

**Kongsberg Maritime**

# Shaping the Future of Maritime Remote Solutions

Ville Vihervaara

Vice President, Remote Systems

Kongsberg Maritime

April 15<sup>th</sup>, 2026

**Kongsberg Maritime Proprietary:** This document and its accompanying elements contain Kongsberg Maritime information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited if not otherwise explicitly agreed with Kongsberg Maritime in writing. Any authorised reproduction, in whole or in part, must include this legend. ©2026 Kongsberg Maritime - All rights reserved.



# Kongsberg Maritime

Global scale and technological depth, applied  
in real-world maritime operations

1. Kongsberg  
Maritime

2. Our R&A  
Vision

3. Our R&A  
Solutions

4. Our R&A  
Projects

# Kongsberg Maritime

Global scale and technological depth, applied  
in real-world maritime operations

## Maritime technology expertise

Deep maritime domain expertise and a large installed base, delivering complex integrated systems at scale.

## Full lifecycle coverage

A broad portfolio of products, services and integrated solutions, supporting both newbuild and aftermarket.

## 24/7 global operations

Supporting commercial, offshore and naval operations, with strong local presence worldwide.

## Driving maritime transformation

Supporting more efficient and digitalised maritime operations across the industry.

## Proven performance globally

~16% average revenue growth and ~24% average order backlog growth over the past five years.

