# Hamburg Cruise Market Development and Passenger Forecast

# Hamburg Cruise Passenger Forecast


## Agenda

1. Background and Objectives
2. Market Analysis
3. Traffic Forecast
4. Possible Sites for New Berths / Terminal

# Background and Objectives of Study

- Hamburg Cruise Centre opened in 2004 and has boosted cruise traffic in Hamburg.
- From the background of worldwide growth in the cruise market it is likely that German cruise passenger demand will continue to increase over the next years.
- Hamburg Cruise Centre has two berths, allowing for a combined maximum ship length of 520 m.
- The number of large cruise ships calling at Hamburg is increasing and the simultaneous berthing of these ships is not possible at the existing Terminal.
- The existing two berths will not be sufficient to cope with expected future market development. There is a risk that cruise operators will skip Hamburg and instead call at other ports in the region.
- From the above background Hamburg Cruise Centre has entrusted HPC Hamburg Port Consulting GmbH with the preparation of a market study and passenger forecast.

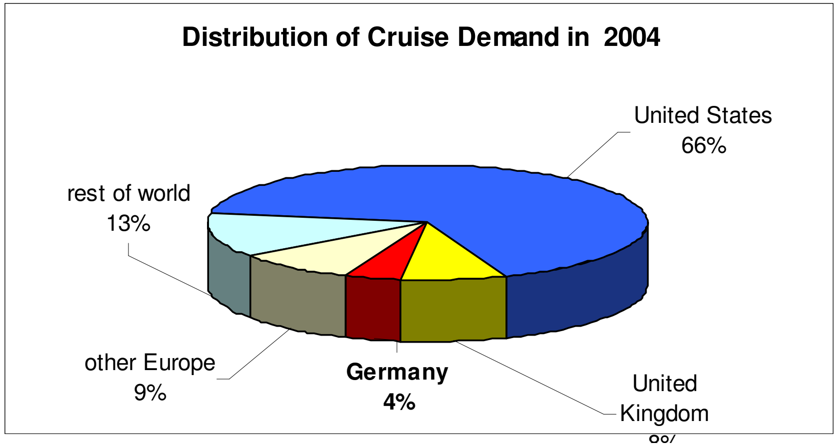
# Development World Cruise Market

- In 2005 worldwide number of cruise passengers amounted to 14.4 million. For the year 2010 18.8 million and for 2015 a further increase of up to 25 million passengers are expected.

- The most important cruise markets are the US with up to 10 million passengers annually, followed by the UK with approx. 1.1 million.

- Germany ranks third with approx. 600,000 passengers in 2005 (2004: 551,000).

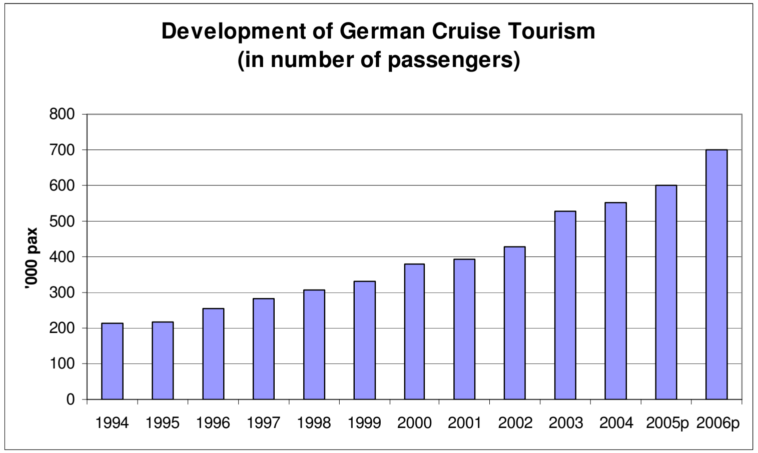
- In Germany cruise tourism has only 2% share on total holiday travel market.



# Development German Cruise Market

- From the mid 1990ies the number of German cruise passengers has more than doubled.
- The average annual growth rate in the German cruise market was at around 10%, while the total tourism industry only increased by approx. 4% p.a.
- Northern Europe as cruise destination has continuously increased its attractiveness for German passengers.
- In 2004 it accounted for 27% of all German cruise passenger movements (2003: 25%).

<u>conclusion:</u> worldwide cruise industry shows a strong growth trend.
German cruise market is expected to have an even higher growth potential.




# Cruise Passenger Arrivals in German Ports

Cruise ships regularly call at the following German ports:

**Development of Cruise Passenger Movements**
Embarking / disembarking: double, Transit call: single

| Region / Port | 1995 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|
| North Sea | | | | | | | |
| Bremerhaven | 44,000 | 55,076 | 59,157 | 52,634 | 63,170 | 70,000 | 72,000 |
| Hamburg | 15,259 | 23,090 | 16,584 | 25,452 | 27,646 | 27,989 | 38,149 |
| Cuxhaven | 8,430 | 7,442 | 8,820 | 10,282 | 20,000 | n.a. | 25,000 |
| Baltic Sea | | | | | | | |
| Kiel | n.a. | 48,033 | 51,128 | 52,227 | 93,172 | 128,500 | 132,000 |
| Lübeck / Travemünde | n.a. | 23,300 | 16,000 | 11,940 | 10,030 | n.a. | n.a. |
| Rostock | n.a. | 52,662 | 69,499 | 77,656 | 95,092 | 92,209 | 124,500 |
| **Total** | **67,689** | **209,603** | **221,188** | **230,191** | **309,110** | **318,698** | **391,649** |

*source: G.P Wild, Feb. 2006*

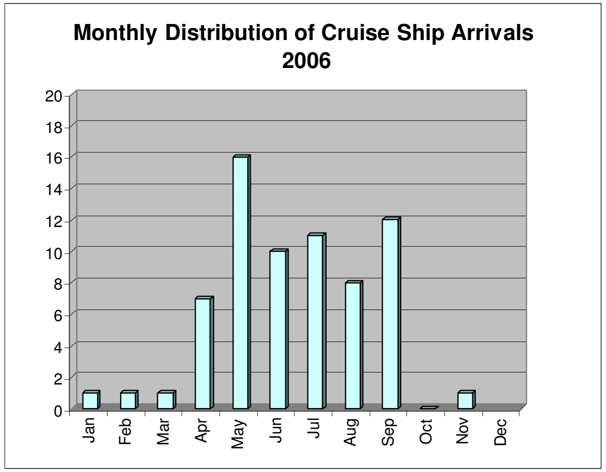
- Over the past ten years cruise passenger arrivals in German ports have increased by almost 600%
- The Baltic Sea ports of Kiel und Rostock showed the highest growth. Both ports have established as homeports in recent years.
- Currently, Hamburg has a market share of less than 10%.
- Nevertheless, passenger growth in Hamburg in 2005 was considerably higher than in the other North Sea port of Bremerhaven and Cuxhaven.

