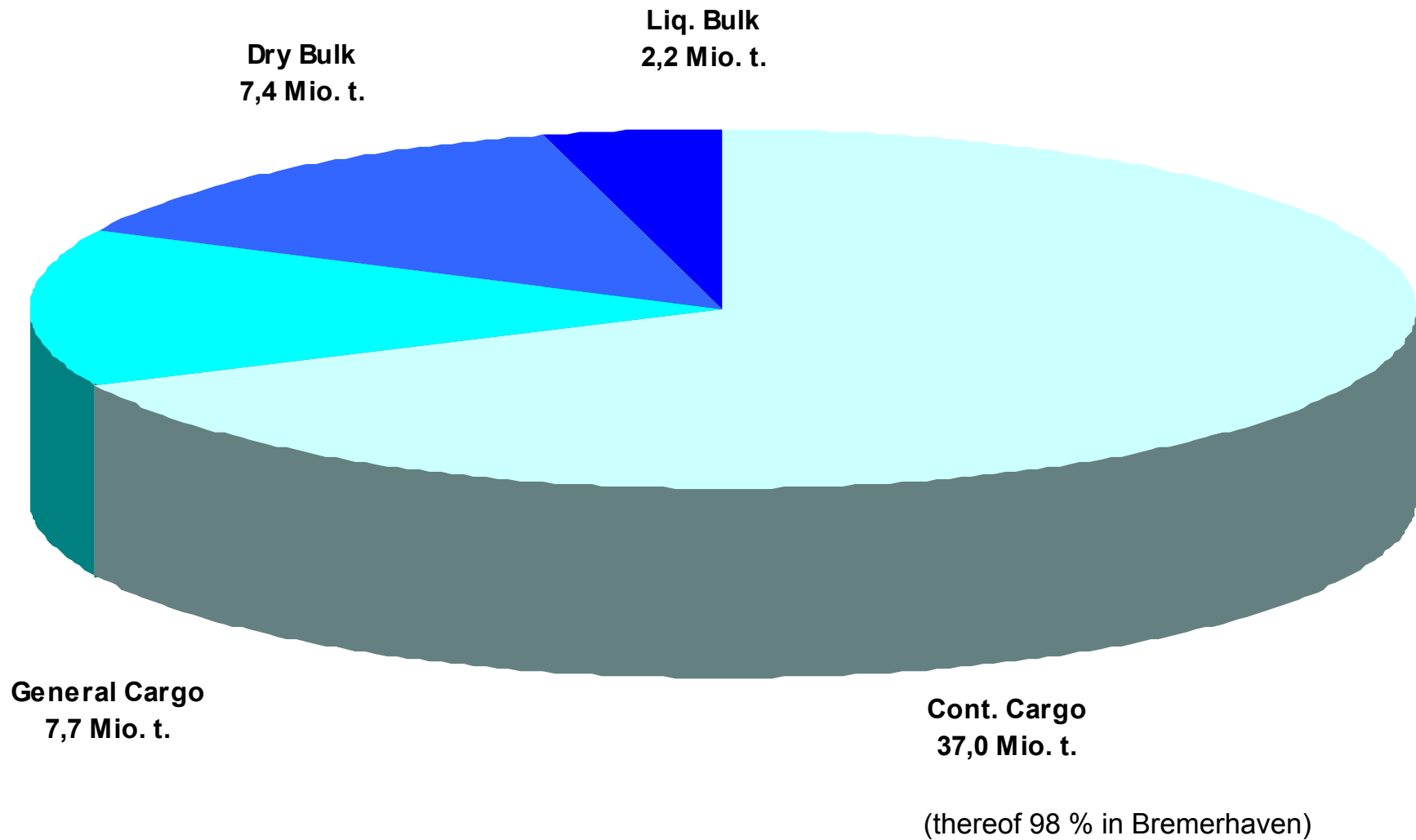


Estimated Capacity Restraints until 2015

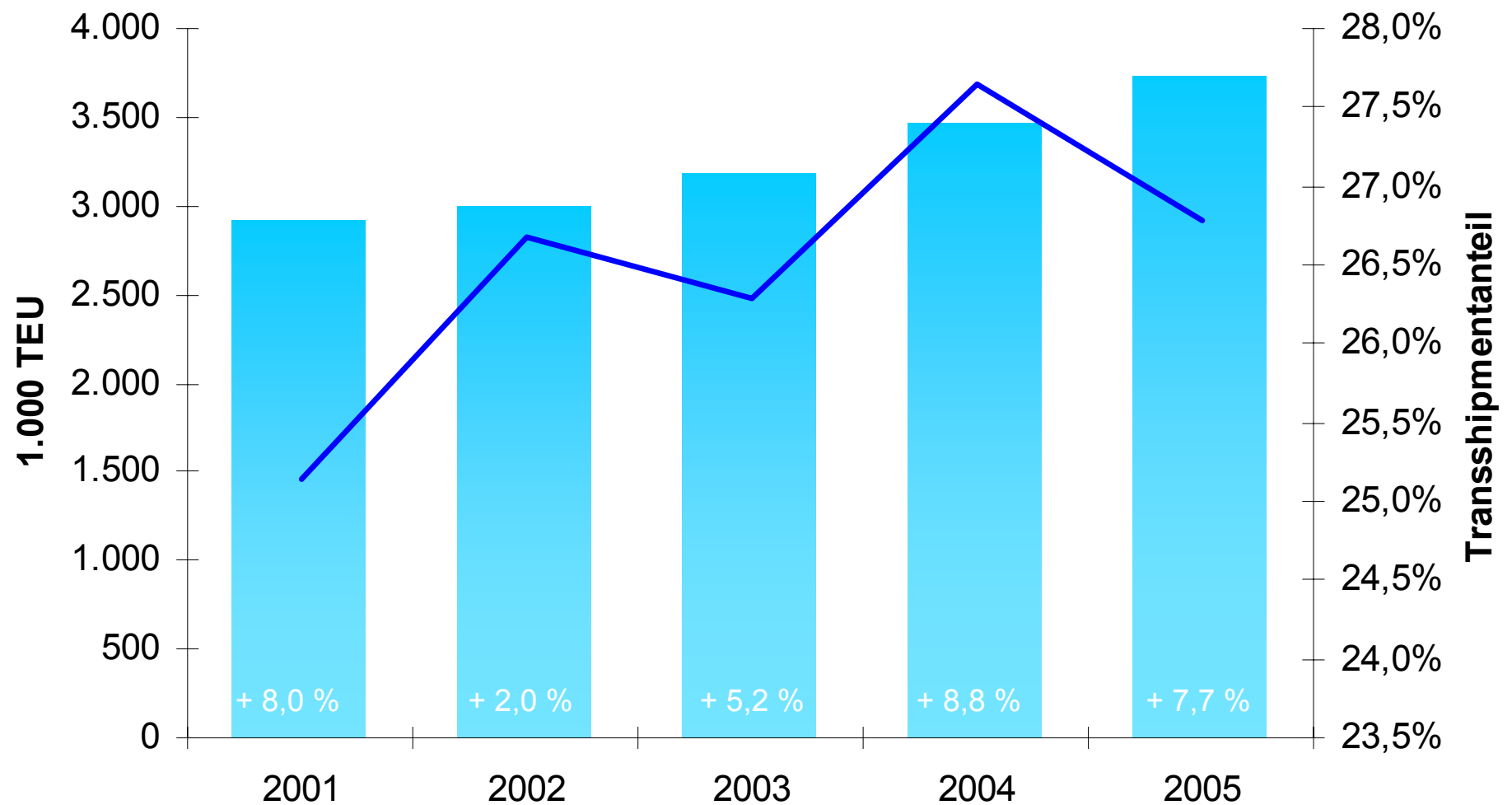


- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- **Development of Seaborne Traffic in Selected Ports**
 - Hamburg
 - **Bremerhaven**
 - Rotterdam
 - Antwerpen
 - Zeebrugge

Total Throughput Bremerhaven (2004)



