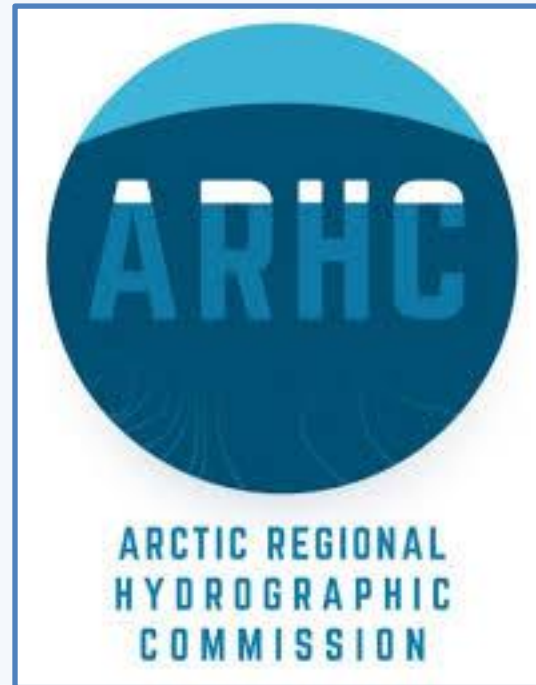


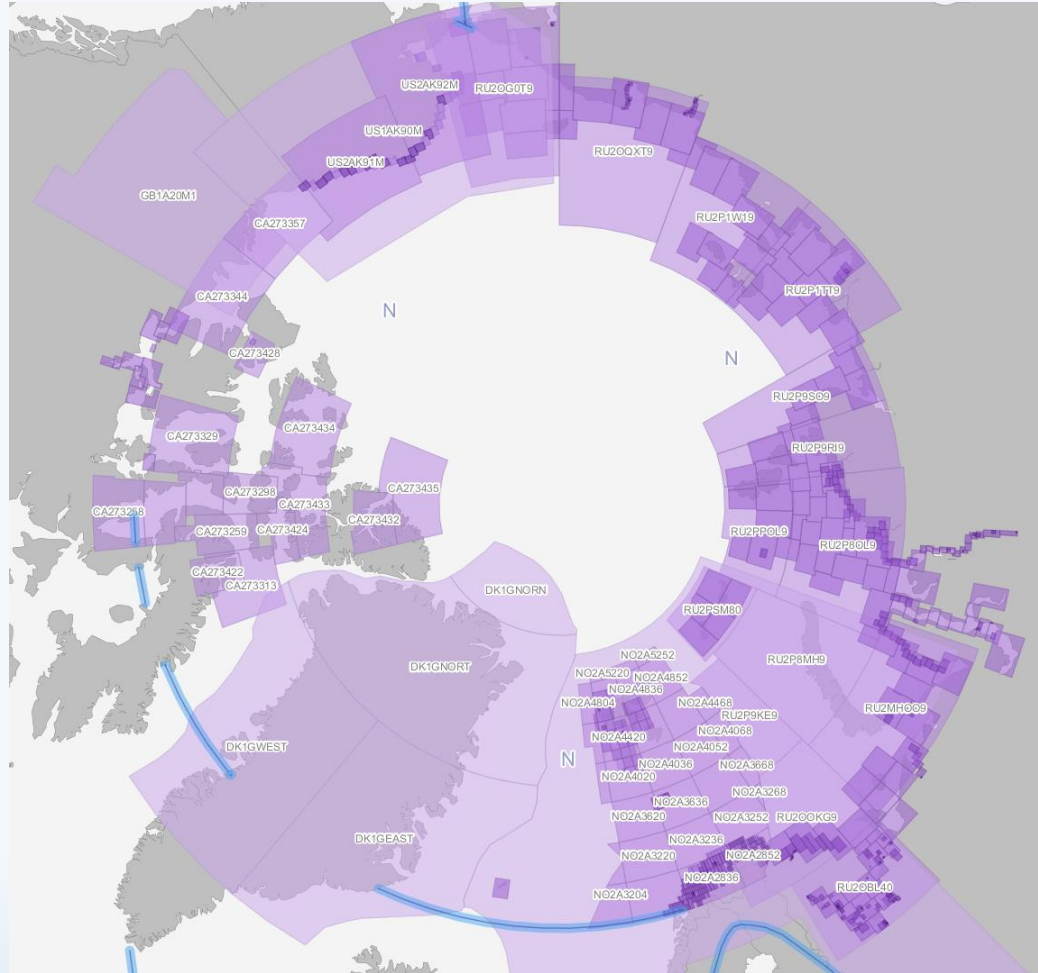
AICCWG REGION N

Report to WENDWG-14



WENDWG-14, Norfolk, USA

Region N: Status of ENC Coverage



ARHC Region N – Total 1057 ENCs

Overview UB1 = 9

General UB2 = 100

Coastal UB3 = 196

Approach UB4 = 539

Harbour UB5 = 179

Berthing UB6 = 34

Region N: ENC Overlaps

IC-ENC REGIONAL HYDROGRAPHIC COMMISSION OVERLAP REPORT - ARCTIC RHC - JANUARY 2024

ID	STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	ENC 1 Scale	ENC 2 Scale	ENC 1 Edn	ENC 2 Edn	Impact Assessment	Action requested
200	RESOLVED	IC-ENC - PRIMAR	ARHC	DE110000	NO1A3000	1	1500000	1500000	6	14	RESOLVED	No Action Required
1	RESOLVED	IC-ENC - PRIMAR	ARHC	DK1GEAST	NO1A3000	1	3500000	1500000	4	16	RESOLVED	No Action Required
2	RESOLVED	IC-ENC - PRIMAR	ARHC	DK1GNORT	NO1A3000	1	3500000	1500000	5	16	RESOLVED	No Action Required
240	RESOLVED	IC-ENC	ARHC	RU2O5Z00	US2AK95M	2	700000	1534076	1	4	RESOLVED	No Action Required
329	RESOLVED	IC-ENC - PRIMAR	ARHC	RU2O9091	RU2O5Z00	2					RESOLVED	No Action Required
273	RESOLVED	IC-ENC - PRIMAR	ARHC	RU2OQ0T1	US2AK92M	2	700000	700000	1	11	RESOLVED	No Action Required
274	RESOLVED	IC-ENC	ARHC/EAHC	RU4OH1S0	US4AK8DM	4	22000	100000	1	7	RESOLVED	No Action Required
275	RESOLVED	IC-ENC - PRIMAR	ARHC/EAHC	US3AK89M	RU3OH0B0	3	315350	180000	10	1	RESOLVED	No Action Required

All instances of overlapping ENCs that may impact on safe navigation in the Region have been successfully resolved.

Status of S-1xx production readiness

AIICWG report regarding status of S-1xx production readiness level of the region (Summary)