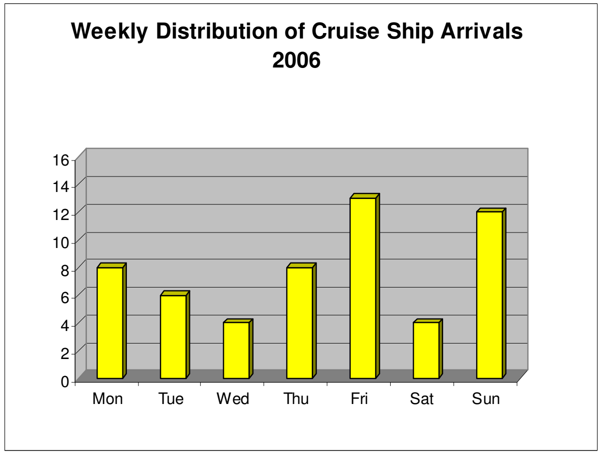
# Development of Cruise Arrivals in Hamburg

Cruise ship arrivals in Hamburg have more than doubled in only one-year time period:

- In 2005 Hamburg Cruise Centre operated 26 cruise ships with 38,149 passengers.
- In 2006 68 ships with 81,724 passengers arrived.
- Main season: May to September
- Most frequented days: Friday and Sunday

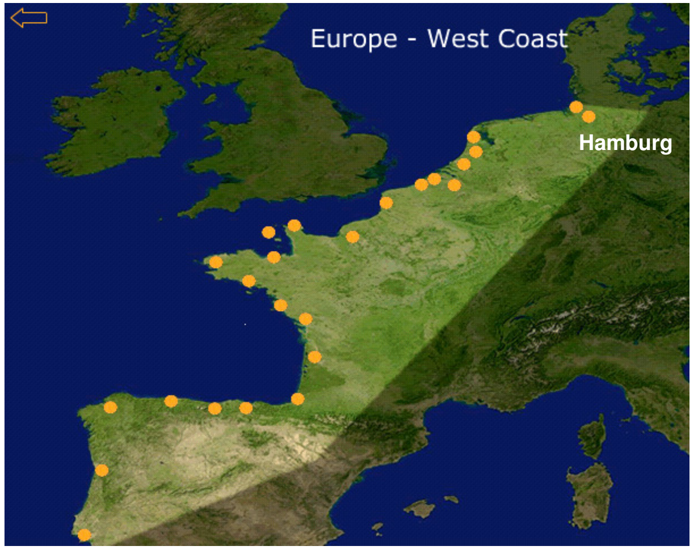
→ For 2007 82 cruise ship arrivals are scheduled
(as per 18.05.07)



# Cruise Destination Hamburg

- Hamburg is located along the major North European cruise itineraries:
  - Western Europe Atlantic coast until Lisbon
  - British Isles, Channel Coast, Scotland
  - Southern Norway and North East Atlantic (Iceland, Spitsbergen, North Cape)
- Hamburg is called during voyages from the Mediterranean to the Baltic Sea (seasonal repositioning of ships).
- Hamburg is frequently called during maiden voyages and for introducing ships in the North European cruise market (e.g. Freedom of the Seas, QM2).



# Hamburg Cruise Voyage Characteristics

- Most common cruise voyages offered with homeport Hamburg are either two-weeks or 10 nights.
- There is a trend towards shorter cruises with 3 to 4 days duration,
  mainly as long weekend or over public holidays (e.g. Labour Day, Ascension Day, Pentecost).
- 7-day cruises – typical for Baltic and Mediterranean Sea – are not featured for Hamburg, because the most attractive destinations, namely Norway and Iceland due to their distance require longer journeys.
- In average cruise ships stay in Hamburg for a time period of between 10 and 12 hours (arrival in the morning between 6:00 and 9:00 hrs, departure in the evening between 18:00 and 20:00 hrs).

# Other Cruise Market Characteristics

Season in North Europe:

- Main Season from April to September .
- Almost no cruise activities from October to March (due to weather conditions).
- Cruise operators are trying to extend season by introducing new products, e.g. Spa-Cruises or “theme” cruises („Christmas Shopping“).
- Ships increasingly become a destination on themselves (on-board attractions, “party ships”).

Development of ship sizes:

- The average size and passenger capacity of new ships ordered is constantly increasing, due to scale economies.
- Most new-built ships have a size of between 70,000 to 150,000 GT and lower berths capacity of 2,500 to 3,500.
- The length overall is often exceeding 260 m (critical ship length at Hamburg Cruise Centre).

# Berth Situation at Hamburg Cruise Centre

- Existing two berths not sufficiently dimensioned to cope with expected market development:
  - Maximum total length of ships berthing is 520 m (two ships up to 260 m)
  - Limitations occur, once LOA of ships exceed 260 m.
  - Example: Ship with LOA of 350 m (QM2) berthing at western quay, maximum ship with LOA of 175 m possible at eastern quay.

→ Simultaneous berthing of two large cruise ships is not possible.

- Bottlenecks can already be observed at Hamburg Cruise Centre:
  - On September 18th 2006 four cruise ships arrived at Hamburg. One ship was berthed at O‘swaldkai. Another ship berthed at Überseebrücke.
  - Simultaneous arrivals of more than two ships will increase in future.

# Forecasting Methodology

- Two workshops with cruise industry experts, analysing and discussing future market strategies for the German cruise market.
- Definition of market scenarios (Base Case, Optimistic, Pessimistic).
- Assumptions regarding scheduled and random ship arrival patterns.
- Forecast of ship arrivals at Hamburg for the time period 2008 to 2010
- Final discussion of forecasting results and underlying assumption with largest operators on the German cruise market.
- Extension of forecasting horizon to 2020, based on existing studies and projections for the North European cruise sector.
- Projection of cruise passenger arrivals in Hamburg up to the year 2020 (only Base Case scenario).

