



14th Meeting of the WENDWG

Report of the Hydrographic Commission on Antarctica (HCA)

Agenda Item 05.1Ae

WENDWG14, Norfolk, United States of America, 20 – 22 February 2024



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HYDROGRAPHIC COMMISSION ON ANTARCTICA

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Members

Argentina, Australia, Brazil, Chile, China, Colombia, Ecuador, France, Germany, Greece, India, Italy, Japan, Korea (Rep. of), Netherlands, New Zealand, Norway, Peru, Poland, Russian Federation, South Africa, Spain, Türkiye, United Kingdom, USA, Uruguay, & Venezuela.

Observers

Antarctic Treaty Secretariat ([ATS](#)), Council of Managers of National Antarctic Programmes ([COMNAP](#)), International Association of Antarctic Tour Operators ([IAATO](#)), Scientific Committee on Antarctic Research ([SCAR](#)), International Maritime Organization ([IMO](#)), Intergovernmental Oceanographic Commission ([IOC](#)), General Bathymetric Chart of the Oceans ([GEBCO](#)), International Bathymetric Chart of the Southern Ocean ([IBCSO](#)).

Last Conference

18th HCA, May 2022, Germany

Next Conference

19th HCA, April 2024, Italy

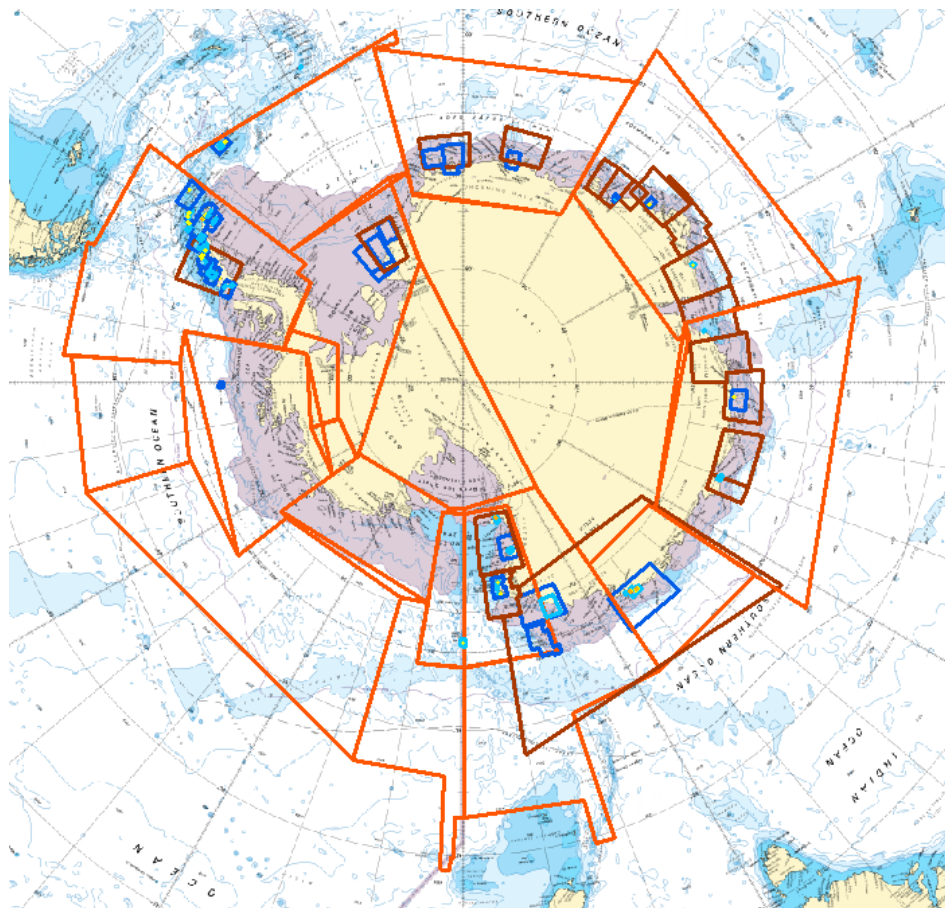
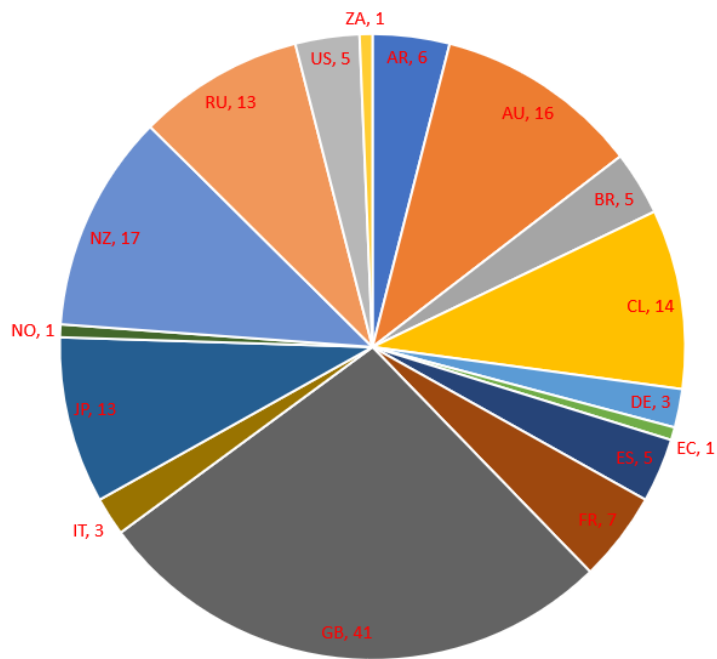


