

SAIHC17

9th SAIHC INT CHART COORDINATION WORKING GROUP (ICCWG)

VTC

7th September 2020

ICCWG Chairman

Alfons Van Craeynest

Membership:

France, Mauritius, Mozambique, Norway, Republic of South Africa, Seychelles, United Kingdom.

Associate Members:

Angola, Comores, India, Kenya, Madagascar, Malawi, Namibia, Portugal, Tanzania.

Agenda

1. Opening
2. Approval of Agenda
3. **Matters arising from Minutes of 8th ICCWG Meeting**
 - 3.1 Actions – Action list to be updated
4. **Region H Chart Scheme**
 - 4.1 S-11 Status of INT Charting
 - 4.2 Member State Updates and Expectations
 - 4.3 Status of ENC's
5. **ENC Overlaps**
 - 5.1 Elimination of overlapping ENC's
6. **SAIHC ENC Scheme**
 - 6.1 Gridded ENC Scheme Options

Agenda (cont.)

7. **Future of the Paper Nautical Chart**
8. **Any Other Matters Arising from Discussions During the Meeting**
9. **Closure**

Item 3: Action Items Arising from the 8th ICCWG Meeting

Actions – Action list to be updated

Item 3: Action Items Arising from the 8th ICCWG Meeting

No.	Action	Action By	Remarks
1	ICC-WG Coordinator to contact Russia and Australia to resolve ENC overlap.	ICC-Coordinator	
2	To define ENC scheme for SAIHC Region H.	ICC-Coordinator	
3	Suggested trial teleconference.	ICC-Coordinator	
4	INT 7582 – is to be removed from S11 and the chart is to become INT 7583 (new INT number). A copy of this chart needs to be circulated to the members for comment and will be pending until this is done.	Portugal Mozambique	
5	INT 7631 & INT 7632 - ongoing discussions between MZ and PT. New survey data is awaited and this will affect buoyage's and chart limits (which still need to be confirmed).	Portugal Mozambique	

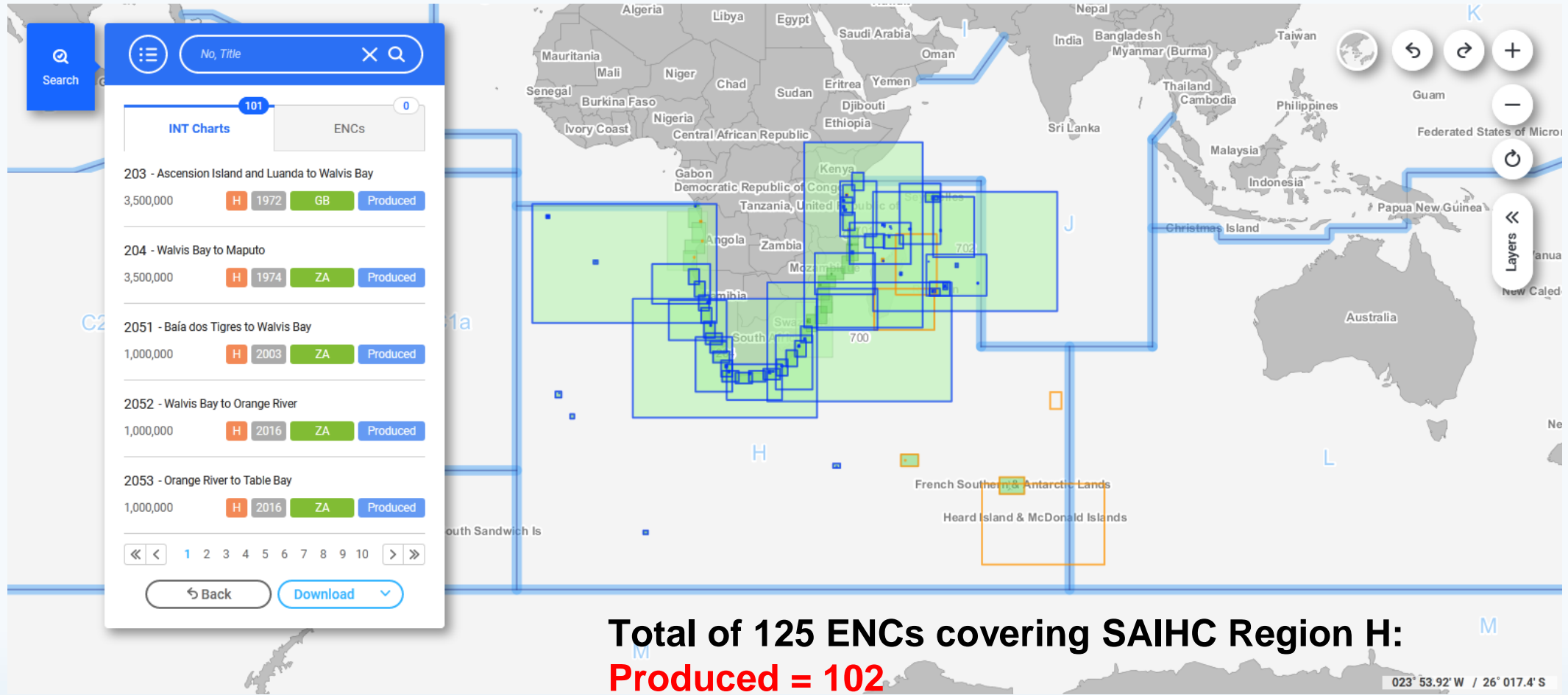
Item 3: Action Items Arising from the 8th ICCWG Meeting

No.	Action	Action By	Remarks
6	INT 7645 – the Scheme has been proposed and is in process. As soon as the limits have been established they are to be forwarded to the chairman for inclusion in S11.	Portugal Mozambique	
7	Member States to feedback comments on how CATZOC is to be used to DQWG.	Member States	
8	UK, Tanzania, Kenya, and India to coordinate ENC requirements to provide the latest data in a carriage compliant product for the Mariner and report back to ICCWG coordinator.	UK, Tanzania, Kenya, India	
9	India and UK to confirm when overlaps with GB ENCs have been removed in Seychelles, Tanzania and Mozambique.	India and UK	

Item 4: S11 - Region H Chart Scheme

Status of INT Charts

Item 4.1: IHO Web Catalogue - Region H - INT Chart Scheme



Item 4.2: S11 - Region H Chart Scheme

Member State Updates (S-11)

Current Status of INT charts – S11

INTRegion	INTChart Number	PanelID	Producers	NatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	V_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	PrinterNation	Printer Nat. No.
H	203		GB	4203	Ascension Island and Luanda to Walvis Bay	26°16.00'S	5°40.10'S	17°10.00'W	16°10.00'E	1972	2015	Produced	3,500,000	CU DE ES FR US	
H	204		ZA	SAN 27	Walvis Bay to Maputo	40°30.00'S	22°15.13'S	1°00.00'E	34°19.98'E	1974	2009	Produced	3,500,000	DE ES GB IN US	4204 7204
H	2050		GB PT	PT 72102 GB 312	Luanda to Baía dos Tigres, Luanda à Baía dos Tigres	17°20.00'S	7°0.00'S	7°15.00'E	14°30.00'E	2010	2013	Produced	1,000,000		
H	2051		ZA	SAN 90	Baía dos Tigres to Walvis Bay	23°5.00'S	16°20.00'S	4°30.00'E	15°0.00'E	2003	2016	Produced	1,000,000	GB	4175
H	2052		ZA	SAN 91	Walvis Bay to Orange River	29°0.00'S	22°30.00'S	7°30.00'E	18°0.00'E	2016		Produced	1,000,000	GB	4176
H	2053		ZA	SAN 92	Orange River to Table Bay	36°50.00'S	28°30.00'S	12°22.00'E	19°0.00'E	2016		Produced	1,000,000	GB	4177
H	2511		GB PT	GB 658	Entrance to River Congo	6°10.70'S	5°53.09'S	12°2.82'E	12°32.63'E	2003	2008	Produced	50,000		
H	2512	CONT-A	GB PT	GB 657	Continuation to Matadi	5°55.67'S	5°47.79'S	12°58.75'E	13°28.55'E	2003	2017	Produced	50,000		
H	2512	CONT-B	GB PT	GB 657	Boma	5°32.55'S	5°51.10'S	13°2.67'E	13°3.70'E	2017		Produced	12,500		
H	2512	CONT-C	GB PT	GB 657	Matadi	5°49.75'S	5°48.50'S	13°26.65'E	13°28.35'E	2017		Produced	12,500		
H	2512		GB PT	GB 657	Punta da Cafumbica to Matadi	6°5.00'S	5°49.76'S	12°31.25'E	13°1.05'E	2017		Produced	50,000		
H	2513	PLAN-A	GB	659	Plan A - Port of Sogo	6°7.80'S	6°6.00'S	12°18.00'E	12°20.80'E	2014	2016	Produced	7,500		
H	2513		GB	659	Approaches to Sogo	6°8.00'S	6°2.71'S	12°16.80'E	12°22.40'E	2014	2016	Produced	15,000		
H	2515	PLAN-A	GB	1691	Plan A - English Bay	7°53.95'S	7°52.90'S	14°23.70'W	14°22.50'W	1994	2005	Produced	10,000		
H	2515	PLAN-B	GB	1691	Plan B - Clarence Bay to South West Bays	7°58.70'S	7°53.48'S	14°27.00'W	14°24.00'W	1994	2005	Produced	15,000		
H	2515		GB	1691	Ascension Island	8°3.00'S	7°45.60'S	14°30.80'W	14°13.50'W	1994	2005	Produced	50,000		
H	2516	PLAN-A	GB	1771	Plan A - Approaches to Ascension Island	8°14.00'S	7°39.00'S	14°39.50'W	14°3.50'W	1994	2005	Produced	150,000		
H	2516	PLAN-B	GB	1771	Plan B - Saint Helena	16°17.00'S	15°40.00'S	6°6.79'W	5°20.00'W	1994	2005	Produced	125,000		
H	2516	PLAN-C	GB	1771	Plan C - Saint Helena, Rupert's and James Bays	15°56.10'S	15°53.70'S	5°43.80'W	5°42.00'W	1994	2005	Produced	15,000		

