

ic-enc

**International Centre for Electronic Navigational Charts**

# **IC-ENC Update to SAIHC**

## **Cape Town, August 2016**

**James Harper, IC-ENC General Manager**

**Presentation title:**

# **Forget ENCs!**

# Agenda

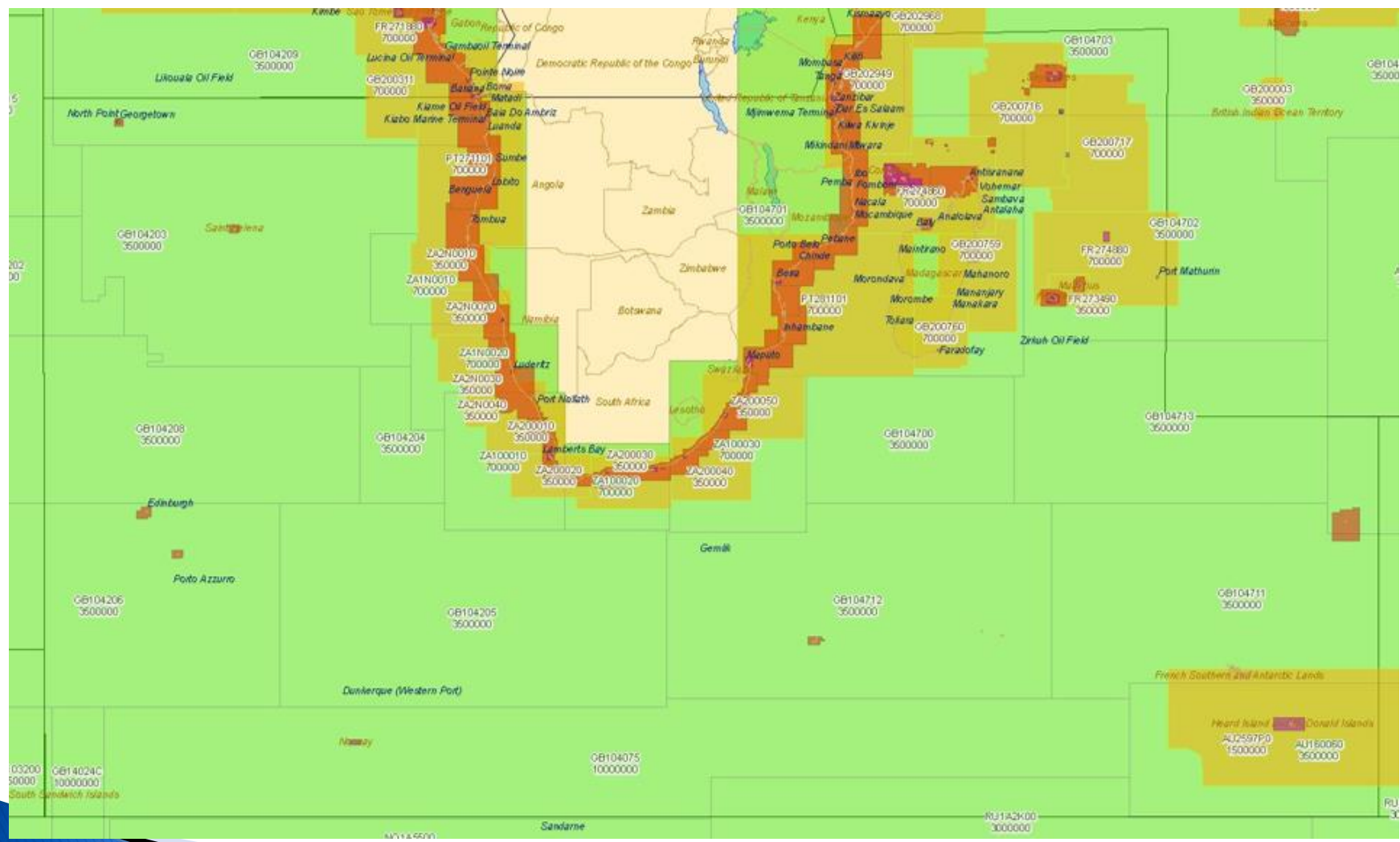
- ▶ Why am I here?
- ▶ ENC's in the SAIHC
- ▶ The WEND: ENC Quality, Consistency, Availability
- ▶ The role of RENCs
- ▶ Key message

