Dossier del BHI No. S3/8152

CIRCULAR No. 05/2012
24 de Enero del 2012

DESCRIPCIONES OPERATIVAS DE LOS RENCS IC-ENC Y PRIMAR

Estimado(a) Director(a),

1.   Los Estados Miembros de la OHI han adoptado el concepto de una Base de Datos Mundial de Cartas Electrónicas de Navegación (WEND). El concepto se resume en la Resolución de la OHI No. 1/1997 – *Principios de la Base de Datos Mundial de Cartas Electrónicas de Navegación.*

2.   Los Principios de la WEND animan a los Estados Miembros a distribuir sus ENCs a través de un Centro Regional Coordinador para las ENCs (RENC), con el fin de compartir sus experiencias y reducir gastos, y para asegurar la mayor normalización, coherencia, fiabilidad y disponibilidad posibles de ENCs. El objetivo de los RENCs es facilitar la cooperación entre los Estados Miembros para resolver los solapamientos y las deficiencias en la cobertura, asegurar la conformidad con las normas de codificación, proporcionar un nivel mundial coherente de datos ENC de gran calidad y apoyar el suministro de servicios para ENCs coordinados a los usuarios finales.

3.   Sin embargo, el modelo operativo de un RENC, incluyendo los servicios que proporcionará y las disposiciones financieras que se utilizarán, no se explica de forma detallada en los Principios WEND. Esta información es importante, especialmente para aquellos Estados Miembros que no son miembros de un RENC.

4.   Durante una reciente reunión del Grupo de Trabajo de la WEND en Wollongong, en Octubre del 2011, los representantes de las organizaciones RENC - IC-ENC y PRIMAR -, proporcionaron a la reunión sesiones informativas que compararon sus dos modelos operativos. Esto es parte de su programa más extenso de trabajo para lograr una cooperación más estrecha y una mayor uniformidad entre las políticas de los RENCs.

5.   En la reunión del GT de la WEND, los dos RENCs convinieron publicar descripciones claras de cómo operan, de modo que los Estados Miembros, y en particular aquellos Estados que no están participando actualmente en uno de los RENCs, puedan comprender mejor las similitudes y las diferencias entre los dos RENCs. Las descripciones operativas proporcionadas por IC-ENC y por PRIMAR responden deliberadamente a las mismas preguntas, para permitir una comparación fácil entre sus dos modelos operativos.

6.   Un resumen del progreso que se está haciendo para armonizar las políticas de los dos RENCs y para asegurar una cooperación más estrecha será presentado por los Presidentes de los RENCs en la XVIIIª Conferencia Hidrográfica Internacional, en Abril. Ambos RENCs compartirán también un stand en la exposición de la CHI, donde los representantes de ambos RENCs estarán disponibles para proporcionar detalles adicionales sobre la cooperación y el funcionamiento de los RENCs a los delegados de los Estados Miembros.

7.   Se adjuntan a esta Circular copias de las descripciones operativas proporcionadas por IC-ENC y por PRIMAR.

En nombre del Comité Directivo
Atentamente,

Robert WARD
Director

Anexos (*en Inglés únicamente*):   1. Descripción operativa - IC-ENC;
2. Descripción operativa - PRIMAR.

RENC Description Document – IC-ENC

Date of document: January 2012 (Issue 1)

Purpose of Document

This document provides a high level description of the operation, governance and finances of the International Centre for Electronic Navigational Charts (ENCs) (IC-ENC). The intended audience is the Hydrographic Office (HO) community, particularly those International Hydrographic Organization (IHO) member states who are not currently a member of a Regional ENC Co-ordinating Centre (RENC). The format of the document will allow an easy comparison between the different RENC models, and provide clarity to a subject that is acknowledged as complex to those without a detailed knowledge of the RENC organisations.

What is a RENC?

RENC stands for Regional ENC Coordinating Centre. A RENC is an organisation, conceptualised in the Worldwide Electronic Navigational Chart Database (WEND) principles of the IHO, through which IHO members can co-operate to resolve overlaps and gaps in coverage, ensure compliance with S57 and S63 encoding standards, provide a world-wide consistent level of high quality data and support the provision of co-ordinated end-user services for official ENCs.

The IHO WEND principles encourage Member States to distribute their ENCs through a RENC in order to share in common experience and reduce expenditure, and to ensure the greatest possible standardization, consistency, reliability and availability of ENCs.

