IC-ENC overview to WENDWG11

February 2021

James Harper, IC-ENC General Manager

Agenda

- ▶ IC-ENC 2020 performance
 - Operational
 - Financial

- ▶ IC-ENC 2021-23 Work Plan
 - Work Plan Themes
 - S100 plans

2020 Operational Performance

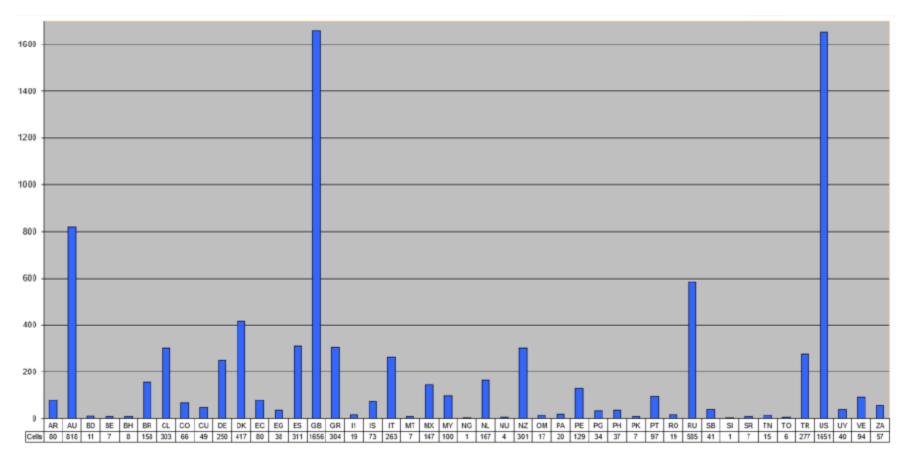
45 Member HOs "in the club"



- Headquarters in UK
- Regional Offices: Australia, Brasil, US



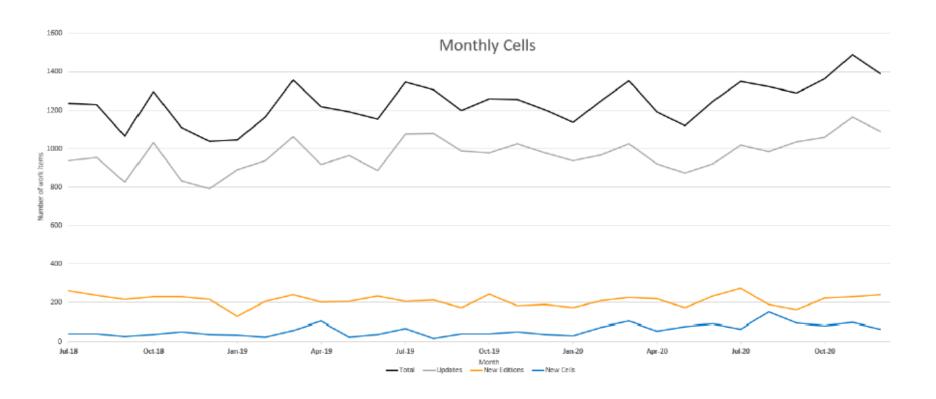
IC-ENC Members' ENC folios



- ▶ Total 8772, which is +504 during 2020
- Congratulations to Nigeria, first ENC issued!



ENC validation: Volumes

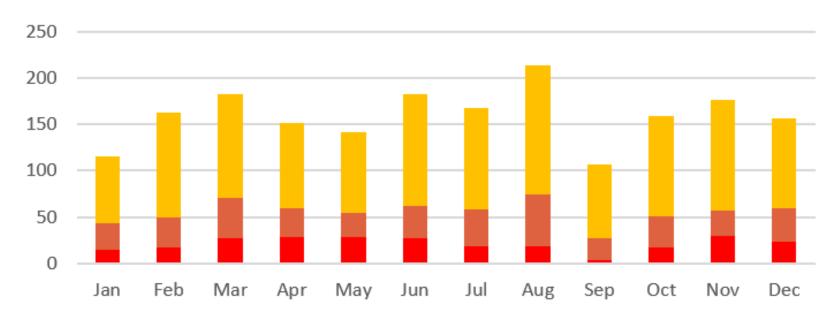


- Validation volumes show upwards trend over 2020.
- Growth is primarily seen in Update files.