# Why am I here?

## SAIHC 2015 Action 27:

	DECISIONS.		
27	Norway proposed that for the next SAIHC conference, an invitation will be forwarded to both regional ENC centres ie IC-ENC and Primar. The Chair concurred and indicated that invitations will be made to both to attend the next SAIHC Conference.	SAIHC Chair.	
28	SAIHC 12 Conference to be held in	South Africa	

# ENCs in the SAIHC



# ENCs in the SAIHC

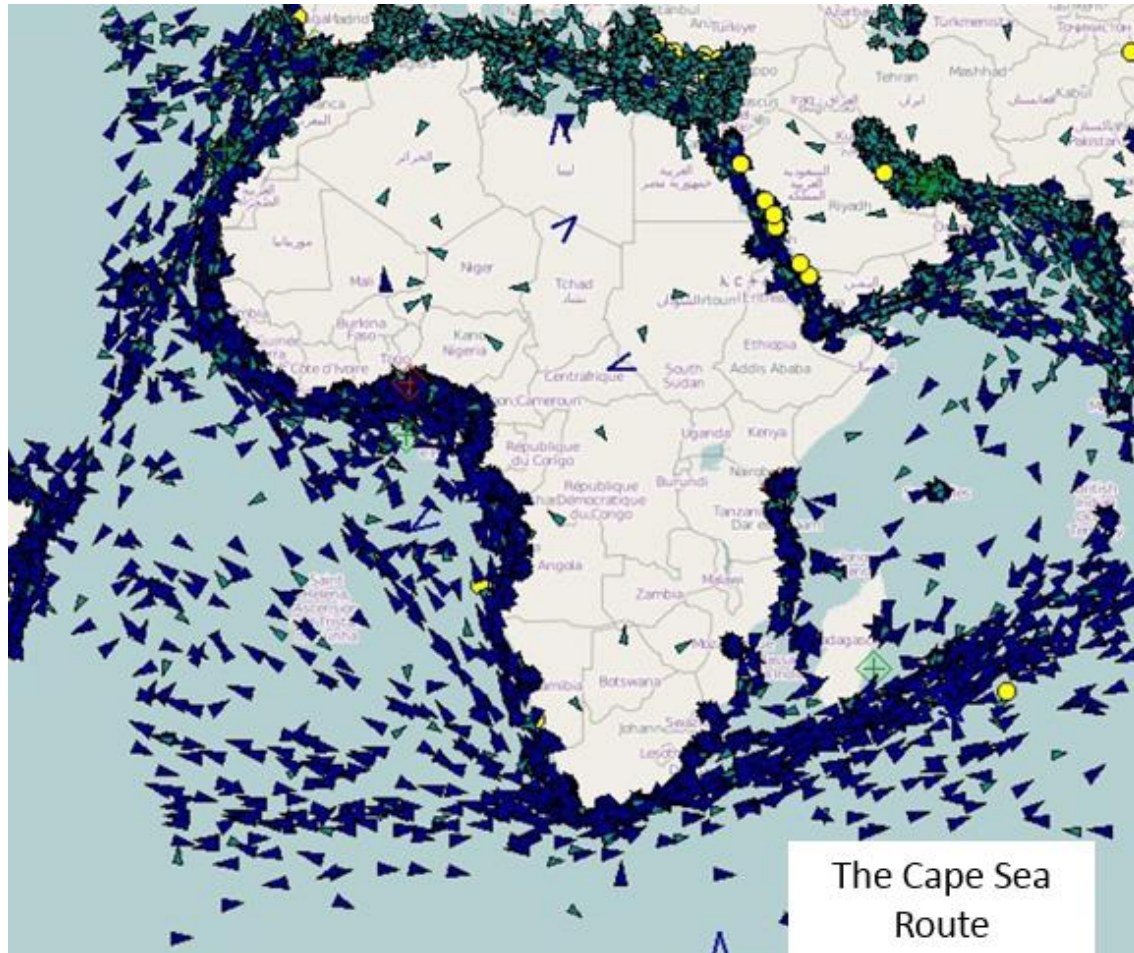
Producer / Usage Band	1	2	3	4	5	6
Australia	2	1	0	1	0	0
France	0	3	4	9	9	2
India	0	0	0	1	6	3
Norway	0	0	0	1	0	0
Portugal	0	2	0	0	0	0
Russia	2	0	0	0	0	0
South Africa	5	9	18	13	11	0
United Kingdom	17	7	32	32	14	2
	26	22	54	57	40	7