Current Status of INT charts – S11

INTRegion	INTChart Number	PanelID	Producers	MatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	W_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	Printer Nation	Printer Mat. No.	Printformat
H	2516		GB	1771	St Helena & Approaches to Ascension Island					1994	2005	Produced	Various			
H	2550		GB PT	PT 73202 GB 307	Cabeça da Cobra to Cabo Ledo,Cabeça da Cobra ao Cabo Ledo	9°52.50'S	6°25.00'S	11°4.00'E	13°26.00'E	2010	2017	Produced	350,000			
H	2551		PT		Porto de Luanda	8°53.00'S	8°41.00'S	13°8.00'E	13°26.00'E			Schemed	30,000			
H	2560		GB PT	PT 73203 GB 308	Cabo Ledo to Lobito,Cabo Ledo ao Lobito	12°32.00'S	9°0.00'S	11°43.50'E	14°10.00'E	2010	2013	Produced	350,000			
H	2561		PT		Porto do Lobito	12°23.00'S	12°11.00'S	13°31.00'E	13°39.00'E			Schemed	20,000			
H	2570		GB PT	GB 309 PT 73204	Lobito to Ponta Grossa,Lobito à Ponta Grossa	14°28.00'S	12°5.00'S	10°26.00'E	14°0.00'E	2009	2013	Produced	350,000			
H	2580		GB PT	GB 310 PT 73205	Ponta Grossa to Kunene River,Ponta Grossa à Foz do Kunene	17°28.00'S	14°0.00'S	10°9.00'E	12°35.00'E	2009	2009	Produced	350,000			
H	2581		PT		Porto de Namibe (Mocamedes)	15°15.00'S	15°4.00'S	12°3.00'E	12°11.00'E			Schemed	20,000			
H	2590		ZA	SAN 71	Kunene River to Sand Table Hill	19°49.85'S	17°13.00'S	11°6.30'E	13°0.00'E	1991	1999	Produced	300,000	GB	4132	
H	2600		ZA	SAN 72	Sand Table Hill to Cape Cross	21°54.80'S	19°20.00'S	12°10.00'E	14°3.70'E	1992	1999	Produced	300,000	GB	4133	
H	2610		ZA	SAN 73	Cape Cross to Conception Bay	24°12.30'S	21°40.00'S	12°56.28'E	14°49.98'E	1993		Produced	300,000	GB	3859	
H	2612		ZA	SAN 1004	Walvis Bay Harbour	22°57.96'S	22°50.00'S	14°25.90'E	14°31.70'E	2012	2019	Produced	15,000	GB	4137	
H	2613		ZA	SAN 1005	Approaches to Walvis Bay Harbour	22°58.30'S	22°38.00'S	14°48.00'E	14°33.50'E	2012	2019	Produced	40,000	GB	4138	
H	2620		ZA	SAN 74	Conception Bay to Hottentot Point	26°14.85'S	23°45.00'S	13°21.30'E	15°15.00'E	1995		Produced	300,000	GB	3860	
H	2630		ZA	SAN 75	Hottentot Point to Chamais Bay	28°36.63'S	26°0.00'S	13°50.00'E	15°51.25'E	1995		Produced	300,000	GB	3869	
H	2631	PLAN-A	ZA	SAN 1002	Plan A - Lüderitz	26°39.00'S	26°37.00'S	15°8.20'E	15°10.30'E	1996	2005	Produced	15,000	GB	3861	
H	2631		ZA	SAN 1002	Approaches to Lüderitz	26°45.20'S	26°30.10'S	14°59.10'E	15°10.90'E	1996	2005	Produced	30,000	GB	3861	
H	2640		ZA	SAN 76	Chamais Bay to Port Nolloth	29°40.00'S	27°53.00'S	14°10.00'E	17°10.00'E	1998	2013	Produced	300,000	GB	3870	
H	2650		ZA	SAN 77	Port Nolloth to Island Point	30°58.45'S	29°13.00'S	15°0.00'E	18°0.00'E	1995		Produced	300,000	GB	2078	
H	2655	PLAN-A	GB	1769	Plan A - Tristan da Cunha Group	37°40.00'S	36°48.00'S	13°0.00'W	11°55.00'W	1994	2014	Produced	150,000			
H	2655	PLAN-B	GB	1769	Plan B - Edinburgh Anchorage	37°5.06'S	37°2.70'S	12°20.00'W	12°17.10'W	1994	2014	Produced	25,000			
H	2655	PLAN-C	GB	1769	Plan C - Gough Island	40°37.00'S	40°0.00'S	10°20.00'W	9°35.00'W	1994	2014	Produced	150,000			
H	2655		GB	1769	Islands & Anchorages in the South Atlantic Ocean					1994	2014	Produced				
H	2656		NO	516	Bouvetøya Island	54°37.00'S	54°13.00'S	2°55.00'E	3°45.00'E	2011		Produced	60,000			
H	2660		ZA	SAN 78	Island Point to Cape Deseada	32°30.00'S	30°46.25'S	15°30.00'E	18°30.00'E	1994		Produced	300,000	GB	4141	
H	2670		ZA	SAN 79	Cape Deseada to Table Bay	34°37.10'S	32°10.00'S	16°58.70'E	18°59.96'E	1990	1999	Produced	300,000	GB	4151	

Current Status of INT charts – S11

INTRegion	INTChart Number	PanelID	Producers	MatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	W_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	PrinterNation	Printer Mat. No.
H	2671		ZA	SAN 1010	Approaches to Saldanha Bay	33°14.45'S	32°49.00'S	17°42.56'E	18°3.75'E	1978	2007	Produced	50,000	GB	4145
H	2672		ZA	SAN 1012	Saldanha Bay Harbour	33°4.70'S	32°59.60'S	17°56.70'E	18°1.15'E	1979	2017	Produced	10,000	GB	4142
H	2673		ZA	SAN 1011	Entrance to Saldanha Bay	33°6.35'S	32°59.40'S	17°51.00'E	18°3.40'E	1977	2017	Produced	20,000	GB	1236
H	2680		ZA	SAN 80	Table Bay to Cape Agulhas	35°23.00'S	33°45.00'S	17°10.00'E	20°10.00'E	1990	1997	Produced	300,000	GB	4152
H	2681	PLAN-A	ZA	SAN 1013	Plan A - Murray's Bay Harbour	33°47.98'S	33°47.70'S	18°22.40'E	18°22.85'E	1978	2006	Produced	6,000	GB	4148
H	2681		ZA	SAN 1013	Approaches to Table Bay	33°59.50'S	33°41.25'S	18°15.40'E	18°30.90'E	1978	2006	Produced	36,000	GB	4148
H	2682		ZA	SAN 1014	Table Bay Harbour	33°55.32'S	33°51.83'S	18°23.16'E	18°29.40'E	2010		Produced	10,000	GB	1846
H	700		ZA	SAN 28	Port Elizabeth to Mauritius	38°13.61'S	19°30.00'S	25°20.00'E	58°39.98'E	1974	1999	Produced	3,500,000	DE ES FR GB IN US	6624 4700 7700
H	701		GB	4701	Maputo to Muqdisho	27°0.00'S	5°28.90'N	32°0.00'E	53°25.80'E	1972	2019	Produced	3,500,000	DE ES FR IN US	6672 7701
H	702		GB	4702	Chagos Archipelago to Madagascar	24°18.10'S	3°30.00'S	44°27.00'E	77°47.00'E	1974	2020	Produced	3,500,000	DE FR IN US	6673 7702
H	7050		ZA	SAN 93	Table Bay to East London	38°0.00'S	32°45.00'S	18°0.00'E	28°0.00'E	2018		Produced	1,000,000	GB	
H	7051		ZA	SAN 94	East London to Richards Bay	36°30.00'S	28°15.00'S	26°52.00'E	33°30.00'E	2018		Produced	1,000,000	GB	
H	7052		PT ZA	SAN 95	Durban to Inhambane	31°40.00'S	22°50.00'S	30°30.00'E	37°8.00'E	2020		Schemed	1,000,000		
H	7053		FR	7798	Southern Approaches to the Moçambique Channel	27°22.00'S	20°33.00'S	34°21.00'E	45°15.00'E	2016		Produced	1,000,000		
H	7054		FR	7797	Moçambique Channel	21°30.00'S	14°24.00'S	33°56.00'E	44°50.00'E	2016		Produced	1,000,000		
H	7055		FR	7486	Canal du Mozambique - Partie Nord	16°20.00'S	9°3.00'S	40°12.00'E	51°18.00'E	2000	2013	Produced	1,000,000	GB	3877
H	7056		GB	2949	Mozambique, Tanzania, Kenya and Somalia, Mtwara to Lamu	11°26.00'S	1°32.50'S	38°30.00'E	45°5.00'E	2005	2014	Produced	1,000,000		
H	7060		GB	716	Seychelles Group to Madagascar and Agalega Islands	12°50.00'S	1°59.00'S	49°16.00'E	56°41.00'E	1999		Produced	1,000,000		

