

ic-enc

International Centre for Electronic
Navigational Charts

IC-ENC Update to SAIHC15

August 2018

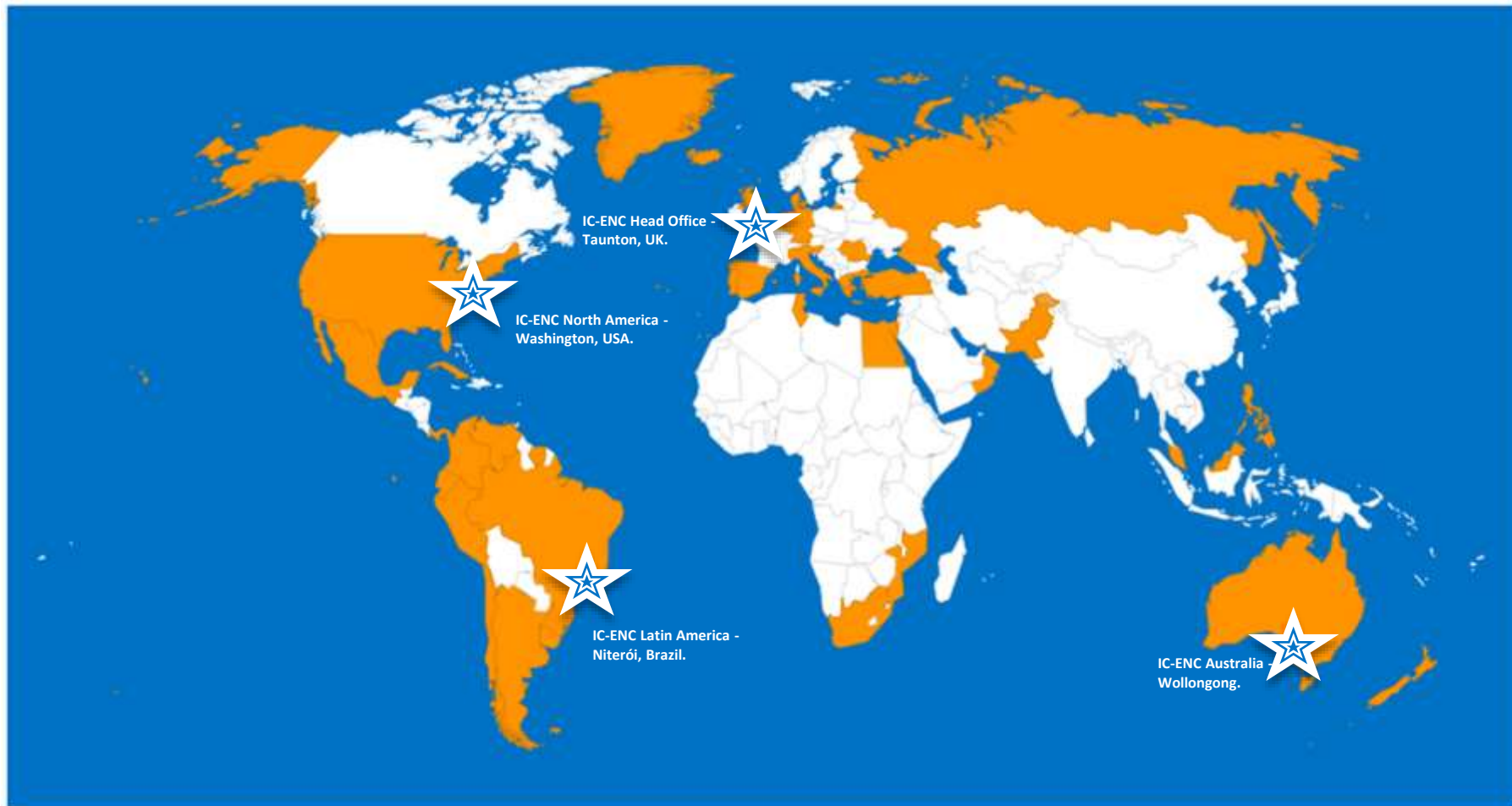
Agenda

- ▶ IC-ENC Introduction
- ▶ IC-ENC Services
 - ENC Production Support for HOs
 - IC-ENC Validation
 - ENC Distribution
 - Revenue Management & Finances
- ▶ IC-ENC Governance

IC-ENC Members (43)

Argentina	Australia	Bahrain
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
Slovenia	Solomon Islands	South Africa
Spain	Suriname	Tunisia
Turkey	United Kingdom	United States
Uruguay	Venezuela	Bangladesh

Membership & IC-ENC Offices



Our Mission

To provide services, at a low cost, to national Hydrographic Offices that ensure their ENC's 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.