What is IC-ENC?

IC-ENC is a RENC, and was formed in 2002. It is a low-cost, not-for-profit organisation controlled by its members.

IC-ENC is an association of national hydrographic organisations working together to harmonise the production and distribution of high quality ENCs. The common goal is to promote safe navigation at sea. IC-ENC has 10 members of staff, located in two offices; the main IC-ENC Headquarters in England and a regional office in Australia.

IC-ENC provides an independent ENC quality assurance service and supply path to market for its members' data. The validation feedback provided by IC-ENC is aimed at improving the individual ENC, improving consistency across the entire dataset, and improving the usability of the product. At all times the feedback is targeted advice designed to improve the product to the benefit of the mariner.

The IC-ENC business model allows for regional offices to operate to the same standards as the main office in England. IC-ENC developed the concept to create regional centres that manage:

- Validation of national or regional data
- Regional cooperation on ENC production
- Development of regional views on standardisation rules and representation of these at IC-ENC working groups
- Local distribution of data for the national market

The regional office model promotes consistency, efficiency and partnership within the region and fits neatly into the WEND concept. IC-ENC encourages the development of regional offices and provides support and training as required.
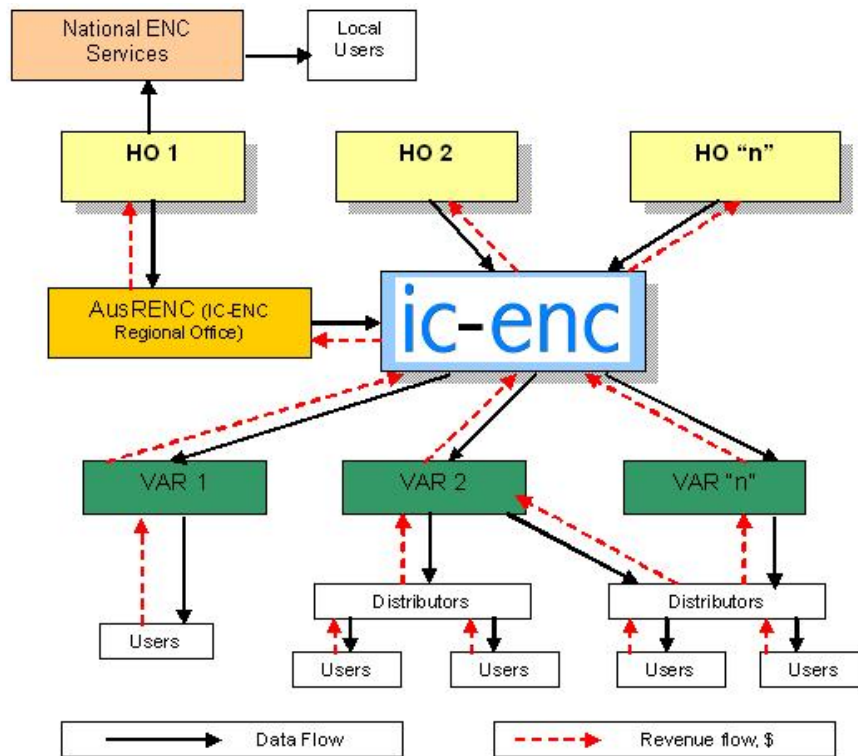
ic-enc

In January 2005 Australia launched the second regional coordinating centre within the IC-ENC family. Hosted by the Australian Hydrographic Service (AHS), the office called "AusRENC" provides the same comprehensive and independent quality assurance services undertaken by the main IC-ENC office in Taunton.

When the ENCs have been validated and are ready for distribution, IC-ENC delivers each ENC file to its Value Added Resellers (VARs) as a complete Exchange Set. The VARs are companies that have practical experience in digital chart supply, and who are able to offer comprehensive ENC services for the mariner. By working with these assessed vendors, IC-ENC ensures the mariner has a choice between different styles of services each incorporating the wide range of ENCs, which are available through well known international distribution outlets.

IC-ENC members therefore benefit from being part of a centre of expertise that provides cost effective quality assurance, advice, distribution, and revenue management services.

IC-ENC's data and revenue flow can be represented diagrammatically:

Who are the current members of IC-ENC?

