2nd Annual Capital Link
International Shipping Forum
China
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Connecting Vessels, Ports and People

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Think Different
Take Action
Make a Difference

Being inspired by what digitization can bring to the maritime industry we now offer possibilities for enhanced digital collaboration between Vessels, Shipping companies, Ports, Terminals and People via Perseus PortCDM Platform

Inspired from other transport sectors, opportunities with satellite-based connectivity, we took the first step towards real-time standardized sharing of information creating vast benefits for involved stakeholders in sea transports and port call operations

Importance of shipping (known facts)

- Maritime transport is essential for the world economy
  - Approximately 90% of the world's trade carried by sea
  - Economic impact of USD 436 billion
- 4.3% growth rate in 2012
- 2.7% of estimated global CO_2 emissions in 2007
- Will grow 2-3 times by 2050

Importance of shipping (known facts)

MARINE FIELDS

As the world is changing, so is the shipping industry. New megaships keep outsizing older models, while emerging technologies boost efficiency and the green image of *shipping*

The maritime industry is constantly evolving and striving for increased innovation. The past few years have been exceptionally interesting. Major trends like globalization and containerization have reshaped the industry and continue to present us with challenging changes even today. This dynamic environment creates a very interesting work setting, pushing the abilities of the employees to the limit and setting a high standard for future co-workers. When looking towards the future of maritime shipping, a few emerging trends can be observed. New ways of doing business, earning money and distinguishing yourself from the competition are created on a daily basis

Contemporary initiatives

STM
Video

Concerns of Sea Traffic Management

Concern:
The need to increase efficiency in operations within and between ports

Maximize the utilization of the facilities in ports

Minimize the use of energy to steam between two ports

constrained by safety considerations

STM is a concept for sharing secure, relevant and timely maritime information with authorized service providers by standards for information management and interoperable services

The Need!

empowering **people** with enhanced situational awareness for collaborative decision making and informed actions in the self-organized ecosystem

… building on enhanced connectivity between **ships** and **ports**

HOW?

The Needs

- Shipping companies
  - Safe sea voyages
  - Reduced TTT
  - Saving bunker
  - Optimal fleet utilization
  - Reduction of anchoring
- Terminals
  - Increased berth productivity
  - Increased capacity utilization
  - Informed berth planning
- Port authorities
  - Safe and efficient port approaches
    with minimized TTT

Perseus PortCDM Platform

How?

Perseus PortCDM (Open) Digital infrastructure for
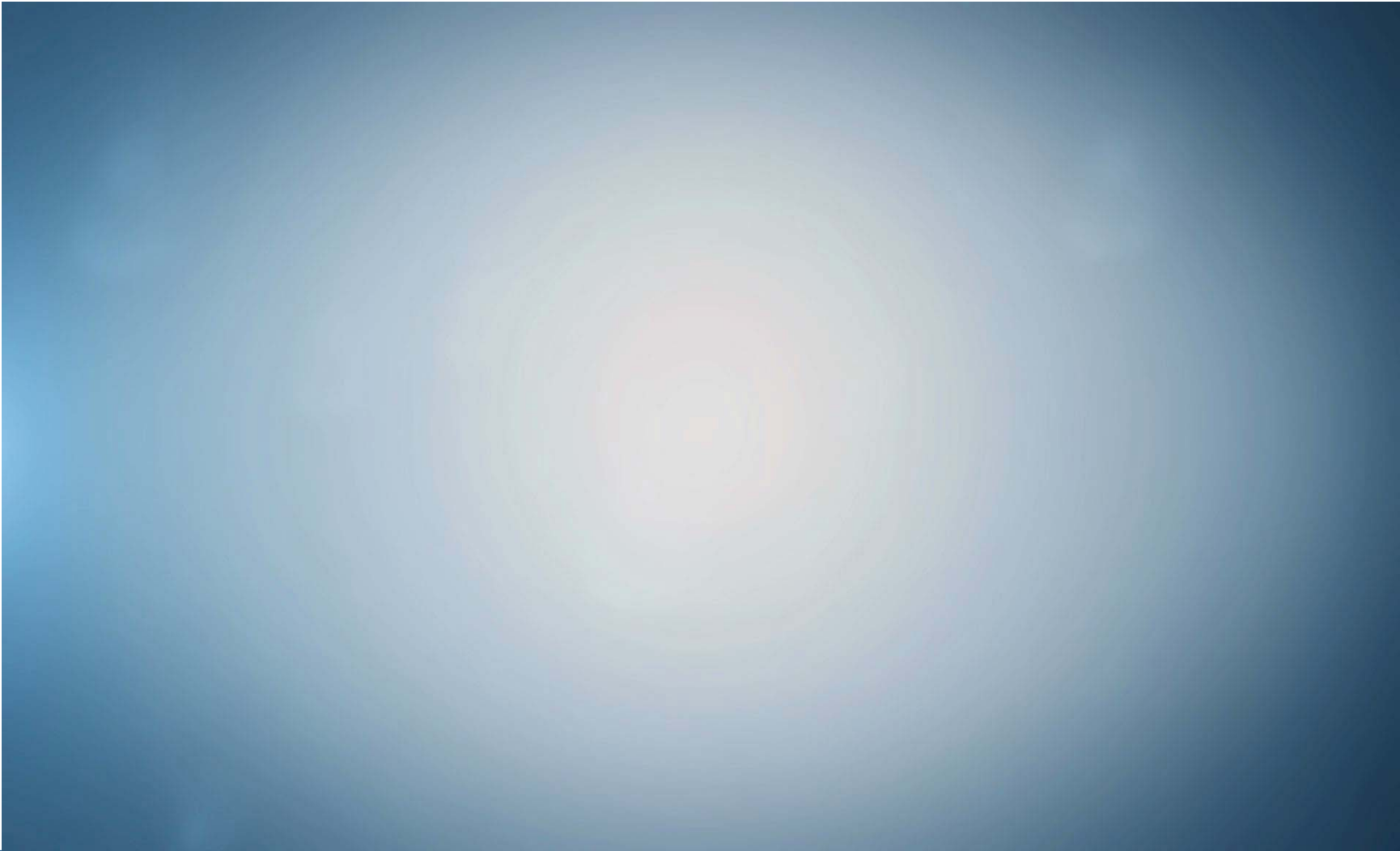
Standardised message exhcanges

