



# HVCC

## Hamburg Vessel Coordination Center

Company Presentation



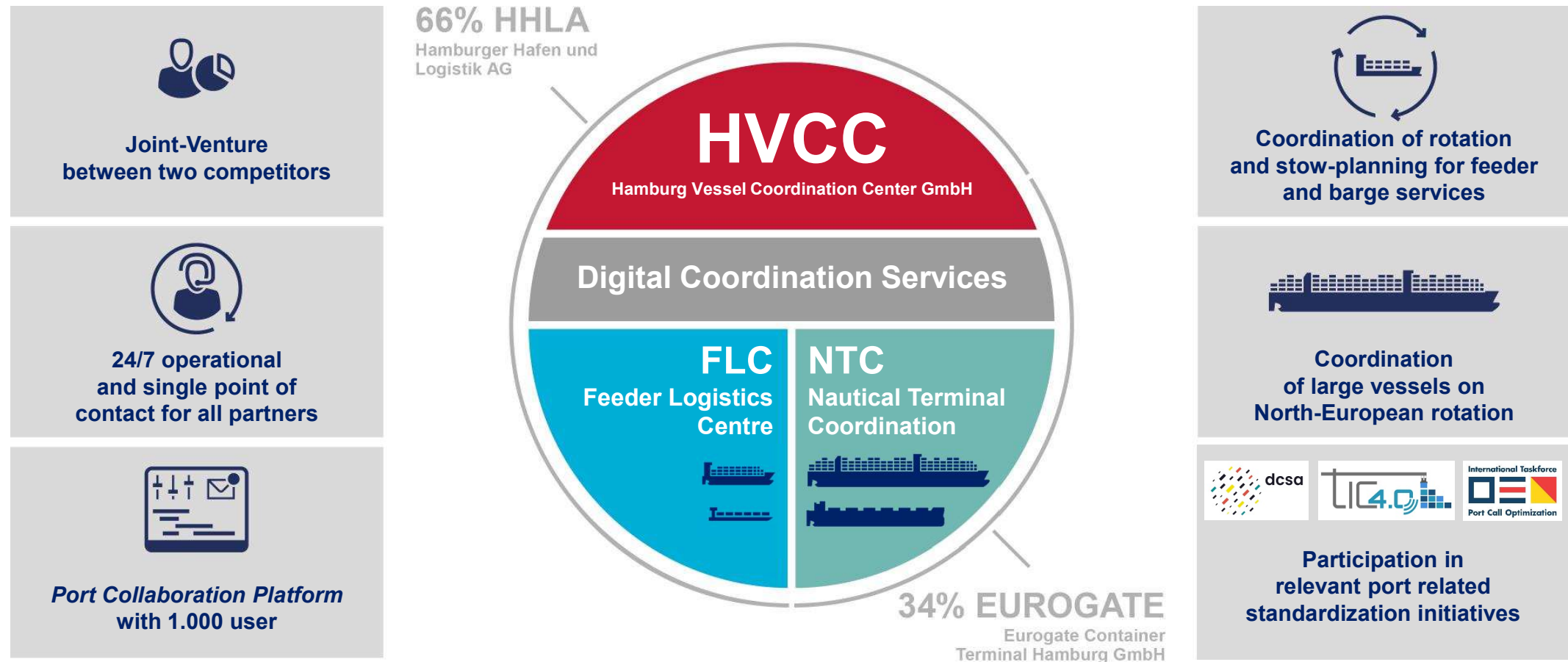


# Why HVCC?



# HVCC is an unique coordination service for customers of the Port of Hamburg

## Overview organisational structure





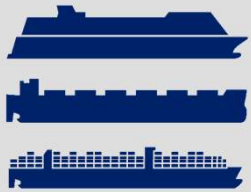
# Geographical coverage of the HVCC coordination service

Cover for large vessels, feeder vessels and inland vessels 2022



**6.250**

Feeder / Barge  
terminal calls



**2.640**

Coordinated  
Large Vessels



**1.000**

Software User



**3.300**

Passage plans for  
Large Vessels



# HVCC has been globally unique for over ten years

## Unique selling points



### Partnership

Unique collaboration (shareholders, customers and partners) for sustainable and customer-oriented service



### Neutrality

Holistic port call optimization and utilization of terminal and port infrastructure in Hamburg



### Availability

24/7 proactive coordination services by highly qualified staff



### Software

Process-oriented software solutions with customized dashboards

# Extensive coordination and connection of port community

## Services of HVCC



### Coordination services

- Initial registration at the terminals as well as with the authorities (berths and port fees)
- Coordination of vessel arrivals/departures and port rotations, incl. ordering of nautical service providers (pilots, tugs, linesmen)
- Central stow planning for feeders and barges
- Create passage plans for large vessels arriving and departing from the Port of Hamburg
- 24/7 supervision of operating and port rotation



### HVCC Port Collaboration platform

- Customised dashboard solutions
- PRISE platform for berth registration at the Port Authority and other vessel information
- Barge-Plattform
- Interfaces for connection with previous / next ports and carriers (DCSA Fahrplan-API)
- API hub for interface-bound use of terminal data for partners
- Interface to the Wärtsilä Navi-Port platform for transmitting the Requested Time of Arrival of a vessel