Argentina, Australia, Bahrain, Belgium, Brazil, Chile, Colombia, Cuba, Ecuador, Germany,Greece, Iceland, Mexico, Mozambique, Netherlands, New Zealand, Pakistan, Peru, Portugal, Russian Federation, South Africa, Spain, Turkey, United Kingdom, Uruguay, Venezuela.

Together, and with the support of IC-ENC, these 26 nations are producing and maintaining a sizeable ENC dataset, currently made up of over 4,200 ENC base cells and growing each week.

IC-ENC is currently in discussion with several other IHO member states who are considering joining.

ic-enc

ENC Validation

The ENC standards are complex and at times open to interpretation. This has lead to various ENC production software systems, HO production teams, and ECDIS systems each handling ENCs slightly differently. IC-ENC therefore conducts a full and independent quality assurance of all of the ENC files it receives.

It is the quality and consistency of the whole database which is important to the navigator, and for stable ECDIS operation. IC-ENC members therefore recognise that a consistent approach to validation is crucial, and this requires a central independent function.

IC-ENC is an ENC centre of expertise, with an experienced staff that has seen many different flavours and styles of ENCs. The IC-ENC team operates to validation policies which are based fundamentally on improving the ENC database for the mariner, rather than simply conforming to the standards. As such, IC-ENC's feedback reports go beyond the single ENC file, reporting on wider data consistency and usability issues. The assessment is made with the use of commercial validation software (7Cs ENC Analyzer and Designer, dKart Inspector), in-house software, and due to the need for install logs, at least one well known and widely used ECDIS system.

IC-ENC members receive a comprehensive feedback report for each processed ENC file, allowing the HO to easily focus on the issues that merit their further attention.

Production Support

IC-ENC assists members with ENC production concerns, through email, phone calls and face-to-face technical support visits. This can range from initial advice on ENC production, chart schemas and internal validation routines for those members commencing their production, to detailed responses on specific technical encoding issues for the more established ENC production departments.

The validation tools are complex, ambiguous and can often report erroneously. IC-ENC members have full access to the *IC-ENC Errors Database*, a database of validation tool error messages, explaining their meaning, significance and action to take, to help support their own production and validation work. The IC-ENC team keeps this database updated as its gains further experience from seeing more ENCs from a growing number of countries, and based on feedback it receives from other users of the same software and the validation software manufacturers.

Distribution

IC-ENC coordinates and manages the wholesale supply of its members' ENCs to VARs. IC-ENC members then automatically have their data available through a range of competing integrated services in accordance with WEND principles. IC-ENC members retain the freedom to manage their own supplemental distribution, for example to local non-SOLAS markets and national administration.

Revenue Management

IC-ENC manages all aspects of the VAR sales reporting, invoicing and revenue collection process. An itemised sales report is provided quarterly to each member, and the revenue generated from these sales is then paid by IC-ENC to the HO.

Who is IC-ENC's host?

IC-ENC Headquarters is currently hosted by the UKHO, in Taunton, England. The AusRENC regional office is currently hosted by the AHS in Wollongong, Australia.

What is the relationship between IC-ENC and the host?

UKHO provides all of IC-ENC Headquarters' infrastructure requirements, such as office accommodation, facilities, and information technology. The host also supplies members of staff to IC-ENC, who work on a full-time secondment basis. The UKHO charges IC-ENC for all of these services in order to recoup its expenditure, and these costs form the majority of the IC-ENC annual cost of operations. IC-ENC's budget is entirely independent from the UKHO.

The AusRENC is supported in a similar manner by the AHS with its overheads and direct staff costs making up the cost of operations.

IC-ENC Headquarters is clearly separated, both politically and physically, from its host. It is housed in a separate office building, has its own server network and IT systems, and the IC-ENC General Manager liaises directly with the elected IC-ENC Chairman. This avoids any potential conflicts of interest. As well as being the IC-ENC host, the UKHO is an ENC producer and thus a member of IC-ENC; and it is also one of the appointed IC-ENC VARs.

The AusRENC is situated in the AHS building and its overheads are calculated on a pro rata basis in relation to floor space and computer terminals.

How is IC-ENC governed?

IC-ENC is controlled by its members. All members belong to the IC-ENC Steering Committee which meets at least once a year to set IC-ENC's strategic direction and technical/commercial policies, agree IC-ENC's budget, and oversee the activities of the specialist team which manages IC-ENC's day-to-day activities.

