



10th Meeting of the ROPME Sea Area Hydrographic Commission

National Report by France (Shom)

[RSAHC Associate Member]

RSAHC10, 26 – 28 November 2024



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TOP ACHIEVEMENT DURING THE YEAR

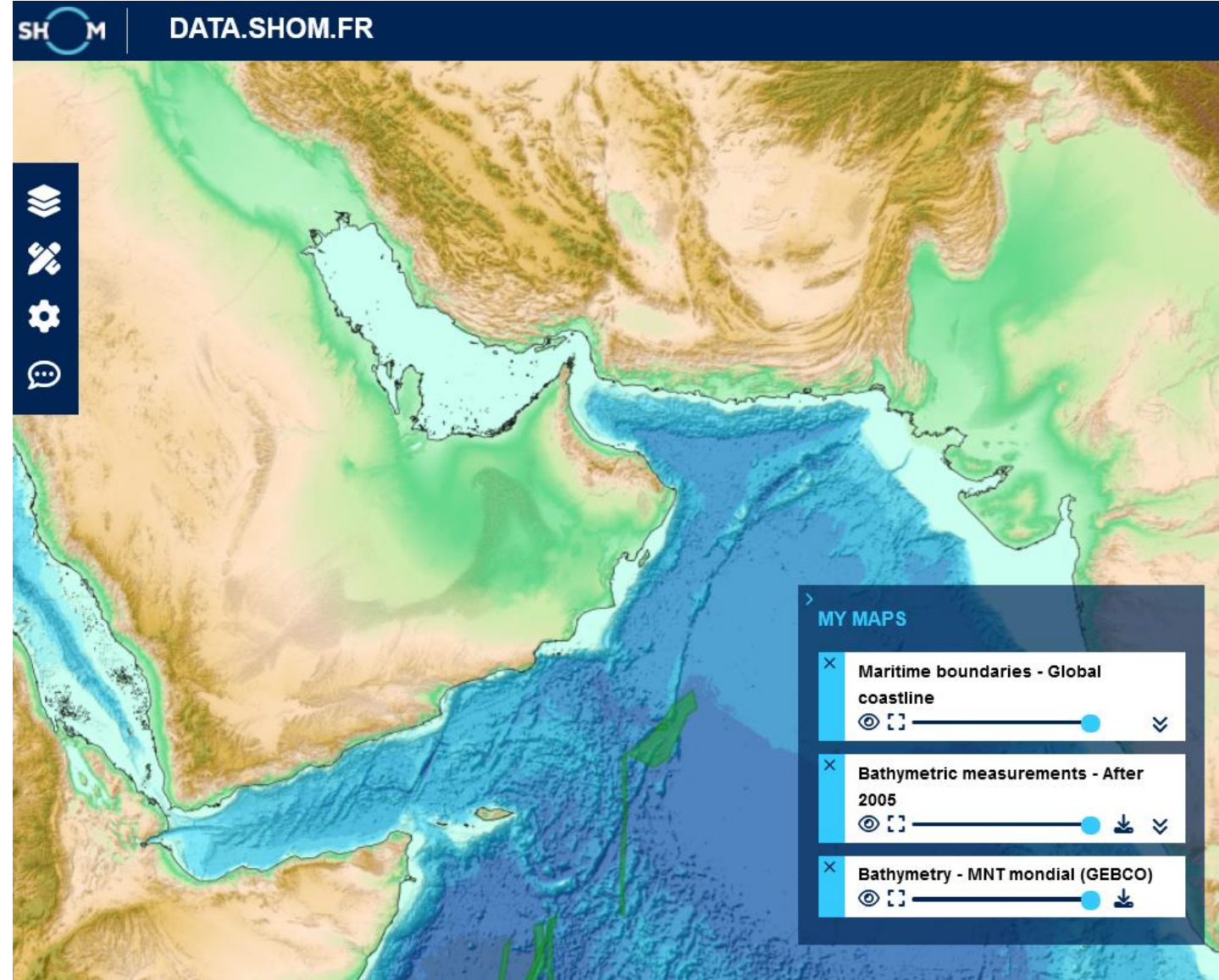
International
Hydrographic
Organization

MSDI

• data.shom.fr

Latest evolutions:

