

ic-enc

International Centre for Electronic
Navigational Charts

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IC-ENC Introduction

- ▶ IC-ENC is a RENC¹ as referenced in the IHO WEND principles
- ▶ IC-ENC was formed in 2002 with 6 members (participating HOs)
- ▶ Our focus is ENC Quality Assurance & Distribution

¹ Regional ENC Coordination Centre

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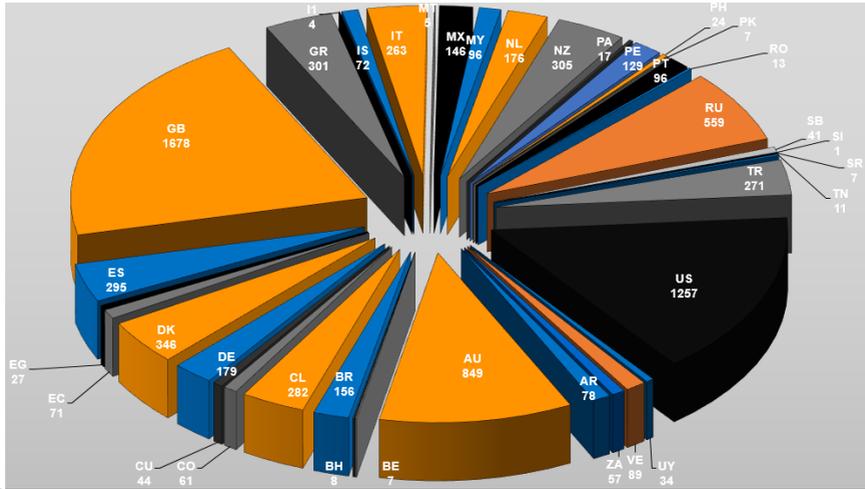
IC-ENC Members - 44

Argentina	Australia	Bahrain
Bangladesh	Belgium	Brazil
Chile	Colombia	Cuba
Denmark	Ecuador	Egypt
Germany	Greece	Iceland
Italy	Israel	Malaysia
Malta	Mexico	Mozambique
Netherlands	New Zealand	Oman
Pakistan	Panama	Peru
Philippines	Portugal	Romania
Russia	Saudi Arabia	Slovenia
Solomon Islands	South Africa	Spain
Suriname	Tunisia	Turkey
United Kingdom	United States	Uruguay
Venezuela		

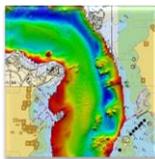
Membership & IC-ENC Offices



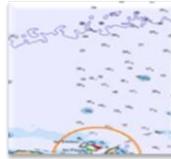
IC-ENC ENC Folio



IC-ENC Core Services



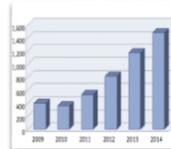
ENC Production Support



ENC Validation



ENC Distribution



Revenue Management

ENC Production Support



- ▶ ENC Validation Training
- ▶ Technical Conferences
- ▶ Bespoke Support & Advice

IC-ENC Errors Database

Back to Site
ERRORS

ic-enc

List

Filter the list

ERR_SPEDEGE

ERR_WRONG_USAGE

Error (3, 2)

Error (3, 9)

Error (5, 2)

Error (5, 4)

Error (5, 5)

Error (5, 6)

Error (5, 9)

Error (5, 10)

Error (6, 2)

Error (6, 4)

Error (6, 6)

Error (6, 7)

Error (6, 8)

Error (6, 9)

Error (6, 10)

Error (6, 11)

Error (6, 13)

Error (6, 15)

ERROR	source	TYPE	Error_explanat...
Error (5, 5)	TRANSAS ECDIS	HO MUST CORRECT / HO SHOULD CORRECT	An apparently invalid attribute has been
EXAMPLE			
Error (5, 5) in object FE000001987 (class HULKES) at hex offset 00001983: Inadmissible attribute in object: CONDITN			
DESCRIPTION			
HO TO CORRECT: Any incorrect object/attribute value combination that has a detrimental affect on the product.			HO MUST CORRECT: Any incorrect object/attribute value combination that may lead to a potentially dangerous situation, E.g unreadable DR
Impact_Assess...			
Variable impact depending on attribute, object and navigational importance of the actual object.			The original classification was FAIL / ERRONEOUS
			SEE EDBCF_06_124.
			When reviewing this error, look at the object in the ECDIS to confirm that the
User_Impact			
Variable, depending on the attribute in question if the attribute is illegal or unreadable this may affect the ECDIS display / interrogation of the object.			If this error has been reported genuinely attribution of the object should be amended conform to the S-57 Standard. When assessing the error remember that there be other software test errors (both Diarr Analysts) that refer more specifically to same problem. If so, use these other en
Ref			
UOC 4.6.B			
Cross_ref			
Y557_ERR_RECFAIL			
Object_Grouping			
Attribution - all objects			
Last_Updated			