All members are invited to attend the meetings, and decisions are reached by consensus, with a voting system defined if consensus is not possible. Between meetings, decisions can be taken through correspondence, via a circular letter to all of the membership. The Steering Committee is chaired by a representative from the membership (although not from the host HO), and is elected for a two year term. The elected Chairman also represents the members on general IC-ENC business outside of the Committee meetings.

IC-ENC has two bodies that report to the Steering Committee: the Technical Experts Working Group (TEWG) and the Commercial Working Group (CWG). These Working Groups are compiled from personnel from the membership, and are facilitated by IC-ENC. The Groups recommend technical and commercial policies to the Steering Committee, and respond to tasking from the Committee and Chairman.

How are the ENCs distributed and marketed?

IC-ENC works with various companies who are able to offer comprehensive end-user services that bring together various navigational products into one package. These companies are referred to as Value Added Resellers (VARs). Any company can apply to become a VAR, and the application is assessed independently by the IC-ENC Comercial Working Group.

The IC-ENC VARs are:

- ChartWorld
- Datema
- Jeppesen Marine
- MARIS
- Norwegian Hydrographic Service
- Transas
- United Kingdom Hydrographic Office

By working with these companies, IC-ENC can offer the mariner a choice between different styles of services each incorporating the wide range of ENCs, and which are available through the variety of

well known international distribution outlets. IC-ENC acts as single point of supply offering consistent terms that give VARs the flexibility to offer a range of integrated services to meet the needs of the international mariner.

With the VAR model of distribution, IC-ENC members avoid:

- Cost of developing and marketing their own services for global distribution
- Managing extensive distributor networks
- Need for complex and expensive service delivery systems

IC-ENC members supply their ENCs to IC-ENC on a *non-exclusive* basis, and so each member can also, if they choose, distribute to other organisations, local markets, their Navy and so on.

How are the ENC's protected?

IC-ENC supplies the ENC data to the VARs without encryption, but by using a secure file transfer process. This is to give the VARs maximum flexibility regarding service provision, permit generation and so on. The VARs then manage the ENC encryption process themselves, and from this point onwards distribution is of encrypted ENCs, using the IHO S63 Data Protection standard.

What services do the VARs/distributors benefit from?

In order to allow a wide range of service developments and to encourage innovation, IC-ENC simply supplies each VAR with a basic exchange set of the ENC files for the week, and a central text document listing the IC-ENC cells now available, plus details of the weekly release. The VARs then integrate this new data into their services (which will also contain data from other sources) and make it available via their own catalogues and ordering systems and their own international network of distributors.

How much does it cost to join IC-ENC?

There is no annual fee or standing charge to be a member. IC-ENC is financed from the sale of ENC, by retaining a fixed fee for each sale made (see 'How is IC-ENC funded?' below).

How much does IC-ENC cost to operate annually?

IC-ENC's financial strategy is to keep costs as low as reasonably practical. Annual operating costs are in the region of US$600,000 for the Headquarters, and US$200,000 for AusRENC. The top level budget for the last complete financial (July 2010 – June 2011) year is presented below:

	09/10		10/11		11/12 Forecast	
Organisation	IC-ENC HQ	AusRENC	IC-ENC HQ	AusRENC	IC-ENC HQ	AusRENC
Staff	$465,499	$161,599	$473,250	$143,951	$497,827	$143,951
IT	$74,100	$12,571	$73,420	$12,481	$105,592	$12,481
Office	$51,934	$47,498	$37,356	$33,464	$41,333	$33,464
Total	**$591,534**	**$221,668**	**$584,027**	**$189,898**	**$644,753**	**$189,898**

Note: The costs are accrued in the national currency, and have been converted to US$ for this document, using December 2011 exchange rates.

ic-enc

How is IC-ENC funded?

IC-ENC is a low cost, 'not for profit' organisation which is financed out of ENC sales. Its costs are recovered by retaining a 'fixed fee' per sale of each ENC made by the VARs. The fixed fee amount is determined by the Steering Committee, and is set to a value expected to cover the forecast cost base, plus any changes to the services provided, and provide a contingency for unplanned operational expenditure. Once the fixed fee amount is agreed, each member is then free to set its own wholesale ENC price. This way, each HO knows for certain how much revenue it will receive for each ENC sold.

