

Maritime Service Suite (MSS) Transition to more Integrated and Digitized Port Information

BIMP-EAGA 22-23 Feb

Pieter van Vrijberghe de Coningh

Managing Director Saab Technologies (Hong Kong) Ltd.



Speaker

After serving 18 years in The Royal Netherlands Navy, Pieter joined Saab (or previously named “HITT Holland Institute of Traffic Technology B.V.”) and started his second career in the Vessel Traffic Services (VTS) domain.

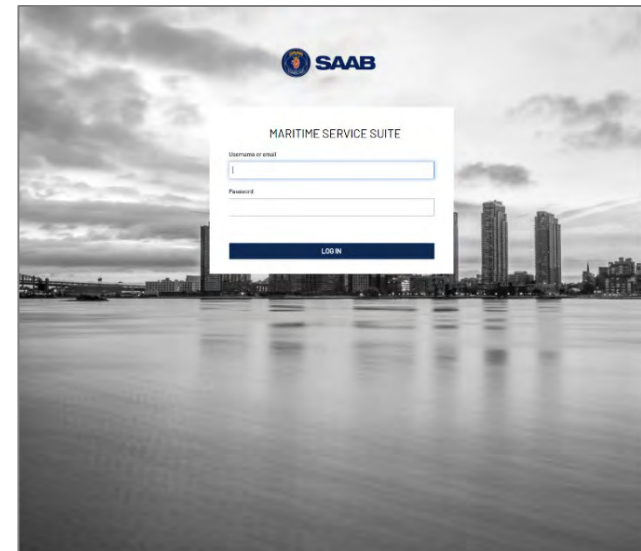
In the last 20+ years, Pieter is active in VTS business in Europe, South America and Asia. As a permanent resident in Hong Kong, Pieter has witnessed the deployment and development of the 2nd and 3rd generation of Hong Kong VTS System.



Pieter van Vrijberghe de Coningh
Managing Director
Saab Technologies (Hong Kong) Limited

Agenda

- Coming changes to our company
- What is a VTS System
- Transition from localized to fully digitalized
- Why & What of MSS (Maritime Service Suite)
- MSS Software in support of Digitalization



Coming Changes to our company per 31 March 2023





PRESS RELEASE

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Date: 30 November 2022
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Saab to Divest Maritime Traffic Management

Saab today announces the divestment of its Maritime Traffic Management (MTM) operation to funds advised by Agilitas Private Equity LLP ("Agilitas") for an enterprise value of approximately 40 MEUR. MTM is a global provider of management solutions for vessel traffic, ports and terminals. Completion of the divestment is subject to certain conditions that need to be fulfilled before closing, expected to take place no later than March 2023.

The divestment is in line with Saab's strategy with increased focus on its core areas: Aeronautics, Sensors, Command & Control, Advanced Weapon Systems and Underwater Systems.

Upon closing, Saab will divest the MTM operation to funds advised by Agilitas, and Saab will remain a minority shareholder, holding between 21 and 28 percent of preference shares, which will be determined at closing. Agilitas and Saab will issue a put and call option related to the minority ownership, giving the parties the right to exercise the options within a four-year period from closing.

"MTM is a stable and resilient business, however no longer part of Saab's core. As we continue to focus our growth within our core areas, we believe the MTM operations will benefit from being part of a new ownership for continued growth with Agilitas," says Micael Johansson, Saab's President and CEO.

"We look forward to partnering with the management team in bringing the business to the next level by developing the service offering and expanding the customer base," says Kevin Jermin, partner at Agilitas.

Maritime Traffic Management (MTM) delivers a wide range of integrated solutions to maritime users around the world. These solutions allow customers to run efficient ports, terminals and pilotages; manage safety and efficiency of traffic on waterways; protect the environment; perform law enforcement and coast guard operations; and protect infrastructure at sea.