ENC validation: Value Add

IC-ENC 2020 Validation - Value Add

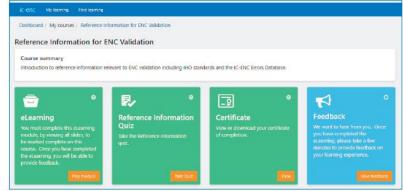


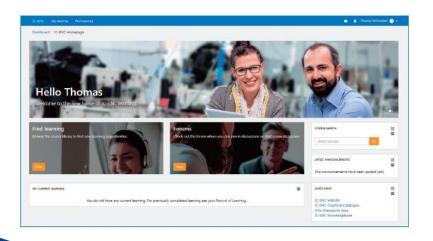
- Advisory Coments Product Improvement (validation, ECDIS, manual assessment)
- Safety Critical Prevented Full Validation (tools, ECDIS, manual assessment)
- Safety Critical Prevented Immediate IC-ENC Response on ENC upload



IC-ENC Learning Management System



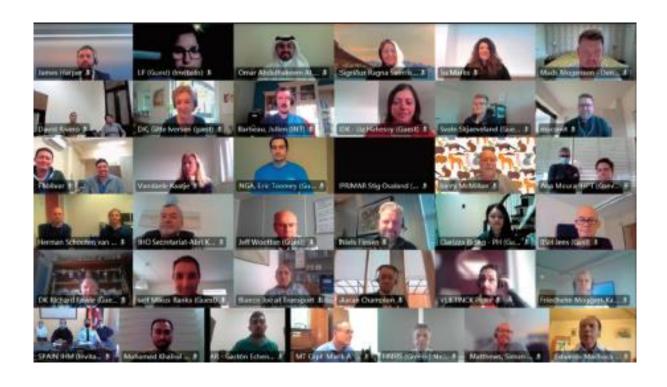




- Repository
- Training material
- Tracking progress/ completion/results
- Reporting
- Community



Technical Conference



 IC-ENC Technical Conference is the body which reviews and approves IC-ENC services