IC-ENC operates using a large, medium and small price band structure for each member. The member is free to set its wholesale prices, which remain in place for one calendar year. At the moment, the IC-ENC fixed fee is US$4 per large cell, reduced proportionally for medium and small price bands. An example of the pricing structure of one of the IC-ENC members is included here:

	Large cell	Medium cell	Small cell
Wholesale price	$14	$7	$3.50
IC-ENC fixed fee	$4	$2	$1
Returned to HO	$10	$5	$2.50

How is the ENC revenue returned to members?

Every quarter, the VARs report their sales to IC-ENC. These reports are collated and processed centrally, and an itemised sales report produced for each member. Each member chooses their preferred method of receiving the revenue owed to them; by bank transfer, invoice, or cheque. These payments are made on a quarterly or an annual basis, again at the request of the member.

What is the relationship between IC-ENC and PRIMAR?

Between 1998 and 2001, there was one RENC organisation, Primar, made up of 11 member nations. In 2001, these nations recognised that two distinct methods of operation were possible, each with their own benefits, leading to the formation of two separate RENC organisations; IC-ENC and Primar Stavanger (which changed back to PRIMAR in 2007).

This gave other prospective RENC members the option of joining the RENC that best suited their individual needs. During much of the 2000s, both RENC offices operated independently from each other, and at times in competition. However, over the last two years, significant developments have taken place in the working relationship between IC-ENC and PRIMAR at a political, operational and technical level.

With the full support of the existing RENC members, IC-ENC and PRIMAR are part way through a programme of work to:

- Promote closer co-operation between the two RENCs
- Harmonise RENC policies
- Increase RENC membership

The goal of the RENC-RENC co-operation programme is to improve the ENC services available through distributors and VARs to end -users. Many of the issues raised at the ECDIS Stakeholders' Forum (see IHO CL 82/2008) are being addressed, including greater flexibility and harmonisation of licensing options, the availability of ENCs, and an agreed approach to data quality and consistency issues. At the meeting of the IHO WEND Working Group in 2011, a sub-working group was formed to oversee the RENC-RENC co-operation programme and to make it visible and accountable to the IHO community.

ic-enc

How do I find out more?

For further information on IC-ENC, please contact the General Manager, James Harper, by email, telephone, or post;

Address: Mr James Harper

            International Centre for ENCs

            Grenville Building,

            Admiralty Way,

            Taunton, TA1 2DN,

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Email: james.harper@ic-enc.org

Website: www.ic-enc.org

RENC Description Document – PRIMAR

Date of document: 9 January 2012 (Issue 1)

Purpose of Document

This document provides a high level description of the operation, governance and finances of PRIMAR Regional ENC Co-ordinating Centre (RENC). The intended audience is the Hydrographic Office (HO) community, particularly those International Hydrographic Organization (IHO) member states who are not currently a member of a RENC. The format of the document will allow an easy comparison between the different RENC models, and provide clarity to a subject that is acknowledged as complex to those without a detailed knowledge of the RENC organisations.

What is a RENC?

RENC stands for Regional ENC Coordinating Centre. A RENC is an organisation, conceptualised in the Worldwide Electronic Navigational Chart Database (WEND) principles of the IHO, through which IHO members can co-operate to resolve overlaps and gaps in coverage, ensure compliance with S57 and S63 encoding standards, provide a world-wide consistent level of high quality data and support the provision of co-ordinated end-user services for official ENCs.

The IHO WEND principles encourage Member States to distribute their ENCs through a RENC in order to share in common experience and reduce expenditure, and to ensure the greatest possible standardization, consistency, reliability and availability of ENCs.

What is PRIMAR?

PRIMAR is a worldwide ENC service operated on a non-profit basis. The core aim is to provide the maritime community, through authorized distributors, with an ENC service recognized for its quality, user-friendliness and overall contribution to marine safety and efficiency on a global level.

The service incorporates the Regional ENC Coordinating Centre (RENC) based on bilateral agreements with several nations as well as direct license and distribution agreements with other hydrographic offices for the distribution of their ENCs through PRIMAR ENC service.

PRIMAR is operated in accordance with the WEND principles (Worldwide Electronic Navigational Chart Database) of the International Hydrographic Organization (IHO).

Who are the current RENC members?

Brazil, Croatia, Denmark, Estonia, Finland, France, Greece, Latvia, Mozambique, Norway, Poland, Russia and Sweden

What services and benefits do PRIMAR members get?

