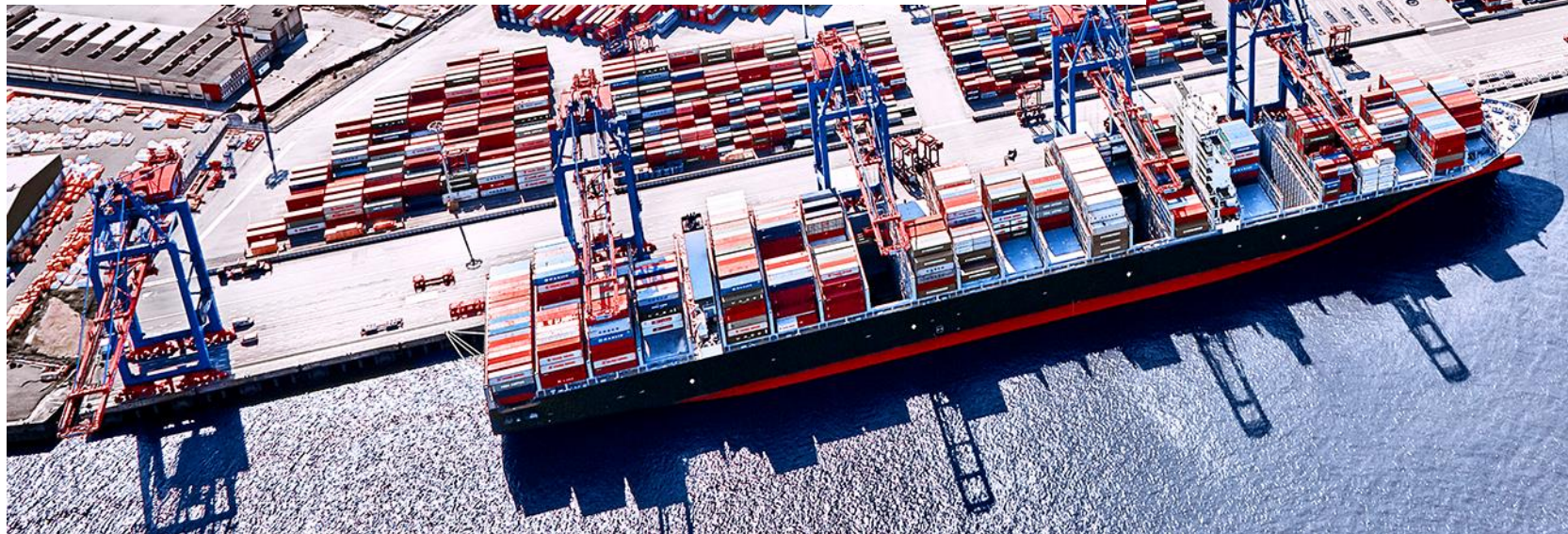




# Welcome to HHLA's Capital Markets Day

Transport streams join data streams

19 November 2019



# Today's schedule

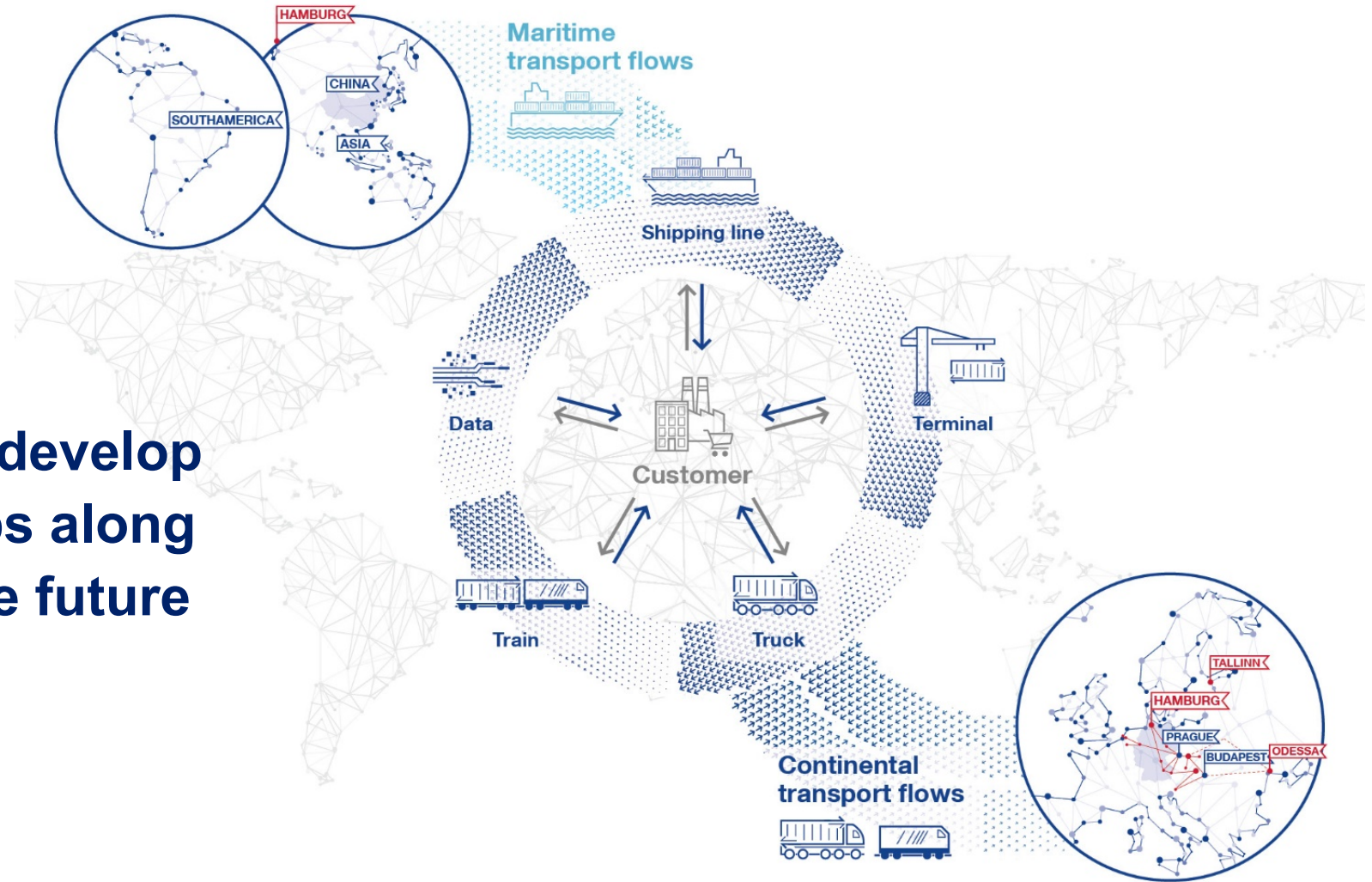




# Strategic update Angela Titzrath, CEO

# HHLA is the gateway to the future

With our customers, we develop logistical and digital hubs along the transport flows of the future



# HHLA is navigating troubled waters



**The face of globalisation is changing...**



**Container growth has largely come to an end...**



**Our customers are continuing to reposition themselves...**



**Volatile political backdrop...**



**Infrastructural development opportunities at the port are still not being seized fully...**

# Protectionism ascending – global growth descending



MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV

SINGAPORE SUMMIT

## US-China cold war and rising protectionism could split world order

PUBLISHED TUE, SEP 24 2019-9:32 PM EDT | UPDATED WED, SEP 25 2019-8:08 PM EDT



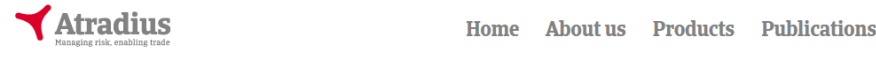
Economics

Bloomberg

## Is the World Economy Sliding Into First Recession Since 2009?

By [Michelle Jamrisko](#), [Enda Curran](#), and [Zoe Schneeweiss](#)

13. Oktober 2019, 01:00 MESZ



**Atradius**  
Managing risk. enabling trade

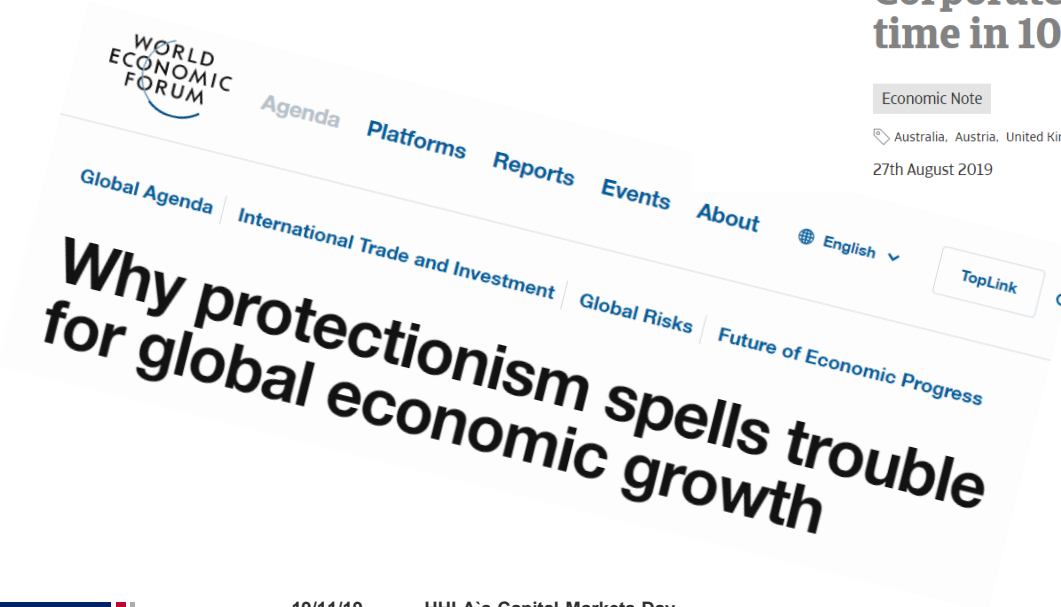
Home About us Products Publications

## Corporate insolvencies rise for first time in 10 years

Economic Note

Australia, Austria, United Kingdom [\[-more\]](#) General economic

27th August 2019



WORLD ECONOMIC FORUM

Agenda Platforms Reports Events About

Global Agenda International Trade and Investment Global Risks Future of Economic Progress

## Why protectionism spells trouble for global economic growth

English

TopLink



The New York Times

## Global Trade Is Deteriorating Fast, Sapping the World's Economy

By [Peter S. Goodman](#)

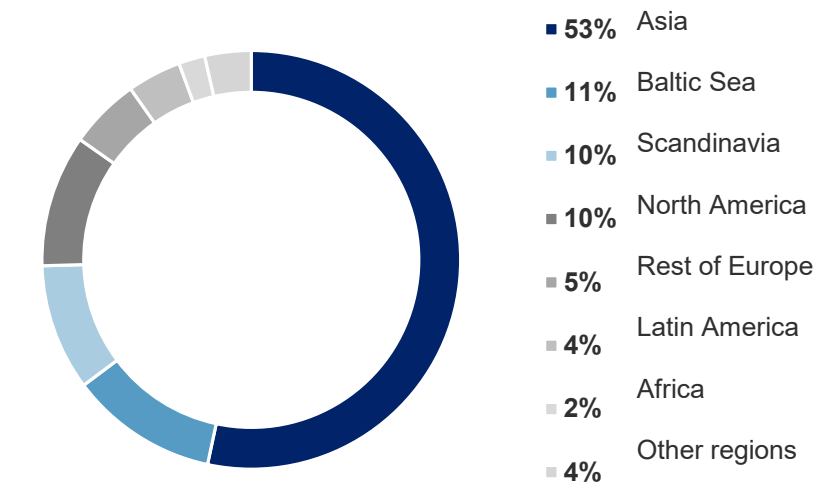
Published Oct. 1, 2019 Updated Oct. 2, 2019