MTM operations include the Vessel Traffic Service Systems (VTS), Port Management Information Systems (PMIS) and Terminal Operating Systems (TOS). The operations are performed from Saab's four legal entities in Apeldoorn, the Netherlands, Hong Kong, Vancouver, Canada, and Antwerp, Belgium.

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PRESS RELEASE

30 November 2022

Agilitas backs buy-out of Saab AB's Maritime Traffic Management business

Agilitas Private Equity LLP ("Agilitas"), the pan-European mid-market private equity firm, today announces the signing of an agreement to back the buy-out of Saab AB's Maritime Traffic Management business ("MTM" or the "Company"). MTM is a leading global provider of software solutions for the maritime sector.

Headquartered in Apeldoorn, the Netherlands, MTM is a provider of mission-critical maritime software solutions. MTM has over 30 years' experience in maritime software and its market leading software solutions are used in some of the world's largest ports. MTM's key solutions include the Vessel Traffic Management Systems (VTMS) *MaritimeControl* and the Coastal Surveillance System (CSS) *CoastWatch* which are used by governmental agencies such as port authorities or coast guards to monitor vessel traffic as well as to support the safe and secure navigation of vessels in and around ports, coastal lines, and inland waterways.

MTM's technological capabilities have allowed it to build long-standing customer relationships with public and private customers globally. The Company employs approximately 170 staff across their offices in the Netherlands, Belgium, Canada and Hong Kong.

Commercial marine shipping plays an important role in global trade. Growing regulatory standards, as well as the volume and diversity of vessel traffic, drive the increasing need for reliable software solutions to manage the accrued complexity. MTM's solutions improve the safety and efficiency of vessels, thereby reducing the risk of accidents and the environmental impact of ships.

Kevin Jermin, Partner of Agilitas who will be joining the board of MTM following the closing of the transaction, commented: "MTM is a great example of the type of investment we seek at Agilitas. The business benefits from a high degree of defensibility and offers significant transformation potential. Following the carve-out from Saab AB, the business will benefit from being a stand-alone company with a strengthened management team and regained focus on maritime software. We look forward to partnering with the management team in bringing the business to the next level by developing the service offering and expanding the customer base."

Martin Calderbank, Managing Partner of Agilitas, said: "The commercial marine shipping sector is undergoing a significant digital transformation. We are delighted to partner with MTM and its management team to be a driving force of that step change. MTM's products have clear benefits for the safety and efficiency of the maritime supply chain and the environment. By accelerating the Company's growth, we intend to bring those benefits to more customers around the world."

The closing of the transaction is subject to the successful completion of the carve-out actions and regulatory approvals.



The same ship, the same crew but
with a new plan for relevance to our
customers

Global drivers like rising population, new
trade routes, revised product chains and
the objective to reduce the carbon
footprint are expected to dramatically
change the landscape

