



2015 ANNUAL REPORT

International Centre for Electronic Navigational Charts



Our 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.

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1. CHAIRMAN'S MESSAGE

"The majority of all vessels sailing on international trade routes are now navigating with ECDIS" - this is my favourite ECDIS news from 2015.

The Electronic Chart revolution began in the mid-1980s when the computer age opened the door for radically new ways to present and use geo-referenced navigational information. The Electronic Chart was conceived jointly by navigators and hydrographers, and started to change the way mariners navigated at sea.

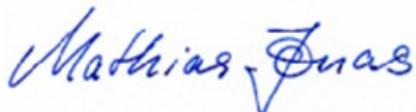
It is remarkable that the early concepts for an "Electronic Chart Display and Information System" are still valid. The underlying technology, however, has greatly improved. From a rather exotic and experimental object of technical research, electronic chart systems have matured to be "natural" components of navigation equipment on-board modern vessels.

But one major effort to make this impressive process happen tends to be underestimated by those who are at sea: the reliable provision of harmonized digital chart data. All those responsible for national ENC production know just how ambitious this aim is for their respective territorial waters.

International shipping needs nautical charting beyond national borders. It is this requirement exactly which IC-ENC contributes to excellently. Within their commonly agreed core services, namely production support, validation, distribution and revenue management for ENCs, IC-ENC supports international collaboration between ENC producers. It does so in a very practical sense, and for the sake of all who use our seas.

IC-ENC membership, its network composed of regional offices and the scope of services for its members has real prospect to increase over the years to come. Could there be any better proof for the appropriateness of the organisation's constitution, and the operational behaviour of IC-ENC? I, for one, don't think so.

IC-ENC is in splendid shape. It is upon us, the members, to keep it so and to develop it further in the right direction.



Dr Mathias Jonas

IC-ENC Chairman

National Hydrographer of Germany



2. GENERAL MANAGER'S INTRODUCTION

Welcome to IC-ENC's second Annual Report.

This report acts in the same way as a company report; it is a declaration of IC-ENC's performance during 2015 (in terms of strategic, operational & financial results), and looks ahead to our plans for 2016.

This has been a successful year for IC-ENC:

- Membership continues to grow, with five new nations joining since the last report; Israel, Malta, Oman, Panama and United States. We have now reached 39 members.
- ENC folio continues to grow in size, and is about 6000 strong. When the US folio is included in mid-2016, this figure will exceed 7000...which is about half of the world's ENCs!
- New cloud-based technology has been designed, developed and implemented to support our services, processes and staff. ECDIS software has been provided to members.
- Two more regional offices are in development, Latin America and North America, both of which will become operational by mid-2016.
- ENC Validation Training has been delivered, through formal IC-ENC courses, to the majority of our members.
- ISO9001:2008 certification has been awarded to underpin our services to members.
- Controlled costs and robust ENC sales have confirmed the IC-ENC low cost financial model, with the cost recovery fixed fee set by the Steering Committee at \$1 through to 2018.



The 2015 Steering Committee meeting saw our largest ever attendance of members and observers; 34 nations were represented. Our Strategic Plan provided the structure to the meeting and allowed informed discussion and debate about IC-ENC's progress and performance. Relevant strategic direction was set and operational actions agreed, culminating with approval of the 2016 Work Plan and Budget. Resources are now being directed to achieve these tasks, and to fulfil our mission.

In terms of finances, 2015 ENC sales were significantly ahead of forecast (+24%), and IC-ENC's costs were kept to within 1% of forecast; the result is that IC-ENC's \$1 fixed fee revenue for the year has more than covered our operating costs. The difference of \$167k has therefore been directed to our operating balance, which now exceeds \$1.4m. Further analysis is provided in section 9.

Our four core services of Production Support, Validation, Distribution and Revenue Management underpin our successful RENC model. New members are attracted by the low cost operation, the focus on data quality (achieved regionally, and with the important 'human touch'), and the ever increasing economies of scale.

As we build on our 2015 achievements, our term 'global ENC collaboration, with a regional focus' becomes ever more appropriate.

A handwritten signature in black ink, appearing to read "James Harper".

James Harper

IC-ENC General Manager

3. STRATEGIC REPORT

IC-ENC's Vision

To be recognised as the leading supplier of services for validation, harmonisation and global distribution of ENCs.

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.

IC-ENC's Core Services

1. ENC Production Support
2. Independent ENC Validation
3. Distribution
4. Revenue Management

IC-ENC's Global Operating Structure

IC-ENC has a Headquarters office and IC-ENC Regional Offices report to it. Production Support and Validation Services are carried out at each IC-ENC office, to benefit from regional expertise, knowledge, time-zone operation and language. Distribution and Revenue Management Services are concentrated centrally at HQ.

Each IC-ENC office is hosted by a national Hydrographic Office, offering economies of scale, staffing and technology advantages, meaning IC-ENC remains a low cost operation. IC-ENC's governance rules mean that IC-ENC is autonomous, and all member nations of IC-ENC can contribute equally to strategic, financial and policy decision making. These rules, and other operating principles, are defined in the IC-ENC Cooperation Arrangement.

IC-ENC's Strategic Objectives

Section	Ref	Strategic Objective
Strategy & Management	SM1	Maintain effective corporate governance and business functions
	SM2	Maintain financial sustainability
	SM3	Increase Membership and ENC coverage
	SM4	Develop the IC-ENC Global Operating Structure
	SM5	Maintain effective relationships with other organisations
People	P1	Deliver Training and Capacity Building to ENC Producers
	P2	Develop and Maintain the IC-ENC International Team
Commercial	C1	Deliver the Distribution service, via the VAR companies
	C2	Deliver the Revenue Management service
	C3	Develop ENC sales rules - non-navigation
	C4	Promote and protect the IC-ENC corporate brand
Validation Service & Technology	T1	Deliver Production Support Services
	T2	Deliver an independent ENC Validation Service
	T3	Maintain and improve IC-ENC Information Technology

4. QUALITY ASSURANCE

Production Support and Validation 2015

The IC-ENC Validation Team has conducted over 9,000 validations during 2015. Two-thirds were update files, but a significant number were new editions and new cells. A bespoke validation report has been returned to the ENC Producer for each file.

	Updates	New Editions	New Cells	Total
Validation	6676	1644	682	9002
Returned for Improvement Action Before Release	254	114	118	488
Percentage Validation (%)	3.8%	6.9%	17.3%	5.4%

IC-ENC returns ENC files for improvement action before the file is released if:

1. Safety critical issues are identified
2. Non-safety critical issues are identified, of the types the producer has agreed to correct before release under their bespoke IC-ENC validation partnership agreement.

Of the new cells validated, a significant portion (17%) were returned for improvement action before release. This is significantly higher than 2014's figure of 6%. During 2015, IC-ENC has supported the first release of several new members' ENCs, with these nations working hard to produce the best ENCs possible. A key success has been the team work between IC-ENC and the Egyptian Navy Hydrographic Department (ENHD), culminating in the release of 12 new ENCs in time for the opening for the new Suez Canal channel.



The other members with their first release of data during 2015 are Ecuador, Panama, Philippines and Slovenia.