# To put that into perspective...



**>85% of HHLA's throughput with countries that stick to free trade**

Sea-bound container throughput in Hamburg 9M19  
by region

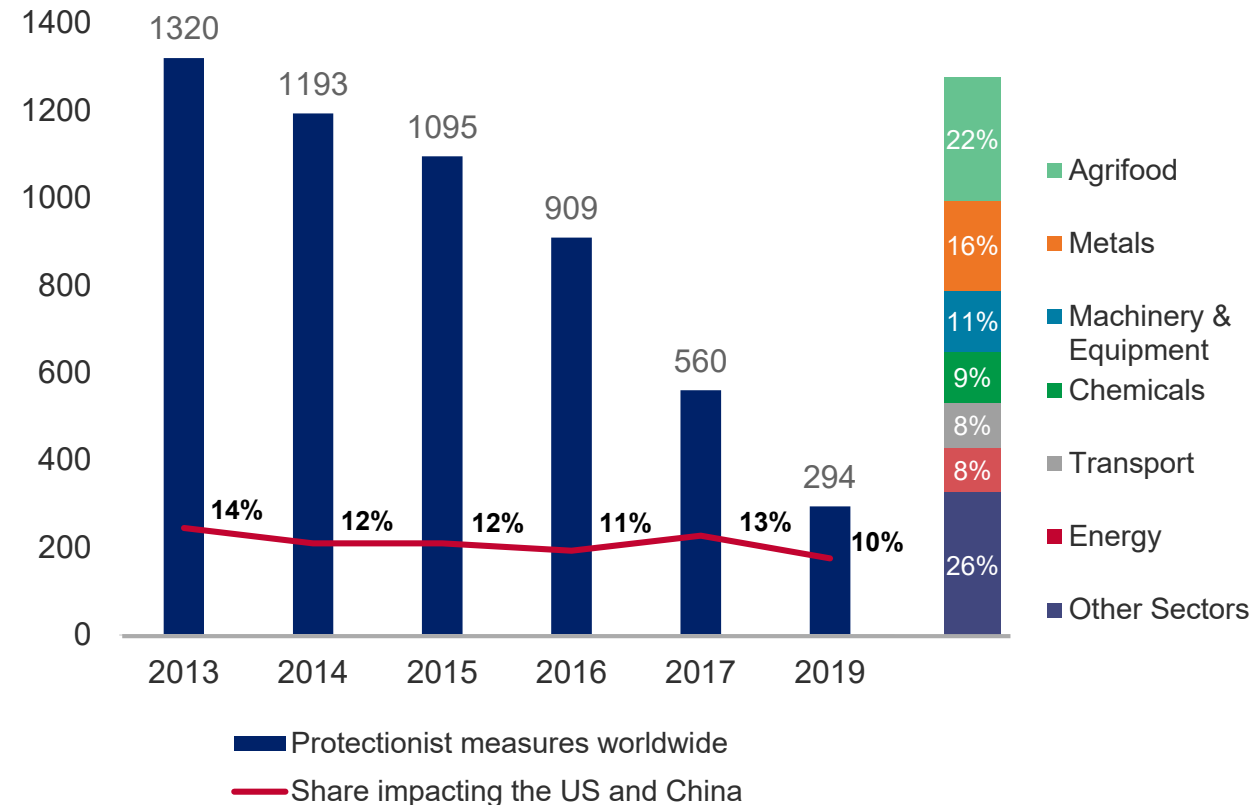


Source: HHLA



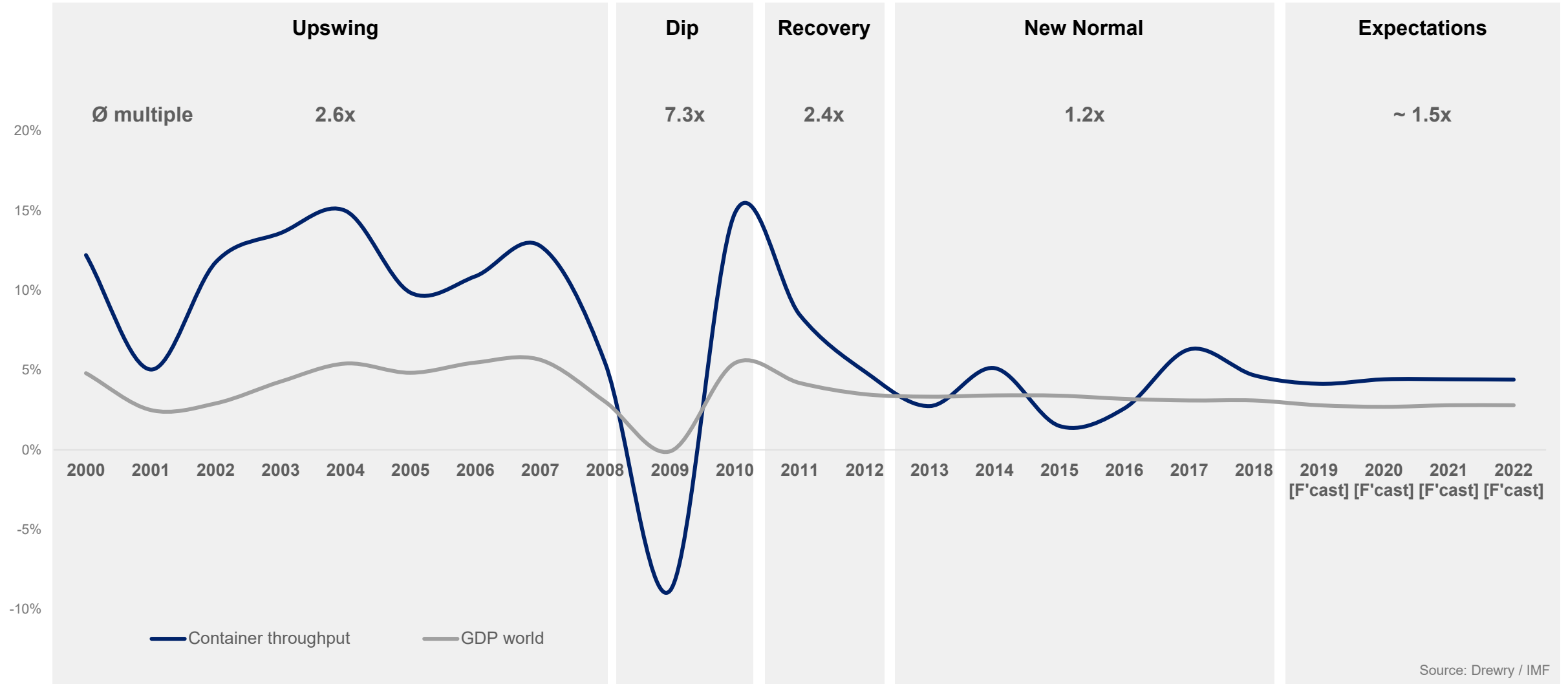
**Perceived protectionism is higher than effective measures**

Number of protectionist measures adopted by year and distribution by sector



# Growth of global container throughput and GDP

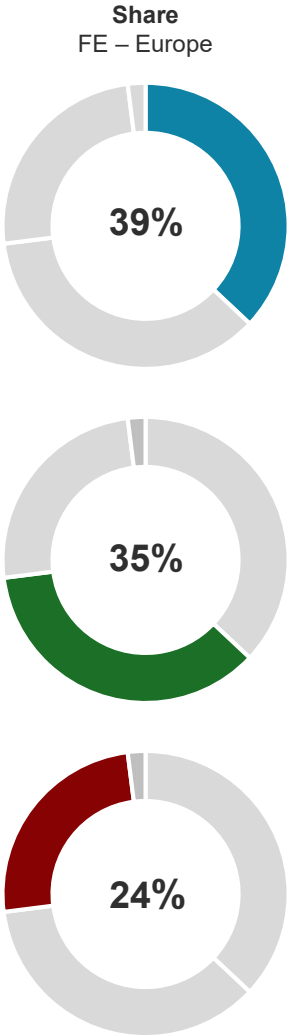
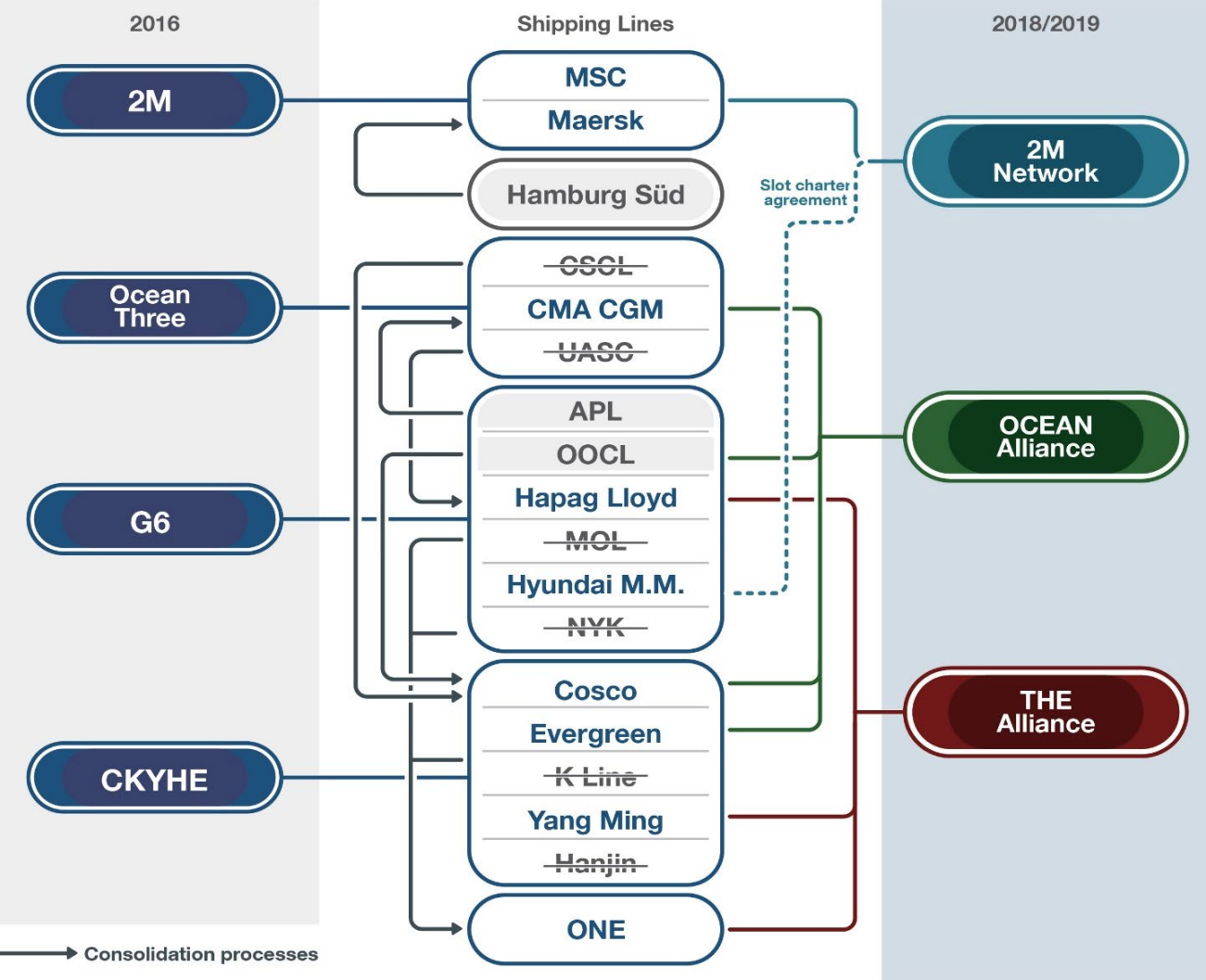
Growth multiplier on GDP slowed down substantially since 2012





