



International Centre for Electronic
Navigational Charts

Mr. James Harper

Agenda

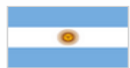
- ▶ IC-ENC Update since RSAHC5
- ▶ IC-ENC Services
- ▶ ICENC Governance and Finances

What is a IC-ENC?

- ▶ IC-ENC Services
 - ENC Production Support for HOs
 - ENC Quality Assurance
 - ENC Distribution
 - Revenue Management

- ▶ **...FOCUS TODAY IS TRAINING AND CAPACITY BUILDING...**

IC-ENC Members (34)



Argentina



Germany



Portugal



Australia



Greece



Romania



Bahrain



Iceland



Russian Federation



Belgium



Italy



Slovenia



Brazil



Mexico



South Africa



Chile



Mozambique



Spain



Colombia



The Netherlands



Suriname



Cuba



New Zealand



Turkey



Denmark



Pakistan



United Kingdom



Ecuador



Peru



Uruguay



Egypt



Philippines



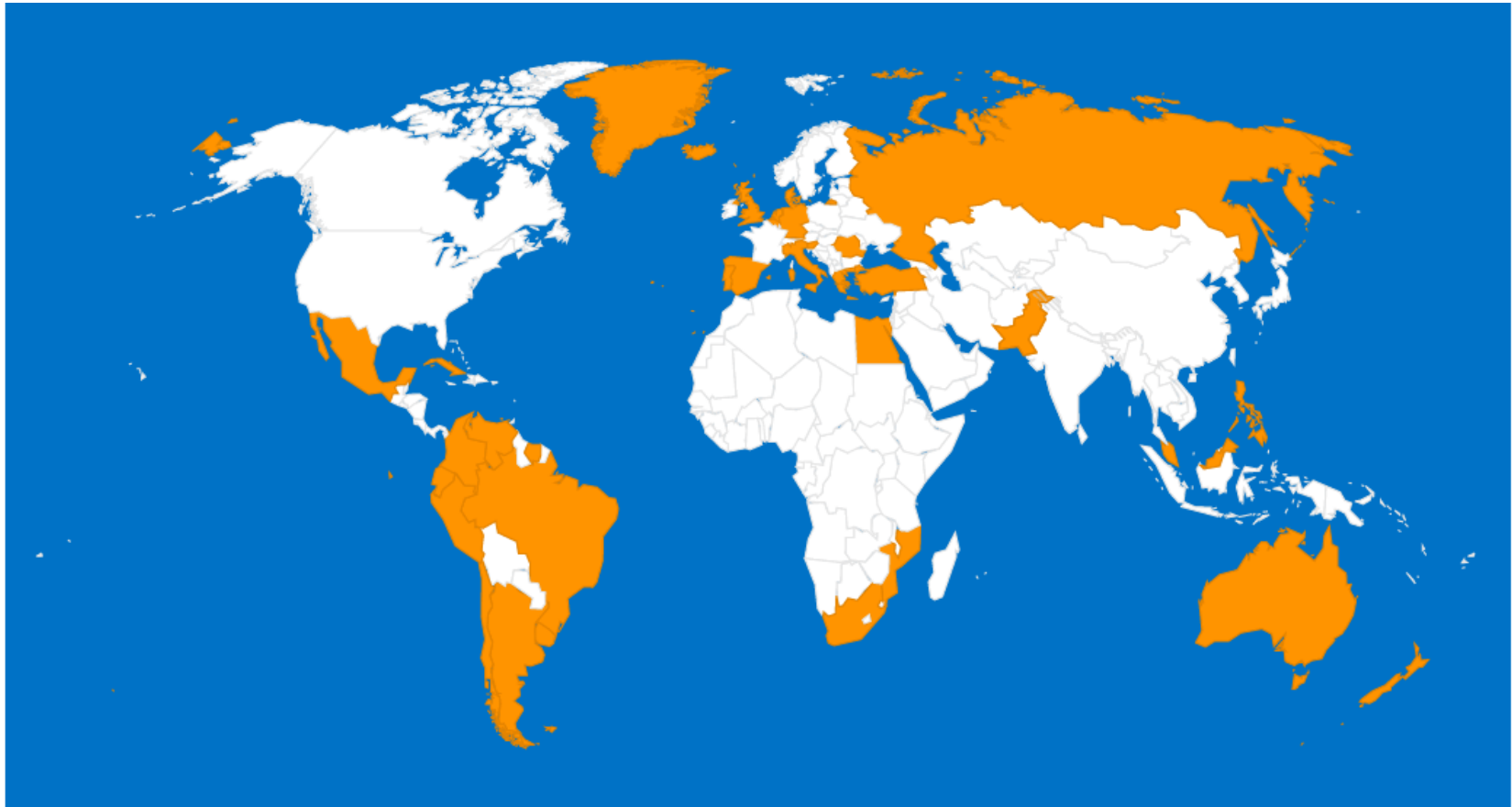
Venezuela



Malaysia

Membership Coverage

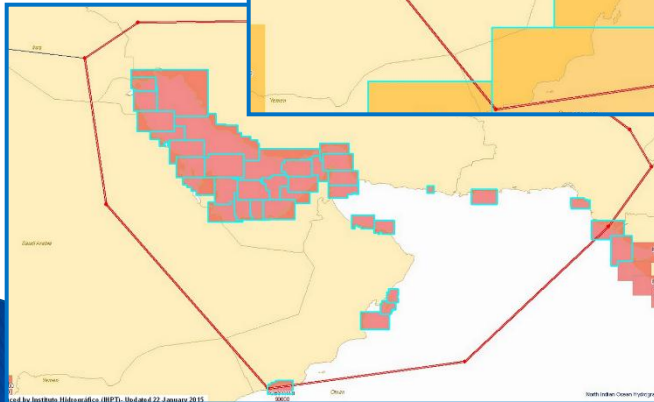
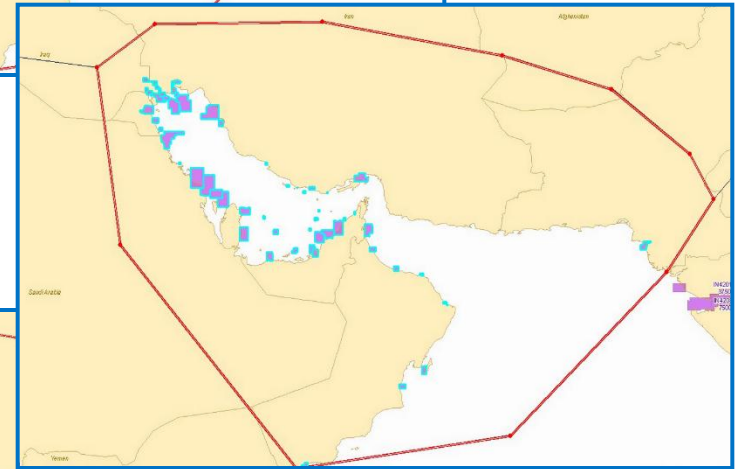
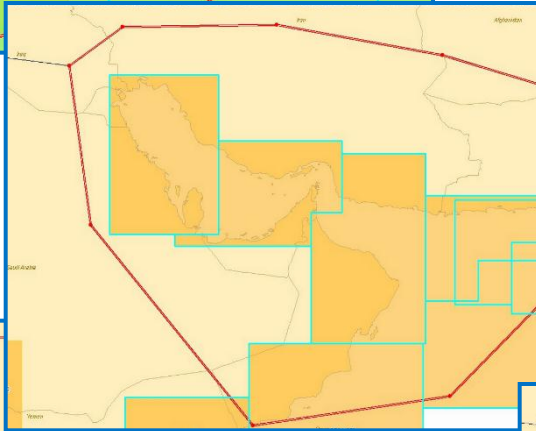
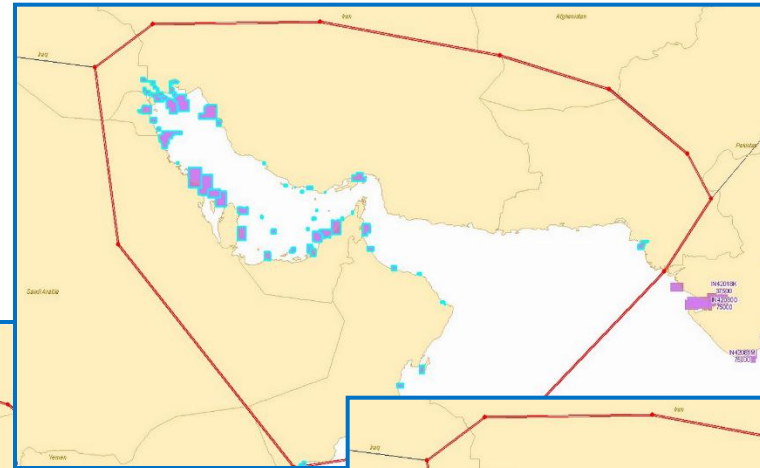
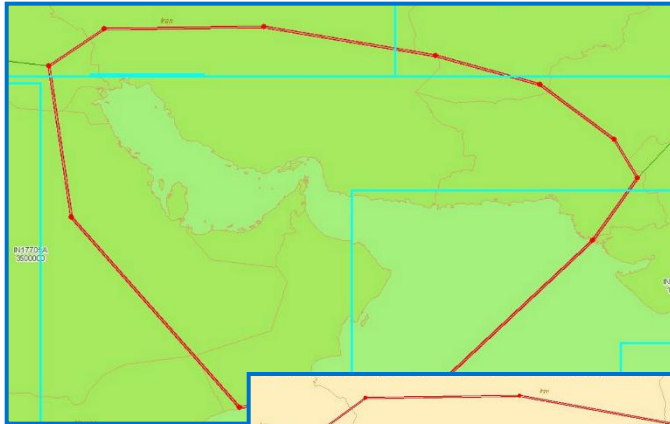
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- ▶ RSAHC Members – Bahrain, Iran, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, United Arab Emirates