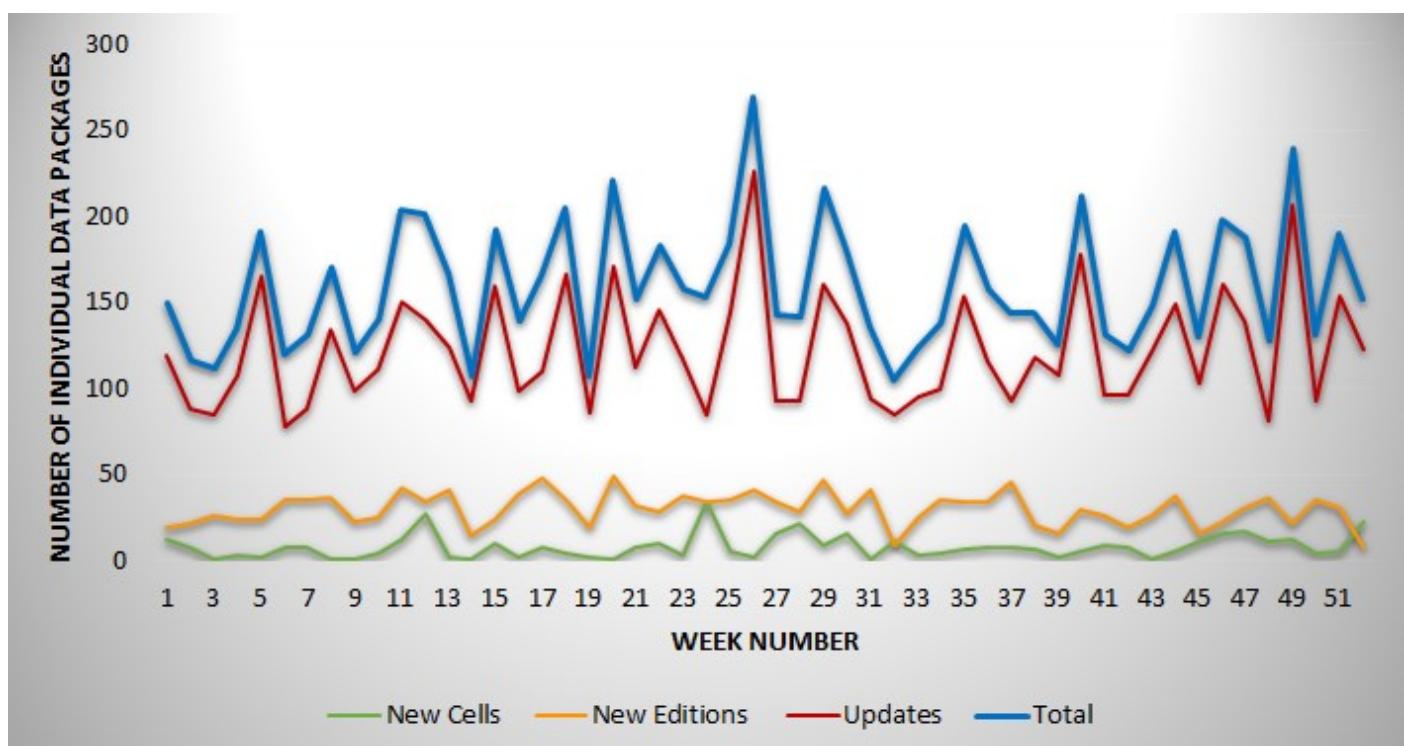
In addition to the ENC files returned for improvement action before release, a comprehensive validation report is provided for every ENC file submitted for validation. For almost all new editions and new cells, product improvement recommendations have been made which are kept on file and will be actioned by the producer when possible.

Since October 2015, IC-ENC has tracked the types of comments made in the validation reports, and an analysis of the annual figures will be provided in next year's Annual Report.

2015 ENC Data Release

IC-ENC's weekly output of files to Value Added Resellers varies considerably each week. It is a challenge to maintain the appropriate Validation Team resource level – i.e. sufficient to meet the peaks in the work level, whilst not being over-staffed during the low work periods (important when noting that staff costs contribute most to the IC-ENC cost base).

This graph illustrates the 2015 weekly release file numbers:



This table shows the lowest, highest, and average numbers of the 2015 weekly release file numbers:

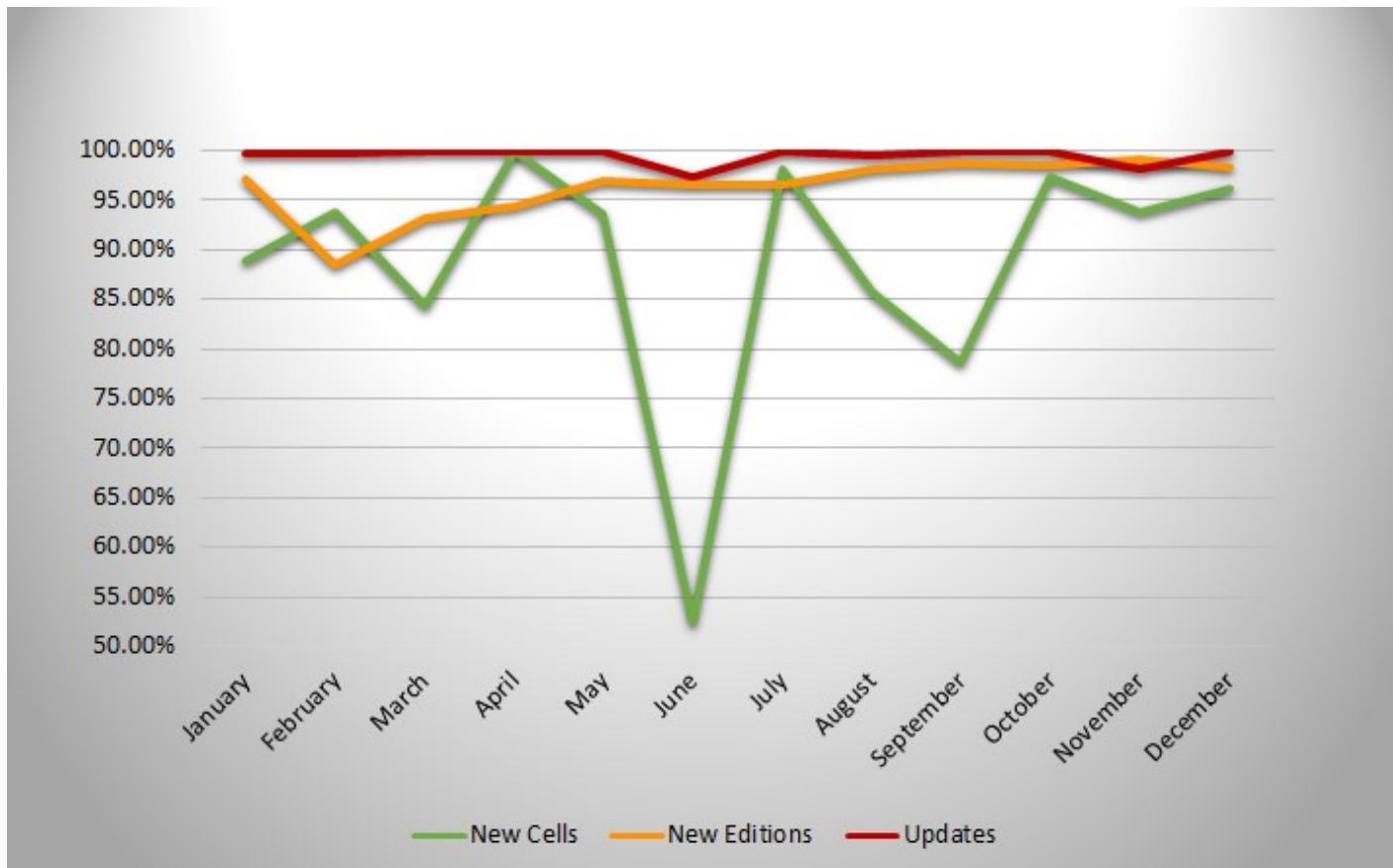
	Minimum	Maximum	Average
Updates	78	226	152
New Editions	8	49	28.5
New Cells	0	34	18
Total	86	309	201.5

