



WP7 Demonstration and validation campaign: DUC1

SEAMLESS WEBINAR 05.06.2025

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Agenda

- Demonstration use case 1 introduction and context
- Overview of the planned demonstration
 - Scenario 1, 2 and 3

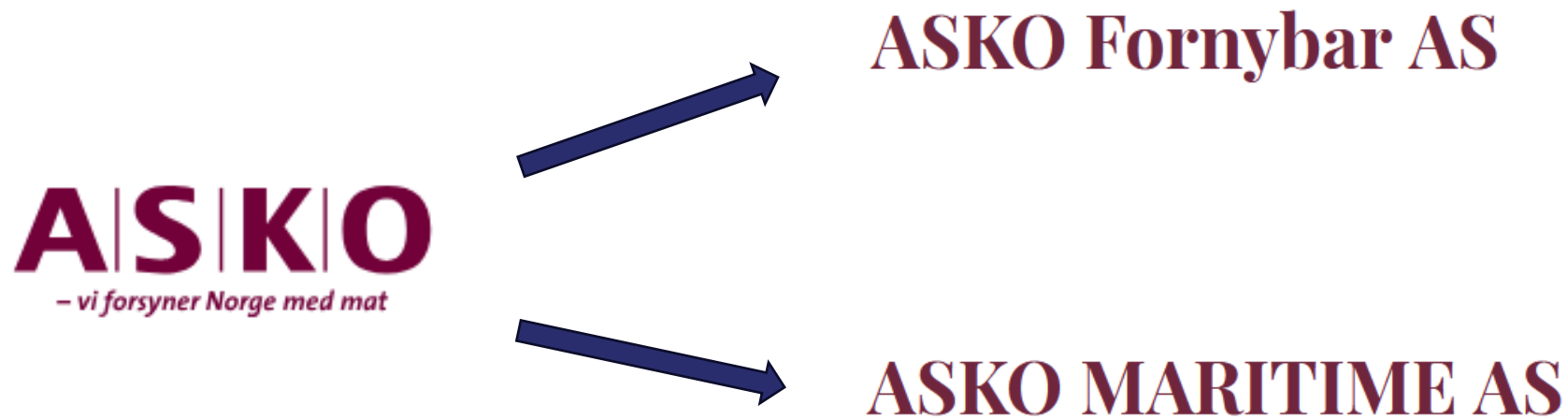
Demonstration Use Case 1 – DUC1



- Largest grocery wholesaler in Norway
- 700 trucks on the roads every day -> one of the largest transport companies in Norway.
- Transitioning to zero-emission logistics
 - Zero emission energy operations by 2026
 - Production of renewable energy covering at least own consumption by 2030