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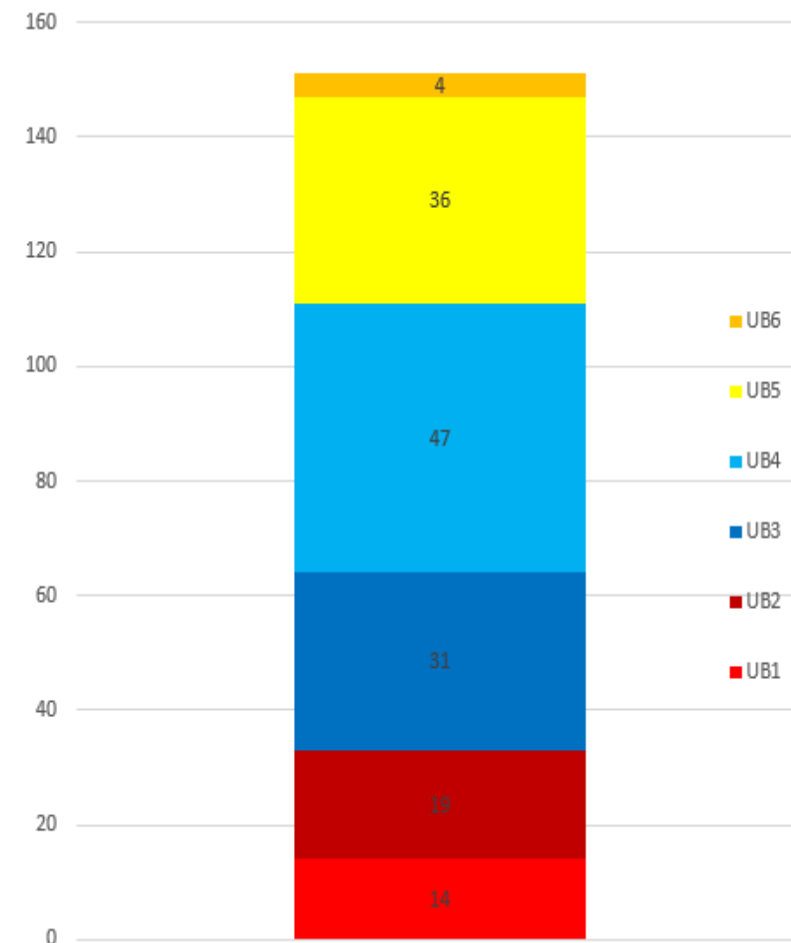
REGION M: STATUS OF ENC COVERAGE

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Region M Producers



151 Region M ENCs



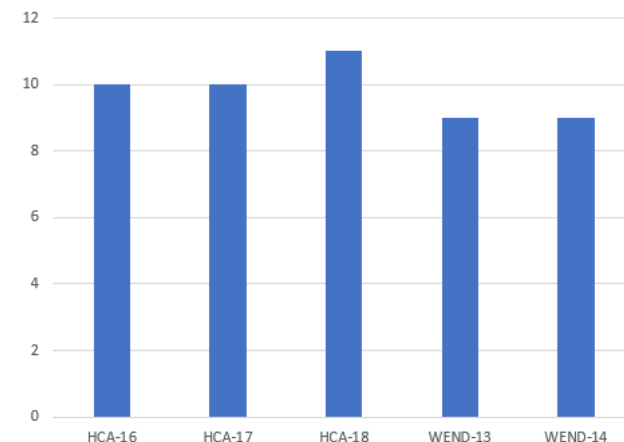
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REGION M: OVERLAP REPORT

HCA Overlaps



Further work is required to reduce resolve overlap – HCA24 (April)