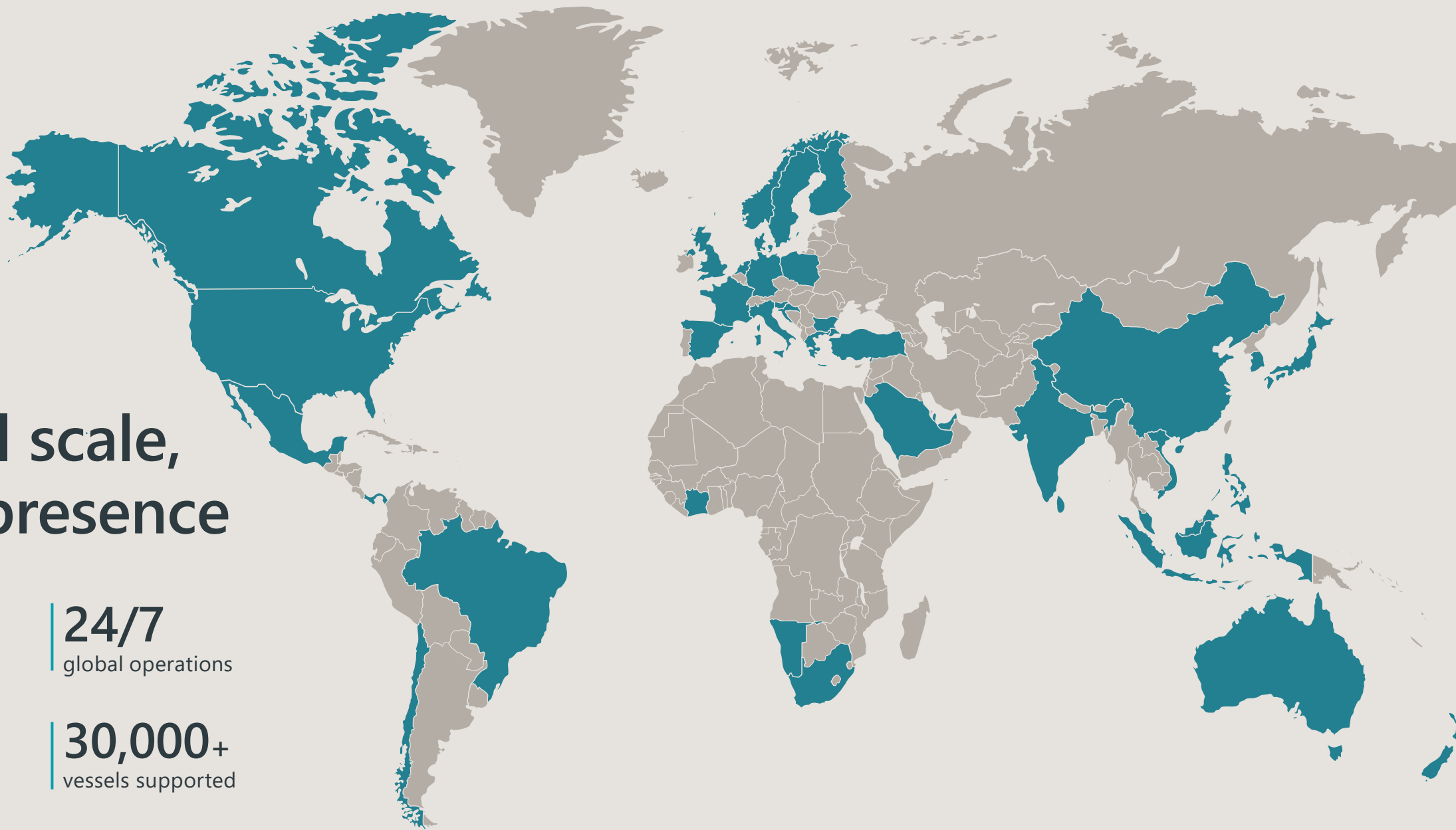
# Global scale, local presence

**8,300**  
employees

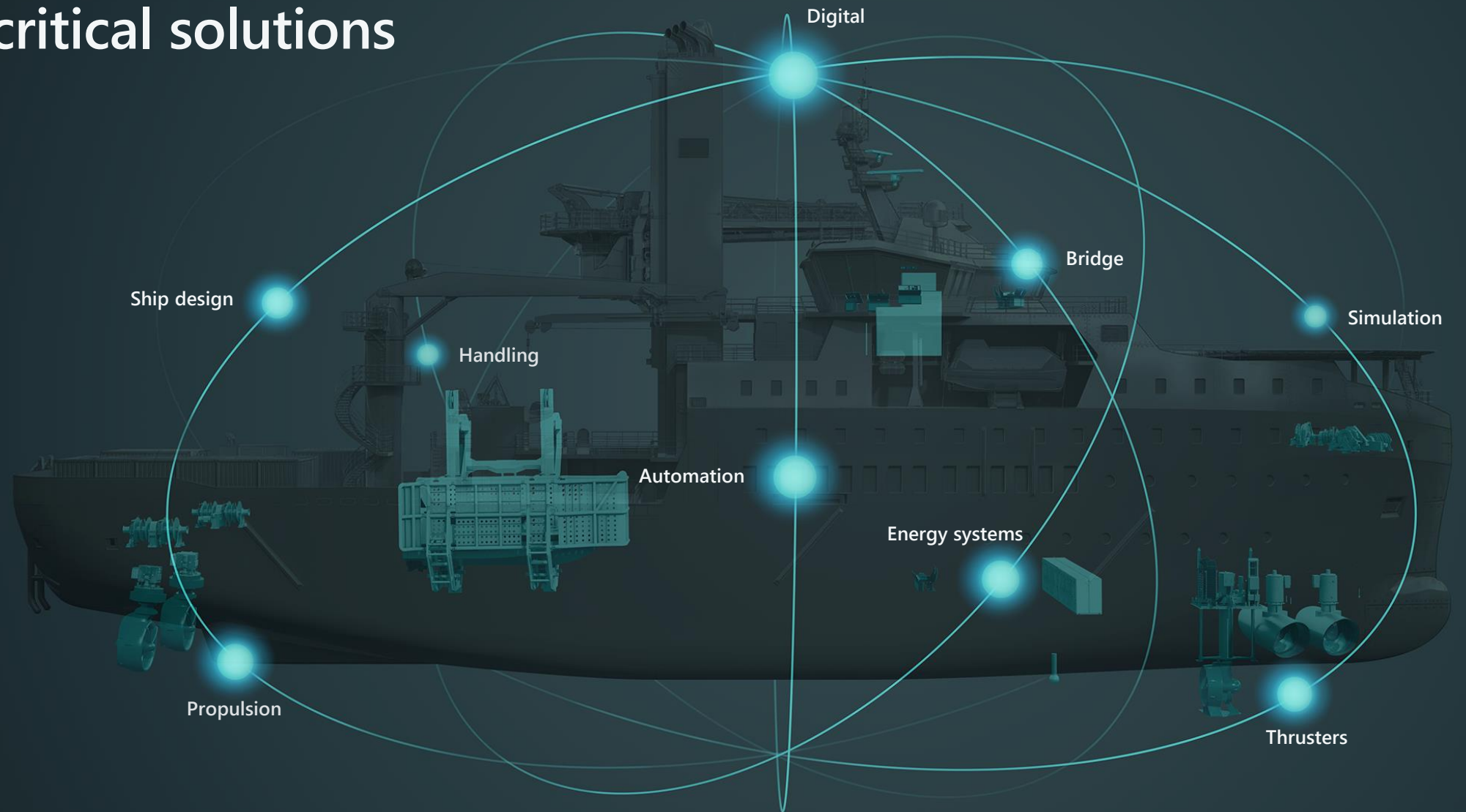
**24/7**  
global operations

**53%**  
engineers

**30,000+**  
vessels supported



# Broad portfolio of unique and mission-critical solutions



# Kongsberg Maritime

Our R&A Vision

# Shaping the Maritime Industry

Introducing more efficient, sustainable and scalable ways of operating ships and assets

Conventional ship operation



Remote ship operation



Remote Fleet operation



**New mindset in maritime**



# Why Remote & Autonomous

## Value Proposition

### BUSINESS



Increasing revenues through digital services

New attractive job opportunities in shore

