

Competition between Ports and Hinterland

Dr. Felix Kasiske

5th Maritime Silk Road Port International Cooperation
Forum, 11th – 12th July 2019 Ningbo, China



Content

01 HPC Background

02 Challenges for Intermodal Hinterland Operations

03 Case Studies

04 Conclusion

01

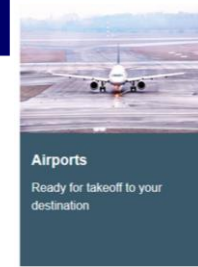
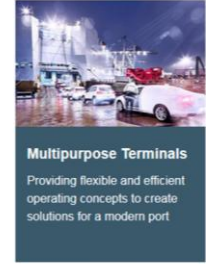
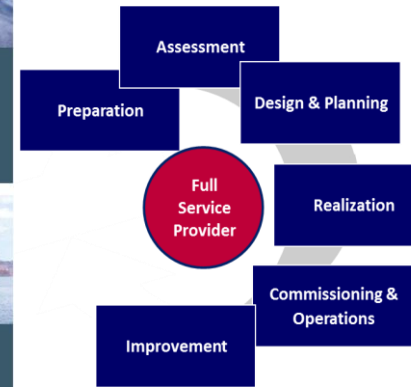
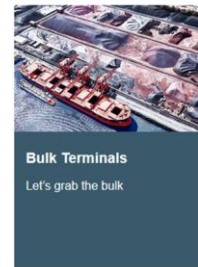
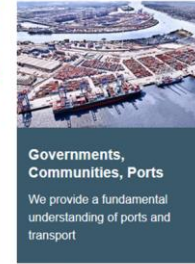
HPC Background

HPC Background

Global Experience, Operational Innovation and Down-to-earth Attitude

History & experience

- Founded in 1976 as subsidiary of HHLA Hamburger Hafen und Logistik AG
- Around 100 dedicated experts, annual turnover in 2018: ~ € 12m
- Reputation as one of the world's leading consultants in the transport sector
- Since 1976 ~1600 port and transport-related projects in 120+ countries, both in the private and public sector



Operator focus

- Operator focus leads to financially viable solutions for port authorities, terminal operators, railways, logistics service providers a.o.
- Developed HPC Ukraina (now CTO) as terminal operator in Odessa (Ukraine)
- Accredited with all major development organizations and banks (World Bank, IFC, ADB, KfW, etc.)