2015 Validation Key Performance Indicator Results

IC-ENC reports validation completion time performance to the Steering Committee, with a target to complete 95% of each of the three job types within the following timescale:

Update	3 days	These Key Performance Indicator targets have been set to recognise that it is more important for the safety of navigation to release ENC change information (update or new edition file) than release brand new ENCs.
New Edition	5 days	
New Cell	10 days	

IC-ENC's 2015 Validation KPI performance (recorded monthly) is presented here:



It can be seen that the target is met for ENC update files in every month, and met in most months for ENC new edition files.

New ENC performance is more varied. It is noticeable that the result dips (i.e. new ENC jobs exceed the 10 day response target) when the work level is high (as is to be expected with a finite Validation Team resource). The significant dip in the June figure is related to the focus on the new Egyptian ENC coverage, related to the immovable deadline of the opening of the new Suez Canal channel.

5. KEY ACHIEVEMENTS 2015

Key Achievements: Strategy and Management

Steering Committee Meeting

IC-ENC held its 16th Steering Committee meeting with the largest ever attendance of 34 nations. The group re-endorsed the 5 year Strategic Plan., which provided the meeting with a definite structure, and an ability to judge progress and performance. Following the meeting, the 2016 Work Plan was agreed, with financial approval of the associated budget. IC-ENC agreed to welcome IHB as an observer to future meetings, and set a programme of co-operation with PRIMAR for 2016.



IC-ENC Steering Committee 16, Munich, Germany

Finances

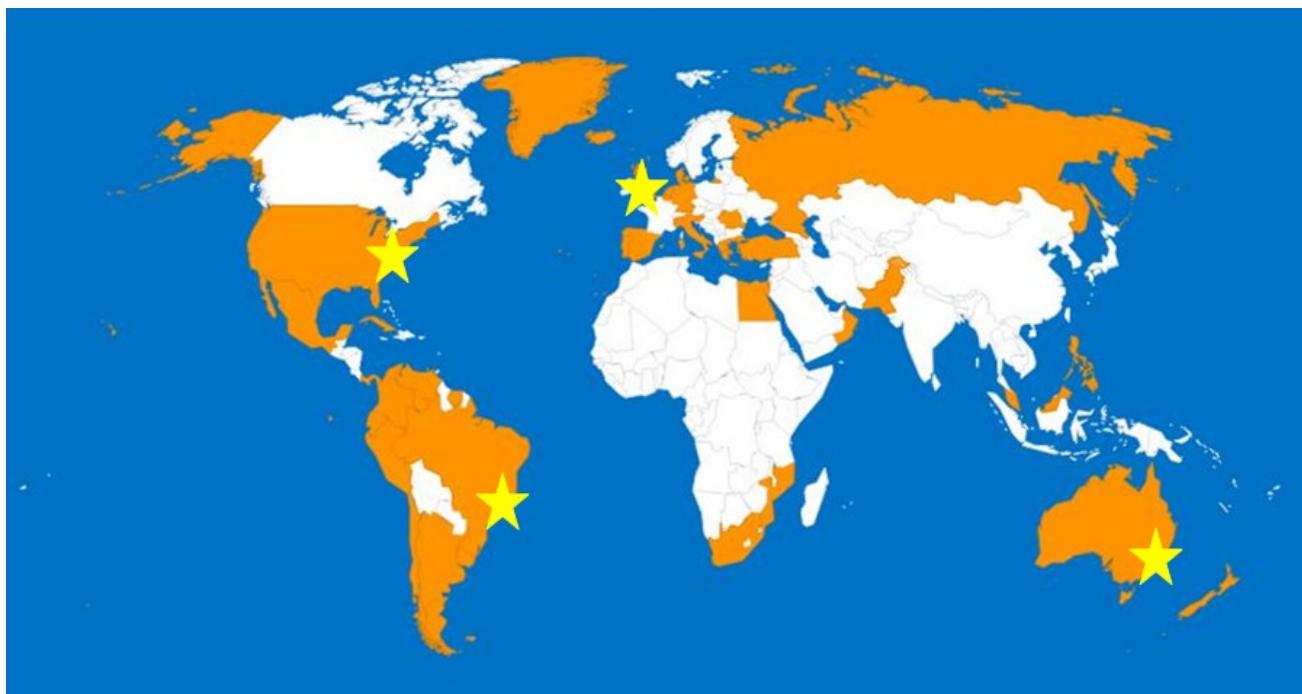
IC-ENC's costs continue to align to forecast, while revenue (from ENC sales volumes) is ahead of forecast. This confirms IC-ENC's financial sustainability, and the \$1 fixed fee amount is the right one. Full financial results are provided later, including a new graphic – a pictorial representation of where each cent of the \$1 has been spent over 2015.

Regional Offices

Work continues on the two new regional offices: Latin America (Brasil) and North America (United States), following Steering Committee approval for these developments. Training of the Validation Teams is to be complete by April 2016, with each office reaching full operating capability soon after. The IC-ENC organisation structure is provided in section 11.

IC-ENC Members

IC-ENC has welcomed five new members since the last Annual Report: Israel, Oman, Malta, Panama and United States. This takes the total number of members to 39. During 2015, the IC-ENC folio has increased by over 350 new ENCs, and is now nearly 6000 strong. This includes the first ENCs released by Ecuador, Egypt, Philippines and Slovenia. Congratulations to these ENC Production teams! Upon formal launch of the IC-ENC North America office, over 1,100 new US ENCs will become part of the IC-ENC folio, taking the total to about half of the world's ENCs. An analysis of the IC-ENC folio growth is provided in Section 7.



IC-ENC Members and Office Locations

ISO9001 Accreditation

In October, IC-ENC was awarded its own ISO9001:2008 Quality Management certificate, from the auditing body DNV. Achieving independent accreditation (i.e. separate from any host HO) means that the certification will be expanded to include each IC-ENC regional office. This will ensure that a high quality service, focused on the needs of our members is delivered, irrespective of which office is delivering the service.



**COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =**

Key Achievements: People

ENC Validation Training

IC-ENC has delivered three ENC Validation training courses during 2015, directly supporting IC-ENC members' ENC production teams, by providing training to a total of 42 individuals from 29 countries.

