

# 24<sup>th</sup> Conference of the Meso American - Caribbean Sea Hydrographic Commission

MACHC International Charting Coordination (MICC)  
Report 2023

MICC CHAIR  
Bernice Mahabier



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# Presentation Agenda

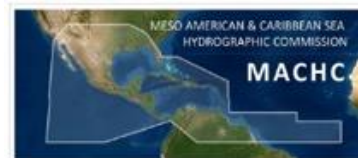
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- ENC Progress
- INT chart progress
- Update on the establishment of S100 coordinator
- Report on the submission of S101 schemes of Member states
- Report on WENDWG CL 01/2023 Report on the Readiness Status of RHCs for the provision of S-1xx datasets by 2026 per Charting Region
- S100 testbed update
- MICC ENC viewer
- MICC Chair /Vice Chair/ INT Chart coordinator
- MICC workplan 2024

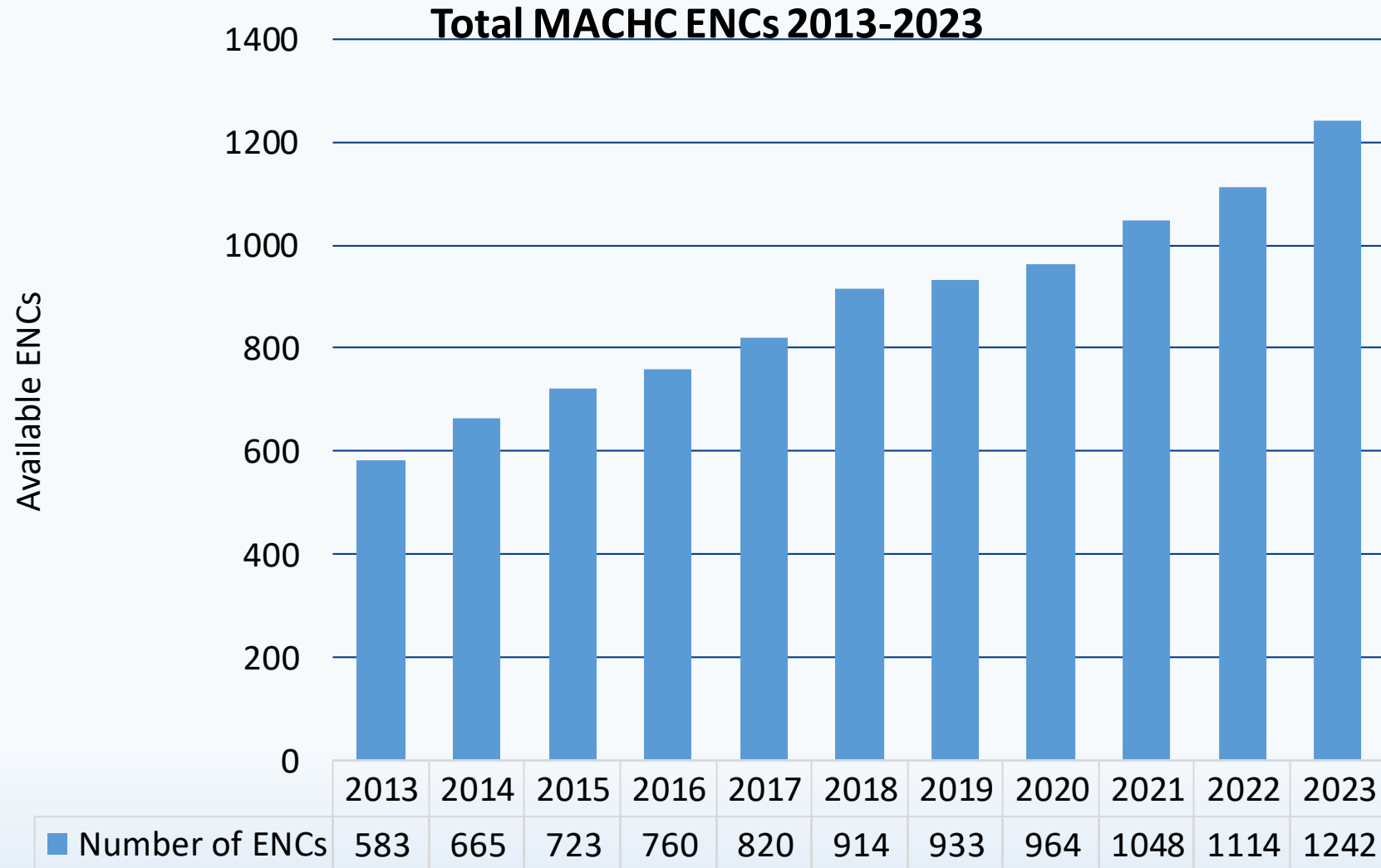


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# MACHC ENC's Available



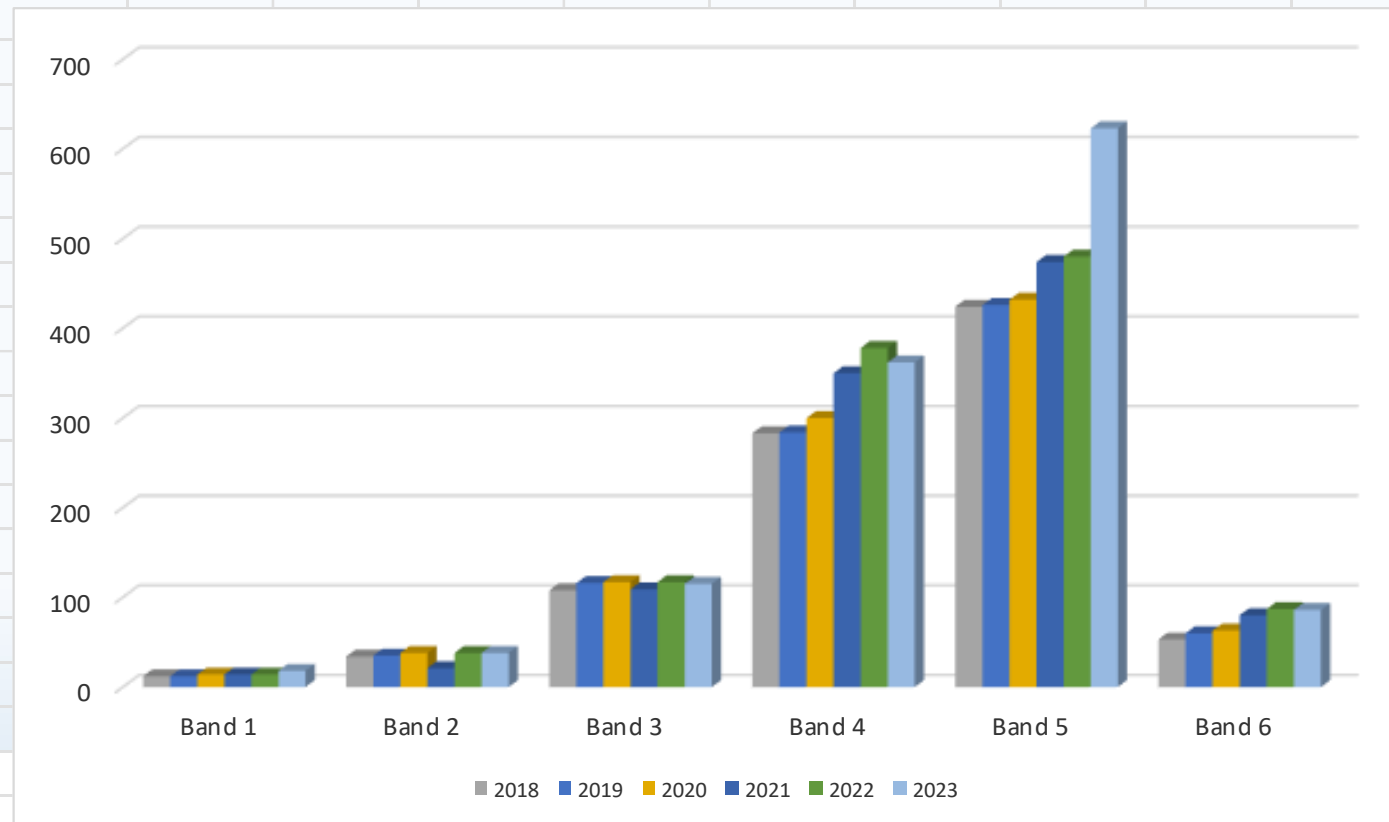
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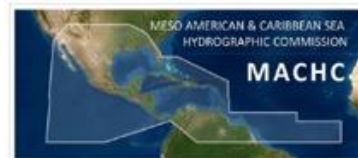
# MACHC ENCs Available