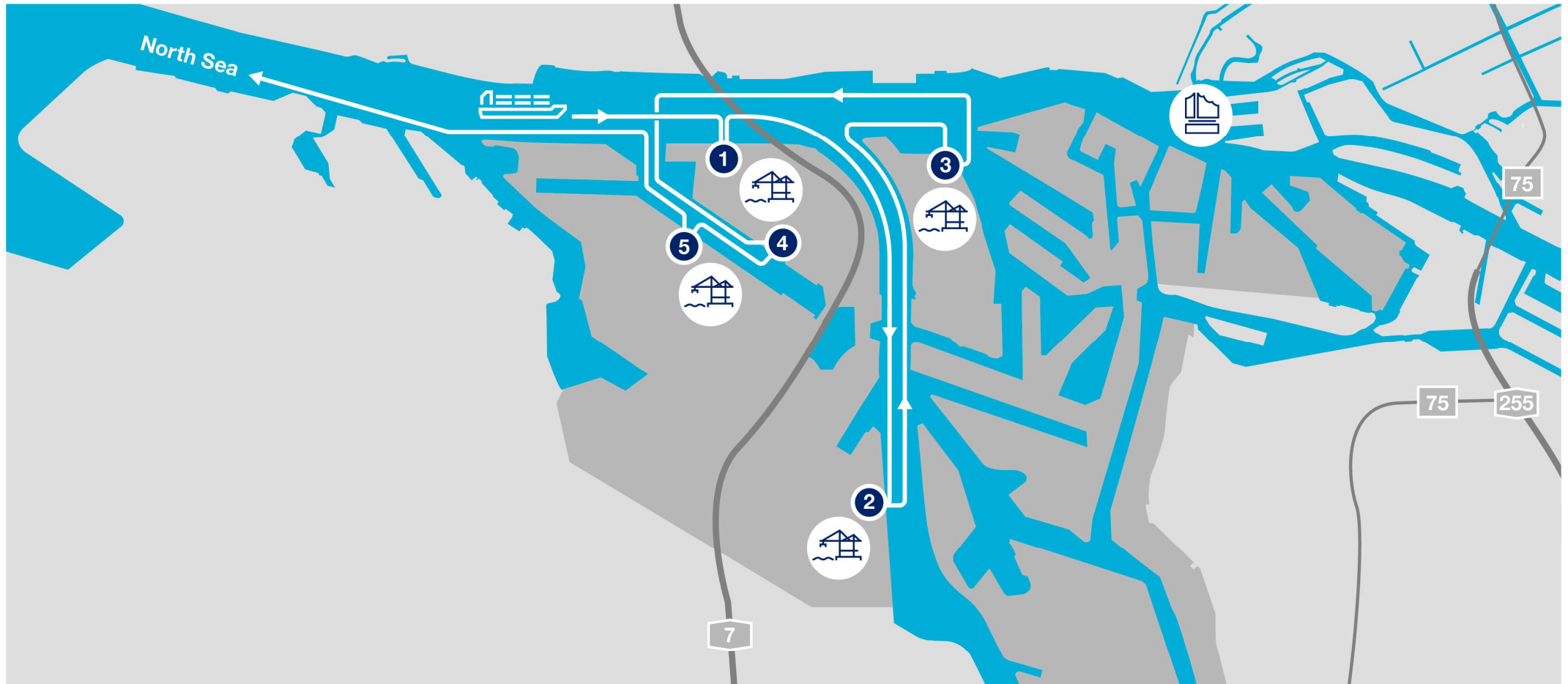




## Feeder Logistics Center

# Complex handling of rotations in tight time windows

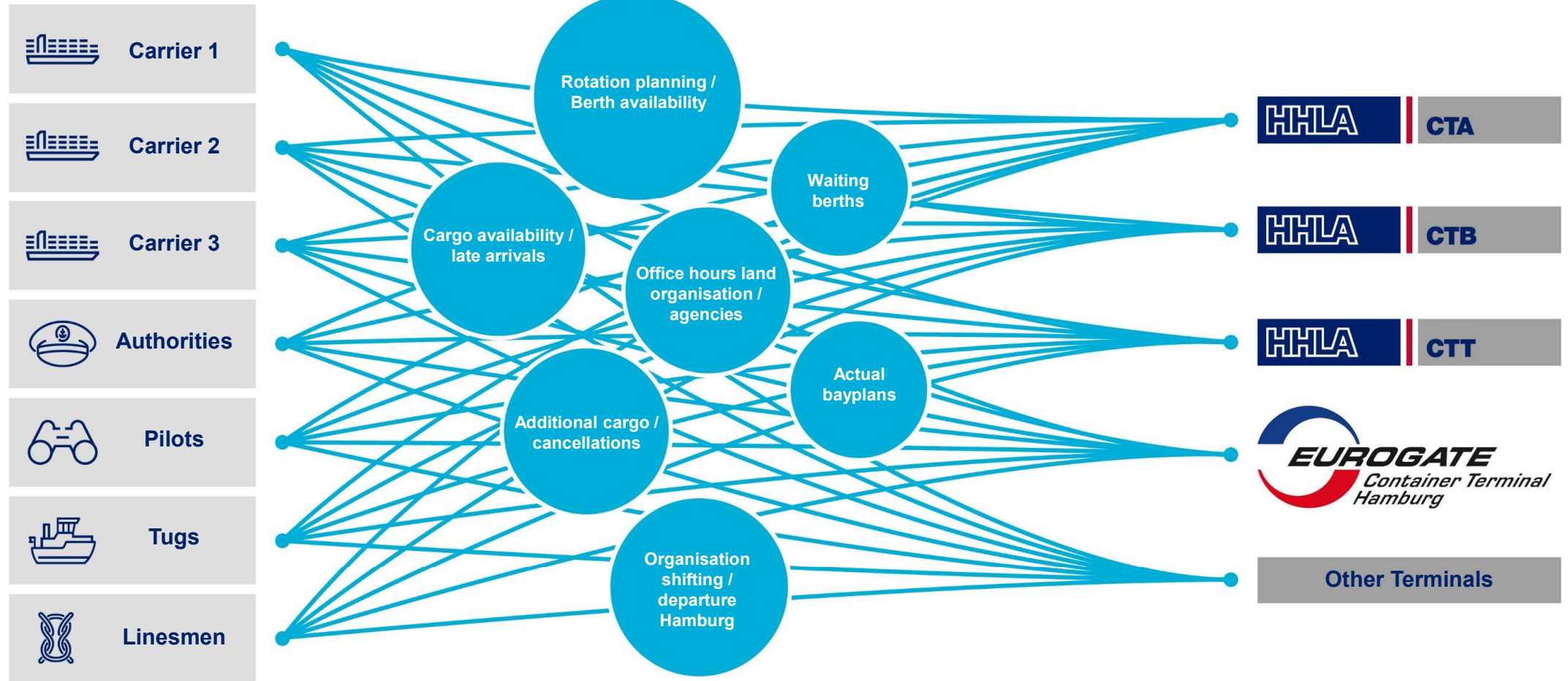
Rotation example of a feeder ship in the port of Hamburg





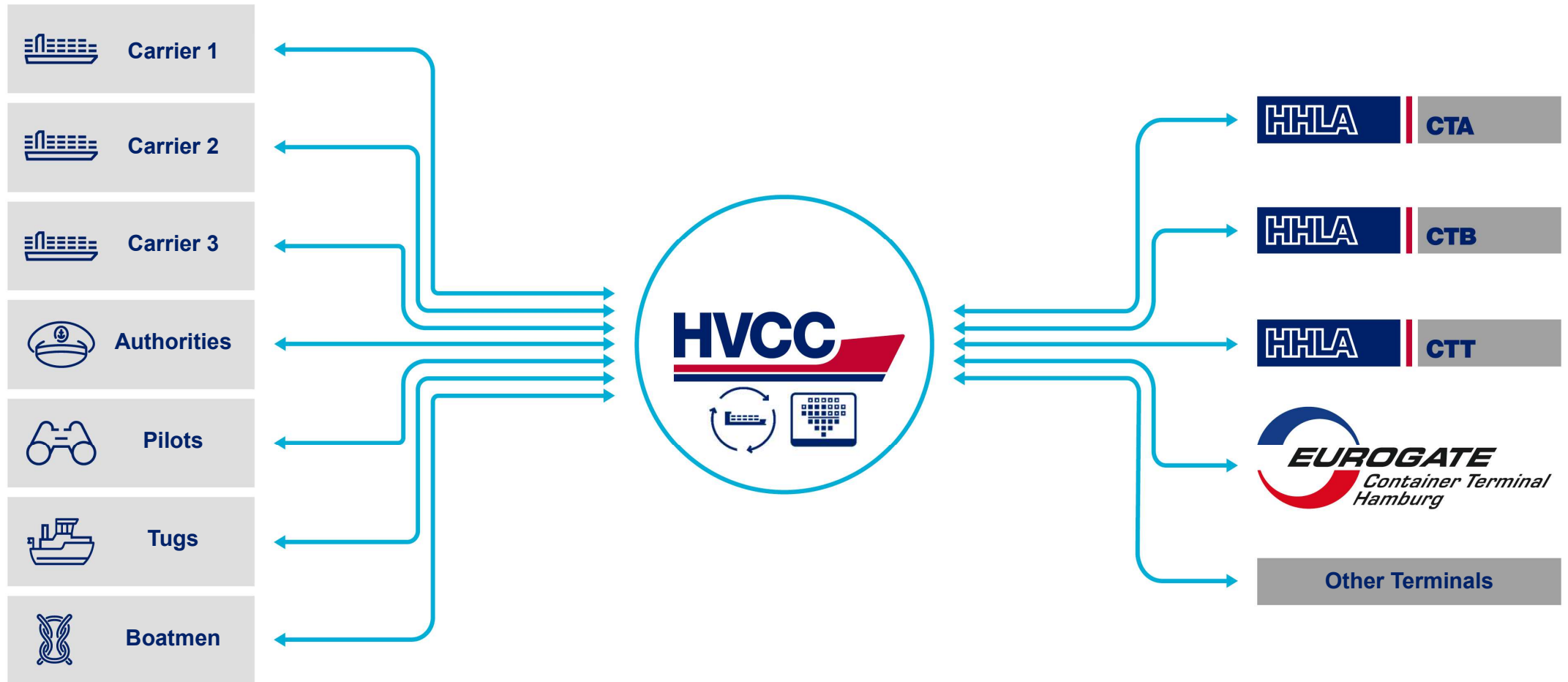
# Multiple bilateral communication around a feeder rotation