ENCs within RSAHC Region

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IC-ENC Services

- ▶ ENC Production Support for HOs
- ▶ ENC Validation
- ▶ ENC Distribution
- ▶ Revenue Management & Financial Reporting

Production Support Services

- ▶ Formal Group training events:
 - IC-ENC ENC Validation Training course

- ▶ Bespoke support for each member:
 - Technical visits to HO
 - HO production staff seconded to IC-ENC offices

- ▶ On-line support:
 - Internal validation – IC-ENC Errors Database

ENC Validation Training Course

Our Aim:

- ▶ Provide our members' with the knowledge and skills required to carry out ENC validation at their ENC production offices
- ◀ Provide our members' with knowledge of the roles and responsibilities of IC-ENC
- ▶ ENC Standards, ENC validation concepts, tools, ECDIS, user experiences, data consistency



ENC Validation Training Course



ENC Validation Training Course

- ▶ Course has been confirmed for three locations during 2015: Europe, Australia and Latin America
- ▶ Additional courses are under consideration
- ▶ All course attendance costs (travel, training, accommodation) are from the central IC-ENC budget
- ▶ ***"An excellent course, suits from novice to confident validator level."*** : Lt. Cdr. Panagiotis Gkionis - Greece

IC-ENC Errors Database

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Back to Site

ERRORS

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List

lights

Attribute 'COLOUR' must be...

Attribute 'LITCHR' must be g...

Attribute 'ORIENT'

Attribute 'SIGGRP' must be ...

Attribute 'SIGPER' must be ...

ERROR 95:

LG0022: (T1503)

LG0022: (T17

LG0022: (T1750)

LG0022: (T1755)

LG0033: (T1781)

LG0043: (T1778)

LG0044: (T1778)

LG0074: suspicious gap

LG0074: (T1845)

LG0080

LG0085

LG0086: (T0542)

LG0087: (T0065)

LG0100: (T0507) mandatory...

LG0100: (T0507) mandatory...

LG0100: (T0507) mandatory...

List

Filter the list...

ERR_SPEDGE]

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

EXAMPLE

DESCRIPTION

Impact_Assess...

