

2017 ANNUAL REPORT

International Centre for Electronic Navigational Charts

Our mission:

To provide services, at a low cost, to ENC Producers, that ensure their ENCs are:

- compliant to the international standards;
- consistent across the global dataset;
- readily available for use.

This is so shipping can navigate safely, efficiently and confidently, whilst ensuring other maritime users are using the same approved data.



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CHAIRMAN'S MESSAGE

Again I'm proud to present the annual IC-ENC report. It provides a good insight into IC-ENC's activities and achievements during 2017. It offers a fine balance between highlights and detail. It will be worth your time reading it.

For IC-ENC 2017 was a year of consolidation. After years of continuous growth and development the IC-ENC construct needed maintenance. I'm pleased to say that important steps were made.

Last year IC-ENC introduced a key element to its ICT infrastructure: a new Data Management Database (DMD). This provided a core sustainable IT capability to IC-ENC replacing legacy tooling.



Last year IC-ENC underwent a relative large number of staff rotations. Together with the introduction of the new DMD, this resulted in a sizable familiarization and training effort.

Last year IC-ENC focused on defining and refining its core functions. This provided clarity on the scope of work.

Last year IC-ENC's quality management system was extended to the both the Latin American and United States regional offices with the ISO9001 quality management accreditation. This reaffirmed the location independency of the IC-ENC validator working with IC-ENC's cloud based technology.

Last year IC-ENC worked to refine its KPIs to make them smarter, less binary in nature. Work on this is still ongoing.

In 2016 IC-ENC absorbed the ENC portfolio of the United States. In 2017 IC-ENC overcame the challenging practicalities of such a large new portfolio.

So, for a year of consolidation 2017 proved also to be a busy year as well. Besides this, the year 2017 turned out to be a very successful financial year. IC-ENC received the highest revenues to date set of against costs that were considerably below forecast. This very firmly underpins the ethos of a low cost service provider to the ENC Producers.

I wish to express my gratitude to all at IC-ENC who have made this possible.

Captain RNLN M.C.J. (Marc) Van Der Donck IC-ENC Steering Committee Chairman Director Netherlands Hydrographic Office Hydrographer of the Royal Netherlands Navy

GENERAL MANAGER'S INTRODUCTION

Welcome to IC-ENC's 2017 Annual Report, which describes IC-ENC's organisation performance over this 12 month period. Continuing the theme from last year, this report describes how IC-ENC is contributing to '...Better ENCs'.

The Worldwide Electronic Navigational Database (WEND) is now made up of over 16,000 ENCs, with about half of these produced and maintained by IC-ENC members with the assistance of the core services: production support, validation, distribution and revenue management. In 2017, IC-ENC welcomed Solomon Islands as its 42nd member, with this national folio being included in



the IC-ENC folio in August. Looking ahead to 2018, we will see the first releases of ENCs from Israel and Oman.

Nearly 15,000 validations have been conducted by our international team in Australia, Brasil, United Kingdom and United States during 2017. This is about 50% higher than in 2016, a very significant increase in operational terms. About one in five New Cell validations identified issues deemed safety critical to navigation, subsequently corrected before the ENC was released to users.

This increase in validation workload, with fixed resource, is reflected in the timeliness of the return of validation reports. However, through internal process improvement, the second half of the year saw a steady improvement, and at the end of 2017 results have returned to satisfactory levels. This has continued into 2018.

The new Data Management Database is fully operational, and the Errors Database saw several upgrades to content – it now contains about 1800 validation error messages with advice on how to improve the ENC to the benefit of the user. The second IC-ENC Technical Conference was held in Denmark, a key strand of the IC-ENC Production Support core service, focusing on establishing and promoting international best practice in ENC encoding.

Increasing ECDIS use, and increasing size of the IC-ENC folio, means that IC-ENC's financial economies of scale improve. As a result of IC-ENC's not for profit status, Extraordinary Settlement 03 (\$1.13 million) was returned to members at the start of 2018, making 2017 a cost/revenue neutral year for IC-ENC.

Following on from 2017, the year ahead is looking like another very busy period for the IC-ENC members and the international team!