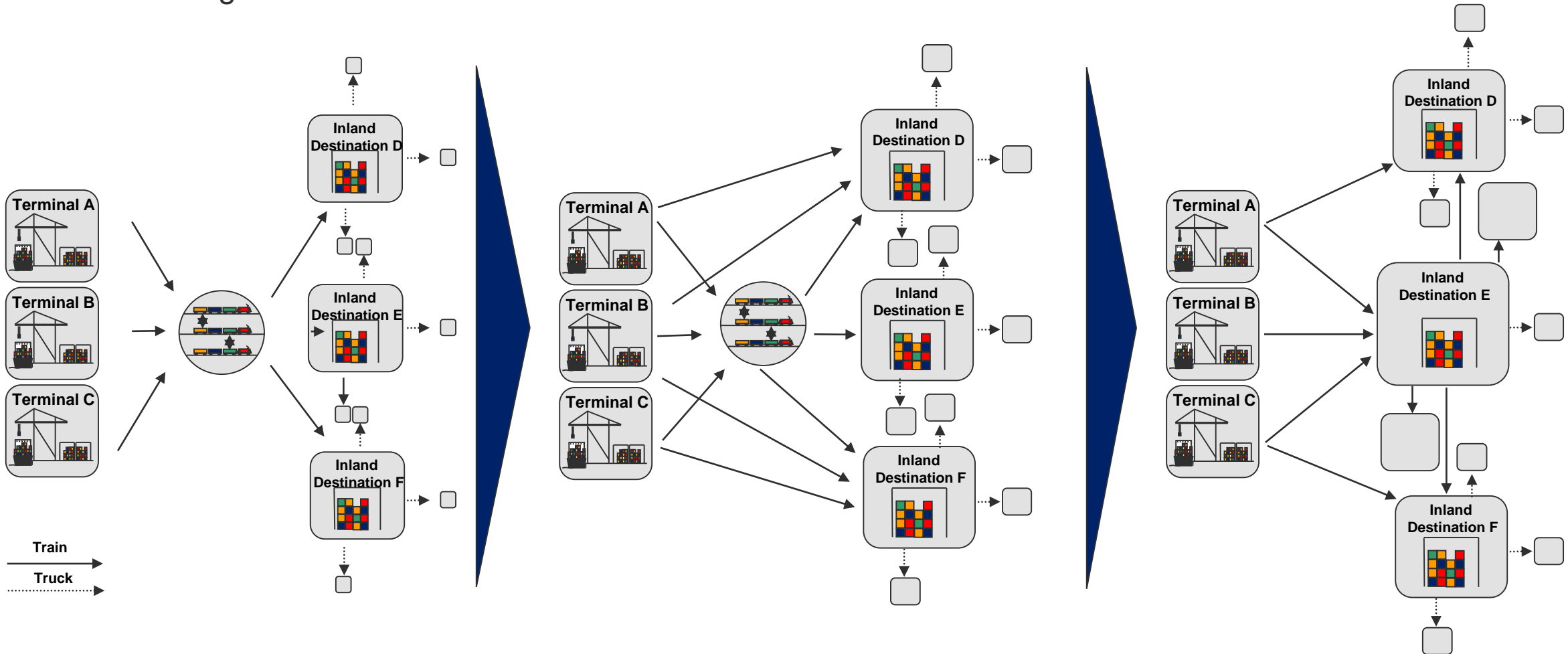


02

Challenges for Intermodal Hinterland Operations

Changes to Network Architecture

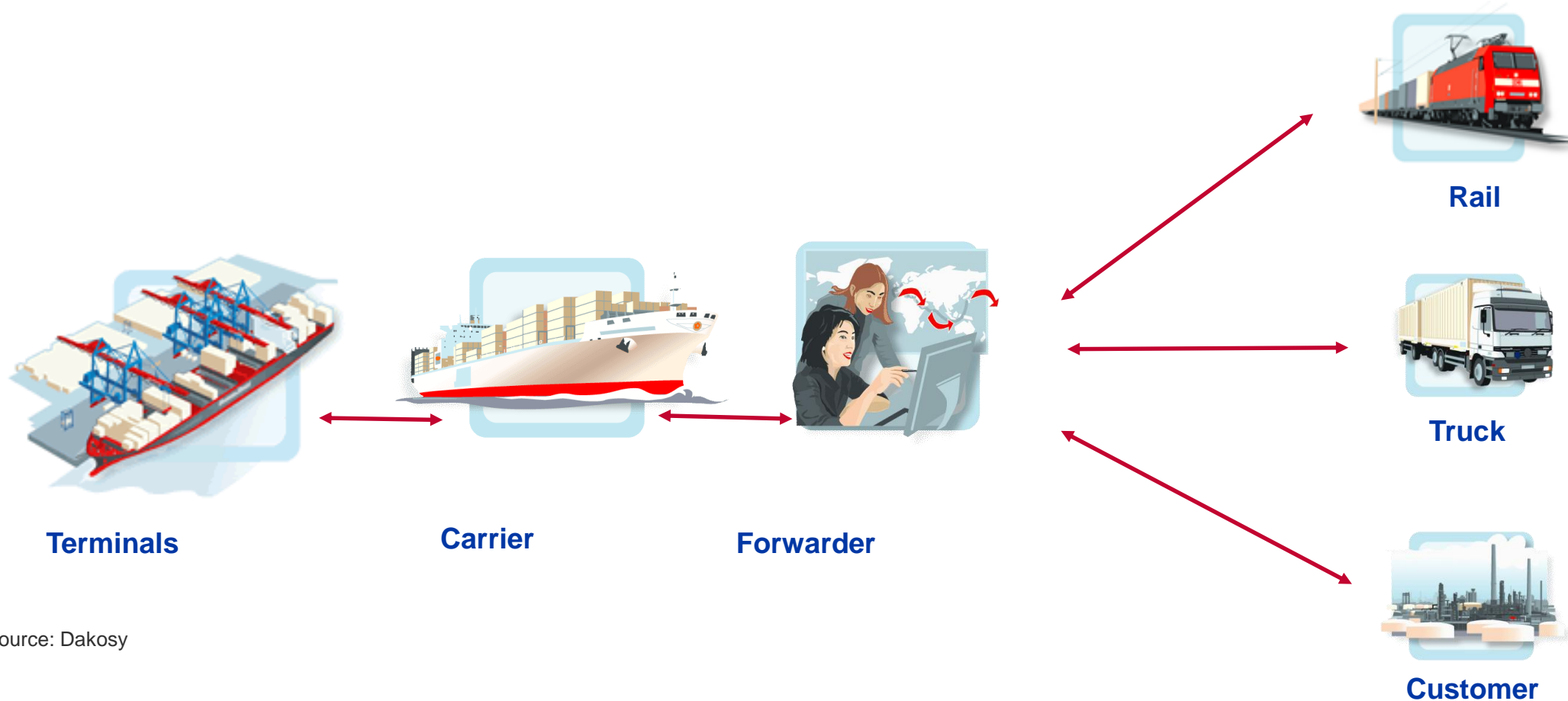
Take Advantage of Economies of Scale



→ Creates Demand for smart Use of Economies of Scale along the Supply Chain involving other Parties!

Contractual Relationship...

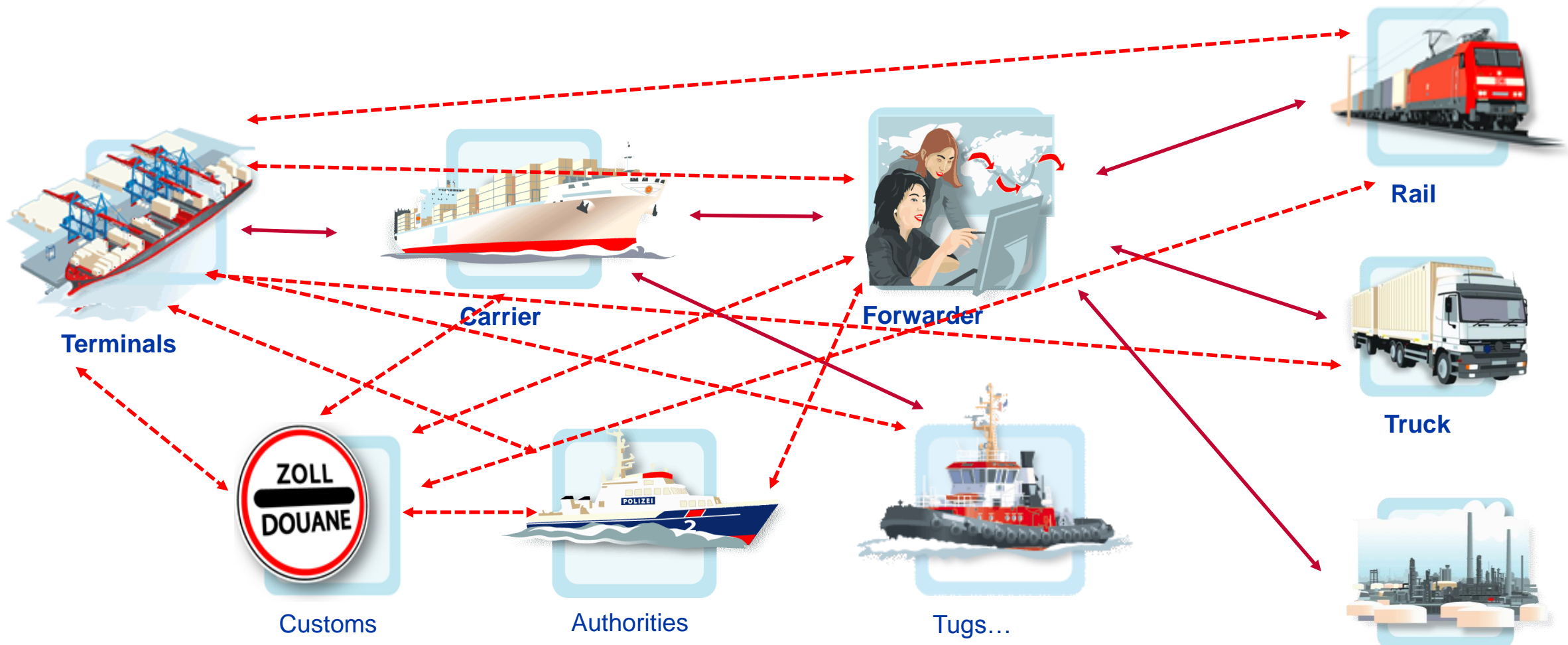
... used as Excuse for non-optimal Supply