Container Throughput Bremerhaven (2001-2005)



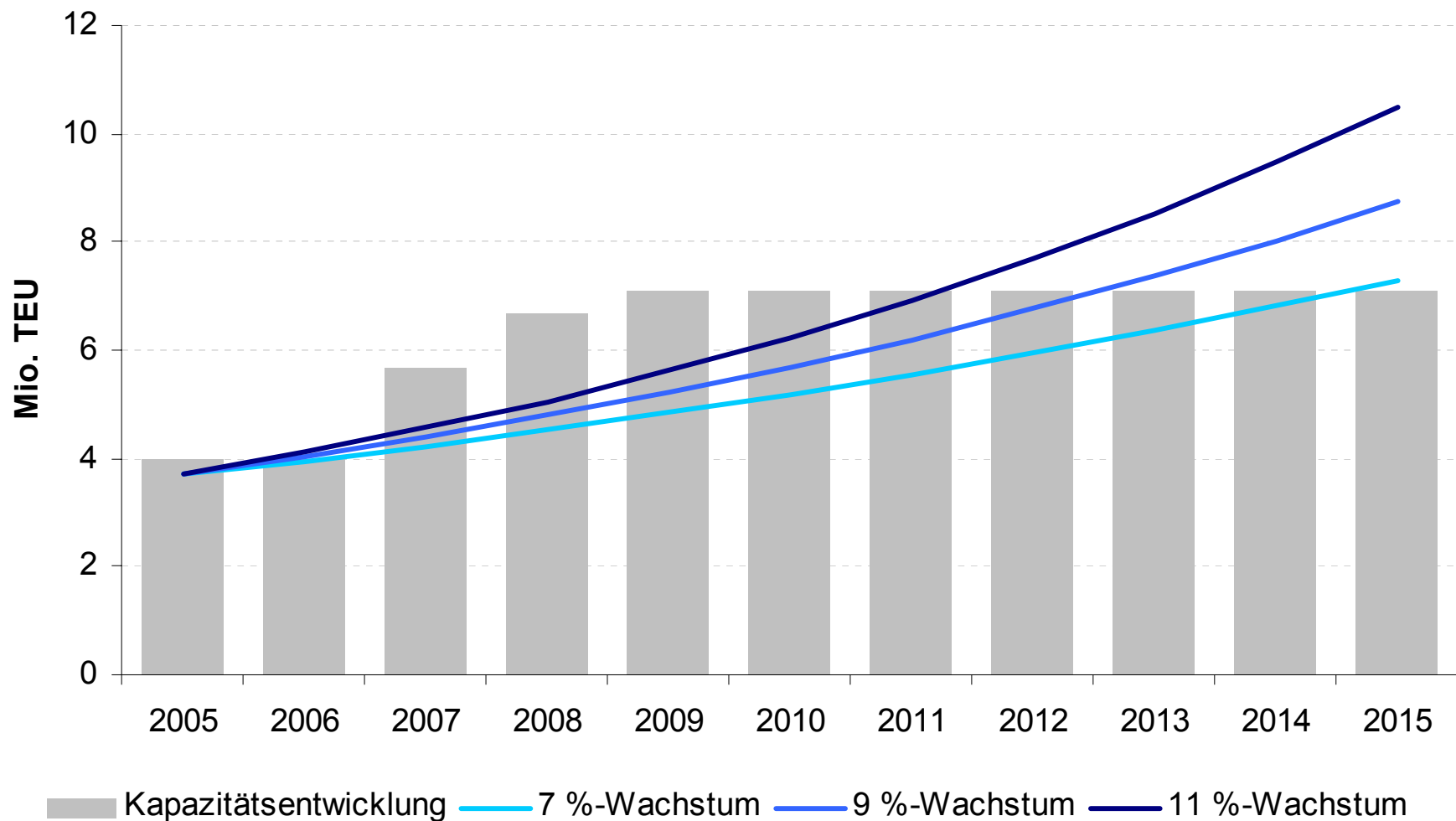


- NTB: Dedicated Terminal der Reederei Maersk
- Total Throughput 2005: 2,1 Mill. TEU (~1,5 Mio. TEU Maersk Line)
- MSC-Gate: Dedicated Terminal MSC, capacity: 1 Mill. TEU
- Eurogate (neutral customers): Capacity 1 Mill. TEU



