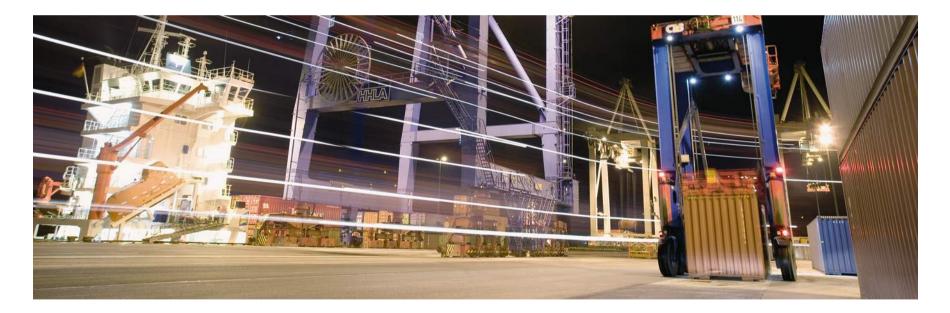
The road to automation – a user perspective

Update presentation of CTB terminal development (TOC Hamburg 2006)

C. Blauert , Managing Director HHLA Container Terminal Burchardkai GmbH **17.06.2009**







CTB and Project Backround

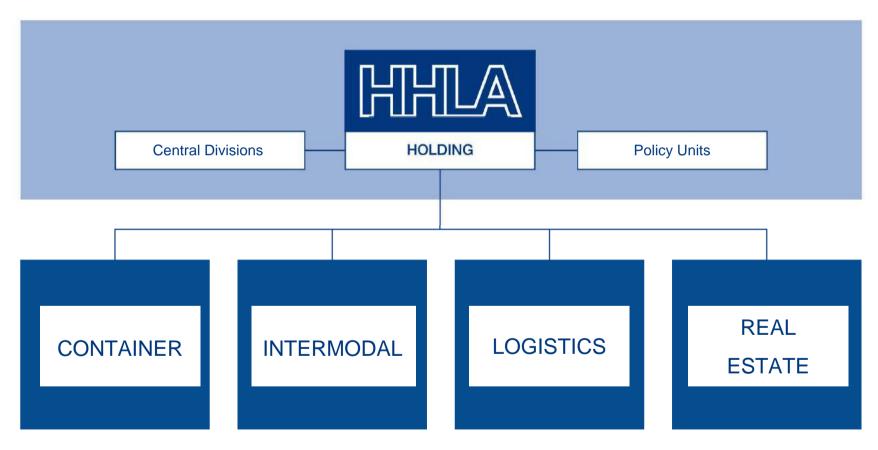
Terminal Development and Current Status

Next Steps and Main Challenges





HHLA GROUP





HHLA CONTAINER TERMINALS

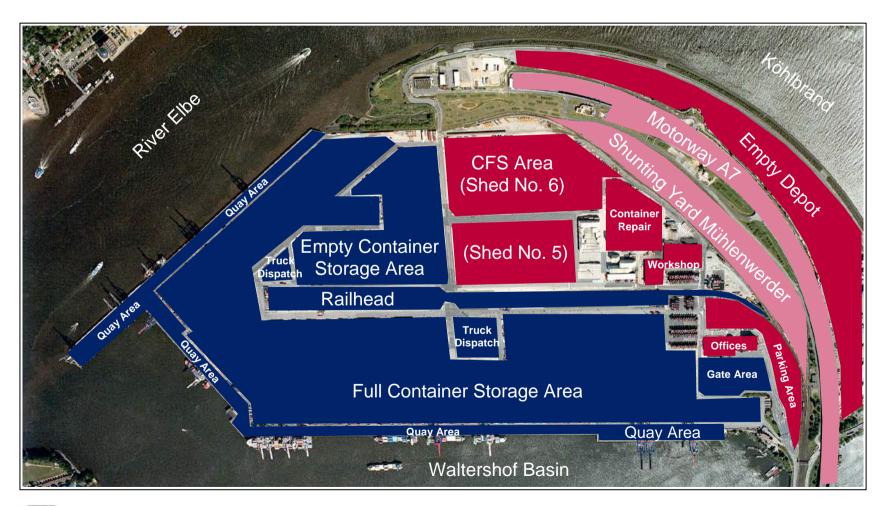


Brief Project History

- Pilot Study (2002):Planning Parameters, Applicable Technologies,
Layout Variants
- Study Phase 1 (2003): Reduction of Variants, Dimensioning & Layout Planning
- Study Phase 2 (2003): Phasing Concepts & Sensitivity Analysis
- Study Phase 3 (2004): Safeguard Planning Results, Decision-Making Document
- End of 2004: Concept's Approval by CTB's Supervisory Board