Source: Dakosy

.... and Information Exchange Complexity

Individual Perspectives lead to suboptimal Solutions



→ Other Approaches necessary! → Collaboration in competitive Environments?

03

Case Studies

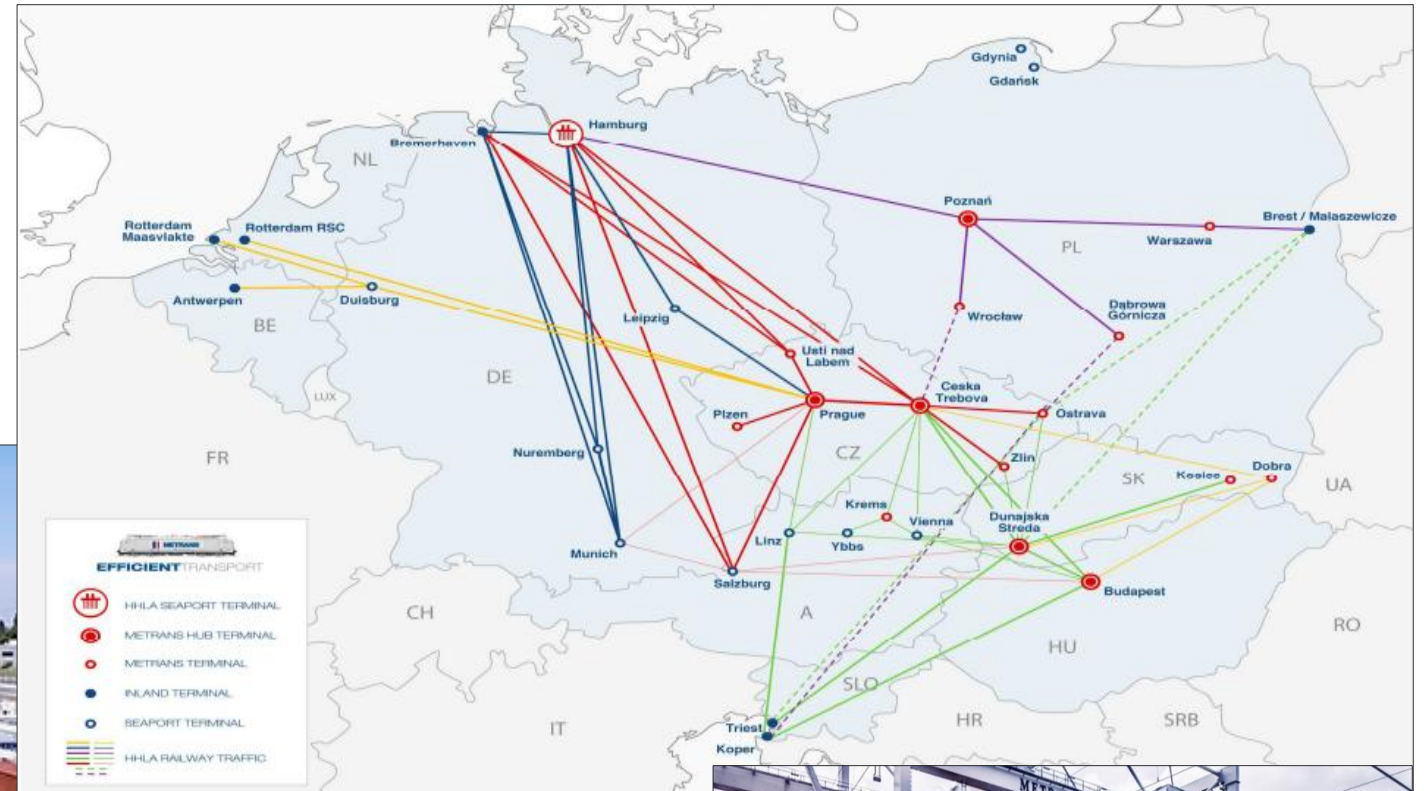
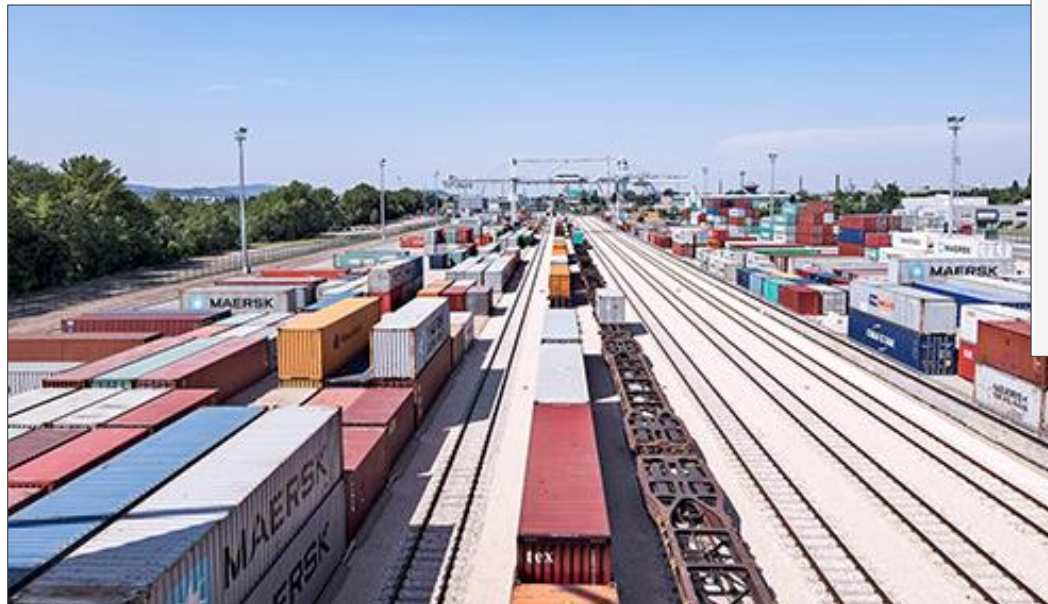
Case Study 1a: Intermodal Hinterland Hubs – Metrans Network