ID	STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	ENC 1 Scale	ENC 2 Scale	ENC 1 Edn	ENC 2 Edn	Overlap extent (Kmxkm) (m/square NM)	Impact Assessment	Justification	Region M Coordinator Comment
749	LIVE	IC-ENC	HCA	GB203572	RU2A1AD0	2	350000	700000	2	1	169Km X 243Km	LOW		Resolved since HCA 17 GB cell with later dates takes priority due to comp scale RU cell withdrawn from AVCS due to content and positional issues
625	LIVE	IC-ENC	HCA	CL4MA956	GB403207	4	45000	22000	1	7	15Km x 7.5Km, 4Km x 4Km	LOW	Area of little SOLAS traffic, covered by UNSARE on both cells. Minor differences between content.	Resolved since HCA 16 GB clipped for overlapping data in channel. Adjusted comp scale in area of charted data to give preference over unsurveyed area
626	LIVE	IC-ENC	HCA	CL4MA957	GB403207	4	45000	22000	1	7	17Km x 7.5Km	LOW	Overlap only covers LNDARE and UNSARE, with very little SOLAS traffic expected within the area.	Resolved since HCA 16 by amendment to comp scale to resolve overlap item 626
930	LIVE	IC-ENC - PRIMAR	HCA	NZ11490E	FR275910	1	1500000	1500000	1	1	457Km x 688Km	LOW		New at HCA 18 Based on same scale overlapping INT charts FR NZ to resolve based on underlying data - Reminder email Feb 24
127	LIVE	IC-ENC	SWPHC/HCA	RU1B0PF0	AU160090	1	3000000	3500000	1	4	560Km x 1700Km 273008 sq. NM	LOW	Overlap is located in the Antarctica, it charts very deep waters. Little traffic as expected.	Reported at HCA 16 - unlikely to be resolved
128	LIVE	IC-ENC	SWPHC/HCA	RU1B0PF0	AU160120	1	3000000	3500000	1	7	560Km x 195Km 31605 sq. NM	LOW	Overlap is located in the Antarctica, it charts very deep waters. Little traffic as expected.	Reported at HCA 16 - unlikely to be resolved
30	LIVE	IC-ENC - NON RENC	HCA	RU2BNM40	JP20ODD0	2	700000	700000	1	3	111Km x 113 Km		IC-ENC does not have access NON RENC ENC to conduct assessment	Reported at HCA 16 - unlikely to be resolved
415	POTENTIAL	IC-ENC	HCA	CL4MA960	GB400445	4	45000	22000	1	6	5.1KM x 12.6KM	MEDIUM	General depiction of bathymetry similar between cells, CL cell has a higher area of UNSARE then on the GB cell and UWTROCs not shown.	New at HCA 18 CL4MA960 represents INT9104 GB400445 represents INT9118 Discussed at 2022 technical meeting - clipping to be agreed prior to release based on HCA principles based on data age and quality
414	POTENTIAL	IC-ENC	HCA	CL5MA980	GB57211A	5	22000	12000	1	5	3.7KM X 5.4KM	MEDIUM		New at HCA 18 CL ENC is not equivalent to INT chart. This is a national product Discussed at 2022 technical meeting, CL cell will not be released. Region M coordinator considers this closed

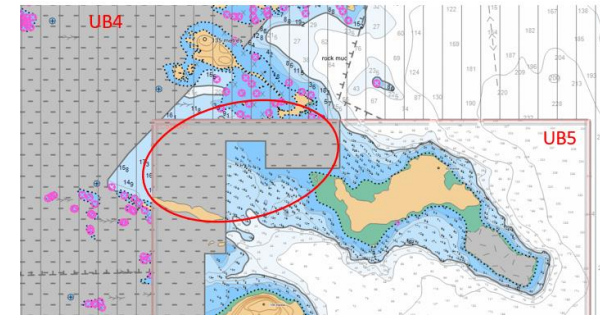
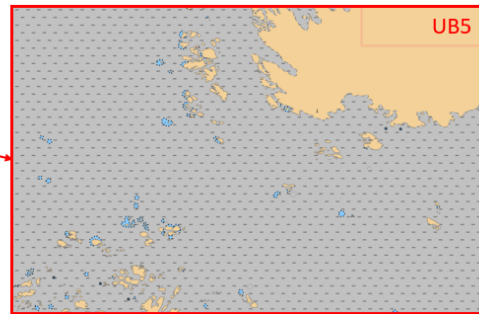
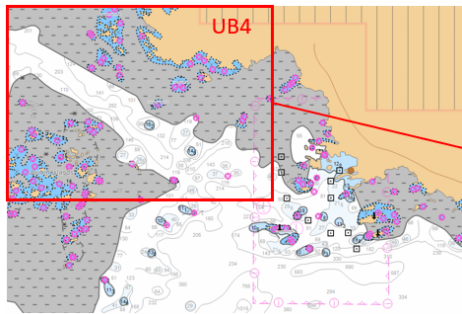


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REGION M: ENC SCHEME CHALLENGES

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- **Maintaining consistency** through UBs of products based on various national schemes and understanding impact on useability.



- **Coverage gaps** need to be addressed. Scheme design is based independent national schemes that may no longer meet international requirements