# Development of alliances

Concentration in the shipping industry substantially increased



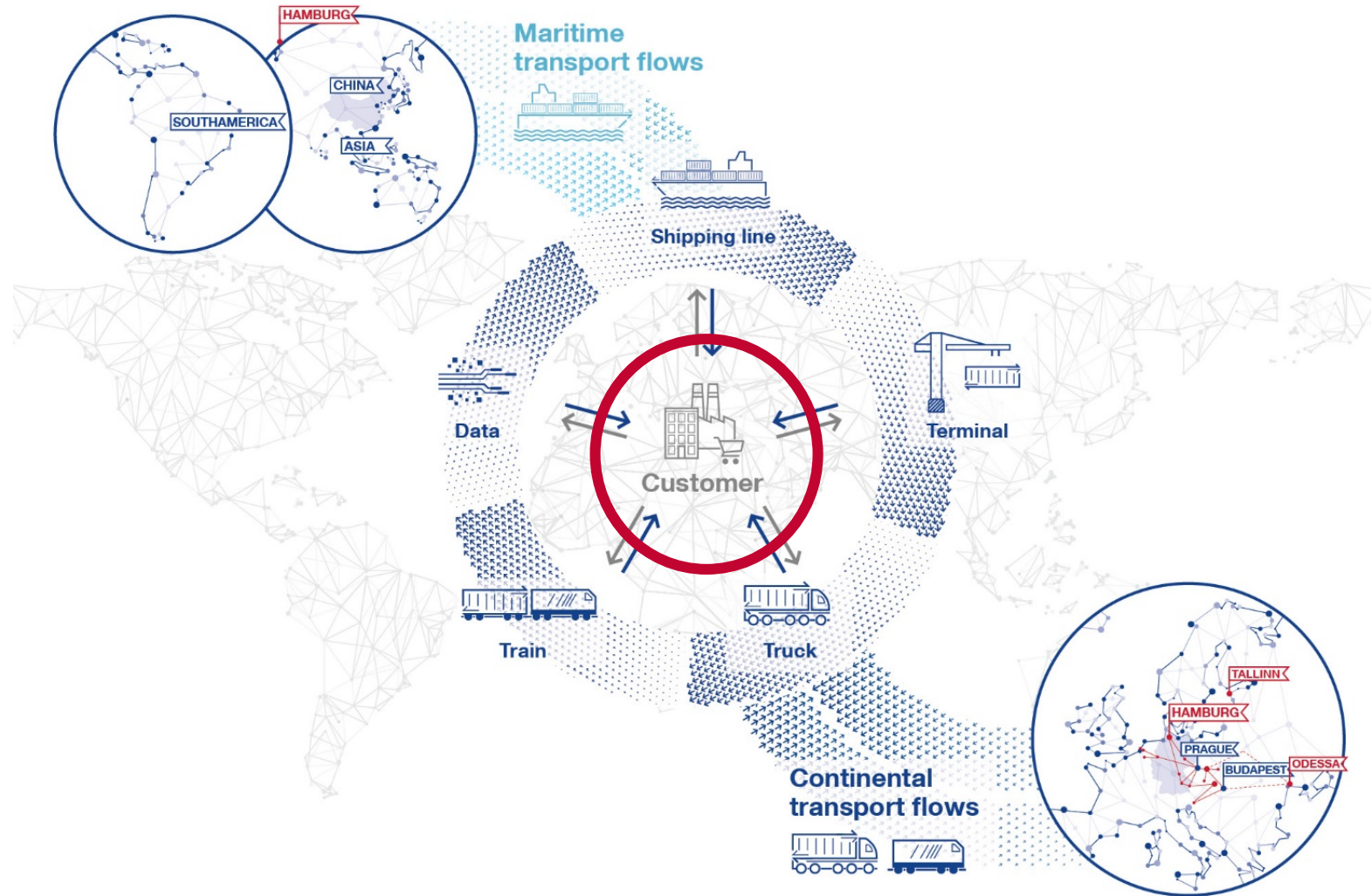
Source: HHLA / AXS Alphaliner Monthly Monitor, March 2019



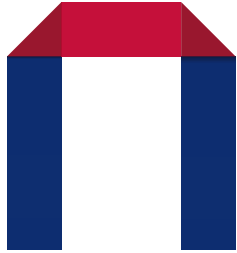
**€ 300\* million EBIT in 2025**

# Customer retention is decisive factor

Never mind the expense?



# On the way to tomorrow's world



We have identified four initiatives to help us achieve this objective:



## Fit for the world of tomorrow

We are making the existing core of HHLA fit for tomorrow's world



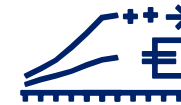
## Open up new growth potential

We are tapping into profitable growth areas in tomorrow's world



## Organisational structure and culture

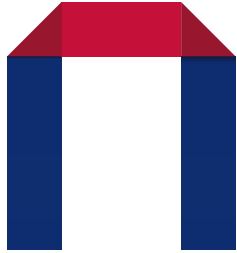
We are aligning our corporate organisational structure and culture with tomorrow's world



## Capital expenditure and finance

We are aligning our capital expenditure and operating results with sustainable profitable growth in tomorrow's world

# On the way to tomorrow's world



We have identified four initiatives to help us achieve this objective:



## Fit for the world of tomorrow

We are making the existing core of HHLA fit for tomorrow's world



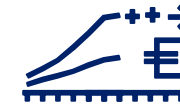
## Open up new growth potential

We are tapping into profitable growth areas in tomorrow's world



## Organisational structure and culture

We are aligning our corporate organisational structure and culture with tomorrow's world



## Capital expenditure and finance

We are aligning our capital expenditure and operating results with sustainable profitable growth in tomorrow's world

# Dominant mega trends with direct relevance for HHLA

**Traffic**

**Production**

**Humans**

**Sustainability**

**Infrastructure**

**Digitalisation**

# Development of digital strategy:

Three fundamental questions serve HHLA to develop its Digital Strategy.

## Why?

- Changes in Customer Behavior
- Changing Market Environment
- New Technologies
- Competition
- Speed

Increased demand for a more transparent and simplified supply chain

Consolidation of shipping lines and vertical integration in the value chain is shaping the maritime industry

New technologies are becoming more cost-effective and can be used to add value to the maritime supply chain

Port operators are developing digital solutions to create competitive advantage

## What?

- Product and Services
- Customer Experience

Develop new business models

Increase customer experience and customer centricity

## How?

- Processes
- Organization Model
- Organizational Framework

Operational and organizational structure

Technology

Culture and Governance

Types of Partnerships

Accelerators and Logistics Hub(s)

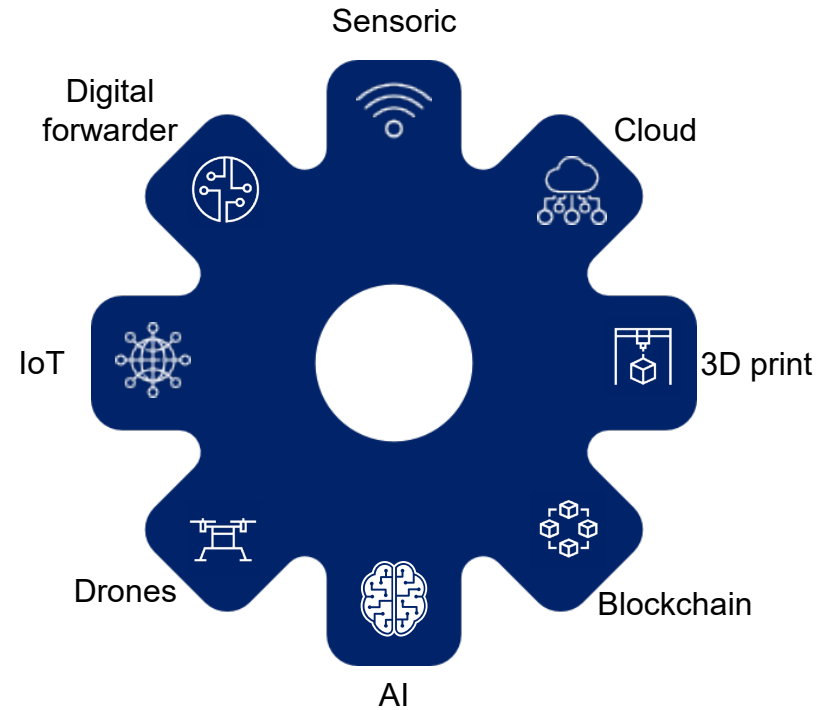
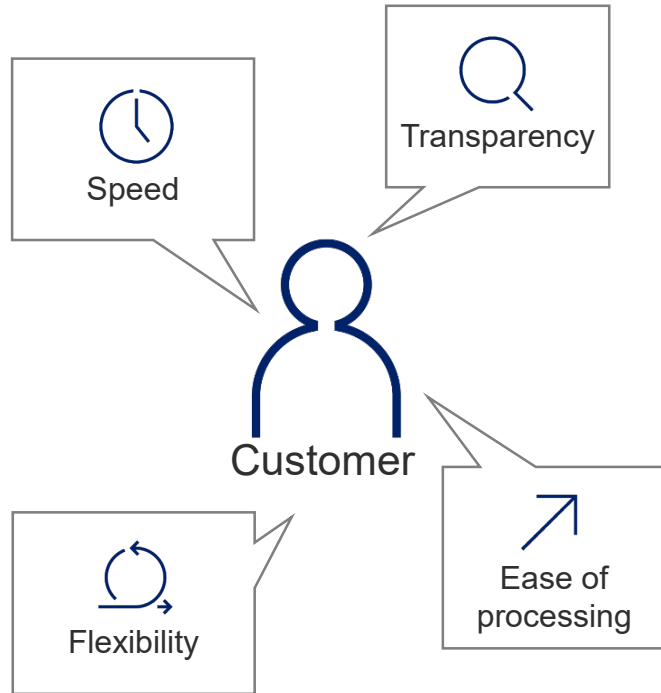
# Why now?

The digital strategy helps secure a competitive position within an evolving market.