- ▶ **IC-ENC: Global ENC collaboration with a regional focus**

Regional Offices - The Benefits

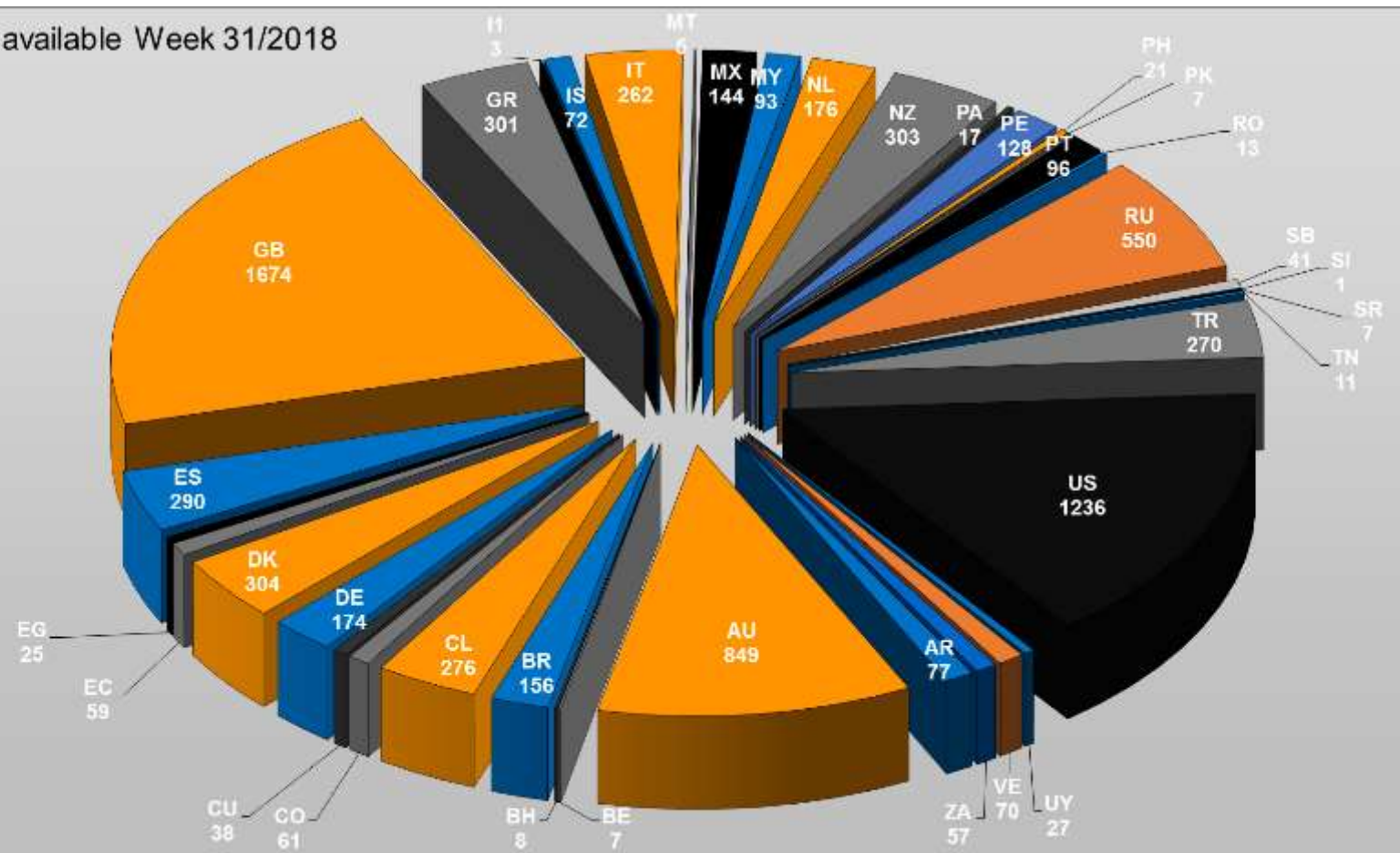
- ▶ Production Support and Validation
 - Coordination of validation work in region.
 - Training and production support in region.
 - Communication advantage
 - Time Zone
 - Possible language benefits

- ▶ Promotes consistency, efficiency and partnership amongst producing HOs.