### COST & SUSTAINABILITY



Reducing crew & fleet operation costs by moving rules and competence to shore

Reducing newbuild vessel costs

Optimizing fuel and energy consumption

### SAFETY & RISK



Reducing human errors

Having no human presence in hazardous environments

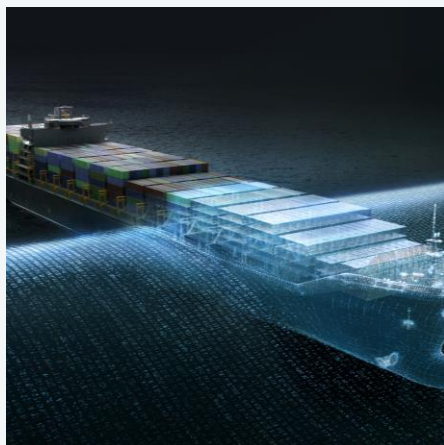
Catching anomalies faster

# Kongsberg Maritime

Our R&A Building Blocks

# R&A Building Blocks

For Remote & Autonomous Operations



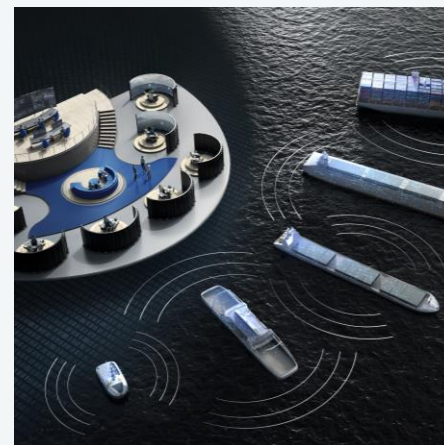
VESSEL SYSTEMS

Enabling remote & autonomous operations with key digital orchestrators and well proven products.



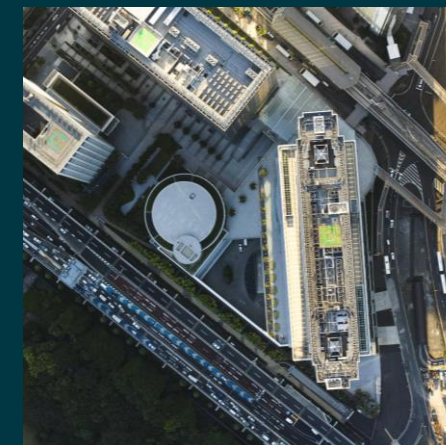
CONNECTIVITY SYSTEM

Enabling secure and safe connection between the ROCs and fleet of vessels.



