

Baltic Sea e-nav Shared Waters same Standards

26th NSHC Tidal Working Group meeting
6 February 2024 Göteborg, Sweden

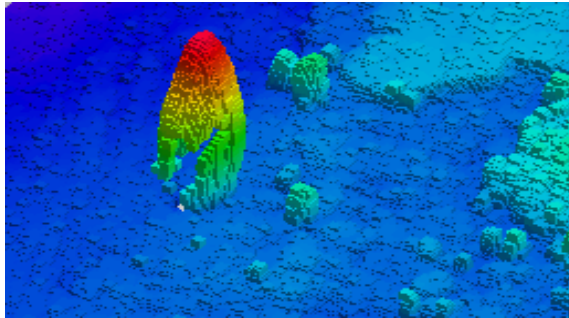
Thomas Hammarklint

SMA S-100 Strategy

Identified Four Major Benefits with S-100 – All for Reduced Environmental Impact from Shipping

SAFETY

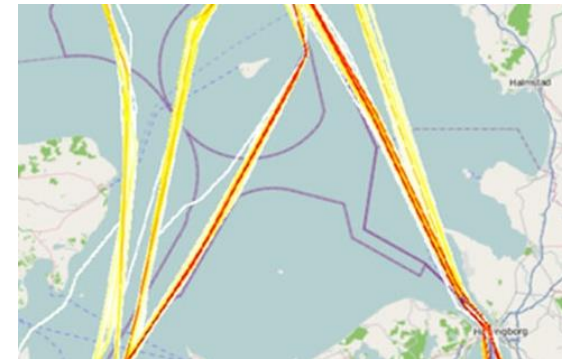
High resolution bathymetry in combination other datasets.



Improved Safety

EFFICIENCY

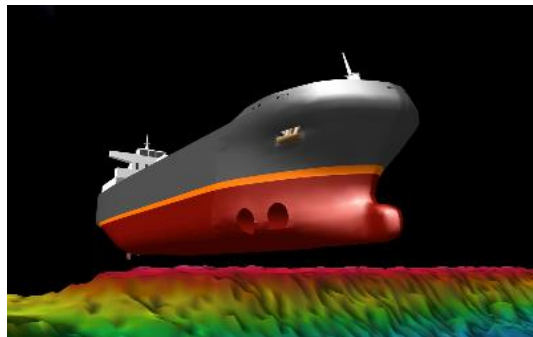
Decreased fuel consumption. Avoid squat, use tide, currents and weather information



Route Optimization and Just in Time

CAPACITY

Under Keel Clearance Management with S-100 and future improved vertical positioning with GNSS