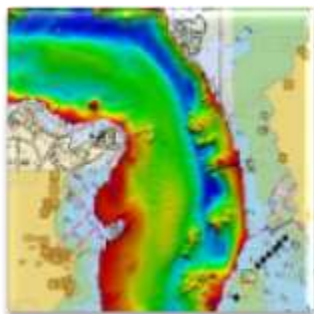
- ▶ Regional office use the IC-ENC standard tool set and working practices to maintain consistent quality.

IC-ENC Folio at Week 31/2018

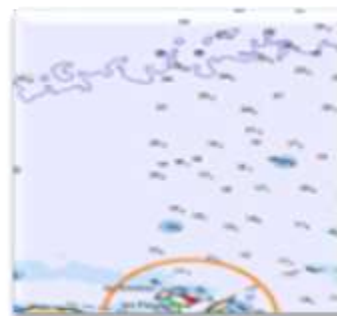
7909 Cells available Week 31/2018



IC-ENC Core Services



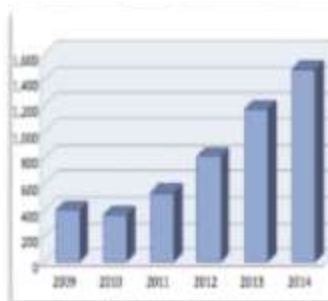
**ENC Production
Support**



ENC Validation



ENC Distribution



**Revenue Management
& Financial Reporting**

Production Support Services

- ▶ IC-ENC ENC Validation Training courses
- ▶ Technical visits to HO
- ▶ HO production staff work alongside IC-ENC validation team in IC-ENC offices
- ▶ Technical Conference
- ▶ Internal validation – IC-ENC Errors Database

IC-ENC Errors Database ic-enc



List

Filter the list...

- ERR_SPEDGE]
- ERR_WRONG_USAGE]
- Error (3, 2)
- Error (3, 3)
- Error (5, 2)
- Error (5, 4)
- Error (5, 5)**
- Error (5, 8)
- Error (5, 9)
- Error (5, 10)
- Error (8, 2)
- Error (8, 4)
- Error (8, 8)
- Error (8, 7)
- Error (8, 8)
- Error (8, 9)
- Error (8, 10)
- Error (8, 11)
- Error (8, 13)
- Error (8, 15)

ERROR	Error (5, 5)	source	TRANSAS ECDIS
EXAMPLE	Error (5, 5) in object FE000001907 (class HULKES) at hex offset 00001663: Inadmissible attribute in object: CONDTN.	TYPE	HO MUST CORRECT / HO SHOULD CI
DESCRIPTION	HO TO CORRECT: Any incorrect object/attribute value combination that has a detrimental affect on the product.	Error_explanat...	An apparently invalid attribute has been
Impact_Assess...	Variable impact depending on attribute, object and navigational importance of the actual object.	DESCRIPTION...	HO MUST CORRECT: Any incorrect object/attribute value combination that may lead to a potentia dangerous situation. E.g unreadable DR
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.	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 i
Ref	UOC 4.6.8	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_ref	VS57_ERR_RECFAIL	Cross_referenc...	
Object_Grouping	Attribution - all objects	c_list	
Last_Updated			

- List
- lights
- Attribute 'COLOR' must be...
 - Attribute 'UTCHR' must be g...
 - Attribute 'ORIENT'
 - Attribute 'SIGGRP' must be ...
 - Attribute 'SIGPER' must be
 - ERROR 85
 - LG0022 (T11603)
 - LG0022 (T11603) **LG0022 (T11603) (LG0022)**
 - LG0022 (T11603)
 - LG0022 (T11603)
 - LG0033 (T11781)
 - LG0040 (T11778)
 - LG0044 (T11778)
 - LG0074 suspicious gap
 - LG0074 (T11646)
 - LG0080
 - LG0085
 - LG0083 (T0542)
 - LG0087 (T0056)
 - LG0100 (T0567) mandatory ...
 - LG0103 (T0007) mandatory
 - LG0103 (T0567) mandatory ...