- Updated layers
 - GEBCO worldwide bathymetric DTM and global coastline
 - Bathymetric measurements
 - Maritime areas – chart 8510CX





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TOP CHALLENGES AND /OR OBSTRUCTIONS

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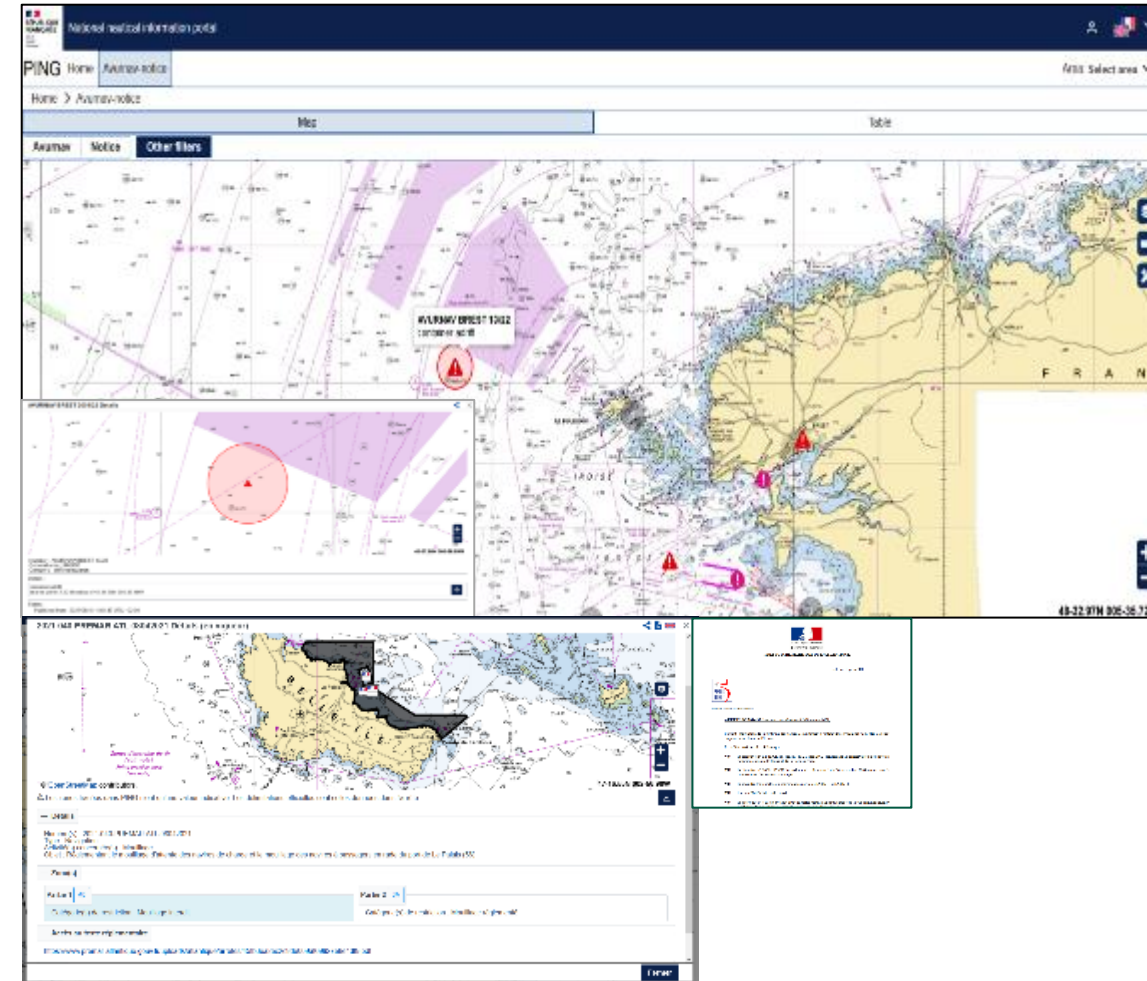
S-124 – French national nautical information platform PING

Shared information system for the transmission, formatting, digitization and posting of nautical information on the Internet

This platform is structured around 3 modules:

- ❖ production and diffusion of navigational warnings,
- ❖ transmission of source information by maritime services and users in order to contribute to nautical information,
- ❖ production and diffusion of maritime regulations in a spatialized form.