Mr James Harper IC-ENC General Manager Taunton, United Kingdom

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;
- readily available for use.

This is so 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 located at a national Hydrographic Office, offering economies of scale, staffing and technology advantages, meaning IC-ENC remains a low cost operation.

IC-ENC's Strategic Objectives

Section	Ref	Strategic Objective			
	SM1	Develop and maintain effective corporate governance and business functions			
	SM2	Maintain financial sustainability			
Strategy & Management	SM3	Increase membership and ENC coverage			
	SM4	Develop the IC-ENC global operating structure			
	SM5	Maintain effective relationships with other organisations			
Deside	P1	Deliver training and capacity building to ENC producers			
Реоріе	P2	Develop and maintain the IC-ENC International Team			
	C1	Deliver the Distribution service, via the VAR companies			
Commercial	C2	Deliver the Revenue Management service			
Commercial	C3	Develop ENC sales rules - non-navigation			
	C4	Promote and protect the IC-ENC corporate brand			
	T1	Deliver production support services			
Validation Service & Technology	T2	Deliver an independent ENC validation service			
	Т3	Maintain and improve IC-ENC information technology			

STEERING COMMITTEE

IC-ENC held two Steering Committee meetings during 2017. A short SC18 was held alongside the IHO Assembly in April to consider some specific aspects, with the full SC19 convening in September in the United Kingdom.

SC19 was well supported by the IC-ENC members, with 31 nations being represented, and the IHO Secretariat observing. IC-ENC reported on the status of operational performance and progress against tasks set by the Steering Committee. New performance indicators were endorsed to measure and report on data throughput times. IC-ENC's financial performance was assessed, as well as definitions agreed regarding the four IC-ENC core services.



The meeting used a new approach of dividing into smaller, informal working groups, to consider key issues of the IC-ENC cost recovery model, IC-ENC structure, Training Needs Analysis, Non-SOLAS use of ENC data. This topics were then addressed formally in the plenary sessions.



on IC-ENC Value Added Reseller activities. Tom Richardson introduced himself as the new Technical & Standards Manager, and talked on aspects such as the S100 watching brief and IC-ENC technology developments. Additionally, AN (RN) Laura Paolino de Souza (Uruguay) updated the SC on the work regarding identifying the ENC training needs of the IC-ENC membership, and options to support this.

CORE SERVICES

ENC VALIDATION

Staff Changes in IC-ENC Validation Team

In January 2017 Max Summers gained promotion to IC-ENC Project Delivery Officer, and he was replaced in the Validation Team by Adele Brewster. Laura Tyzack sadly left us at the end of December after 5 years in IC-ENC to pursue alternative career options.

IC-ENC Validation

The IC-ENC Validation Team conducted 14,922 validations during 2017. This was an increase of 4,806 from last year.

The number of New Cell validations increased by only 44, while New Editions increased by 2,398 and Updates by 2,364. The number of ENCs requiring improvement reduced for both Updates and New Editions, indicating improvements in the quality of the data supplied by IC-ENC's members:

	Updates	New Editions	New Cells	Total
Number of Validations	9715	4539	668	14922
Returned for Improvement Action Before Release	177	125	127	429
Percentage % of Validations (2016 figures in brackets)	1.8 (2.8)	2.8 (4.5)	19.1 (18.3)	2.9 (4.4)

New Data Releases During 2017

At the end of 2016 IC-ENC had 7321 cells in its database provided by 37 countries. 2017 ended with an increase to 38 countries having welcomed Solomon Islands to our membership, and 7702 cells in the database - an increase of 391 ENCs.

IC-ENC has also been working closely with newer members Oman and Israel and it is expected that their data will become available during the first half of 2018. Further details about the ENC Folio are provided on page 17.

'Value Added' Validation Report Feedback Comments

IC-ENC continues to monitor the types of feedback comment made in the validation reports. Over 3000 ENCs in 2017 received feedback designed to improve their content. *The results for 2017 are shown below:*

	No Action (usually Update files)	Advisory (improvements for the user)	Critical (dangerous - must be fixed)	Total
New Cell	397	144	127	668
New Edition	1955	2459	125	4539
Update	9456	82	177	9715
Total	11808	2685	429	14922

ENC Data Release

The average number of ENC files included in IC-ENC's weekly exchange set releases to the VARs continued to rise - an average of 221 files in 2016 increased to an average of 296 files in 2017. One of the 2017 exchange sets contained 379 files - IC-ENC's highest ever weekly total!