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

IC-ENC Training Courses



IC-ENC Technical Conference



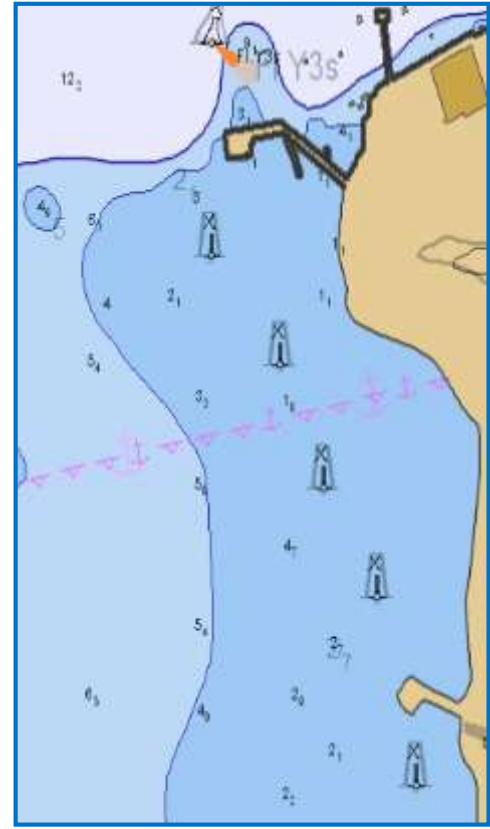
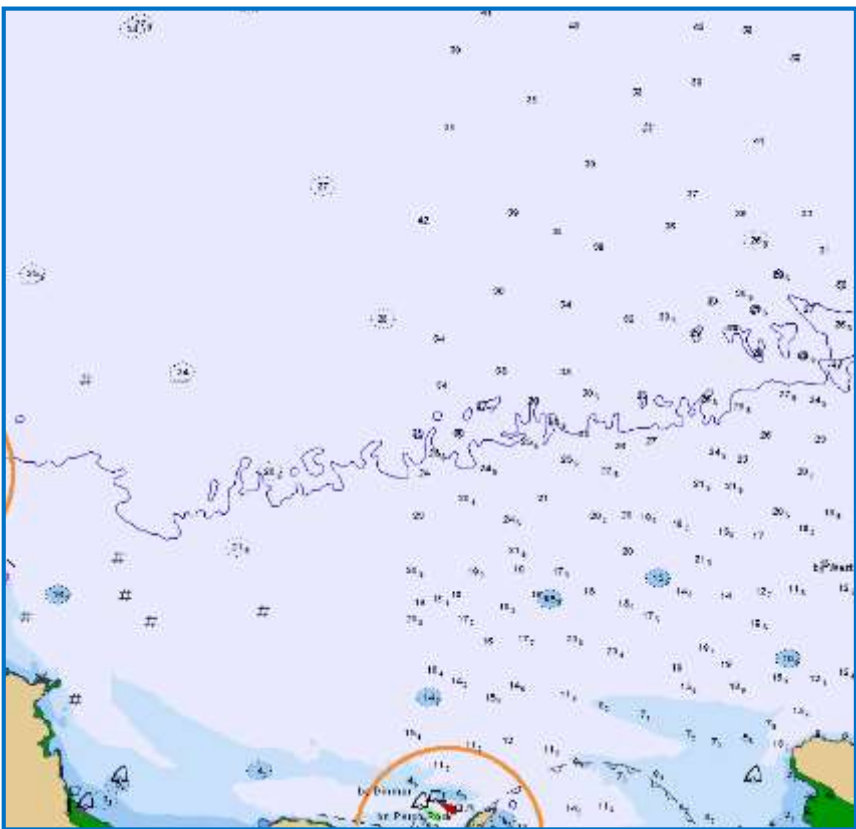
IC-ENC Validation

IC-ENC does not edit or modify the data provide by the HO, the ENC remains the property and responsibility of the producing nation at all times

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

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

IC-ENC Validation



The Feedback Report

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- ▶ **Feedback Report** to our members for each cell
- ▶ Created from the error classifications and decision making from validation
- ▶ Reports issues back to HO
- ▶ Can be Country dependent – Partnership Agreement

IC-ENC form 0007

ENC Validation Report

<i>Cell Information:</i>
Cell Name – US5ME25M.000
Edition Number – 8
CRC – 48A38DCD
Date Received - 14 Feb 2017
Service Level:
Reduced

<i>Validated By:</i>
Name – Jenny Thacker
Phone – (+44) (0) 1823 723389
Email – jenny.thacker@ic-enc.org
Date Validated – 17 Feb 2017

Validation Conclusion

ACCEPTED FOR DISTRIBUTION ON 24 Feb 2017

Validation Comments

Correction required as soon as possible:

It is unnecessary to withhold the ENC from distribution for these particular issues, but to maintain good practice it is recommended that you correct them as soon as possible.

