

CHRIS15-9.1A-2

15th CHRIS MEETING
IHB, Monaco, 10-13 June 2003



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**International cooperation for
provision of a consistent, timely
and reliable Electronic
Navigational Chart (ENC) service
for sea transport and operation.**

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International Rules and Principles



✓ International Hydrographic Organisation (IHO)

In the IHO **Worldwide Electronic Navigational Chart Database (WEND) principles (1994)**, the member nations are recommended to cooperate on regional and international level to ensure the greatest possible uniformity and quality of a global ENC service.

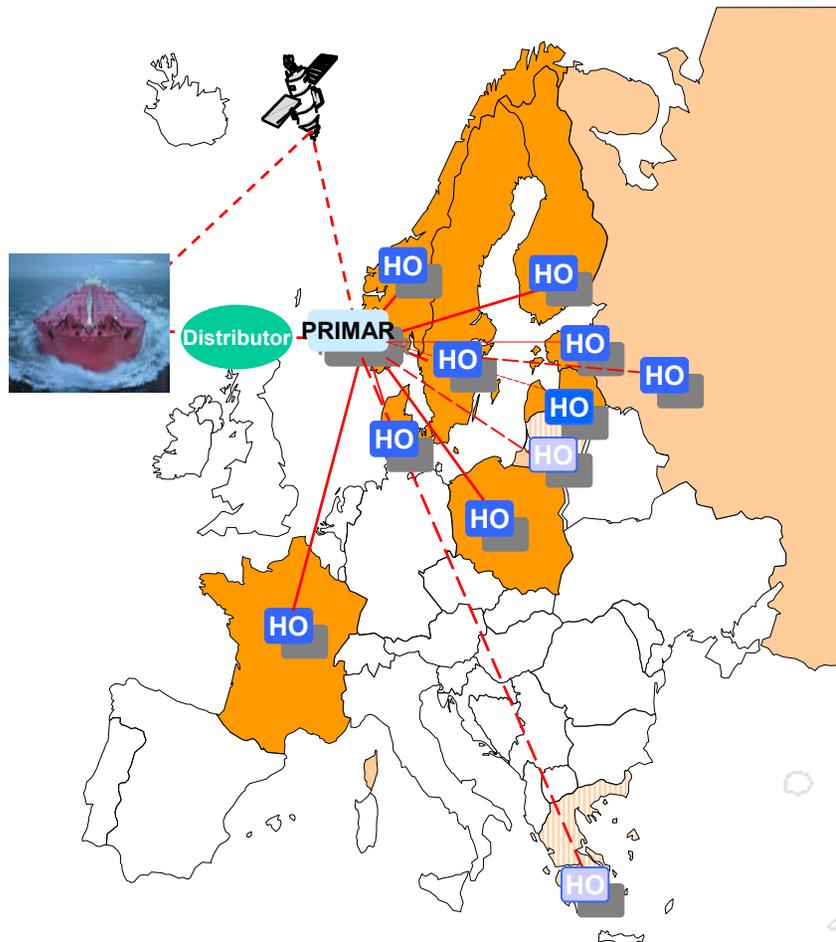
✓ International Maritime Organisation (IMO)

In the IMO **Safety of Life at Sea (SOLAS) Convention Chapter V (2002)**, “ the contracting governments undertake to coordinate their activities to the greatest possible degree in order to ensure that hydrographic and nautical information is made available on a worldwide scale as timely, reliable and unambiguously as possible.”

Contributing Nations



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- ✓ Established and operated by the Norwegian Hydrographic Service
- ✓ Based on bi-lateral agreements and coordinated through an Advisory Committee attended by cooperating hydrographic offices
- ✓ Open for hydrographic organisations worldwide
- ✓ Meet all relevant standards and regulations issued by IHO and IMO

 **Cooperating countries**

 **Delivers ENC**

 **Intends to contribute**

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Our core aim



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To provide the maritime community, through authorised distributors, with an ENC service recognised for its quality, user-friendliness and overall contribution to marine safety and efficiency on a global level.

The basic ENC service



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- ✓ The basic products are the electronic navigational charts (ENCs), produced by the national hydrographic organisations.
- ✓ Each ENC is made up of two types of data files, both supplied in the current version of the international recognised S-57 standard.
- ✓ The first type of file contains the basic chart information, and is replaced each time a new edition of the charts is produced.
- ✓ The second type of file contains the details for a correction to the basic chart, just like the “Notice to Mariners” does in the paper charts
- ✓ All ENC files released are encrypted. This means that to be able to display the files, you need a security key that unlocks the data.
- ✓ The security scheme is planned to become IHO standard in 2003.