Existing Facility / Starting Position

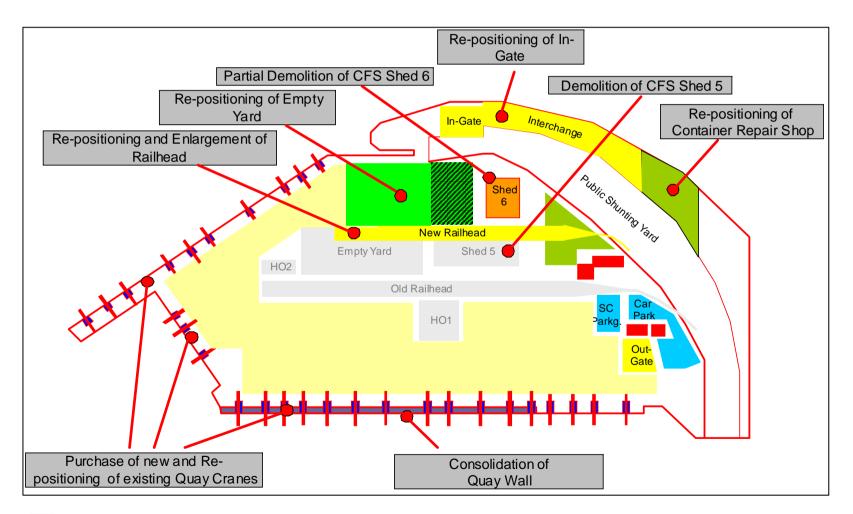
Functional Layout (End of 2004)