Current Status of INT charts – S11

INTRegion	INTChart Number	PanelID	Producers	NatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	W_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	Printer Nation	Printer Mat. No.	Printformat
H	7061		GB	717	Seychelles Group to Nazareth Bank	15°9.00'S	4°23.00'S	55°20.00'E	62°45.00'E	1999		Produced	1,000,000			
H	7062		FR	7487	Approches Nord-Est de Madagascar	21°35.00'S	11°5.00'S	48°35.00'E	56°0.00'E	2018		Schemed	1,000,000			
H	7063		FR	7488	De l'Île de La Réunion à l'Île Rodrigues et à l'Île Tromelin	21°45.00'S	14°40.00'S	54°7.00'E	65°0.00'E	2013		Produced	1,000,000			
H	7064		FR	7489	Approches Sud-Est de Madagascar	27°22.00'S	20°33.00'S	44°40.00'E	55°33.00'E	2017		Schemed	1,000,000	GB	3906	
H	7510		ZA	SAN 81	Cape Agulhas to Cape St Blaize	35°37.70'S	34°0.00'S	19°35.00'E	22°35.00'E	1997		Produced	300,000	GB	4153	
H	7520		ZA	SAN 82	Cape St Blaize to Cape St Francis	35°23.00'S	33°45.00'S	22°0.00'E	25°0.00'E	1997		Produced	300,000	GB	4155	
H	7521	PLAN-A	ZA	SAN 1020	Plan A - Mossel Bay	34°11.31'S	34°7.90'S	22°6.20'E	22°9.25'E	2004	2011	Produced	10,000	GB	4154	
H	7521		ZA	SAN 1020	Approches to Mossel Bay	34°16.70'S	34°3.00'S	22°4.60'E	22°16.90'E	2004	2011	Produced	40,000	GB	4154	
H	7530		ZA	SAN 83	Cape St Francis to Great Fish Point	35°3.38'S	33°25.00'S	24°38.00'E	27°38.00'E	1997	2000	Produced	300,000	GB	4156	
H	7531		ZA	SAN 1024	Approches to Port Elizabeth	34°7.60'S	33°42.20'S	25°35.00'E	25°56.40'E	1980	2015	Produced	50,000	GB	4157	
H	7532	PLAN-A	ZA	SAN 1025	Plan A - Port Elizabeth	33°58.80'S	33°54.90'S	25°35.80'E	25°42.23'E	2002	2016	Produced	15,000	GB	4158	
H	7532	PLAN-B	ZA	SAN 1025	Plan B - Bird Island Passage	33°53.73'S	33°44.00'S	26°12.80'E	26°29.91'E	2002	2016	Produced	40,000	GB	4158	
H	7532		ZA	SAN 1025	Port Elizabeth and Bird Island Passage					2002	2016	Produced	0	GB	4158	
H	7533		ZA	SAN 1026	Ngqura Harbour	33°52.00'S	33°47.00'S	25°39.00'E	25°43.30'E	2009	2014	Produced	10,000	GB	4160	
H	7540		ZA	SAN 84	Great Fish Point to Mbashe Point	34°27.00'S	32°0.00'S	27°0.00'E	29°1.00'E	2005		Produced	300,000	GB	4159	
H	7541	PLAN-A	ZA	SAN 1027	Plan A - East London	33°2.85'S	32°59.81'S	27°53.68'E	28°58.73'E	2004		Produced	12,000	GB	4162	
H	7541		ZA	SAN 1027	Approches to East London	33°6.00'S	32°53.80'S	27°48.95'E	28°5.90'E	2004		Produced	40,000	GB	4162	
H	7550		ZA	SAN 85	Mbashe Point to Port Shepstone	33°4.50'S	30°35.00'S	28°44.00'E	30°45.00'E	2012		Produced	300,000	GB	4163	
H	7560		ZA	SAN 86	Port Shepstone to Tugela River	31°35.00'S	29°5.00'S	30°20.00'E	32°20.00'E	2013		Produced	300,000	GB	4171	
H	7561		ZA	SAN 1030	Approches to Durban	29°58.77'S	29°43.50'S	30°58.80'E	31°11.10'E	2003	2010	Produced	30,000	GB	4170	
H	7562		ZA	SAN 1031	Durban Harbour	29°54.27'S	29°50.83'S	30°59.46'E	31°5.44'E	1982	2010	Produced	10,000	GB	643	
H	7563		ZA	SAN 1029	Approches to Durban - Oil terminal SBM	30°5.30'S	29°55.00'S	30°52.00'E	31°10.00'E	2015		Produced	30,000	GB	4169	
H	7570		ZA	SAN 87	Tugela River to Ponta do Ouro (Mozambique Border)	29°22.51'S	26°47.00'S	31°22.00'E	33°23.26'E	2001		Produced	300,000	GB	4172	
H	7571		ZA	SAN 1033	Richards Bay Harbour	28°50.50'S	28°46.23'S	32°1.00'E	32°8.40'E	1987	2008	Produced	12,500	GB	4174	
H	7572		ZA	SAN 1032	Approches to Richards Bay	28°58.10'S	28°39.00'S	32°0.00'E	32°15.20'E	1988	2010	Produced	37,500	GB	4173	
H	7580		GB PT ZA	GB (2930) SAN 88	Jesser Point to Boa Paz	27°37.00'S	24°50.00'S	32°25.00'E	34°20.00'E	1995	2002	Schemed	300,000			
H	7581		GB MZ PT	GB 644	Baia de Maputo	26°16.50'S	25°33.50'S	32°33.00'E	33°5.00'E	2012	2017	Produced	75,000			
H	7583		MZ PT	MZ (16401)	Porto de Maputo	26°1.00'S	25°49.00'S	32°29.00'E	32°47.50'E	2020		Schemed	30,000			

Current Status of INT charts – S11

INTChart Number	PanelID	Producer s	MatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	W_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	Printer Nation	Printer Mat. No.	Printformat
7590		GB MZ PT	GB 2939	Boa Paz to Baía de Inhambane	26°22.00'S	23°30.00'S	34°0.00'E	36°5.00'E	2011		Produced	300,000			
7610		GB PT	GB 2931	Baia de Inhambane to Cabo de Sao Sebastiao	24°35.00'S	21°45.00'S	35°0.00'E	37°5.00'E	2011		Produced	300,000			
7620		GB PT	GB 2932	Cabo de Sao Sebastiao to Beira	22°25.00'S	19°30.00'S	34°30.00'E	36°35.00'E	1995		Schemed	300,000			
7630		GB PT	GB 2934	Beira to Rio Zambeze	20°15.00'S	18°20.00'S	34°35.00'E	37°40.00'E	1998		Schemed	300,000			
7631		MZ PT	MZ (16204)	Approaches to Porto da Beira	20°0.00'S	19°48.30'S	34°45.40'E	35°3.60'E	2020		Schemed	30,000			A0
7632		MZ PT	MZ16303	Porto da Beira	19°54.00'S	19°47.00'S	34°45.50'E	34°51.60'E	2020		Schemed	15,000			
7640		GB PT	GB 2935	Rio Zambeze to Ilha Epidendron	19°0.00'S	17°0.00'S	36°5.00'E	39°10.00'E	1998		Schemed	300,000			
7641	PLAN-A	MZ PT	MZ 16402	Plan A - Quelimane					2001		Produced	10,000	PT	485	
7641		MZ PT	MZ 16402	Aproximações a Quelimane	18°10.00'S	17°52.00'S	36°52.00'E	37°4.00'E	2001		Produced	30,000	PT	485	
7645		MZ PT	MZ (16307)	Porto da Topuito	16°39.60'S	16°33.00'S	39°37.90'E	39°49.60'E			Schemed	30,000			
7650		GB MZ PT	GB 2933	Ilha Epidendron to Porto de Moçambique	17°55.00'S	14°55.00'S	38°50.00'E	40°58.00'E	2011		Produced	300,000			
7660		GB MZ PT	GB 2926	Porto de Moçambique to Pemba	15°45.00'S	12°43.98'S	39°40.00'E	41°45.00'E	2011		Produced	300,000			
7661		MZ	16205	Approaches to Nacala	14°33.20'S	14°3.40'S	40°32.60'E	40°53.70'E	2019		Produced	50,000			
7666		MZ PT	MZ16206	Pemba (Porto Amelia)	13°3.00'S	12°51.00'S	40°23.00'E	40°39.00'E	2020		Schemed	30,000			A0
7670		GB MZ PT	GB 2927	Pemba to Mtwara	13°0.00'S	10°0.00'S	39°50.00'E	41°45.00'E	2002	2012	Produced	300,000			
7671	PLAN-A	GB	664	Mtwara	10°18.21'S	10°13.00'S	40°10.54'E	40°14.69'E	2018		Produced	15,000			
7671	PLAN-B	GB	664	Entrance to Mikindani Harbour	10°16.00'S	10°14.25'S	40°7.20'E	40°8.70'E	2018		Produced	17,500			
7671		GB	664	Approaches to Mtwara	10°21.50'S	10°8.48'S	40°5.50'E	40°15.87'E	2018		Produced	37,500			