Production and dissemination of navigational warnings in compliance with S-124 (as soon as the specification standard is operational) with compatibility with the current NAVTEX and EGC systems





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Transformation of the hydro-oceanographic capacities

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- **Sketch up of the expected capacities**

- **Ship Dimensions (range)**

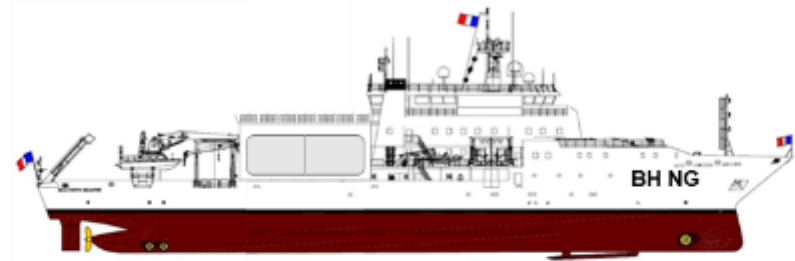
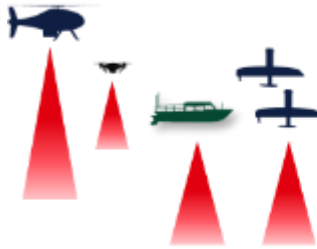
- Length: 90 metres
- Gross tonnage: 3,000 tonnes
- Average operating speed: 10 knots
- Maximum crew : 80 (29 for specialists)

- **Full hydroacoustic suite**

- MBES (shallow, medium, large class), SBP, SBES, ADCP, ...

- **Scientific facilities**

- Handling equipment
 - Stern and mid-ship 'A' frame
 - Comprehensive winch suite
- Laboratories (humid and air-conditionned)



- **Mobile vehicles**

- 2 medium class USV
- 1 hydrographic survey launch
- 1 large oceanic class USV (not on board)
- Micro AUVs
- 1 AUV 6000
- Gliders
- 1 micro and medium class UAV

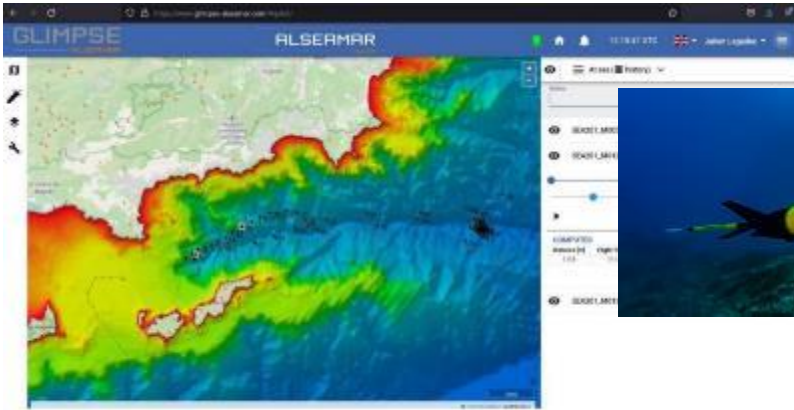


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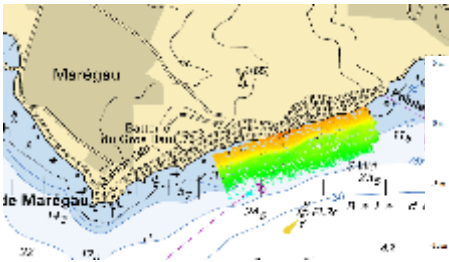
Transformation of the hydro-oceanographic capacities