	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6
2018	12	34	108	283	424	53
2019	12	35	116	284	426	60
2020	14	38	117	300	432	63
2021	14	21	109	350	474	80
2022	14	38	117	378	480	87
2023	18	38	115	362	623	86



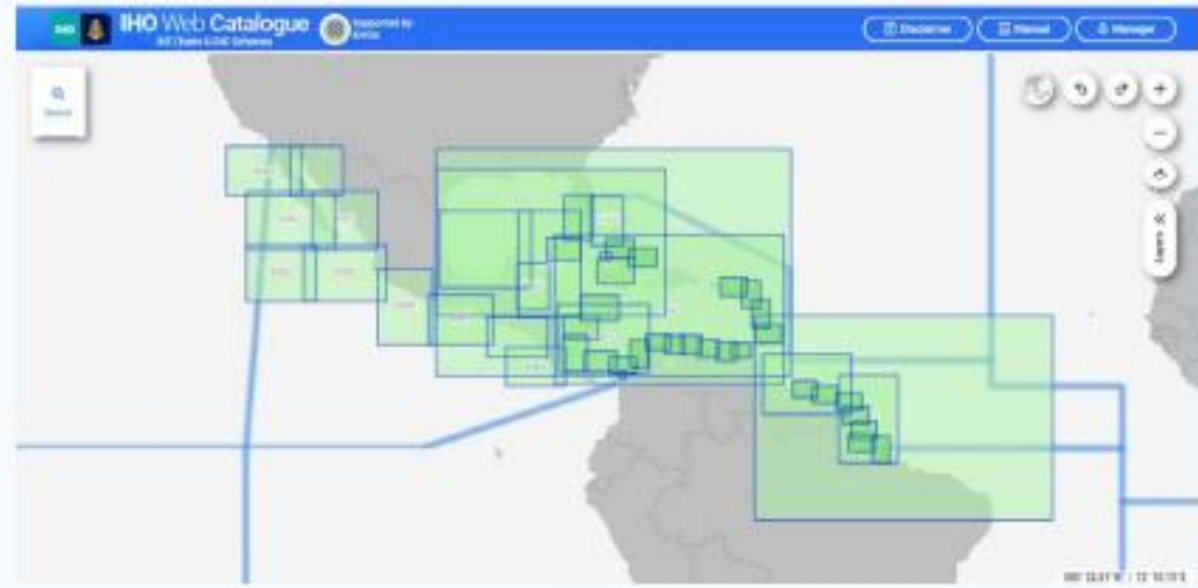
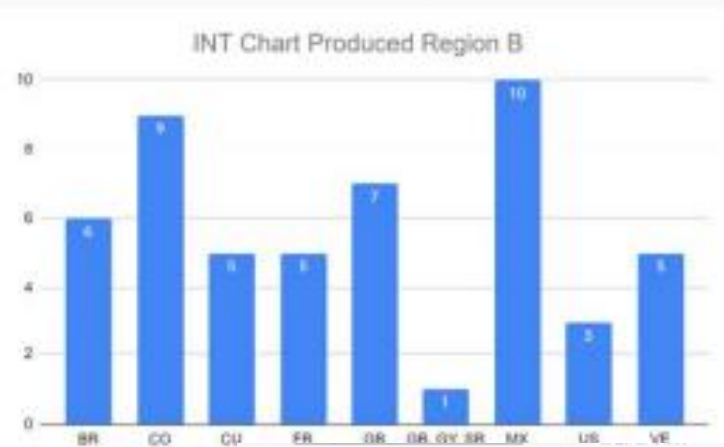
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# INT Charts update

- No pending submissions
- No updates on current coverage.