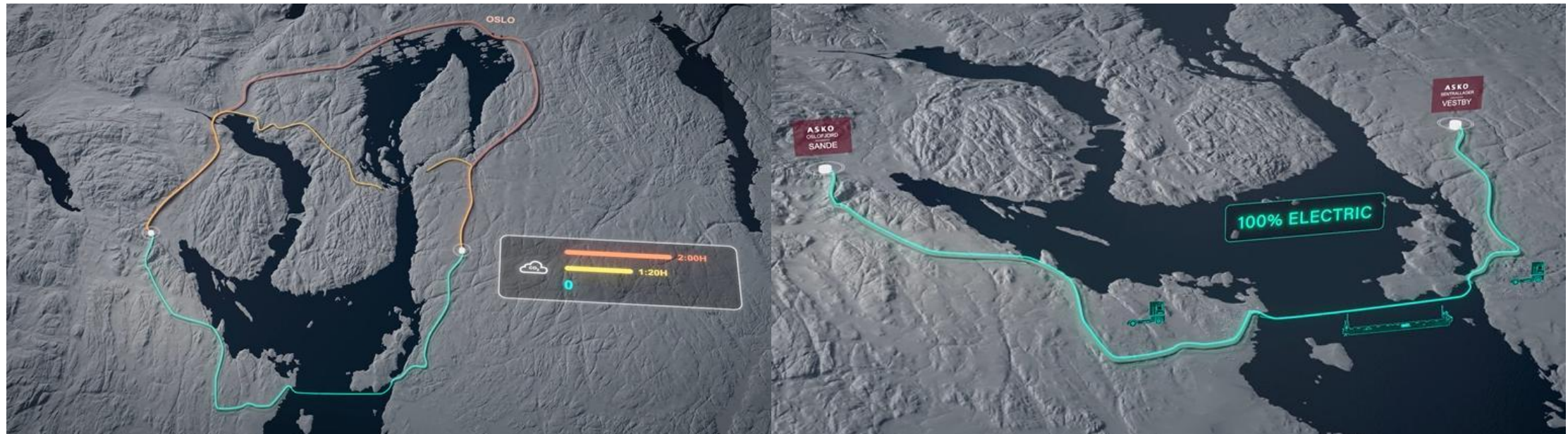


Demonstration Use Case 1 – DUC1



Demonstration Use Case 1 – DUC1

ASKO MARITIME AS



<https://asko.no/kontakt-oss/vare