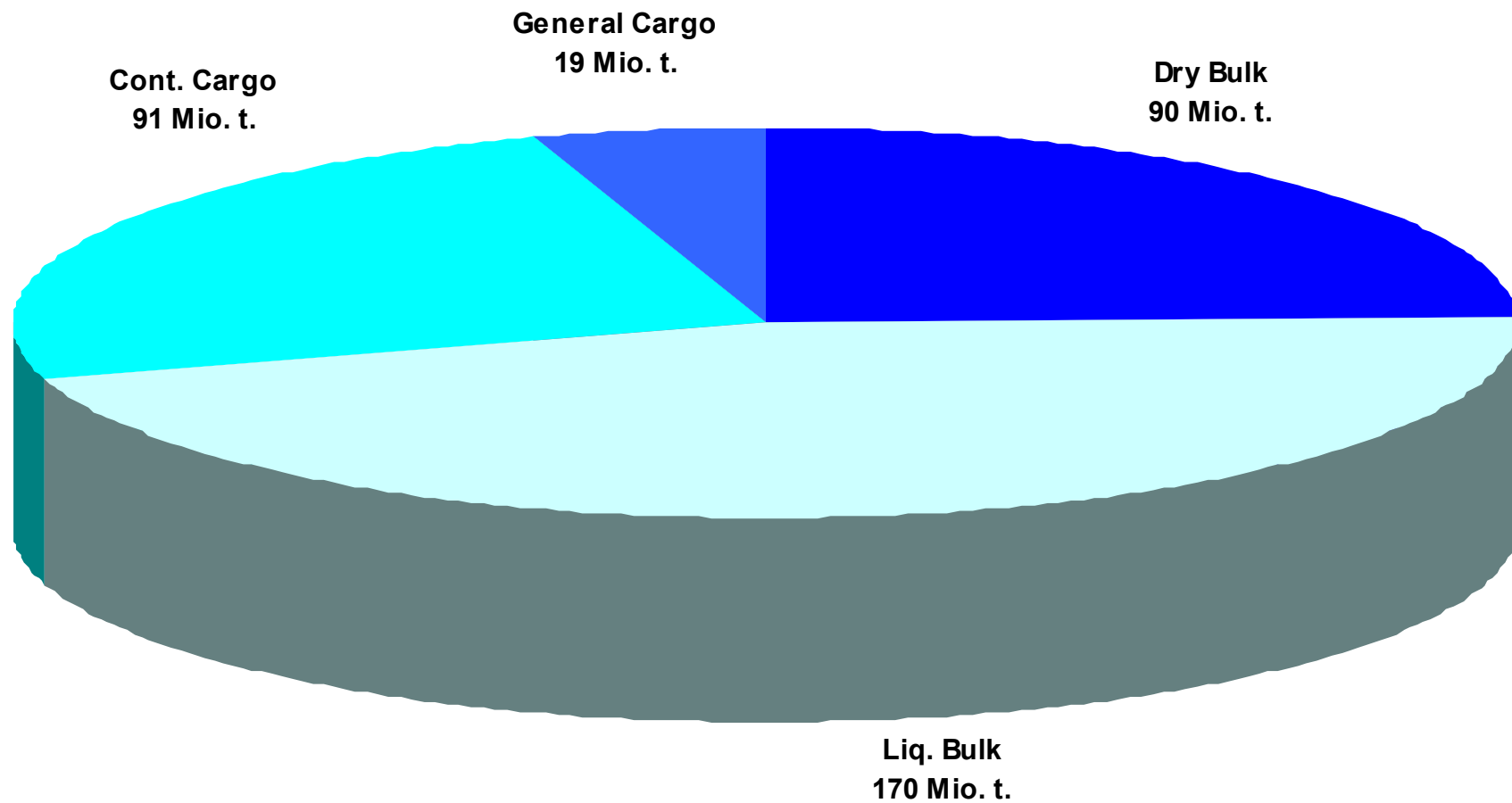
- CT IV: Extension of Stromkaje, 1.700 m in northern direction
- Realization: End of 2007
- End of 2006: 1. berth
- Max. capacity: 3 Mill. TEU
- Total capacity in Bremerhaven by 2009: app. 7 Mill. TEU
- No further extension possibilities