INT Chart Schemed Region B

Total 51 INT Charts Produced  
Total 33 INT Charts Schemed

# S100 coordinator role

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## MACHC23 Decisions

23.9.4.1	MACHC should coordinate S-101, S-102, S-104, S-111, S-124, S-128 and MSDI in the MACHC Region to reflect the WEND-100 IGIF Matrix.
23.9.4.2	MACHC should have at least one S-100 Coordinator.
23.9.4.3	MACHC S-100 Coordinator role(s) should be consistent across the Regional Hydrographic Commissions.
23.9.4.4	Approved the joint Coordination of S-57/S-101 under the responsibility of the MICC Chair, taking into account the tight schedule of the “dual-fuel” transition period.

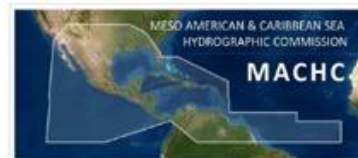
In MACHC MICC CL 03 MS are requested to review the TOR and ROP on the Role of the S100 coordinator distributed, only response from the Netherlands

To accelerate the S100 products development MS are requested to submit candidates for the S100 working group and candidates for the role of S100 coordinator.



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# MACHC Regional ENC Scheme

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## MACHC23 decisions

23.9.2.1	Approved the MRES for Usage Band 1 (UB1)
23.9.4.4	Approved the joint Coordination of S-57/S-101 under the responsibility of the MICC Chair, taking into account the tight schedule of the “dual-fuel” transition period.

## MICC CL 04/2023

Request for Member states update on planned S-101 chart schemes, usage bands 2 – 4

MICC Letter 05/2023 Request to Primary Charting Authorities (PCA)

References: IRCC15 7 Recommendation 10

Report by MICC sub working group M.R.E.S. Chaired by Mexico.

United States :Julio Castillo (US)

Columbia :Olga Bonfante (CO)

UKHO: Nick Rodwell

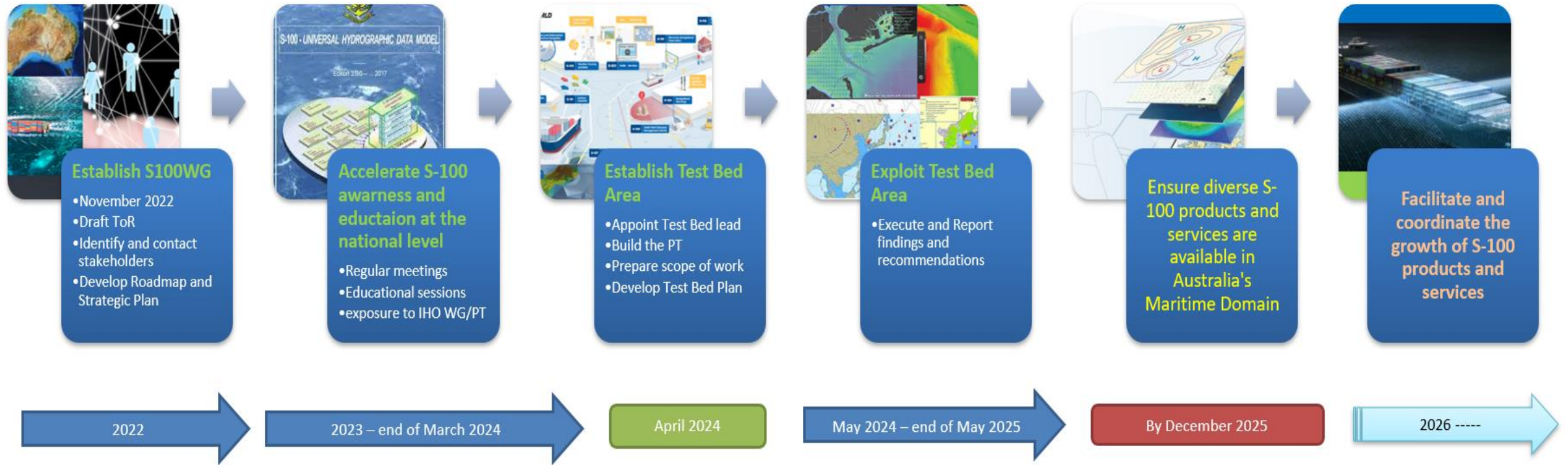


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# ROADMAP of the South West Pacific region