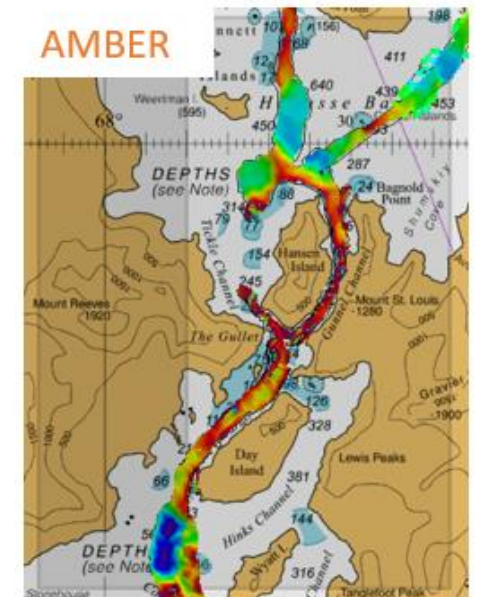
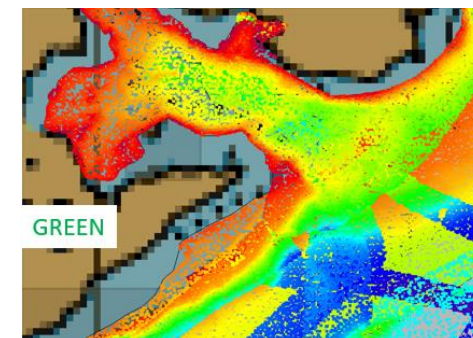
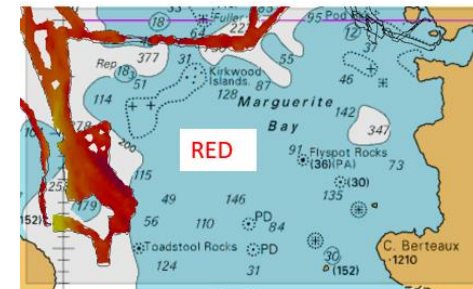
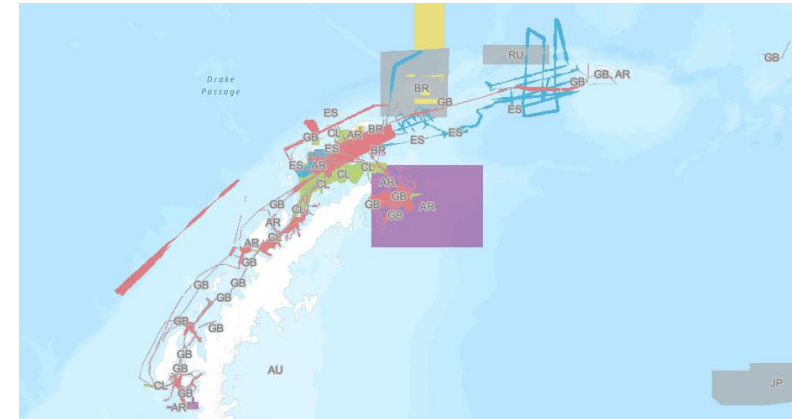


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REGION M: ENC SCHEME CHALLENGES

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- **Data Discovery** may delay production of new coverage. HCA GIS is incomplete.
- **Production responsibility is unevenly distributed** which may impact on the delivery of new products and maintaining currency of existing products.
- Based on INT chart coverage, the production of 20 ENC's are outstanding. Initial 'RAG' analysis indicates that over 50% have data to support production. Further details will be provided at HCA19 in April.



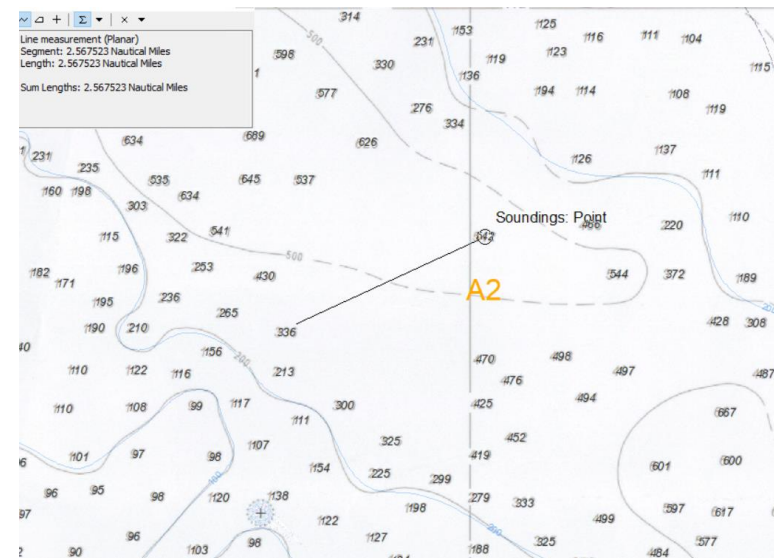
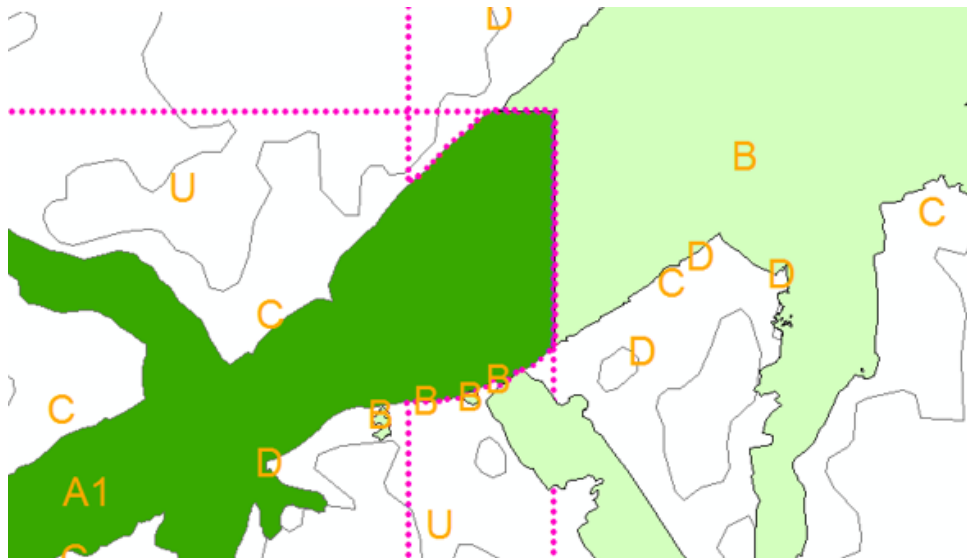