Adapted network structures for efficient hinterland operations

Sister company within Hamburger Hafen und Logistik AG (HHLA)

Operator of Terminals and Trains

Hub-Terminals in Poznan (PL), Prague, Ceska Trebova (CZ), Dunajska Streda (SK) and Budapest (HU)

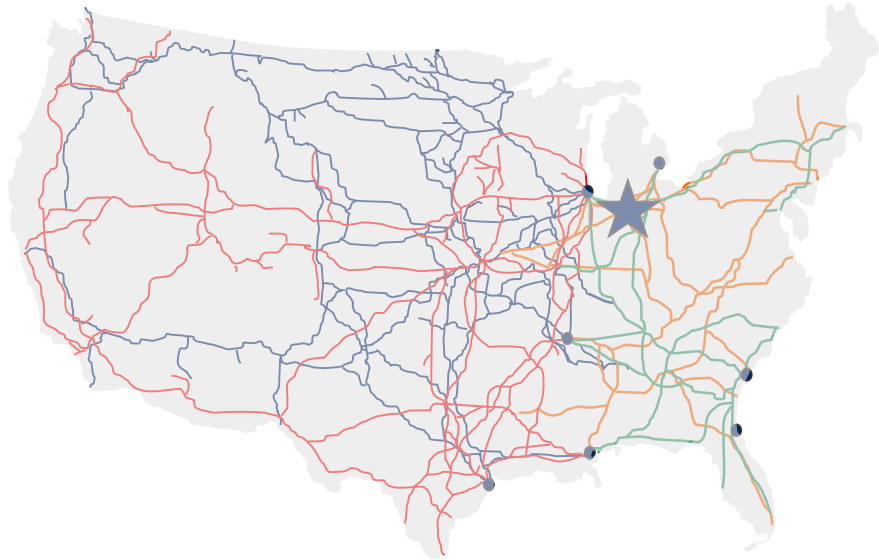


- Network of more than 500 trains per week
- More than 2,500 railcars



Case Study 1b: Intermodal Hinterland Hubs – Hub Terminal NWOH

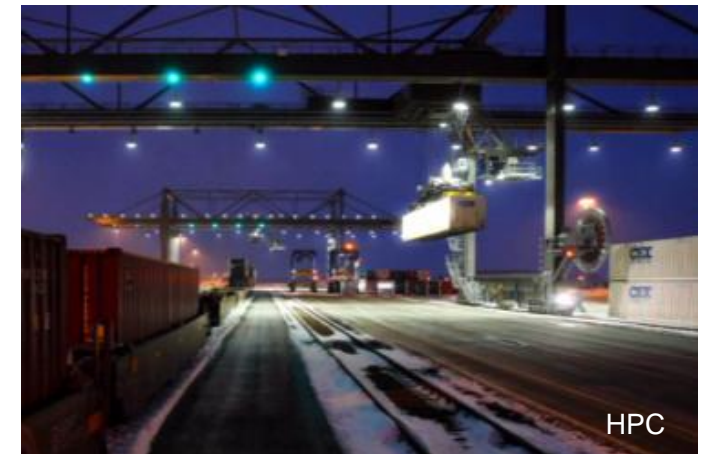
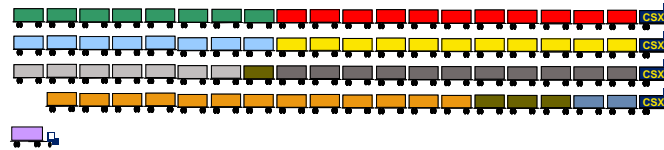
The world's first hub terminal designed as such!