Estimated Capacity Restraints until 2015

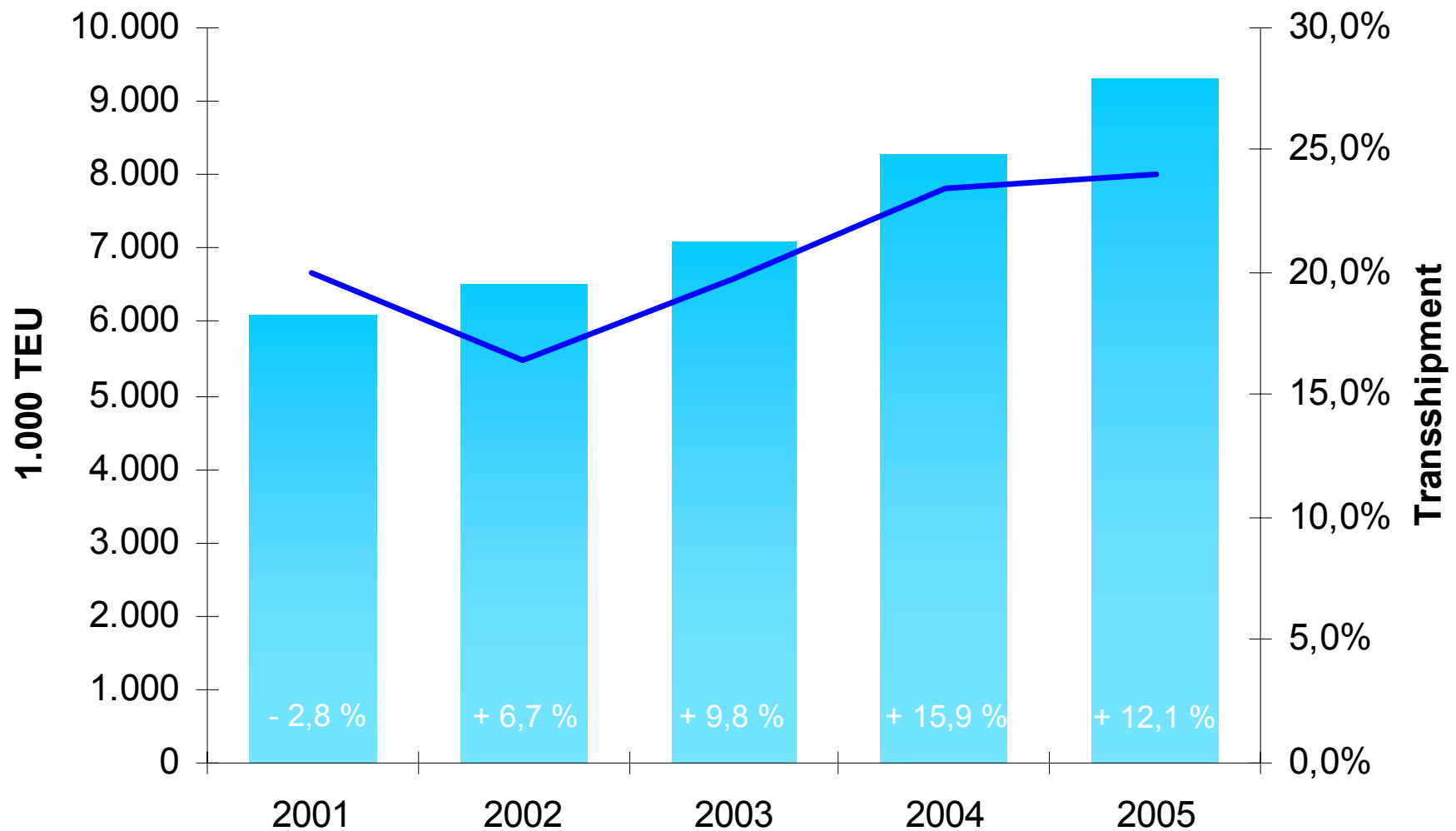


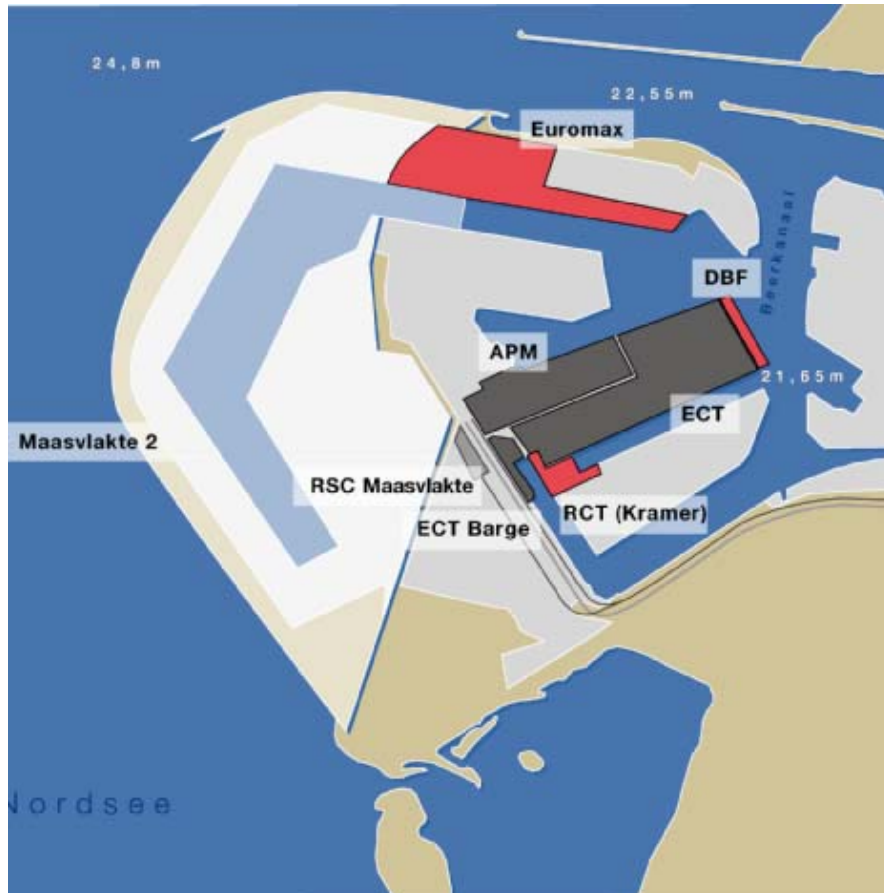
- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- **Development of Seaborne Traffic in Selected Ports**
 - Hamburg
 - Bremerhaven
 - **Rotterdam**
 - Antwerp
 - Zeebrugge

Total Cargo Throughput in Rotterdam (2005)



Container Throughput (2001-2005)





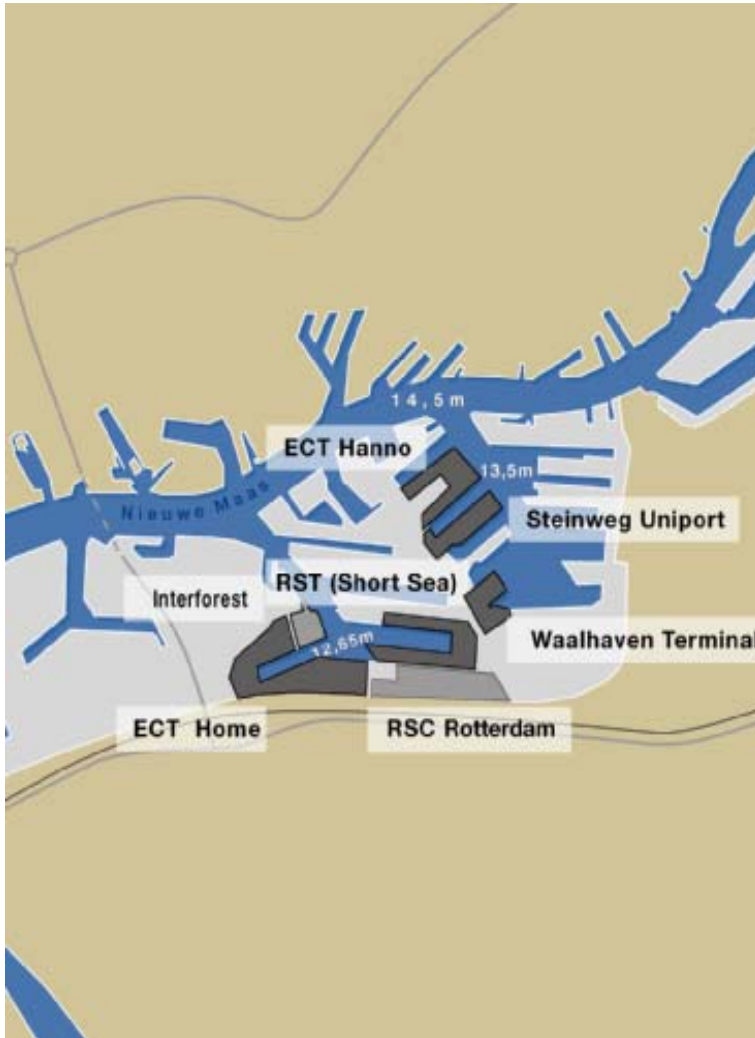
Terminal capacities:

- ECT-Delta: 3.7 Mill. TEU
- APM: 2.8 Mill. TEU

Capacity Restraints!

Maasvlakte Rotterdam





ECT Home

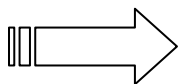
- max. schip-size: 5.500 TEU
- Capacity: 1 Mill. TEU