	Minimum	Maximum	2017 Average	2016 Average	2015 Average
Updates	116	277	182	149	152
New Editions	48	125	86	61	29
New Cells	0	66	9	11	18
Combined	211	379	279	221	199



Graph showing the weekly releases of ENCs in 2017:

2017 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 timescales below:

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

The monthly results, beginning from June 2016, are:



* "STD NE" is a Standard New Edition. For more details see the quarterly management report to the Steering Committee.

Although KPIs were met for Updates during 2017, the significantly higher number of cells to be validated impacted on New Edition and New Cell results. Figures began showing marked improvement from the middle of the year, however, and this has continued as a result of internal efficiencies and process improvements.

ECDIS systems

IC-ENC continues to use 3 separate ECDIS systems to load and view ENCs after they have been submitted for validation from member HOs. These offer a means to test that the data loads correctly, and to view the data as the mariner would see it, so helping with validation judgement and decisions.

The systems we use are manufactured by:



IC-ENC DMD (Data Management Database)

This year saw IC-ENC deliver the DMD (Data Management Database) Replacement in March. This bespoke validation, workflow management, and reporting tool replaced our longstanding DMD (Microsoft Access database) which had accumulated more than 72,000 entries over the 15 years it had been in use.

The benefits which have been realised include:

- A more secure and reliable database
- Automated ENC registration; notification to members of first level validation results
- Increased usability
- More efficient processes
- More stable on a cloud platform allowing multiple concurrent users from any location, which supports the regional office concept
- Easier to update, maintain and improve
- Improved workflow tracking and reporting
- Faster weekly release process
- Provides a platform for future improvements (i.e. capable for daily release of data)
- Improved business resilience through third party support and maintenance

The combination of these benefits has led to a new database system that is:

- Reliable
- Robust
- Available
- Scalable

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								Cells 👻	Releases		s Custo			Users
Work	in progress													
Totals 55	new cells 37 new ed	itions 4 updates	3 cancelled 0 reis	ssued										
ID T	Cell	Due Date 🔺	▼ Priority -	Modification Type	Validator T	Summary	Status		T HO Auth	orisation Hv	Count		Actions	
119371	AU301143.000	27 Feb 2018		New Edition	Dave Durston	Processed	Results (Being	g Validated)		10			Select actic	on 🗸
119377	DK41331C.000	27 Feb 2018		New Edition	Aaran Champion	Awaiting \	/alidation			8		0	Select actic	on 🗸
119381	AR4PP112.000	27 Feb 2018		New Edition	Bruna Pinheiro	P007 Sent	(Passed Valid	ation)		5		0	Select actic	on 🗸
119382	US4AK49M.000	27 Feb 2018		New Edition	Jenny Thacker	Awaiting \	/alidation			15			Select actic	on 🗸
119386	US4AK33M.000	27 Feb 2018		New Edition	Jenny Thacker	Awaiting \	Call	EC300200.0	00	Vex History IHV Che	ex Call Info	Add Watch	status	
119387	NZ505325.000	27 Feb 2018		New Edition	Dave Durston	Processed		Service tops Full	Medification New Cell	lation 1	0 119405		Being	ed Results
119391	US5MI61M.000	27 Feb 2018		New Edition	Robert Ciepiela	Processed		Max Summers	Medium	• BC	90009		II Trid value I High-priori II Havley	tion. Ry
119202	EC510820.000	28 Feb 2018		New Cell	Bruna Pinheiro	P007 Sent	Dates	20-Fub 2018 Validated	21 Feb 2018 P007 Sent	Or Mar 2018 Ready for Release	FR Statut Rep	port Sent	2 HD authori Revolidate Anollary fil iz Title chang	Jution Is warring Jed
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PRODUCTION SUPPORT

TECHNICAL CONFERENCE

IC-ENC held its second Technical Conference in May 2017 in Copenhagen, Denmark. A significant portion of the IC-ENC members were represented - 41 delegates from 32 ENC Production offices. As with TC01, it was recognised that a group of this size, working in unison, can be a useful and powerful lobbying voice in areas such as technical standards development. Once again, the success of the conference was due to the active participation of the delegates and the IC-ENC technical staff charged with delivering the event. Additionally we benefited from a very active 'host' – GST in Denmark – who provided logistical and secretarial support.