Terminal Extension Measures

Measures Excluding Changes of the Full Container Storage Concept

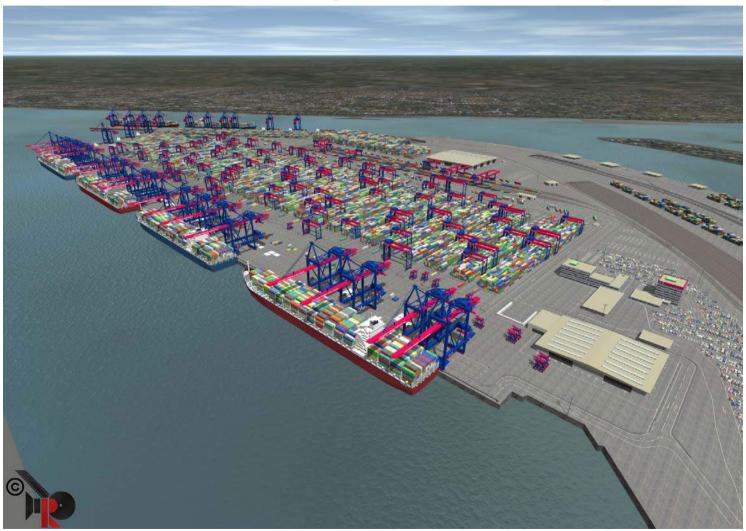




Burchardkai

Container

Terminal Development Concept



New CTB Yard Design

Container







CTB and **Project** Backround



Terminal Development and Current Status

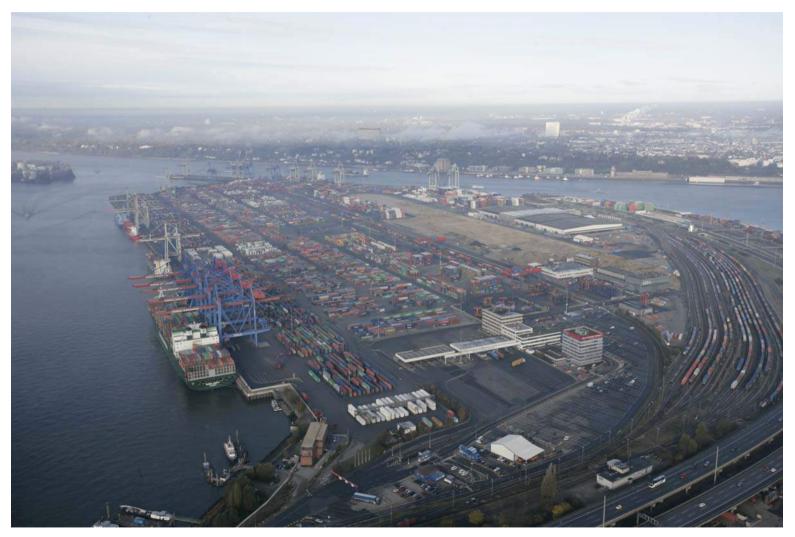
Next Steps and Main Challenges





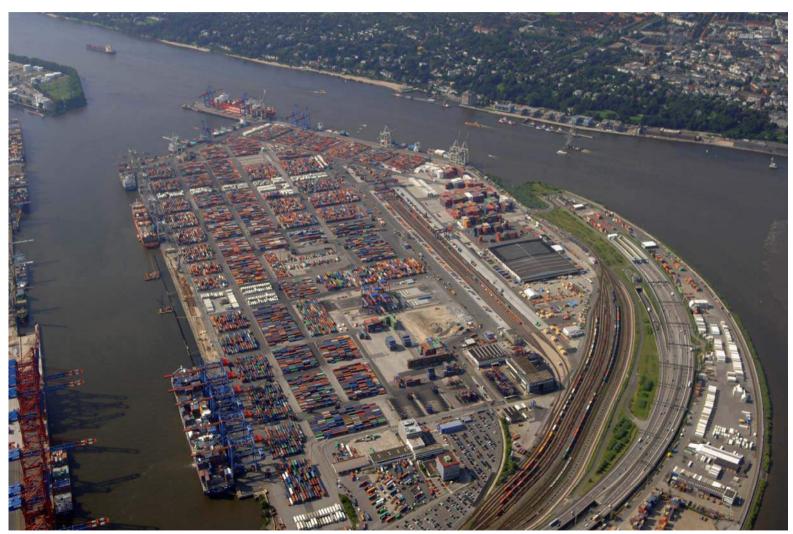
Burchardkai

CTB November 2005





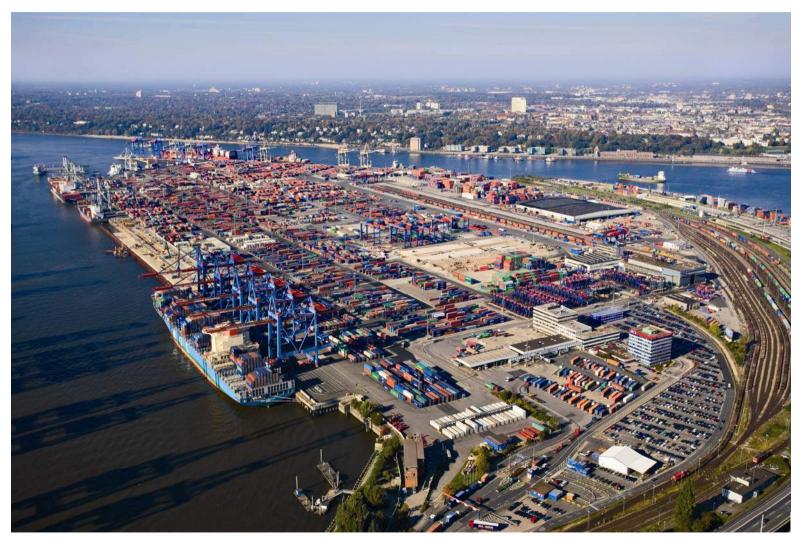
CTB March 2007





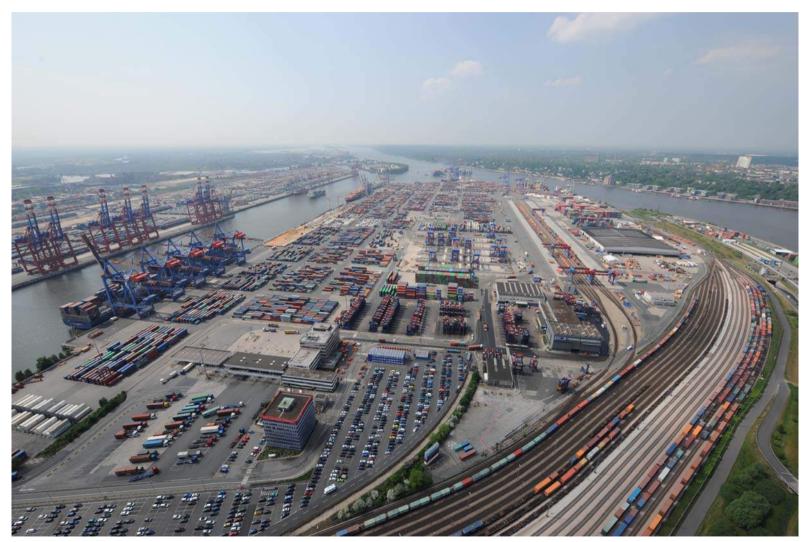
Burchardkai

CTB November 2007





CTB Mai 2008





Quayside: commissioning of new Twin 40 Quaycranes





Yard: finishing of construction work is started (roll out of blocks)







CIB © HHLA Container Terminal Burchardkai GmbH

CTB 2009

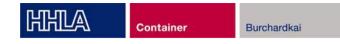
TOS: first operation of feeder vessel since June 2009













CTB and **Project** Backround

Terminal Development and Current Status

Next Steps and Main Challenges



Next Steps

- Setting-up operation with TWIN 40 Cranes
- Finishing and Go Live of Automated Yard System
 - -> First 5 Yard Blocks
 - -> Next 3 Yard Blocks
- Further commissioning and Go Live of new TOS
- Integration of new TOS and Automated Yard System
- Implementation of new Control Tower (operational procedures and work flow)

CB © HHLA Container Terminal Burchardkai GmbH

Main Challenges

- Capacity Expansion under Full Operation
 - Ongoing existing operation has priority
 - Fall Back Options
 - Risk Management
- Human Factor
 - Changes within the existing terminal organization
 - Implementing new operational procedures
 - Qualification of the terminal crew





END