Feeder communication in the port **without** coordination by FLZ



# Optimisation of vessels' port call and utilisation of terminal infrastructure

FLC established port-communication platform





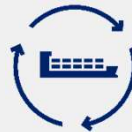
# Working areas and service of FLC

## Overview



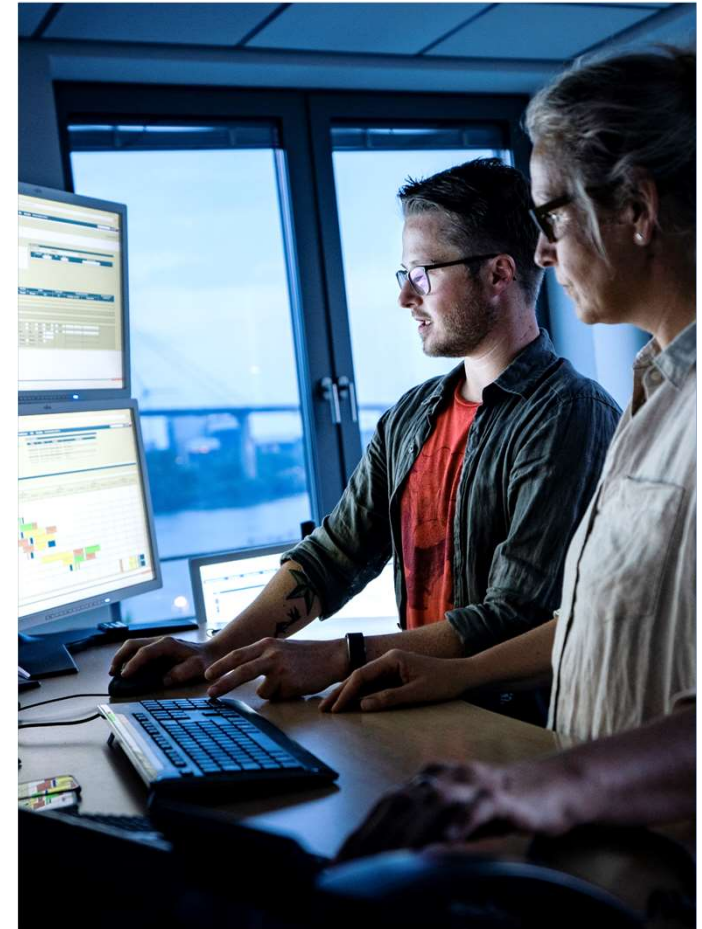
### Planning (Stow planning)

- Receiving of stow instructions,
- Continuous checking of cargo availability as well as work programmes
- Ad-hoc adjustment / rescheduling of a vessel
- Forwarding and coordination of the checked stowage plans with the terminal
- Continuous and pro-active communication with the carrier



### Operating (rotation planning)

- Permanent monitoring of vessel positions and pro-active intervention in case of delays
- Direct access to terminal's operational systems and continuous communication with duty manager at the terminal resulting in real-time operational status picture
- On-time ordering of nautical service providers and authorities
- Arranging waiting berths



# Advantages of 24/7 service of FLC

## Overview



### Carrier

- Enabling concentration on core business
- Optimization of rotations and port stay
- Direct access to terminal's operational systems
- Operational decisions on behalf of the carrier
- On-time ordering of service providers



### Terminal

- Contact person for all operational issues
- Receipt of approved work programs/stowage plans, reducing waiting times through clarification processes
- Optimized berth utilization through coordination of feeders and barges by one central instance



### Port

- Optimized use of port's infrastructure
- Relief of authorities (e.g. VTS) regarding requests on vessel's rotation
- HVCC as a unique feature of the Port of Hamburg