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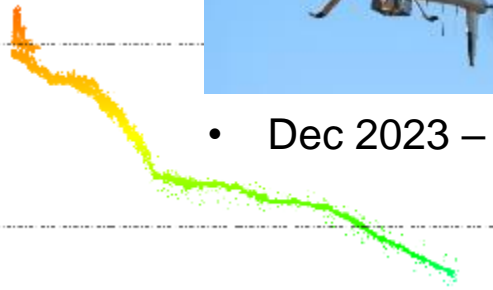
- **Latest experiments & ops**
- August 2023 – 2 gliders Sea Explorer (Alseamar) // July 2024 – 1st operational survey



- October 2023 – 1 USV DriX (eXail)



- Dec 2023 – 1 UAV S100 (Schiebel) / Lidar VQ840G (Riegl)





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Transformation of the hydro-oceanographic capacities is underway!

2024

2025

2026

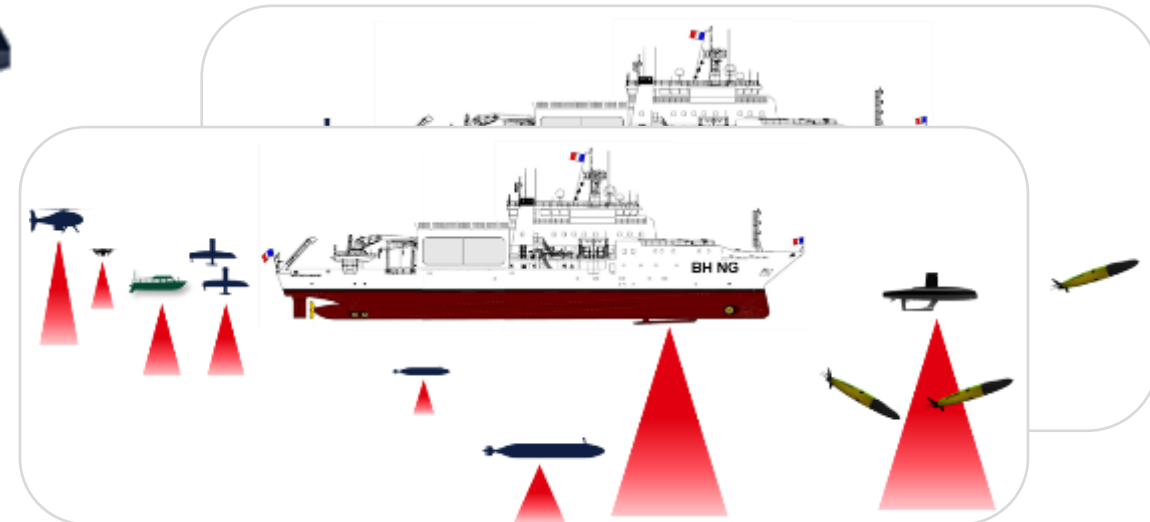
2027

2028

2029

2026 ... 2028

Decommissioning





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TOP CHALLENGES AND /OR OBSTRUCTIONS