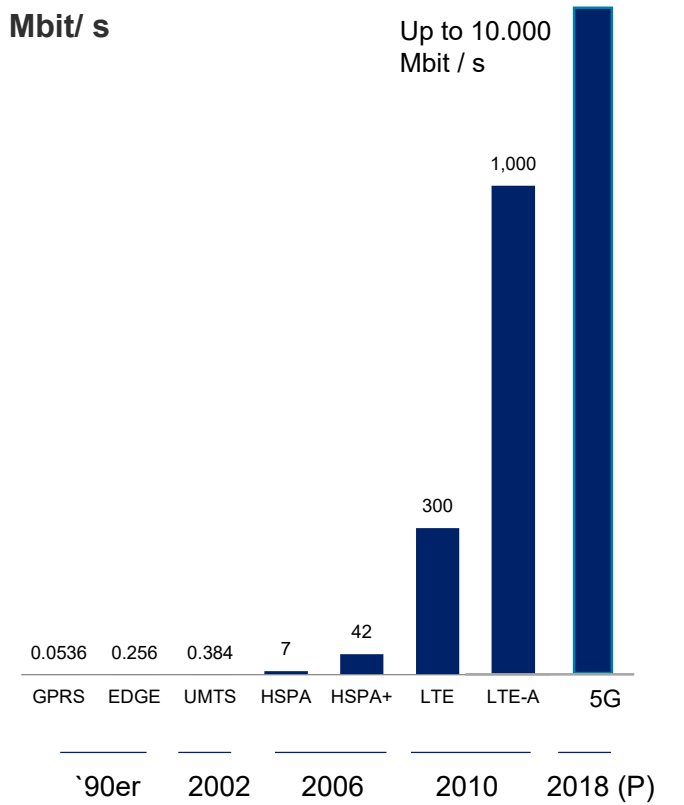
Changes in customer demand

Disruptive technologies

Speed



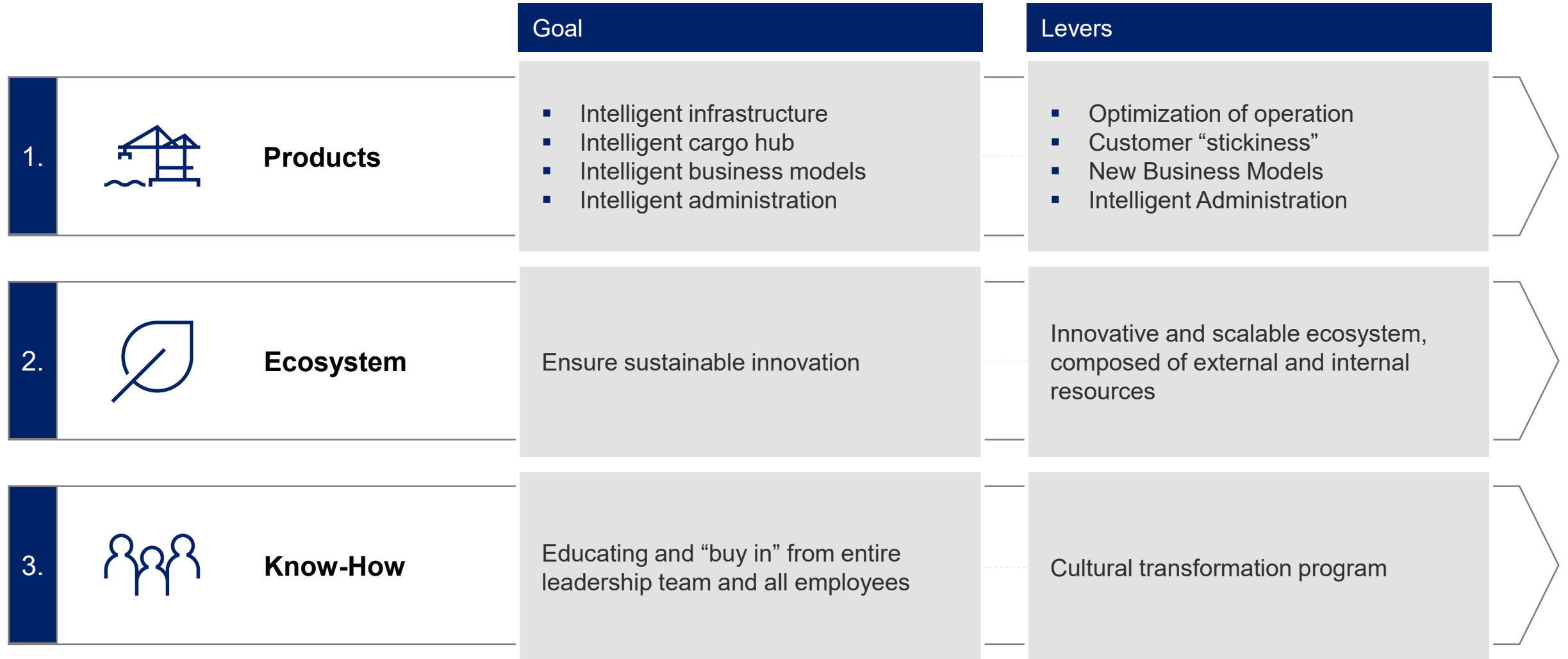
Max Mbit/ s





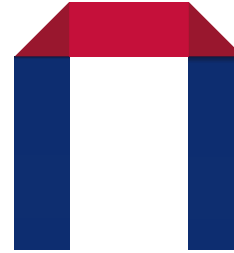
# Digital pillars of strategy implementation:

Three themes set the foundation of HHLA's digital strategy.



# Digital project development:

Digitization is key to unlocking additional corporate potential.



## Digitization



### Smart infrastructure

Further refinement and sophistication of operational business processes\*:

- Automation
- Data Analytics / AI to increase asset utilization
- Augmented Reality
- Smart Assets (e.g. IoT)



### Smart cargo hub

Tied-up cargo:

- Blockchain
- Autonomous driving

Tied-up volume from freight forwarder:

- Shipment Coordination Centers

Tied-up volume from shipping companies:

- Hinterland Traffic Coordination



### Smart business models

Development of promising new business areas (outside of Terminal operations):

- Establishing HHLA within the **value chain of 3D-printing**
- Development of **additional commercial services**
  - App for an enhanced cleaning process of tank-type containers
  - HHLA Project Sky



### Smart administration

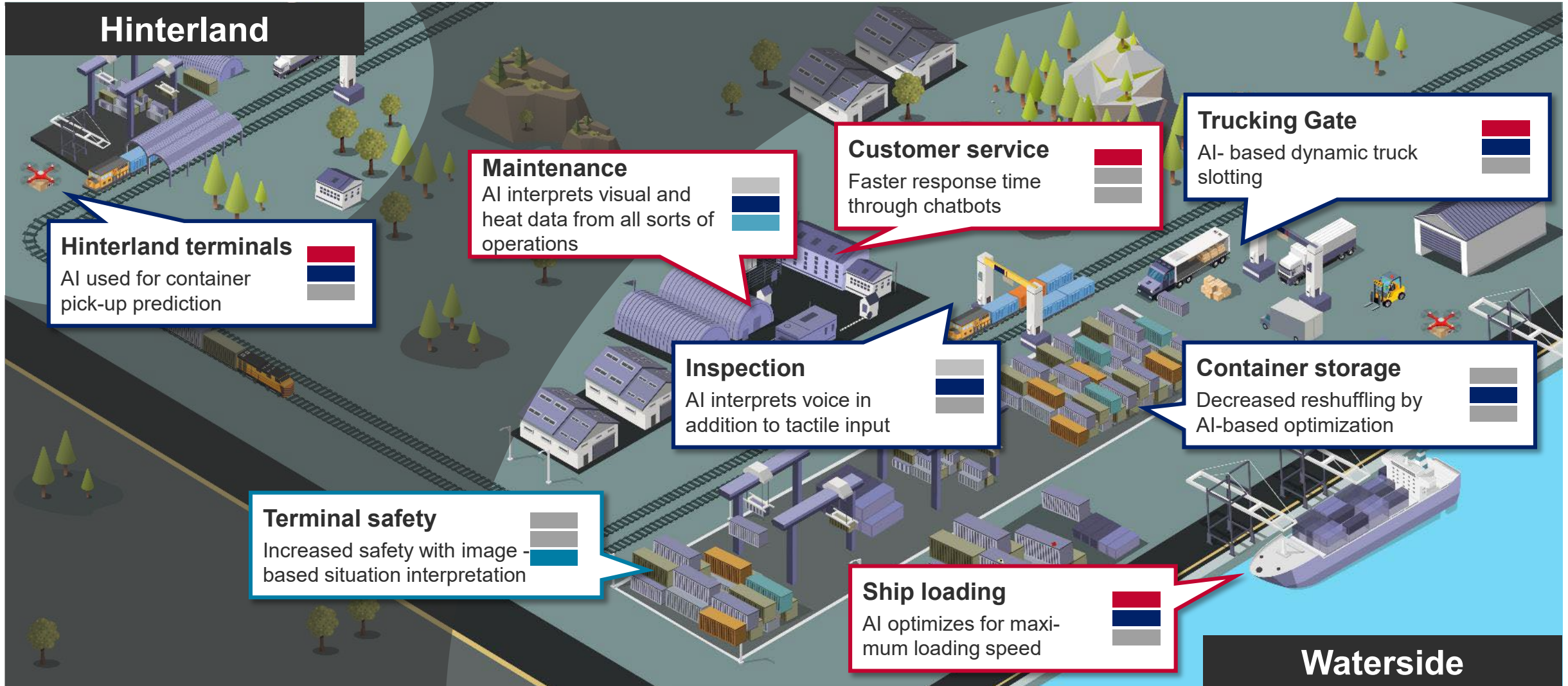
- Improving communication- and coordination-processes of employees (**Employee platform solution**)
- Utilization of RPA (**Robotic Process Automation**) to optimize the execution of manual processes (e.g. in finance, controlling, reporting)

# The HHLA AI program serves three key business objectives



# Possible AI application areas can be found across various terminal operations

Potential areas for AI application



# Projects and new business fields derived from mega trends

- Artificial Intelligence
- HVCC
- TACCO and M&R

- Blockchain
- N4
- HHLA Sky
- Spherie

## Digitalisation

- Hyperloop
- MAN

## Traffic

## Infrastructure

- Belt and Road initiative
- Multisystem locomotives

## Production

- Bionic

## Sustainability

- Extended targets
- HHLA Pure
- AGV conversion



**HHLA wants to grow  
sustainably while preserving  
the environment.**

# Climate protection target

**Climate neutrality target, ambitious intermediate target; electrified technical solutions will pave the way to reach the targets**

---



**Until 2040 HHLA will be a climate neutral company**

---



**Intermediate target: HHLA will reduce its CO<sub>2</sub> emissions by at least 50% by 2030. (base 2018)**

---

**HHLA has set a new, ambitious climate protection target.**

# New targets for HHLA's sustainability action fields

Evolution of existing sustainability strategy

	action fields	guidelines	target
<b>Ecology</b>	Climate friendly logistics chain	Active development of sustainable, climate and environmentally friendly logistic chains	<ul style="list-style-type: none"> <li>▪ Increase number of transported rail containers</li> </ul>
	Conserving space	Increase efficient usage of harbour and logistics areas	<ul style="list-style-type: none"> <li>▪ Increase capacity on existing space</li> </ul>
	Environment and resource protection	Protection of natural resources and minimisation of environment impacts	<ul style="list-style-type: none"> <li>▪ Enhancement of environment protection performance</li> </ul>
	Climate protection and energy efficiency	Reduction of CO2 emissions through highest energy efficiency as well as innovative concepts and technologies	<ul style="list-style-type: none"> <li>▪ Climate neutral by 2040, reduction of absolute CO2 emissions by 50% by 2030</li> </ul>
<b>Employees</b>	Occupational health and safety protection	Safety, humane working conditions and promotion of health-conscious behaviour	<ul style="list-style-type: none"> <li>▪ Reduction of working accidents</li> <li>▪ Increase of health quota</li> </ul>
	Working conditions	Expansion and focus of training, further education and training with individual promotion of employees as well as increasing diversity	<ul style="list-style-type: none"> <li>▪ adequate training and development</li> </ul>



# New targets for HHLA's sustainability action fields

Evolution of existing sustainability strategy

	action fields	guidelines	target
<b>Society</b>	Responsibility in the community	Intensification of the dialogue with society as well as information and discussions on topics of port logistics	<ul style="list-style-type: none"><li>Stable or increasing number of participants in Educational projects</li></ul>
<b>Economy</b>	Added value and innovation	Achievement of a lasting and substantial contribution to the creation of value and thus to the prosperity at all locations	<ul style="list-style-type: none"><li>Positive development added value</li></ul>
	Business partners	Offer tailor-made customer solutions and reliable cooperation with suppliers Responsible supply chain	<ul style="list-style-type: none"><li>Compliance with supplier Code</li></ul>