## Verena Bosselmann-Borsos

### Technical Leader

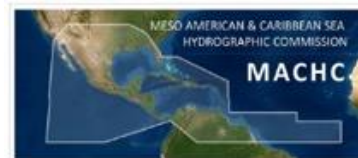
New Zealand Hydrographic Authority  
VBosselmann-Borsos@linz.govt.nz

[S-100 Working Group | Intergovernmental Committee on Surveying and Mapping \(icsm.gov.au\)](https://www.icsm.gov.au)



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# S100 update

- Report on the Readiness Status of RHCs for the provision of S-1xx datasets by 2026 per Charting Region WENDWG CL 01/2023

9 MS responded Including PCA's  
3 MS have no S100 plan

Requesting S100 producers to submit their response to WENDWG CL 01/2023 before the 18<sup>th</sup> of December

Members:	response	no response	PCA/ S57 prod
Brazil	x		
Colombia	x		
Cuba		x	
Dominican Republic	x		UKHO Grid
France	x		
Guatemala		x	
Guyana	x		UKHO Grid
Jamaica	x		UKHO Grid
Mexico	x		
Netherlands	x ( incl. overseas terr.)		
Suriname	x		UKHO Grid
Trinidad and Tobago	x		UKHO Grid
United Kingdom	x		UKHO Grid
United States	x		
Venezuela		x	
Associate Members:	response	no response	PCA/ S57 prod
Antigua and Barbuda	x		UKHO Grid
Barbados	x		UKHO Grid
Belize	x		UKHO Grid
Costa Rica		x	
El Salvador		x	
Grenada	x		UKHO Grid
Haiti	x	x	
Honduras	x	x	
Nicaragua	x	x	
Panama	x		UKHO Grid
Saint Lucia	x		UKHO Grid
Saint Kitts and Nevis	x		UKHO Grid
St. Vincent & Grenadines	x		UKHO Grid



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# S100 update

Report on the Readiness Status of RHCs for the provision of S-1xx datasets by 2026 per Charting Region WENDWG CL 01/2023

Product	2024	2025	2026	2027	2028	2029	2030	Need support		Trails		support in sharing	
								no	yes	no	yes	no	yes
S101	1	1	3	3				3	6	5	4	6	3
S102	1	2	3	2				1	6		4		3
S104		2	2				1	1	4		3		3
S128			3				1	1	2				3
S111		1	2				2	1	4		4		3
S124		1	3				1	1	4		1		3
S122			1										
S129			1						1				3
other S-100 products									1				3



# S100 update

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## Findings

- Most MS will have the S100 ready by 2026 and 2027
- 3 MS have no S100 plan
- Most MS are focused on S101 and 102 , other S100 products will be produced by 2030 or not included in their plan
- MS requested support in production ( production systems) and distribution
- There are trials in progress

## Recommendations based on the findings;

- Establish a S100 working group or groups
- Develop a S100 roadmap for the region



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# S100 testbeds update

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- Test bed update

IC ENC been receiving and releasing Members' S-1XX test datasets under their Product Development & Testing (PDT) Licence.

Please see below list of IC-ENC & MACHC members who have provided us with S-1XX test datasets to date:

- ✓ Netherlands – Data stack provided to IC-ENC in June 2023 containing S-101, S-102, S-104, S-111, S-122, S-123, S-128 test datasets. IC-ENC has a planned S-101 trial with NL taking place Jan-Mar 2024
- ✓ United Kingdom – S-101, S-102, S-104, S-111, S-121, S-122 test datasets available via Admiralty Marine Data Portal. Involved in UKHO-SHOM trial (S-101 & S-102 test datasets)
- ✓ United States of America – S-102, S-104, S-111 test datasets available via NOAA website
- ✓ Spain (MACHC observer) – S-101 and S-102 test datasets provided to IC-ENC in 2023

- Capacity building

Capacity building opportunity for IC-ENC members and nonmembers through IC-ENC Learning Management System (LMS)

The IC-ENC has dedicated a LMS dashboards and discussion forum for the MACHC for ENC Gridding. This allows sharing of good practice/ collaboration and the ability to ask and answer questions.