1. TXTDSC describes raster portrayal not ENC

Description:

See US5ME25B.TXT pasted below.

The recommended track for deep draft vessels entering and departing Penobscot Bay and River is attributed with a textual description (TXTDSC) which describes the depiction of the channel on the raster chart. It says "Two-way traffic is possible within all parts of the green-tinted areas." On the ENC no such green tint exists.

Impact:

Telling the mariner that he/she can find an object with a particular description, when the described object is not depicted that way may cause confusion and cause the mariner not to find the object described. Since the object described by this note is an important traffic lane it is even more significant.

Action:

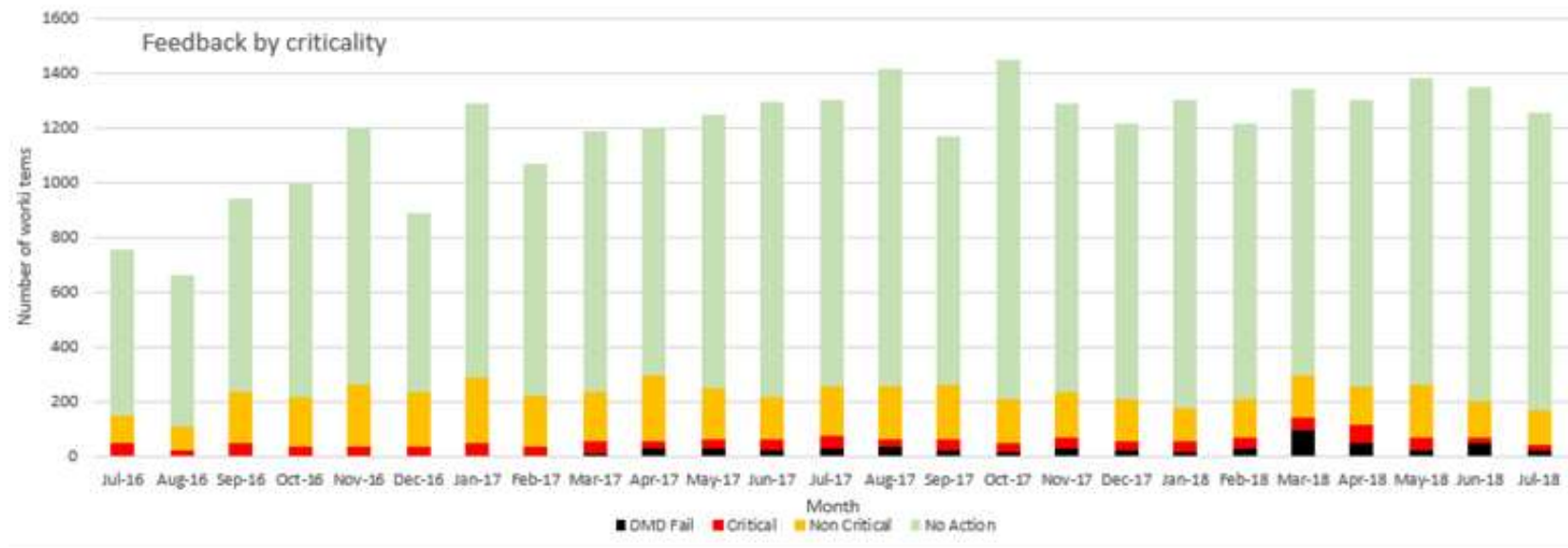
Remove the portion of the TXTDSC where it describes the raster chart colours (highlighted in yellow). Consider how to reword the remaining part of the paragraph for the best possible clarity.