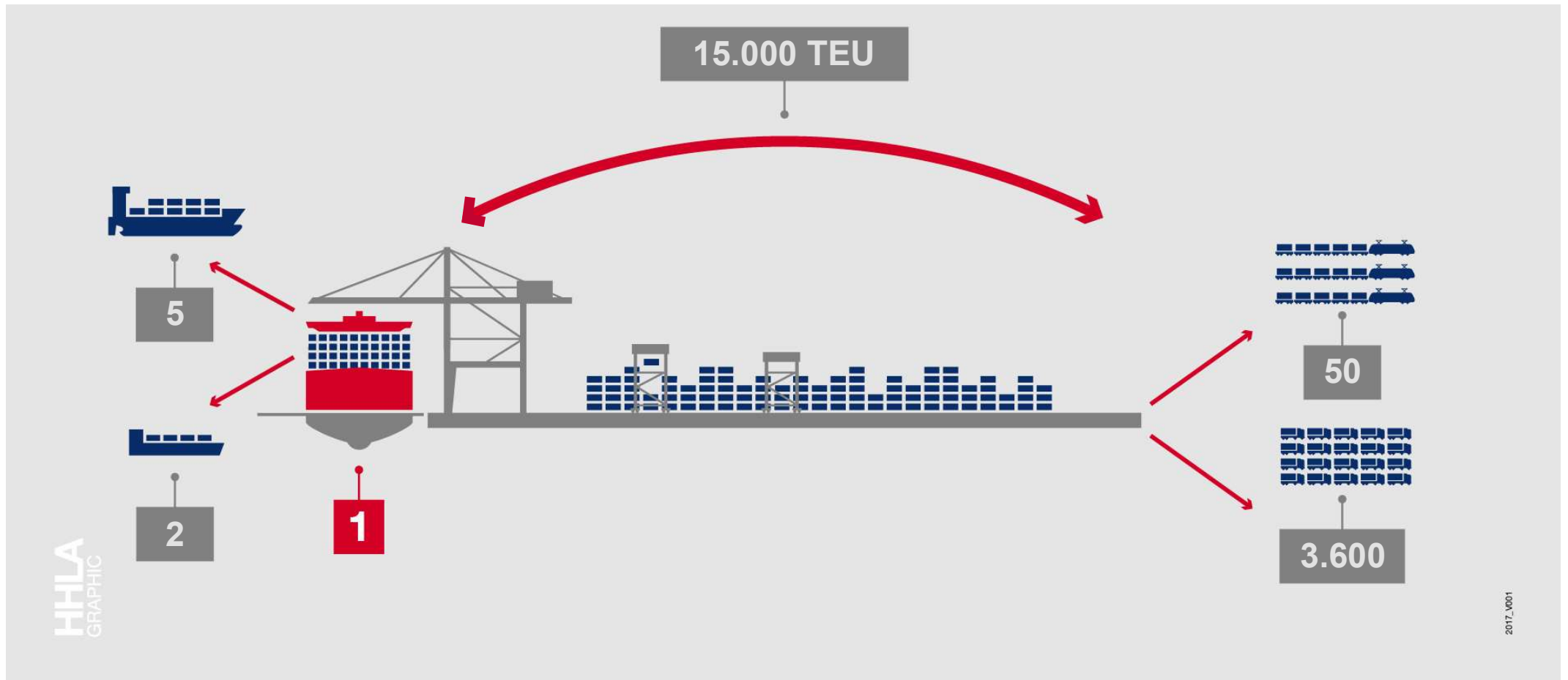




# Nautical Terminal Coordination

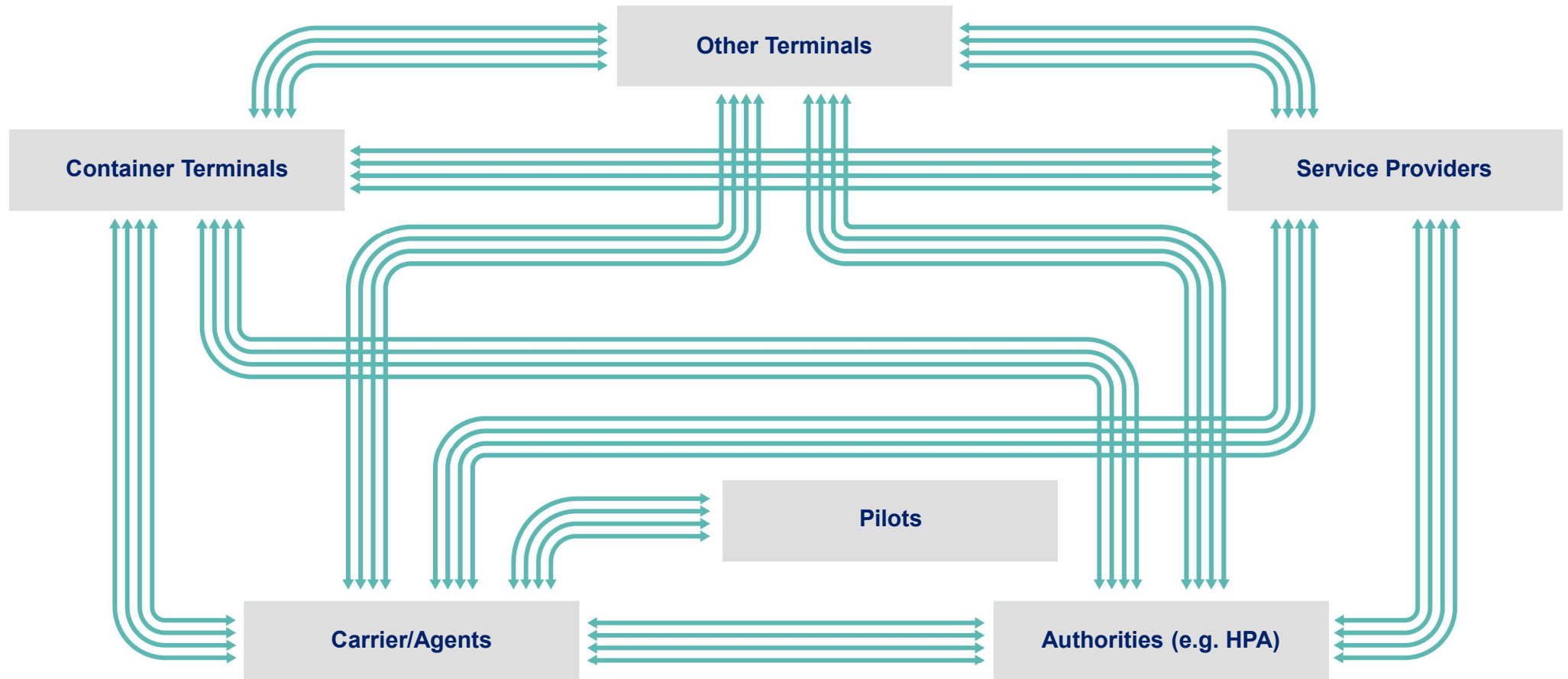
# Enormous importance of reliable inflow control

Example peak loads using a 20,000 TEU vessel as an example



# Only bilateral communication between participants

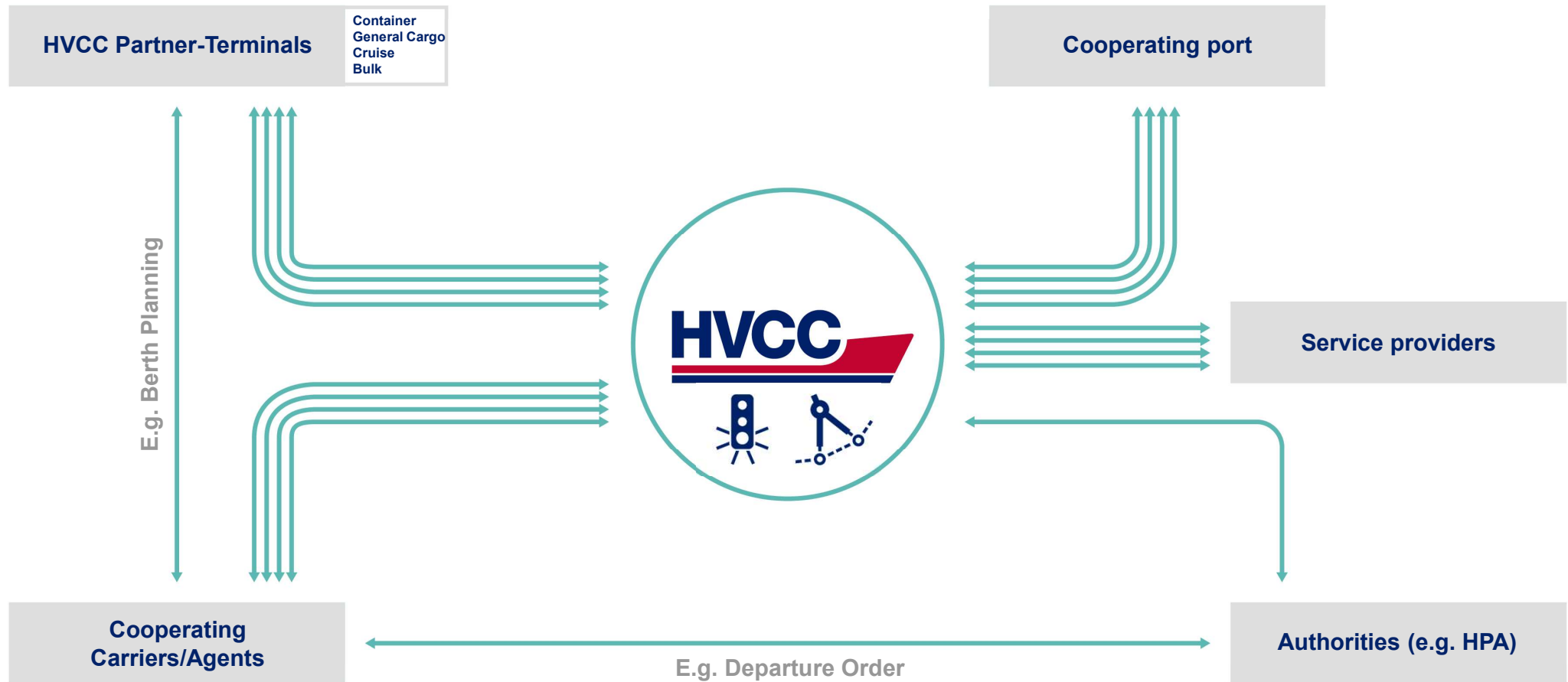
No consideration of interactions of individual planning