# Expected Development in 2007

As per 18.05.07 82 cruise ship arrivals, of which:

- Five cruise operators with passenger turnaround in Hamburg:
  - Two operators (A and B) from „contemporary“ market segment totalling 31 arrivals.
  - Two operators from “premium” (F, G) and one operator from “luxury” market segment (E) totalling 21 ship arrivals.
- 10 ships with turnaround
- 20 calls

| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2007 (as per 18.05.07) turnaround | call |
|---|---|---|---|---|
| operator A / Contemporary | 250 | 2,000 | 7 | |
| | 200 | 1,600 | 17 | |
| operator B / Contemporary | 290 | 2,100 | 7 | |
| operator C / Contemporary | 250 | 1,600 | 3 | |
| operator D / Premium | 200 | 800 | | 1 |
| operator E / Luxury | 200 | 400 | 6 | |
| | 120 | 180 | 6 | |
| operator F / Premium | 175 | 550 | 6 | |
| operator G / Premium | 345 | 2,600 | 2 | |
| | 300 | 1,800 | 1 | 1 |
| Calls: | | | | |
| introduction / newbuilt | 340 | 3,600 | | |
| introduction / newbuilt | 300 | 2,400 | | 1 |
| positioning Med - Baltic | 270 | 2,700 | 2 | |
| other | 180 | 500 | 5 | 17 |
| subtotal other calls | | | 7 | 18 |
| **Turnaround / Call** | | | **62** | **20** |
| **TOTAL** | | | **82** | |

* according to T. Peisley / Seadtrade 2006

# Projection for 2008 (Base Case)

Total of 100 ship arrivals, i.e. increase by 28 arrivals:

- 7 Operators with turnaround in Hamburg
  - One additional operator in “contemporary” market segment (C) starting with 10 turnaround,
  - Established operators (A, B) will continue with 31 arrivals.
  - One additional operator with initially 10 arrivals in premium segment (D) plus 23 arrivals of other premium and luxury brands (E, F, G).
- 26 calls (+ 5)

| **operator / market segment*** | **ship length overall (m)** | **passenger capacity lower berths** | **2008 turnaround** | **2008 call** |
|---|---|---|---|---|
| operator A / Contemporary | 250 | 2,000 | **21** | |
| | 200 | 1,600 | **5** | |
| operator B / Contemporary | 290 | 2,100 | 5 | |
| operator C / Contemporary | **250** | **1,600** | **10** | |
| operator D / Premium | **200** | **800** | **10** | |
| operator E / Luxury | 200 | 400 | 5 | |
| | 120 | 180 | 5 | |
| operator F / Premium | 175 | 550 | 8 | |
| operator G / Premium | 345 | 2,600 | 3 | |
| | 300 | 1,800 | 2 | |
| Calls: | | | | |
| introduction / newbuilt | 340 | 3,600 | | 2 |
| introduction / newbuilt | 300 | 2,400 | | 2 |
| positioning Med - Baltic | 270 | 2,700 | | 2 |
| other | 180 | 500 | | 20 |
| subtotal other calls | | | | 26 |
| **Turnaround / Call** | | | **74** | **26** |
| **TOTAL** | | | **100** | |

* according to T. Peisley / Seadtrade 2006

# Projection for 2009 (Base Case)

Total of 122 ship arrivals, i.e. increase by 22:

- Number of cruise operators with Hamburg as turnaround will be same as in 2008 but frequency will increase:
  - Operators A, B, C expected with total of 57 ship arrivals (+ 16).
  - Operator D unchanged with 10 arrivals, but with significantly larger ship (LoA: 290 m, pax: 1.800)
  - Other turnarounds totalling 25 (+ 2).
- 30 calls (+ 4).

| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2009 turnaround | 2009 call |
|---|---|---|---|---|
| operator A / Contemporary | 250 | 2,000 | 22 | |
| | 200 | 1,600 | 10 | |
| operator B / Contemporary | 290 | 2,100 | 10 | |
| operator C / Contemporary | 250 | 1,600 | 15 | |
| **operator D / Premium** | **290** | **1,800** | 10 | |
| operator E / Luxury | 200 | 400 | 5 | |
| | 120 | 180 | 5 | |
| operator F / Premium | 175 | 550 | 10 | |
| operator G / Premium | 345 | 2,600 | 3 | |
| | 300 | 1,800 | 2 | |
| Calls: | | | | |
| introduction / newbuilt | 340 | 3,600 | | 2 |
| introduction / newbuilt | 300 | 2,400 | | 3 |
| positioning Med - Baltic | 270 | 2,700 | | 3 |
| other | 180 | 500 | | 22 |
| subtotal other calls | | | | 30 |
| **Turnaround / Call** | | | **92** | **30** |
| **TOTAL** | | | **122** | |

* according to T. Peisley / Seadtrade 2006

# Projection for 2010 (Base Case)

Total of 141 cruise ship arrivals (+ 19):

- Number of operators and ship size expected to remain unchanged:
  - Operators A, B, C will increase their frequency to 70 turnarounds (+ 13).
  - Operator D 12 turnarounds (+ 2),
  - 25 turnarounds of other operators.
- 34 calls (+ 4).

| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2010 turnaround | 2010 call |
|---|---|---|---|---|
| operator A / Contemporary | 250 | 2,000 | 22 | |
| | 200 | 1,600 | 12 | |
| operator B / Contemporary | 290 | 2,100 | 16 | |
| operator C / Contemporary | 250 | 1,600 | 20 | |
| operator D / Premium | 290 | 1,800 | 12 | |
| operator E / Luxury | 200 | 400 | 5 | |
| | 120 | 180 | 5 | |
| operator F / Premium | 175 | 550 | 10 | |
| operator G / Premium | 345 | 2,600 | 3 | |
| | 300 | 1,800 | 2 | |
| Calls: | | | | |
| introduction / newbuilt | 340 | 3,600 | | 2 |
| introduction / newbuilt | 300 | 2,400 | | 4 |
| positioning Med - Baltic | 270 | 2,700 | | 6 |
| other | 180 | 500 | | 22 |
| subtotal other calls | | | | 34 |
| **Turnaround / Call** | | | **107** | **34** |
| **TOTAL** | | | **141** | |