User_impact

Ref

Cross_ref

Object_Grouping

Last_Updated

Error (5, 5)

Error (5, 5) in object FE0000001987 (class HULKES) at hex offset 00001663: Inadmissible attribute in object: CONDTN.

HO TO CORRECT:
Any incorrect object/attribute value combination that has a detrimental affect on the product.

Variable impact depending on attribute, object and navigational importance of the actual object.

Variable, depending on the attribute in question. If the attribute is illegal or unreadable this may affect the ECDIS display / interrogation of the object.

UOC 4.6.8

VS57_ERR_RECFAIL

Attribution - all objects

source

TRANASAS ECDIS

TYPE

HO MUST CORRECT / HO SHOULD C

Error_explanat...

An apparently invalid attribute has been

DESCRIPTION...

HO MUST CORRECT:
Any incorrect object/attribute value combination that may lead to a potentia dangerous situation. E.g unreadable DR

Validator_Notes

The original classification was FAIL / ERRONEOUS

SEE EDBCF_08_124.

When reviewing this error, look at the re object in the ECDIS to confirm that the

Required_action

If this error has been reported genuinely attribution of the object should be amen conform to the S-57 Standard. When assessing the error remember that there be other software test errors (both Dkart Analyzer) that refer more specifically to same problem. If so, use these other en

Cross_referenc...

c_list

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DESCRIPTION

HO TO CORRECT:
If the encoded object class does not exist in S57 Appendix A (Object Catalogue) Chapter 1 or its use is not permitted in S57 Appendix B:1 (ENC Product Specification)

Impact_Assess...

DESCRIPTION...

HO MUST CORRECT:
If the encoded object class does not exist in S57 Appendix A (Object Catalogue) Chapter 1 or its use is not permitted in S57 Appendix B:1 (ENC Product Specification)