Optimized Loading

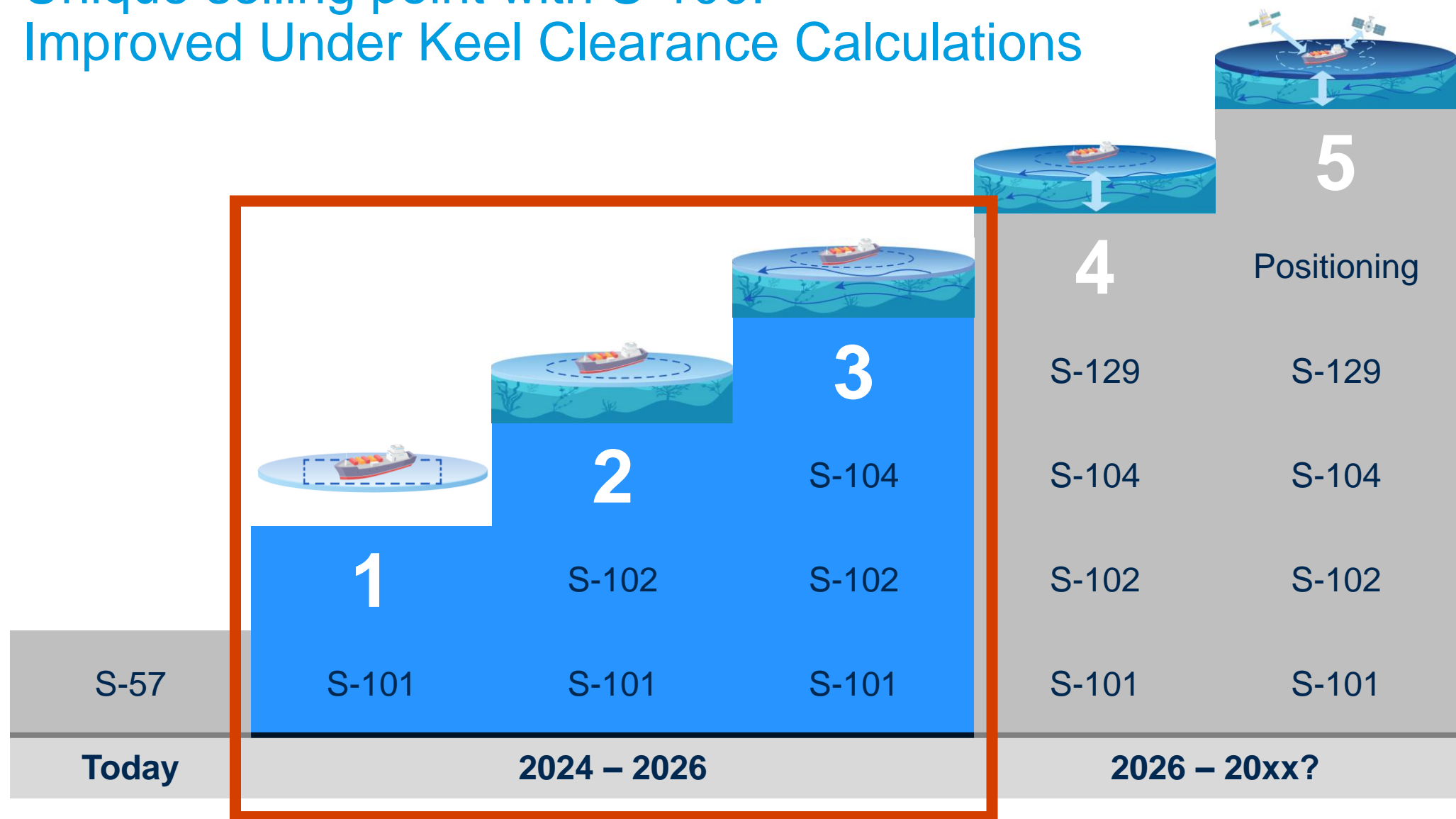
AUTONOMY

Machine readable nautical information can facilitate all four levels of MASS – Maritime Autonomous Surface Ships as defined by IMO