# All initiatives contribute to HHLA's goals

Growing sustainably while preserving the environment

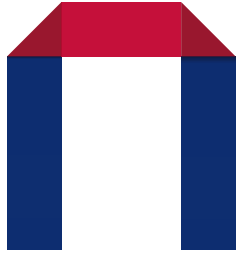
## Efficiency and profitability

- Autonomous driving MAN
- Bionic
- HHLA Sky
- N4
- Spherie
- TACCO and M&R

## Preserving the environment

- AGV conversion
- Artificial Intelligence
- HHLA Pure
- HVCC
- Hyperloop
- Metrans

# On the way to tomorrow's world



We have identified four initiatives to help us achieve this objective:



## Fit for the world of tomorrow

We are making the existing core of HHLA fit for tomorrow's world



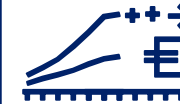
## Open up new growth potential

We are tapping into profitable growth areas in tomorrow's world



## Organisational structure and culture

We are aligning our corporate organisational structure and culture with tomorrow's world



## Capital expenditure and finance

We are aligning our capital expenditure and operating results with sustainable profitable growth in tomorrow's world

# Fit for the world of tomorrow

## Jens Hansen, COO



# Five new gantry cranes for CTB



## Technical dimensions...

...for serving customers' needs

- Height: 89 metres
- Length of jib: 80 metres
- Span: 26 container rows
- Lifting force: 110 tons
- Weight: 2,480 tonnes
- Capacity: two 40ft containers or four 20ft containers

**Additional berth for 400m vessels**

# Expansion CTT

## Current status and timing

- HPA is in preliminary planning phase
- Exploratory works have to be validated
- Tendering of different crafts
- HHLA will then decide on execution
- Construction work to be finished in 2025
- As a result berths 4 and 5 will be prepared to service one 400m vessel and one 430m vessel simultaneously



# Conversion of AGVs at CTA



## Technical dimensions

- Length: 15 metres
- Width: 3 metres
- Empty weight: 23 tons
- Capacity: 2 TEU
- Cargo load: 70 tons
- Max speed: 6 m/s
- The whole fleet of ~100 AGVs will be equipped with lithium-ion batteries.

# Ten Vectron MS locomotives from Siemens Mobility

## Technical information

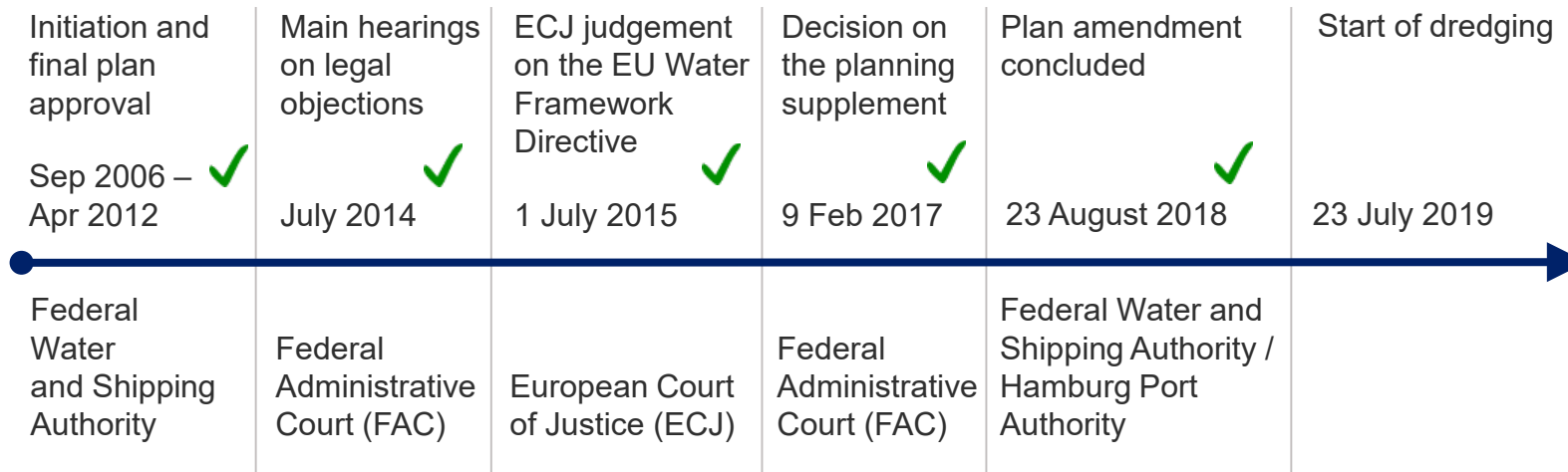
- Maximum output of 6.4 megawatts
- Top speed of 160 km/h
- Equipped with the required national train control systems as well as the European Train Control System (ETCS).
- The locomotives are certified to operate in Austria, the Czech Republic, Germany, Hungary, Poland and Slovakia
- Future upgrades for Bulgaria, Croatia, the Netherlands, Romania, Serbia and Slovenia are possible





# Elbe waterway adjustment

Administrative steps by the public authorities in charge



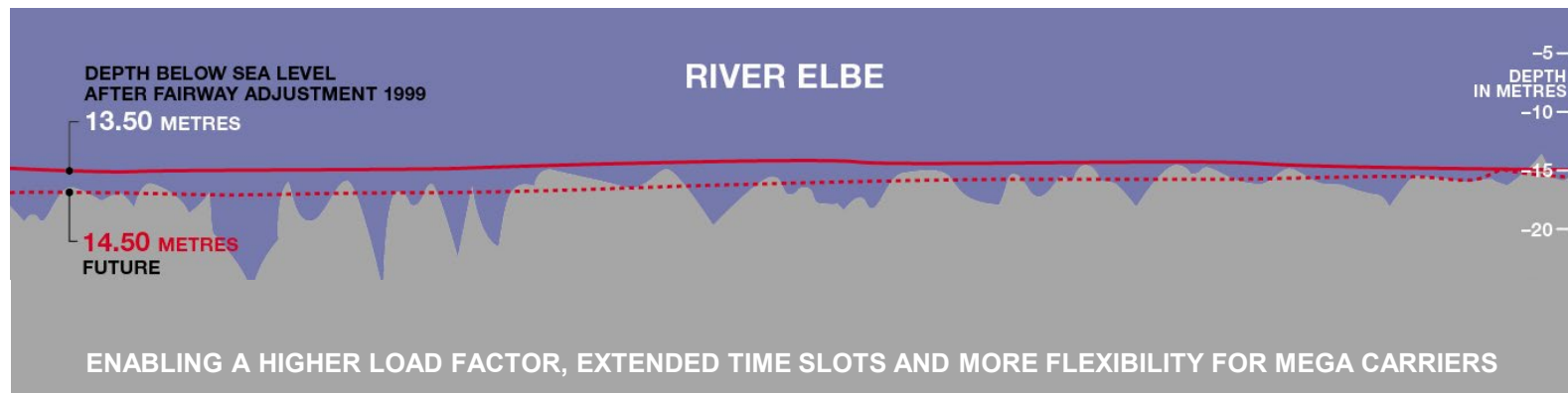
“The Elbe dredging is the best-tested and best-planned infrastructure project and was approved by the highest court.”

Andreas Scheuer, Federal Minister of transport and digital infrastructure, 23/07/2019

“With today’s plan supplement decision, we are creating construction rights for the waterway adjustment which makes the port of Hamburg internationally much more competitive.”

Dr Peter Tschentscher, Mayor of Hamburg, 23/08/2018

## Adjustment of navigation channel




**The dredging is scheduled to be completed in 2021.**  
Federal Water and Shipping Authority



# Investments and finance Dr. Roland Lappin, CFO

# Financial highlights of Port Logistics subgroup in the first nine months of 2019



Revenue  
**€ 1,020.2 million**  
+ 8.6 %

EBIT  
**€ 162.7 million**  
+ 13.3 %

EBIT margin  
**15.9 %**  
+ 0.6 pp

Profit after tax  
and minorities  
**€ 76.6 million**  
± 0.0 %

ROCE  
**11.8 %**  
– 4.2 pp

Operating cash flow  
**€ 254.0 million**  
+ 54.2 %

# Forecast for 2019

Updated forecast for Port Logistics subgroup

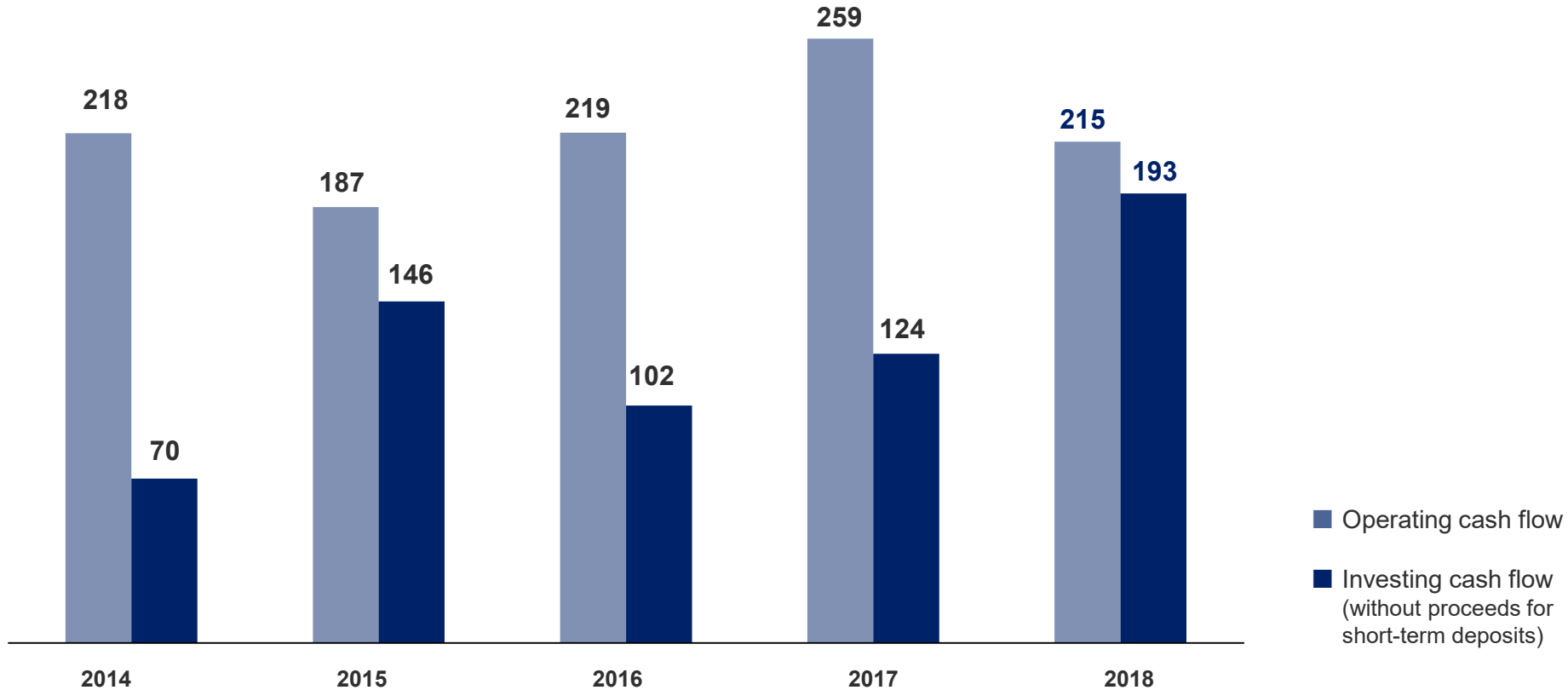
		2018	Guidance 2019
Container throughput	updated ↗	7,336 thousand TEU	<b>Moderate increase on previous year</b> (previously: Slight increase on previous year)
Container transport	updated ↗	1,480 thousand TEU	<b>Significant increase on previous year</b> (previously: Slight increase on previous year)
Revenues	updated ↗	€ 1,258.5 million	<b>Significant increase on previous year</b> (previously: Slight increase on previous year)
EBIT		€ 188.4 million	<b>Significant increase on previous year*</b>
▪ EBIT Container segment	updated ↗	€ 131.6 million	<b>Moderate increase on previous year</b> (previously: in the region of previous year)
▪ EBIT Intermodal segment	updated ↗	€ 89.1 million	<b>Strong increase</b> (previously: significant increase)
Capital expenditure		€ 132.9 million	<b>in the range of € 200 million**</b>