REMOTE OPERATIONS CENTRE

Enabling remote & autonomous operations of vessels and other floating assets in a safe, efficient and secure manner.



VESSEL OPERATOR

Providing required infrastructure and procedures for remote & autonomous operations service.



**AUTOSHIP**  
Autonomous Shipping Initiative for European Waters



# Kongsberg Maritime

Our Solutions and Projects

**ROA Alert Center**  
Multi-vessel view

**ROA Navigation**  
3 x Single vessel

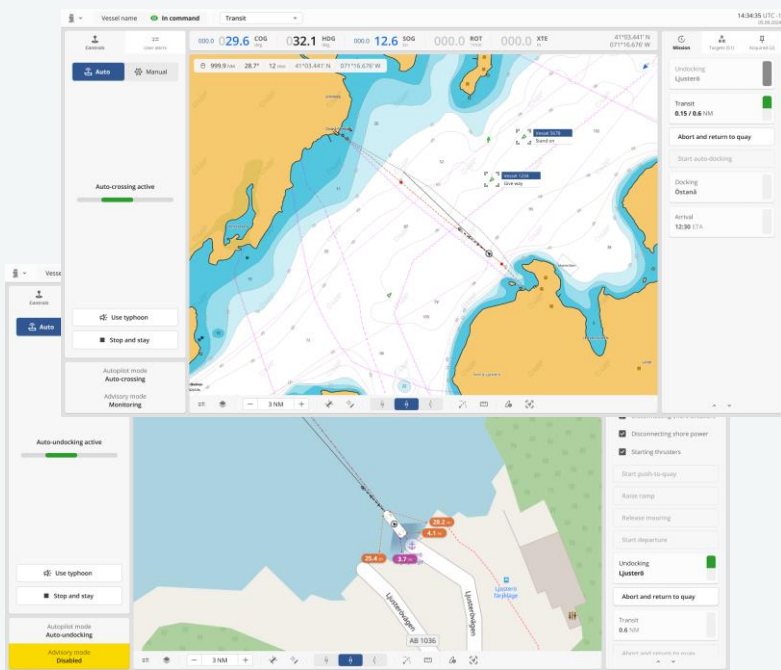
**ROA Dashboard**  
3 x Single vessel

Vision of navigation ROWS with  
example of 3 vessel operation

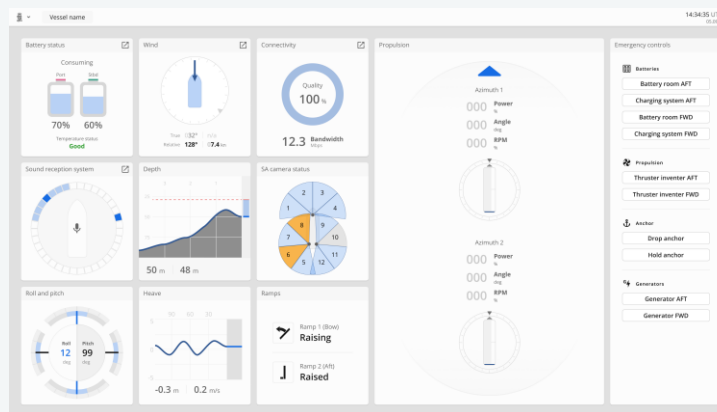


# ROA Suite

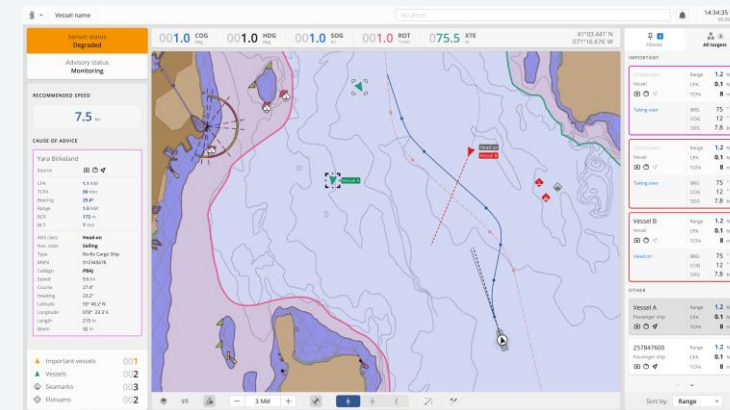
## Remote Operation Applications



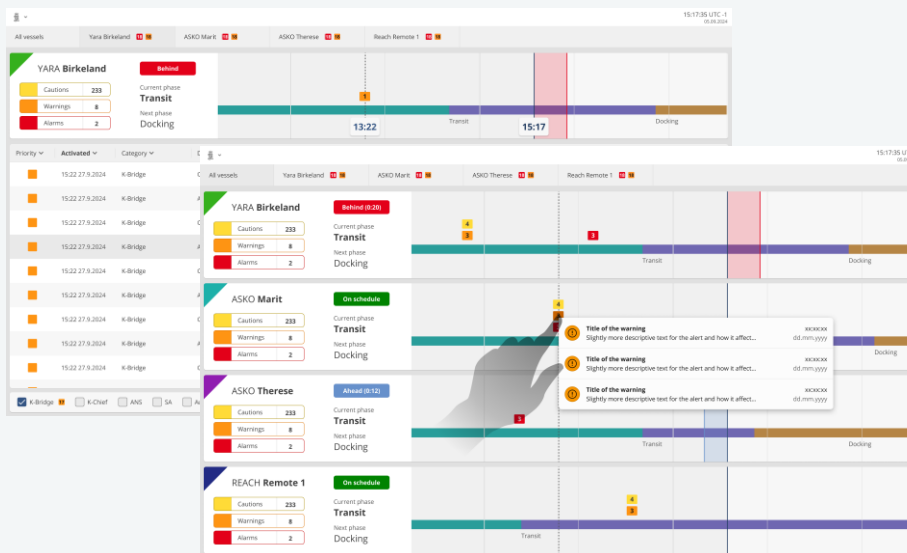
ROA Navigation



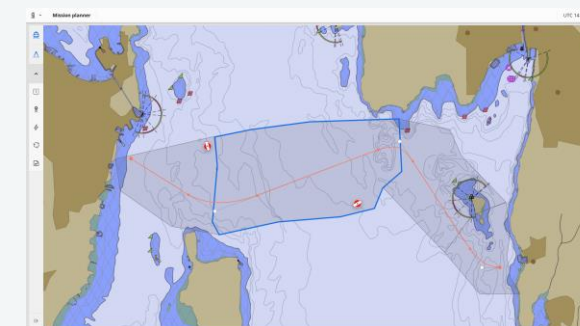
ROA Dashboards



(ROA Advisory)



ROA Alert Center



(ROA Planner)

See Statement of Proprietary information

See statement of proprietary information



## Key Facts

# ROA - Remote Operation Applications

- Built specifically for **ROC for single- and multivessel operations**
- Enable multivessel operation by **reducing cognitive load**
- Combines data and functionalities from **multiple sources**
- Modern browser-based applications
- Purpose built user interfaces for different operational needs
- Designed by using **KM design system**  
(Based on OpenBridge design system)
- KM **Vessel API** is the interface between vessel and ROA