ECT Hanno

- max. ship-size: 6.000 TEU
- Capacity: < 1 Mio. TEU

other Terminals

- Predominantly used for Short-Sea and barge traffic
- Capacity: < 250.000 TEU



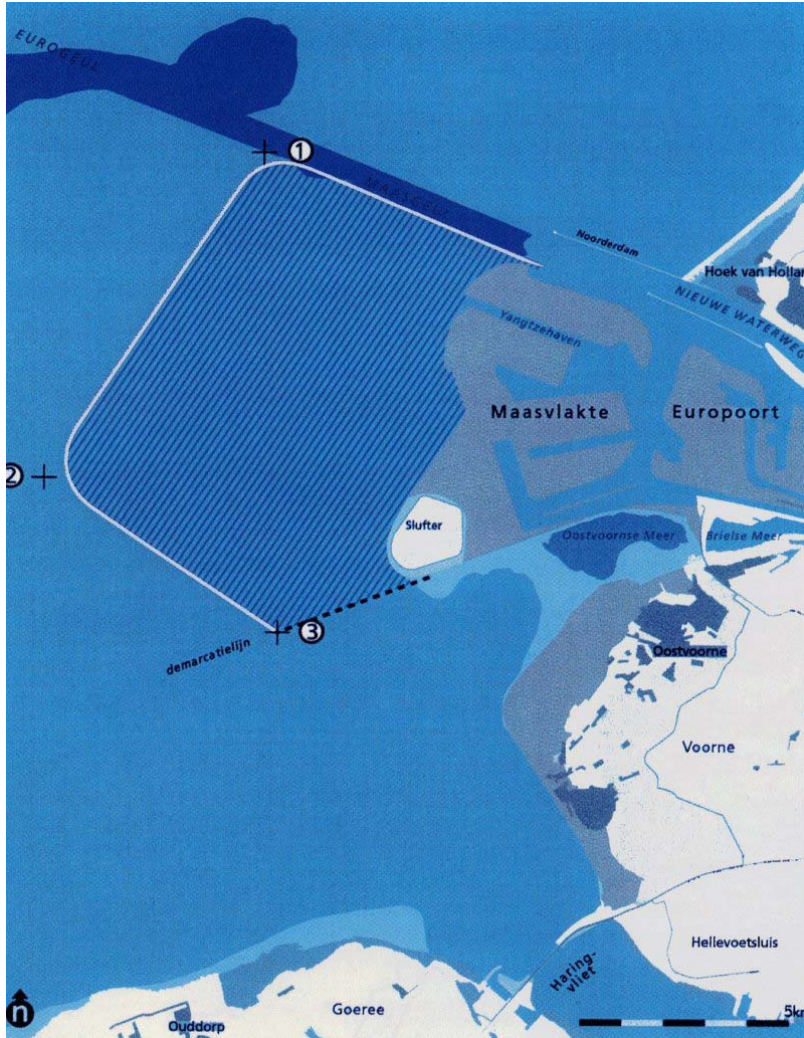
Future plans for terminal closings

EUROMAXX
TERMINAL



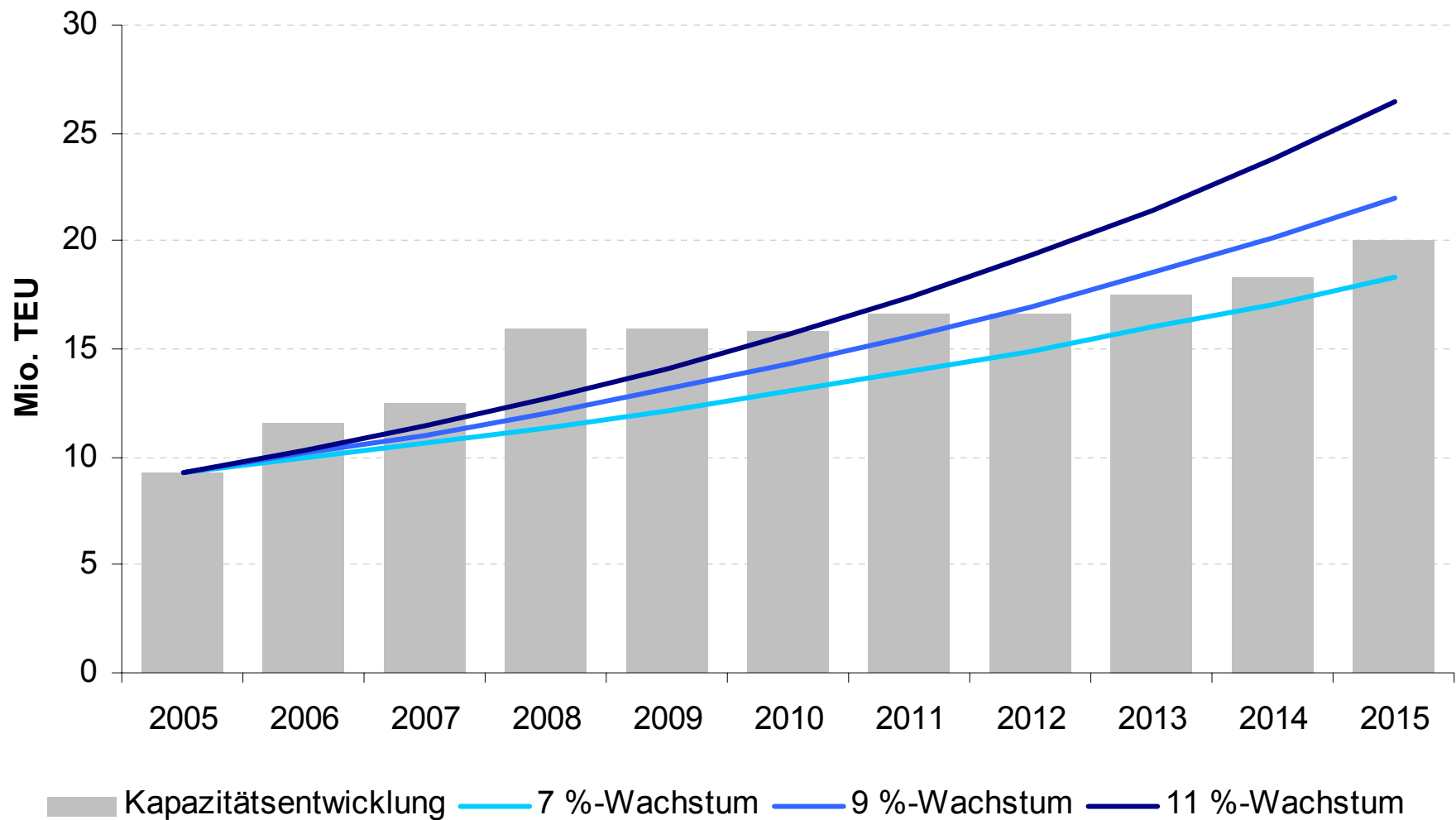
- Location: Northwest-end Maasvlakte I
- Cooperation PONL – ECT
- Relization planned for end of 2007
- Estimated capacity: 2 Mill. TEU
- Delays due to clash of interest after PONL takeover
- Further extension plans:
 - Barge- and feederterminal at ECT
 - Terminal enhancement ECT (5 Mio. TEU)
 - Terminal enhancement APM (3 Mio. TEU)

Port Extension Rotterdam (2)