Focusing on the standards S101, S102 it shows that 4 out of 5 ARHC MS have a plan of progress toward 2026. The status of implementation of the other prioritized standards is showing bigger span in readiness.

Currently none of the average scores for prioritized S-1XX implementation status in the Arctic is above 50% of readiness, so there is still work to do in ARHC before reaching the IHO Strategic Plan 1.3.1:

'Ability and capability of Member States to meet the requirements and delivery phases of the S100 implementation plan (2026: 50%).'

Comment: There were some confusions regarding the inclusion of MSDI-related questions in the survey. The relevance of MSDI to the production level of S1xx standards is unclear, given that MSDI typically serves as a display platform rather than a production system. Clarification on this aspect would be beneficial.

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- Russian Federation

Arctic Gridding – Approaching Polar Cap Region

- In 2022 Canada commissioned IIC report to consider gridding in Arctic
 - Upper Arctic and Polar Cap of particular interest due to impact of skew on gridding (~6x with rectangular/square cells)
 - New proposed grids where cells are broadened to account for skew
 - Each Zone has different (related dimensions)
- Currently Canada/US broaden width of cells as latitude increases
- Bulk of migration effort is in ensuring common boundaries between subdivided cells
- Coverage sparse and so high Arctic currently in unique position to adopt a new common grid framework