Safe and secure digital interaction

Enhanced situational awareness

Collaborative decision-making based on
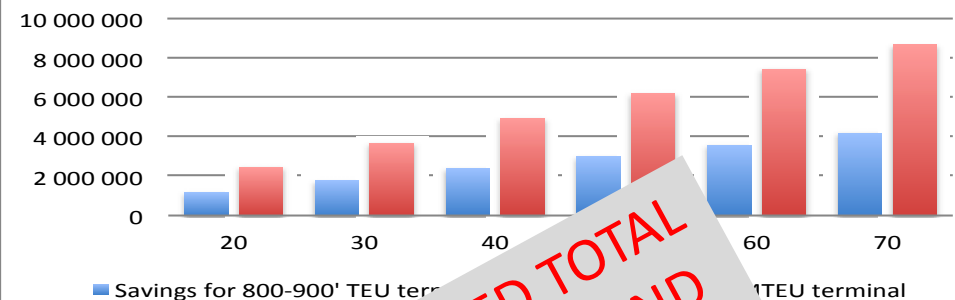in real-time data sharing

PortCDM
Video

Savings for a large shipping line (40 000 port calls per year between 65m USD and 130m USD) -time arri

JUST-IN-TIME ARRIVAL and GREEN STEAMING

Assumption: T... ...er vessel consumes **240 tons** of fuel at ... (**23 knots**) and **40 tons** ...el at **10 knots**)

Annual savings by reduced TTT (by minutes)

■ Savings for 800-900' TEU ter... ...TEU terminal

Many times ships ...ve on time giving ri... ...nal port call costs ... ...ime window to ne... ...delay for arriving vessels

JUST-IN-TIME DEPARTURES and REDUCED CHASING

A reduction of ... ...y one vessel in a route of 5 le... ...ng only 4 ships (if ... ...ded)

REDUCED TOTAL TURN AROUND TIME

STRONG INCENTIVES FOR ENHANCED INTERACTION BETWEEN SHIPS AND PORTS

Perseus PortCDM Platform is an event-based system in which standardized time stamped messages are shared and consumed in real-time among the involved port call actors. These messages reflect the progress of all aspects of a port call.

