Bilateral Arrangement Between

Finnish Maritime Administration and

Norwegian Mapping Authority, Hydrographic Service (NHS) NORWAY

on

Operation of a Regional Electronic Navigational Chart Coordinating Centre (RENC)

SAAPUNUT

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Last updated by NHS: 15 December 2006

1 Scope

This Arrangement covers the co-operation between Finnish Maritime Administration (hereinafter referred to as CHO) and the Norwegian Mapping Authority, Hydrographic Service, hereinafter called NHS, on the operation of a RENC according to the International Hydrographic Organisation's principles for a World Wide Electronic Navigational Chart Data Base (WEND).

2 Definitions

Z Deminions	
Electronic Navigational	A database, standardised as to content, structure and format, issued for
Chart (ENC)	use with ECDIS on the authority of government authorised
` '	Hydrographic Offices (HOs). It contains all chart information
	necessary for safe navigation and may contain supplementary
	information in addition to that contained in the paper chart (e.g. sailing
	directions), which may be considered necessary for safe navigation.
ENC Service	The service comprising the supply of ENCs and ENC updates, issued
	officially on the authority of the government authorised Hydrographic
	Offices (HOs), designed to satisfy the requirements of international
	shipping in compliance with the relevant IMO resolutions and IHO
	standards.
World-wide Electronic	A common, world-wide network of ENCs, based on IHO standards,
Navigational Chart Data	designed specifically to meet the needs of international maritime traffic
Base (WEND)	using ECDIS which conform to the IMO Performance Standards for
	ECDIS.
Regional Electronic	In the World-wide Electronic Navigational Chart Data Base (WEND)
Navigational Chart Co-	the regional node being responsible for official ENCs and official ENC
ordinating Centre (RENC)	updates compiled from national ENC data.
Participants	The Hydrographic Offices involved in the RENC operated by NHS.
Cooperating Hydrographic	The Hydrographic Office that is party to this Agreement along with
Office (CHO)	NHS.
Force Majeure	This includes, but is not limited to strikes, lockouts, riots, sabotage,
-	acts of war or piracy, destruction of essential equipment by fire,
	explosion, storm, flood or earthquake, and delay caused by failure of
	power supplies or transport facilities.

3 General provisions

3.1 Implementation

This Arrangement shall come into effect from the date of the last signature and shall continue in operation until superseded by a revised version or terminated according to 3.4 below. Fulfilling the provisions of this Arrangement is subject to national laws and regulations.

3.2 Methods of Exchange

ENC, ENC Updates and information exchanged as a result of this Arrangement shall receive the security protection and handling conditions required by the providing Participant.

3.3 Force Majeure

Neither party shall be responsible for any delay or failure in carrying out obligations under this agreement if the delay or failure is caused by circumstances beyond the reasonable control of the affected party. In such circumstances each party shall notify the other of any such likelihood as soon as possible. Both parties shall allow each other a reasonable extension of time to carry out their duties in these circumstances.

3.4 Review and Termination

This Arrangement may be revised at any time by the written, mutual consent of both Participants. This Arrangement may be terminated by either Participant giving twelve months notice in writing of its intention to do so. In order to protect a Third Party's use of the Participants' Products, notice of

termination shall automatically result in renegotiations to seek to resolve outstanding differences between Participants. Both Participants can demand and expect to have negotiations commenced within two months of receiving such written notice.

3.5 Disputes

Any dispute regarding the interpretation or application of this Arrangement shall be resolved by consultation between the Participants.

In the event of the dispute being unresolved to the satisfaction of both Participants, both Participants shall refer the dispute to the President of the International Hydrographic Organisation. The President shall nominate the appropriate Director of the said Organisation to act as a mediator in order to assist the Participants to resolve the dispute.

3.6 Confidentiality of the Arrangement

The Arrangement is not confidential. The Parties may by mutual consent decide to make parts of it or certain information pertaining to it confidential.