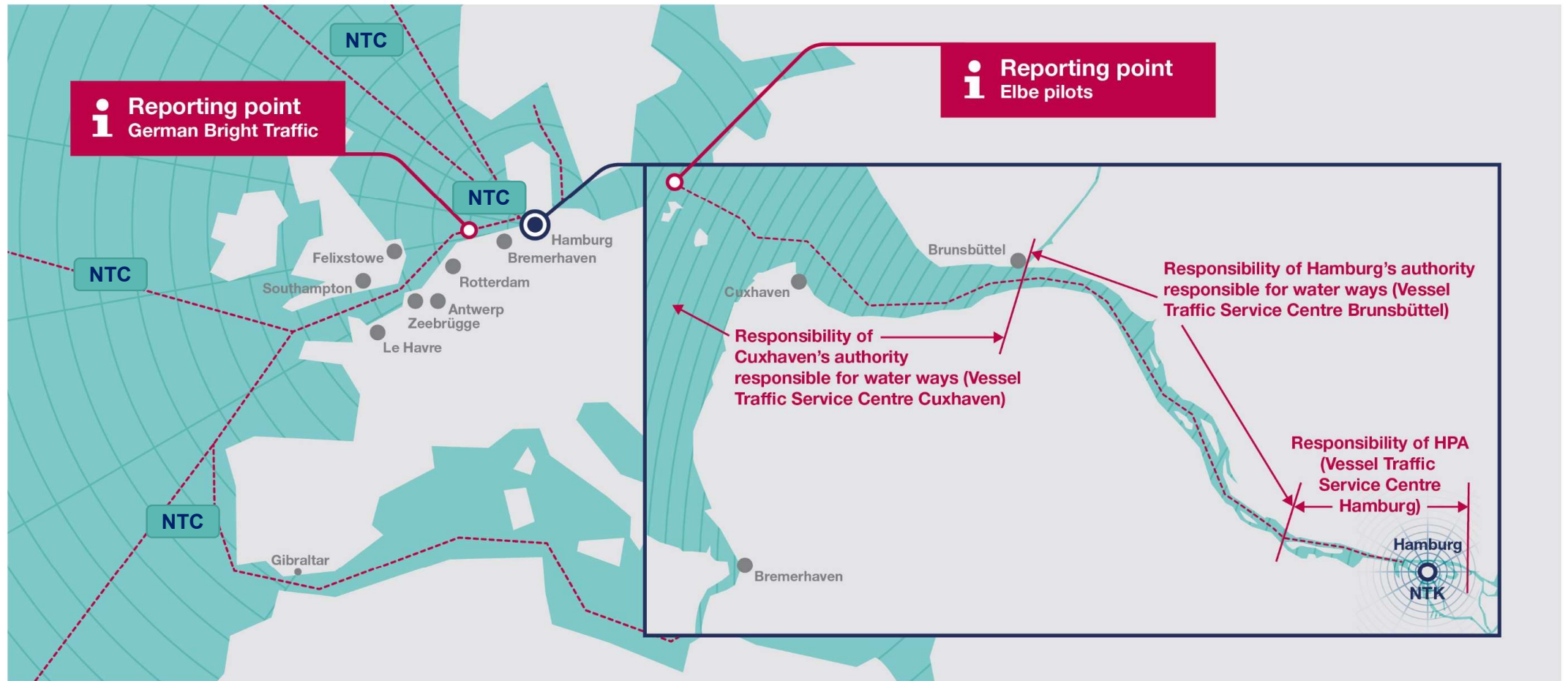
# Operational planning coordinated by NTC

Communication channels of the NTC partners and coordination with the Port Authority of the HPA



# NTC's coverage extends far beyond Port of Hamburg

Geographical coverage and responsibilities



# Working areas and services of NTC

## Overview



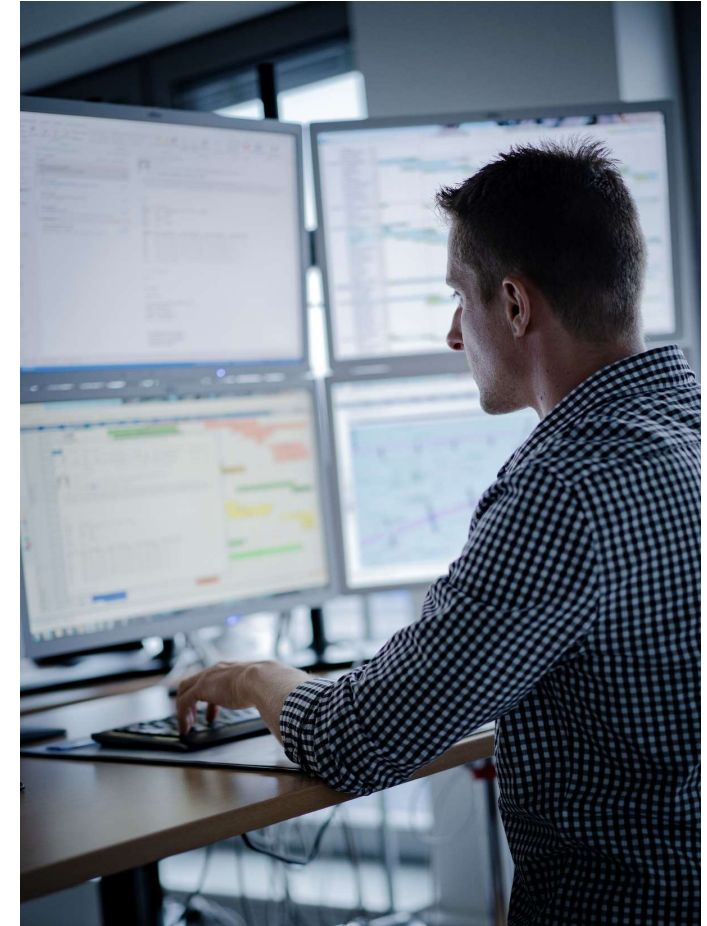
### Operating

- Early identification of potential interdependencies on River Elbe
- Dynamic development of solutions after consulting with all involved stakeholders to optimise passage to Port of Hamburg
- Coordination of traffic management with the port authority as a uniform planning basis