Current Status of INT charts – S11

INTRegion	INTChart Number	PanelID	Producers	NatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	W_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	Printer Nation	Printer Mat. No.	Printformat
H	7680		GB	2929	Mtwara to Mafia Island	10°22.00'S	7°12.00'S	39°0.00'E	41°9.00'E	2003		Produced	350,000			
H	7690		GB	3310	Mafia Island to Pemba Island	7°39.00'S	4°26.00'S	38°38.00'E	40°45.00'E	1997		Produced	350,000			
H	7691		GB	674	Approaches to Dar Es Salaam	6°52.20'S	6°34.80'S	39°10.50'E	39°37.10'E	2000		Produced	50,000			
H	7692		GB	693	Dar Es Salaam	6°51.50'S	6°47.50'S	39°16.85'E	39°19.46'E	2005	2016	Produced	7,500			
H	7695		GB	665	Approaches to Zanzibar	6°24.00'S	5°57.00'S	39°0.00'E	39°18.00'E	1995	2012	Produced	50,000			
H	7696		GB	3211	Zanzibar Harbour	6°11.10'S	6°6.70'S	39°6.90'E	39°13.50'E	2012	2015	Produced	12,500			
H	7698	PLAN-A	GB	663	Plan A - Tanga	5°4.50'S	5°2.30'S	39°5.50'E	39°10.94'E	1997	2015	Produced	15,000			
H	7698		GB	663	Approaches to Tanga	5°10.20'S	4°55.57'S	39°3.00'E	39°16.60'E	1997	2015	Produced	37,500			
H	7700		GB	3361	Pemba Island to Lamu	5°25.00'S	2°12.00'S	39°0.00'E	41°5.00'E	1997	2002	Produced	350,000			
H	7701		GB	616	Approaches to Port Mombasa	4°20.00'S	3°52.80'S	39°33.00'E	39°51.10'E	1992		Schemed	50,000			
H	7702	PLAN-A	GB	666	Plan A - Mbaraki Creek	4°4.53'S	4°4.90'S	39°39.61'E	39°39.86'E	2012	2013	Produced	3,000			
H	7702		GB	666	Port Mombasa including Port Kilindini and Port Reitz	4°6.32'S	4°1.90'S	39°35.68'E	39°43.12'E	2012	2013	Produced	12,500			
H	7705		GB	3362	Lamu to Kismayo	3°14.00'S	0°0.00'S	40°40.00'E	42°45.00'E	1997		Produced	350,000			
H	7710		FR	7490	Archipel des Comores	13°25.00'S	11°3.00'S	42°58.00'E	46°30.00'E	2013		Produced	350,000	GB	3895	
H	7720		FR	7491	De Nosy Bé à la Baie d'Antsiranana - Récif du Gegser - Iles Glorieuses	13°37.00'S	11°15.00'S	46°23.00'E	49°55.00'E	1998		Produced	350,000	GB	3876	
H	7722		FR	7682	Abords Nord de Toamasina (Tamatave)	18°14.50'S	17°45.00'S	49°19.70'E	49°40.70'E	2013		Produced	50,000	GB	695	
H	7723		FR	7683	Port et Passes de Toamasina (Tamatave)	18°10.35'S	18°1.41'S	49°22.50'E	49°28.87'E	2012		Produced	15,000	GB	696	
H	7724		FR	7684	Approches de Mahajanga	15°52.10'S	15°22.30'S	46°1.60'E	46°22.50'E	2017		Schemed	50,000			
H	7725	PLAN-A	FR	7685	Plan A: Port de Mahajanga	15°44.60'S	15°42.35'S	46°16.43'E	46°19.30'E	2017		Produced	10,000			
H	7725	PLAN-B	FR	7685	Plan B - Port de Boanamarg	15°51.37'S	15°49.57'S	46°18.05'E	46°20.26'E	2017		Produced	10,000			
H	7725		FR	7685	Ports de Mahajanga et Boanamarg					2017		Produced				
H	7730	PLAN-A	FR	7349	Plan A - Ile Tromelin	15°56.70'S	15°52.20'S	54°29.90'E	54°32.60'E	1996		Produced	30,000	GB	712	
H	7730		FR	7349	De la Réunion à Maurice (Mauritius) - Ile Tromelin	21°45.00'S	19°23.00'S	54°40.00'E	58°21.00'E	1996		Produced	350,000	GB	712	
H	7731	PLAN-A	GB	718	Plan A - Aldabra Island	9°33.30'S	9°15.80'S	46°2.70'E	46°37.40'E	1994	2019	Produced	100,000			
H	7731	PLAN-B	GB	718	Plan B - Assumption	9°47.50'S	9°39.00'S	46°26.80'E	46°34.90'E	1994	2019	Produced	75,000			
H	7731	PLAN-C	GB	718	Plan C - Ile Picard	9°25.00'S	9°21.50'S	46°10.40'E	46°17.50'E	1994	2019	Produced	30,000			
H	7731	PLAN-D	GB	718	Plan D - Cosmoledo Group	9°48.10'S	9°38.40'S	47°28.60'E	47°41.00'E	1994	2019	Produced	75,000			
H	7731	PLAN-E	GB	718	Plan E - Farquhar Group	10°16.60'S	10°3.70'S	50°56.60'E	51°13.90'E	1994	2019	Produced	100,000			
H	7731	PLAN-F	GB	718	Plan F - Ile Glorieuses	11°38.10'S	11°23.09'S	47°15.24'E	47°27.79'E	1994	2019	Produced	150,000			
H	7731	PLAN-G	GB	718	Plan G - Astove Island	10°7.50'S	10°2.40'S	47°42.50'E	47°47.00'E	1994	2019	Produced	50,000			
H	7731	PLAN-H	GB	718	Plan H - Entrance to Inner Harbour	10°7.70'S	10°5.70'S	51°8.80'E	51°10.10'E	1994	2019	Produced	20,000			

Current Status of INT charts – S11

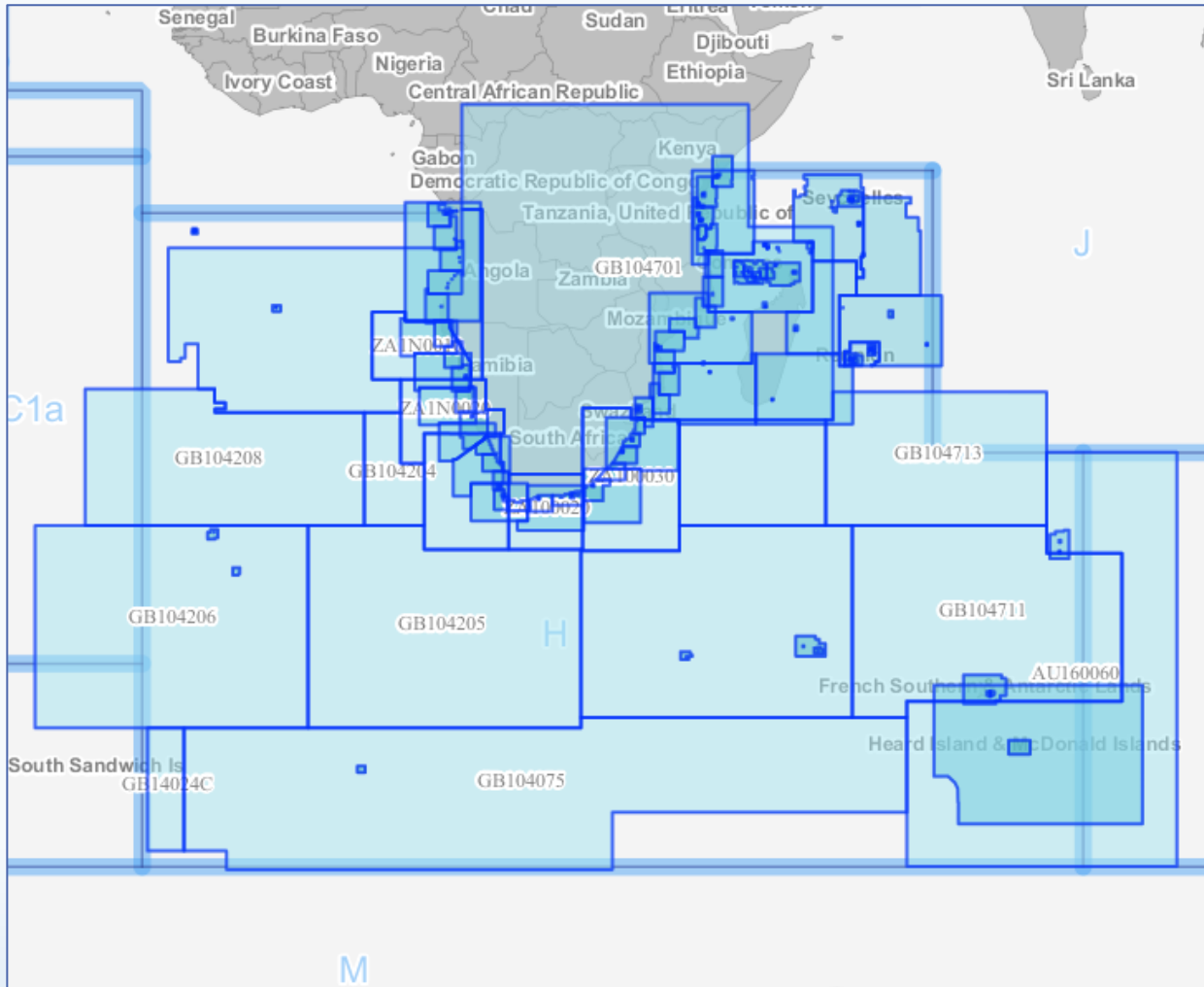
INTChart Number	PanelID	Producers	MatChartNumber	INT TITLE / TITRE	S_Limit	N_Limit	W_Limit	E_Limit	1 st Ed Year	New Ed Year	Producing Status	Scale	Printer Nation	Printer Mat. No.	Printformat
7731		GB	718	Islands North of Madagascar					1994	2019	Produced	Various			
7735		FR	7035	La Réunion	21°41.80'S	20°30.80'S	54°41.60'E	56°32.60'E	1985	1998	Produced	175,000	GB	1497	
7736	PLAN-A	FR	7183	Plan A - Port de Saint-Gilles-les-Bains	21°3.65'S	21°2.41'S	55°12.45'E	55°13.80'E	1990	2016	Produced	10,000	GB	1495	
7736	PLAN-B	FR	7183	Plan B - Port de la Pointe-des-Galets-Port Ouest	20°56.79'S	20°55.55'S	55°16.19'E	55°17.55'E	1990	2016	Produced	10,000	GB	1495	
7736	PLAN-C	FR	7183	Plan C - Port de la Pointe-des-Galets-Port Est	20°56.35'S	20°55.11'S	55°18.55'E	55°19.90'E	1990	2016	Produced	10,000	GB	1495	
7736		FR	7183	La Réunion - Partie Nord. De la Pointe des Châteaux à la Pointe de la Rivière du Mât	21°11.70'S	20°47.40'S	55°6.60'E	55°44.60'E	1990	2016	Produced	60,000	GB	1495	
7739	PLAN-A	IN	2514	Plan A: Port Louis	20°10.75'S	20°6.35'S	57°27.60'E	57°30.70'E	2014	2018	Produced	12,500	GB	710	
7739		IN	2514	Approaches to Port Louis	20°13.16'S	20°0.04'S	57°21.00'E	57°33.00'E	2014	2018	Produced	37,500	GB	710	
77391		IN	2503	Approaches to Cargados - Carajos Shoals	16°53.00'S	16°13.00'S	59°22.00'E	59°49.00'E	2016	2017	Produced	75,000			
77392		IN	2504	Mathurin Harbour	19°42.40'S	19°38.00'S	63°23.00'E	63°26.43'E	2017		Produced	12,500			
77393		IN	2505	Approaches to Mathurin Harbour	19°43.00'S	19°29.70'S	63°21.25'E	63°30.50'E	2017		Produced	25,000			
77394	PLAN-A	IN	2506	Plan B - Grande Riviere Noire Bag	20°22.60'S	20°18.04'S	57°18.35'E	57°23.00'E	2017		Produced	25,000			
77394		IN	2506	Plan A - Grand Bag	20°1.13'S	19°56.56'S	57°31.60'E	57°36.14'E	2017		Produced	25,000			
77395		IN	2507	Grand Port	20°25.35'S	20°20.90'S	57°43.75'E	57°47.20'E	2017	2020	Produced	12,500			
77396		IN	2512	Agalega Islands	10°33.60'S	10°15.90'S	56°33.35'E	56°45.45'E	2017		Produced	37,500			
77397		IN	2527	Mauritius	20°41.60'S	19°35.40'S	57°9.00'E	57°55.60'E	2019		Produced	125,000	IN		
7740		GB	740	Seychelles Group	5°20.60'S	3°38.00'S	53°55.90'E	56°34.90'E	2003		Produced	300,000			
7741		GB	742	Mahe, Praslin and Adjacent Islands	4°54.12'S	4°11.39'S	55°6.96'E	56°13.20'E	2011		Produced	125,000			
7742		GB	722	Port Victoria and Approaches	4°40.83'S	4°34.03'S	55°26.86'E	55°31.40'E	1994	2009	Produced	12,500			
7745	PLAN-A	ZA	SAN 2003	Plan A - Marion Island (Transvaal Cove)	46°54.30'S	46°50.50'S	37°49.80'E	37°55.60'E	1989	2013	Produced	30,000			
7745		ZA	SAN 2003	Marion & Prince Edward Islands	47°4.00'S	46°30.00'S	37°15.00'E	38°30.00'E	1989	2013	Produced	100,000			
7746		AU	Aus 597	Approaches to Heard Islands	57°40.00'S	48°57.00'S	64°10.86'E	86°20.00'E	2006		Schemed	Various			
7747	PLAN-A	FR	6498	A - Ile aux Cochons - côte Est , mouillage de la Meurthe	46°9.20'S	46°3.20'S	50°14.50'E	50°21.50'E	1967	1989	Schemed	50,000			
7747		FR	6498	Iles Crozet	46°50.00'S	45°20.50'S	49°30.00'E	52°38.50'E	1967	1989	Schemed	250,000			
7748		FR	7171	Approche des Iles Saint-Paul et Amsterdam	39°17.00'S	36°53.50'S	76°30.00'E	78°33.00'E	1991		Schemed	Various			
7749		FR	6741	Iles Kerguelen	50°10.00'S	48°10.00'S	67°20.00'E	71°50.00'E	1978	2018	Schemed	300,000			