Train block
swapping and
transload of
containers

Objectives

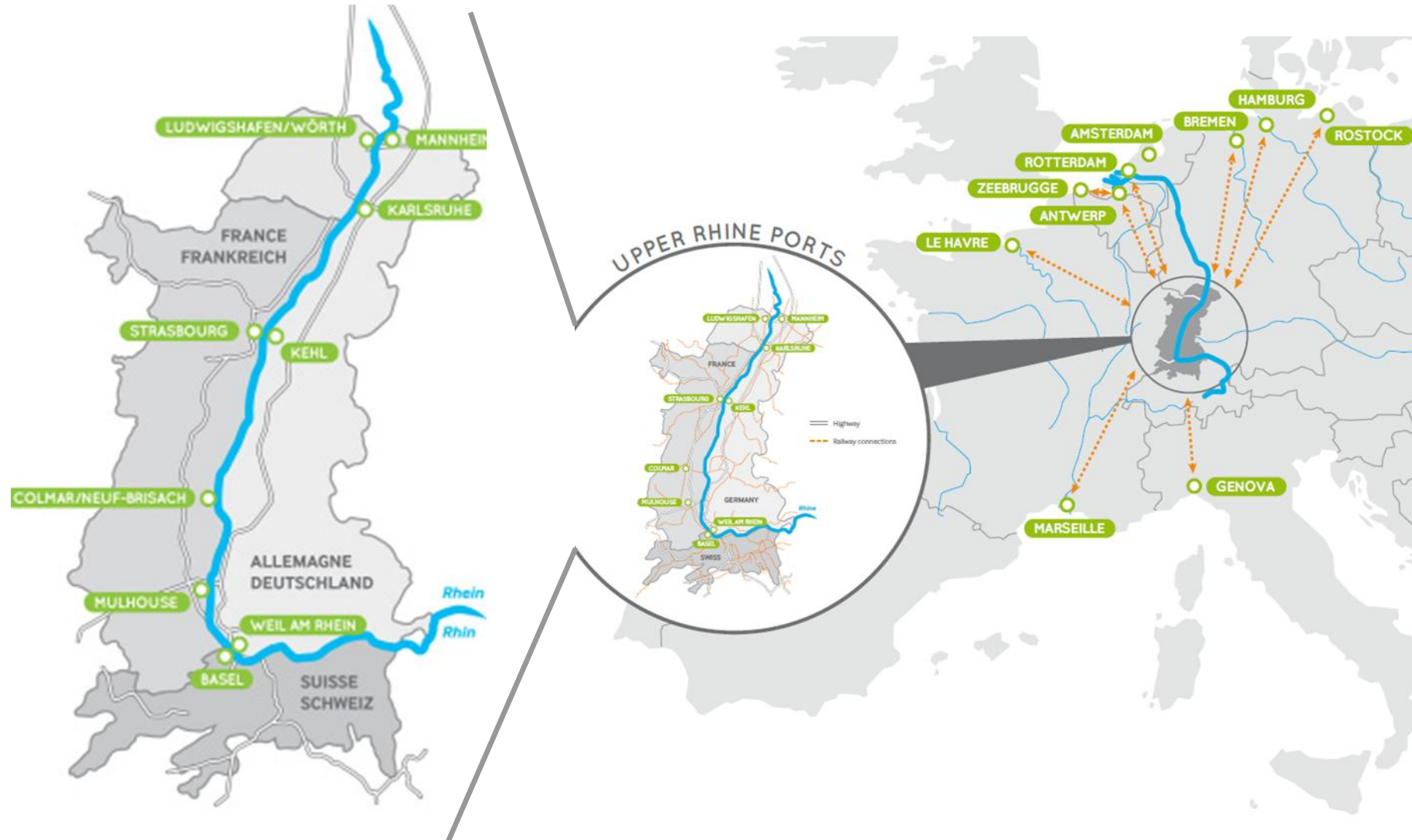
- Connect Western and Eastern railway networks avoiding transload in Chicago
- Toupee/Fillet operations
- Intermodal service to the growing northwestern Ohio market



→ Hub Terminal for the World's most advanced Intermodal Market ("Transrailment" Terminal)!

Case Study 2: RheinPorts & Upper Rhine Information System

Transparency matters

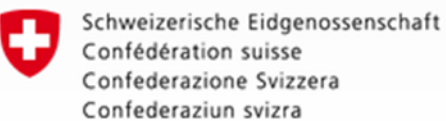


Objectives:

- Create visibility to supply chain partners...
- Better utilize available infrastructure
- Create reliability and efficiency

Case Study 2: RheinPorts & Upper Rhine Information System

RPIS - Stakeholder



Case Study 3: Vessel Routing Optimization with HVCC

Hamburg Vessel Coordination Center – Feeder Logistics Center – Nautical Terminal Coordination