4 Principles for operating the RENC

NHS shall operate a RENC by integrating official ENCs from a number of Participating Hydrographic Offices (Participants) including the CHO into a single, integrated ENC database. NHS shall from the ENC database provide 24 hours a day unlimited Upload, Release and Download ENC service. NHS shall enable the CHO to control and manage its own data. The ENC Service shall be provided to distributors appointed by NHS under published criteria. The distributors shall supply the end-users.

The CHO may, under national licenses, provide the ENC service to Derived Product Producers (DPPs), SENC providers and defence forces. The CHO shall ensure that a DPP is not allowed to pass of their service as a RENC or ENC service.

The Parties shall co-operate in establishing and maintaining procedures for the ENC service that comply with the standards of the International Hydrographic Organisation (IHO) and the International Maritime Organisation (IMO). NHS shall consult the Participants in order to determine the strategy for the future operation of the RENC. NHS shall initiate Technical User forums as necessary to optimize the RENC operation. The individual elements of the RENC operation shall be clearly identifiable in NHS organisation and accounts.

5 The ENC Service

ENC service shall be operated in a secure manner, including digital signature of the data. An encryption scheme may be applied to protect the data and NHS shall work with IHO/IHB to standardise the security measures.

NHS shall maintain a disaster recovery program with replication of all data to a remote site. The aim of the disaster recovery is to have core services available within 2 days.

The CHO is invited to support Primar Stavanger and distributors in marketing and promotion activities, including participation in RENC marketing group.

NHS shall provide an ENC chart catalogue (Primar Chart Catalogue).

NHS shall operate a financial system for the invoice of distributors, auditing their sales reports, receive and distribute payments.

6 Procedures

The Parties shall promptly inform each other of any developments, claims or other important issues concerning this Arrangement and the execution of it.

The Parties shall render such reasonable assistance to each other as is necessary in order to settle disputes with Third Parties, arising out of this Arrangement or the execution of it.

The CHO shall keep the RENC regularly informed of ENC production schedules in agreed format. The CHO shall verify, validate and release own ENC data and updates to the data. The RENC shall operate an on-line quality assurance system.

The CHO ENC data shall comply with relevant IHO standards i.e. IHO S52 and S57, latest editions, unless otherwise decided jointly.

7 Financial Arrangements

The RENC is operated as a not-for- profit organisation.

A new financing model which will ensure a balanced contribution has been adopted by the Primar Stavanger Advisory Committee Meeting (PSAC9, Gdynia), to take effect from 1 January 2007. This model will be valid through 2009.

The principle behind the model is that the revenue shall cover costs of operation of RENC, including necessary investments in organization and infrastructure.

The CHO will receive 35 % royalty from sales of national ENCs.

The CHO shall cover own costs arising from participating in the co-operation under this Arrangement, unless otherwise agreed.

The CHO shall be able to set the price at which its ENCs shall be sold to distributors, subject to a minimum price acceptable for the Participants

Twice a year, NHS shall pay to the CHO royalties due. For first half year 1 January to 31 June, royalty transferred by 31 July. For second half year 1 July to 31 December, royalty transferred by 31 January the following year.

The CHO will via technological infrastructure have on-line access to national sales figures.

8 Intellectual property rights

No intellectual property rights are transferred unless otherwise is agreed in writing. NHS shall recognise and respect the intellectual property rights in the ENCs, updates and associated information supplied by the CHO to the RENC, and use all reasonable endeavours to protect these rights in its dealings with any Third Party.

Each ENC shall contain an acknowledgement statement indicating the sources of the data and stating that it is protected by copyright and that it may not be reproduced without the prior written consent of the copyright holders.

9 Liability and Claims from Third Parties

The CHO shall assume liability for the content of the ENCs and ENC updates provided by it according to this arrangement.

NHS shall assume liability for faults in the ENCs and ENC updates caused by processes incurred in operating the RENC.