Conclusions from IMO Solas chapter V



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- ✓ ENC is the only electronic chart alternative which legally can be used for navigation on its own
- ✓ ENC is legal for navigation when used on type approved Electronic Chart Display and Information System (ECDIS) with appropriate backup
- ✓ Appropriate backup is an additional ECDIS (e.g. planning station) or updated paper charts

Current ENC Coverage

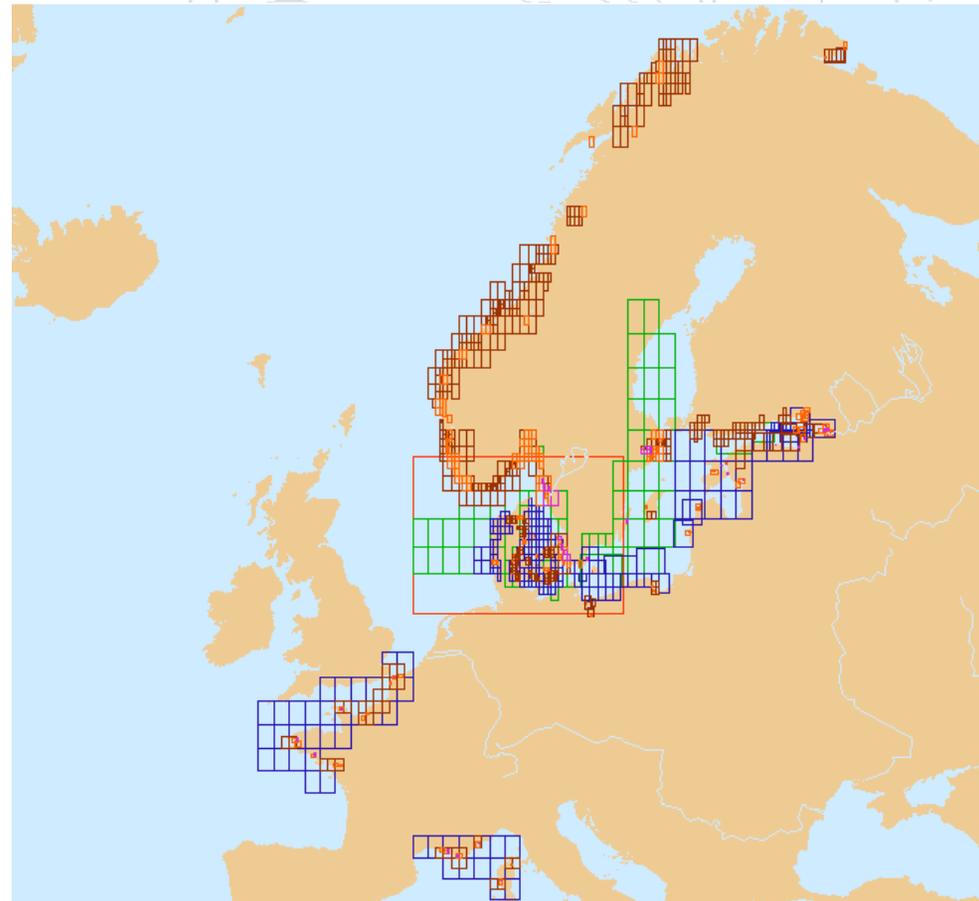


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Majority of European ENCs delivered from Primar Stavanger

Estonia, Finland, Sweden
Denmark, Norway, France,
Russia, Poland, Latvia

(More ENCs from new nations will
soon be available)