-asko-selskap/asko-maritime-as/>



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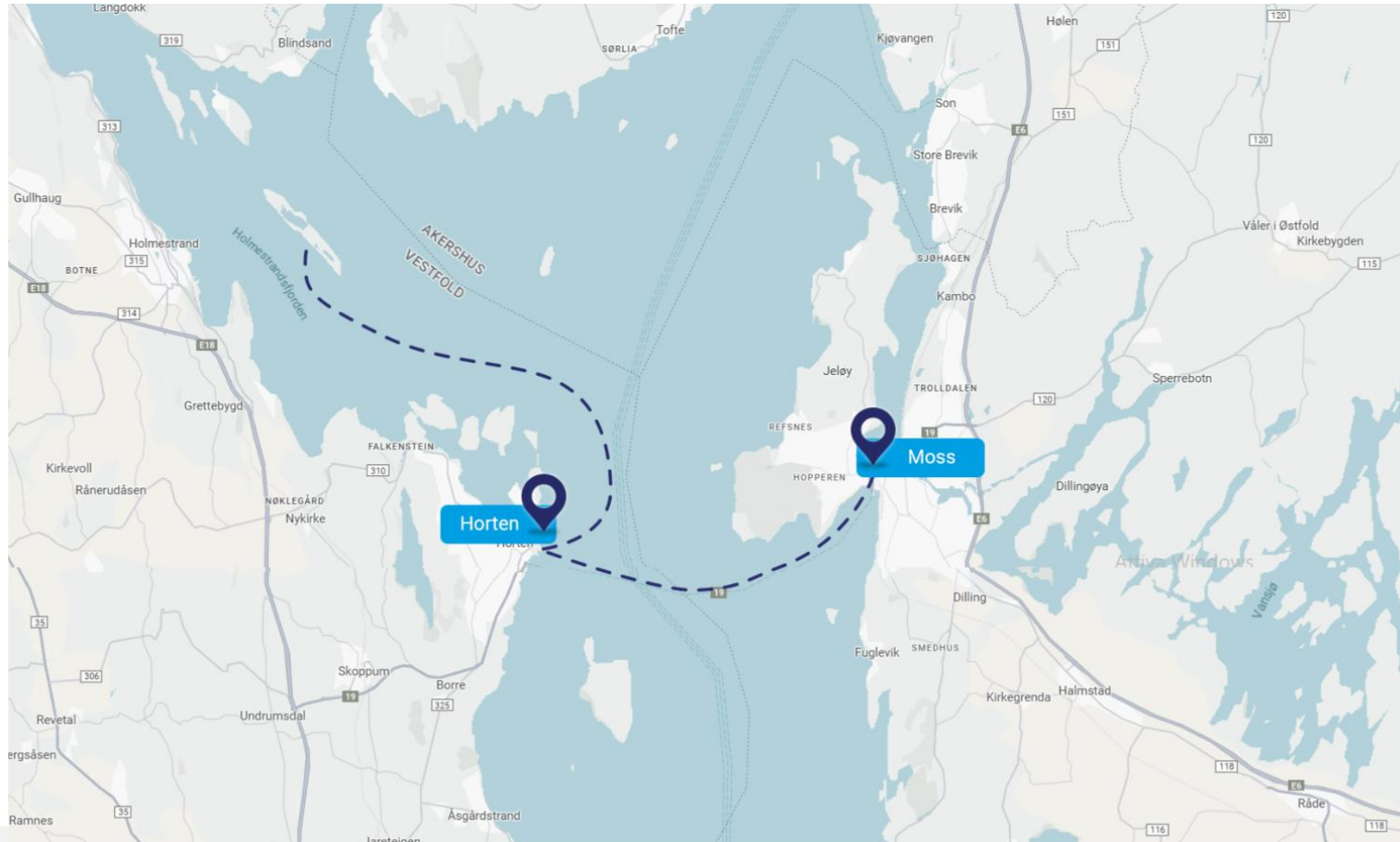
Demonstration Use Case 1 – DUC1