* according to T. Peisley / Seadtrade 2006

# Ship Arrivals at Hamburg 2007 – 2010 (Base Case)

| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2007 (as per 18.05.07) turnaround | 2007 call | 2008 turnaround | 2008 call | 2009 turnaround | 2009 call | 2010 turnaround | 2010 call | Rotation |
|---|---|---|---|---|---|---|---|---|---|---|---|
| operator A / Contemporary | 250 | 2,000 | 7 | | 21 | | 22 | | 22 | | 10 days |
| | 200 | 1,600 | 17 | | 5 | | 10 | | 12 | | 14 days Sat (from April to mid Sept.) |
| operator B / Contemporary | 290 | 2,100 | 7 | | 5 | | 10 | | 16 | | 3-4 days |
| operator C / Contemporary | 250 | 1,600 | 3 | | 10 | | 15 | | 20 | | wöchentlich, Sa. |
| operator D / Premium | 200 | 800 | | 1 | 10 | | | | | | 12 days / 2009: 14 days |
| | 290 | 1,800 | | | | | 10 | | 12 | | |
| operator E / Luxury | 200 | 400 | 6 | | 5 | | 5 | | 5 | | irregular (earliest June) |
| | 120 | 180 | 6 | | 5 | | 5 | | 5 | | |
| operator F / Premium | 175 | 550 | 6 | | 8 | | 10 | | 10 | | 10 dary from May to August |
| operator G / Premium | 345 | 2,600 | 2 | | 3 | | 3 | | 3 | | irregular |
| | 300 | 1,800 | 1 | 1 | 2 | | 2 | | 2 | | |
| Calls: | | | | | | | | | | | |
| introduction / newbuilt | 340 | 3,600 | | | | 2 | | 2 | | 2 | irregular / spring or autumn |
| introduction / newbuilt | 300 | 2,400 | | 1 | | 2 | | 3 | | 4 | irregular / spring or autumn |
| positioning Med - Baltic | 270 | 2,700 | 2 | | | 2 | | 3 | | 6 | April / September |
| other | 180 | 500 | 5 | 17 | | 20 | | 22 | | 22 | irregular throughout season |
| subtotal other calls | | | 7 | 18 | | 26 | | 30 | | 34 | |
| **Turnaround / Call** | | | **62** | **20** | **74** | **26** | **92** | **30** | **107** | **34** | |
| **TOTAL** | | | **82** | | **100** | | **122** | | **141** | | |

* according to T. Peisley / Seadtrade 2006

# Traffic Forecast 2007 – 2010 in Optimistic and Pessimistic Scenario

- Optimistic Scenario: 2 additional operators with regular turnaround in Hamburg.

| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2007 (as per 18.05.07) turnaround | call | 2008 turnaround | call | 2009 turnaround | call | 2010 turnaround | call | Rotation |
|---|---|---|---|---|---|---|---|---|---|---|---|
| operator "new" / Contemporary | 250 | 1,600 | - | - | 10 | | 15 | | 20 | | 10 - 11 days |
| operator "established" / Standard | 190 | 580 | - | - | 5 | | 5 | | 5 | | May to June 3 - 7 days |
| | 135 | 440 | - | - | 5 | | 5 | | 5 | | June to August 7 days |
| **TOTAL optimistic** | | | **82** | | **110** | | **147** | | **166** | | |

- Pessimistic Scenario: One large operator will decide against Hamburg as homeport. Consequently, the number of turnarounds will be lower than in the Base Case 2008 (-10), 2009 (-15) 2010 (-20).

| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2007 (as per 18.05.07) turnaround | call | 2008 turnaround | call | 2009 turnaround | call | 2010 turnaround | call |
|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround / Call | | | 62 | 20 | 64 | 26 | 77 | 30 | 87 | 34 |
| **TOTAl pessimistic** | | | **82** | | **90** | | **107** | | **121** | |

# Passenger Forecast (Base Case)

In 2007 arrival of approx. 143,000 passengers is expected (ships announced as per 18.05.07), of which:

- Embarking/ disembarking : 127,000
- Transit call: 16.000

*(calculated according to below methodology)*

The calculation of passenger movements for the time period 2008 – 2010 has been carried out as followed:

- All calculations based on ships lower berths,
- „turnaround“ passengers calculated with double move (embarking/disembarking),
- Visiting calls single passenger move,
- Average passenger utilisation factor of 85% (very conservative estimate)

# Passenger Forecast (Base Case)

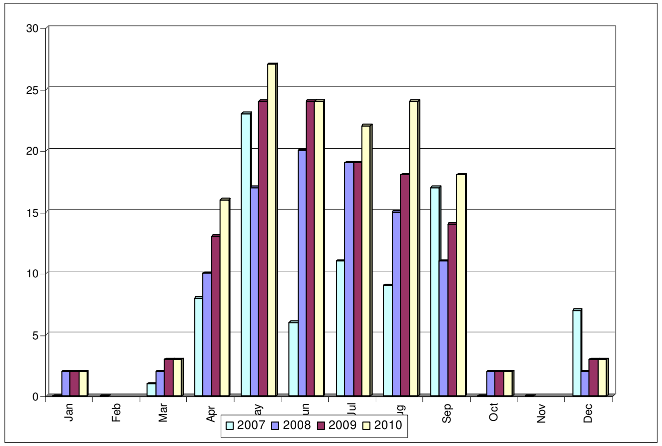
| operator / market segment* | ship length overall (m) | passenger capacity lower berths | 2008 passenger moves turnaround | 2008 transit | 2008 total | 2009 passenger moves turnaround | 2009 transit | 2009 total | 2010 passenger moves turnaround | 2010 transit | 2010 total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| operator A / Contemporary | 250 | 2,000 | 71,400 | | **71,400** | 74,800 | | **74,800** | 74,800 | | **74,800** |
| | 200 | 1,600 | 13,600 | | **13,600** | 27,200 | | **27,200** | 32,640 | | **32,640** |
| operator B / Contemporary | 290 | 2,100 | 17,850 | | **17,850** | 35,700 | | **35,700** | 57,120 | | **57,120** |
| operator C / Contemporary | 250 | 1,600 | 27,200 | | **27,200** | 40,800 | | **40,800** | 54,400 | | **54,400** |
| operator D / Premium | 200 | 800 | 13,600 | | **13,600** | | | | | | |
| | 290 | 1,800 | | | | 30,600 | | **30,600** | 36,720 | | **36,720** |
| operator E / Luxury | 200 | 400 | 3,400 | | **3,400** | 3,400 | | **3,400** | 3,400 | | **3,400** |
| | 120 | 180 | 1,530 | | **1,530** | 1,530 | | **1,530** | 1,530 | | **1,530** |
| operator F / Premium | 175 | 550 | 7,480 | | **7,480** | 9,350 | | **9,350** | 9,350 | | **9,350** |
| operator G / Premium | 345 | 2,600 | 13,260 | | **13,260** | 13,260 | | **13,260** | 13,260 | | **13,260** |
| | 300 | 1,800 | 6,120 | | **6,120** | 6,120 | | **6,120** | 6,120 | | **6,120** |
| Calls: | | | | | | | | | | | |
| introduction / newbuilt | 340 | 3,600 | | 6,120 | **6,120** | | 6,120 | **6,120** | | 6,120 | **6,120** |
| introduction / newbuilt | 300 | 2,400 | | 4,080 | **4,080** | | 6,120 | **6,120** | | 8,160 | **8,160** |
| positioning Med - Baltic | 270 | 2,700 | | 4,590 | **4,590** | | 6,885 | **6,885** | | 13,770 | **13,770** |
| other | 180 | 500 | | 8,500 | **8,500** | | 9,350 | **9,350** | | 9,350 | **9,350** |
| **total passengers** | | | 175,440 | 23,290 | **198,730** | 242,760 | 28,475 | **271,235** | 289,340 | 37,400 | **326,740** |