Updates were provided on developments within IC-ENC including the Errors Database and the new Data Management Database (DMD). ENC production issues such as T&P notices were discussed and actions taken to better inform future discussions on this subject.

Further updates were provided for each of the relevant IHO Working Groups. This included S-58 6.0.0 and progress within the S-100 WG on S-101. It was identified that one way to improve understanding of S-101 is for members to familiarise themselves with the latest S-101 DCEG document.

The Training Needs Analysis (TNA) project team had completed preparatory work prior to the conference. The results of the TNA questionnaire were discussed and an action was taken to review the TNA work ahead of proposals to the Steering Committee.

Presentations were provided by four ENC software providers. This provided a good insight into the software manufacturers' perspective on ENC production and validation.

Overall the conference was a successful event which was ably hosted by Denmark and which built on TC01. A third Technical Conference was endorsed by SC19, more details to be published soon.



IC-ENC ERRORS DATABASE

The IC-ENC Errors Database (EDB) is an important tool which supports all IC-ENC validations and HO ENC production. It contains nearly **1800** error messages reported by our core validation tools dKart Inspector, ENC Analyzer and 3 ECDIS systems. Each message is described and classified based on the S-58 standard but with additional intelligence applied based on the impact to the user. It is regularly maintained and provided to members through the IC-ENC Hydrographic Office pages.

ERROR	Error (5, 5)	source	TRANSAS ECDIS
EXAMPLE	Error (5,5) in object FE0000001987 (class	TYPE	HO MUST CORRECT / HO SHOULD CO
	HULKES) at hex offset 00001663: Inadmissible attribute in object: CONDTN.	Error_explanat	An apparently invalid attribute has been
DESCRIPTION	HO TO CORRECT: Any incorrect object/attribute value combination that has a detrimental affect on the product.	DESCRIPTION	HO MUST CORRECT: Any incorrect object/attribute value combination that may lead to a potentia dangerous situation. E.g unreadable DR
Impact_Assess	Variable impact depending on attribute, object and navigational importance of the actual 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 r
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.	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
Ref	UOC 4.6.8	Cross_referenc	
Cross_ref	VS57_ERR_RECFAIL	c_list	
Object_Grouping	Attribution - all objects		

Following the filling of the Technical and Standards Manager post in September 2017, it has been possible to focus effort on updating and improving the Errors Database and a number of releases took place during Q4 of 2017:

Release Date	Software Change	Comments
06/10/2017	dKart Inspector 6.2	-
01/12/2017	-	EDB updated for further dKart 6.2 errors; additional maintenance.

In addition to testing dKart Inspector versions 6.2 and 6.3, a beta release of ENC Analyzer 3.6.0 has also been tested and feedback provided to SevenCs. Once the final release has been implemented IC-ENC will be using two validation tools which have been updated for S-58 6.0.0.

In support of the introduction of S-58 6.0.0 the Technical and Standards Manager will be conducting an analysis of EDB contents against S-58 6.0.0, initially focusing on the Critical errors.

A project known as the "Production Support Database" has been initiated to migrate the Errors Database and other IC-ENC information into a more suitable database structure and into a more accessible form. This reflects the fact that Microsoft Access will not be supported by MS after April 2018.

DISTRIBUTION

ENC Sales

IC-ENC distributes its combined members' ENC database through companies known as Value Added Resellers (VARs), who are able to offer comprehensive maritime end-use services that bring together various navigational products into one package.

By working with VARs, IC-ENC is able to offer the mariner a choice of services, each incorporating a wide range of ENCs, which are available through a variety of well-known international distribution outlets.