Distribution: ECDIS

Appointed network of Value Added Resellers





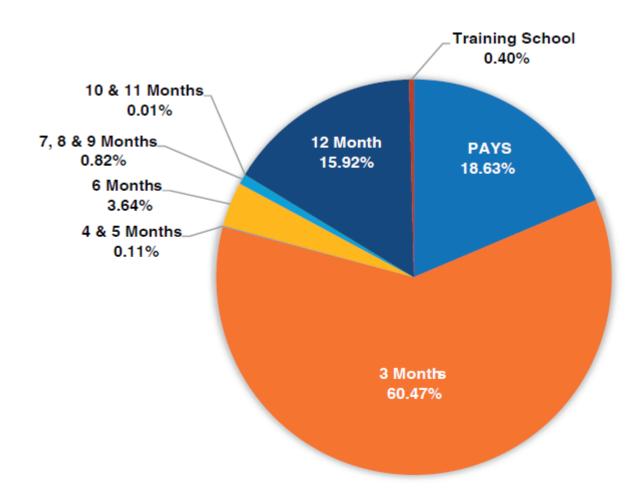








2020 ENC Subscription Analysis





Distribution: non-ECDIS

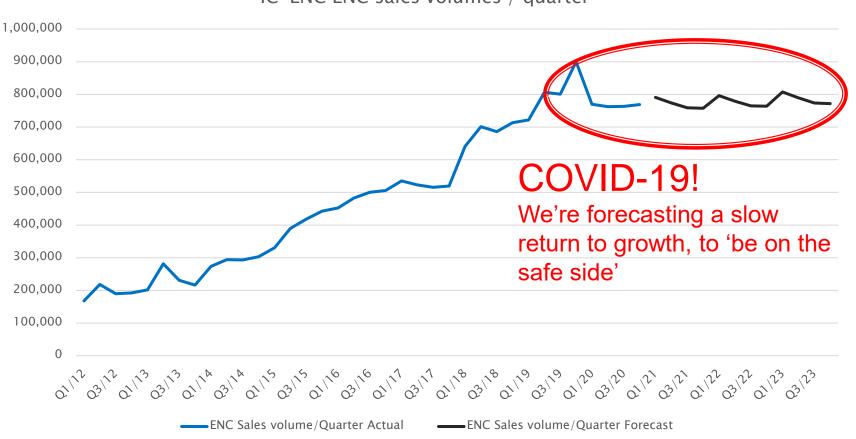
- New Service to HO ENC data to be used to support safe navigation by non-ECDIS vessels
- IC-ENC supply & licensing service launch 2021/Q1
- The need for a service like this has been discussed at previous WENDWGs

2020 Financial Performance

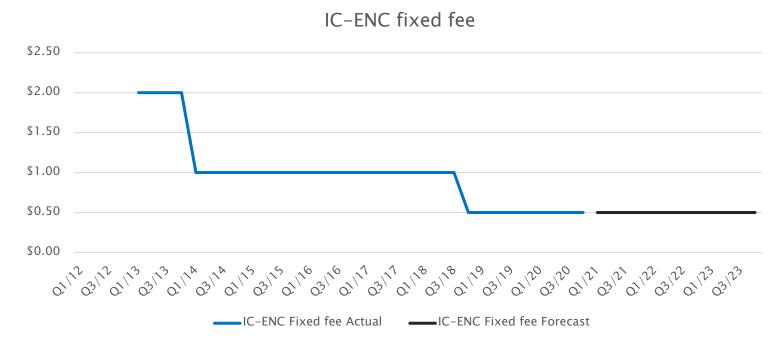


ENC sales volumes (through the VARs)

IC-ENC ENC sales volumes / quarter



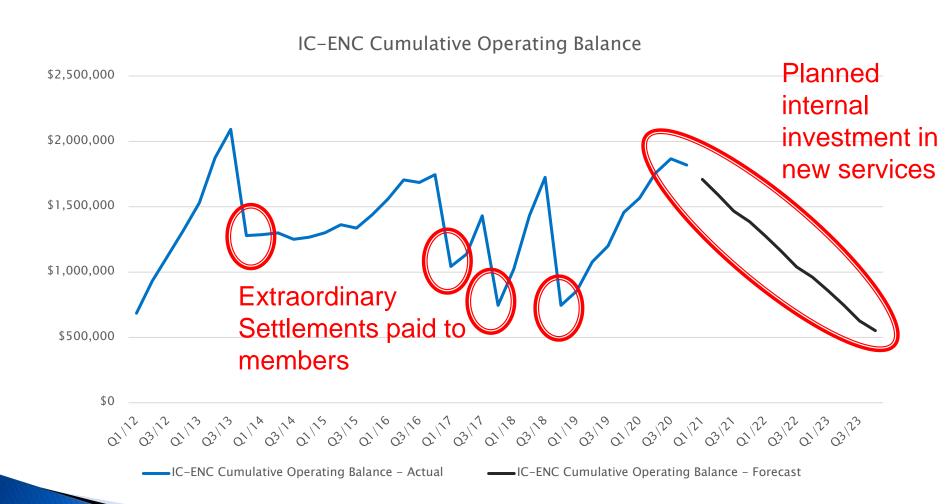
Cost of membership ("fixed fee")



- \$0.50 retained per 12 month subscription, forecast to continue at this rate for 2021-23 activities
- Fixed fee is reduced for shorter subscription periods
 (\$0.15 for a three month ENC subscription)



IC-ENC "operating balance"