This agreement supersedes the former Bilateral agreement on the operation of a Regional Electronic Navigational Chart Coordinating Centre (RENC) signed 21 Ocotber 2002.

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Name in block capitals Faode WLEPSVIN	••••
for the Norwegian Hydrographic Service (NHS)	
Signed by . Signed by . TINA TUURNALA	Date 3.1. 2007
For Finnish Maritime Administration. Makizen	3.1.2007

Schedule I Description of ENC Service from Primar Stavanger

Primar Stavanger – ENC Service

The Norwegian Hydrographic Service (NHS) is the operator of the Primar Stavanger ENC service. This incorporates the Regional ENC Coordinating Centre (RENC) based on bilateral agreements with several nations as well as direct license and distributor agreements with other hydrographic offices and distributors.

1. Distributor sales

All sales are done via an international network of distributors. Distributors are required to supply ENCs as supplied by NHS secured in IHO S-63 format. Distributor can in addition, if accepted by respective country, supply ENCs in SENC format. SENC Distributor must then be approved by meeting the requirements in the NHS SENC Distributor Specification, and be approved in accordance with this by a notified body, e.g. DNV or BSH.

2. Navy Supplier Service

NHS offers all Participants a Navy Supplier service, for effective 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.

3. Pilots/VTS/other governmental users

NHS offers all Participants a service for Pilots, VTS and other governmental users. This service may be delivered via authorized distributors or through a national agreement with NHS.

It is a national discretion to decide the policy and mechanism for delivery of ENCs to pilots, VTS or other governmental users.

4. Virtual Primar Network (VPN)

The VPN is a web tool for secure administration of national ENCs. This includes upload, download and release of ENCs. Integrated in this process is light quality check of data using the Virtual Report Checker (VRC) and the S57Advisor.

Cooperating HOs can in addition monitor their sales via the VPN. Full information on sales development and vessels in service are available on-line.

5. Primar Chart Catalogue

The Primar Chart Catalogue is an ordering and vessel chart management tool launched by Primar Stavanger. The catalogue is used by distributors to manage sales and distribution of ENC services to the commercial market. It provides a graphical interface to the ENC coverage available from Primar Stavanger. Registered distributors can also access on-line ordering of ENC permit files, allowing them to manage their own customers directly via the Primar Stavanger server. A distributor can add and edit information about its customers directly through Primar Chart Catalogue, and dynamically enter new customers for Primar Stavanger services without needing to interact with staff in Stavanger, Norway. The Primar Chart Catalogue is under constant development and will continue to provide safe and efficient ENC information as well as permit-keys. The Primar Chart Catalogue is available 24-7 for appointed Distributors.

6. Primar Online

Primar Online is an extended functionality in Primar Chart Catalogue, enabling vessels to download updates and new edition within their portfolio directly to vessel. Right to do so can only be ordered via an authorized Primar distributor. Only encrypted data are transferred. The Primar Online service is free of charge.

7. CD-Service

NHS provides all its distributor with necessary base CDs and weekly updates CDs direct or via website download. Distributors are free to download the CD content from the Primar web site, burn and distribute this CD based on profile requirement set by NHS. The ENCs with its format and content cannot be changed in this process. The Licensor will continuously be informed of any change in the Primar CD service.

8. Information and Promotion

The Participants are invited to support Primar Stavanger and distributors in marketing and promotion activities, including participation in RENC marketing group, information working groups, exhibitions and seminars. To maximize the use of ENCs for increased safety of navigation, the ENC service shall be visible in the global maritime community via information and promotion to distributors and users.

Annex to Bilateral Agreement between the Norwegian Hydrographic Service (NHS) and the The Finnish Maritime Administration (FMA), hereinafter called the Organisation, for the provision of an ENC service for the Finnish VTS.

1 Introduction

The Appendix defines the roles and responsibilities for all organisations involved in operating the ENC services described in this document. An operational model is described with service levels for ENC deliveries and support.