# Distribution of Ship Arrivals (Base Case)

The future berth capacity needed will strongly depend on ship arrival patterns:

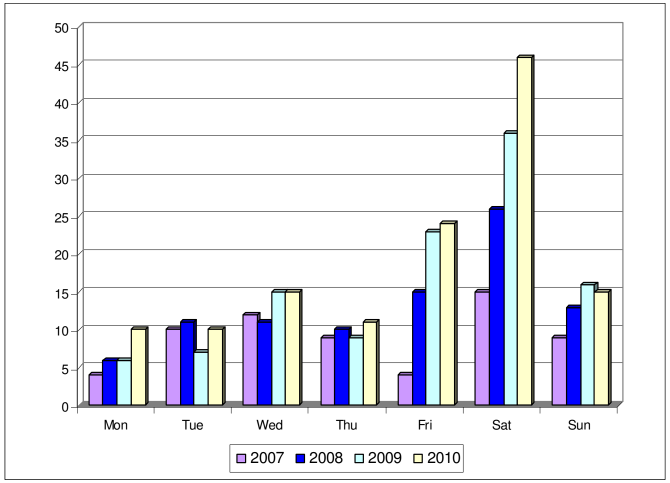
Monthly distribution:

- Seasonality will remain almost unchanged (only few arrivals during winter months)
- Peak season with most ship arrival from April to September




Week-day distribution:

- Uneven distribution throughout the week
- Ships piling up towards end of the week (Friday / Saturday), mainly caused by trend to weekly / fortnightly cruise patterns and short voyages over the weekend
- In 2010 35% of all ship arrivals expected on Saturday (2007: 24%)



# Analysis of Forecasting Results

Strong increase in the number of ships with LOA of more than 260 m.

Expected seasonal and week-day distribution of ship arrivals will result in more frequent occurrence of

- 3 ships with simultaneous berthing
- Exceeding of maximum length of 520 m.

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| **Base Case Scenario** | | | | | |
| ships > 260m | 4 | 11 | 16 | 33 | 45 |
| 3 simultaneous calls | 1 | - | 4 | 6 | 8 |
| **total length > 520 m** | **1** | **-** | **7** | **14** | **17** |
| percentage large cruise ships | 7% | 13% | 16% | 27% | 32% |
| **Optimistic Scenario** | | | | | |
| ships > 260m | 4 | 11 | 16 | 33 | 45 |
| 3 simultaneous calls | 1 | - | 7 | 14 | 16 |
| **total length > 520 m** | **1** | **-** | **9** | **22** | **26** |
| percentage large cruise ships | 7% | 13% | 13% | 22% | 27% |
| **Pessimistic Scenario** | | | | | |
| ships > 260m | 4 | 11 | 16 | 33 | 45 |
| 3 simultaneous calls | 1 | - | - | 3 | 4 |
| **total length > 520 m** | **1** | **-** | **4** | **10** | **14** |
| percentage large cruise ships | 7% | 13% | 18% | 31% | 37% |

Conclusion:

A third berth in Hamburg, capable to accommodate large cruise ships will be urgently needed.

# Hamburg vis-à-vis other North Europe Cruise Ports

Comparison of forecast growth path in Hamburg with past development in main North Europe cruise ports :

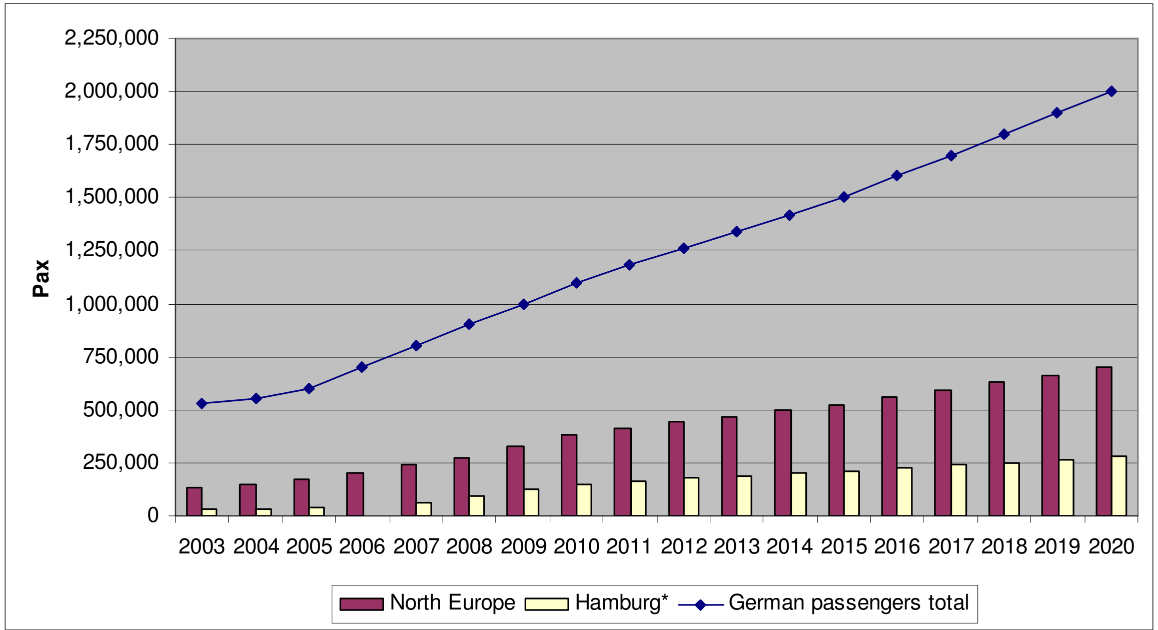
| port | 2003 | 2004 | 2005 | Hamburg 2010 |
|---|---|---|---|---|
| **ship arrivals** | | | | |
| Amsterdam | 86 | 90 | 88 | |
| Copenhagen | 246 | 264 | 284 | **141** |
| Southampton | 214 | 204 | 230 | |
| **Total North Europe** | **4,866** | **5,103** | **5,572** | |
| **passengers** | | | | |
| Amsterdam | 95,099 | 105,422 | 122,105 | |
| Copenhagen | 268,391 | 320,000 | 387,412 | **327,000** |
| Southampton | 480,000 | 532,500 | 701,000 | |
| **Total North Europe** | **4,190,000** | **4,650,000** | **5,350,000** | |
| **av. passengers per ship** | | | | |
| Amsterdam | 1,106 | 1,171 | 1,388 | |
| Copenhagen | 1,091 | 1,212 | 1,364 | **2,319** |
| Southampton | 2,243 | 2,610 | 3,048 | |
| **Total North Europe** | **861** | **911** | **960** | |

*source: T. Peisley, Seatrade 2006, HPC calcultations*

- 2010 forecast with 141 ship arrivals in Hamburg significantly lower than Southampton and Copenhagen in 2003.
- 2010 forecast of approx. 2,300 passengers per ship in Hamburg only slightly higher than Southampton in 2003 (homeport of QM2).