These courses were hosted at the respective offices of the UK, Australia and Panama (Canal Authority). This provided great benefit in terms of infrastructure, site visits, guest speakers, cost effectiveness, and other opportunities such as a technical visit to the new Panama Canal lock construction site. IC-ENC's new technology allowed HQ staff to deliver presentations on their areas of work remotely.

The courses have evolved into workshop-type events; open discussion between the trainees has been an important element of the success of this training. Mike Hawes, IC-ENC Data Manager who has lead this training, comments "it has been great to see the high level of cultural exchange, as well as real friendships and productive working relationships established between the trainees". Comments from some of the trainees are available on the IC-ENC website.



Wollongong, Australia



Taunton, UK



Panama City, Panama

Bespoke Training and Support

IC-ENC has welcomed several working visits/secondments to IC-ENC during 2015, including colleagues from Egypt, Turkey, Netherlands, Germany and South Africa. In addition to this, several prospective new members have also visited for technical demonstrations and so on.



Left: Egyptian colleagues; Right: Maltese colleagues

The IC-ENC Team

New IC-ENC staff members have been selected for the Latin America and North America offices: Ana Mileze and Bruna Pinheiro from DHN, and Robert Ciepiela and Jenny Thacker from NOAA. All four staff members are part-way through their introductory training at the UK office.



Left to right: Bruna Pinheiro, Jenny Thacker, Ana Mileze, Rob Ciepiela

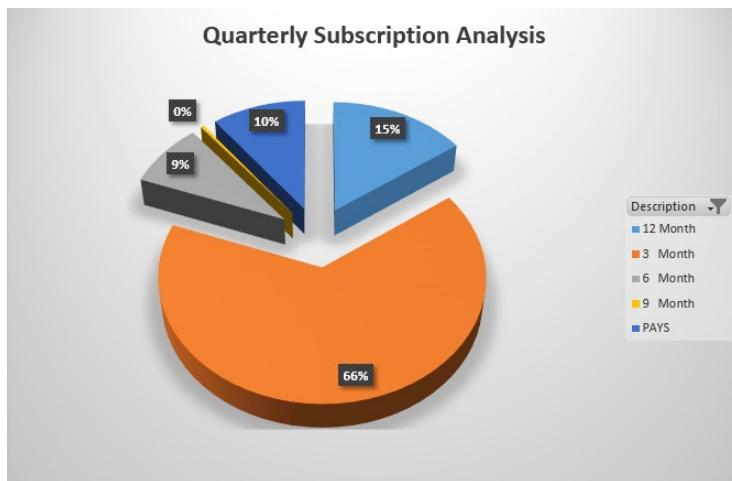
IC-ENC congratulates Dan Garratt, who with over 7 years of experience in the role of IC-ENC Data Validator, has recently been appointed as Senior Data Validator, to assist co-ordination and quality management across all the IC-ENC offices.

In preparation for the new S-100 suite of standards and other ENC and ECDIS developments, and as part of the IC-ENC staff succession planning, Liz Hahessy was selected for the new role of Future Standards Manager, and joined in mid-2015.

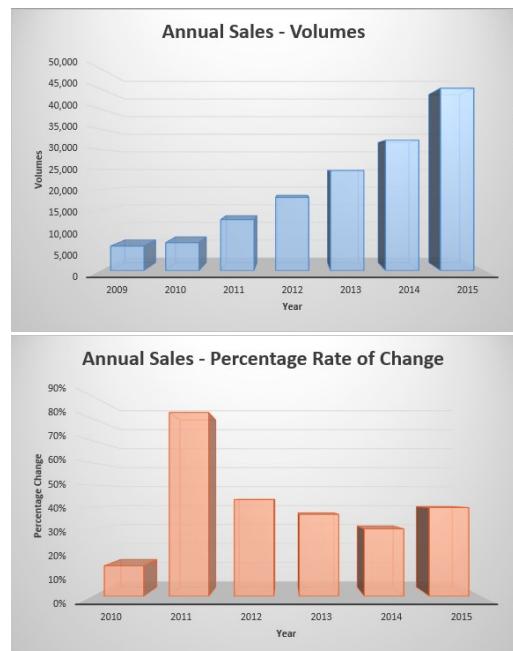
“Real Time Reporting” of VAR Sales

IC-ENC launched a brand new approach to ENC sales reporting in early 2015. The Real Time Reporting (RTR) system offers many benefits, to IC-ENC and to its members. The system enables IC-ENC to be more responsive to its members reporting needs and to enable faster, and more detailed, auditing of VAR sales. One of the prime functions of RTR is to automatically manage the ENC sales rules and procedures, and to highlight any aspects that require detailed investigation and analysis by the team.

In tandem with the introduction of RTR, IC-ENC took the opportunity to completely overhaul the quarterly distribution and financial reports to members to enhance the detail and clarity.



Sample Quarterly ENC Sales Report provided to each IC-ENC member



New Joint RENC Pay As You Sail (PAYS) Specification

IC-ENC lead, in conjunction with PRIMAR, a review and overhaul of the PAYS Specification which clarified and standardised the sales rules globally. This resulted in the production of Joint PAYS Specification Version 1.3, to which all PAYS Systems are now harmonised.

Pay As You Sail (PAYS) Planning Fee

At the members' request, IC-ENC designed and implemented improvements to the PAYS sales rules so that the system now directly recognises the value of voyage planning. From January 2016, there is a separate and upfront “planning fee” element whilst reducing the previous cost premium for a PAYS service sale. This major revision to the PAYS concept, which meets the needs of IC-ENC members, has been implemented with VARS and End Users to be as smooth and painless as possible.

VAR Re-Issues Specification

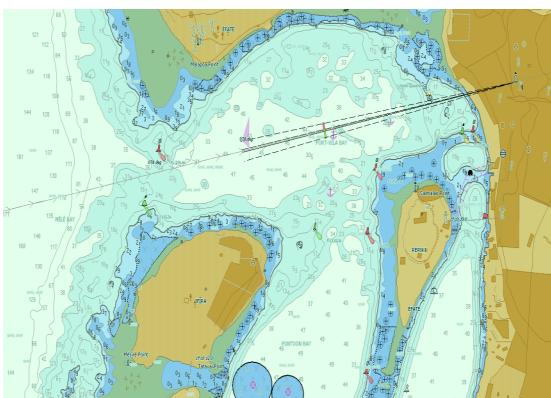
The development of the IC-ENC VAR Re-issue Service specification, in conjunction with DNV, has been completed. Members have decided individually whether or not to allow their ENC data to be included in a VAR Re-Issue Service as described by IC-ENC's Specification. The new service provides tangible benefits to End Users by making ECDIS loading times faster, reducing the number of warning messages and reducing the data volumes.

Key Achievements: Technology

Cloud Migration

Significant progress has been made with improving IC-ENC's technology. IC-ENC has successfully migrated into the secure Microsoft Azure cloud environment, with the assistance of an IT support company selected through the UK government procurement process to ensure value for money.