1.1 References

- [1] IHO S-57 Transfer standard for Digital Hydrographic Data.
- [2] IHO S-63 Data Protection Scheme
- [3] Primar Stavanger Chart Catalogue

1.2 Constraints

The model is made available to governmental organisations working with Primar Stavanger to organise and operate their own ENC distribution service to their own end-users.

End-users is in this annex related to each user permit delivered, i-e. one user permit per HW-ID and several systems can have the same HW-id. A maximum of 5 systems can share an identical user permit in these services.

2 Operational model for ENC access and autonomous distribution service

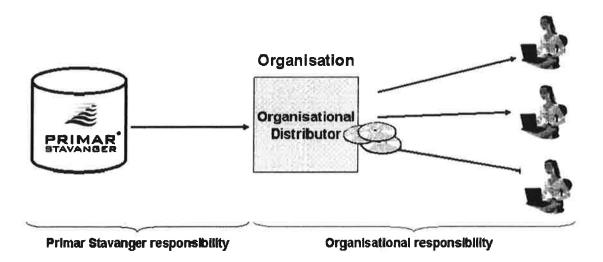


Figure 1: Organisation appoints internal distributor who is responsible for all interfaces with Primar Stavanger and supplying an internal ENC service to all its internal enc-users

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In this service model will an Organisation enter into an agreement with the Norwegian Hydrographic Service (NHS) - Primar Stavanger. The Organisation will operate as a distributor on behalf of all its end-users. Primar Stavanger will make its Chart Catalogue product available to the Distributor to manage registration and reporting of all end-users in the Organisation. End-user is in this annex related to each user permit delivered, i.e. one user permit per HW-ID and several systems can have same HW-ID.

Primar Stavanger delivers an official ENC service compliant with the IHO S-57 and S-63 standards. The Organisational distributor can use the Primar Chart Catalogue to download encrypted ENC and make the data available in its internal distribution service. The end-users do not have direct access to any ENC services available from Primar Stavanger.

3 Roles and Responsibilities

3.1 Organisation

- Must enter into an agreement with NHS Primar Stavanger to initiate the services.
- The Distributor must use the Primar Chart Catalogue to:
 - Manage continuous registration of all its internal end-users. Each end-user
 (client) must be uniquely defined with its S-63 User Permit.
 - o To manage the ENC coverage for each of its end-users
 - Access and download S-63 protected versions of all ENCs to be used by the end-users in the Organisation.
- The Organisation is responsible for operating an ENC distribution service to all its end-users.
- The end-users in the Organisation do not have access to any ENC distribution services available from Primar Stavanger.
- Any need and cost for training in the services must be agreed with Primar Stavanger
- The Organisation must have access to an internet connection to use the Primar Stavanger ENC services. Minimum recommendation is ISDN (64 kbit/s) speed. All ENC service options will be made available using secure HTTPS internet transfer. The Organisation must enable support for the current version of the Java Run Time Environment and open communication through proxy servers.
- Organisation is responsible for the negotiation of terms and conditions for the delivery and use of ENCs provided by other national Hydrographic Offices.

3.2 Primar Stavanger (PS)

- Must enter into an agreement with the Organisation
- Will make the Primar Chart Catalogue available to the distributor role within the Organisation to:
 - Register all the internal end-users with their User Permit
 - Manage delivery of S-63 Cell Permits to the distributor role within the organisation for onward distribution to their end-users
 - Access and download protected ENCs to enable the Organisation to deliver its ENC service to its end-users.