\* mainly due to changes in accounting policy for leasing (IFRS 16)

\*\* mainly attributable to the Port Logistics subgroup

# Maintenance and expansion capex funded from operating cash flow

## Self-funded investments in € million



# HHLA and HTT form new joint venture

HHLA continues a tradition leading the way in port innovations



- HHLA and Hyperloop Transportation Technologies (HyperloopTT/HTT) establish a joint venture.
- The company will focus on integrating the latest container movement innovations with Hyperloop technology into the largest rail port in Europe.
- The project will begin with an initial study on connecting a cargo-based Hyperloop system from the HHLA container terminal CTA to container yards located further inland.
- In general the system aims at expanding the port's capacity, while reducing congestion within the port and city area, and lowering the carbon footprint of the port.
- Initially, the construction of a transfer station for testing purposes at the HHLA terminal CTA in Hamburg is planned, including an initial 100 meter cargo route along with a special freight capsule and loading dock.
- The goal of the joint venture is to develop and later market a Hyperloop transport system for shipping containers.
- **Investment: € 7 million (split 50:50)**

# HHLA TK Estonia: Biggest terminal operator in Estonia

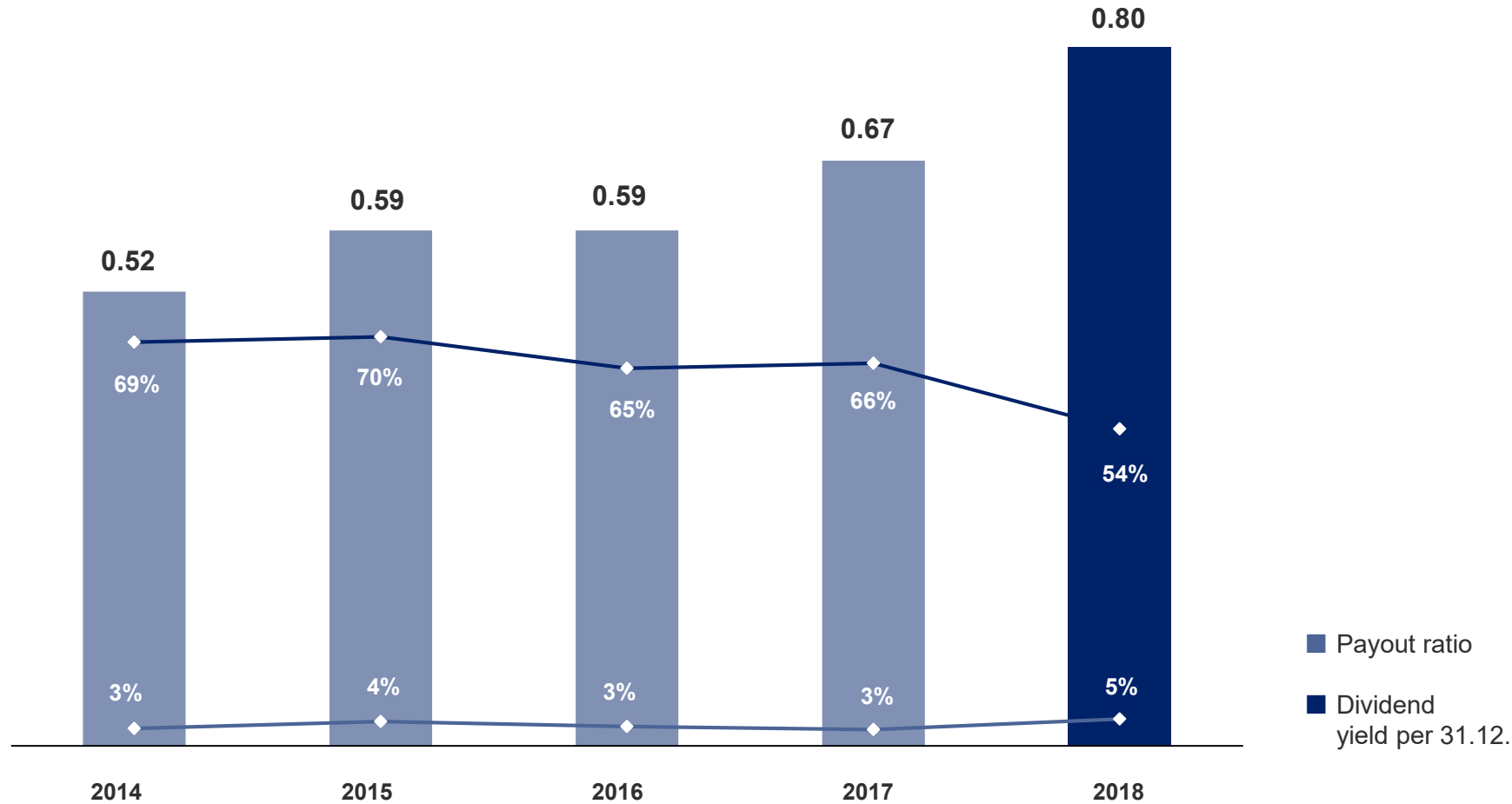
Port Logistics subgroup is stepping up its international presence



- HHLA acquired 100 % of the shares of the Estonian port operator Transiidikeskuse AS (TK) in Muuga (Tallinn) in 2018
- TK is clear market leader in container handling in the Baltic country and operates a multipurpose terminal for break bulk, bulk and RoRo handling
- TK's Geographic position links the Northern European market with the "New Silk Road"
- Location is developing into a multimodal hub as a result of regional infrastructural projects (such as the Rail Baltica project)
- Container terminal currently with high utilisation of its capacity of around 300 TTEU; can be increased to approximately 800 TTEU
- HHLA expects to leverage synergies by further professionalising sales and operations and integrating the port operator into the HHLA network
- HHLA is expanding its regional diversification and confirming its goal of also achieving international growth
- **Purchase price: € 74.2 million**

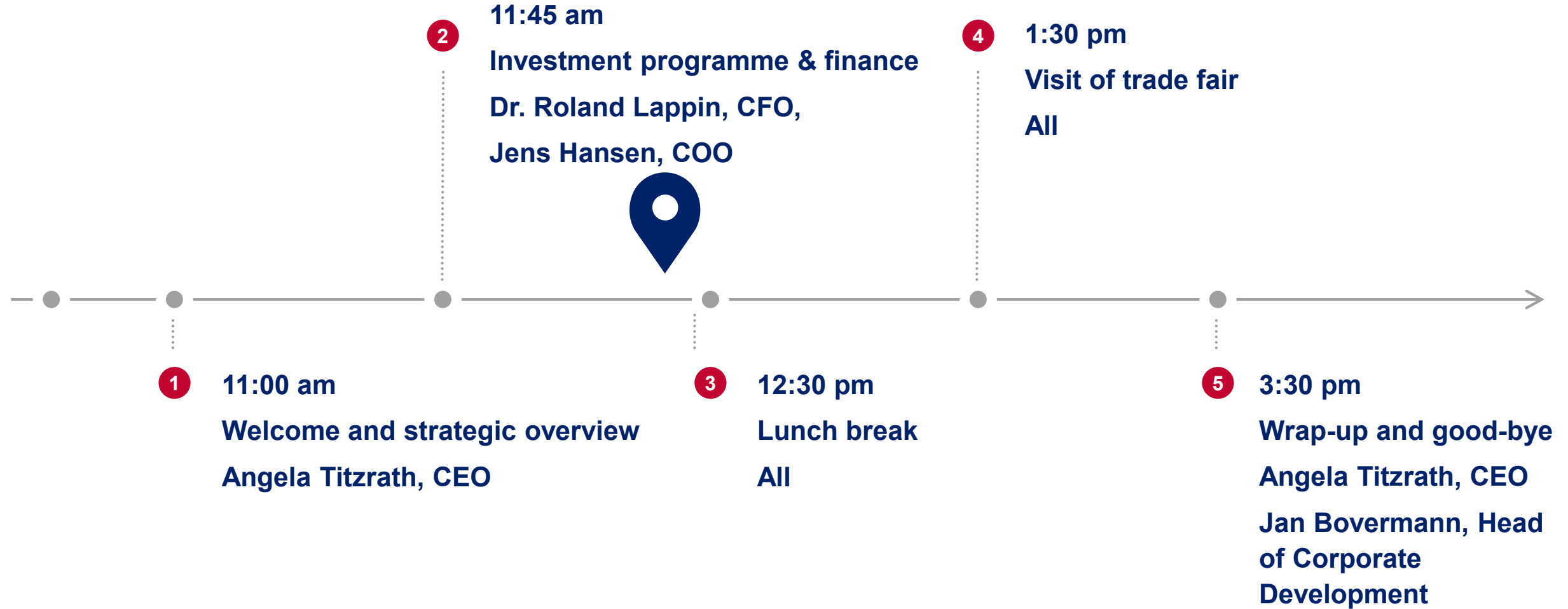
# Responsible handling of finances leads to continuity in dividend policy