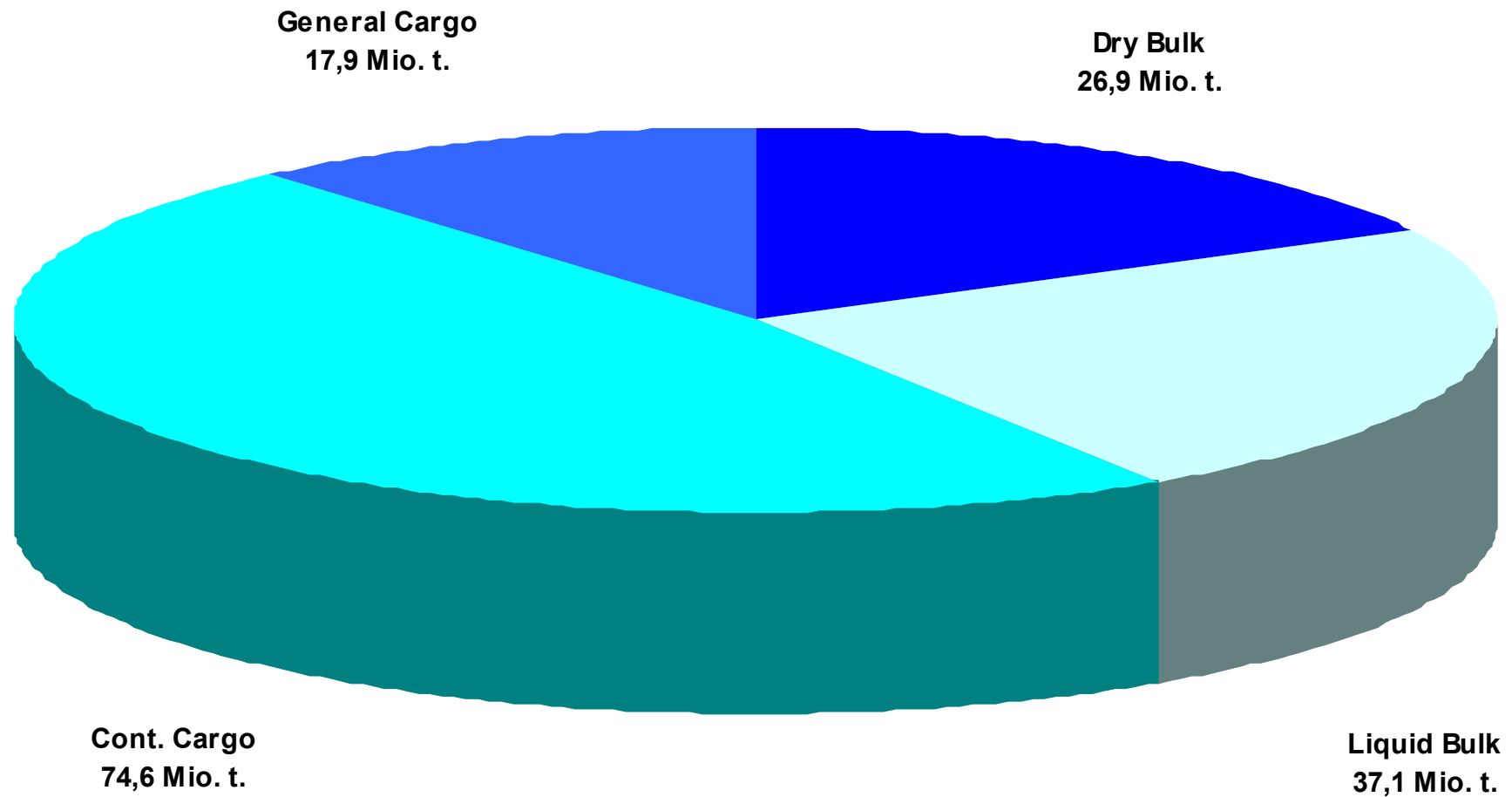
- Maasvlakte II
- Area: 1.500 ha, thereof 1.000 ha for container purposes
- Estimated begin of construction works 2008, scheduled final realization: 2012
- Current delay

Estimated Capacity Restraints until 2015

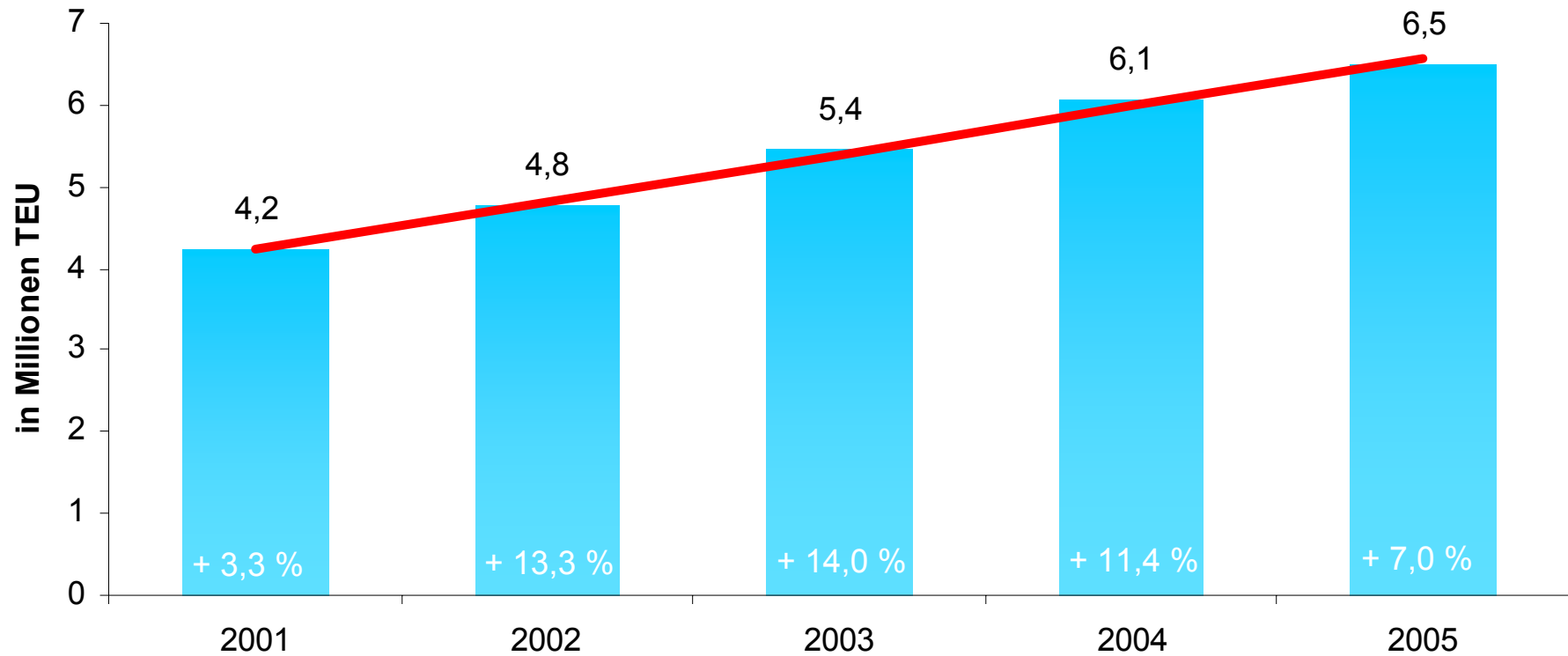


- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- **Development of Seaborne Traffic in Selected Ports**
 - Hamburg
 - Bremerhaven
 - Rotterdam
 - **Antwerp**
 - Zeebrugge