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- Primar Stavanger will not make any of its ENC distribution services available directly to the end-users in the Organisation
- Primar Stavanger will invoice the Organisation for the use and delivery of the ENC services

3.3 Primar Stavanger

- Will develop and operate the technical infrastructure for an ENC service meeting the objectives as defined in chapter 3.2 (of this Appendix), and meeting Primar responsibility for delivering the infrastructure elements for an ENC service as defined in chapter 4 (of this Appendix).
- Primar Stavanger will invoice the Organisation for the use of the ENC services by the Organisation in accordance with the price list defined in chapter 6 (of this Appendix)

4 Definition of ENC Services

4.1 General

- There is no limitation for the Organisation on the frequency, duration and connections to the Primar Stavanger ENC services
- The ENC service will only include official ENCs and updates as made available by the national Hydrographic Offices compliant with the current versions of the IHO S-57 and S-63 standards.
- The ENC update service will include all updates, re-issues and new editions issued by the national Hydrographic Office.
- All use of the ENC services by the Organisation will be logged by Primar Stavanger.

4.2 Content

4.2.1 CD Service

- Primar Stavanger will not deliver a CD service to the Organisation or its endusers.
- The Organisation can make requests for CD deliveries at helpdesk@primar.org. The CD delivery will contain one copy of the latest base CD and update CD delivered to a single address at the cost defined in chapter 6 (of this Appendix).

4.2.2 ENC access service

- Primar Stavanger will enable the Distributor role within the Organisation on-line access to the ENCs and updates using the Primar Chart Catalogue. The Primar Chart Catalogue will download a protected ENC exchange set compliant with the current editions of the IHO S-57 and S-63 standards.
- The Primar Chart Catalogue will enable the organisation to create an accumulative ENC updating service for all its end-users

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- 5) No service levels are established to manage fire, flooding, theft or other force majeure or disaster situations
- 6) Primar Stavanger is responsible for support related to the delivery of the ENC services to the Distributor role within the Organisation. Primar is responsible for support related to the content of their ENC. The Organisation and their system manufacturer are responsible for their internal ENC distribution and the loading and use of the ENC on their systems. Relevant support issues shall be forwarded to helpdesk@primar.org.

6 Prices

Primar Stavanger is entitled to increase the prices every 12 (twelve) months for the duration of the Agreement using the Labour Cost Index within computer and consultancy sector as published by Statistics Norway on the anniversary of the start date of the Agreement.

Some service elements are invoiced annually, others are invoiced quarterly based the number of end-users registered each month by the Organisation.

Primar Stavanger will invoice the Organisation.

The Organisation shall pay invoices in full within 15 days of receipt.

Primar Stavanger can renegotiate the agreement with the Organisation in cases where there are major changes in the usage or support activities.

An end-user is in this appendix related to each user-permit delivered, i.e. one user permit per HW-ID. In certain configurations can several systems share a common hardware ID (HW-ID). A maximum of 5 systems can share an identical user permit in these services.

6.1 ENC service

Element	Pr month	Pr year
Generation of ENC permit services by Primar	USD35	
Stavanger to the Organisation for each registered	Pr end-user	
end-user. Invoiced quarterly based on the number		
of end-users registered for each month.		

All prices are exclusive any taxes or VAT.

All prices will be adjusted annually with the annual consumer price index (CPI-all time index) published by Statistics Norway.

Time for set-up will not exceed 2 months from agreement signature.

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6.2 Additional service elements

Element	Unit	Price
Delivery of protected ENC data by CD (ref. 4.2.1). Each package contains a copy of the latest base and update CD.	CD	USD 38
Additional tokens issued to the Organisation to access ENC services made available using the Primar Chart Catalogue (ref. 4.3)	Token with duration of 36 months	USD 152
Any use of Primar Stavanger resources for training purposes or specific support issues.		Must be agreed for each case

All prices are exclusive any taxes or VAT.

Costs for additional service elements are included on the first upcoming quarterly invoice.

The agreement can be renegotiated after 12 months with a 2 months notice.
Signed by GULOUSC Date 15, 12, 2006 Name in block capitals. KJELL OLSEW
Name in block capitals. KJELL OLSEW
for the Norwegian Hydrographic service
Signed by. Date. 4. 1. 200.6
Name in block capitals. TINA TURNA LA
for the FMA, Hydrographic Day.

MATTI AALTONGO FMA, PIRECTOR TRAFFIC DEPARTMENT