Our VAR partners:



The analysis below shows Sales Volume and Distribution growth since the beginning of 2013 to the end of 2017:



DISTRIBUTION

ENC Subscriptions

ENCs used by SOLAS vessels for navigation are enabled through subscriptions. There are various subscription options:

"Standard" (or pre-paid) Subscription

- Defined subscription period (3 12 months)
- Purchased prior to voyage or planning

"Pay As You Sail" (PAYS) Subscription

- A vessel registers for a PAYS service
- All ENC's are available for planning purposes (a planning fee is charged)
- The PAYS system tracks and records the vessels movements
- 3 month PAYS subscription is recorded for all cells intersected by the vessels track

The Real Time Reporting (RTR) system allows IC-ENC to analyse the ENC sales subscriptions. The Subscription Analysis pie chart shows the popularity of shorter term subscription periods:

REVENUE MANAGEMENT

Reporting of VAR Sales

IC-ENC's Real Time Reporting (RTR) business system enables IC-ENC to be more responsive to its members' reporting needs and to enable fast and 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 more thorough investigation and analysis by the team.

IC-ENC UK (HQ) manages all aspects of the VARs sales reporting, auditing, invoicing and the revenue collection process. An itemised sales report is produced - in arrears - on a quarterly basis, for each IC-ENC member and the revenue generated from these sales is then paid accordingly to each member by IC-ENC.

IC-ENC Financial Model

Since 2014, IC-ENC has had the same stable and equitable, cost recovery financial model with its members which is based upon a fixed fee of \$1 being retained by IC-ENC from each 12 month subscription sale. Shorter subscription periods (3 month to 11 months, Training School and PAYS subscriptions) attract lower pro rata fixed fees (11 and 12 month are charged at the same rate as 10 month). See the example table below which is based upon a fictitious IC-ENC member which has chosen \$15.00 for its wholesale price:

	F	FICTITIOUS EXAMPLE OF AN IC-ENC MEMBER WHICH HAS CHOSEN A \$15.00 WHOLESALE PRICE FOR 12 MONTH ENC SUBSCRIPTIONS (IC-ENC Fixed Fee \$1)												
		Subscription Type / Periods												
	3 Month	4 Month	5 Month	6 Month	7 Month	8 Month	9 Month	10 Month	11 Month	12 Month	PAYS (3 Month)	Training (3 Month)	Training (6 Month)	Training (12 Month)
Volume/ Factor	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.00	1.00	0.30	0.15	0.30	0.60
Member revenue	\$4.20	\$5.60	\$7.00	\$8.40	\$9.80	\$11.20	\$12.60	\$14.00	\$14.00	\$14.00	\$4.20	\$2.10	\$4.20	\$8.40
IC-ENC Fee	\$0.30	\$0.40	\$0.50	\$0.60	\$0.70	\$0.80	\$0.90	\$1.00	\$1.00	\$1.00	\$0.30	\$0.15	\$0.30	\$0.60
Whole- sale Price to VARs	\$4.50	\$6.00	\$7.50	\$9.00	\$10.50	\$12.00	\$13.50	\$15.00	\$15.00	\$15.00	\$4.50	\$2.25	\$4.50	\$9.00