Relevance

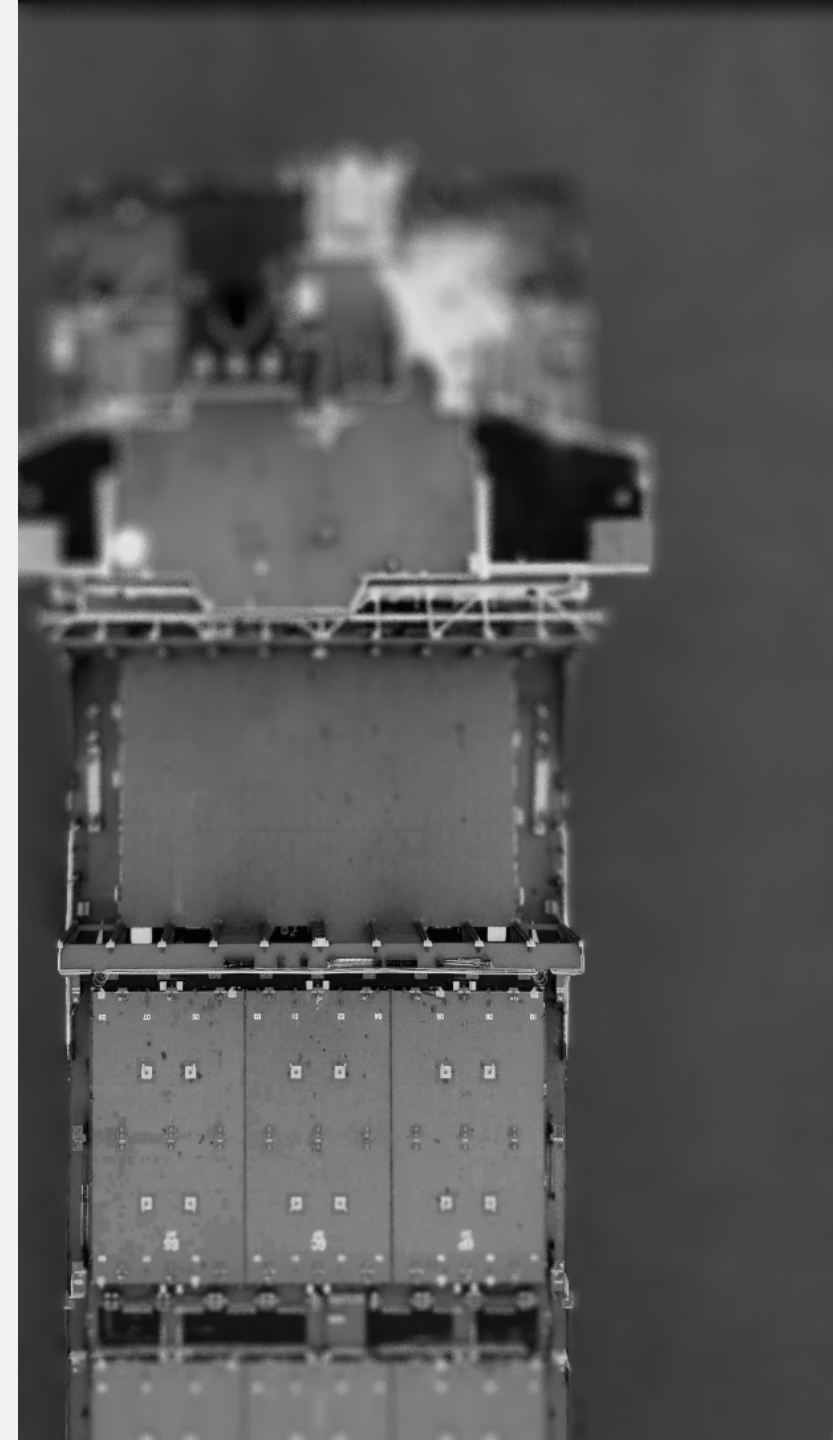


Partner of new port Eco Systems

It is our expectation mission-critical port operations will be revisited as they can no longer act decentral and in silos.

Customers objectives confirm vision

- Create a multi-domain mission-critical platform
- Interoperable with 3rd party solutions
- Drive sustainability by (partly) remote deployments
- Systemize and standardize to increase repeatability
- Solutions offered on-demand
- Secure the domain expertise
- One team, one voice



Introduction to Maritime Traffic Management - VTS



What is VTS?



- Vessel Traffic Services (VTS) contribute to safety of life at sea, safety and efficiency of navigation and protection of the marine environment, adjacent shore areas, work sites and offshore installations from possible adverse effects of maritime traffic.
- Governments may establish VTS when, in their opinion, the volume of traffic or the degree of risk justifies such services.

Purpose of VTS

- Provision of timely and relevant information on factors that may influence the ship's movements and assist onboard decision making.
- Monitoring and management of ship traffic to ensure the safety and efficiency of ship movements.
- Responding to developing unsafe situations.



How do we implement VTS?



