

Port of the future: innovation in action

Erwin Verstraelen – VP innovation

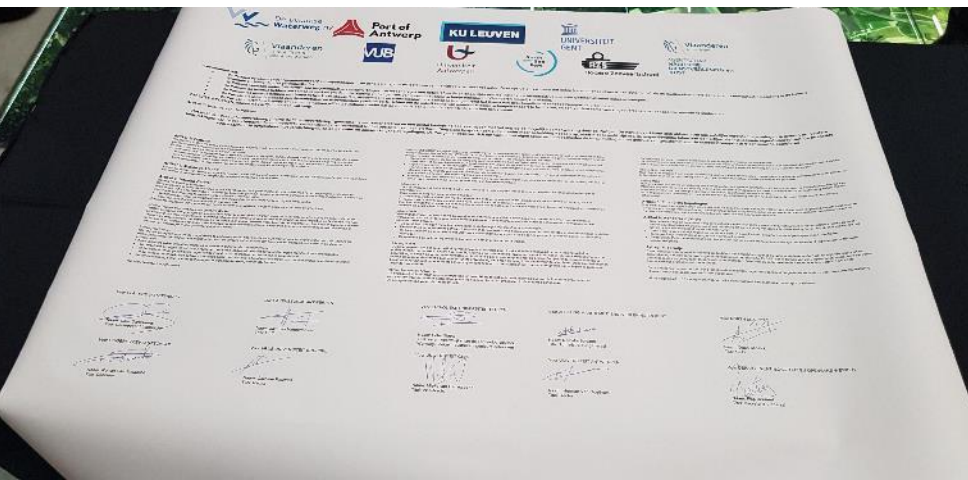
IMO – MASS event 11/4/2024





“We must dare to pioneer”





Innovation Platform Smart Shipping



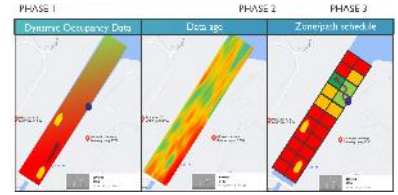
Echodrone 1.0
POC world first



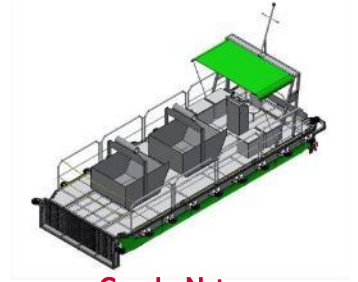
Echodrone 2.0
Operational



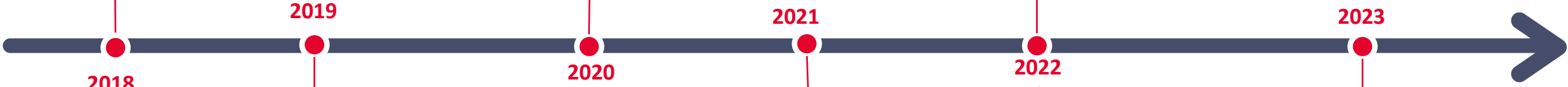
Project Mahi



Echodrone
Autonomous AI-path planner



CondorNxt
Partnership
DEME-BRABO-POAB



2019
1st Remote Piloted Ship
test Seafar
in POAB



2020
1st remote barge operation from
control center
@ the Beacon



2021
Shared Legal experimentation
framework for smart shipping
with DVW



2022
Operational Shore Control
Center Seafar



2023
First Commercial Remote
Piloted ship "Riverdrone"
in POAB





SEAFAR's footprint

Pioneer in remote shipping.