Total Throughput Antwerp (2005)



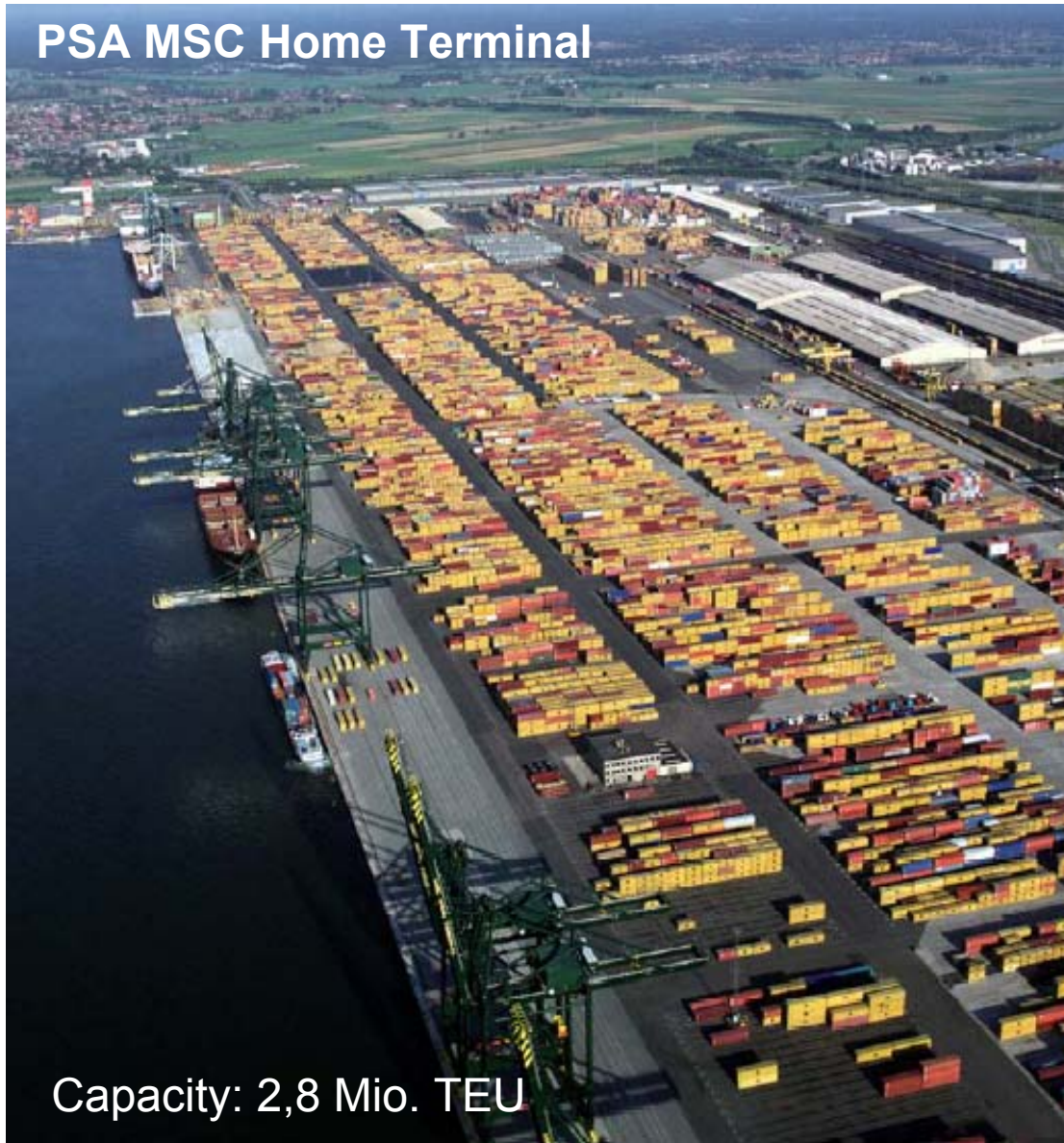
Container Throughput Antwerp (2001-2005)



Transshipment: 15-17 %

Container Terminals Antwerp (Selection)

PSA MSC Home Terminal



Capacity: 2,8 Mio. TEU

P&O Ports (Delwaide Dock)