New hardware, software and processes are now in place and fully operational in the UK office, and at the final implementation stage in Australia. Service output to members has continued unaffected throughout this period of significant operational change. A remote desktop solution now provides secure access to the IC-ENC network for the team, which is vital when operating away from the office.



A new secure FTP solution is available to all members and VARs, to allow safe transfer of ENCs. Nearly all IC-ENC Validation applications are now cloud based and available to all users. Skype for Business has been configured to allow IC-ENC staff, from all offices, to communicate with each other regardless of physical location; Office 365 provides access to the latest Office applications, whether working remotely in the cloud or in the office. IC-ENC has a dedicated internet leased line to provide uncontended internet access to the network, adding security, guaranteed service level and greater connectivity speed to our applications, internet and files, regardless of location.

IC-ENC Technical Conference

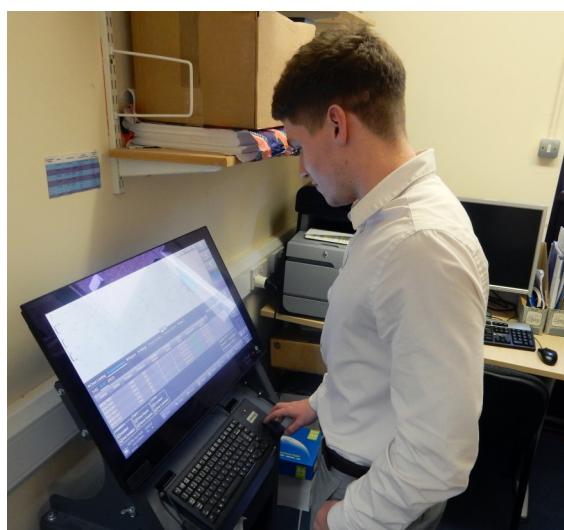
Plans are maturing for the IC-ENC Technical Conference, a three day event to be held at the end of April in Taunton, UK. IC-ENC is expecting a high level of participation from members. The conference will allow experienced ENC production staff to discuss issues they have with ENC production and validation, the progression of S-101 and to explain the developments within IC-ENC. The key deliverable will be a proposed IC-ENC roadmap for S-100/S-101 services, based on member input, for review at the Steering Committee meeting in September.

ECDIS Supply to Members

IC-ENC continues to supply to its members with eGlobe ECDIS software. Introductory training and familiarisation is part of our ENC Validation training course. This tool supports ENC Production teams by giving an opportunity to view and assess ENC performance on an ECDIS as part of the production workflow.

International Standards Development

IC-ENC has maintained its presence in Standards Development forums through participation at S-100 Working Groups and HSSC meetings. IC-ENC continues to represent the views of its members at these meetings. Outcomes of the ENC and S-100 WGs in March 2016 will feed into the April Technical Conference.



6. KEY GOALS FOR 2016

Strategy and Management

- Conclude membership discussions with several significant ENC producers. IC-ENC is mid-way through the joining process with a number of nations, who will bring sizeable ENC volumes, in important locations, into the IC-ENC quality assured folio.
- Reach full operating capability for the IC-ENC regional offices in Brasil and US, and extend ISO9001 certificate to all regional offices.
- Streamline internal business processes, including the introduction of a Customer Relationship Management tool. The size of membership and ENC folio now require it.
- Reach a Steering Committee decision on how to employ, or return to members, the IC-ENC operating surplus.

People

- Train the new Latin America and North America Validation Teams.
- Deliver 3 ENC Validation Training Courses to staff from ENC Production teams.
- Gain externally recognised accreditation for the IC-ENC Training Course.
- Maintain the capacity for IC-ENC members to send their staff on secondment to IC-ENC.

Commercial

- Launch the Pay As You Sail Planning Fee with VARs and ensure the internal business systems continue to work effectively. Monitor the “real world” impact of PAYS Planning Fee to VARs and End Users, compare to expectations, and report to SC17.
- Publish the IC-ENC VAR Re-Issue Specification and support VARs with development of their Re-Issues services.
- Develop a full business plan for a Re-Use of ENC data service (Action SC19/9), to be reviewed and voted on by the Steering Committee.
- Organise and conduct a VAR conference to engender a closer working relationship with the VAR network. This is to run in parallel with the annual survey in informing IC-ENC of market trends and information.
- Develop a generic End User License Agreement (EULA) for all IC-ENC data by September 2016 (Action SC15/15).

Technology

- Deliver improvements to key internal databases and processes, in particular the key validation tool, the Data Management Database (DMD).
- Upgrade the IC-ENC SharePoint solution to make full use of the advantages this tool gives, and ensure IC-ENC members are fully aware of the resources available to them through this system.
- Establish effective technology for each regional office, noting the varying national technology policies of each of IC-ENC's different host HOs.
- Hold the first IC-ENC Technical Conference and develop the proposed IC-ENC roadmap for S101 services review by the Steering Committee.