# Forget ENCs, think WEND

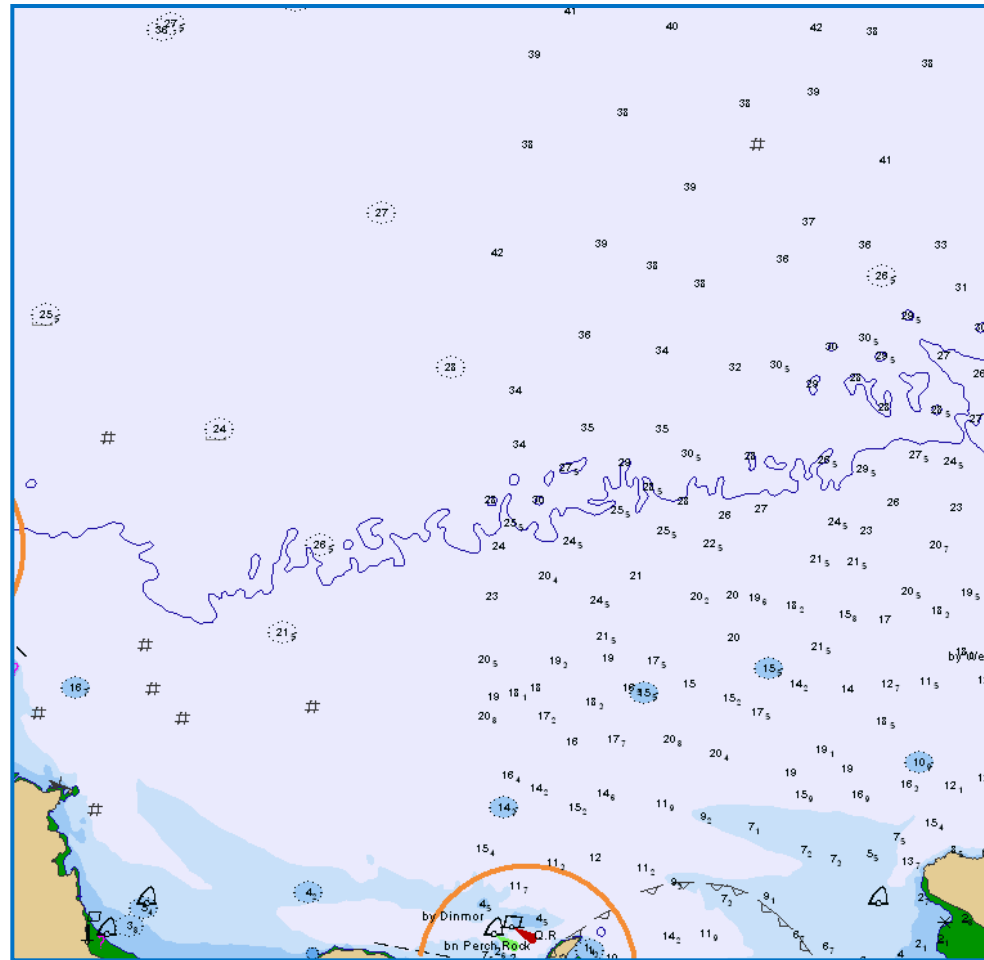
- ▶ **W**orldwide
- ▶ **E**lectronic
- ▶ **N**avigational **C**hart
- ▶ **D**atabase