18

Founded in Antwerp, Belgium

35

35 FTE, Software Engineers & Operators

3

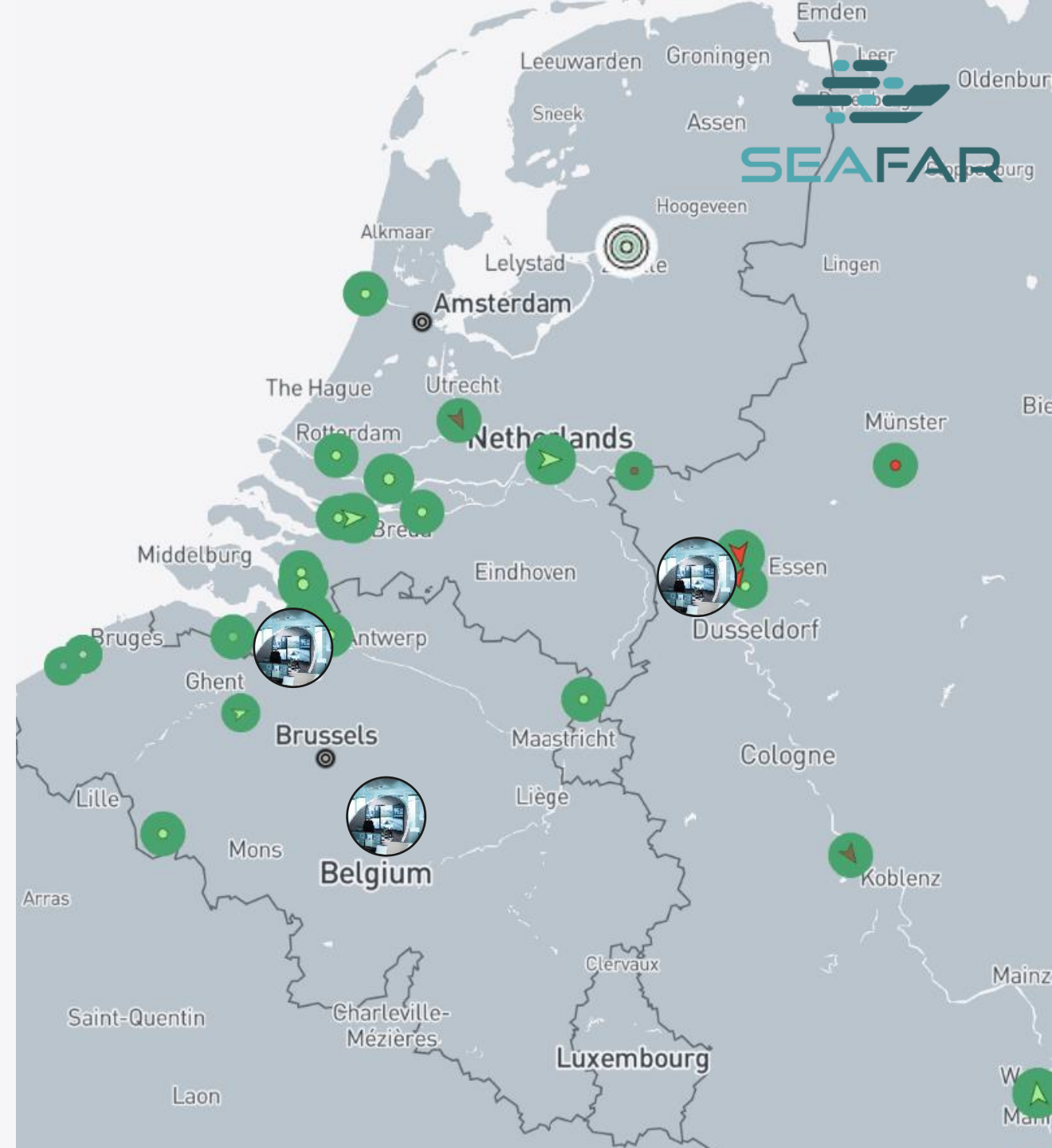
3 ROC locations: Antwerp, Charleroi and Duisburg

40

More than 40 inland vessels equipped with SEAFAR-system. First steps into Short Sea.