Item 4.2: S11 - Region H Chart Scheme

Member States – Expectations

- Maintenance of S-11 Web Catalogue
- Consultation
- Review of INT charts and ENC's
- Monitoring of INT charts
- Surveys

Item 4.3: Region H Chart Scheme – Status of ENC coverage



Number of ENCs per Usage Band

Berthing UB6 = 21

Harbour UB5 = 68

Approach UB4 = 74

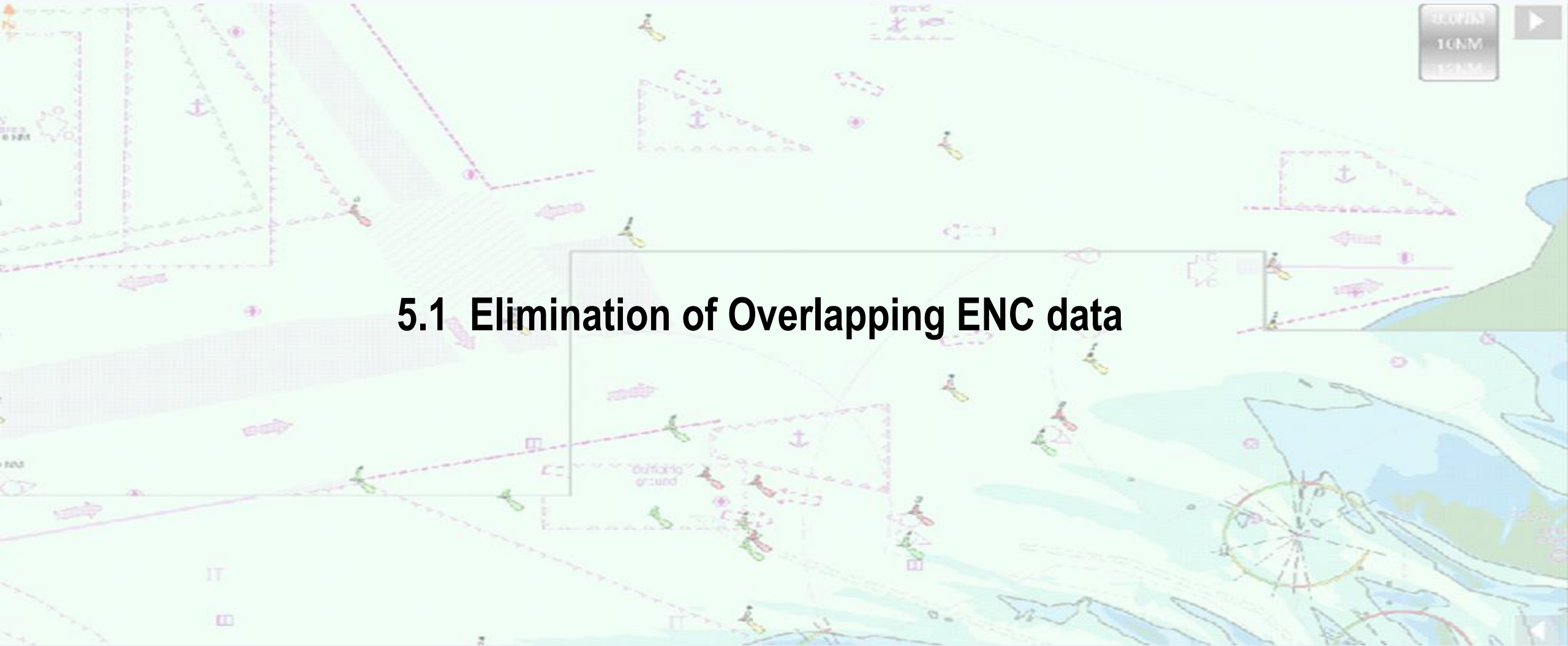
Coastal UB3 = 55

General UB2 = 21

Overview UB1 = 18

Total of 257 ENCs covering SAIHC Region H

Item 5: ENC Overlaps



5.1 Elimination of Overlapping ENC data

Item 5: ENC Overlaps

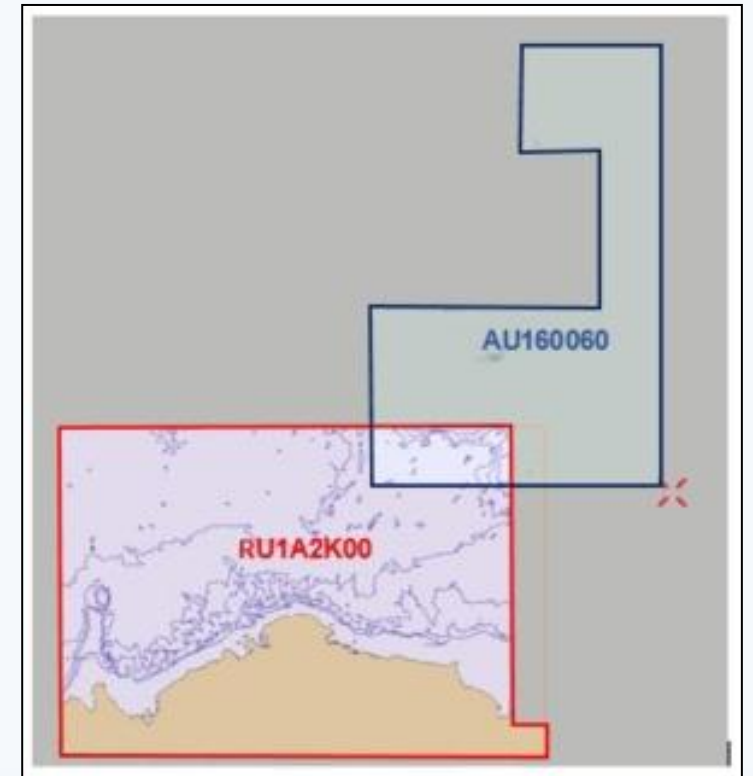
Current Status of Overlapping ENCs in Region

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC	SAIHC/HCA	RU1A2K00	AU160060	1	LOW
LIVE	IC-ENC-PRIMAR	SAIHC	ZA100030	FR277980	1/2	LOW
LIVE	IC-ENC - PRIMAR	SAIHC	GB54232A	IN52520A	5	LOW
LIVE	IC-ENC - PRIMAR	SAIHC	GB500722	IN52551A	5	MEDIUM
				IN52552W		MEDIUM
LIVE	IC-ENC - PRIMAR	SAIHC	GB502758	IN52510B	5	MEDIUM
				IN52511A		MEDIUM
LIVE	IC-ENC-PRIMAR	SAIHC	GB54232A	IN62516D	5/6	MEDIUM
ACCEPT	IC-ENC	SAIHC	ZA100010	GB104701	1	Overland
ACCEPT	IC-ENC	SAIHC	ZA1N0020	GB104701	1	Overland
ACCEPT	IC-ENC	SAIHC	ZA1N0010	GB104203	1	-
RESOLVED	IC-ENC	SAIHC	ZA200010	ZA200020	2	LOW
RESOLVED	IC-ENC	SAIHC	ZA200030	ZA200040	2	LOW
RESOLVED	IC-ENC	SAIHC	ZA100030	GB104701	1	-
RESOLVED	IC-ENC	SAIHC	ZA300120	GB302930	3	-
RESOLVED	IC-ENC	SAIHC	ZA200010	ZA2N0040	2	LOW
RESOLVED	IC-ENC-PRIMAR	SAIHC	ZA3N0030	ZA3N0020	3	-
RESOLVED	IC-ENC	SAIHC	ZA3N0030	ZA3N0040	3	-
RESOLVED	IC-ENC - PRIMAR	SAIHC	ZA200020	ZA200030	2	LOW
RESOLVED	IC-ENC - PRIMAR	SAIHC	GB600722	IN62515P	2	-