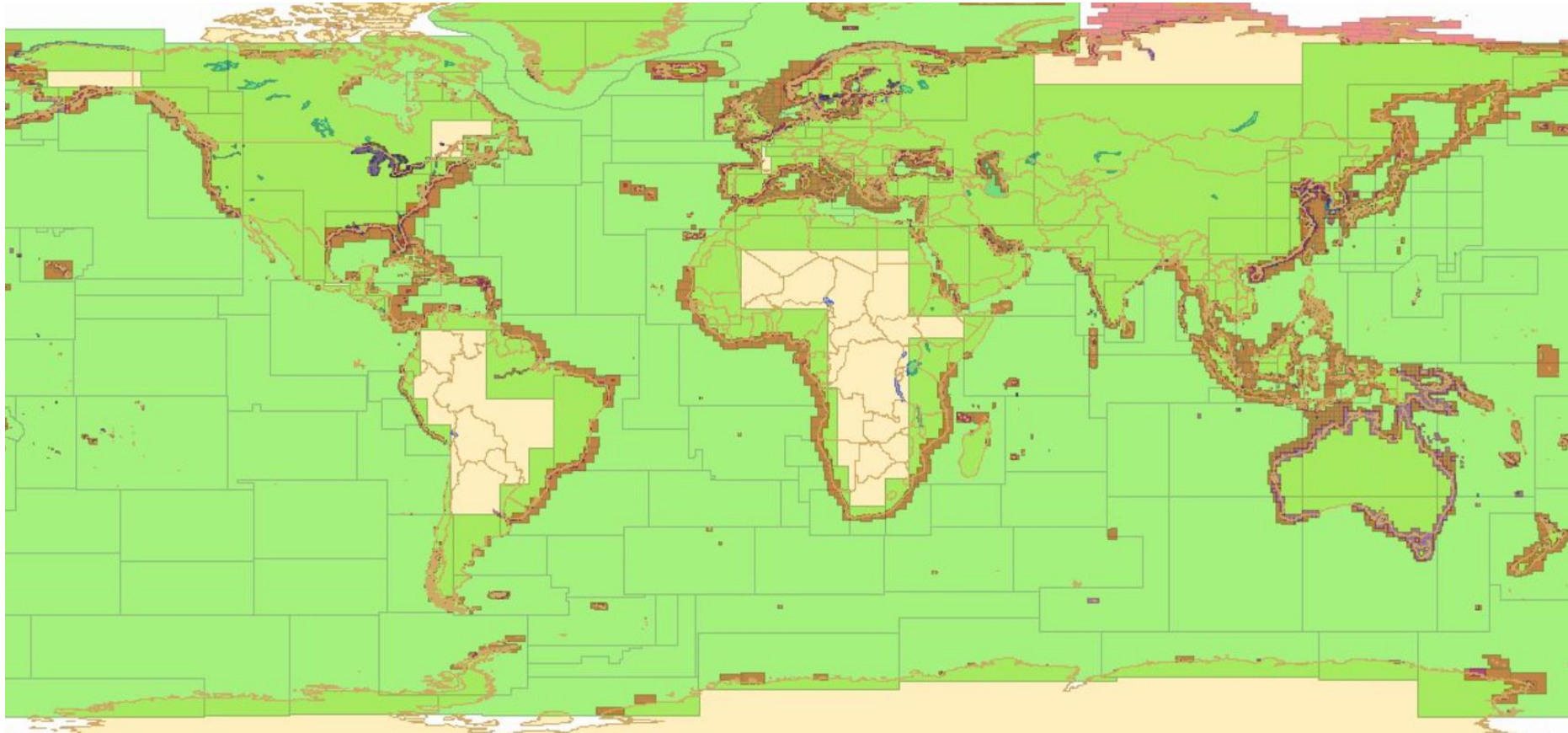
# The 'W' of WEND; Worldwide...