Conclusion: It is expected that Hamburg will make up some ground to other North European ports.

# Hamburg Forecast in Comparison with overall German Cruise Passenger Projection




- OCS forecast of 1.1 million passengers in 2010 (all destinations), 1.5 million pax in 2015 and 2 million pax in 2020.
- It is expected that the market share of cruise destination North Europe will increase from 27% in 2004 to 35% in 2010.

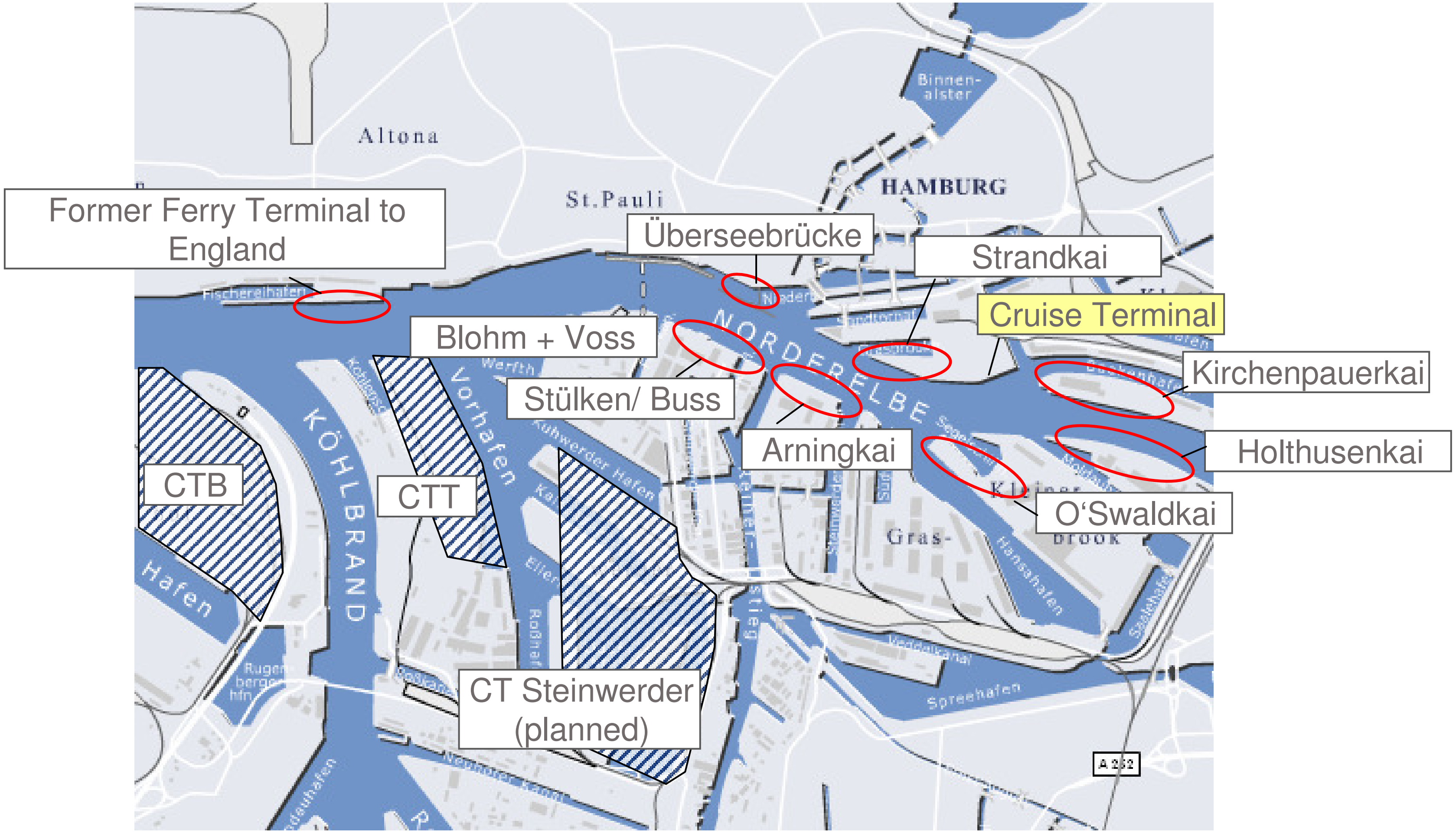
Hamburg market share in terms of passengers in 2004 was 5%. For 2007 an increase to 8% can be expected. It is forecast that this share will further increase to 11% in 2008 and 14% in 2010 (thereafter constant).

# Hamburg Cruise Traffic Projection to 2020 (Base Case )

| | Forecast (Base Case) | | | | long-term projection | |
|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2015** | **2020** |
| passenger moves * | 143,000 | 199,000 | 271,000 | 327,000 | 455,000 | 606,000 |
| cruise ship arrivals | 82 | 100 | 122 | 141 | 193 | 253 |
| av. passengers per ship | 1,744 | 1,990 | 2,221 | 2,319 | 2,358 | 2,395 |