Source: Website of Hong Kong Marine Department



Source: globalfishingwatch.org



Source: gcaptain.com

HOW ABOUT NOW?



Traffic Display



RDF



AIS



Radar



Electro-Optical Systems



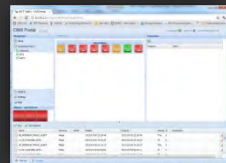
Meteo



VHF



Processing & Networking



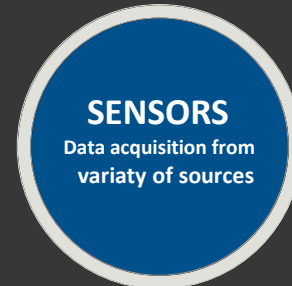
CMS



PORTCONTROL™



PROCESSING
Centralized operation and control



SENSORS
Data acquisition from variety of sources



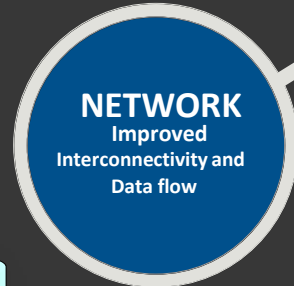
SECURITY
Data confidentiality and integrity



SERVICES
Improved Information Flow



PLATFORM
Increased operational Efficiency

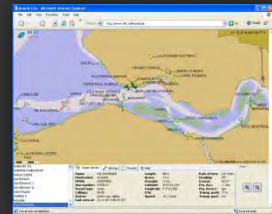


NETWORK
Improved Interconnectivity and Data flow

MARITIMECONTROL™



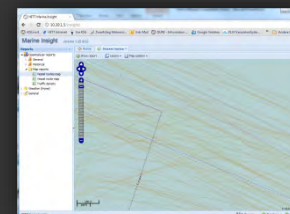
Record & Replay



Opsview



IVEF & other Interfaces



Traffic Analysis

Transition from localized to fully digitalized



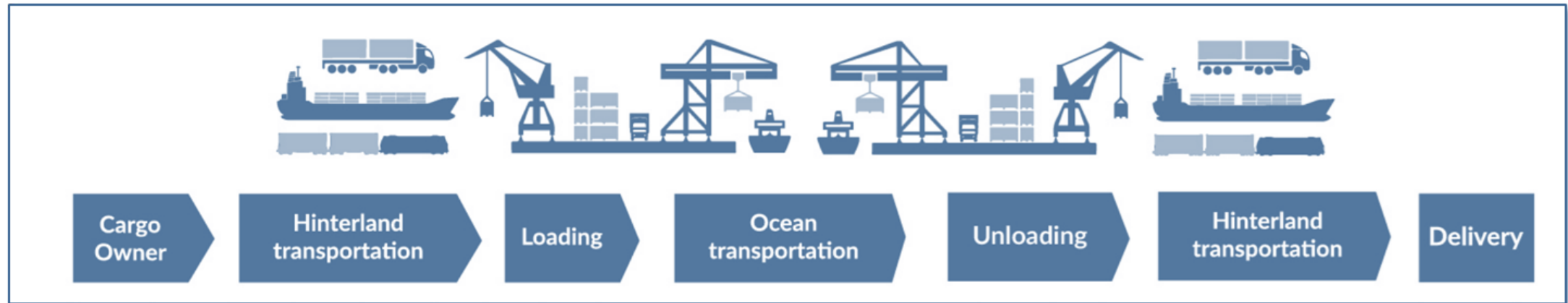
VTS the traffic orchestrator

- Holistic View of the ports traffic and waterway infrastructure
- Provider of information related to traffic, traffic planning and the waterway infrastructure
- Facilitating collaborative planning of the traffic based on the individual stakeholder's interests
 - Ship owners
 - Terminal owners
 - Service providers
 - Port authority, Lock/Bridge Operator
- Guardian of the Safety, Security & Environmental demands