# Forget ENC's, think WEND



# WEND so far...



# The WEND requires:

- ▶ Each individual ENC to be of appropriate **Quality**
- ▶ **Consistency** across the WEND
- ▶ **Availability** (including maintenance)

RENCs (PRIMAR & IC-ENC) are in place to assist HO's with achieving this

# IC-ENC's Mission

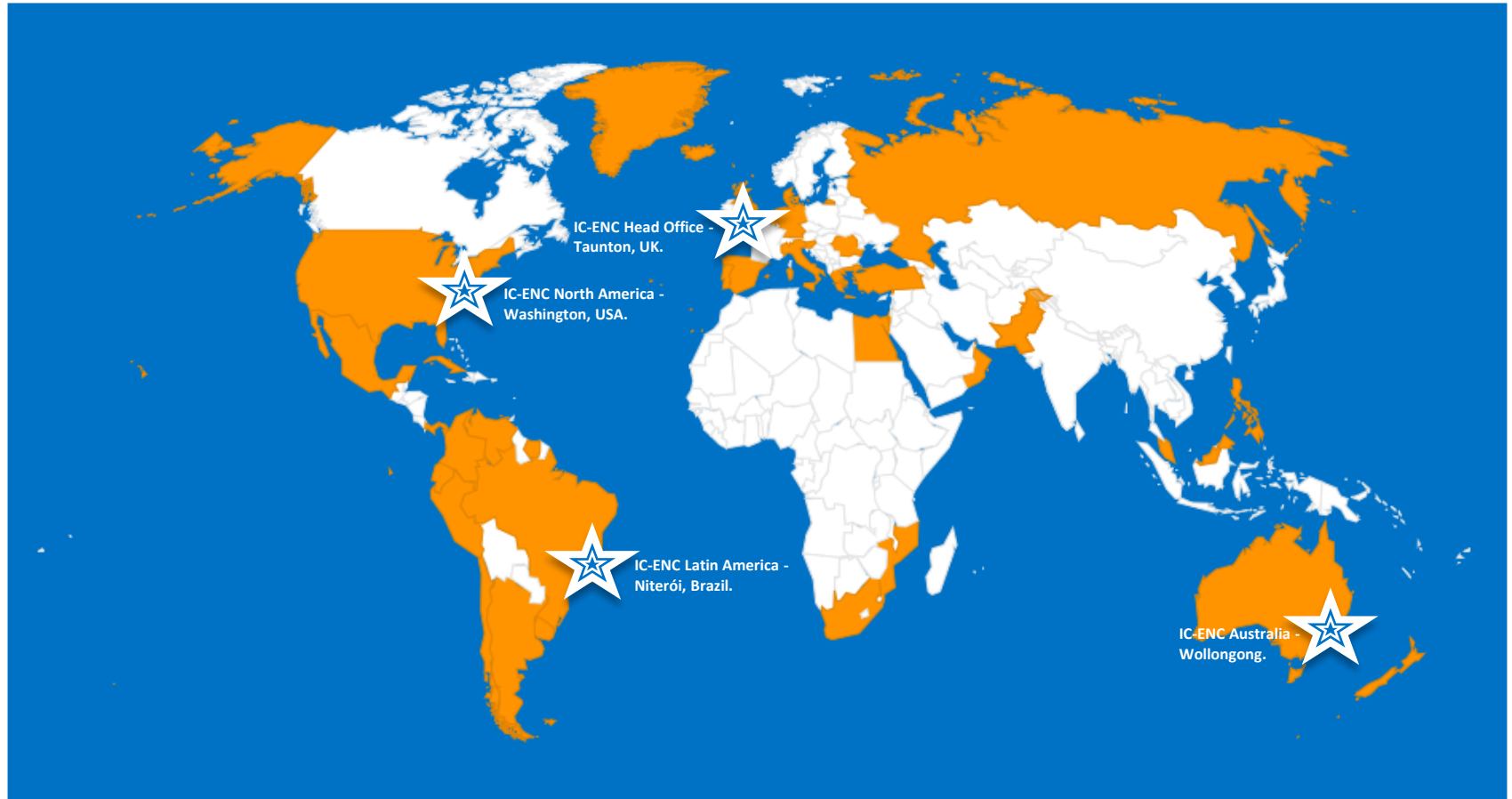
*To provide services, at a low cost, to national Hydrographic Offices that ensure their ENCs are:*