# Kongsberg Maritime

## Customer Project Examples



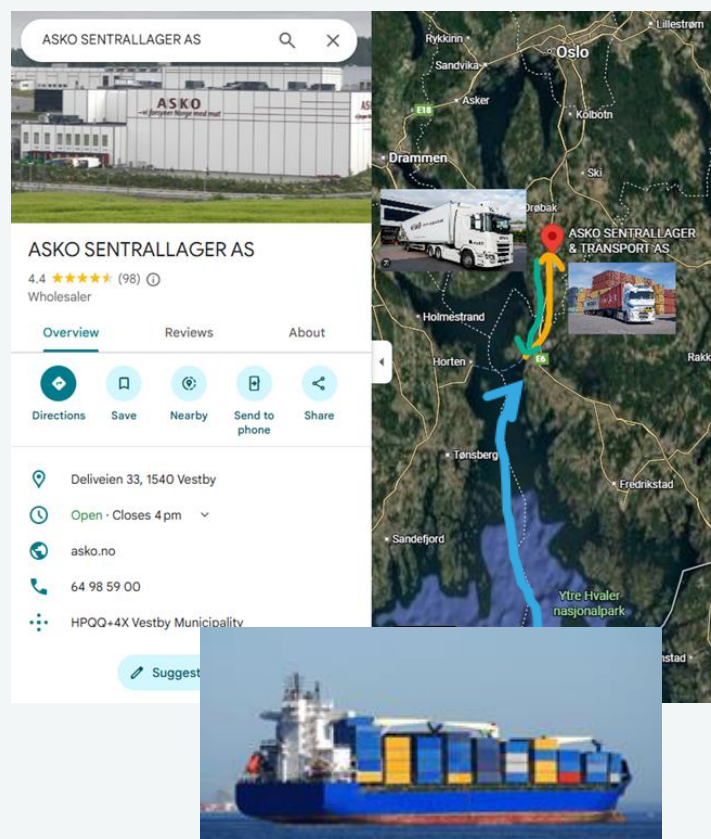
# SEAMLESS Demo

## The SEAMLESS Story

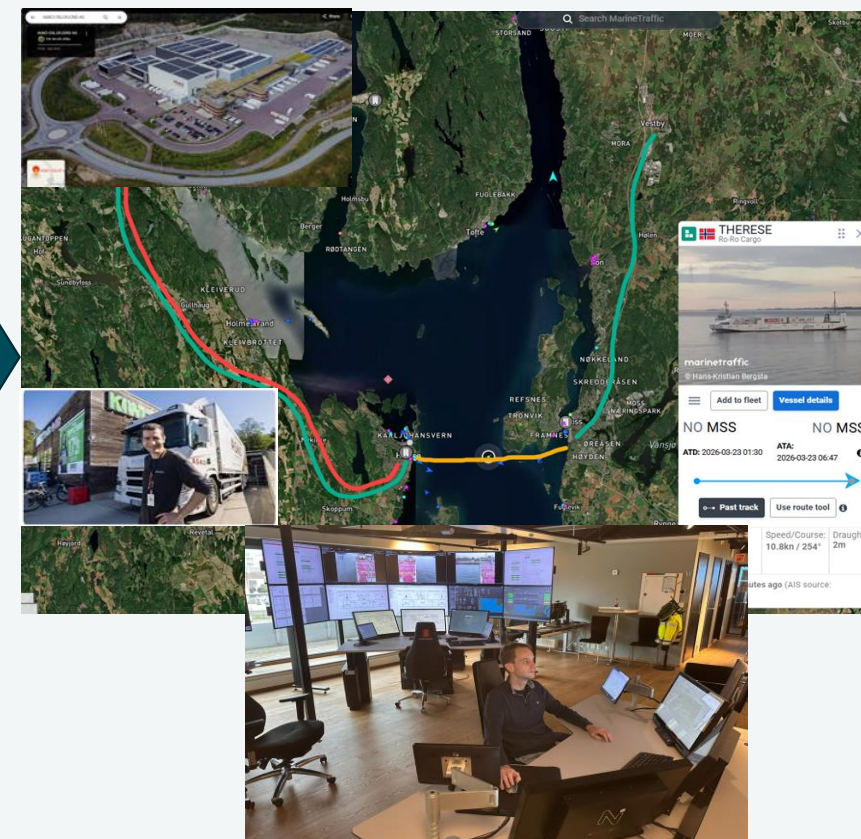
### Follow cat food from production to consumer

- A container with pet food leaves factory in the Netherlands bringing it on river Rhine to Rotterdam and further to Moss in Norway
- The container continues on an electric truck and on the autonomous vessel Therese to Asko distribution centre and finally to a local grocery store from where the cat food is bought by a consumer
- As part of the demo we will demonstrate usage of MacGregor's VCOP (live), MacGregor's autonomous crane (simulated), "autonomous" vessel (live), ROC operation (live) and ModalNet (live).