ASKO MARITIME AS

- Two battery electric roro ferries for crossing the Oslofjord in operation
- Project investigating a new vessel service to Oslo
- In cooperation with Kongsberg Maritime and Massterly to make the ferries autonomous and uncrewed



DUC1: Northern European demonstration – location Oslofjord



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DUC1: ASKO Marit & Therese



& a third vessel to be announced...



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DUC1: Crewing during demonstration

- Asko vessels equipped with bridge, and currently crewed
- Crew will most likely stay onboard during demonstrations
- Approval for uncrewed operation ongoing
- Main goal of the project is to demonstrate that the various technologies work



DUC1: The ROC

- Masterly ROC in Horten to be used
 - Equipped with KM ROC technology
- Possibly also the KM ROC in Turku



DUC1: Auto-charging and mooring



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SEAMLESS: Consortium

The consortium comprises of 26 organizations from 12 EU countries.



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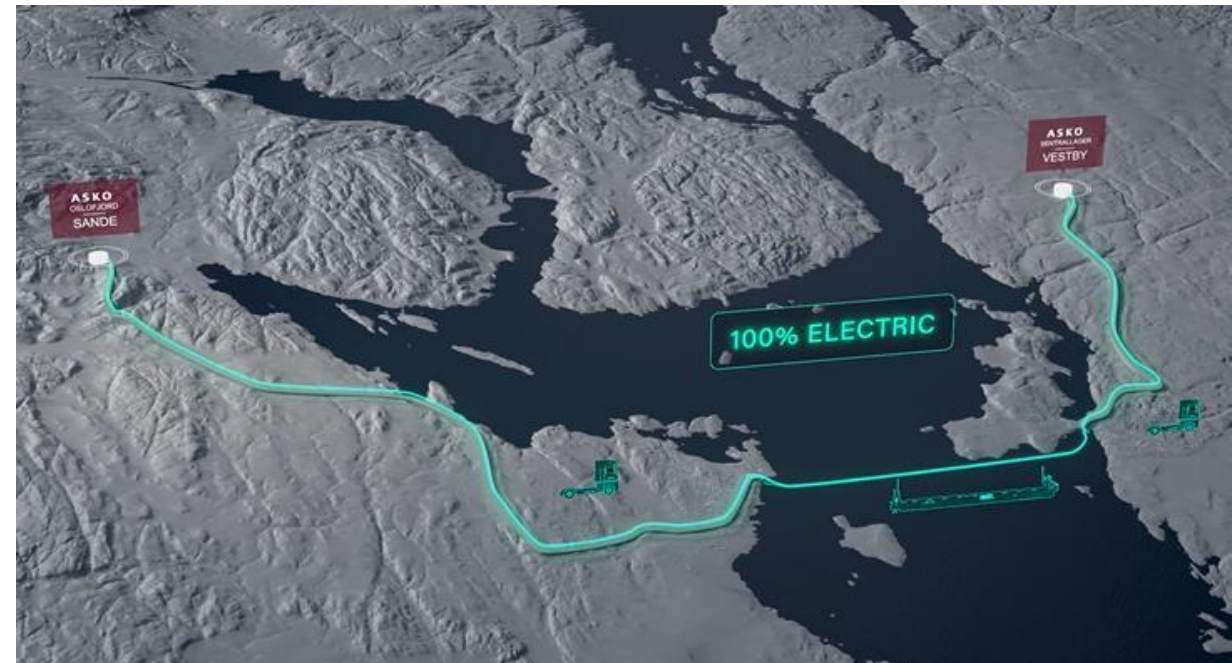
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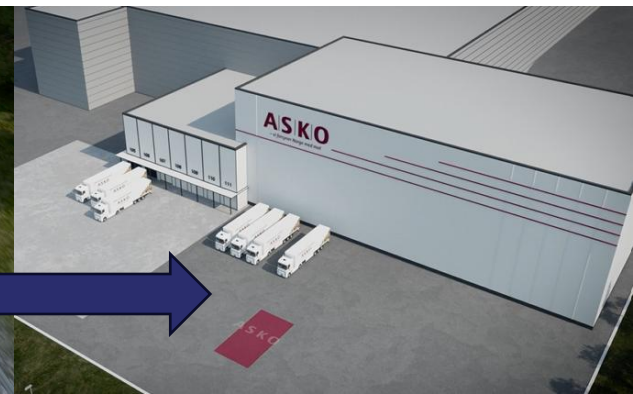
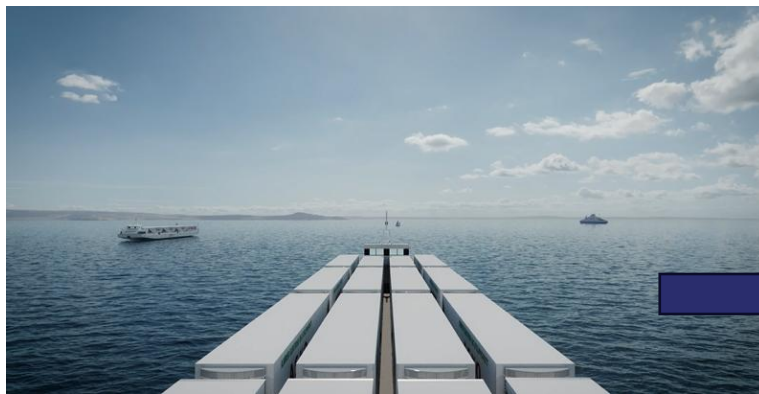
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DUC1: Scenario 1

- Logistics focus
- Involve systems: VCOP, ModINET, KM ROC and autonomous technology
- Interfacing existing logistics systems
- Door-to-door transport, booking, event tracking and reporting, automated stowage planning, re-planning for no-show containers