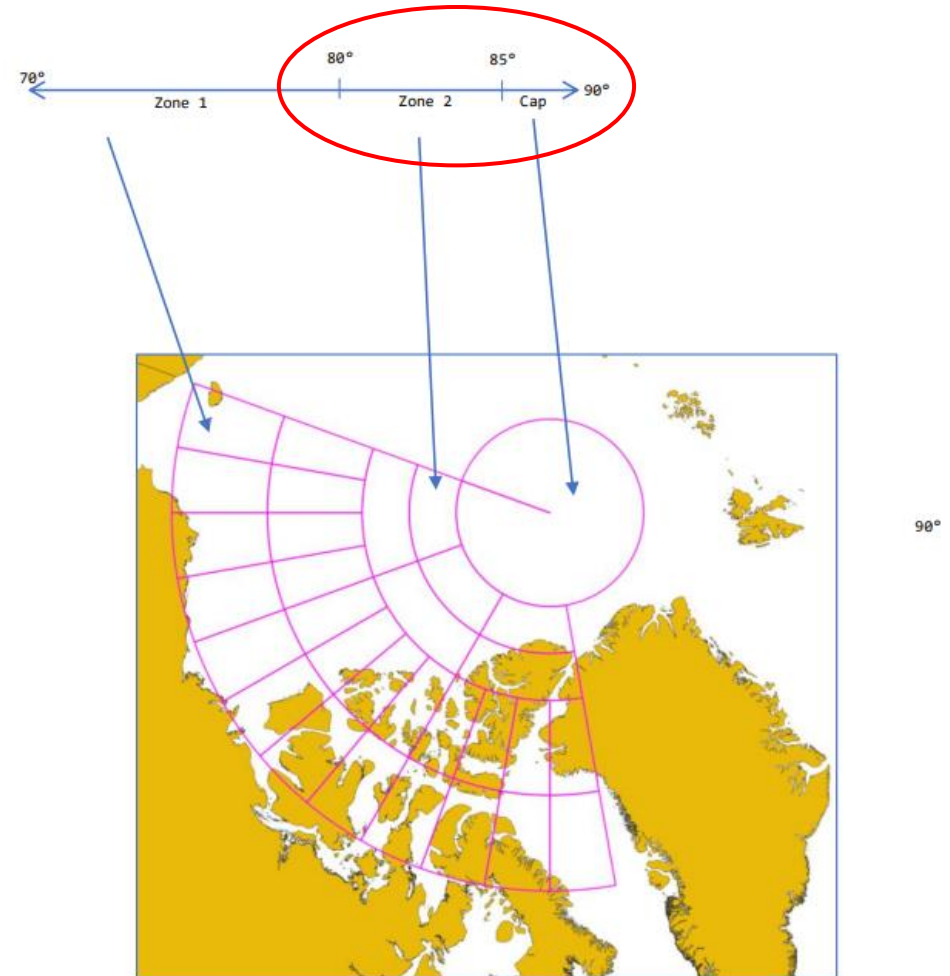
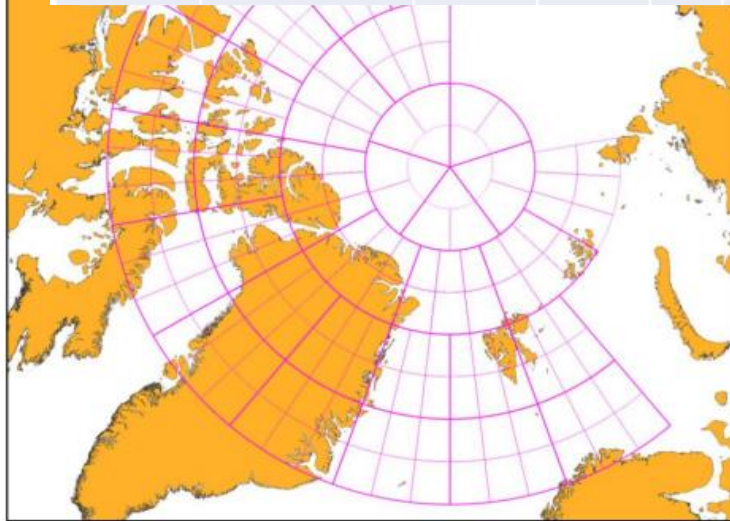


Image courtesy IIC Technologies

Two Proposed Rectilinear Grid Options

G₁

Zone	Subdivision	Dimensions		Cols	Rows
		Width	Height		
Cap	1	72	5	5	1
	2	14.4	2.5	2	2
Zone 1	1	20	5	3	2
	2	6.666667	2.5	3	4
	3	2.222222	0.625	4	4
	4	0.555556	0.15625		



Reduced skew to
 $\frac{h}{w} = 1.2x$



G₂

Zone	Subdivision	Width	Height	Multiplier	
				Cols	Rows
Cap	1	72	5	5	1
	2	14.4	2.5	2	2
Zone 1	1	18	5	3	2
	2	6	2.5	3	4
	3	2	0.625	4	4
	4	0.5	0.15625		

Next Steps

- ARHC has asked AICCWG/Canada to start a process to implement a common rectilinear grid in the high Arctic/Polar cap region and ID a test pilot area in an Arctic boarder region
- Canada is considering options to action this request
- Canada is considering possible tools to help manage gridding in Arctic transboundary areas; perhaps modeled off of the [USCHC Transboundary Web App](#) (discussed further in USCHC report)