Item 5: ENC Overlaps

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC	SAIHC/HCA	RU1A2K00	AU160060	1	LOW

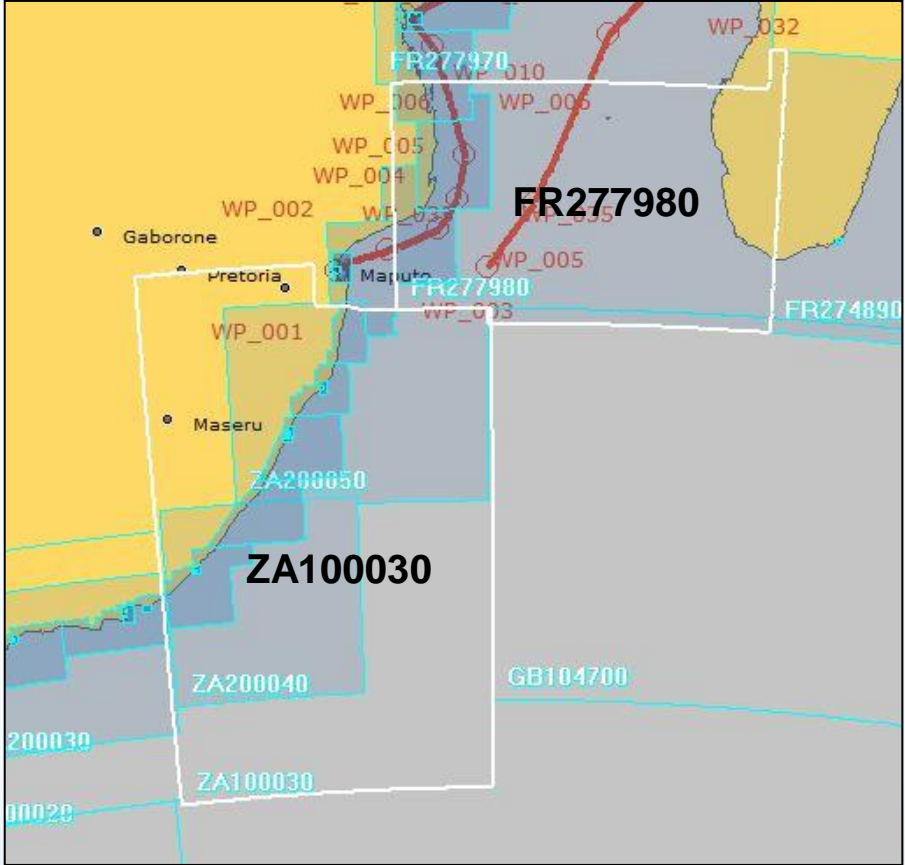
Overlap remains unresolved



Item 5: ENC Overlaps

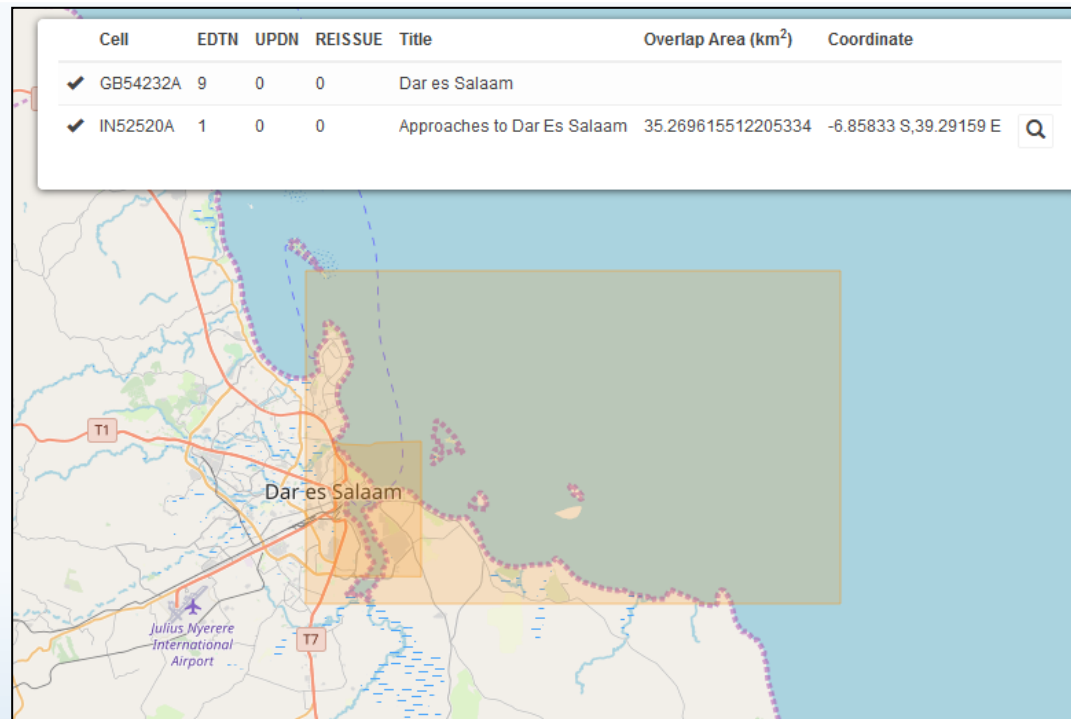
STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC/PRIMAR	SAIHC	ZA100030	FR277980	1/2	LOW

Overlap to be resolved



Item 5: ENC Overlaps

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC - PRIMAR	SAIHC	GB54232A	IN52520A	5	LOW



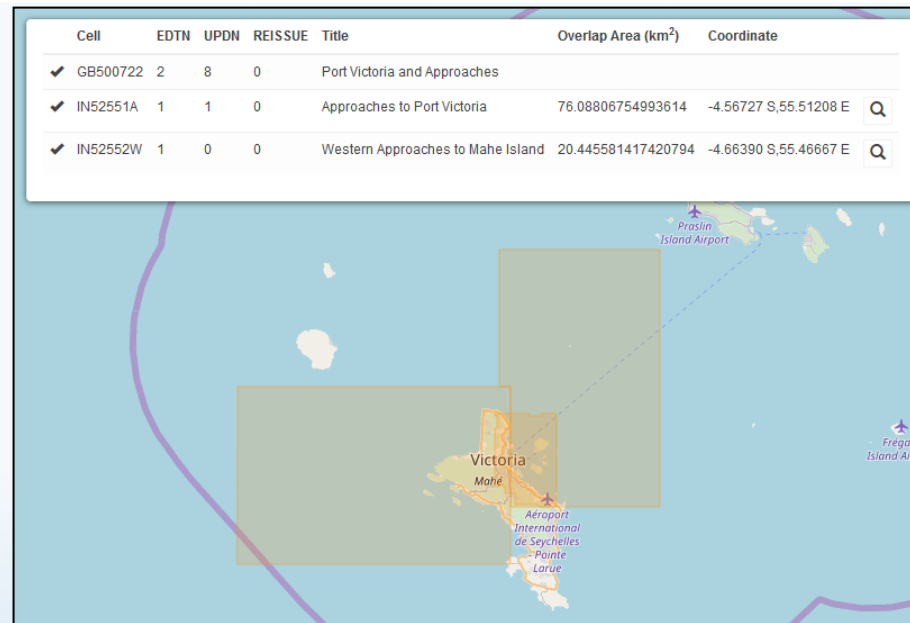
Discussions ongoing between MS to resolve overlap

Tanzania

Item 5: ENC Overlaps

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC - PRIMAR	SAIHC	GB500722	IN52551A IN52552W	5	MEDIUM

Discussions ongoing between MS to resolve overlap

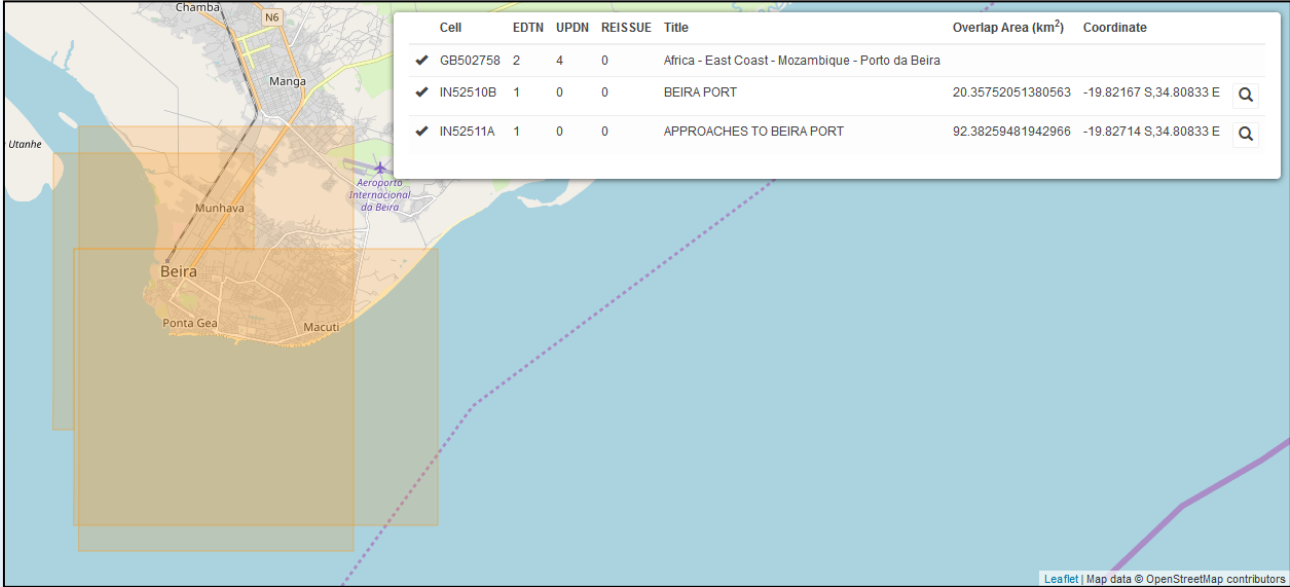


Seychelles

Item 5: ENC Overlaps

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC - PRIMAR	SAIHC	GB502758	IN52510B IN52511A	5	MEDIUM