## From the Netherlands to Warehouse in Norway

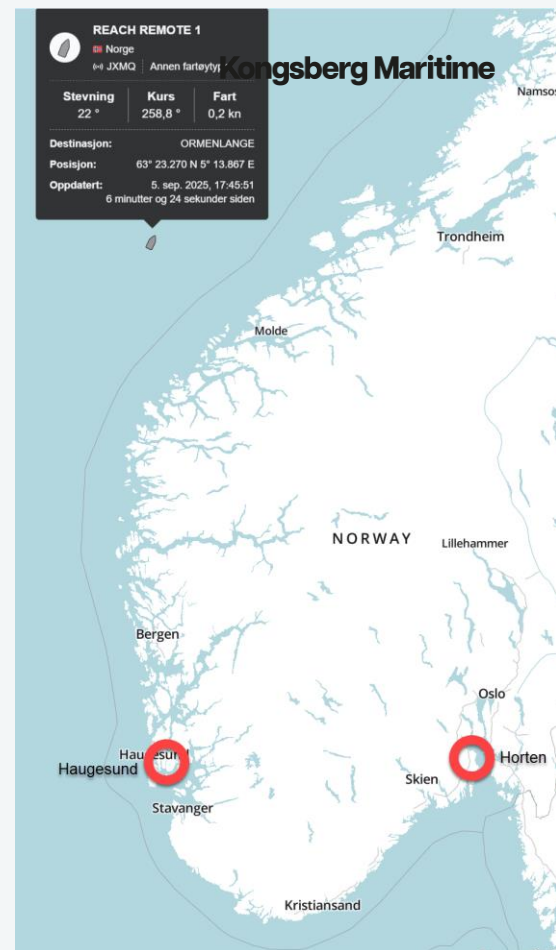
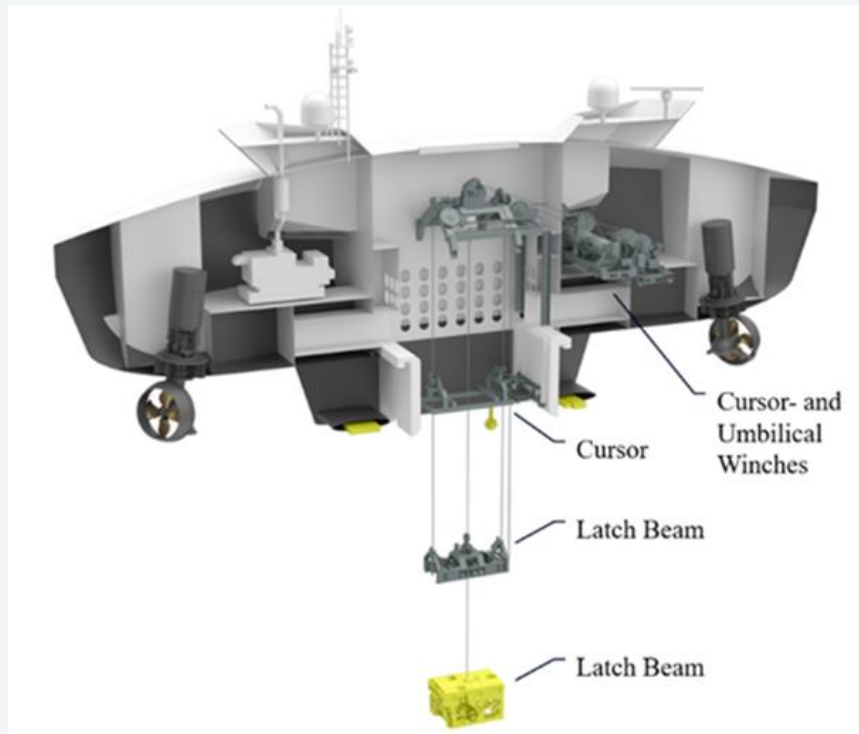


## From Central Warehouse in Norway to Regional Warehouse to Grocery Store



# Reach Remote

- ROV Operations and Sounder operations
- Replacing large manned multi-functional research vessels in many operations with 24m USV
- Moonpool with LARS system for ROV
- Remote Operation centers for ROC and ROV in separate locations – Shared Situational Awareness
- 90% Co2 reduction
- 30 days unmanned operations



Kongsberg Maritime

# Thank you!