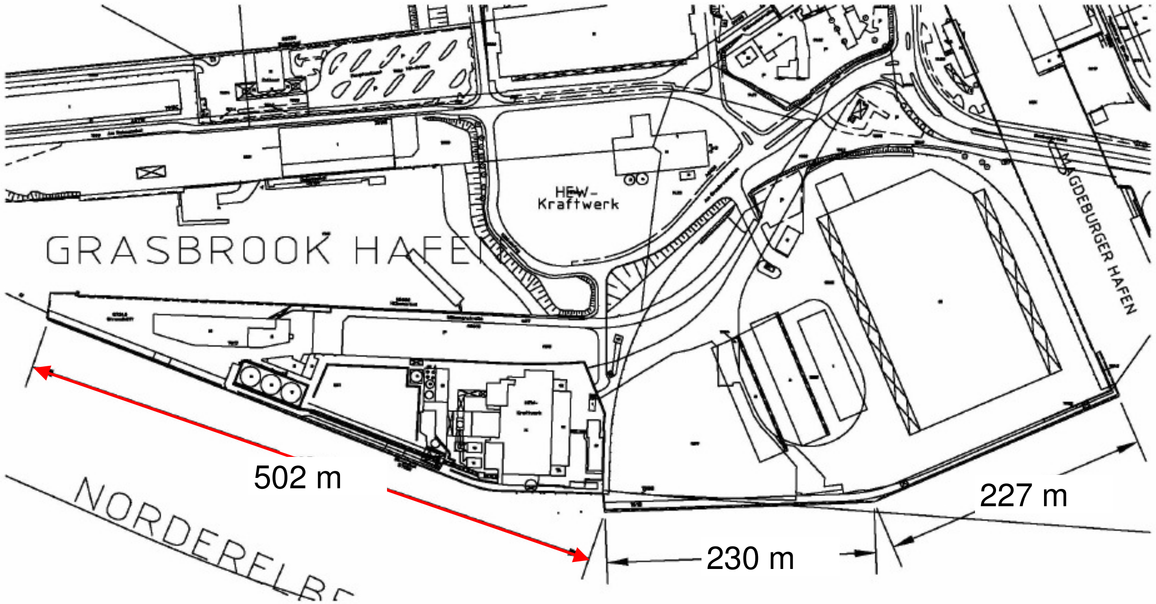
* embarking /disembarking: double, transit call: single

# Overview: Possible Cruise Terminal Sites in the Port of Hamburg



# Possible Extension existing Cruise Terminal

# Extension of Cruise Terminal by Sandtorkai



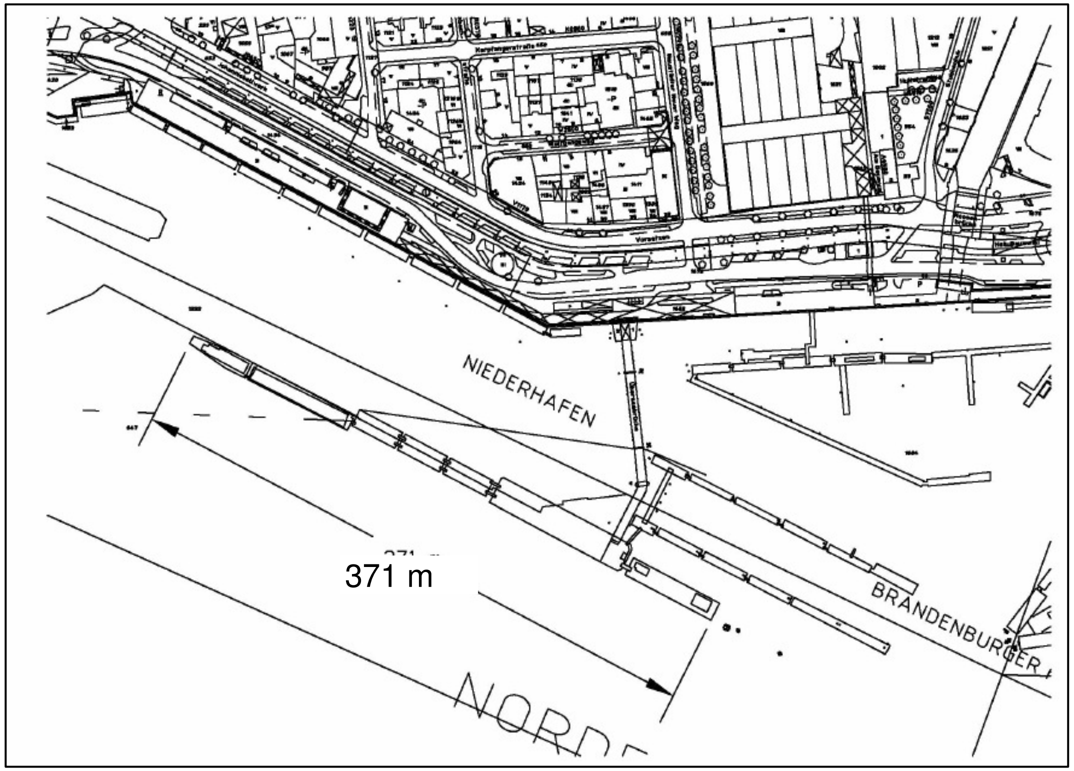

## Strengths / Opportunities

- In vicinity of existing Cruise Terminal
- Attractive location within walking distance to city centre
- Traffic connection, incl public transport

## Weaknesses/ Obstacles

- Conflict with Harbour City planning (residential areas)
- Existing quay-wall needs rehabilitation

# Überseebrücke




Strengths / Opportunities

- Attractive location with excellent connection to public transport (subway)
- Existing (floating) berth
- Rehabilitation works planned

Weaknesses /Obstacles

- Only calls possible (baggage transport /ship supply difficult at site)
- Insufficient parking areas for Busses / Taxis etc.
- During rehabilitation works from 2008 to 2011 only limited utilisation for cruise ships possible