### Administration

- Observation of vessels heading to Port of Hamburg on their rotation in Northern Europe
- Tracking of vessels in previous ports
- Consideration of forecasts for wind, weather and water levels
- Calculation of passage windows
- Providing carriers / vessels with navigational information for passage to / from Port of Hamburg





# Vorteile durch 24/7 Leistungen der NTK

## Overview



### Carrier

- Reliable planning by providing smooth passage
- Reduction of bunker/energy consumption and emissions through optimized inflow control and optimal speed
- Port call optimisation



### Terminal

- Optimized planning of resources (quay walls and staff) through reliable arrival and departure times of the vessels.
- Central data aggregation and coordination
- Single Point of Contact



### Port / Authorities

- Optimal pre-sequence planning of vessels
- Obtaining an operational solution for passage conflicts as a decision base for sovereign tasks
- Efficient use of port infrastructure



### Service Providers

- Overview of overall traffic situation
- Operational involvement in the traffic management system
- Improved services quality to customers

## The result: Realization of significant savings potentials

This requires collaboration of all stakeholders (carrier, vessel, terminal, authorities, service providers)



At 14 kn instead of  
18 kn

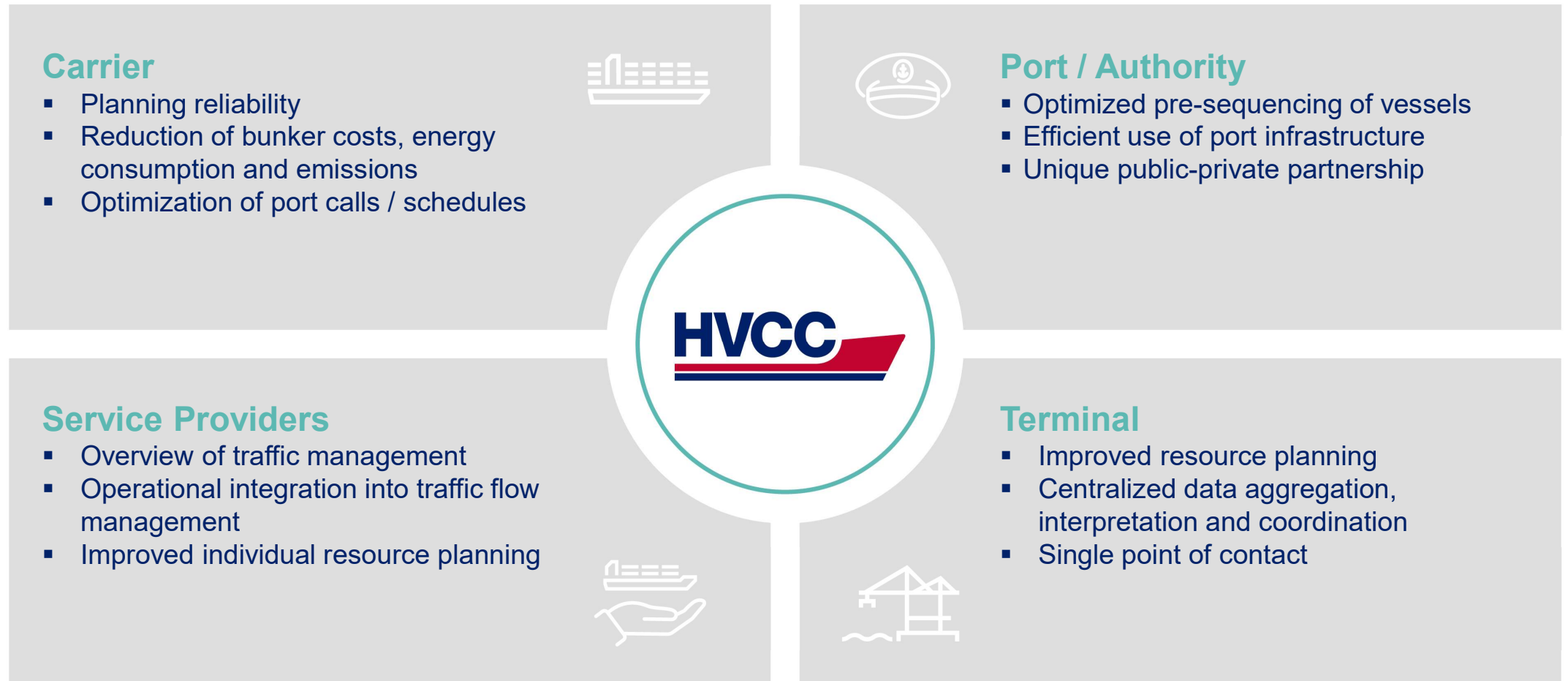
**22 t**  
Bunker Saving

**66 t**  
Less CO<sub>2</sub> Emissions



# Mehrwerte der HVCC-Koordinationsleistungen

## Überblick





An aerial photograph of a large port area, including a container yard, industrial buildings, and a river. A network of glowing blue nodes connected by thin white lines is overlaid on the image, suggesting a digital or collaborative platform. The nodes are concentrated in the container yard and along the riverbank.