TXTDSC

US5ME25B.TXT

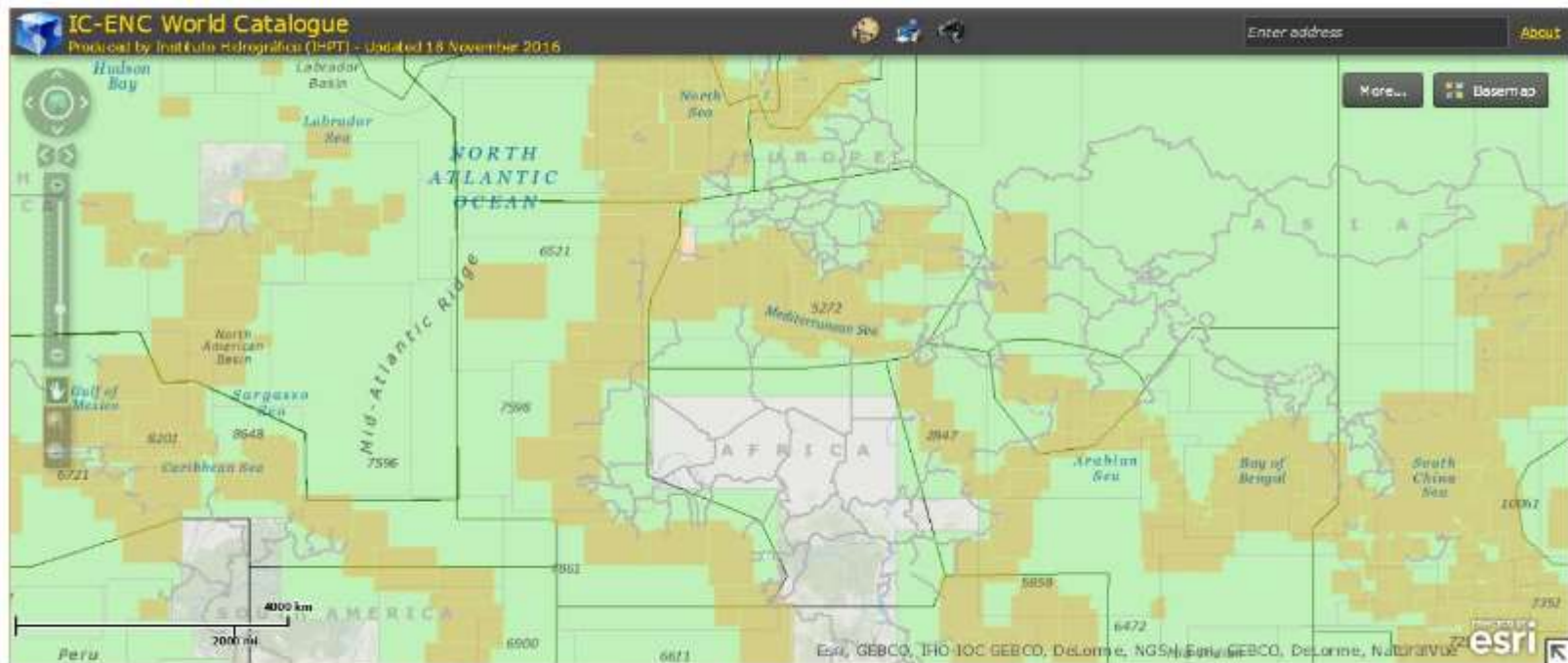
Deep draft vessels entering and departing Penobscot Bay and River are requested to remain within the Recommended Vessel Route. Two-way traffic is possible within all parts of the green-tinted areas. Other vessels, while not excluded, should exercise caution in these areas and monitor VHF channel 16 or 13 for information concerning vessels transiting these areas. See U.S. Coast Pilot 1, Chapter 7.