Validation services/ Quality assurance services

Virtual PRIMAR Network (VPN) . The VPN is a web tool with internally developed functionality for secure administration of national ENCs by the issuing hydrographic office. This includes upload of ENCs to the PRIMAR database, download and release of ENCs. When ENC data are uploaded to the PRIMAR database a set of minimum checks are performed on the data. Integrated in the validation process is a quality check of data using the internally developed software Validation Report Checker

(VRC), the 'S57 Advisor' and Overlap checker and also tools for checking of horizontal and vertical consistency. All members use the same commercial validation software, dKart Inspector and ENC Analyzer as a basis for the validation process. Necessary support is provided to members as required. All ENCs are checked in 2 ECDIS systems. Member nations can in addition monitor their sales via the VPN. Full information on sales development and vessels in service are available on-line.

Navy Supplier Service

PRIMAR RENC members are offered a Navy Supplier service, for delivery of ENCs to national navy. It is a national discretion to appoint a supplier for ENC delivery to its own navy. This arrangement is dealt with in a separate Navy Supplier Agreement between NHS and the appointed Navy Supplier.

National services (Pilots/VTS/other governmental users)

PRIMAR RENC members are offered a service for their Pilots, VTS and governmental organisations. The national services are delivered through a separate agreement with NHS. It is the discretion of the member nation to decide the policy and mechanism for delivery of ENCs to pilots, VTS or other governmental users.

PRIMAR Web Chart Service (wms)

PRIMAR Web Chart Service uses internet to deliver chart images derived from the content of updated electronic navigational charts (ENC) made available by cooperating hydrographic offices. The service is available for RENC member's governmental organisations.

PRIMAR Inspector service

PRIMAR RENC members are offered access to Inspector - a tool for port state control of ENC status on vessels. Inspectors responsible for enforcing port state control can by using this service access real-time chart information, ENC coverage and update status for all vessels using PRIMAR ENC services.

Who is PRIMAR's host?

PRIMAR is hosted by The Norwegian Hydrographic Service (NHS), located in Stavanger, Norway.

The NHS uses a Norwegian state owned company, ECC AS, to deliver services within database operations/validation, sales and distribution, infrastructure and R&D to PRIMAR through a service provider agreement with the NHS.

What is the relationship between PRIMAR and the host?

NHS is responsible for the daily operation within the framework of strategies and policies decided by PRIMAR Advisory Committee.

The daily operational includes:

- Administration and signing of agreements (bilateral agreements for RENC cooperation, licensing agreements, distributor agreements, navy supplier agreements and national agreements)
- Receive and quality assure (QA) ENCs
- Support and follow up HOs in all issues related to QA
- Coordinate feedback from the market to the relevant member nation
- Make available ENCs via a network of authorized distributors (CD, web, ftp)
- Support and follow up distributors
- Maintain and develop infrastructure in order to meet customer requirements (HOs and distributors)
- Organize and chair PRIMAR Financial Working Group, PRIMAR Marketing Working Group and Technical Experts Meetings

How is PRIMAR governed?

The formal framework of the RENC cooperation is the PRIMAR Advisory Committee (PAC) as defined in the PAC statutes. The cooperation is aimed at providing guidance and advice on the RENC operation and to exchange opinions on related topics of mutual interest. PAC members are invited to an annual meeting. Decisions can be made on:

- Strategy issues
- Technical issues (encryption, non-navigation services, etc.)
- Marketing issues (pricing and distribution models, etc.)
- Information, communication
- Financial issues (cost and revenue sharing, etc.)

How are the ENCs distributed and marketed?

Standard distributor agreement allows all PRIMAR distributors to resell encrypted ENC data from PRIMAR.

Approved SENC distributors receive the data unencrypted and distribute it in their proprietary SENC format.

Qualified Distributors receive the unique cell keys from PRIMAR which enables them to generate their own permits files. This is meant to be an interim arrangement pending full implementation of the S-63 regime by all OEMs.

Real Time Reporting (RTR) with 24 hours frequency is required for SENC and QD.

By the end of 2011 the distributor network comprises:

- 66 distributors, where
  - 3 are SENC distributors
  - 4 are Qualified Distributors

How are the ENCs protected?

Data is encrypted using the IHO S-63 Data Protection standard. SENC distributors, who receive the data unencrypted, are required to obtain certification from a notified body and demonstrate compliance with the NHS SENC specifications.

What services do the VARs/distributors benefit from?

