HHLA

HHLA CONTAINER-TERMINAL ALTENWERDER GMBH







PORT OF HAMBURG: MULTIMODAL HUB

100 containers passing through the Port of Hamburg...

10 containers



stuffed/unstuffed within the port

30 containers



to European
Hinterland
(70% by rail,
long distance)

30 containers



Hamburgs economic catchment area (80% by truck)

30 containers



Transit
Baltic Sea /
Scandinavia
(80% by feeder)





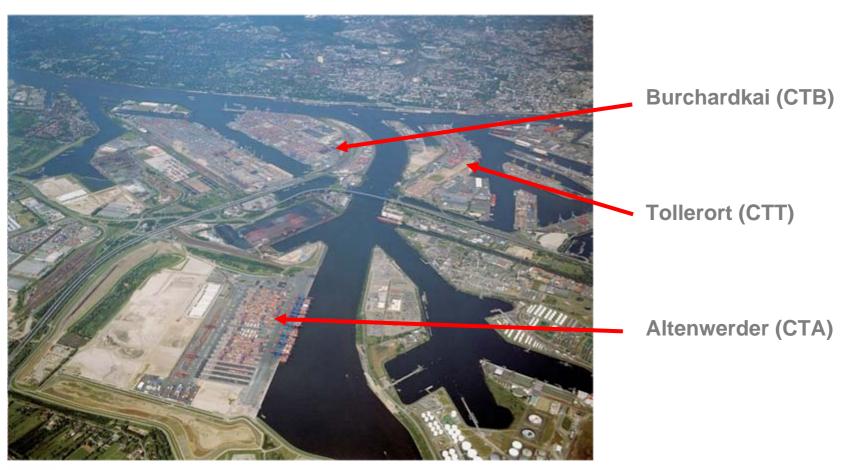
HHLA INTERMODAL CONNECTIONS





PORT OF HAMBURG

HHLA CONTAINER TERMINALS





PLANNING ASSUMPTIONS

Projected outline data

- Length of quay: 1,400 m (1st building phase 800 m)
- Height of quay wall (flood-proof): + 7.5 m mean sea level
- Depth of water : 16.5 m mean sea level
- Width of terminal area: approximately 600 m

CONTAINER TERMINAL ALTENWERDS

Construction in 2 phases

- First phase operational by end of June 2002, projected for 1.100.000 TEU/a
- Second phase to be realised in steps, projected for then
- altogether 1.900.000 TEU/a

...further expansion of terminal capacity

- Second phase optimized to 2.400.000 TEU/a
- Third phase projected for 3.000.000 TEU/a
- Fourth phase projected for 3.600.000 TEU/a







OBJECTIVES FOR ALTENWERDER

Increased productivity

- 150 mvs*/net berth hour for ocean-going vessels

Improved quality

- reduced berthing time for vessels
- easier planning of procedures

Reduced costs

- rationalisation by using automatic handling technology
- 1.900.000 TEU/a with less area and fewer quay cranes as well as shorter quays, compared with existing terminals



STAFF FOR TERMINAL OPERATION

	1st Phase	2nd Phase	3rd Phase
Quayside (Quay Cranes)	119	190	280
Hinterland (Gate, Rail, Remote			
Control of DRMG)	85	150	190
Management and Terminal Control			
	57	65	70
Reefer Service, Empty Storage,			
Container Repair *)	43	65	120
Maintanance and Repair **)	35	90	130
Administration	15	20	40
Other Services (Lashing)	40	80	110
Customs	40	80	90
Total	434	740	1030