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REGION M: ENC SCHEME CHALLENGES

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- **Antarctic CATZoCs** could potentially negatively affect navigational decision making. Challenges include:
 - Reducing the use of ZoC 'U'
 - Assigning ZoC to legacy survey data
 - Inconsistent & incorrect application of ZoC to surveys



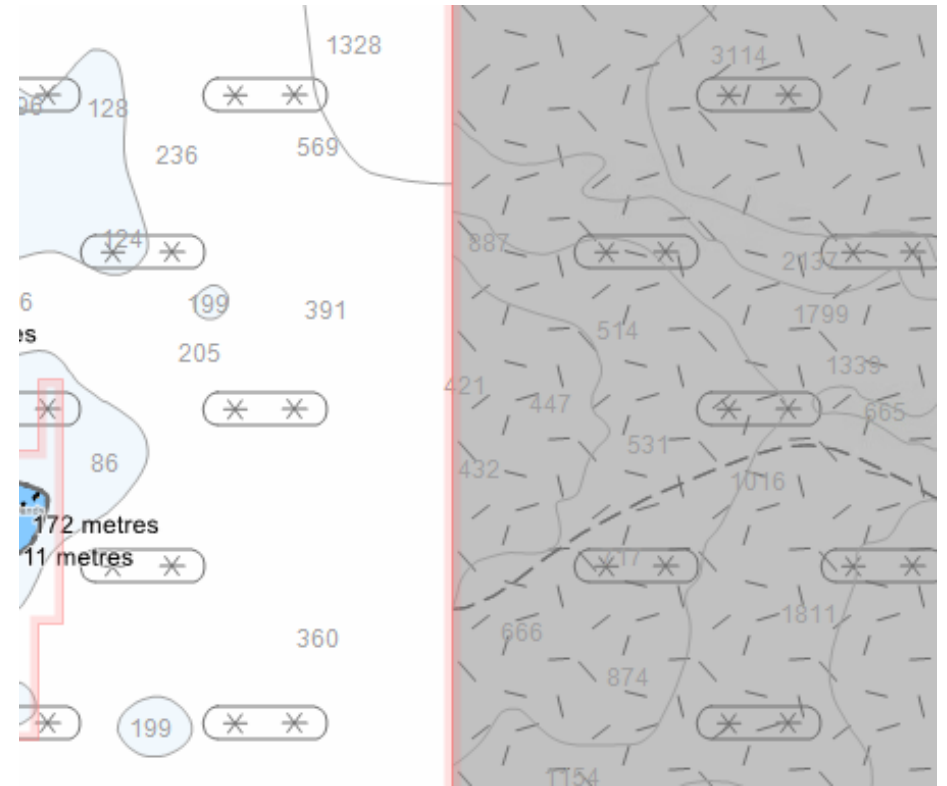
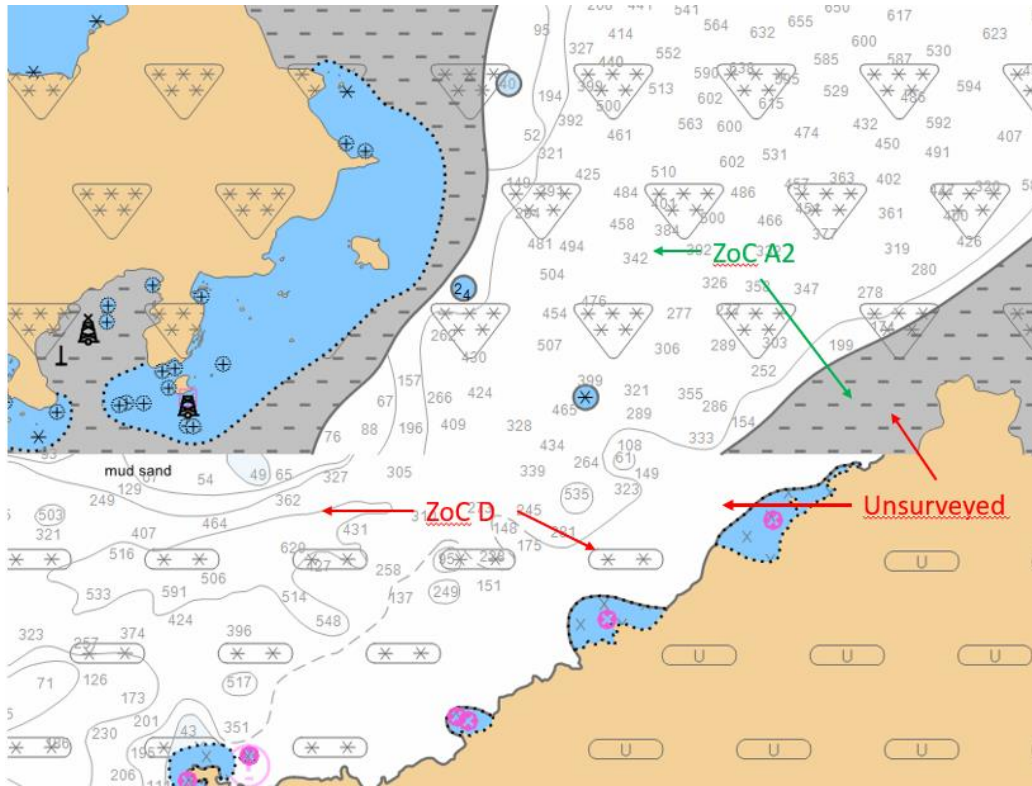