“The set of efforts (measures, provisions, services and related functions) which, within a given area and under specified circumstances, intend to minimize risks for Safety, security and the environment, whilst maximizing the efficiency of waterborne and connecting nodes of transport. Thus VTMISS is defined as: Services that intend to respond to public and private demand for facilitating Vessel Traffic Management”

Definition VTMISS (Hadley, 2001)

The Buzz Words



- “Digitization” of the maritime transport chain
- “Smart Ports”, “Connected Ports”, “Door-to-door” cargo management
- “Collaborative Decision Making”, “Waste reduction”
- “Eco system”, “Autonomous” shipping
- “Artificial Intelligence” “Machine Learning”
- “Decoupling”, “Just in time delivery”, “Robustness of transport chain”
- But also non technical: changing demographics



Trends in Maritime Digitalization

- Major shipping lines call for end of paper Bill of Lading by 2030
- EU – single maritime window framework operational by 2025
- IMO Maritime Single Window Mandatory for Ports all over the world within 2024 (Facilitation Committee)
- Tracking of Empty Containers is an issue
- Decarbonization, how to keep track? And are we really tracking all the vessels real-time?
- All the above call for acceleration of digitalization of shipping much faster than before and that in a very traditional industry
- Data driven decision making

Terminal Operations were front runner in digitalization followed by Port Management. Vessel Traffic Management is years later, but now must accelerate.

Challenges ahead

Handle more or larger vessels with the same infrastructure



Accidents & Incidents must come down



Traffic must become more predictable and punctual



Reduce travel & turn around time and costs for shipping lines



All information must be secure, available and accurate



Environment will become a driver



All stakeholders need to be informed



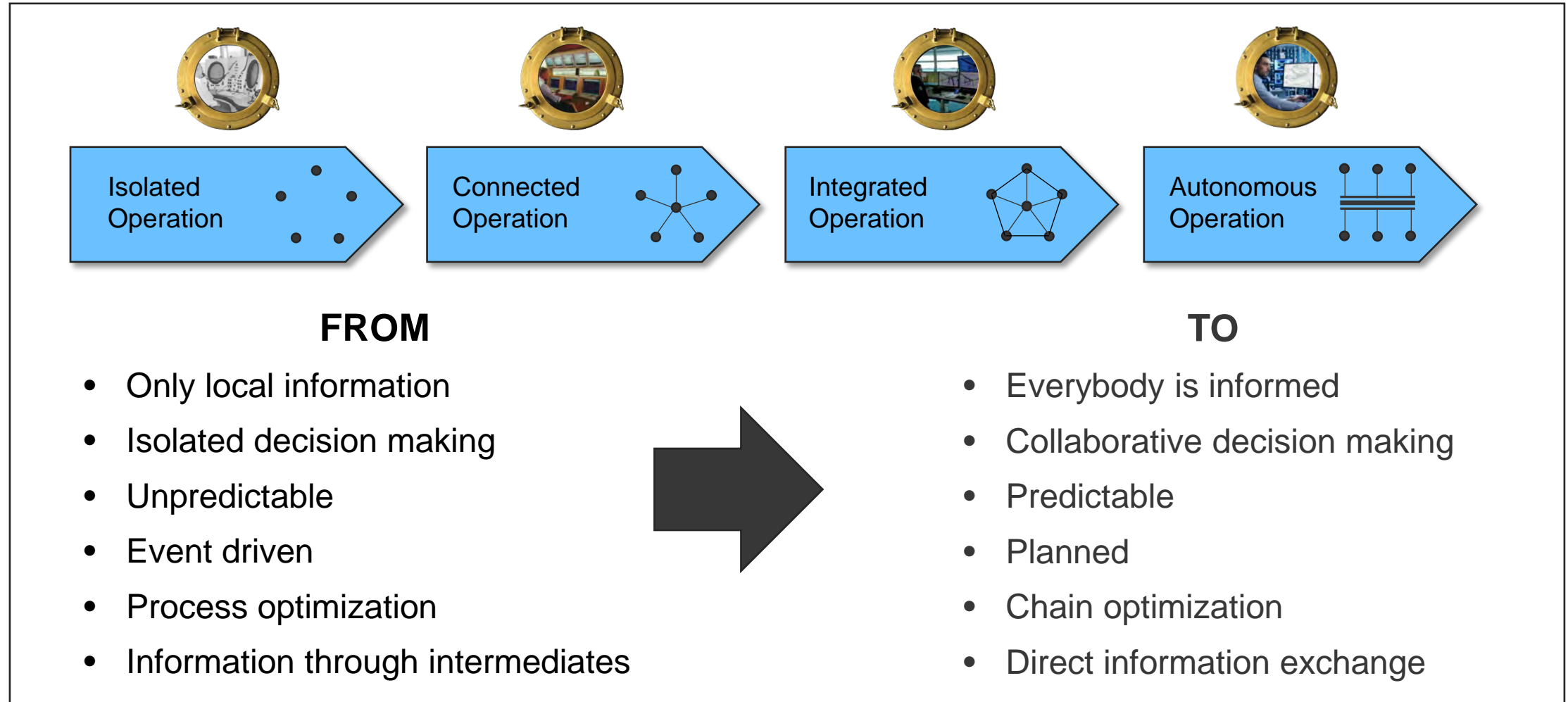
Everybody needs to be "connected"