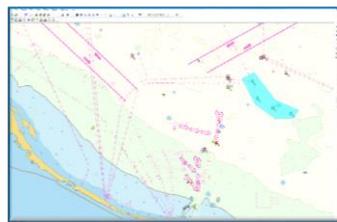
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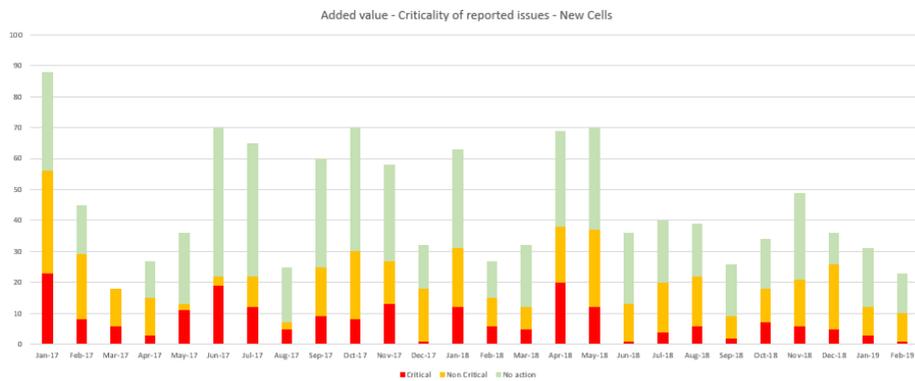
IC-ENC Validation

- ▶ Software analysis and testing
 - Assessment of S-58 errors
 - Exchange set checks

- ▶ IC-ENC validation team expertise
 - Consistency Checks
 - ECDIS Checks

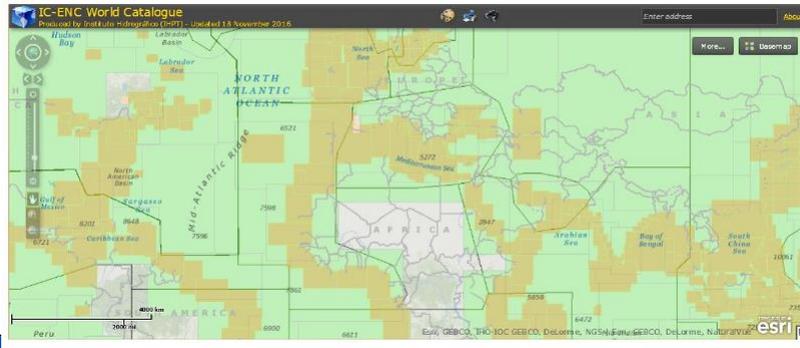


New Cell Validation – severity of ic-enc issues identified



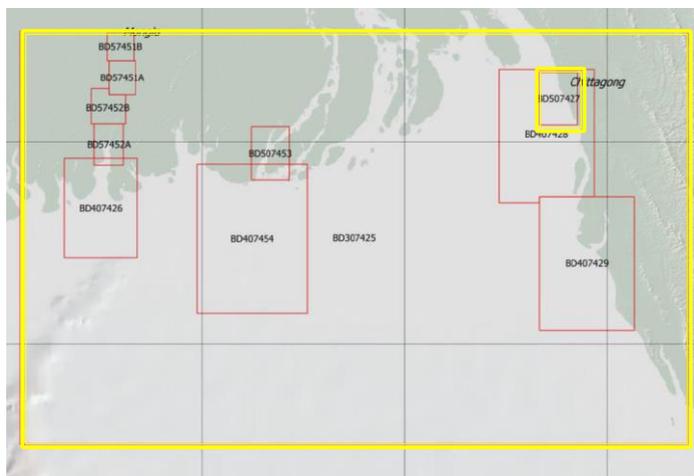
Ensuring seamless coverage ic-enc

- ▶ IC-ENC act as coordinators for consistency between HOs in resolution of overlap and gaps
- ▶ Coordinate cancellation and replacement coverage on behalf of new and developing producers



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March 2019: BD replacing GB ic-enc



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ENC Distribution - VARs



Value Added Resellers

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What next for ENC & RENCs?

- ▶ S-101 ENC Standard
 - Interoperability with other S-10x data standards
- ▶ S-10x new data types
- ▶ Using ENC & RENCs more widely
 - Licensing service to support safe navigation of non-ECDIS equipped craft

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Non-ECDIS navigation management service

- ▶ Proposal for consideration by IC-ENC members is in development.
- ▶ Challenge is to replicate the benefits of ECDIS distribution, but without the 'backing' of such strong regulation, nor the Standards

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IC-ENC Steering Committee

- ▶ Agrees IC-ENC services, budget, provides support and guidance. Next convenes in July to consider future opportunities.



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