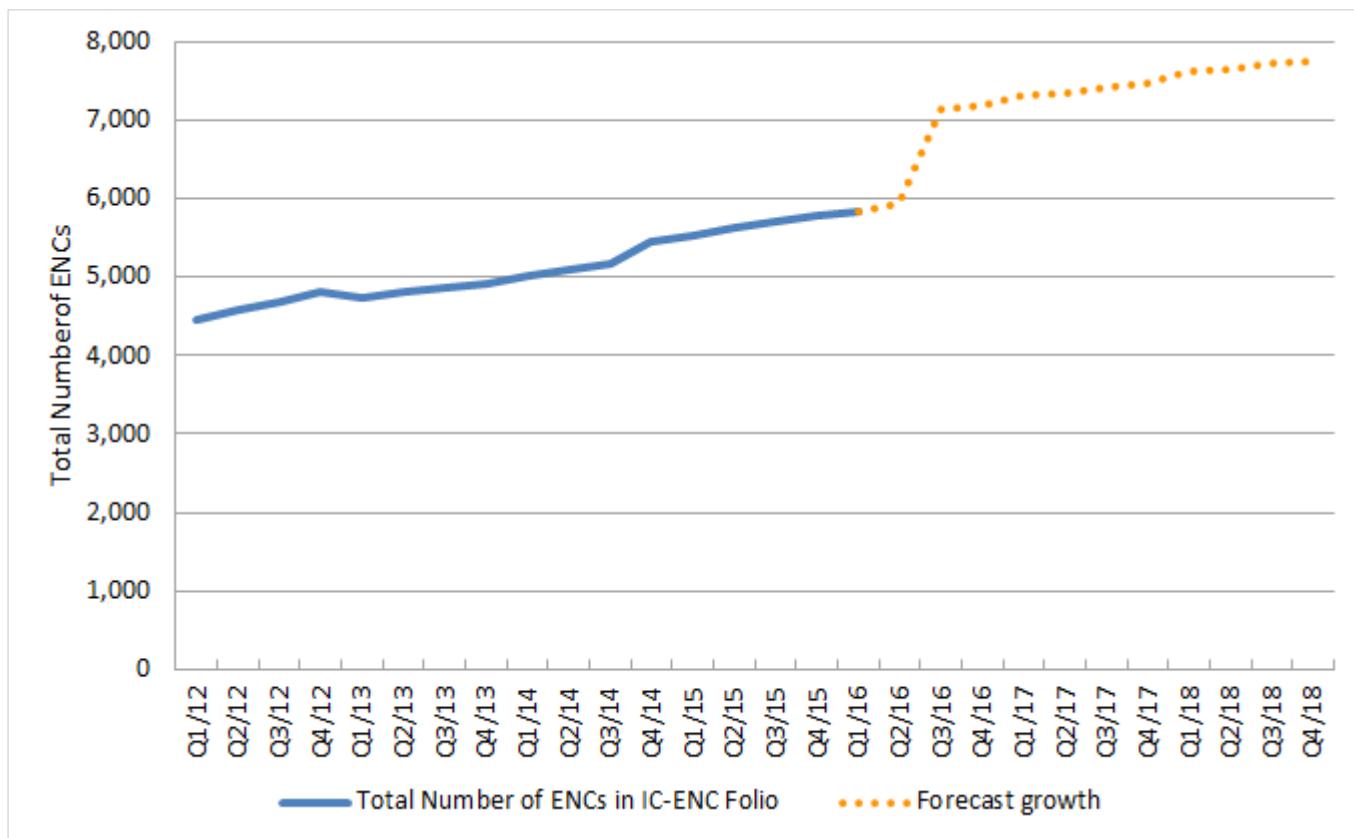
7. IC-ENC MEMBERSHIP AND FOLIO STATUS

ENC Folio Status at Week 01/2016

Country	Member since	Wk1 2014	Wk1 2015	Wk1 2016	2015 Actual Change	2015 % Change	2015 NE issued	2015 Updates issued	
Argentina	2005	61	66	70	4	6.1	2	124	
Australia	2005	842	841	843	2	0.2	242	1077	
Belgium	2002	7	7	7	0	0	7	53	
Bahrain	2002	4	4	8	4	100	0	11	
Brazil	2008	131	136	137	1	0.7	21	169	
Chile	2004	186	197	220	23	11.7	7	74	
Colombia	2010	36	36	56	20	55.6	5	98	
Cuba	2013	8	15	21	6	40	3	4	
Denmark	2013	130	149	219	70	47	139	358	
Ecuador	2008	-	-	14	14	-	0	4	
Egypt	2014	-	-	17	17	-	7	31	
Germany	2002	154	155	159	4	2.6	115	431	
Greece	2003	285	287	291	4	1.4	8	188	
Iceland	2005	70	70	71	1	1.4	26	7	
Israel	2015	-	-	0	-	-	-	-	
Italy	2014	0	253	255	2	0.8	42	1151	
Malaysia	2014	-	-	0	82 ENCs to be released Q1/2016				
Malta	2016	-	-	0	Initial ENCs to be released during 2016				
Mexico	2005	99	116	128	12	10.3	2	14	
Mozambique	2004	-	-	0	-	-	-	-	
Netherlands	2002	71	85	139	54	63.5	15	420	
New Zealand	2008	201	230	241	11	4.8	22	57	
Oman	2015	-	-	0	Initial ENCs to be released during 2016				
Panama	2015	-	-	10	10	-	0	0	
Peru	2006	122	122	124	2	1.6	10	90	
Philippines	2014	-	-	17	17	-	2	28	
Pakistan	2005	5	6	6	0	-	0	4	
Portugal	2002	89	89	91	2	2.2	11	124	
Romania	2013	1	3	6	3	100	1	4	
Russian Fed.	2005	430	443	477	34	7.7	37	203	
Slovenia	2014	-	-	1	1	-	0	0	
Spain	2002	165	228	248	20	8.8	11	353	
South Africa	2002	56	57	57	0	-	8	63	
Suriname	2014	4	4	4	0	-	4	19	
Turkey	2004	259	259	266	7	2.7	75	231	
United Kingdom	2002	1467	1558	1566	8	0.5	723	1028	
United States	2016	-	-	0	>1,100 ENCs to be included Q2/2016				
Uruguay	2011	16	26	27	1	3.8	3	99	
Venezuela	2006	17	18	18	0	-	2	1	
TOTAL		4916	5460	5814	354	6.50%	1550	6518	

ENC Folio Growth

The total number of ENCs in the IC-ENC folio is almost 6,000. The growth of the folio since 2012, and the forecasted growth, is shown in this graph:



At the beginning of 2016, the IC-ENC folio stands at just below 6,000 ENC cells. This is approximately 40% of the globally available ENCs.

The folio has grown steadily since 2012, as new members have joined IC-ENC, and all members have produced new ENCs.

The forecast figures (2016-2018) are based on:

- Known production forecasts supplied by IC-ENC members
- The inclusion of the US ENC folio in Q2/2016. Upon formal launch of the IC-ENC North America office, over 1,100 new US ENCs will become part of the IC-ENC folio, thus taking the total IC-ENC folio to about 50% of the world's ENCs.

The forecast does not include the ENC folios of HOs with whom IC-ENC is part-way through the membership process. Given this, It is probable that the folio will grow at a faster rate than indicated.

8. ENC DISTRIBUTION 2015

Quarterly ENC Sales Volumes

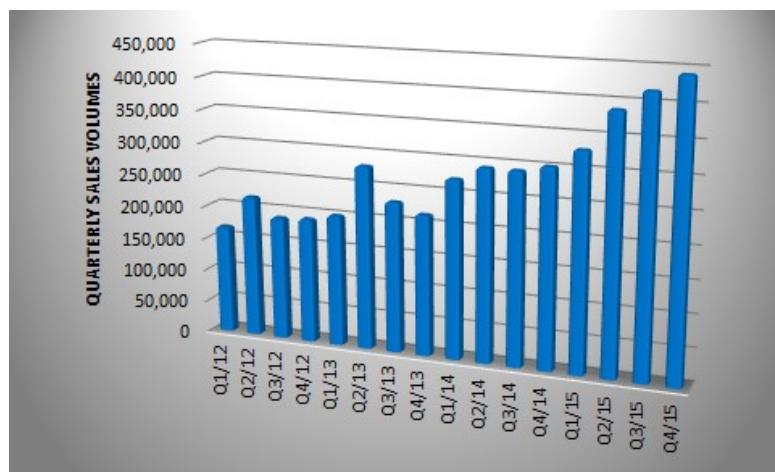
To ensure a representative base line for comparison, an (annual equivalent) ENC sales volumes measure is used which is not affected by price rises but does take account any increase in the IC-ENC folio.

The analysis contained in the bar chart shows growth since the beginning of 2012 to the end of 2015.