Capacity: 2,0 Mio. TEU

PSA Nordzee Terminal



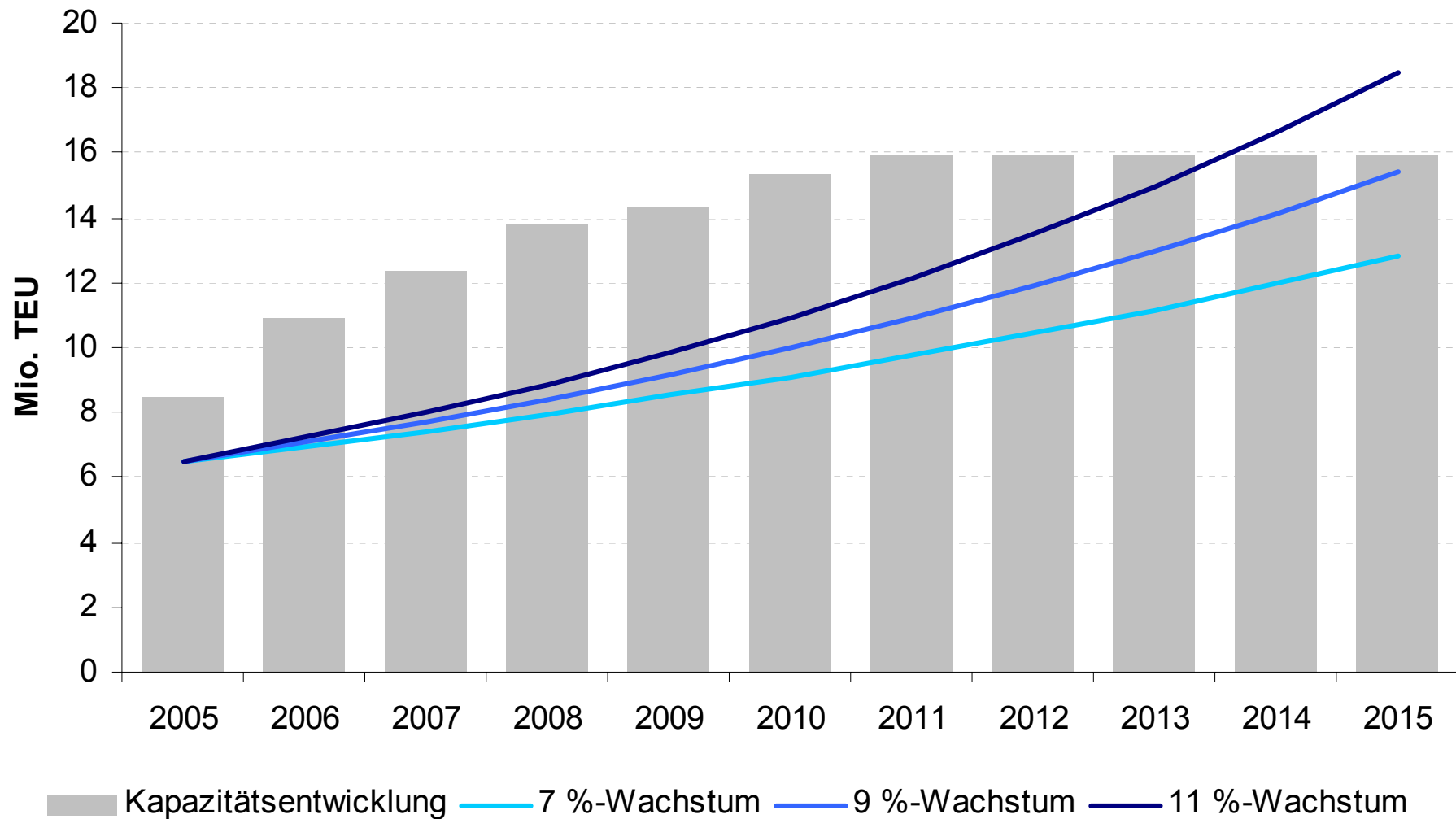
Capacity: 1,875 Mio. TEU

PSA Churchill-Terminal

Capacity: 0,75 Mio. TEU

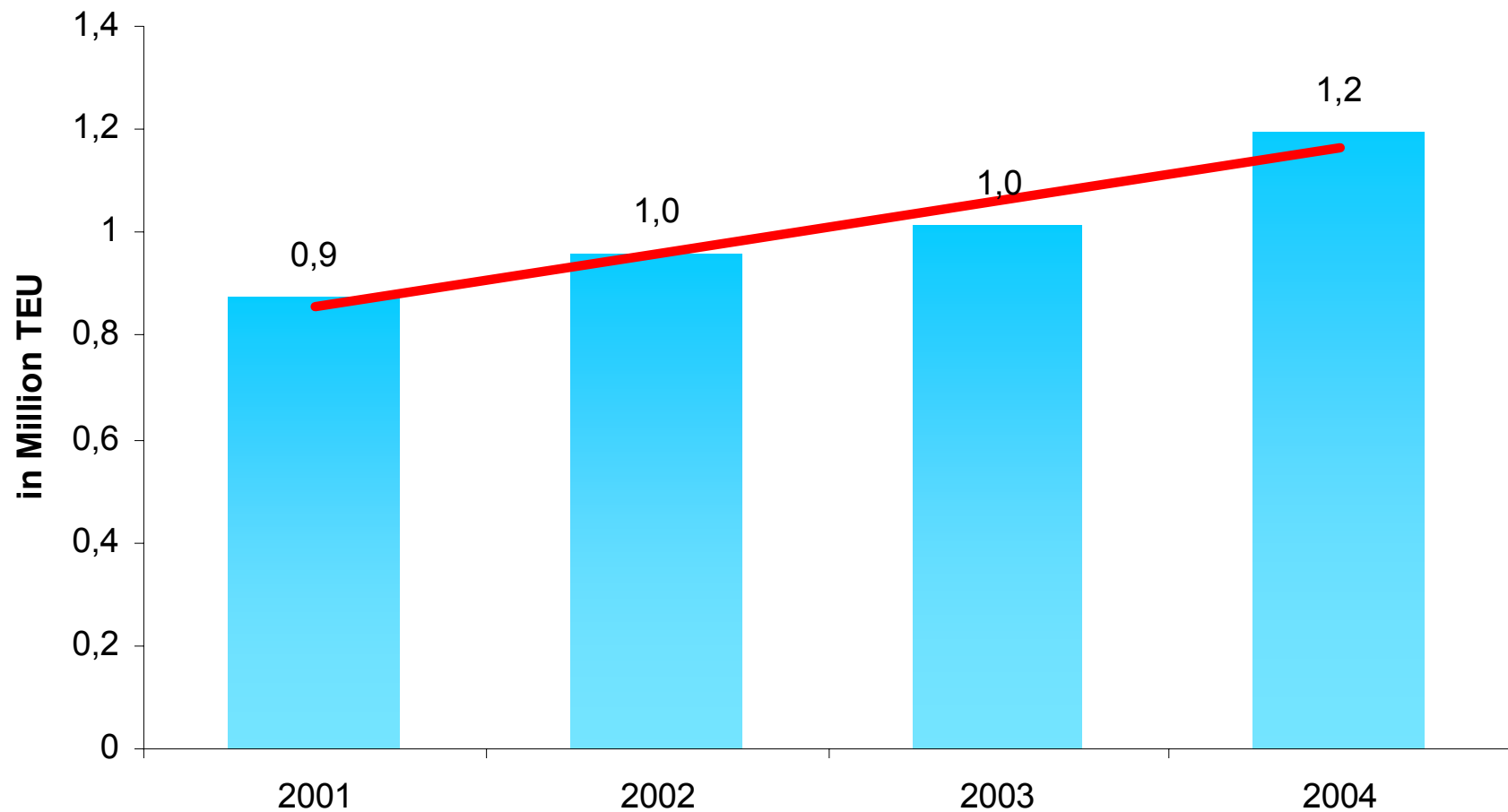
- MSC-Home: partially up to 4,2 Mill. TEU
- Deurganck Dock North (PSA/HNN)
 - First section: August 2005
 - Capacity: 1,5 Mill. TEU (1st extension 2006)
 - Capacity: 6,4 Mill. TEU after last extension (2011)
 - 2 exkl. berth für CYKH-Alliance
- Deurganck Dock South (Antwerp Gateway)
 - First section: August 2005
 - Share holders: COSCO (20%), CMA-CGM (10%), PONL/APM (20%), Port of Duisburg (7,5%), P&O Ports (42,5%)
 - Capacity: 3,5 Mill. TEU after last extension (2009)

Estimated Capacity Restraints until 2015



- Introduction
- Development of World Economy and World Container Throughput
- Development of Seaborne Traffic in North-Range
- **Development of Seaborne Traffic in Selected Ports**
 - Hamburg
 - Bremerhaven
 - Rotterdam
 - Antwerpen
 - **Zeebrugge**

Container Throughput Zeebrugge (2001-2004)



Transshipment: 14 %

OCHZ Container Terminal Zeebrugge

- Capacity: 760.000 TEU
- Share holders: PSA/HNN (35%), CMA-CGM (65%)



- APM-Terminal at Albert II Dock South
- Scheduled opening: July 2006
- Capacity: 1,2 Mio. TEU
- Dedicated Terminal of Maersk Line as Deep-sea terminal



Thank you for your interest!