This figure provides a holistic view of the timestamps to be shared via the Perseus PortCDM Platform, setting the basic infrastructure for a new way to collaborate digitally

What's in it for …

MARINE FIELDS
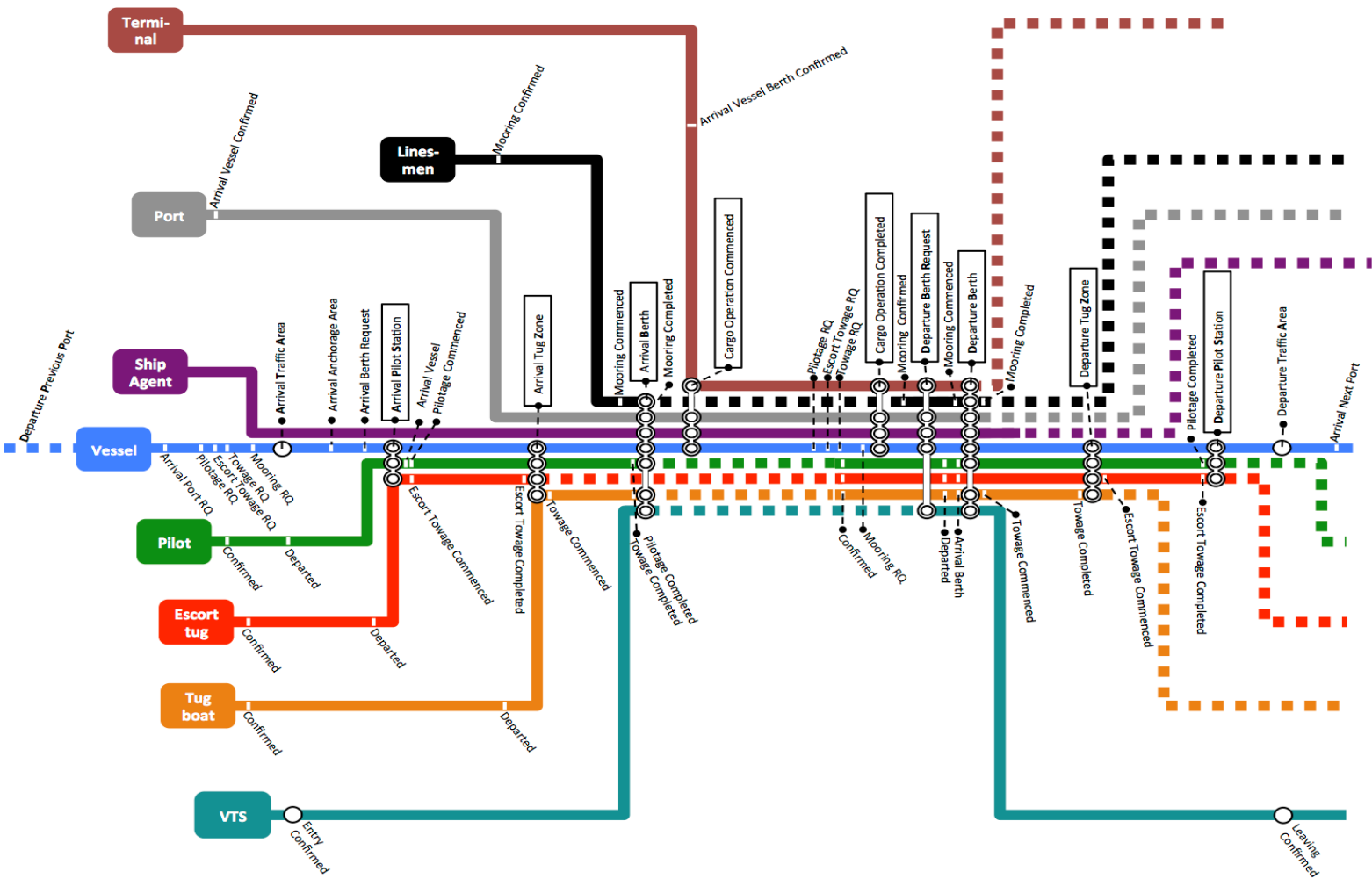
Cargo Owners
- Increased awareness of where the cargo is and when it will arrive to a particular destination

Shipping Companies
- Green steaming and just-in-time operations
- Increased predictability
- Possibility to better utilisation of the fleet

Ports Operators
- Increased predictability
- Increased attractiveness leading to more port calls
- Basis for forward planning
- Optimal use of existing infrastructure
- Optimal use of variable resources

THINK DIFFERENT

MAKE THINGS HAPPEN

MAKE A DIFFERENCE

Connecting Vessels, Ports and People

Perseus PortCDM

For questions do not hesitate to contact:

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