MACHC S100 workshop in March 2024



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# IHO S100 link to S100 testbeds

Regarding S-100 Testbeds, the following link to the IHO S-100 Resources page is the best place to look: <https://iho-ohi.github.io/S100Resources/>  
This page also provides sections on the current status of the Phase 1 Product Specifications, S-100 viewers and converters, and test datasets.

## Testbed Programmes

Name	Contributors	Related standards	Information	Contact
KHOA S-100 Testbed	Rep.of Korea	S-98, S-1xx		<a href="#">Iji KIM</a>
IHO-Singapore Lab	Singapore	S-101, S-102	<a href="#">LINK</a>	<a href="#">Parry Oei</a>
S-100 Across the channel	France, UK	S-101, S-102		<a href="#">Christian Mouden</a>
PRIMAR Conversion Project	PRIMAR, PRIMAR RENC member states, Taiwan, SevenCs, i4Insight, TCaris, ECC	S-101	<a href="#">LINK</a>	<a href="mailto:data@ecc.no">data@ecc.no</a>
S-100 / S-102 Demo	ECC, PRIMAR, Norway	S-101,S-102,S-111,S-129	<a href="#">S-100 Demo, S-102 Demo</a>	
S-100 as a service	ECC, PRIMAR, CHS, TCaris, SevenCs	S-102, S-104, S-111	<a href="#">LINK</a>	



# MICC ENC viewer

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The MICC ENC viewer was created to support MICC activities:

The MICC ENC viewer provides details on the ENC scheme for all the MACHC member states. The map contains overlays of AIS heat density as well as top priority ports within the region, thus allowing for member states to identify the current state of chart coverage against vessel traffic. The basemap to this viewer is the MACHC ENC Online map service, providing a view of ENCs within the region (Not for Navigation use).

## Observation

The MICC viewer was created before the IHO portal was upgraded .

Currently the IHO portal contains upto date information and the MICC viewer is not consistent with the IHO portal.

## Recommendation

Look at regional portals like the Southwest Pacific Hydrographic Commission and draft a proposal for the MICC viewer



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# MICC Chair / Vice Chair

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- MICC Chair / Vice Chair
- MACHC -MICC CL 01- VACANCY MACHC MICC CHAIR

One submission by USA for Vice Chair – Julio Castillo, International Affairs Analyst (On Detail)

NOAA Office of Coast Survey

- Currently – No INT Chart coordinator (expression of interest received)



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# MICC workplan 2024

## ANNEX C – WORK PLAN MILESTONES 2024

DELIVERY DATE (2024)	ACTIONS	
	Electronic Chart Activities	INT Chart Activities
Jan 1 – Feb1	Member States to provide updates based on discussions, and consideration presented at the MACHC 2023 MICC on plans to address ENC coverage within their area.	Member States to provide updates based on discussions, and consideration of the individual Ports Reports presented at the MACHC 2023, MICC on plans.
Feb 20 - 22	Represent MACHC at WEND WG	
March 29	<p>In preparation for the quarterly Conference Call, Member States to provide updates to:</p> <ul style="list-style-type: none"> <li>the list of available ENCs</li> <li>resolutions of any gaps/overlaps identified.</li> <li>Update on the S101 regional scheme</li> <li>Update on the establishment of S100 coordinator role</li> <li>S-100 Production update and test beds</li> <li>Product Specification development participation</li> <li>S100 Capacity building opportunities including workshop on Dual fuel S101 – S57 production.</li> <li>Assessment of MACHC members needs to produce S101.</li> <li>Update MICC portal</li> </ul>	<p>In preparation for the quarterly Conference Call,</p> <ul style="list-style-type: none"> <li>Member States to forward INT Chart metadata and shapefiles for “planned” INT Charts.</li> <li>Member States to propose additional coverage/adjustments for S-11, section B</li> </ul>
April 12	Hold quarterly conference call to assess status and next steps.	
May 6	Complete follow-up activities from Conference Call. Member States to provide all additional information identified during conference call.	