## **HVCC Port Collaboration Platform**



# HVCC-Software shows transparent traffic situation

Tailor-made software solutions for partners

## Overview of partners



Project owner



Project management

**DAKOSY**

Software development



AIS-partner

## Functional overview



Schedules / vessel's data



Gantt chart overview



AIS-data

# HVCC Port Collaboration Platform today

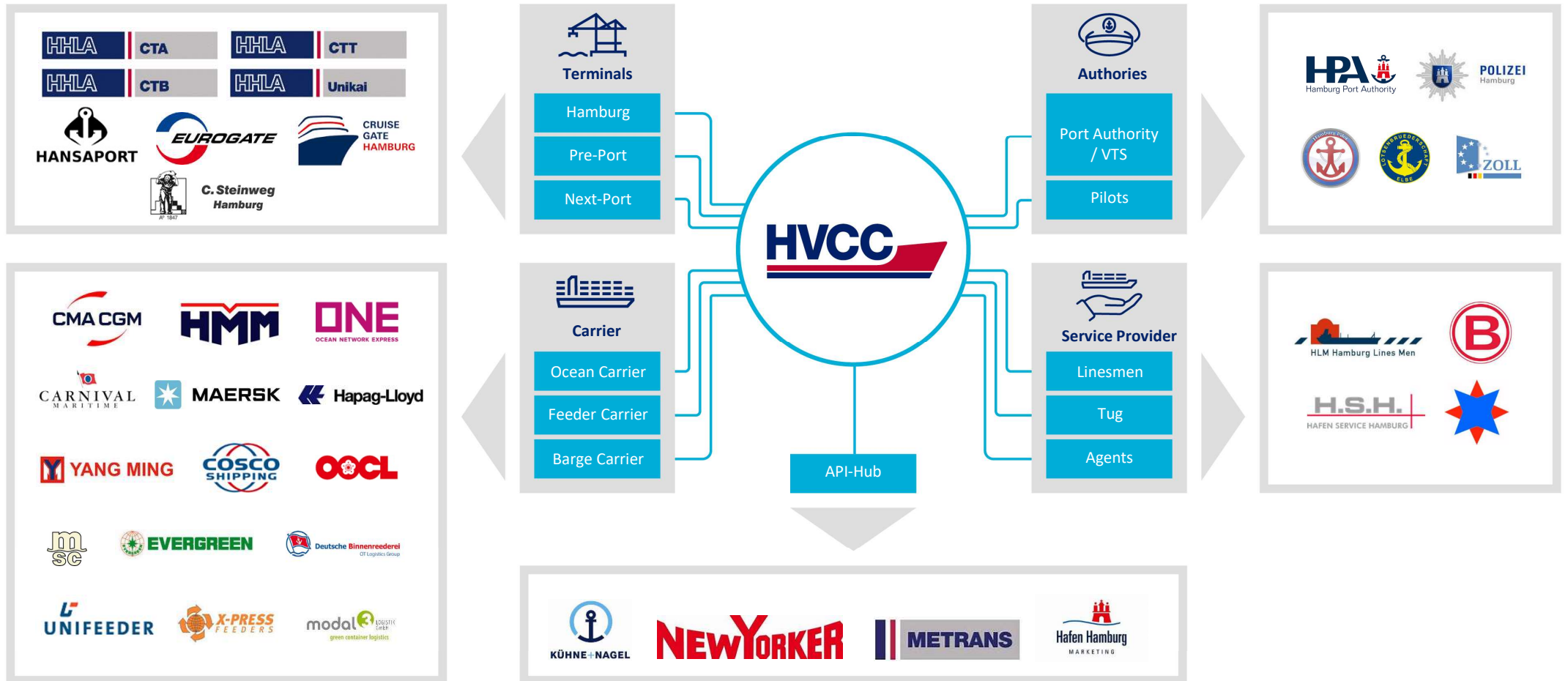
Over 1,000 users in the Port of Hamburg





# Extensive coverage of the business partners in the port

Overview of HVCC partners with access to HVCC software, dashboards, PRISE system or API hub.



# HVCC-Dashboard as a synchronous planning base

Continuous development of functions



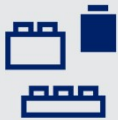
**Extensive data and  
information sources**