PRIMAR ENC CD and Permit Service

PRIMAR delivers a weekly ENC Base and Update CD service. The content of these CDs are encrypted in accordance with IHO S-63 and can only be viewed by compatible systems and with a valid permit file/license.

PRIMAR FTP and Web Service

The Distributor has secure access to download the weekly PRIMAR CD content (Image) on an FTP server through the PRIMAR FTP Service. The Distributor will be informed via e-mail when the weekly CD content (Image) is published.

PRIMAR Chart Catalogue

The PRIMAR Chart Catalogue is an ordering and vessel chart management tool. The catalogue is used by distributors to manage sales and distribution of ENC services to the commercial market and is available 24-7 for appointed distributors. It provides a graphical interface to the ENC coverage available from PRIMAR. Registered distributors can also access on-line ordering of ENC permit files, allowing them to manage their own customers directly via the PRIMAR server.

PRIMAR Online Services

PRIMAR online service can be used in addition to or as a supplement to the PRIMAR ENC CD and Permit Service. PRIMAR Online is an internet-based service for maintaining a vessel's ENC portfolio and is provided by the distributor.

PRIMAR B2B Service

PRIMAR B2B Service integrates a distributor's business systems with PRIMAR ENC Service. The secure interface is designed to support online customer & vessel registration and management.

Pay As You Sail (PAYS)

PRIMAR offers a service that will allow PRIMAR ENC data to be passively installed on a navigation system. The data can be freely viewed and accessed for planning purposes.

The distributor must establish a mechanism whereby the use of all ENC data accessed during navigation is registered accurately and the ENC usage information is transmitted automatically to the distributor. The service will ensure that the user has immediate access to additional ENC coverage in case of re-routing due to operational or contingency purposes.

Only authorised PRIMAR distributors can become Pay As You Sail (PAYS) distributors.

How much does it cost to join PRIMAR?

PRIMAR RENC members set the wholesale price of their own ENCs and receive royalties in accordance with the agreed financial arrangement. The current financial arrangement returns a flat and equal percentage of the individual nation's sales. The rest is retained to cover the cost of the operation. For 2012 the target of the return percentage is 45% of the individual nations' sales. The budget and the royalty percentage is subject to discussion and decision by the annual PRIMAR Advisory Committee meeting. The annual changes are updated in the bilateral agreements for RENC cooperation.

How much does PRIMAR cost to operate annually?

Contact PRIMAR management for this information.

How is PRIMAR funded?

PRIMAR operation is based on a not-for-profit model. The cost is covered by the ENC sales and no governmental funding is received.

PRIMAR Financial Working Group proposes a financial model that must be approved by PAC. The current financial arrangement decided for the period 2011 – 2013 is based on a flat and equal percentage of the individual nation's ENC sales with a target of a yearly increase of the percentage.

How is the ENC revenue returned to members?

PRIMAR RENC member nations receive royalties at six month intervals. All sales information for the individual nation is available online. In addition the NHS provides reports as a supplement for invoice or payment.

What is the relationship between PRIMAR and IC-ENC?

Between 1998 and 2001, there was one RENC organisation, Primar, made up of 11 member nations. In 2001, these nations recognised that two distinct methods of operation were possible, each with their own benefits, leading to the formation of two separate RENC organisations; IC-ENC and Primar Stavanger (which changed back to PRIMAR in 2007).

This gave other prospective RENC members the option of joining the RENC that best suited their individual needs. During much of the 2000s, both RENC offices operated independently from each other, and at times in competition. However, over the last two years, significant developments have taken place in the working relationship between IC-ENC and PRIMAR at a political, operational and technical level.

With the full support of the existing RENC members, IC-ENC and PRIMAR are part way through a programme of work to:

- Promote closer co-operation between the two RENCs
- Harmonise RENC policies
- Increase RENC membership

The goal of the RENC-RENC co-operation programme is to improve the ENC services available through distributors and VARs to end -users. Many of the issues raised at the ECDIS Stakeholders Forum (see IHO CL 82/2008) are being addressed, including greater flexibility and harmonisation of licensing options, the availability of ENCs, and an agreed approach to data quality and consistency issues. At the meeting of the IHO WEND Working Group in 2011, a sub-working group was formed to oversee the RENC-RENC co-operation programme and to make it visible and accountable to the IHO community.

How do I find out more?

For further information on on PRIMAR visit PRIMAR at www.primar.no