When is next pandemic and what impact?

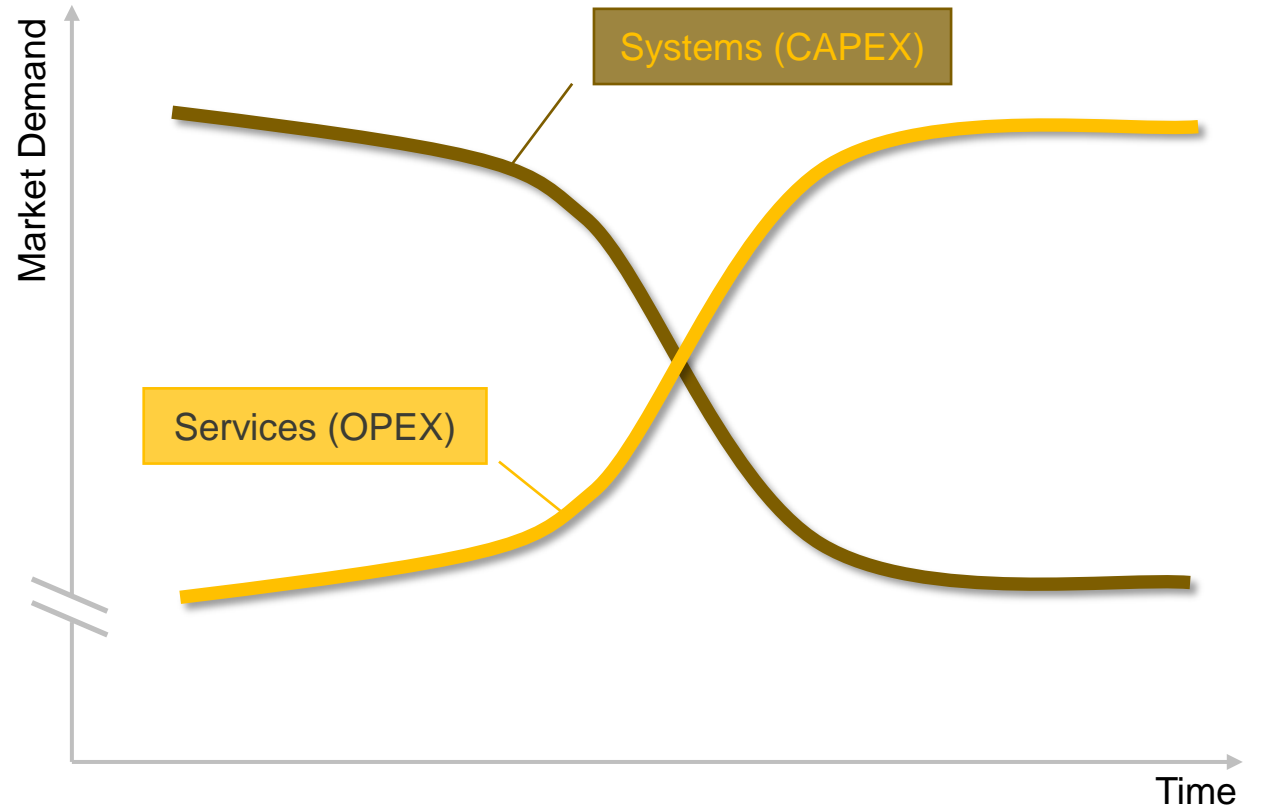


Changing Operation



Business Models

- Gradual shift of business models
 - Forecasted growth services
 - Declining demand systems
- More flexibility
 - Functionality
 - Business models
- More customer value
- Continuous improvements
- Less vendor lock-in, open solution
- Lower cost, OPEX driven



MSS services

Human
Machine
Interface



Machine
Machine
Interface



Maritime Service Suite

Application Programming Interface (API)

Route
Services

VTS
Services

Traffic
Services

Visit
Services

Radar
Services

AIS
Services

ENC
Services

Mail
Services

Security
Services

Video
Services

Equipm.
Services

EDI
Services

STM
Services

Port
Services

Meteo
Services

Alarm
Services

Tug
Services

Pilot
Services

Incident
Services

Gate
Services

Yard
Services

Lock
Services

Berth
Services

Billing
Services

Stowage
Services

CDM
Services

Internet of Things (IoT)