23

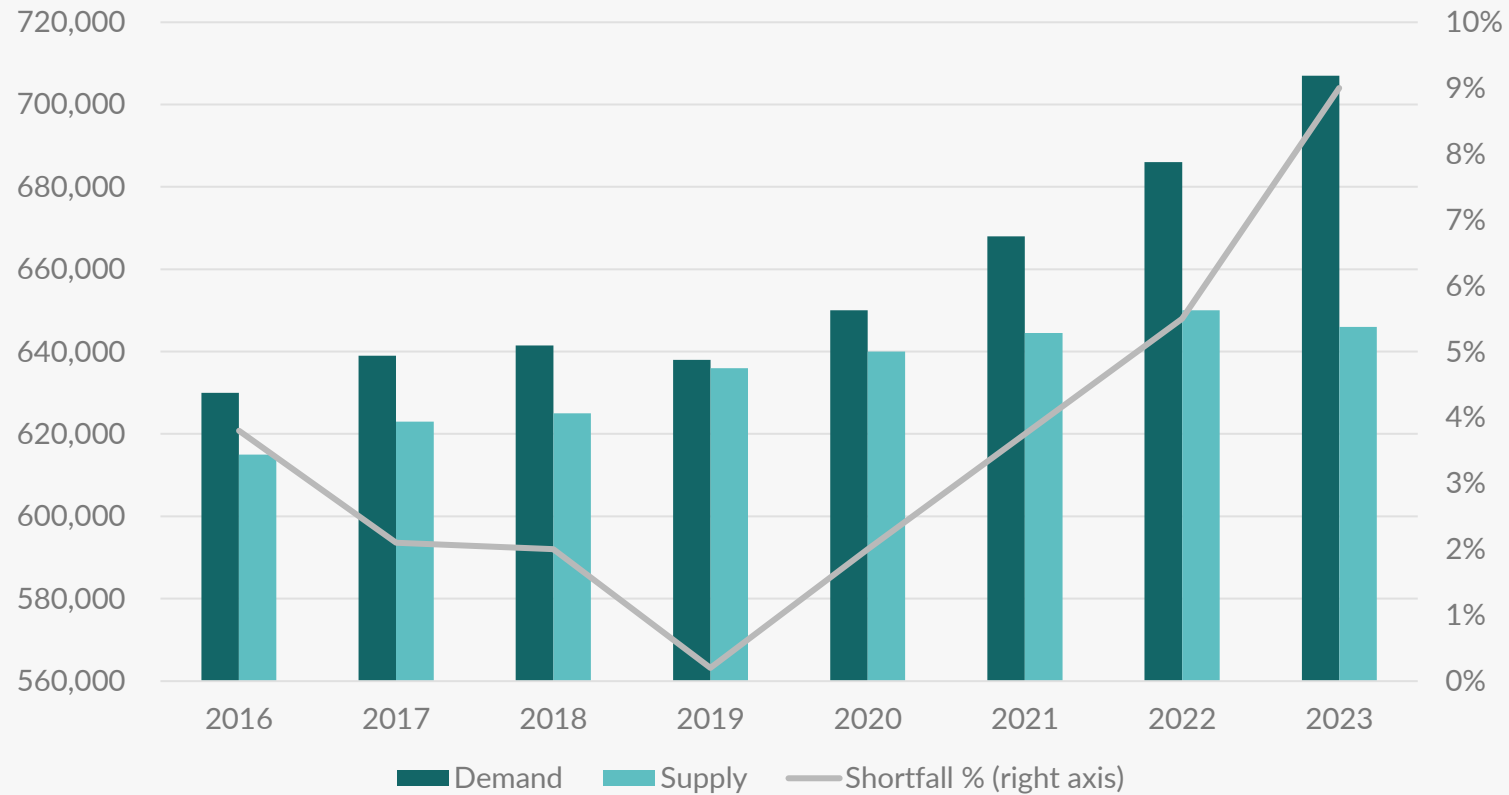
Vessels operated daily



WHY SMART SHIPPING?