First feedback: two-thirds time savings

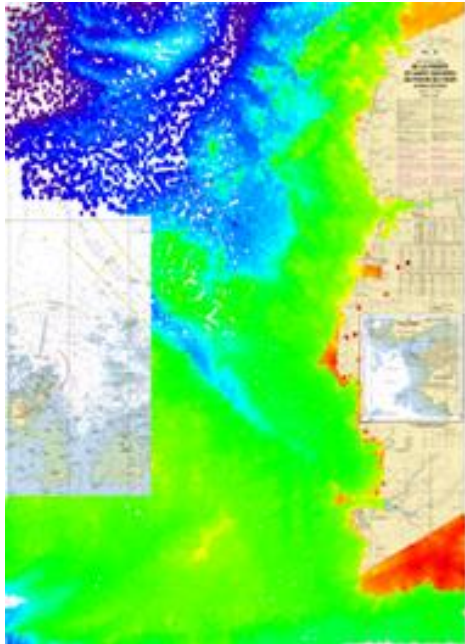


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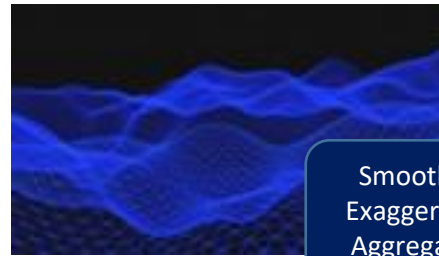
Automatic generalization

Calhypso : a major step forward

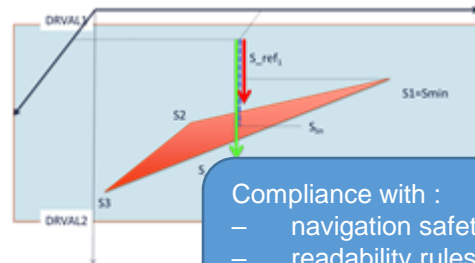
Bathymetric knowledge



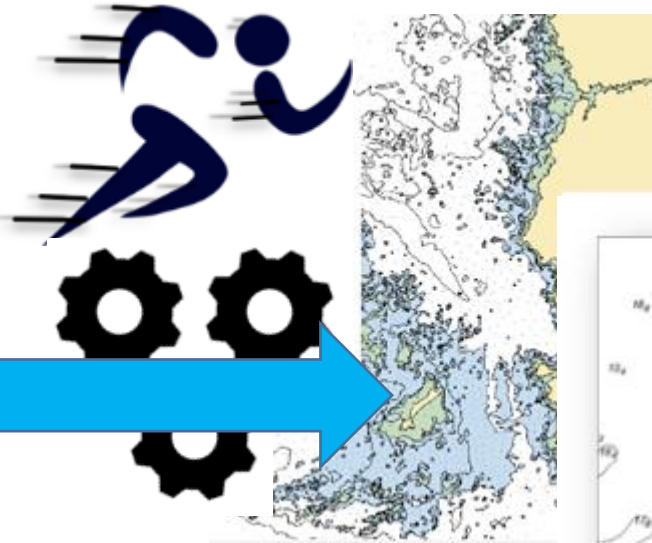
65 500 000 soundings



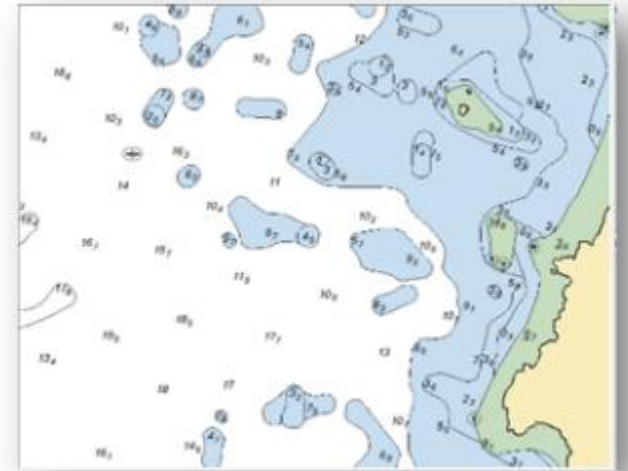
Smoothing
Exaggeration
Aggregation



- Compliance with :
- navigation safety rules
 - readability rules
 - geomorphological relevance rules
 - topological consistency rules



Automated generalized chart



1 417 depth contours
3 033 soundings



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TOP CHALLENGES AND /OR OBSTRUCTIONS

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Unified Cartographic Source (FCU)