# MICC workplan 2024

DELIVERY DATE (2024)	ACTIONS	
	Electronic Chart Activities	INT Chart Activities
June 21	<p>In preparation for the quarterly Conference Call, Member States to provide updates to:</p> <ul style="list-style-type: none"> <li>the list of available ENCs</li> <li>resolutions of any gaps/overlaps identified.</li> <li>Update on the S101 regional scheme</li> <li>Update on the establishment of S100 coordinator role</li> <li>S-100 Production update and test beds</li> <li>Product Specification development participation</li> <li>S100 Capacity building opportunities</li> <li>Draft a workplan in support of the production of S101.</li> <li>Update MICC portal</li> </ul>	<p>In preparation for the quarterly Conference Call,</p> <ul style="list-style-type: none"> <li>Member States to forward INT Chart metadata and shapefiles for “planned” INT Charts.</li> <li>Member States to propose additional coverage/adjustments for S-11, section B</li> </ul>
July 19	Hold quarterly conference call to assess status and prepare information as needed for subsequent communication to IRCC and IHB.	
Aug 05	Complete follow-up activities from Conference Call. Member States to provide all additional information identified during conference call.	
Aug 30	Investigate and/or track issues regarding consistencies and availability of ENCs and the corresponding INT (paper) Charts if problems persist.	
Sept 6		MS to forward S-11 updates to INT Chart Coordinator for inclusion for Region B, S-11.
Sept 13		MICC INT Chart Coordinator to forward S-11 updates to IHB, to include Pacific INT scheme.
Oct 11	<p>In preparation for the quarterly Conference Call, Member States to provide updates to:</p> <ul style="list-style-type: none"> <li>the list of available ENCs</li> </ul>	In preparation for the quarterly Conference Call,



December, 2024

DELIVERY DATE (2024)	ACTIONS	
	Electronic Chart Activities	INT Chart Activities
	<ul style="list-style-type: none"> <li>• resolutions of any gaps/overlaps identified.</li> <li>• Update on the S101 regional scheme</li> <li>• Finalize documents and CL for establishment of S100 coordinator</li> <li>• S-100 Production update and test beds</li> <li>• Product Specification development participation</li> <li>• S100 Capacity building opportunities</li> <li>• Finalize workplan in support of the production of S101.</li> </ul>	<ul style="list-style-type: none"> <li>• Member States to forward INT Chart metadata and shapefiles for “planned” INT Charts.</li> <li>• Member States to propose additional coverage/adjustments for S-11, section B</li> </ul>
Oct 12	Hold quarterly follow-up conference call to update/review and discuss MS input in preparation of 25 <sup>th</sup> MACHC.	
Nov 8	Complete follow-up activities from Conference Call. Member States to provide all additional information identified during conference call.	
Nov 15	Provide all updates, to the MICC Chair and INT chart Coordinator for the MICC Report to 25 <sup>th</sup> MACHC.	
Dec 2024	Provide update on 2025 MICC activities/accomplishments	



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# Requests to MACHC MS and AS

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- Note the MICC Report
- Approve the MICC 2024 Work Plan
- Establish a S100 WG and Review the TOR and ROP on the Role of the S100 coordinator
- Submit names of candidates for INT chart coordinator and MICC Chair /Vice Chair
- Respond to WENDWG CL 01/2023 Report on the Readiness Status of RHCs for the provision of S-1xx datasets by 2026 per Charting Region deadline 18th December
- Submission of INT Chart submission to IHO Web Catalogue (<http://chart.iho.int:8080/iho/main.do>) and maintenance of ENC schemes using INTOGIS II
- Submission of CATZOC information to the IHO via the RENC, IC-ENC Circular Letter 2017/11-Proposed Joint RENC policy on IHO Secretariat's use of ENC and IC-ENC CL2019/15 - Supply of CATZOC files to the IHO. CATZOC file analysis
- Submission of the C55 to the IHO .  
<https://iho.int/en/iho-c-55>
- Report capacity building opportunities with regards to S100 products and services



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**THANK YOU VERY MUCH!**



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