2021-2023 Work Plan



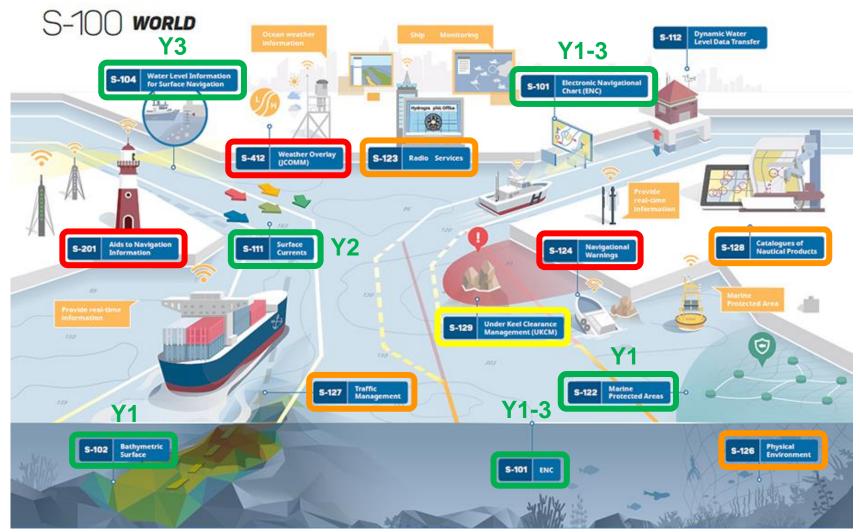
2021-23 Work Plan

	Theme	Aim/objective
1	Production Support Part A	More, and better, products are available.
2	S-57 ENC Validation Service	Ensure the quality of every ENC entering the IC-ENC folio.
3	Distribution Services	IC-ENC folio is available to users.
4	Revenue Management	Use of members' products is correctly reported, paid for and revenue returned to IC-ENC members.
5	Governance, finance and business functions	IC-ENC's governance, finance and business functions remain fit for purpose.
6	Infrastructure – maintain and develop	IC-ENC has the technology required to deliver its services at the required levels of security, resilience and efficiency
7	Membership, IHO community and international groups	IC-ENC members are supported as required, and the wider IHO community/international groups are supported as required and aligned with where advantageous.

8	IC-ENC structure and the team	To have an effective IC-ENC organisational structure (regional offices) and right sized, high performing team
9	S-102 service	Establish an end-to-end S-102 service, data ingest, assessment, and data output.
10	S-122 service	Demonstrate capability to ingest, assess and output S-122 data, as an end-to-end service.
11	S-101 and Conversion Support services	Develop Conversion Support service and S-101 knowledge/understanding.
12	Harmonisation service	Develop Data Harmonisation service.
13	Year 2 other	Establish S-111, Conversion Support and Data Harmonisation services, and develop S-101 service.
14	Year 3 other	Establish S-104 service and S-101 trial service, further iteration of Conversion Support and Data Harmonisation services.



2021-23 Work Plan - S-100 focus

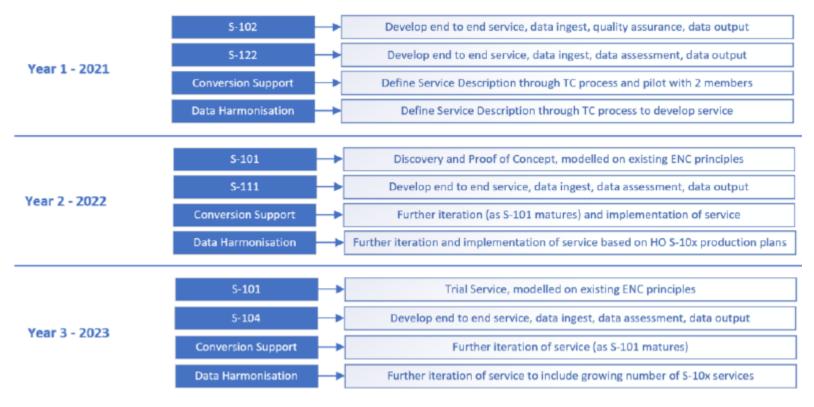


Based on S-100 Options Paper:

- First generation green
- The exception between first and next generation yellow
- · Next generation orange
- Out of scope red



S100 era services



Prioritisation of services has been set by engagement with IC-ENC Members, the maturity of the Product Specifications, and market/user research... can iterate as required over time.