^{*)} HHLA SUBSIDIARY HCCR



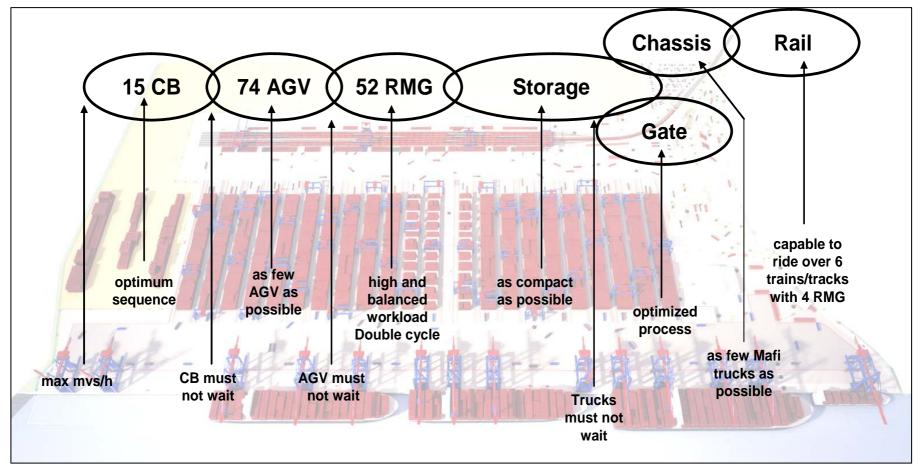
^{**)} CTA SUBSIDIARY SCA





THROUGHPUT SYSTEM - TLS

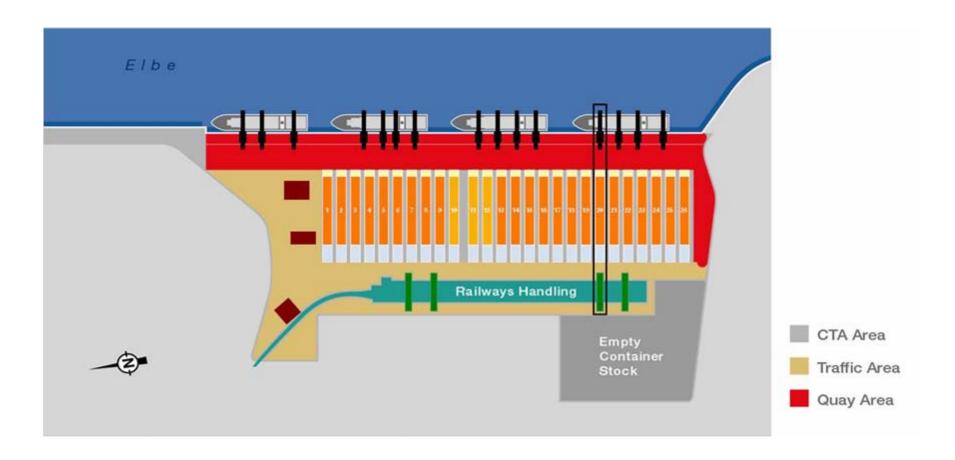
ELEMENTS AND INTERFACES







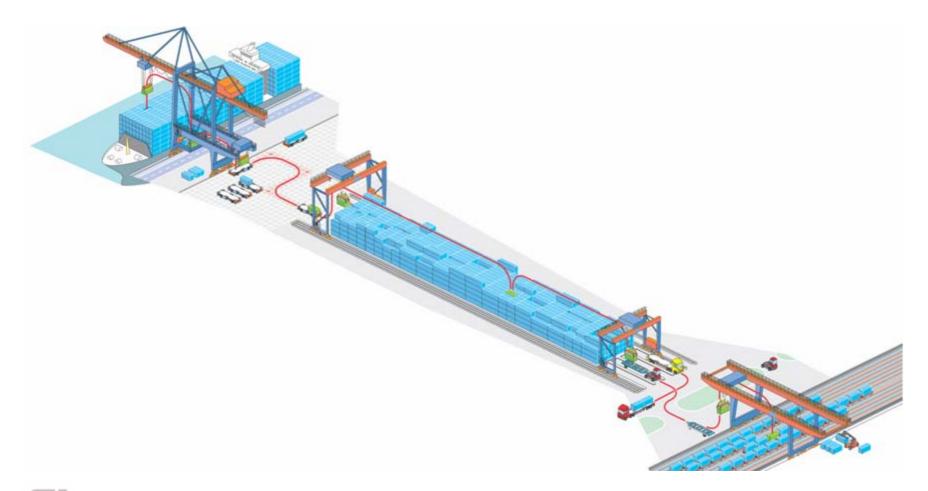
TERMINAL LAYOUT + HANDLING PROCESS







WORKFLOW DETAIL - YARD

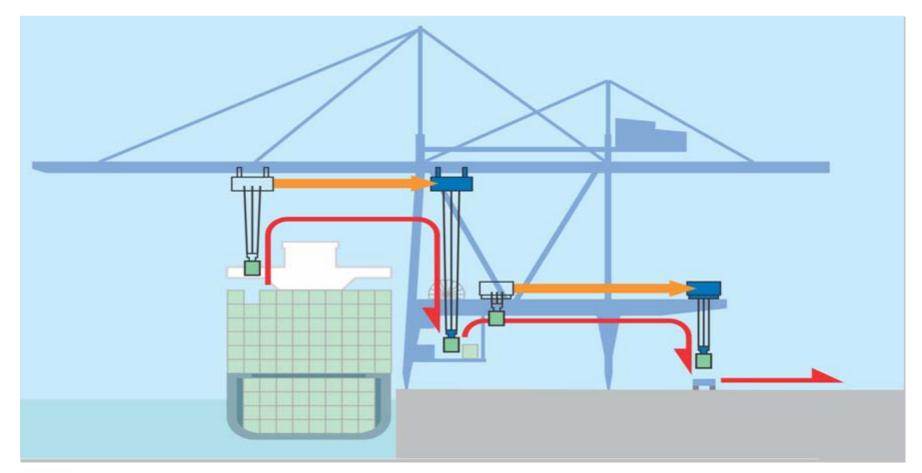






WORKFLOW DETAIL

SHIP TO SHORE CRANE





QUAYSIDE HANDLING





HHLA

HORIZONTALTRANSPORT

BY AUTOMATED GUIDED VEHICLES (AGV)







HHLA

BLOCK STORAGE

WITH AUTOMATED CRANES

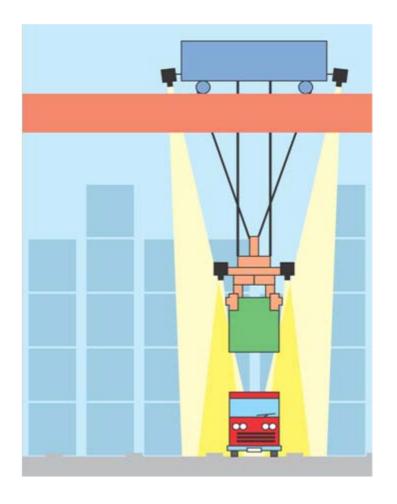






Altenwerder

REMOTE CONTROL - CAMERA SUPPORTED





Altenwerder



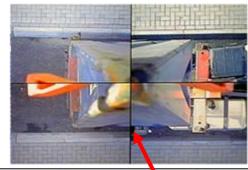
TRUCK HANDLING

REMOTE CONTROL OPERATION