IC-ENC Validation Feedback



Facilitating New 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

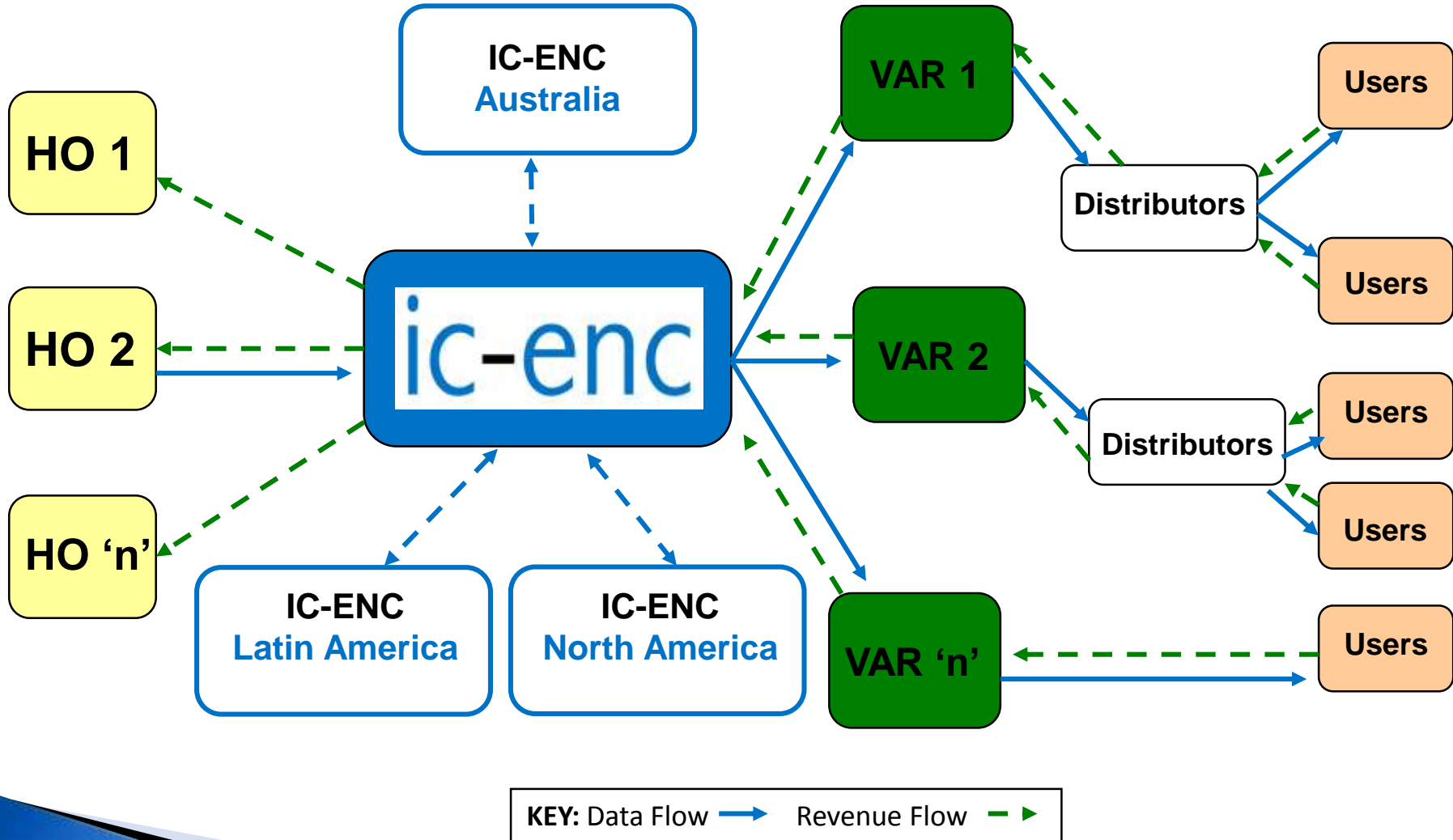


Value Added Resellers (VARs): ENC Distribution

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Data & Revenue flow



Steering Committee



SC19 meeting, Bristol, 12. - 14. September 2017

Future Developments

- ▶ Fixed Fee is to reduce by 50% (from \$1 to \$0.50)
- ▶ IC-ENC is considering how to provide services which mean that members' ENC's are available to more users (outside of regulated ECDIS), to support safe navigation.

For further information:

- ▶ Please review the IC-ENC website;
 - www.ic-enc.org
- ▶ Or email the IC-ENC team:
 - therenc@ic-enc.org

Summary

- ▶ Currently 43 Member HOs with 7900+ ENCs
- ▶ IC-ENC is low cost RENC, and not-for-profit
- ▶ IC-ENC cost recovery fee is \$1 for each 12 month ENC subscription sale (reduced pro rata for short subscription periods). This will reduce to \$0.50 from Q4/2018.
- ▶ Through the Steering Committee, each HO contributes to IC-ENC

My award 😊



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