A single charting scale per area

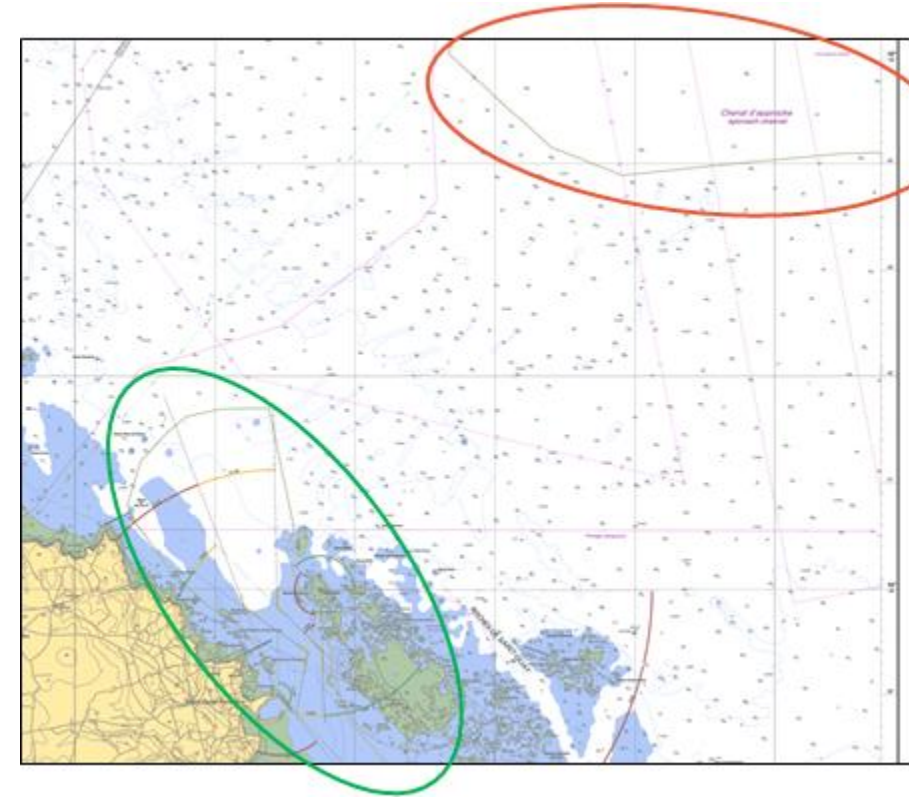
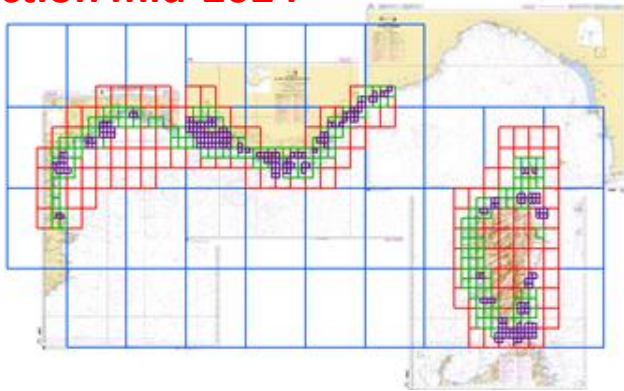
A chart will be a **view/extraction from the FCU**

Limited number of **compilation scales : 6**

Use of a **Unified Cartographic Source** and **Automation**

ENC will be produced in a grid scheme

Start of production mid-2024



Gamme	maximumDisplayScale S-101 (CSLC S-57 – Compilation)	minimumDisplayScale S-101
UB1	1 : 1 500 000	/
UB2	1 : 350 000	1 : 1 500 000
UB3	1 : 90 000	1 : 350 000
UB4	1 : 22 000	1 : 90 000
UB5	1 : 8 000	1 : 22 000
UB6	TBD ^(*)	1 : 8 000