Automated Navigation

Unique selling point with S-100: Improved Under Keel Clearance Calculations



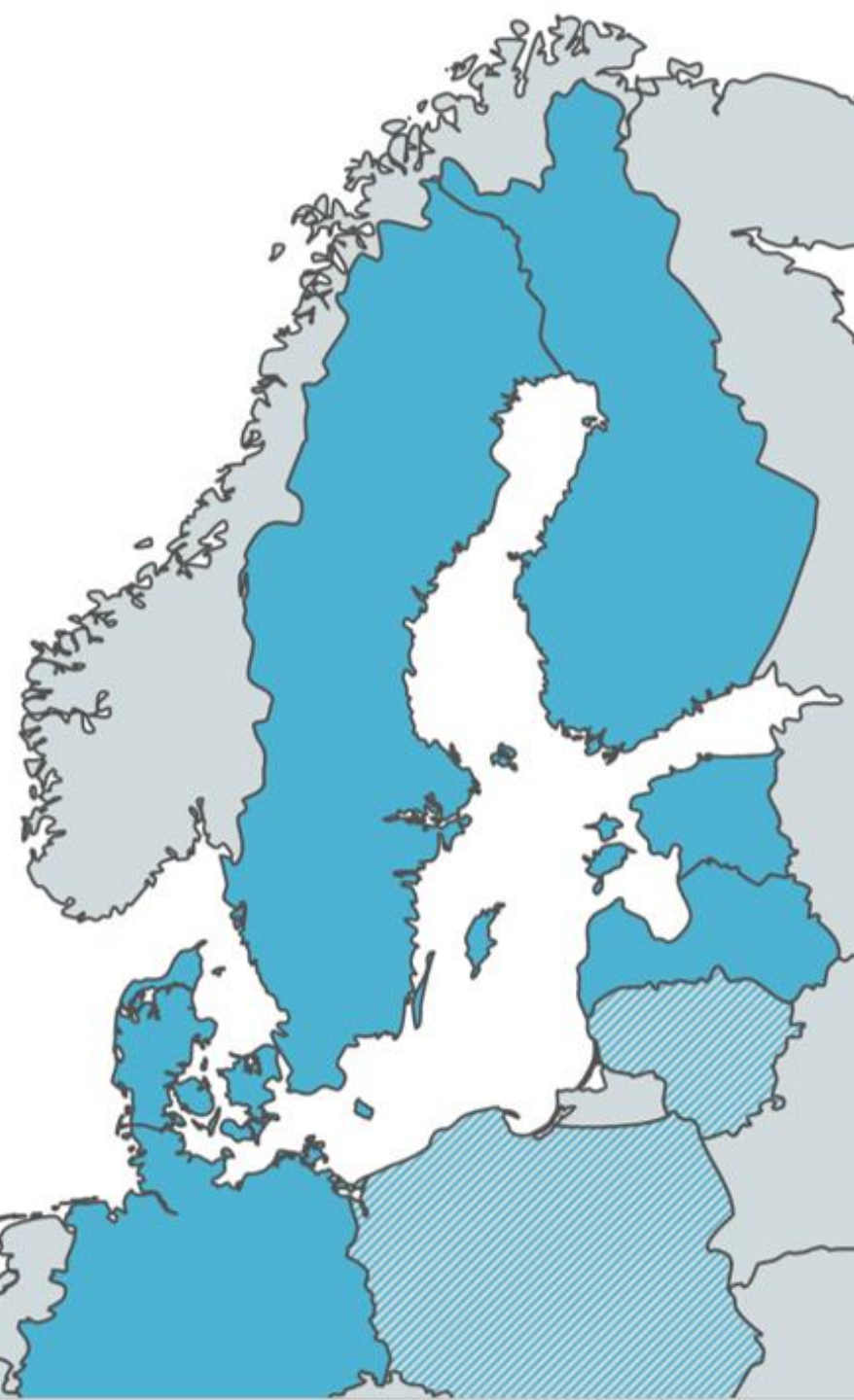


Baltic Sea e-Nav – Scope

November 2023 – October 2026

- Deadline for the application 14 March 2023
- Approval June 2023

Goal	Period
Develop production capabilities for S-101 ENC, S-102 bathymetry and to some extent S-104 water level	2023-2025
Establish harmonization rules for S-10x-products, under the BSHC umbrella	2024-2026
Test, evaluate and refine the S-10x products	2025
Commercial rollout for S-101 and S-102 in the Baltic Sea. S-104 in parts of FI.	2026



Baltic Sea e-Nav – Partnership

Hydrographic offices:

SE (coordinator), DE, FI, DK, EE, LV (Associated: LT, PL)

Academia:

RiSE (SE), SAMK (FI)

Private sector:

ECDIS OEM – Furuno

Meteorological agency:

Finnish Meteorological Institute

RENCs:

(Associated: PRIMAR, IC-ENC)

Baltic Sea e-Nav – Financing

- Programme Interreg Baltic Sea Region
- Postponed with one year after rejection of the project the first attempt (September 2022)
- Financing approved (June 2023)
- Approximately 5 MEuro

Interreg
Baltic Sea Region



Co-funded by
the European Union

SINCERE – Innovation regarding UKCM

Application to Horizon Europe submitted – await approval

Goal	Period
Mainstream the use of dynamic Under Keel Clearance Management (UKCM) systems through the open release of a reference implementation to be used by companies that develop maritime information display systems.	2024- Q3/2025
SMA: SE participation in S-129PT to prepare the S-129 standard also for <i>ship based services</i> (Göteborg).	2024- 2026
SMA: Provide test data in Göteborg (S-101, S-102, S-104), together with PRIMAR.	2024- 2025
SMA: Establish cooperation with SMHI (SE Met- and Oceanographic Adm.) and SHOM	2024- 2025

S-129:
Under Keel
Clearance
Management

Partners: RiSE (coordinator – SE), SMA (SE), SHOM (FR), SMHI (SE), Kongsberg (NO), PRIMAR/ECC (NO), and others