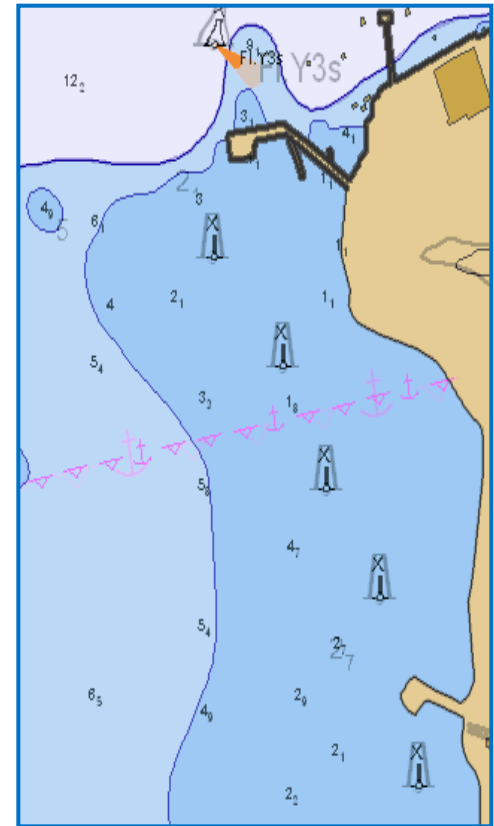
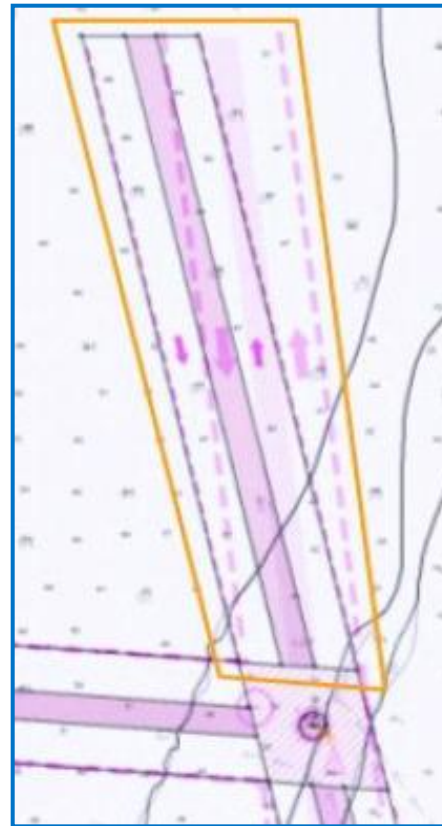
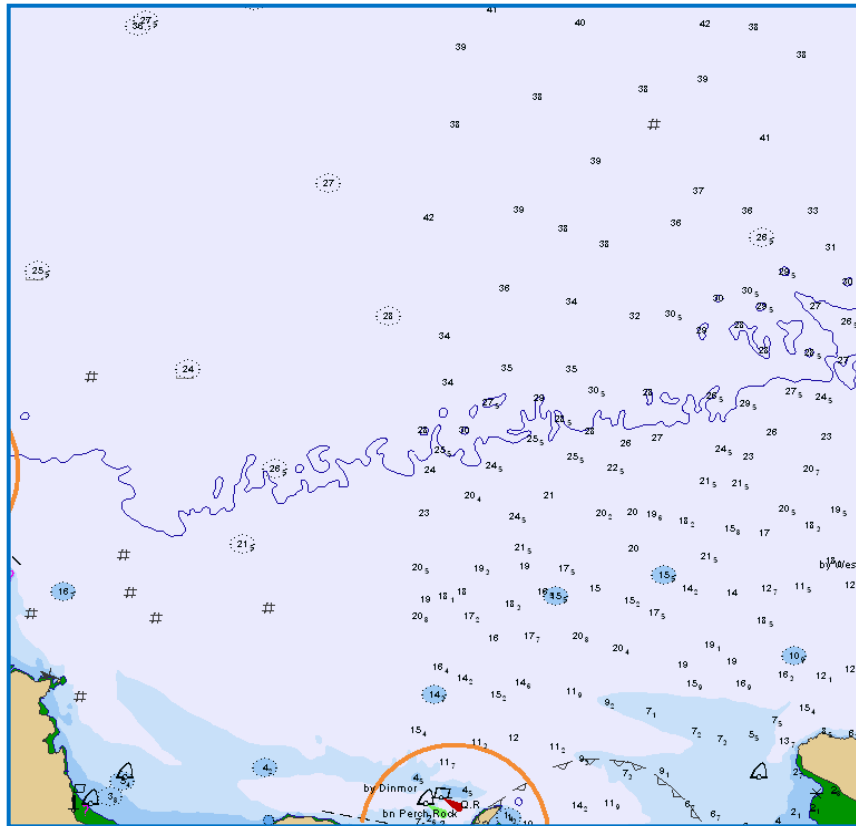
ERRONEOUS:
If the encoded object class does exist in S57 Appendix A (Object Catalogue) Chapter 1 and its use is permitted in S57 Appendix B:1 (ENC Product Specification)

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ATIOM - Archive\GB50808D_002\GB50808D.000 - dKart Inspector 6.0



IC-ENC Validation



ENC Distribution and Revenue

....ENC Licensing rules, Sales reporting,
Invoicing, Settlement Payments....



Governance

- ▶ Strategic direction is set by the IC-ENC Steering Committee
 - **All members** are invited to participate in this group
- ▶ The Steering Committee elects a Chairman and Vice Chairman



IC-ENC Finances

- ▶ Not-for-profit organization
- ▶ Budget is set by the IC-ENC **Steering Committee**
- ▶ Operating costs are recovered by retaining a small fee per ENC sale, *once your ENCs are distributed*.
 - **2015: \$1.00**
- ▶ Example:
 - An HO sets its ENC price at \$15, \$14 returned to HO, \$1 retained by IC-ENC

Summary of IC-ENC

- ▶ IC-ENC supports **34** member HOs (5500 ENC's)
- ▶ IC-ENC's Services:
 - Production support – Training
 - ENC Validation
 - Distribution
 - Revenue Management
- ▶ IC-ENC is a low cost, not for profit RENC, retaining just **\$1.00** per ENC sold to cover costs
- ▶ Controlled by our Steering Committee, each HO contributes to IC-ENC policy setting

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