# O´Swaldkai

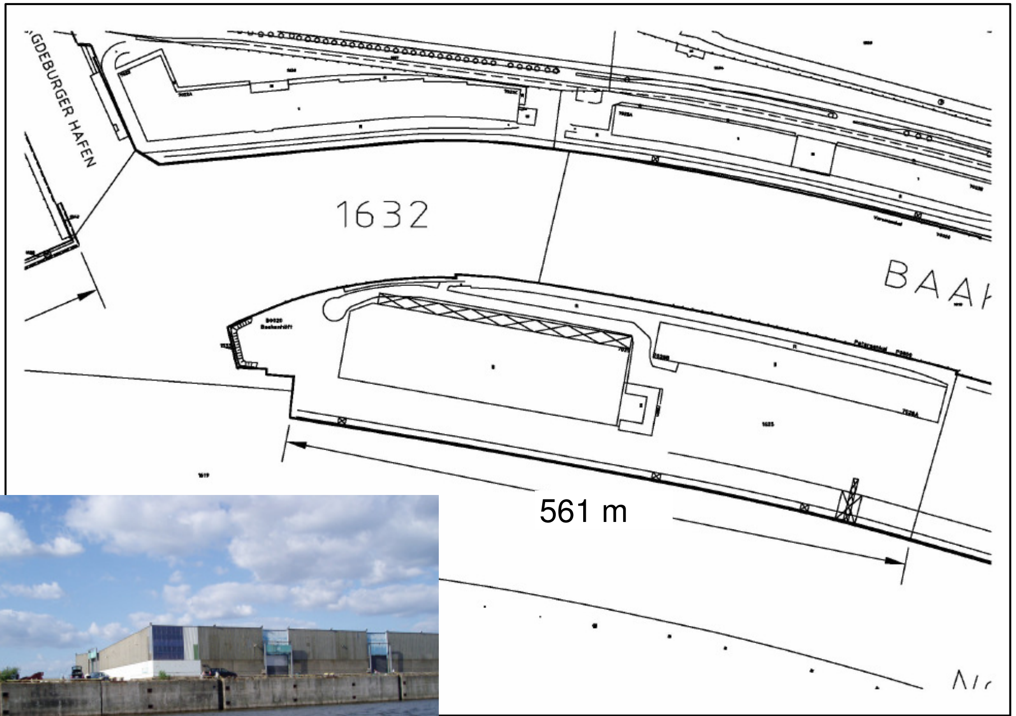
Strengths / Opportunities

- Existing quay wall for large ships
- ISPS certified facility
- Attractive view to city
- Presently utilised as alternative to Cruise Centre

Weaknesses / Obstacles

- Conflict with growing cargo volumes: Higher berth occupancy by cargo vessels reduces time window for cruise ships
- Cargo operations have priority

# Kirchenpauerkai



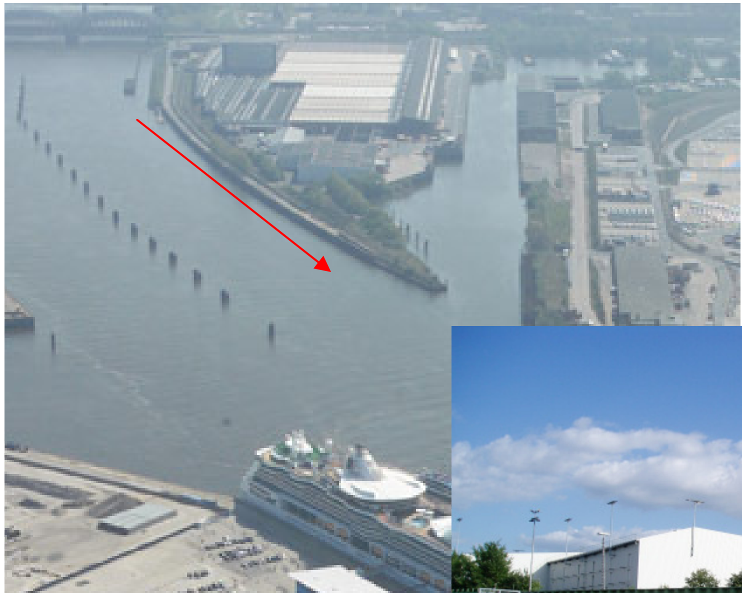

## Strengths / Opportunities

- Existing linear quay wall for two berths
- Existing sheds (passenger terminal / parking)
- In the long-term part of Harbour City (presumably from 2010)
- Good road connection to city centre and autobahn

## Weaknesses / Obstacles

- Location presently unattractive
- Potential planning conflict with Harbour City and “Living Bridge”

# Holthusenkai



## Strengths / Opportunities

- Good road connections (to autobahn and city centre)
- Attractive view to city centre and future Harbour City
- Linear quay line of 500 m
- Within planning area of „Jump over Elbe River“

## Weaknesses / Obstacles

- Old quay wall with water depth of only 6.30 m
- Existing flood protection walls impede landside access

# Arningkai


Strengths / Opportunities

- Existing quay wall
- Attractive view to city and from the city to terminal
- Parking areas and buildings possible

Weaknesses / Obstacles

- Existing industrial complex (long-term lease)
- Unattractive industrial surroundings
- Long road distance to city (alternative: ferry boat)
- Berthing / unberthing of large cruise ships could have impact on Elbe River traffic in the eastern part of Hamburg Port

# Former Stülken Ship Yard / Buss



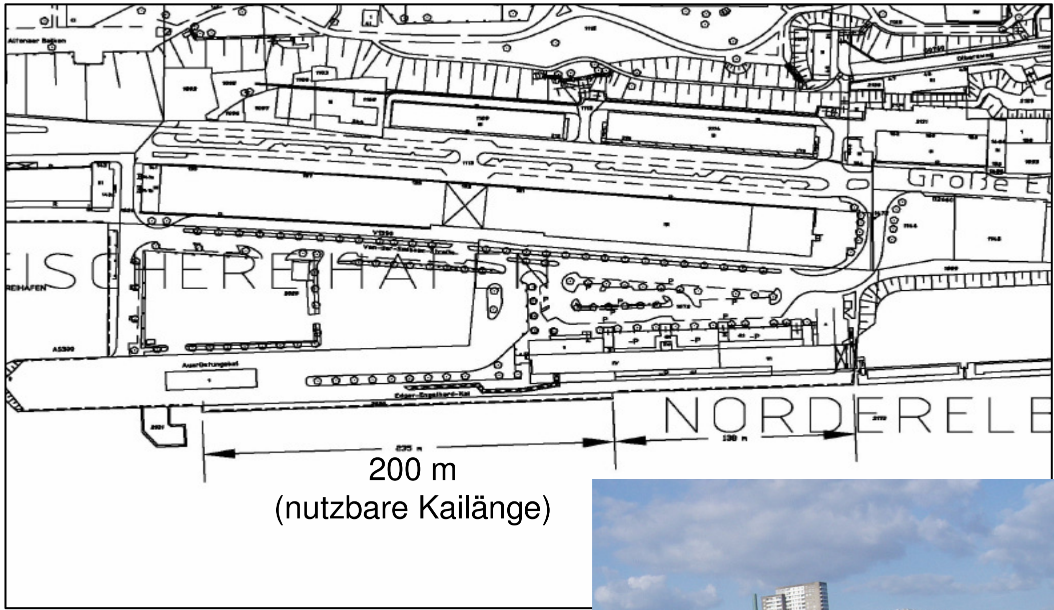
Strengths / Opportunities

- Attractive view to city and from the city to terminal
- Parking areas and buildings possible
- In vicinity to musical theatre Hamburg

Weaknesses / Obstacles

- No existing quay wall (only embankment)
- Long road distance by bus to city centre (alternative: river crossing by ferry boat or old Elbe tunnel for Taxi only)
- Possible limitations for large ships passing to eastern parts of Hamburg Port

# Former Ferry Terminal (to England)




Strengths / Opportunities

- Existing quay wall
- Terminal building and parking areas available
- Attractive location

Weaknesses / Obstacles

- Congested roads to city centre
- Other planning authority (District Altona)
- Limited quay length and water depth, requiring berth extension