## Dividend development





# Today's schedule

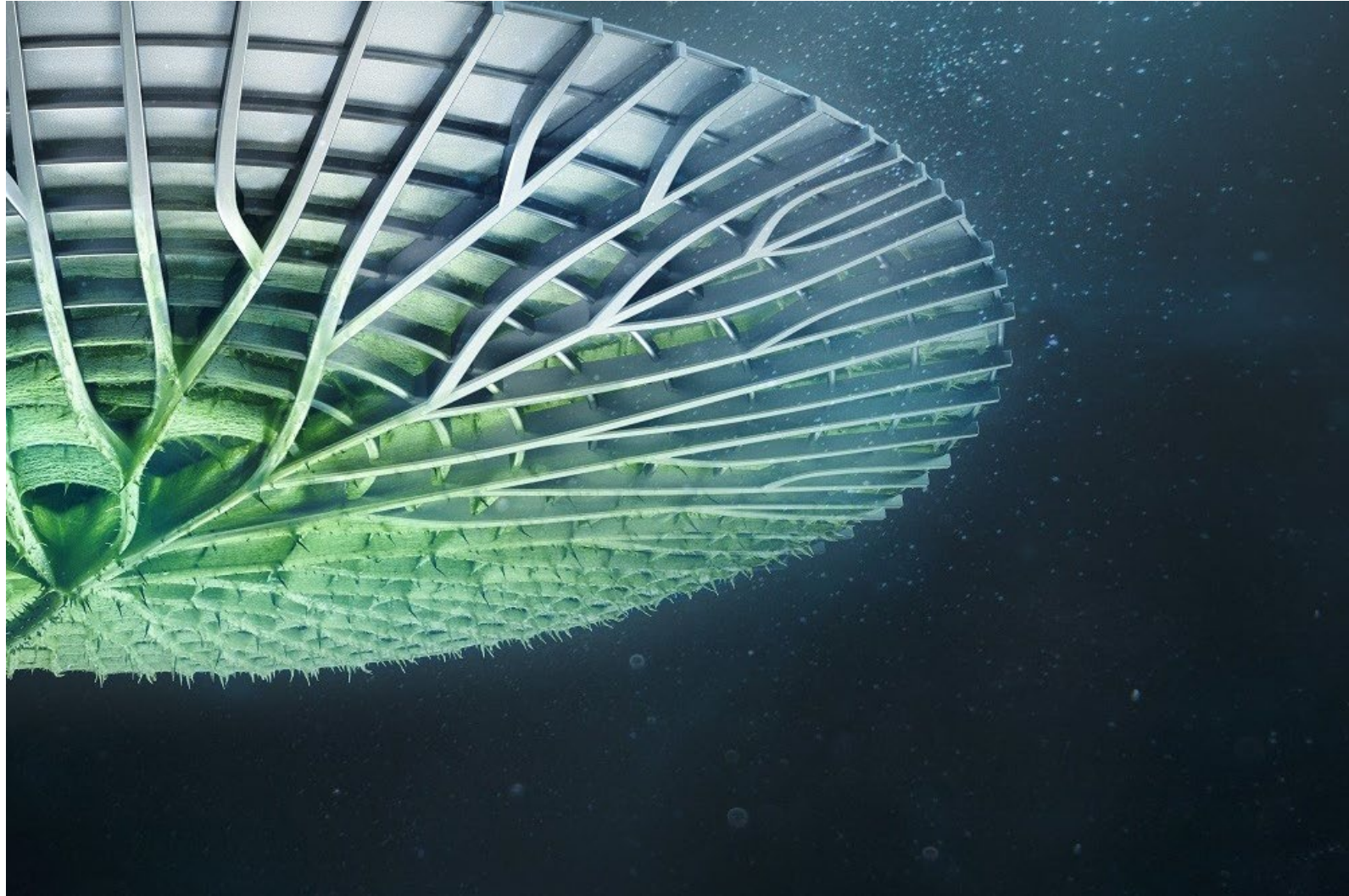




# Preview of the exhibition Angela Titzrath, CEO

# New business fields

Bionic Production



Combining 3D printing and bionic design

Visit us in hall 12 at booth E78!

**formnext**

Frankfurt am Main, 19.-22.11.2019

# New business fields

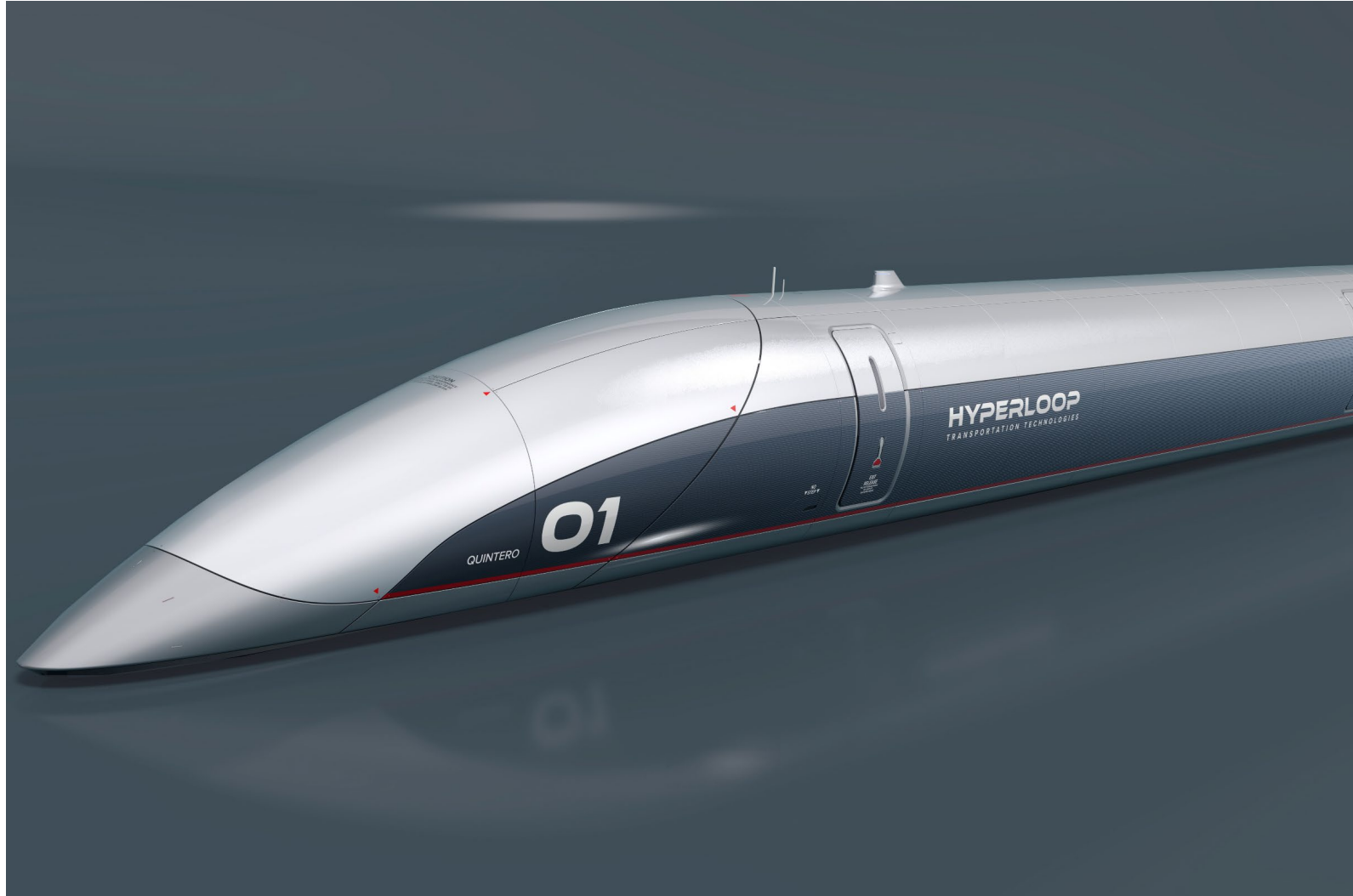
HHLA Sky

Reasonable use of drones for improving safety, inspection and transport



# New business fields

Hyperloop

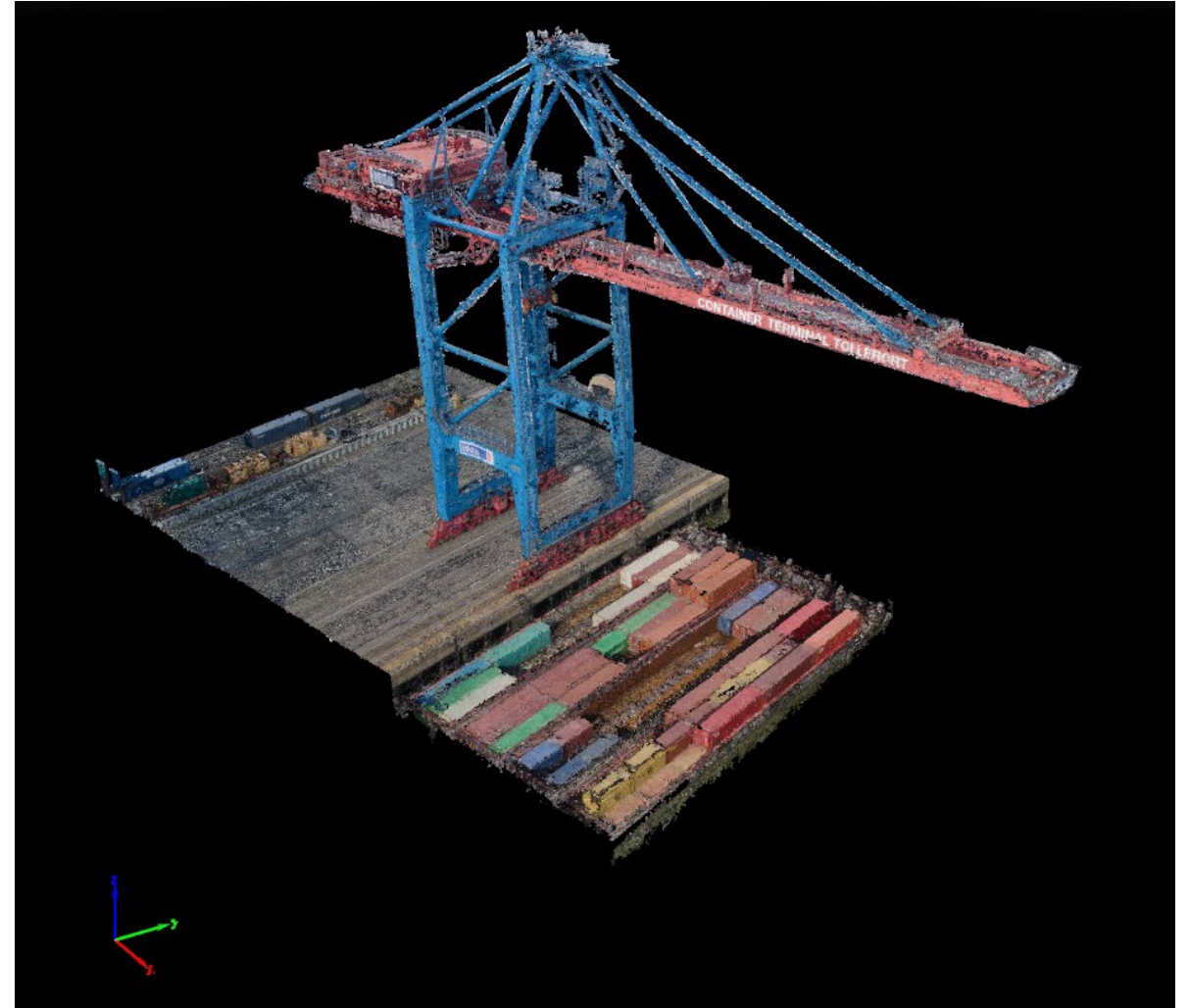


Bringing the square thing into the round thing

# New business fields

Spherie

## Digital twins for autonomous drone flights



# New business fields

TACCO and M&R

HHLA

HCCR

Digital transformation of order management and documentation of cleanings for tank containers.

## Insight:

In a highly competitive environment Hamburg's port and logistics provider needs to increase its efficiency and nurture loyalty with timely, transparent services. There is potential for a state of the art white label industry solution.

## Idea:

A webbased solution digitizes the workflow and gathers data for business analysis. Automated recognition of products, planning and prioritization of orders paired with data collection to optimize washing programs and pricing models.

## Impact:

HHLA and its customers benefit from streamlined workflows which pay off in profitability, customer satisfaction and a baseline for more efficiency gains.