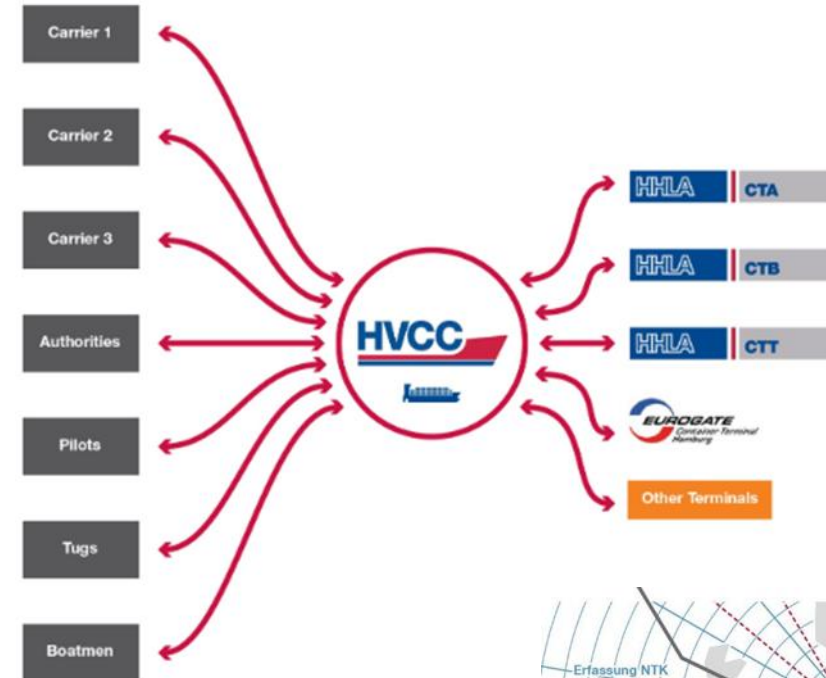
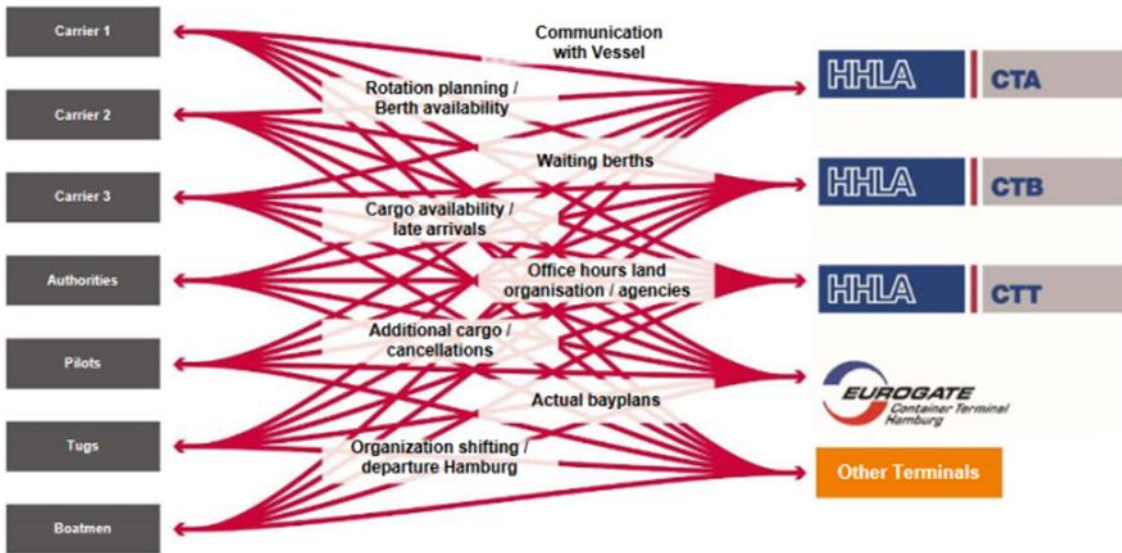


Typical Situation:

- Communication with vessel
- Rotation planning/ berth availability
- Cargo availability/late arrivals
- Office hours land organizations/agencies
- Additional cargo/cancellations
- Actual bayplans
- Organizational shifting/ departure Hamburg

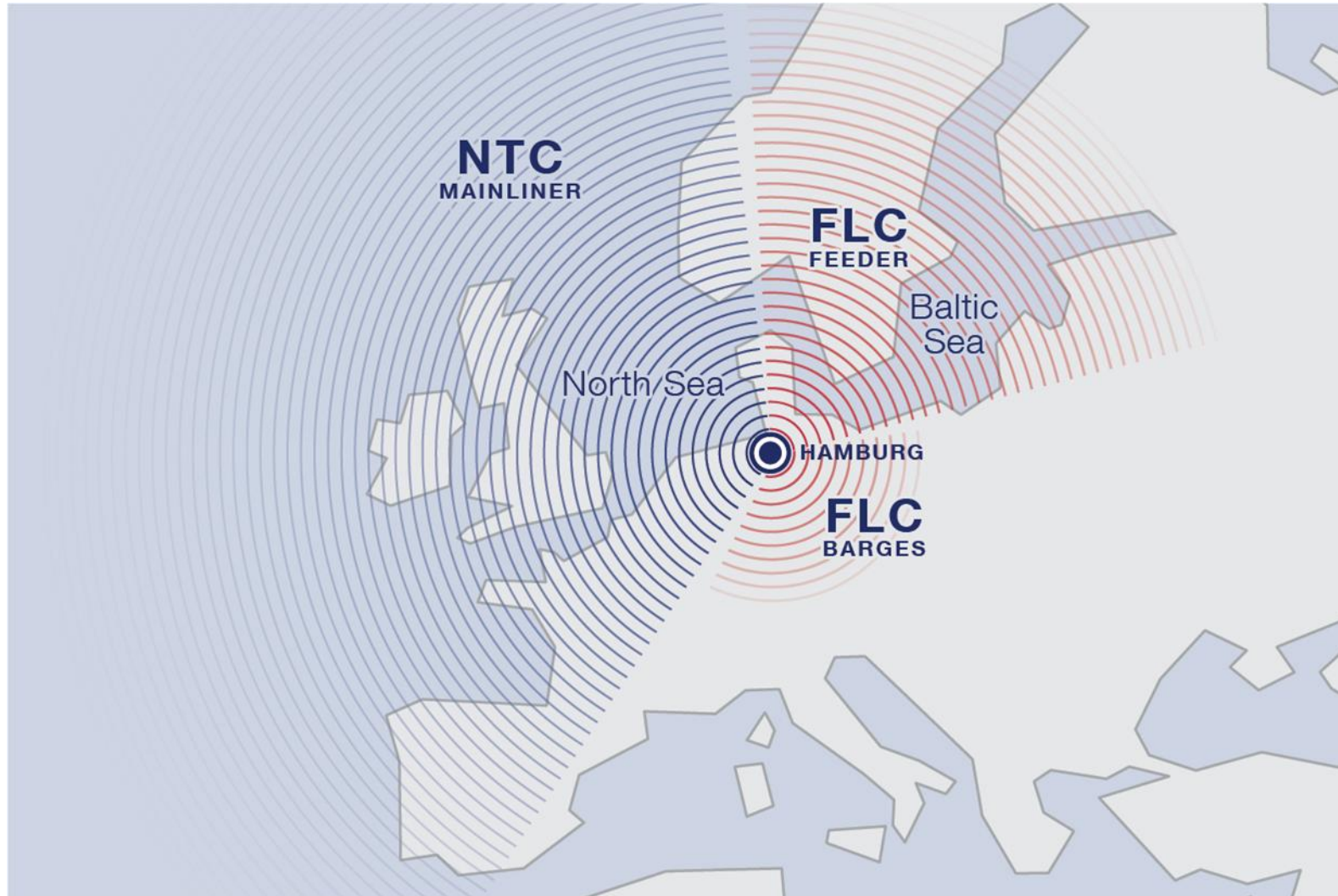
Case Study 3: Vessel Routing Optimization with HVCC