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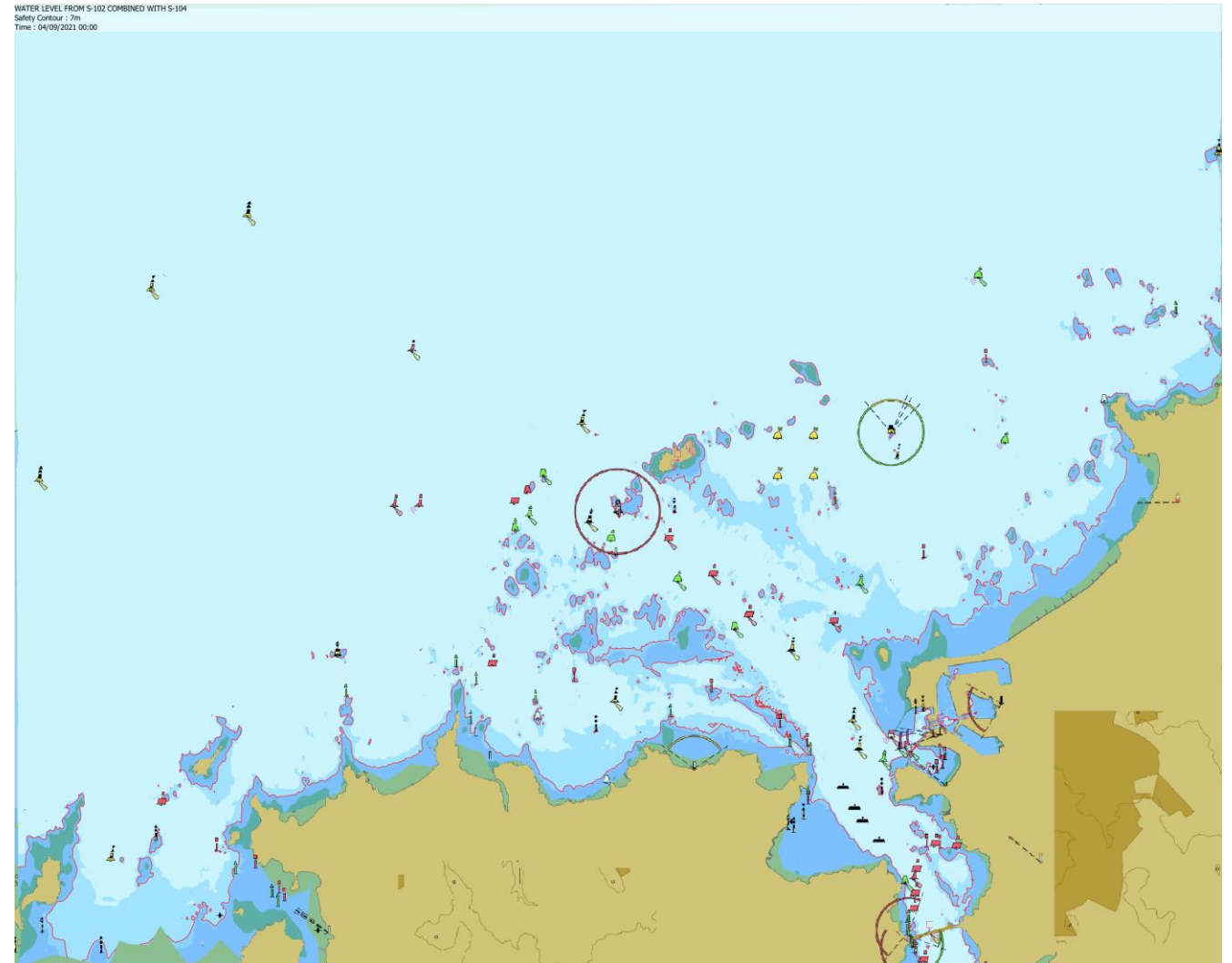
TOP CHALLENGES AND /OR OBSTRUCTIONS

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S-100 strategy

Moving forward the S-100 Phase 1 products

Animated example of an S-102 and an S-104 combined to show users the benefits of the S-100 world





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ACTIONS REQUESTED FROM RSAHC10

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1. To take note of the French national report



Thank you for your attention

RSAHC10, 26 – 28 November 2024