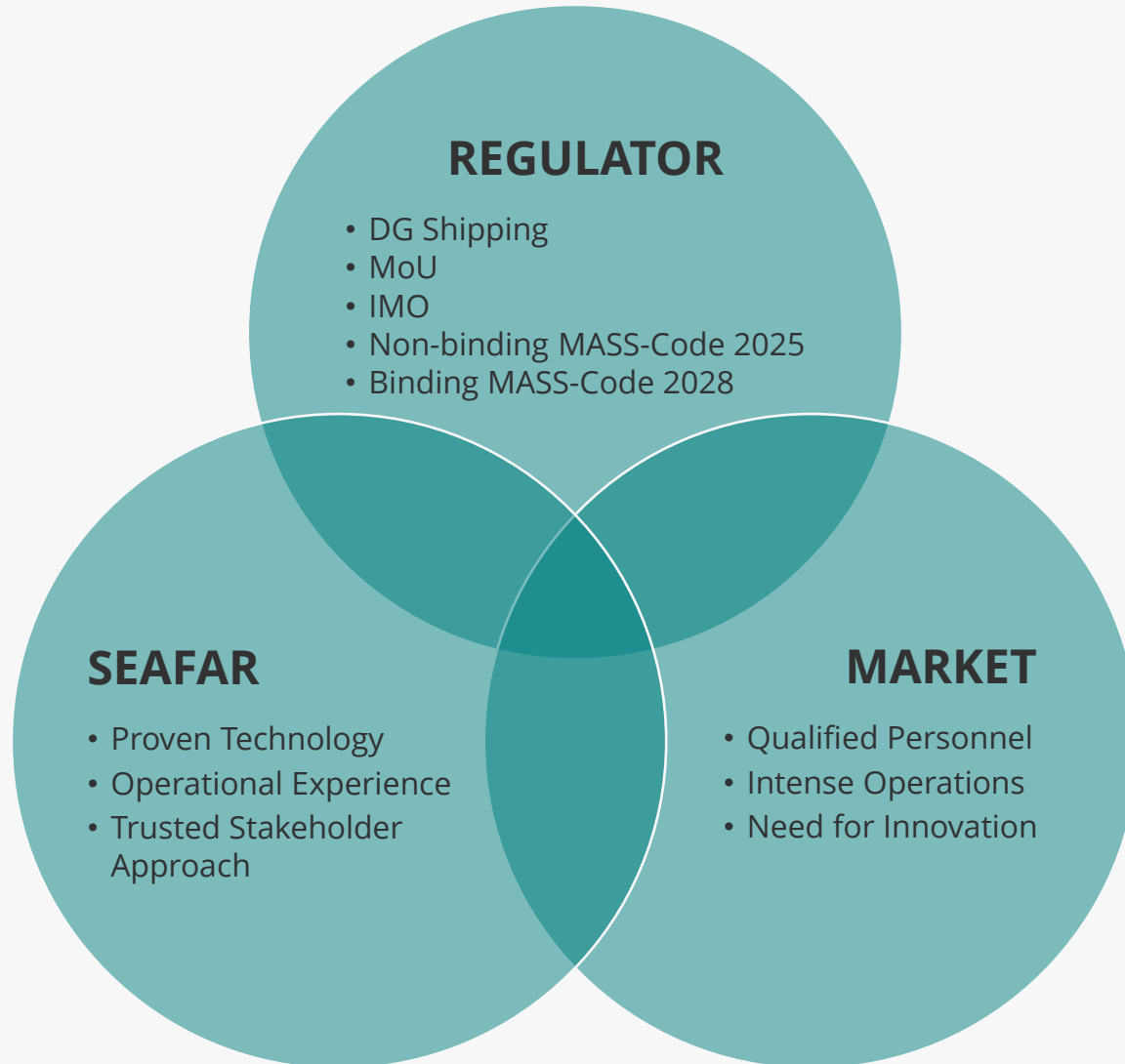
Changing socio-economic environment requires action

“In 2023 officer availability has widened to a deficit equating to about 9% of the global pool”



Cooperations toward valuable business case

Leveraging SEAFAR's inland experience



First steps into Short Sea

Stepwise and joint approach

- Phase 1: Fully crewed Bridge – SEAFAR Monitors
 - Evaluate System & Network Reliability
 - Ensure Compatibility with Regulations
- Phase 2: Phase 2: Fully crewed bridge – SEAFAR navigates
 - Validate Remote Capabilities
- Phase 3: Towards crew reductions & task redistribution – SEAFAR navigates from ROC.
 - In cooperation with all stakeholders
 - Input based on operational experience