Discussions ongoing between MS to resolve overlap

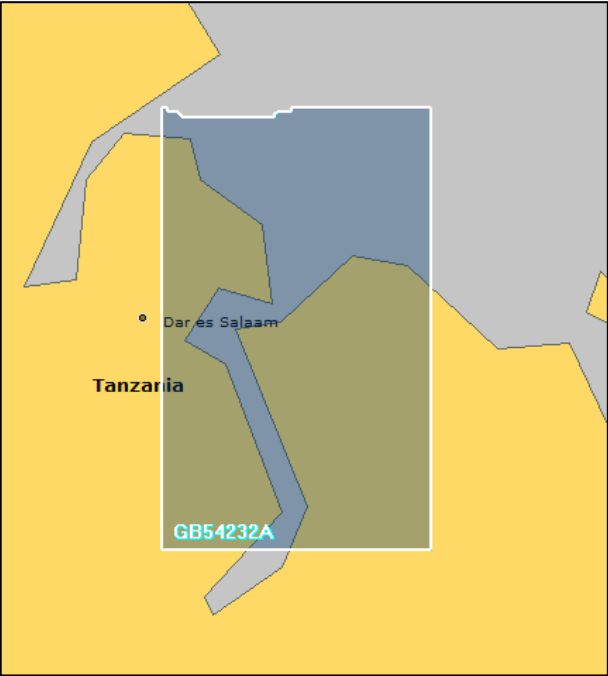


Mozambique

Item 5: ENC Overlaps

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC - PRIMAR	SAIHC	GB54232A	IN62516D	5/6	MEDIUM

Discussions ongoing between MS to resolve overlap



Tanzania

Item 5: ENC Overlaps

Summary of existing LIVE overlapping ENCs in Region H

STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Overall Severity of Risk
LIVE	IC-ENC	SAIHC/HCA	RU1A2K00	AU160060	1	LOW
LIVE	IC-ENC-PRIMAR	SAIHC	ZA100030	FR277980	1/2	LOW
LIVE	IC-ENC - PRIMAR	SAIHC	GB54232A	IN52520A	5	LOW
LIVE	IC-ENC - PRIMAR	SAIHC	GB500722	IN52551A	5	MEDIUM
				IN52552W		MEDIUM
LIVE	IC-ENC - PRIMAR	SAIHC	GB502758	IN52510B	5	MEDIUM
				IN52511A		MEDIUM
LIVE	IC-ENC-PRIMAR	SAIHC	GB54232A	IN62516D	5/6	MEDIUM

Item 5: ENC Overlaps

Potential implications overlapping ENCs may have on ECDIS systems and the safety of navigation:

- Overlapping data can have erratic effects on the display of ENCs.
- Significant inconsistency between results in different ECDIS.
- The main negative effects are on panning across the cell and the pick report summary



UK Hydrographic
Office

ICCWG 6.1

SAIHC ENC Scheme – Gridded ENC Option

Presented by James Timmins, UKHO

September 7, 2020



International Hydrographic Organization
Organisation Hydrographique Internationale

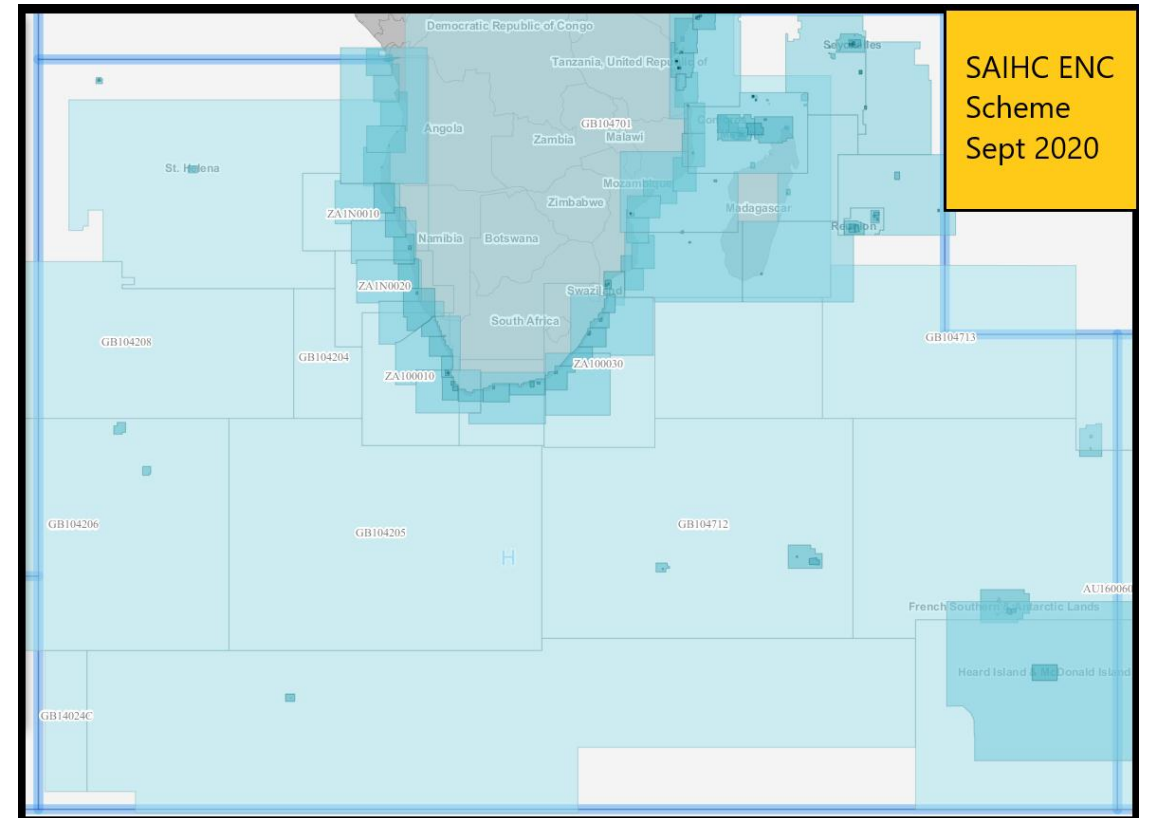
Southern African and Islands Hydrographic Commission



Existing SAIHC ENC Scheme

Traditional scheme evolved from paper chart limits

- Closely follows paper chart scheming
- Focused on ports and approaches
- Cells extents and shapes are varied
- No systematic structure to the scheme
- Does not contain 'richer' data such as higher density contours



Gridded ENC

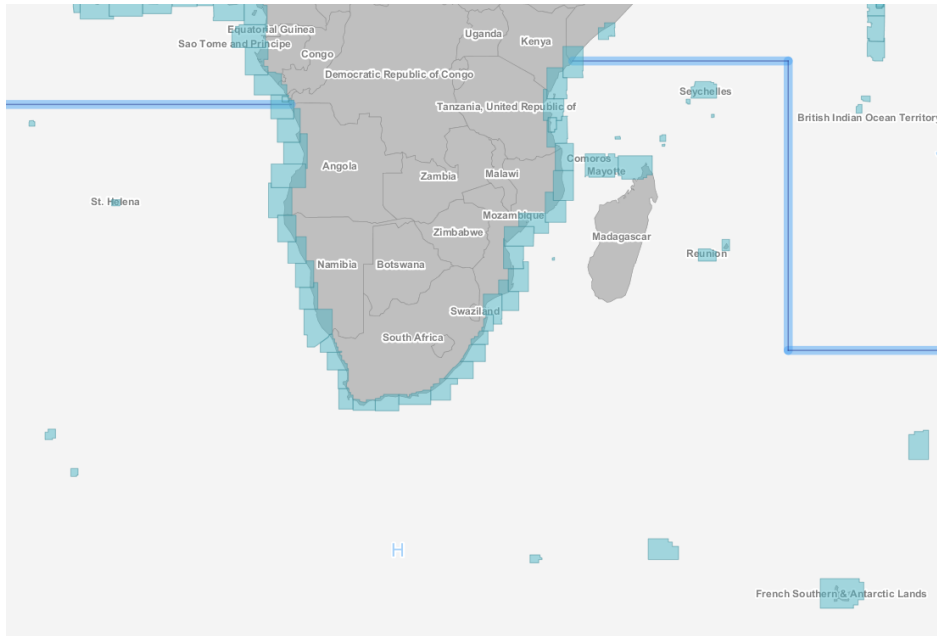
Gridded ENC scheme not based on evolved paper charts

- Cells follow a logical system and extents, shapes are uniform
- Cells are smaller extent and can support 'richer' data (higher density contours)
- Gridded cells could support automated paper chart production in the future
- Gridded data packages easier to manage as a scheme