*compliant to the international standards,  
consistent across the global dataset,  
and readily available for use.*

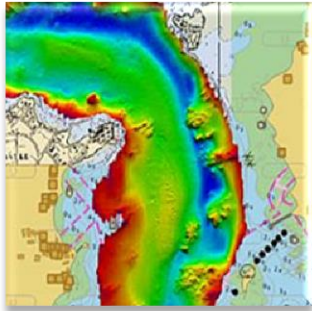
*This is so that shipping can navigate safely,  
efficiently and confidently, whilst ensuring other  
maritime users are using the same approved data.*

# *Better* **ENCs**

# Membership (40) & IC-ENC Offices (4)



# IC-ENC Core Services



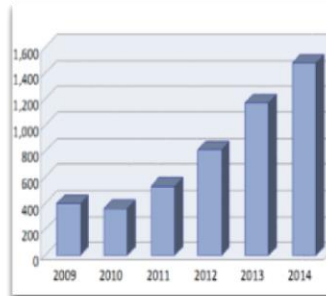
**ENC Production Support**



**ENC Validation**



**ENC Distribution**



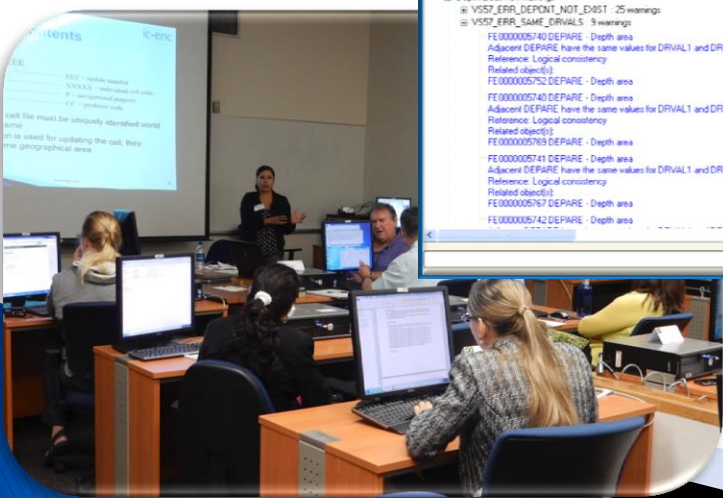
**Revenue Management & Financial Reporting**



# ENC Quality and WEND Consistency: Validation and Production Support

The screenshot displays the 'ic-enc' software interface. On the left, a 'List' pane shows a table of errors with columns for 'Filter the list', 'ERROR', 'EXAMPLE', and 'DESCRIPTION'. The main window is titled 'ENC Analyzer' and contains a 'Checks' section with various options like 'Data dictionary', 'Topology', and 'Redundancy'. Below this is a 'Messages' pane showing a detailed list of warnings and errors, such as 'Summary information: 1 information' and 'Depth areas: 34 warnings'.

The screenshot shows the 'IC-ENC Data Management Data base' interface. It displays metadata for a specific cell, including 'CELL: DE421010.009', 'EDITION: 8', 'ISSUE DATE: 10/01/14', and 'DMD ID: 65203'. The interface includes fields for geographic coordinates (SOUTH, WEST, NORTH, EAST), scale, and CRC. A 'Cancelled' checkbox is visible. Below the metadata, there are buttons for 'Check Errors', 'P007', 'Previous P007', 'Email', 'COUNTRY INFO', 'CELL INFO', 'TICK LIST', and 'Add Australia'. A 'Comments' section at the bottom provides additional context: 'Recommendation made in P007 for DE521130 (DMD ID 31830) for more bathymetry to be depicted in the area of the band 4 cell that is covered by the band 5. (Watch List No. 485)'.