2017 FINANCIAL ACCOUNTS

TVDE	2017 APF	PROVED	2017 mid- year	2017	COMMENTS
IYPE	FOREC	AST, \$	revised forecast	ACTUAL	COMMENTS
Costs	Known / Allocated	Reserved / Contingency	Torecast		
Staff Wages, known	-\$711,000		-\$662,957	-\$636,929	Gapped posts have positive effect on staff costs. Additionally, temporary agency staff has less cost than a permanent employee.
Staff Wages, contingency		-\$101,000	-\$25,200	\$0	No staff contingency costs used (a quarter kept at mid-year revised forecast stage to assist SC19 discussions).
Work Plan Activities, known	-\$548,000		-\$555,464	-\$429,713	Some Work Plan items not achieved, namely a CRM tool, Real Time Reporting SAP system improvement and VAR audit function. Carried forward to 2018.
Work Plan Activities, contgncy.		-\$100,000	-\$100,000	\$0	No contingency costs used (whole amount kept at mid-year revised forecast stage to assist SC19 discussions).
Information Tech- nology	-\$210,000		-\$181,065	-\$159,946	
Accommodation and Support	-\$117,000		-\$111,144	-\$108,224	
UKHO Gvt +3%	-\$26,000		-\$21,762	-\$20,015	SC17 Finance Report refers.
Financials	\$9,000		\$29,795	\$71,845	Significantly higher amount than forecast generat- ed by bank interest, plus lower banking charges. A result of VAR invoicing monthly, payments to members quarterly or annually, time taken for members to invoice IC-ENC for money owed.
COSTS, known	-\$1,603,000		-\$1,502,597	\$1,282,981	,
COSTS, contgncy.		-\$201,000	-\$125,200	\$0	
TOTAL COSTS 2017	-\$1,80	4,000	-\$1,627,797	-\$1,282,981	Actual costs were below forecast in each area. No use of the allocated contingency funds. Favourable GBP to USD exchange rate (average 1.29 versus forecast 1.4).
IC-ENC Revenue					1
IC-ENC Fixed Fee	\$1		\$1	\$1	
2017 Sales Volume	1,823,000		2,093,179	2,297,502	Includes known changes to ENC sales reporting routes. Includes effect of US reporting.
2017 IC-ENC Revenue	\$1,923,000		\$2,169,924	\$2,416,526	Includes PAYS planning fee, and effect of US revenue.
Member HO Rev	enue		1	1	
Member HO Revenue	\$25,113,000		\$26,024,215	\$27,507,575	Paid to IC-ENC members during 2017.
IC-ENC Financial	Position		1	1	
2017 Annual Balance (in year)	\$119,000		\$542,126	\$1,133,544	Positive in year balance, 2017 IC-ENC Revenue minus 2017 Total costs.
Extraordinary Settle- ment Number 3				\$1,133,544	Equal to the 2017 Annual Balance, as per Decision SC19/06. Paid pro rata to members January 2018.
IC-ENC Operating Balance at 1st Jan 2018				\$746,129	Returns balance to start of year amount, making 2017 a cost and revenue neutral year - 'not for profit'.

IC-ENC 2018 BUDGET

ТҮРЕ	FOREC	AST, \$	COMMENTS (exchange rate assumption: £1=\$1.40)
Costs	Known / Allocated	Reserved / Contingency	
Staff Wages	\$724,000		UK and Aus office staff. Continues to be no cost of Brazil or US staff to IC-ENC.
Work Plan Activities, known	\$498,000		
Work Plan Activities, contingency		\$100,000	Budget contingency for Validation Training courses (up to 3).
Information Technology	\$236,000		Global IT infrastructure including Azure Cloud, support, software licenses (validation and non-validation, incl. Microsoft, etc). DMD support & maintenance.
Accommodation and Support	\$117,000		No change from 2017 in terms of office costs and other UKHO support costs.
UKHO Government +3%	\$23,000		SC17 Finance Report refers.
Financials	(+)\$17,000		Net of bank interest minus banking costs.
COSTS - known	\$1,581,000		
COSTS - contingency		\$100,000	
TOTAL COSTS 2018	\$1,68	1,000	

IC-ENC Revenue

	1	
IC-ENC fixed fee value	\$1	IC-ENC is a not-for-profit organisation. Its costs 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 forecasts. The SC has set the fixed fee amount to \$1.00.
2018 IC-ENC Revenue	\$2,234,000	Assumptions: Revenue based on a 'worst case scenario'; no new members during 2018, no mem- bers leave during 2018, fixed fee remains at \$1 during all of 2018, no change to existing cost recovery fixed fee model. Includes PAYS planning fee at forecast.

IC-ENC Financial Position

2018 Annual Balance, initial	\$553,000	Positive in year balance, 2018 IC-ENC Revenue minus 2018 Total costs. The expectation is that the Extraor- dinary Settlement (EOS) process will be used to re- turn this annual balance to zero (referencing the dis- cussions at SC19 regarding the 2017 annual balance). IC-ENC will assess if this is best achieved singularly at the end of 2018, or at stages through the year.
2018 Annual Balance, after EOS	\$0	
IC-ENC Operating Balance	\$746,129	At end of 2018. i.e. same as at end of 2017. SC19 Finance Report refers.