2013 year on year growth — 21.1%

2014 year on year growth — 25.0%

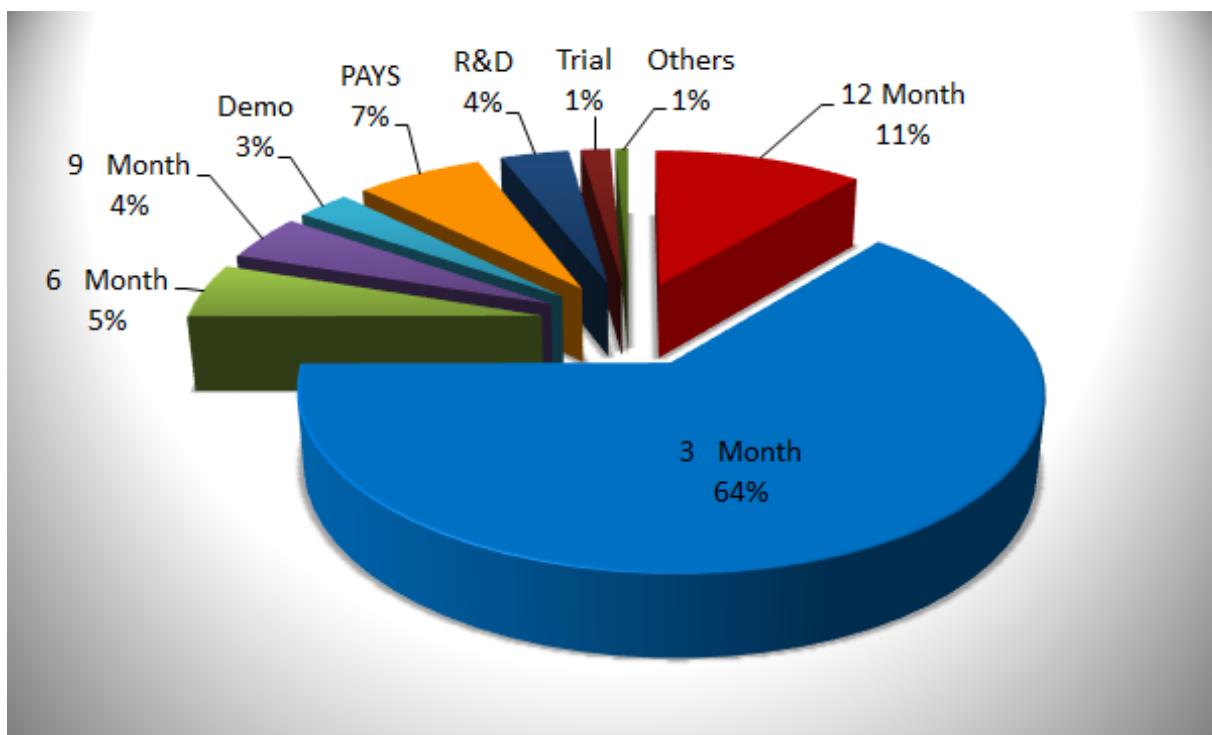
2015 year on year growth — 35.8%



It was always clear that mandation (2012–2018) would see the fastest period of uptake in vessels sailing with ECDIS as the primary source of navigation. The strong year on year growth percentages are ahead of our forecast but the trend is very much in line with our expectations.

ENC Sales by Subscription Type

Since the introduction of Real Time Reporting (RTR), IC-ENC is able to interpolate the ENC sales to a far greater level of detail than ever before. A good example of this is demonstrated below by the subscription analysis pie chart, which shows the overwhelming dominance of shorter term subscription periods. The 2015 subscription type analysis is presented here:



Again, the relatively small proportion of PAYS subscriptions is significant. These have been compared to previous years, and shows an increase over the past couple of years, but from a small base.

This level of detail will come into its own and allow meaningful comparison when 2016 data is available, which will enable comparative analysis and trending to be conducted.

9. FINANCIAL ACCOUNTS—2015 RESULTS

The IC-ENC budget is under review of the Steering Committee and subject to its annual approval. Quarterly financial status reports are reviewed by the IC-ENC Chairman.

IC-ENC is a not-for-profit organisation. Its costs of operation are funded by IC-ENC retaining a fixed fee for each ENC sold. The amount of the fixed fee is set by the SC, taking account of the financial position (deficit or surplus) and future forecasted operating costs and revenue. The SC has set the fixed fee amount to \$1.00 for the duration of this Strategic Plan (i.e. through to 2018).

What has each \$1 funded in 2015?

During 2015, each \$1 retained has been used by IC-ENC in the following ways:

How has each \$1 been used?



Full 2015 Financial Results

TYPE	FORECAST	ACTUAL	VARIANCE	COMMENTS
Costs				
Staff wages	-\$779,000	-\$756,667	-3%	
Work Plan Activities	-\$413,000	-\$404,796	-2%	
Information Technology	-\$114,000	-\$144,610	27%	
Accommodation and Support	-\$120,000	-\$108,679	-10%	
Financials	\$2,500	\$5,862	134%	
TOTAL COSTS	-\$1,423,500	-\$1,408,891	-1%	
Revenue				
IC-ENC fixed fee value	\$1	\$1		Set to \$1 at SC16 through to 2018, to provide stability for financial planning.
2015 Sales Volume	1274400	1580587	24%	
2015 IC-ENC Revenue	\$1,274,400	\$1,580,587	24%	
Financial position				
2015 Annual Balance	-\$149,100	\$171,696		2015 Revenue minus costs. Positive in-year balance.
IC-ENC Operating balance	\$1,118,213	\$1,439,009	\$320,796	At end of 2015.

10. FINANCIAL ACCOUNTS—2016 FORECAST

TYPE	FORECAST	COMMENTS
Costs		
Staff wages	\$834,000	
Work Plan Activities	\$541,000	Itemised Work Plan budget has been presented and approved by IC-ENC members.
Information Technology	\$180,000	First full year of IC-ENC's independent IT systems and third party support.
Accommodation and Support	\$120,000	No substantial change from 2015
Financials	(+)\$4,500	Interest earned from balance in IC-ENC bank account, minus banking costs
TOTAL COSTS	\$1,670,500	
Revenue		
IC-ENC fixed fee value	\$1	Set at SC16, through to 2018
2016 Sales Volume	1,925,600	
2016 IC-ENC Revenue	\$1,925,600	
Financial position		
2016 Annual Balance	\$255,100	2016 Revenue minus costs.
IC-ENC Operating balance	\$1,694,109	At end of 2016.

At the meeting in September 2016, the IC-ENC Steering Committee will consider how to use the IC-ENC operating balance. This will include making an 'Extra Ordinary' settlement payment to members. In business terms, this would be similar in nature and purpose to a company's 'Extraordinary Dividend'.