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- The encoding of features/areas can vary by producer and impact on product usability. E.g. Ice & unsurveyed areas





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- Due to the age and quality of underlying data **positional accuracy issues** may exist on some Region M ENCs.



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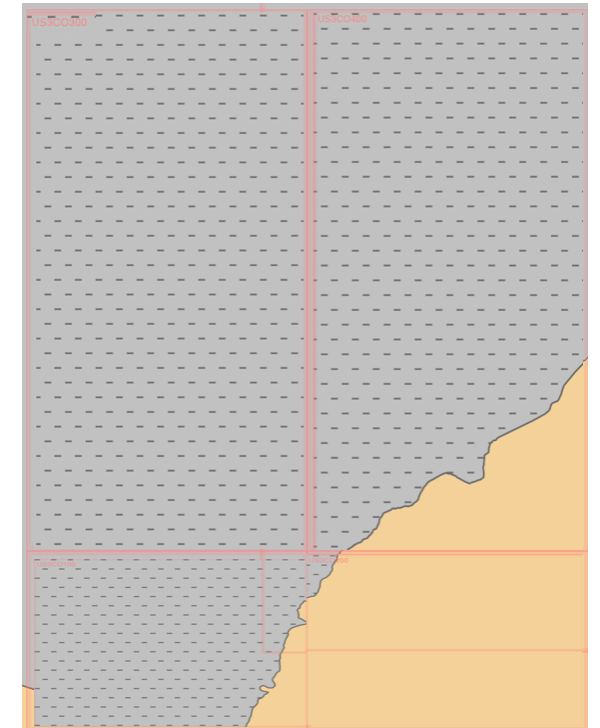
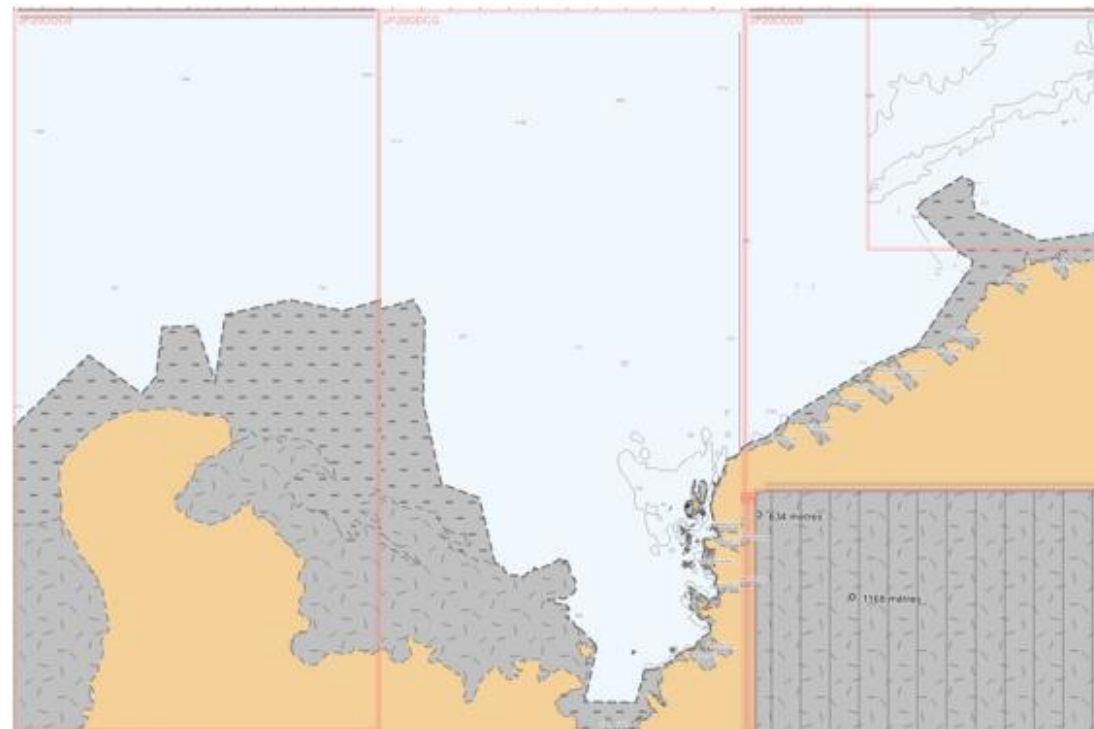
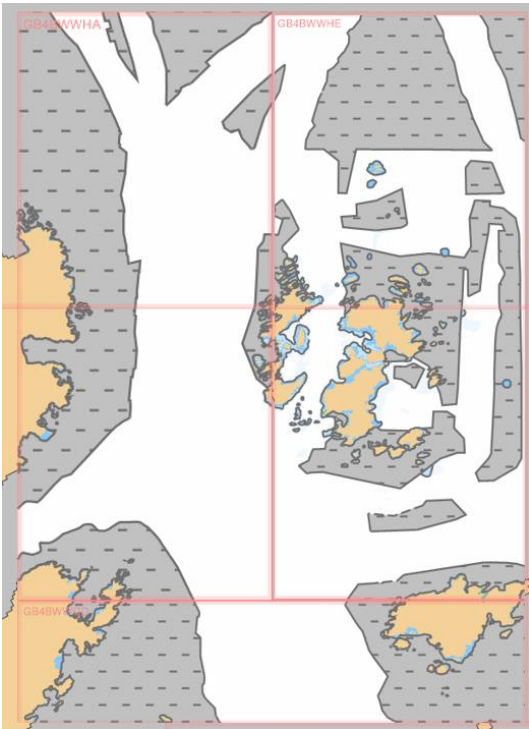