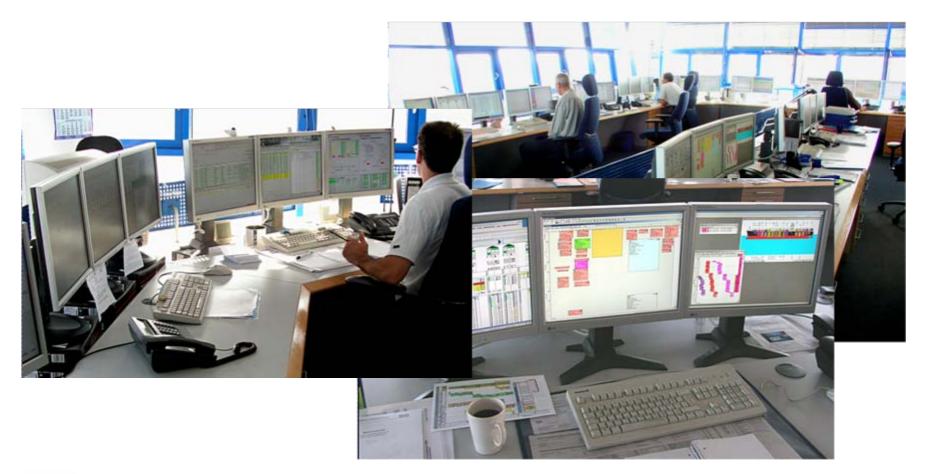
RAIL OPERATION BY TRANSTAINERS







CONTROL CENTER





CTA – HANDLING FIGURES

- CTA serves
 - all 4 Far East services of the Grand Alliance calling Port of Hamburg
 - additionally 1 North Atlantic service
 - all 3 Far East services of The New World Alliance calling Port of Hamburg
- 7 calls of Super Postpanmax vessels and 1 North Atlantic Panmax vessel per week
- App. 90-100 calls of feeder vessels per week
- Throughput per month: app. 145.000 bxs incl. 40.000 feeder bxs
- Truck Handling 2.400 bxs per day (max: 2.700)
- Rail throughput app. 1.100 mvs per day (max: 1.400)
- CTA operates since June 24th 2002



Container

THANK YOU VERY MUCH FOR YOUR ATTENTION.