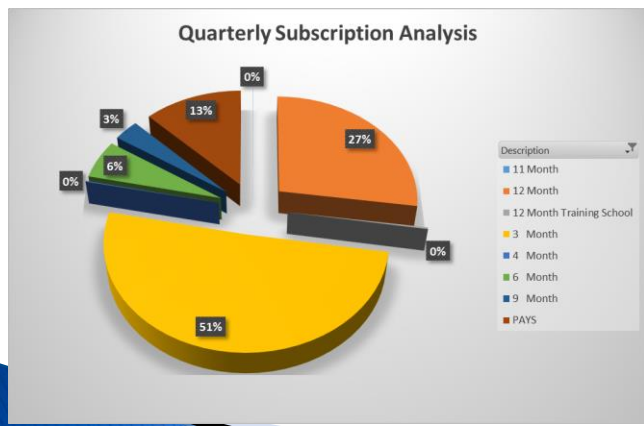
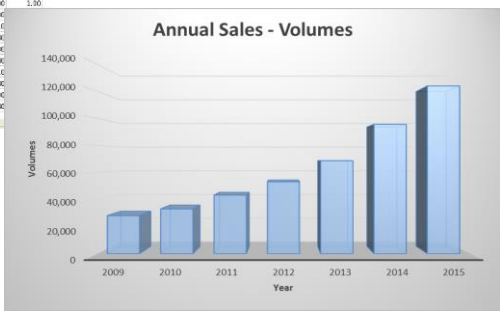