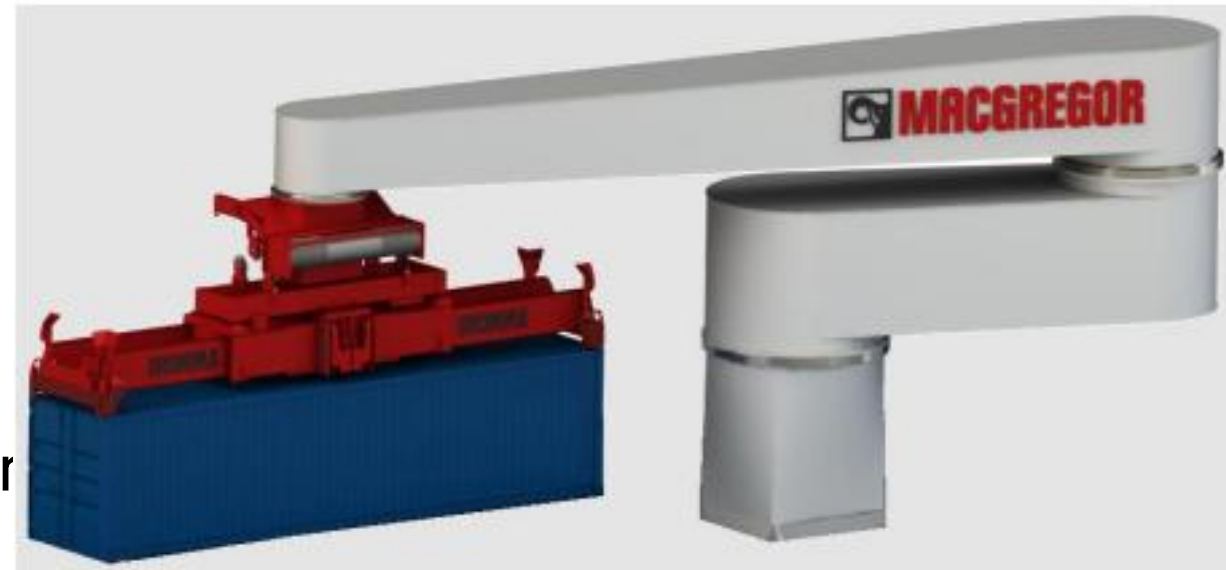


DUC1 – Scenario 1: steps



DUC1: Scenario 2

- Simulated – cargo handling focus
- Involved systems: Autonomous crane, VCOP
- Automated stowage and cargo handling planning
- Automated cargo handling execution
- Automated transfer between container liner and simulated ASKO vessel

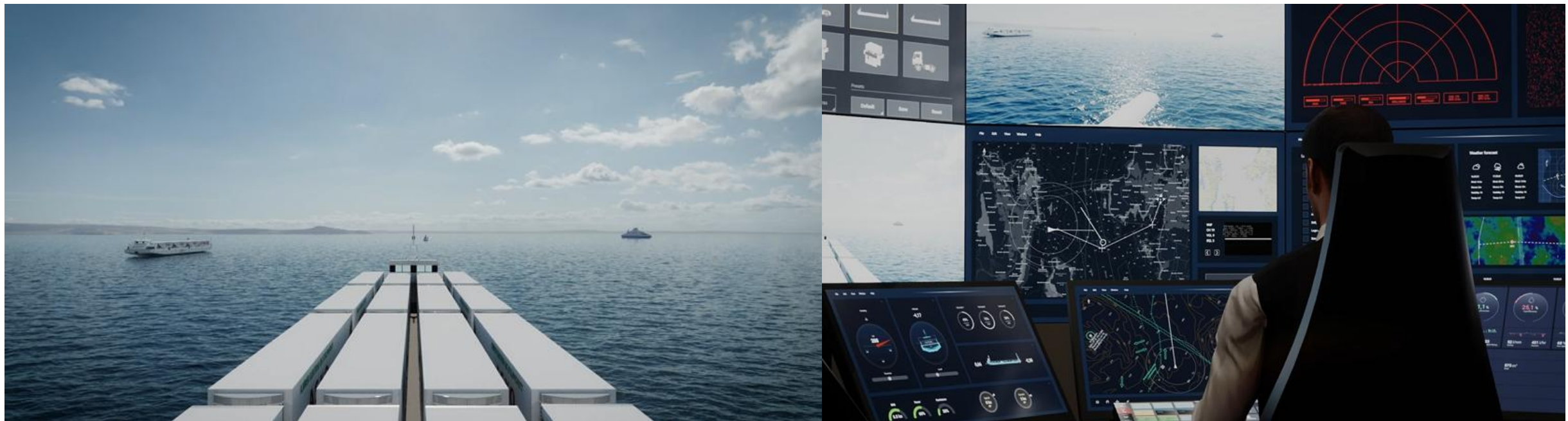


DUC1: Scenario 3

- Fleet operation of three autonomous vessels
- One ROC team (navigator and chief)
- Full scale
- Involved systems are the KM ROC and autonomy systems.



DUC1 – scenario 3: main objectives



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Demo day

- Date: 3rd or 4th of June
- Time: 0900-1600
- 0900-1230: Introduction, SEAMLESS presentations, demonstration video
 - Venue that holds 150+, near Horten
- 13-1600: In Horten - Visit the vessels, the ROC, and the technology suppliers
- More to come



Thank you



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