HHLA's first hackathon and an answer to a main customers' pain point

# Customer retention

HVCC

Digital solutions for ports,  
shipping lines and the  
environment





# Customer retention

## Blockchain HHLA TK & IBM

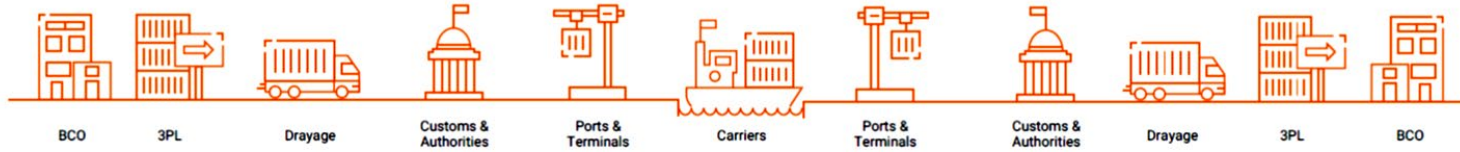
TRADELENS

TradeLens Overview

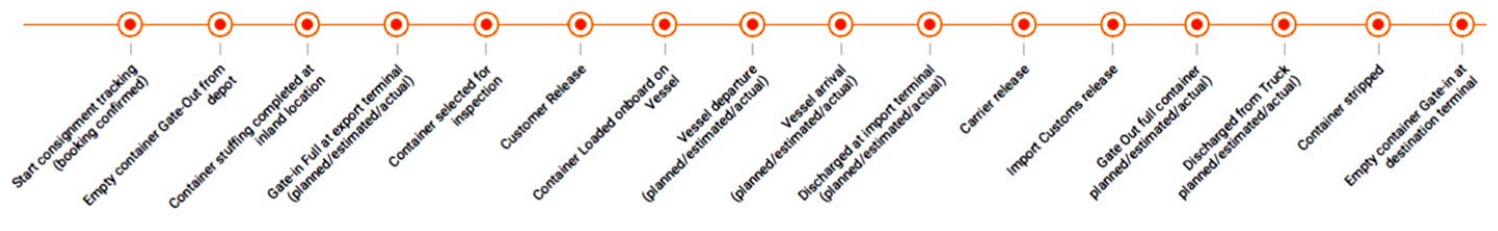
Introduction

10 September, 2019

## Bringing trust into the logistics chain



### SHIPPING MILESTONES AND SHIPMENT DATA\*



### STRUCTURED AND UNSTRUCTURED DOCUMENTS\*



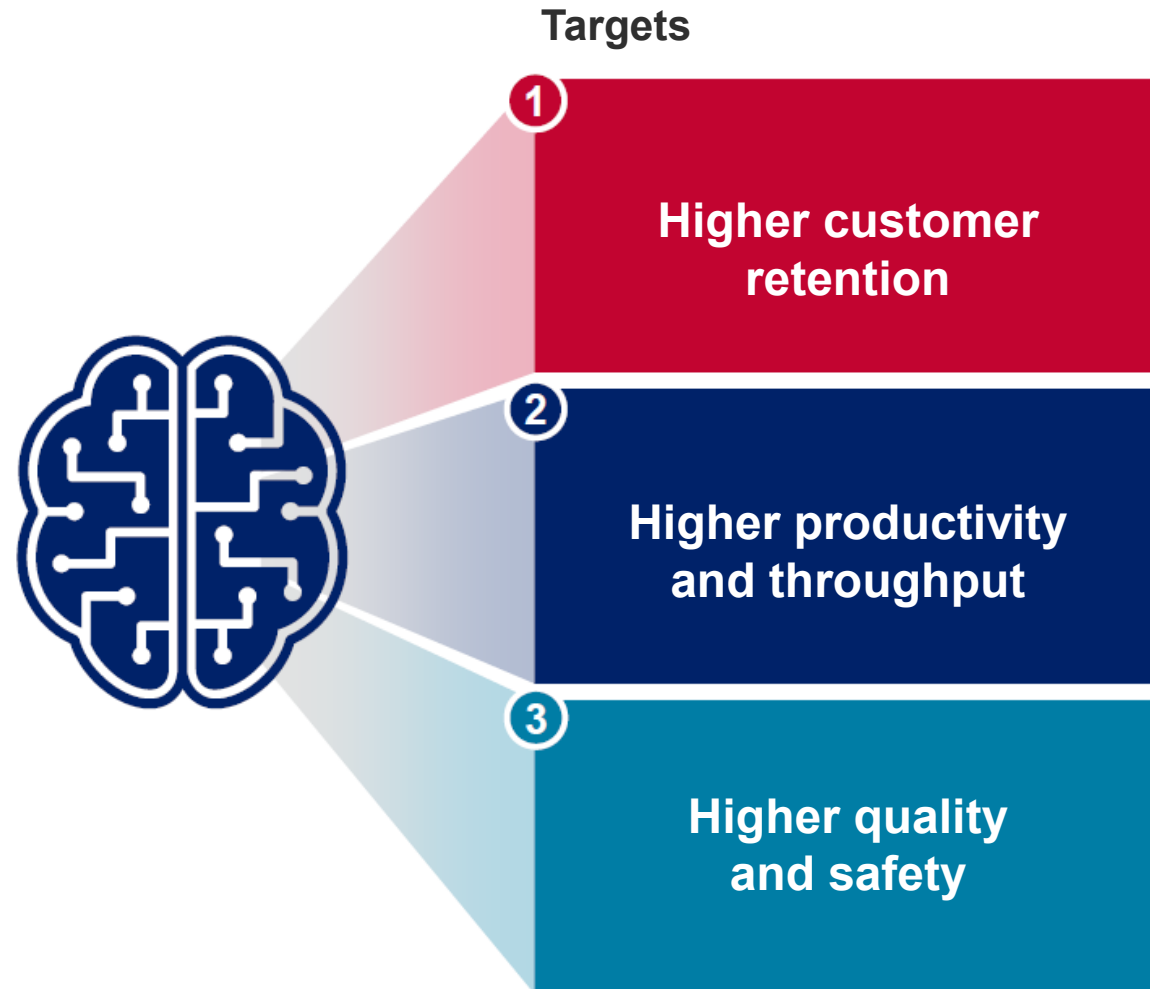
### TRADELENS BLOCKCHAIN BUSINESS NETWORK



# Automation of operating processes

Artificial intelligence

Optimizing the storage block  
first, moving forward from there



# Automation of operating processes

Autonomous driving MAN

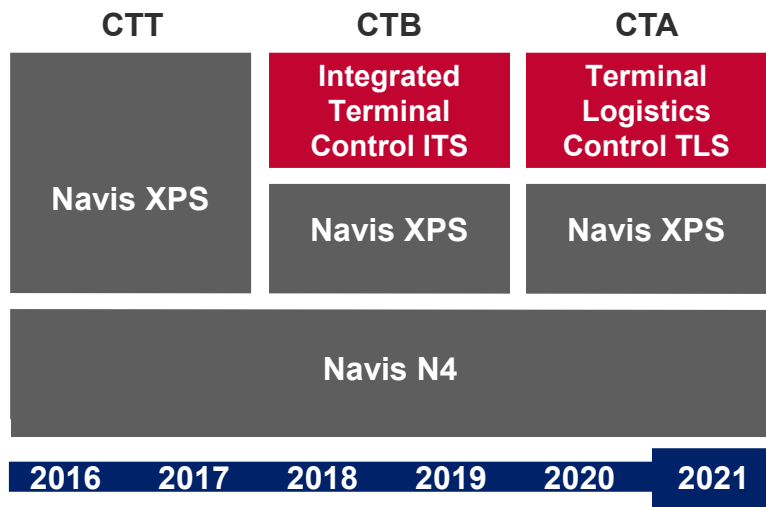


Giving truck drivers the well-deserved coffee break

# Automation of operating processes

Terminal software N4

**CTT Terminal**  
**N4 Go Live Easter**  
**Weekend 2019**



# Sustainability and environmental protection

HHLA Pure



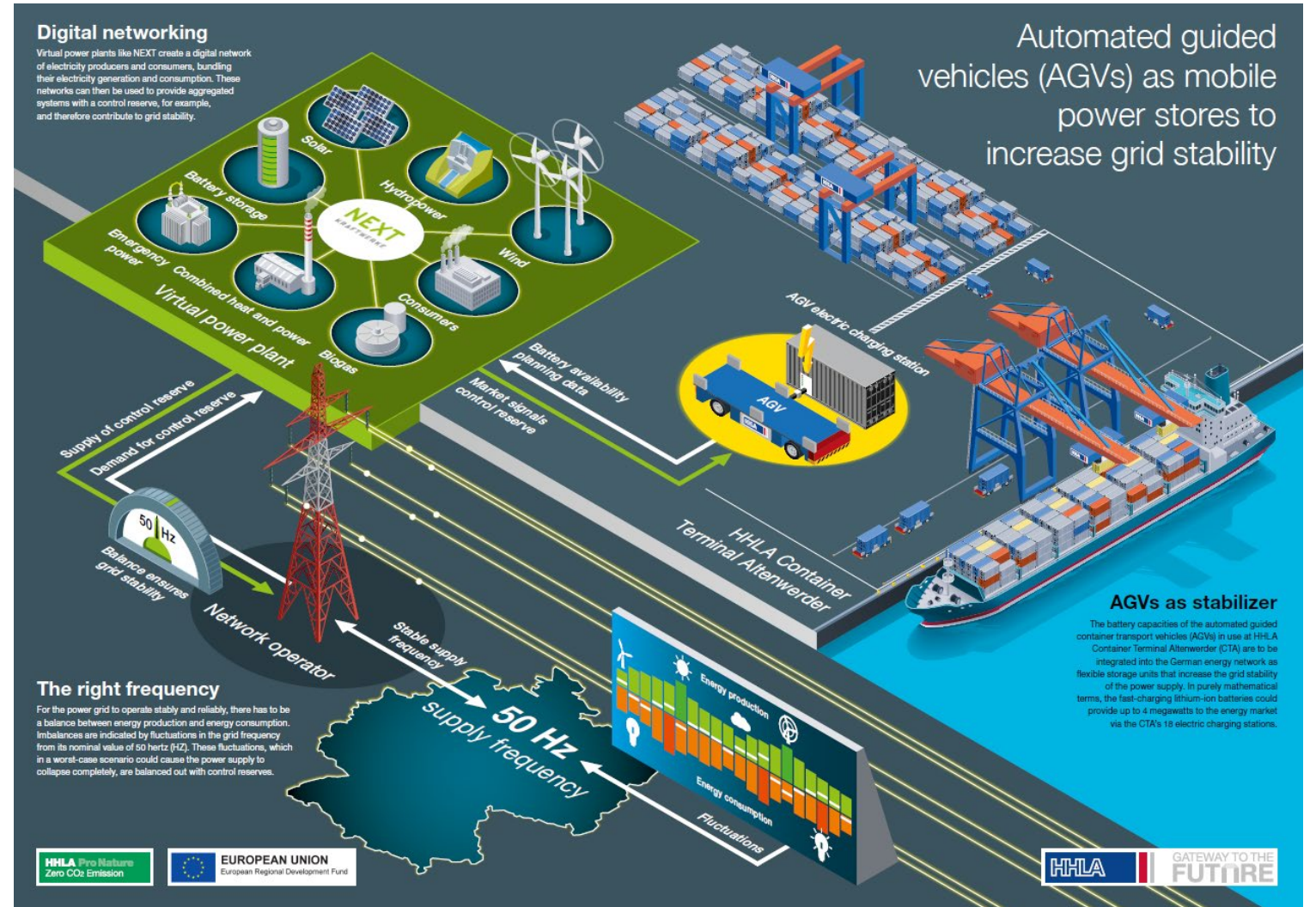
## Sustainable from the quay wall to the final destination



# Sustainability and environmental protection

## Conversion of AGVs at CTA

### Thinking beyond the terminal



# Customer centricity becomes even more important

Targets: Improve service offerings, become more efficient, expand business, sustain the environment

## New business fields

- Bionic
- HHLA Sky
- Hyperloop
- Spherie
- TACCO & M&R

## Customer retention

- Blockchain
- HVCC

## Automation of operational processes

- Artificial intelligence
- Autonomous driving
- N4

## Sustainability and environmental protection

- Sustainability strategy
- AGV conversion

# Lunch break







# Enjoy your visit to our trade fair



# Q&A, wrap-up and closing remarks

Angela Titzrath, CEO  
Dr. Roland Lappin, CFO  
Jens Hansen, COO