**Coordinated traffic situation  
(time and geographically)**



**Group-specific event messages  
and alert function**



**Content adaptable to individual  
needs**

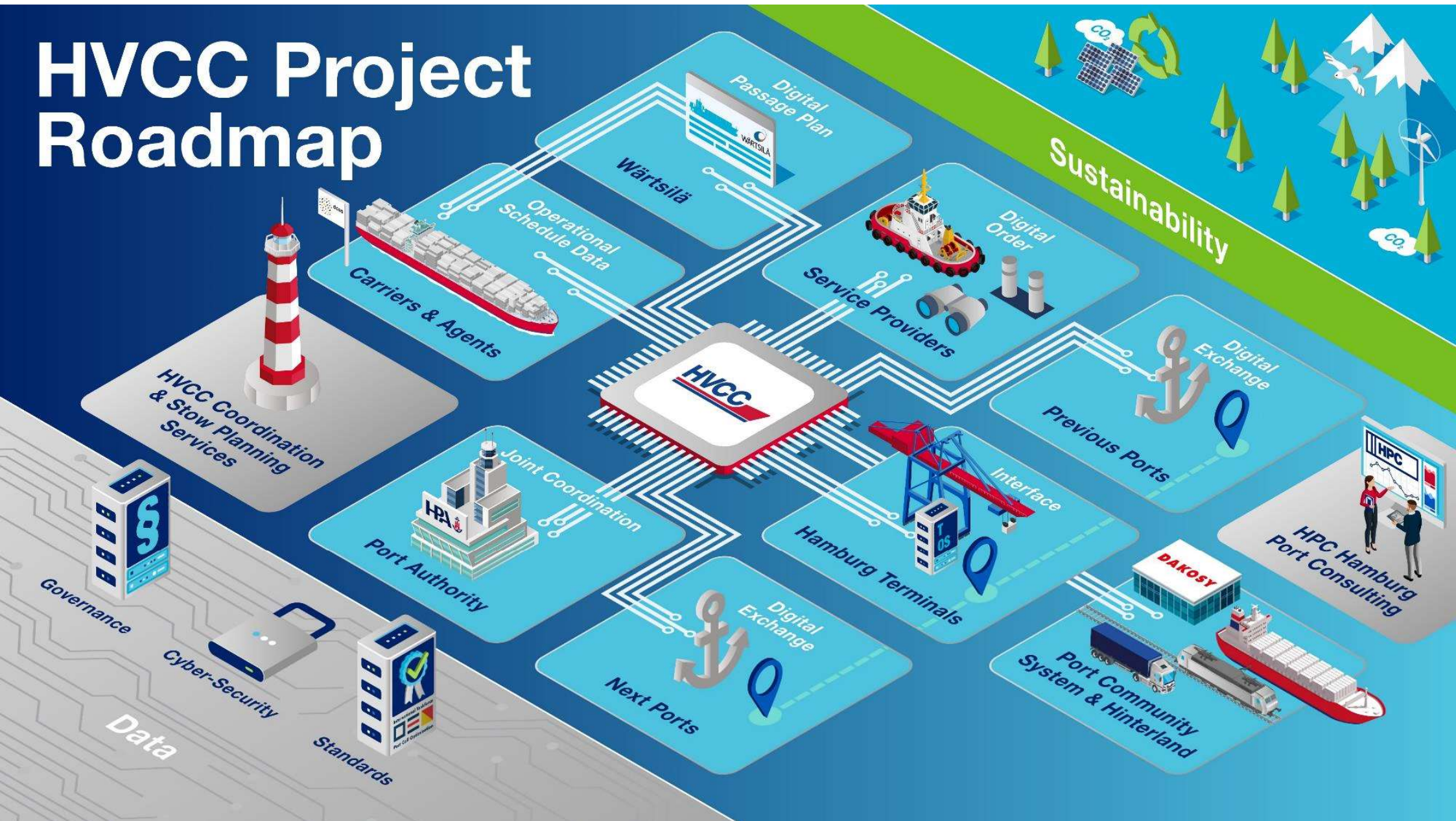


**Direct data exchange with  
previous / next ports and carriers**



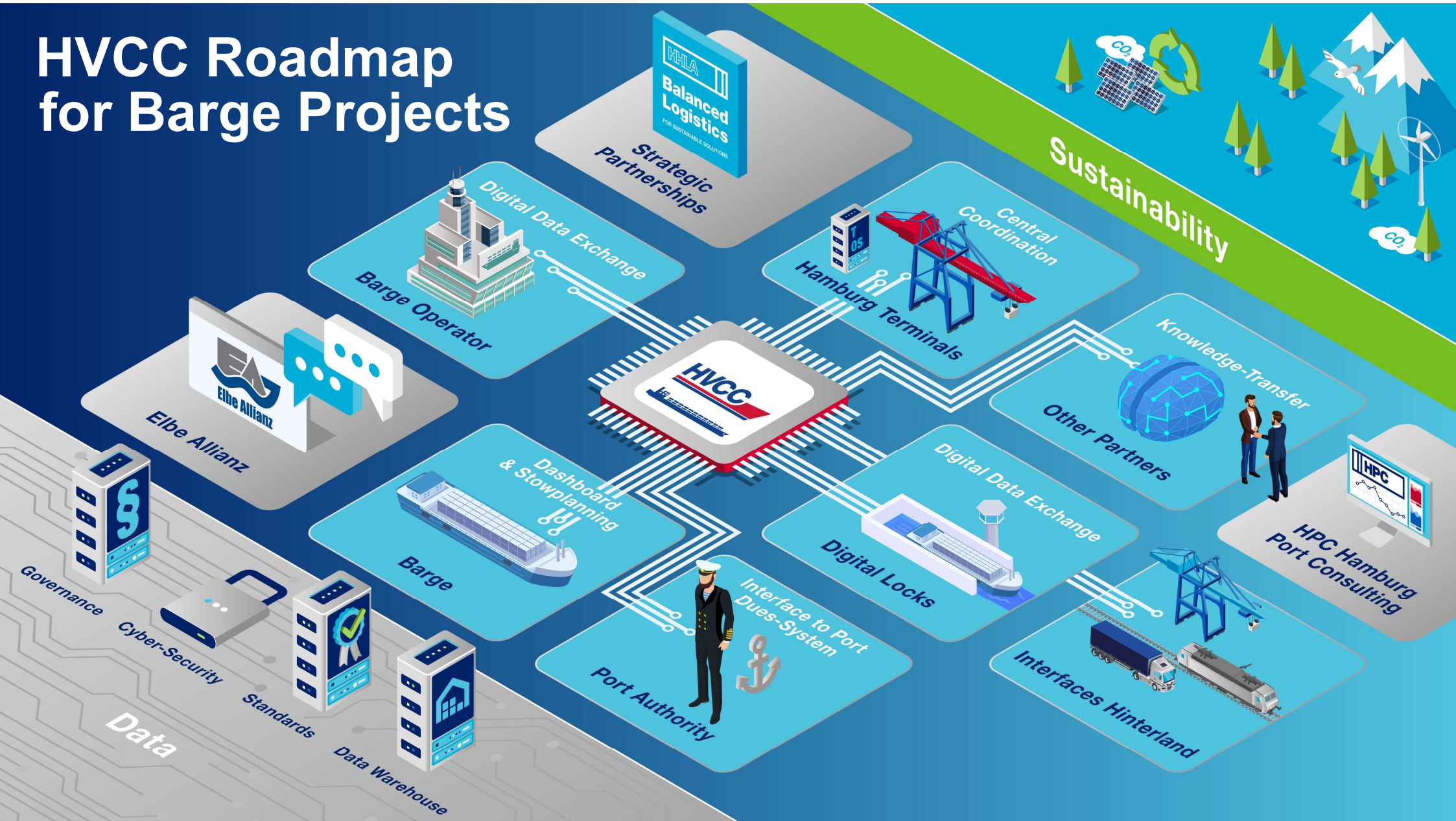
**Direct ordering of services**

# HVCC Project Roadmap



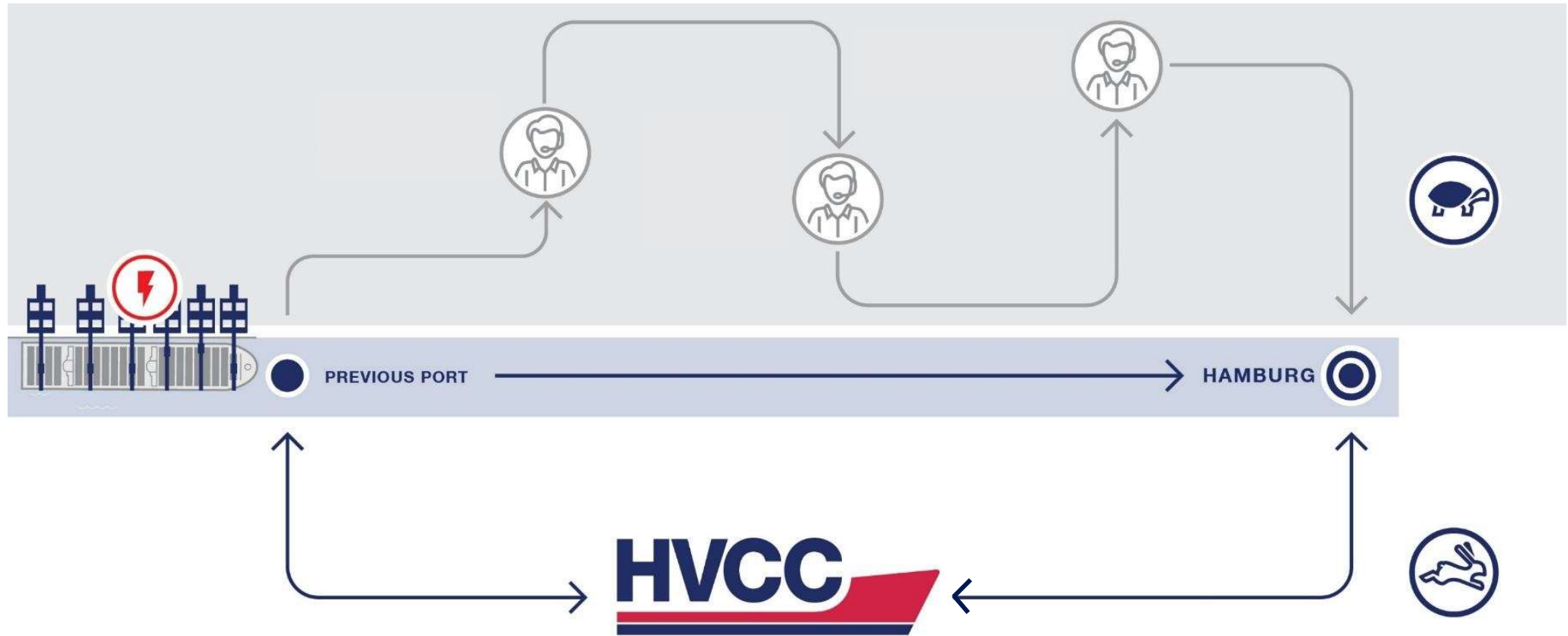


# HVCC Roadmap for Barge Projects



# Data exchange not standardized and too slow

Short transit time requires transparency and direct data exchange





# Kontakt

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