IC-ENC MEMBERSHIP AND FOLIO STATUS: Week 01/18

COUNTRY	Member since	CODE	Wk1 2014	Wk1 2015	Wk1 2016	Wk1 2017	Wk1 2018	2017 Net Change	2017 % Change	2017 NEs issued	2017 Updates issued	
Argentina	2005	AR	61	66	70	72	75	3	4.2	5	98	
Australia	2005	AU	842	841	843	843	849	6	0.7	234	985	
Belgium	2002	BE	7	7	7	7	7	0	0.0	4	35	
Bahrain	2002	BH	4	4	8	8	8	0	0.0	0	0	
Brazil	2008	BR	131	136	137	145	153	8	5.5	63	211	
Chile	2004	CL	186	197	220	253	269	16	6.3	5	63	
Colombia	2010	CO	36	36	56	61	61	0	0.0	4	104	
Cuba	2013	CU	8	15	21	23	36	13	56.5	3	14	
Germany	2002	DE	154	155	159	160	164	4	2.5	77	401	
Denmark	2013	DK	130	149	219	254	276	22	8.7	124	316	
Ecuador	2008	EC	0	0	14	24	40	16	66.7	7	0	
Egypt	2014	EG	0	0	17	21	23	2	9.5	5	11	
Spain	2002	ES	165	228	248	269	279	10	3.7	35	418	
United Kingdom	2002	GB	1467	1558	1566	1578	1665	87	5.5	1449	1531	
Greece	2003	GR	285	287	291	300	301	1	0.3	10	365	
Israel	2015	11	0	0	0	0	0	First E	First ENC release planned Q1/2018			
Iceland	2005	IS	70	70	71	71	72	1	1.4	8	8	
Italy	2014	IT	0	253	255	259	262	3	1.2	36	762	
Malta	2016	MT	0	0	0	5	5	0	0.0	0	10	
Mexico	2005	MX	99	116	128	131	135	4	3.1	1	38	
Malaysia	2014	MY	0	0	0	85	88	3	3.5	27	89	
Mozambique	2004	MZ	0	0	0	0	0	0	n/a	0	0	
Netherlands	2002	NL	71	85	139	139	162	23	16.5	53	310	
New Zealand	2008	NZ	201	230	241	273	300	27	9.9	66	203	
Oman	2015	OM	0	0	0	0	0	0	n/a	0	0	
Panama - Can	2015	PA	0	0	0	7	7	0	0.0	6	11	
Panama - Mar	2015	PA	0	0	10	9	10	1	11.1	1	0	
Peru	2006	PE	122	122	124	125	125	0	0.0	7	59	
Philippines	2014	PH	0	0	17	17	19	2	11.8	20	39	
Pakistan	2005	PK	5	6	6	7	7	0	0.0	1	1	
Portugal	2002	PT	89	89	91	90	94	4	4.4	8	116	
Romania	2013	RO	1	3	6	6	8	2	33.3	0	13	
Russian Fed	2005	RU	430	443	477	488	520	32	6.6	74	142	
Solomon Is	2017	SB	0	0	0	0	41	41	First EN	Cs issued A	ug 2017	
Slovenia	2014	SI	0	0	1	1	1	0	0.0	0	0	
Suriname	2014	SR	4	4	4	4	7	3	75.0	2	9	
Tunisia	2016	TN	0	0	0	6	8	2	33.3	2	5	
Turkey	2004	TR	259	259	266	268	270	2	0.7	53	349	
United States	2016	US	0	0	0	1196	1231	35	2.9	1959	2549	
Uruguay	2011	UY	16	26	27	27	27	0	0.0	12	33	
Venezuela	2006	VE	17	18	18	41	59	18	43.9	18	26	
South Africa	2002	ZA	56	57	57	57	57	0	0.0	2	41	
TOTAL			4916	5460	5814	7330	7721	391	5.3	4381	9365	

"Global ENC collaboration, with a regional focus"

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