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REGION M: GRIDDED ENCS

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- Some producers intend to grid ENC in Region M
- GB, JP & US gridded cells have been published



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REGION M S10X READINESS QUESTIONNAIRE

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27 Member States were asked to complete a short questionnaire on S10X implementation for region M

8 Responses received equal to 50% representation of region M producer nations

Majority of MS intend to produce S10x services in region M in parallel with other regions

MS continue to focus on the delivery of IHO priority S10x services

50% of respondents' intent to produce gridded ENC's

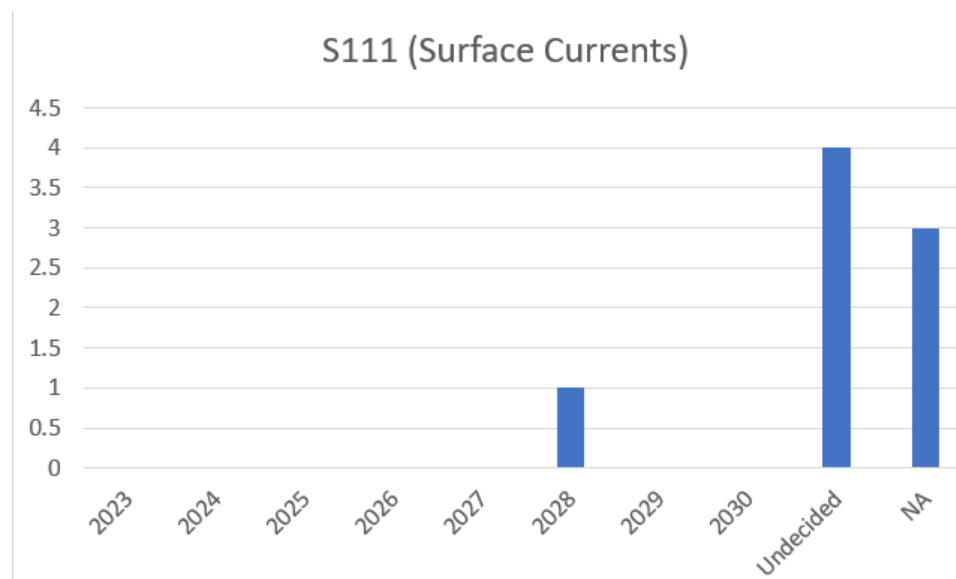
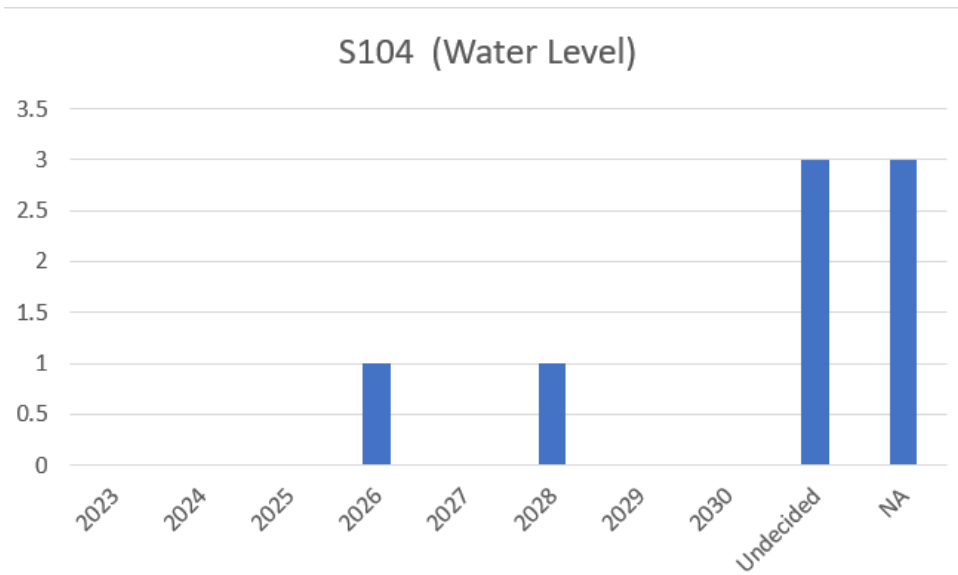
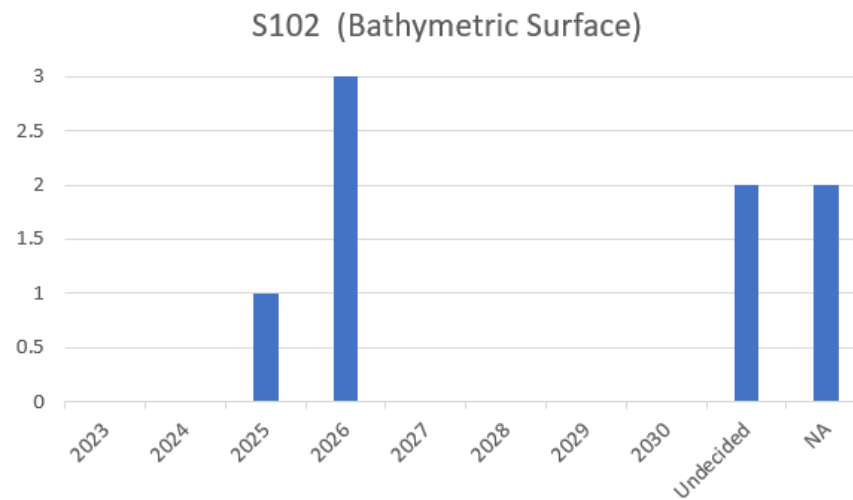
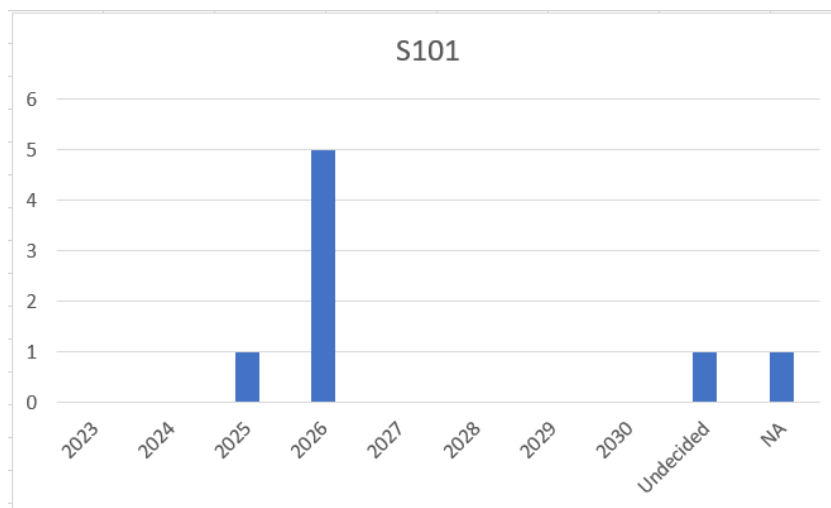
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REGION M S10X IMPLEMENTATION DATES

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REGION M S10X COORDINATION

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Following up on Action WENDWG12/33 (IGIF pathway matrix per S-1xx product, per RHC), HCA agreed on some guiding initial principles and leaders to fill the HCA S-100- IGIF Matrix:

- **S-101: GB** (as Region M Charting Coordinator, continuity by S-57 conversion)
- **S-102: GE** (in liaison with AWI, as Seabed 2030 Data Centre/IBCSO)
- **S-104: US** (in its global capacity in ocean modelling)
- **S-111: US/FR** (in its global capacity in ocean modelling)
- **S-122: EC/GE** (making benefits of experience gained in Ecuador and BSHC)
- **S-124: AR, AU, CL, ZA, NZ** (as NAV Coordinators)
- **S-128: NO/GB** (as Operators of PRIMAR/IC-ENC)
- **S-411** – Ice information: AR/CL/GE

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ACTIONS TO BE CONSIDERED BY THE WENDWG14

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WENDWG invited to note the report from HCA

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