Hamburg Vessel Coordination Center – Feeder Logistics Center – Nautical Terminal Coordination



Case Study 3: Vessel Routing Optimization with HVCC

Achievements per annum



4,100
feeder / barge
terminal calls
coordinated

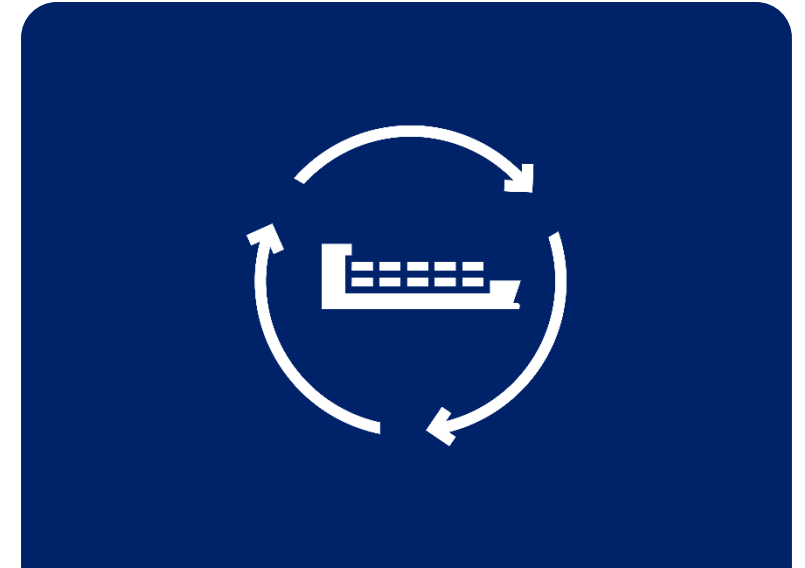
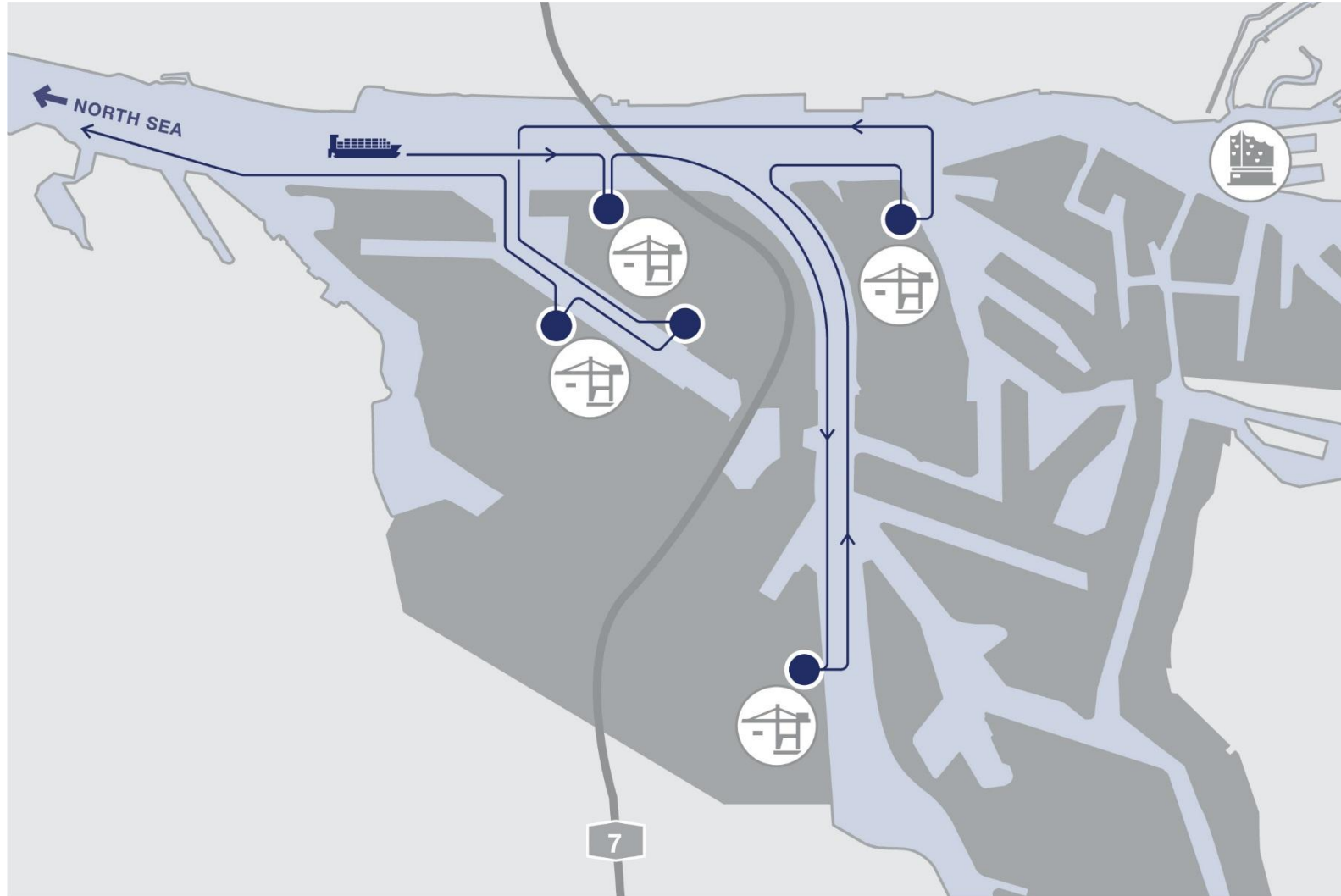
3,000
calls of large
vessels
coordinated