# Availability: Worldwide ENC Distribution



# ENC Revenue Management

1	A	B	C	D	E	F	G	H	I	J	K	L	M	
2	DEM01	NONIMO	X012345A	CELL NAME	-1	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
3	DEM01	NONIMO	X012345B	CELL NAME	-2	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
4	DEM01	NONIMO	X012345C	CELL NAME	-3	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
5	DEM01	NONIMO	X012345D	CELL NAME	-4	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
6	DEM01	NONIMO	X012345E	CELL NAME	-5	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
7	DEM01	NONIMO	X012345F	CELL NAME	-6	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
8	DEM01	NONIMO	X012345G	CELL NAME	-7	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
9	DEM01	NONIMO	X012345H	CELL NAME	-8	3	12 Month	IG-ENC-XX	01/02/2015	29/02/2016	USD	\$1.00	\$11.00	1.00
10	DEM02	IM012345T	X012345E	CELL NAME	-2	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
11	DEM02	IM012345T	X012345E	CELL NAME	-4	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
12	DEM02	IM012345T	X012345E	CELL NAME	-5	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
13	DEM03	IM012345B	X012345E	CELL NAME	-2	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
14	DEM03	IM012345B	X012345E	CELL NAME	-4	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
15	DEM03	IM012345B	X012345E	CELL NAME	-1	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
16	DEM04	IM012345B	X012345E	CELL NAME	-2	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
17	DEM04	IM012345B	X012345E	CELL NAME	-1	4	3 Month	IG-ENC-XX	02/02/2015	31/05/2015		\$6.00	\$0.00	0.00
18	DEM05	IM012345T	X012345E	CELL NAME	-3	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
19	DEM05	IM012345T	X012345E	CELL NAME	-1	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
20	DEM05	IM012345T	X012345E	CELL NAME	-2	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
21	DEM05	IM012345T	X012345E	CELL NAME	-3	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
22	DEM05	IM012345T	X012345E	CELL NAME	-4	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
23	DEM05	IM012345T	X012345E	CELL NAME	-5	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
24	DEM05	IM012345T	X012345E	CELL NAME	-6	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
25	DEM05	IM012345T	X012345E	CELL NAME	-7	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
26	DEM05	IM012345T	X012345E	CELL NAME	-8	1	6 Month	IG-ENC-XX	09/02/2015	31/08/2015		\$6.00	\$0.00	0.00
27	DEM07	NONIMO	X012345F	CELL NAME	-6	7	PAYS	IG-ENC-XX	25/02/2015	25/02/2015		\$93.40	\$397.40	3.00
28	DEM07	NONIMO	X012345F	CELL NAME	-5	7	PAYS	IG-ENC-XX	25/02/2015	25/02/2015		\$93.40	\$397.40	3.00
29	DEM07	NONIMO	X012345F	CELL NAME	-4	7	PAYS	IG-ENC-XX	25/02/2015	25/02/2015		\$93.40	\$397.40	3.00
30	DEM07	NONIMO	X012345F	CELL NAME	-3	7	PAYS	IG-ENC-XX	25/02/2015	25/02/2015		\$93.40	\$397.40	3.00
31	DEM07	NONIMO	X012345F	CELL NAME	-2	7	PAYS	IG-ENC-XX	25/02/2015	25/02/2015		\$93.40	\$397.40	3.00
32	DEM07	NONIMO	X012345F	CELL NAME	-1	7	PAYS	IG-ENC-XX	25/02/2015	25/02/2015		\$93.40	\$397.40	3.00
33	DEM09	IM0999999	X012345A	CELL NAME	-1	5	Demo	IG-ENC-XX	27/02/2015	31/05/2015		\$46.10	\$495.10	1.00
34	DEM09	IM0999999	X012345C	CELL NAME	-3	5	Demo	IG-ENC-XX	27/02/2015	31/05/2015		\$46.10	\$495.10	1.00
35	DEM09	NONIMO	X012345A	CELL NAME	-1	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
36	DEM09	NONIMO	X012345B	CELL NAME	-2	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
37	DEM09	NONIMO	X012345C	CELL NAME	-3	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
38	DEM09	NONIMO	X012345D	CELL NAME	-4	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
39	DEM10	NONIMO	X012345A	CELL NAME	-1	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
40	DEM10	NONIMO	X012345B	CELL NAME	-2	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
41	DEM10	NONIMO	X012345C	CELL NAME	-3	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
42	DEM10	NONIMO	X012345D	CELL NAME	-4	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
43	DEM11	NONIMO	X012345A	CELL NAME	-1	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
44	DEM11	NONIMO	X012345B	CELL NAME	-2	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
45	DEM11	NONIMO	X012345C	CELL NAME	-3	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
46	DEM11	NONIMO	X012345D	CELL NAME	-4	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
47	DEM11	NONIMO	X012345E	CELL NAME	-5	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
48	DEM11	NONIMO	X012345F	CELL NAME	-6	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
49	DEM11	NONIMO	X012345G	CELL NAME	-7	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00
50	DEM11	NONIMO	X012345H	CELL NAME	-8	9	12 Month	IG-ENC-XX	01/02/2015	29/02/2016		\$1.00	\$11.00	1.00



	A	B	C	D
1				
2				
3	Row Labels	Sum of Sales Vol	Sum of Total HO	
4	X012345A	49.30	\$542.30	
5	X012345B	51.90	\$570.90	
6	X012345C	39.60	\$435.60	
7	X012345D	39.10	\$430.10	
8	X012345E	45.20	\$497.20	
9	X012345F	46.80	\$514.80	
10	X012345G	35.40	\$389.40	
11	X012345H	33.70	\$370.70	
12	Grand Total	341.00	\$3,751.00	
13				

Detailed sales reports produced

Financial payments made to ENC Producers each quarter

## Key message:

For emerging ENC Producers in the SAIHC to “**think WEND**”

- ▶ ENC Quality
- ▶ WEND Consistency
- ▶ Availability

# What about the Established ENC ic-enc Producers?

- ▶ ENC Departments change (people, tools, philosophy etc)
  - Resources, capacity building, training
- ▶ S-101
  - The new ENC Standard – new production tools, techniques, understanding

ic-enc