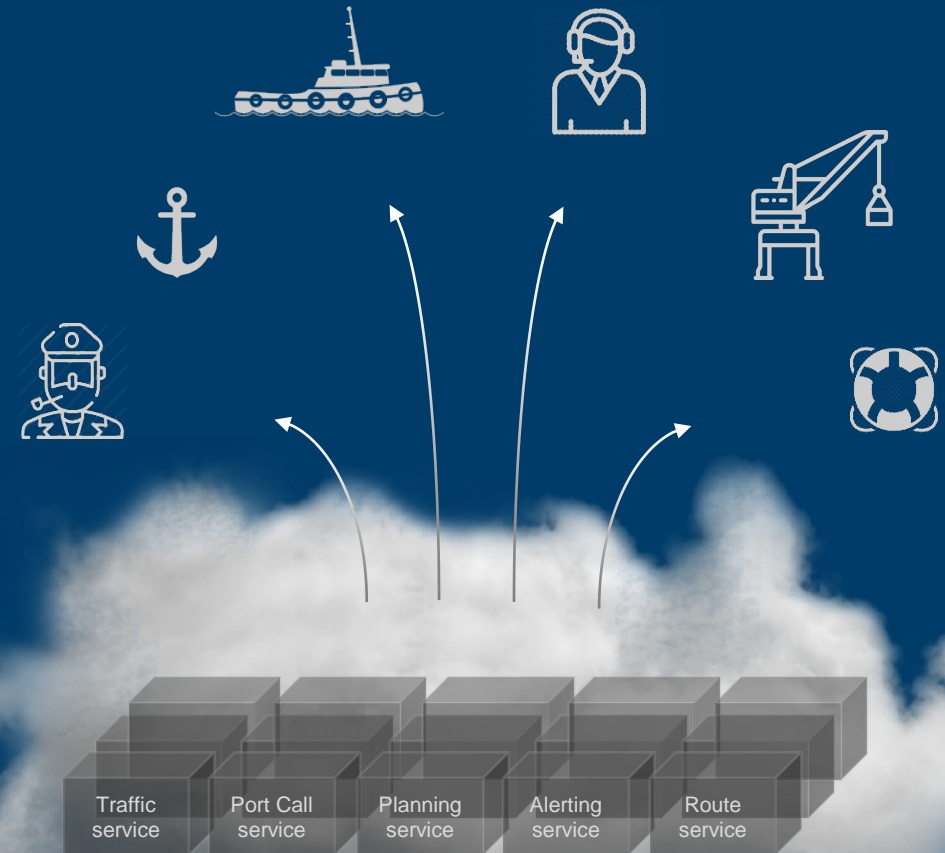


Third party Data Providers



What is MSS?

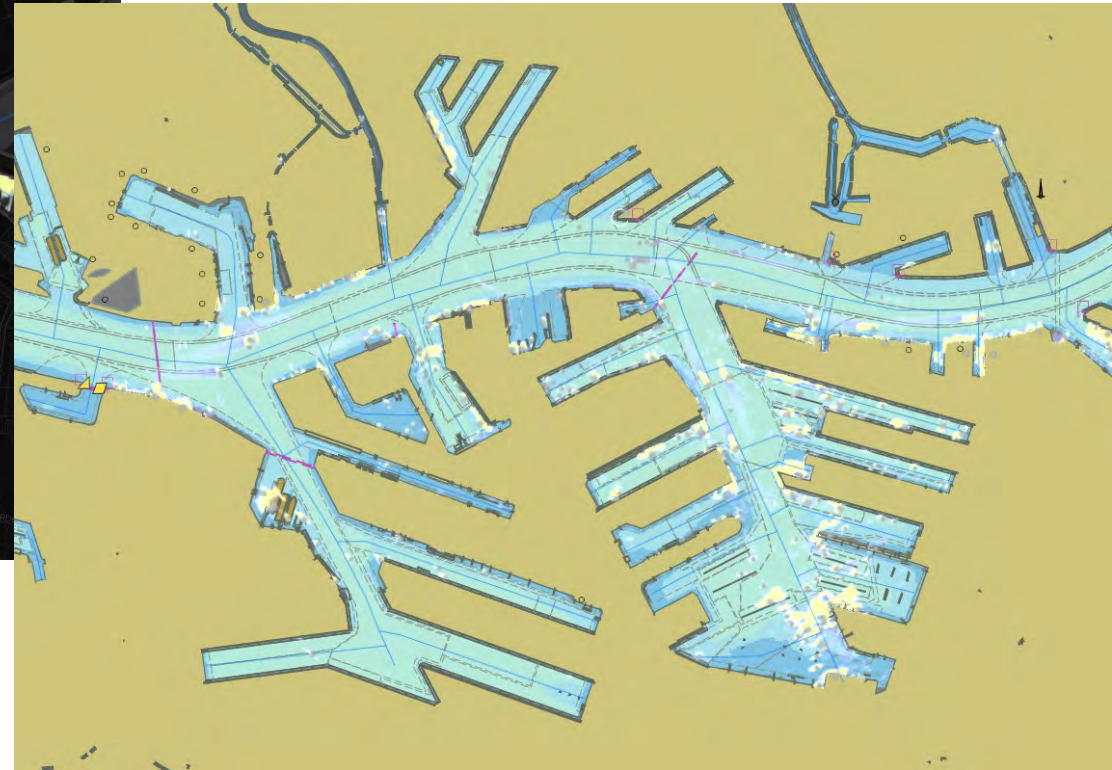
- A Suite of Maritime micro services,
 - Autonomous business services
 - Cloud natively developed
- Services are available as
 - API (Machine to Machine)
 - Web front-end (Machine – Human)
- Services offer maximum flexibility
- Gradually replaces current product lines
- Technology can be applied to on premise solutions as well
- Services all business models



MSS how does it look?



Radar



Thank you