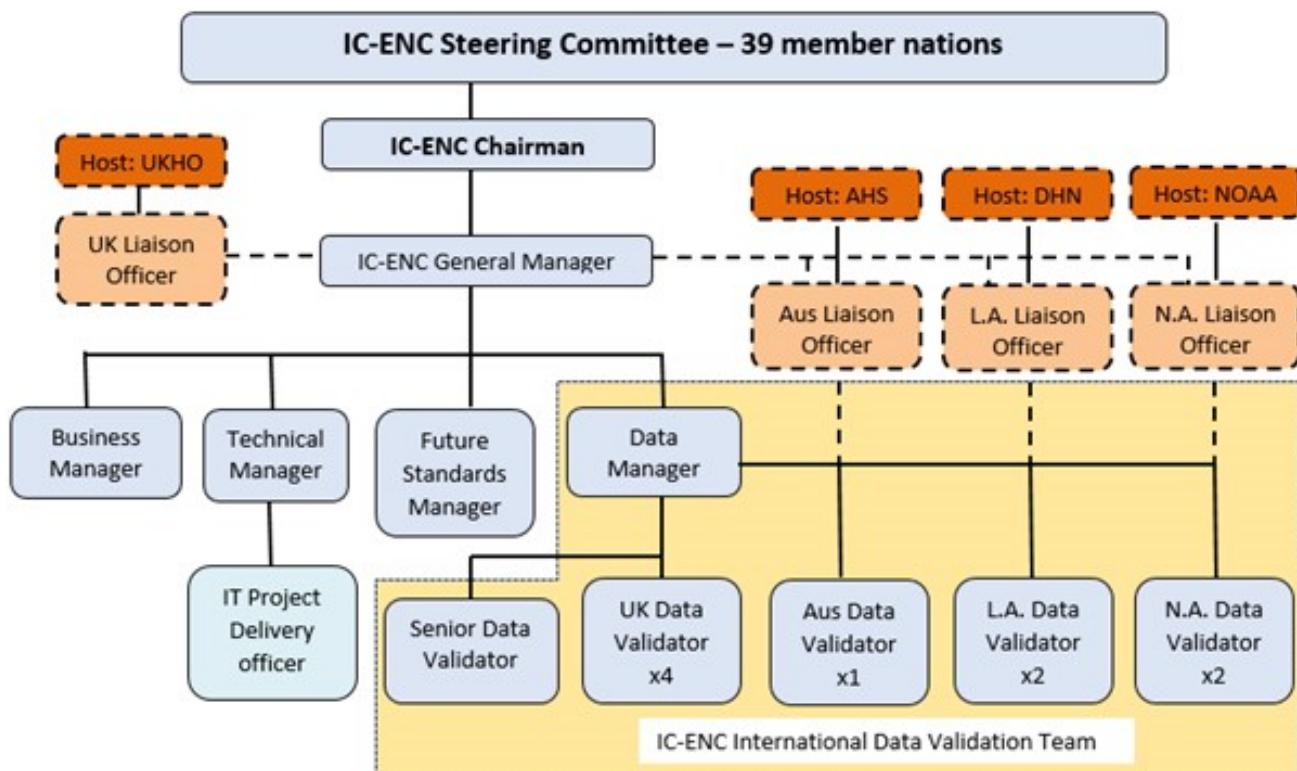
11. ORGANISATION INFORMATION

IC-ENC's Organisational Structure

IC-ENC benefits from close association to a number of 'host' Hydrographic Offices (HOs). These offices support IC-ENC in various ways, and appoint a liaison officer to be the link between the IC-ENC office and the host HO.

The majority of the IC-ENC team are based in the UK office (HQ), with the elected Chairman providing oversight and strategic guidance. This office maintains central policies, quality management, technology, and so on.

Validation is conducted regionally: UK and Australia are operational, Latin America (Brasil) and North America (US) will become operational in Q2/2016.



IC-ENC Office Locations

IC-ENC Headquarters

Admiralty Way
Taunton, Somerset
TA1 2DN
United Kingdom

IC-ENC Australia

8 Station Street
Wollongong
NSW 2500
Australia

IC-ENC Latin America

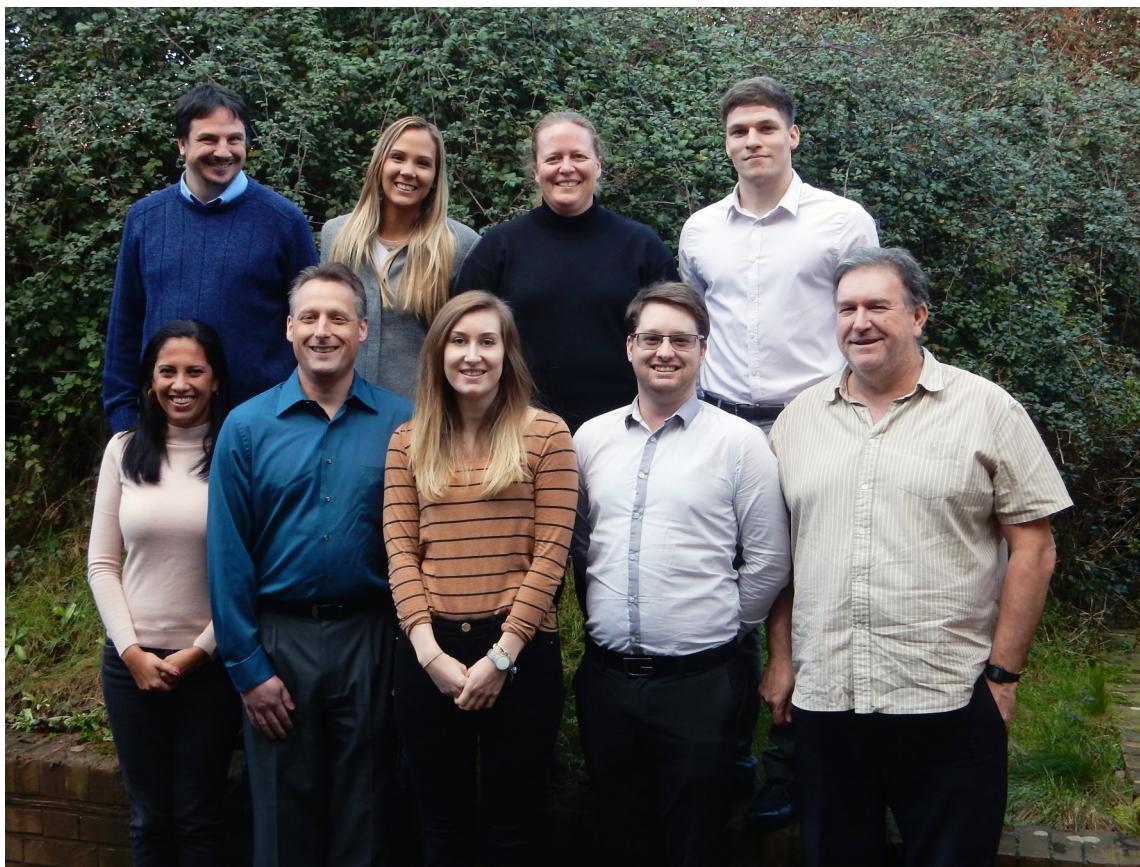
Rua Barão de Jaceguay s/n
Ponta da Armação, Niterói
Rio de Janeiro 24049-900
Brasil

IC-ENC North America

NOAA Office (N/CS2)
1315 East West Highway, SSMC 3
Silver Spring, MD 20910
United States

Further Information

For further information on IC-ENC, including contact details, please visit www.ic-enc.org.



IC-ENC International Validation Team — Back, left to front right: Dan Garratt (UK – Senior Data Validator), Bruna Pinheiro (Brazil), Jenny Thacker (US), Max Summers (UK). Front: Ana Mileze (Brazil), Rob Ciepela (US), Laura Tyzack (UK), Aaran Champion (UK), Mike Hawes (UK – Data Manager). Not pictured: Alison Vale (UK), David Durston (Aus).

“Global ENC collaboration, with a regional focus”



International Centre for ENCs

Admiralty Way

Taunton,

Somerset

TA1 2DN

United Kingdom

www.ic-enc.org