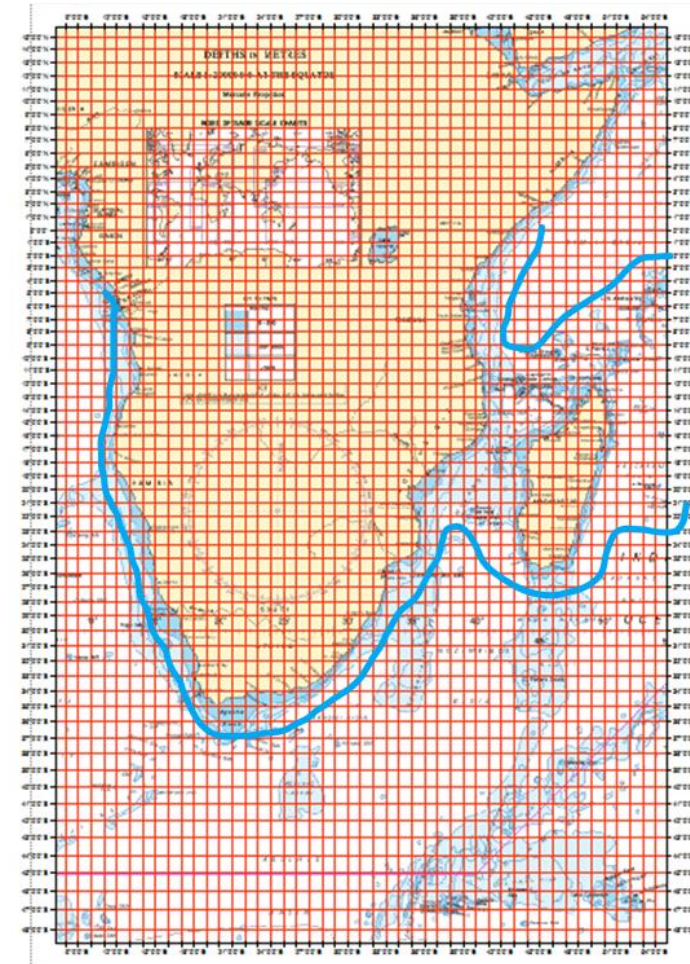
Things to consider

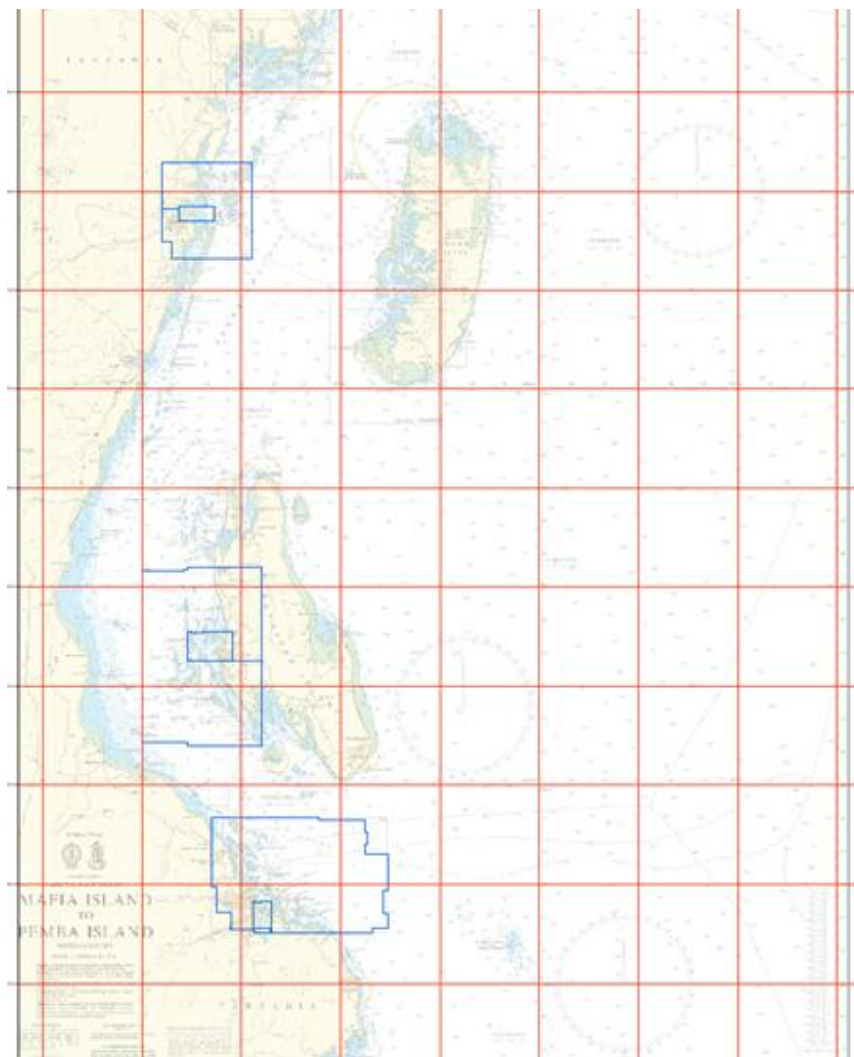
- Effort needed to rescheme existing cells
- Regional grid or individual country grids
- Cell splits across International boundaries and ports
- Grid cell size, origin and naming convention
- Availability of sufficient bathymetric data
- Would users purchase all the cells needed for safe navigation?
- SOLAS vessels follow clear routes, many grid cells may have low user requirement

Grid options



The coastal ENC coverage (UB3) could be a 1° x 1° grid. The coast and main routes could be prioritised before other areas .





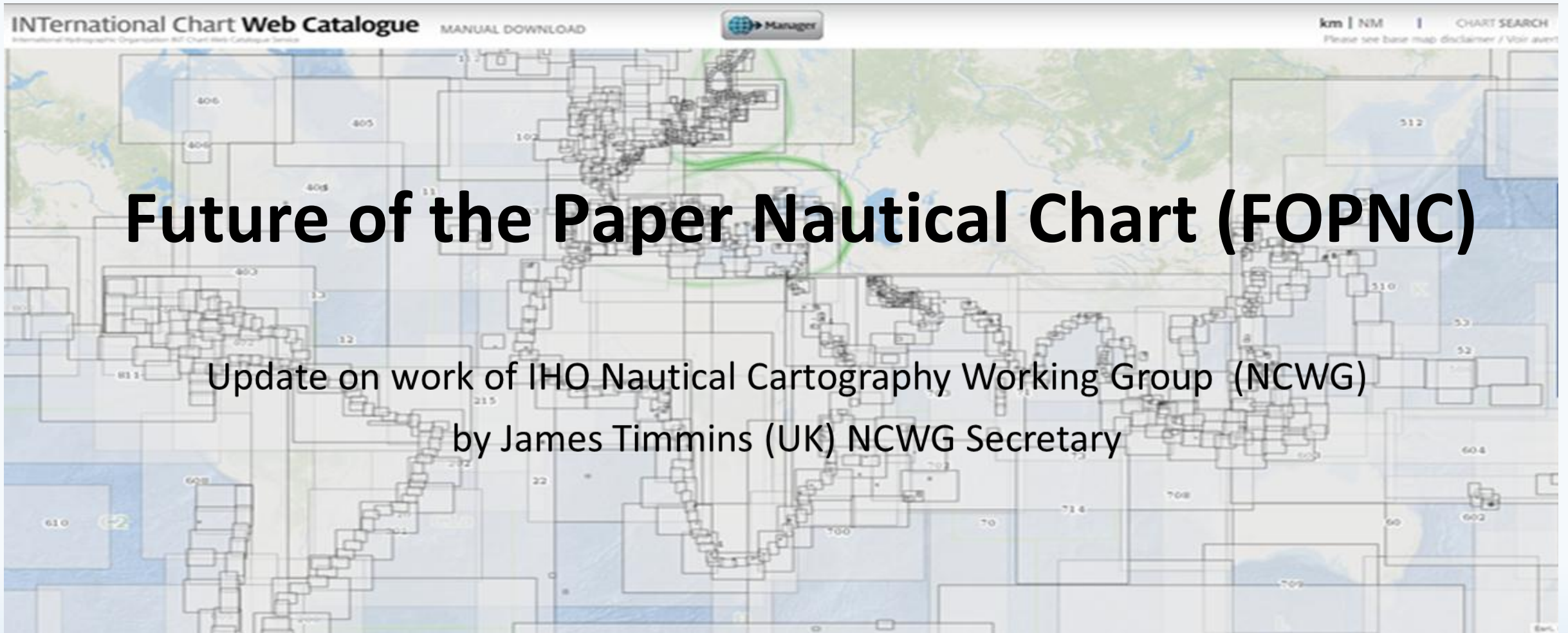
Example of Approach coverage (UB4) shown in red against existing ENC (UB4) ENCs shown in blue. This grid uses a $0.25^\circ \times 0.25^\circ$ cell size.

Recommendations

- SAIHC ICCWG monitors global developments in ENC gridding as IHO members start to investigate further and make advances.
- Consider if SAIHC areas that do not have ENCs at the moment would benefit from gridded ENCs instead of following paper chart limits.
- Undertake further research to understand how many gridded cells could be required and consider advantages and disadvantages in closer detail.

Questions

Item 7:



Future of the Paper Nautical Chart (FOPNC)

Update on work of IHO Nautical Cartography Working Group (NCWG)
by James Timmins (UK) NCWG Secretary

Item 7:

NCWG Progress since last SAIHC meeting:

- FOPNC Questionnaire submitted to IHO members via CL 29/19
- Results of questionnaire included in final 65 page FOPNC report submitted to HSSC 12 in October 2020.
- Discussions at NCWG5, Stockholm Nov 2019 included :
 - Is there still a requirement for INT charts
 - Is there a need for simplified paper charts or 'back up charts'
 - Automated paper chart production
 - Future of S-4 should now be reviewed and a baseline symbology developed for paper charts.
 - Techniques for reducing maintenance on paper charts
 - UK is taking over responsibility for English language INT 1.

Item 8:

Any other matters arising from discussions during the meeting

Item 9:

Closure