2,250
passage plans
distributed

Case Study 3: Vessel Routing Optimization with HVCC

Achievements per annum

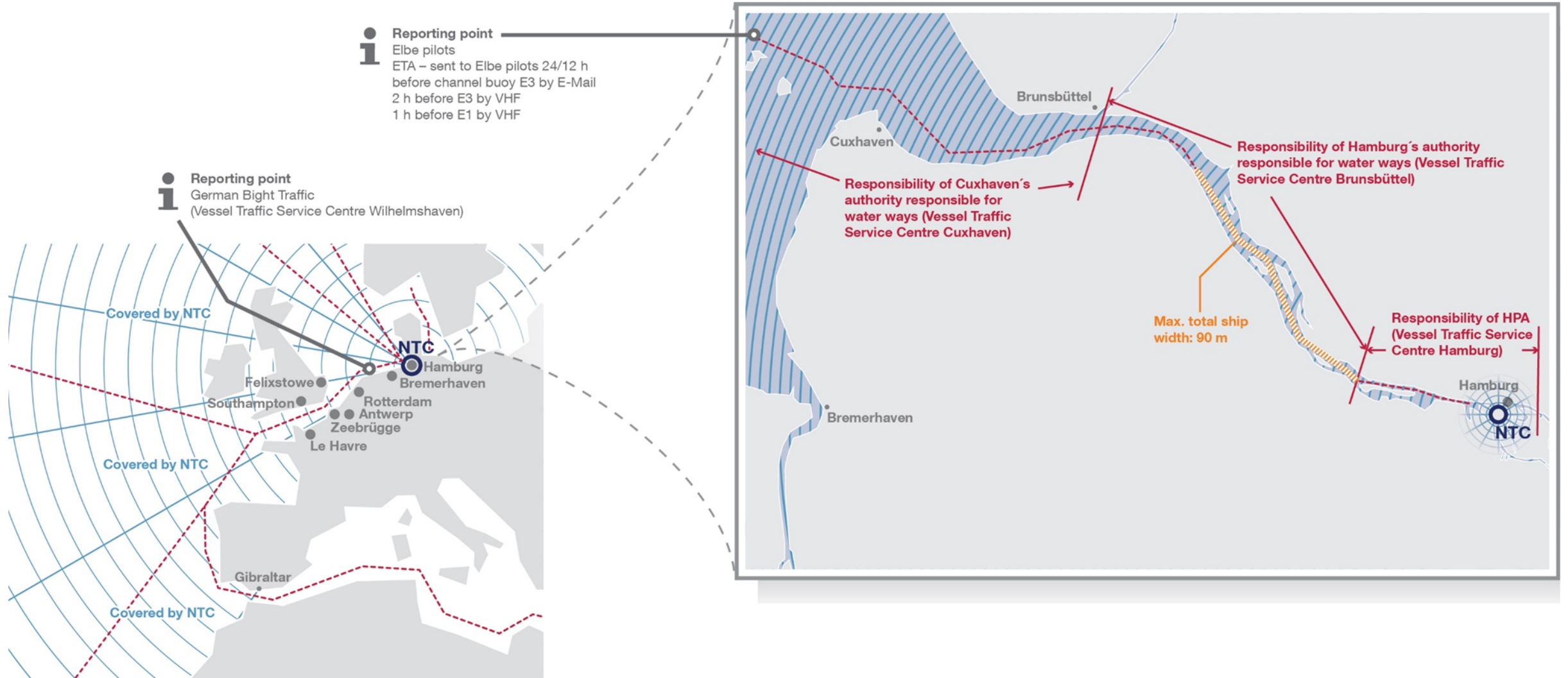


Approx. **2,000**

vessel operating hours saved
through effective coordination

Case Study 3: Vessel Routing Optimization with HVCC

Nautical Coordination on Approach to Hamburg



Case Study 3: Vessel Routing Optimization with HVCC

Achievement Opportunities



If sailing with 14 kn
instead of 18 kn

22 t

bunker savings

66 t

less CO₂-emissions



03

Conclusion

Community Approach



Lessons learned

- Infrastructures are getting a digital counterparts to be endeavored for new solutions
- Willingness to cooperate is prerequisite
- Service quality and reliability become increasingly important
- Stakeholder, change & integration management are the success factors
- Modular design of IT systems & flexible interfaces
- Standardization as much as possible
- Involvement of new technologies
 - IoT & Big data
 - Block chain solutions

→ All Solutions have one Aspect in common – Cooperation!

Conclusion

Lessons learned



From Competition to Coopetition!



**Supply Chain Focus with
Community System Support in
stepwise Approach**

Thank you for your attention!



Dr. Felix Kasiske

CEO, Partner

HPC Hamburg Port Consulting GmbH

Am Ballinkai 1

21129 Hamburg / Germany

+49 40 74008-130

f.kasiske@hpc-hamburg.de

www.hpc-hamburg.de