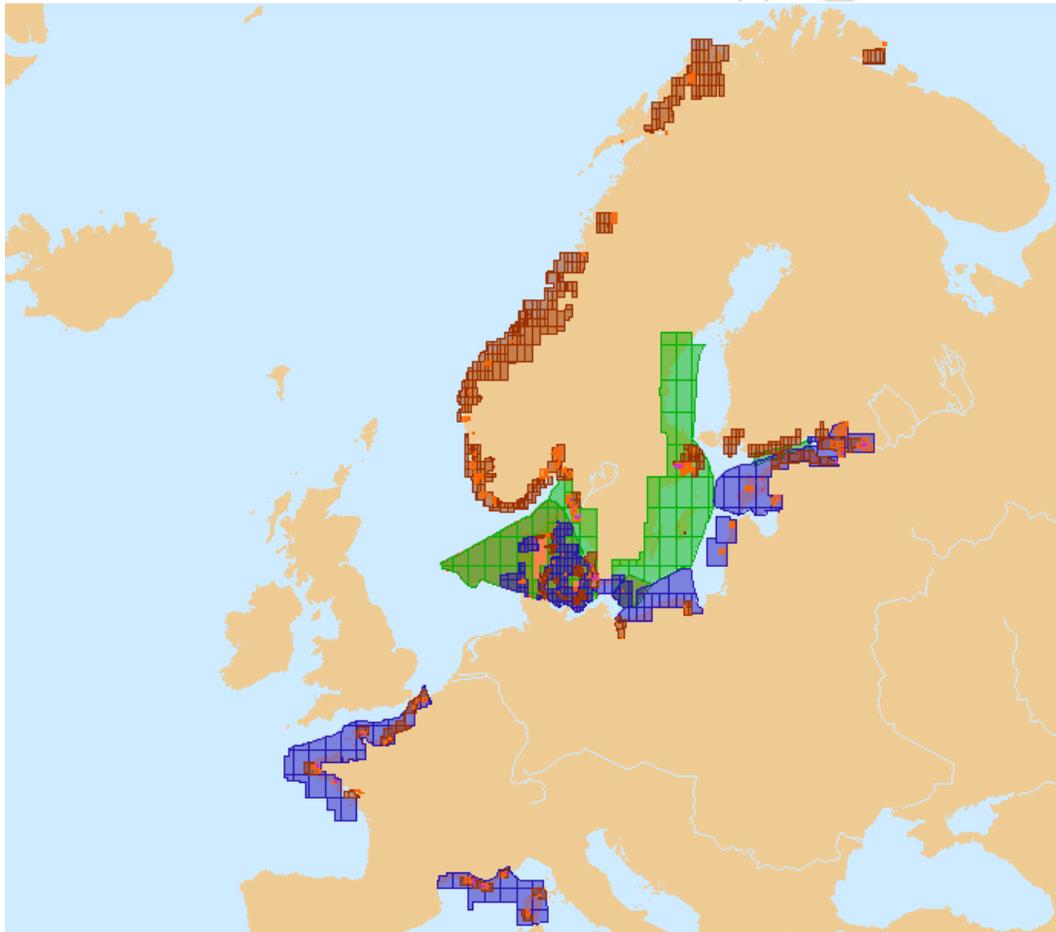


Exact Coverage

- Special Primar Stavanger Chart Catalogue 2.0
functionality-



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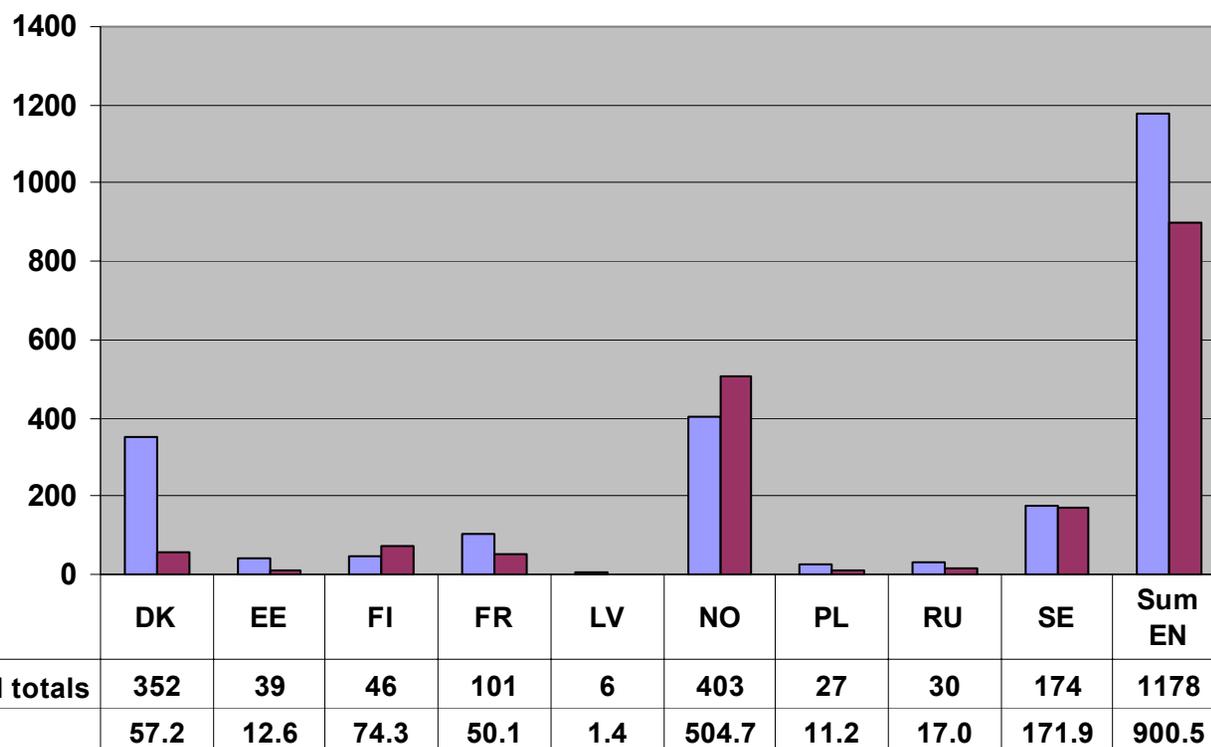
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Volume of available ENCs



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Volume and Number of Available ENC Cells week 2/2003



Operational tools



✓ **Virtual Primar Network (VPN)**

A secure Internet interface to the hydrographic offices (HOs) for delivery, management and control, and distribution of their national ENC's in the Primar Stavanger service.

✓ **Validation Report Checker (VRC)**

An Internet service for the HOs, providing an automatic review of the ENC validation log file against the S57 standard and Primar Stavanger ENC errors database

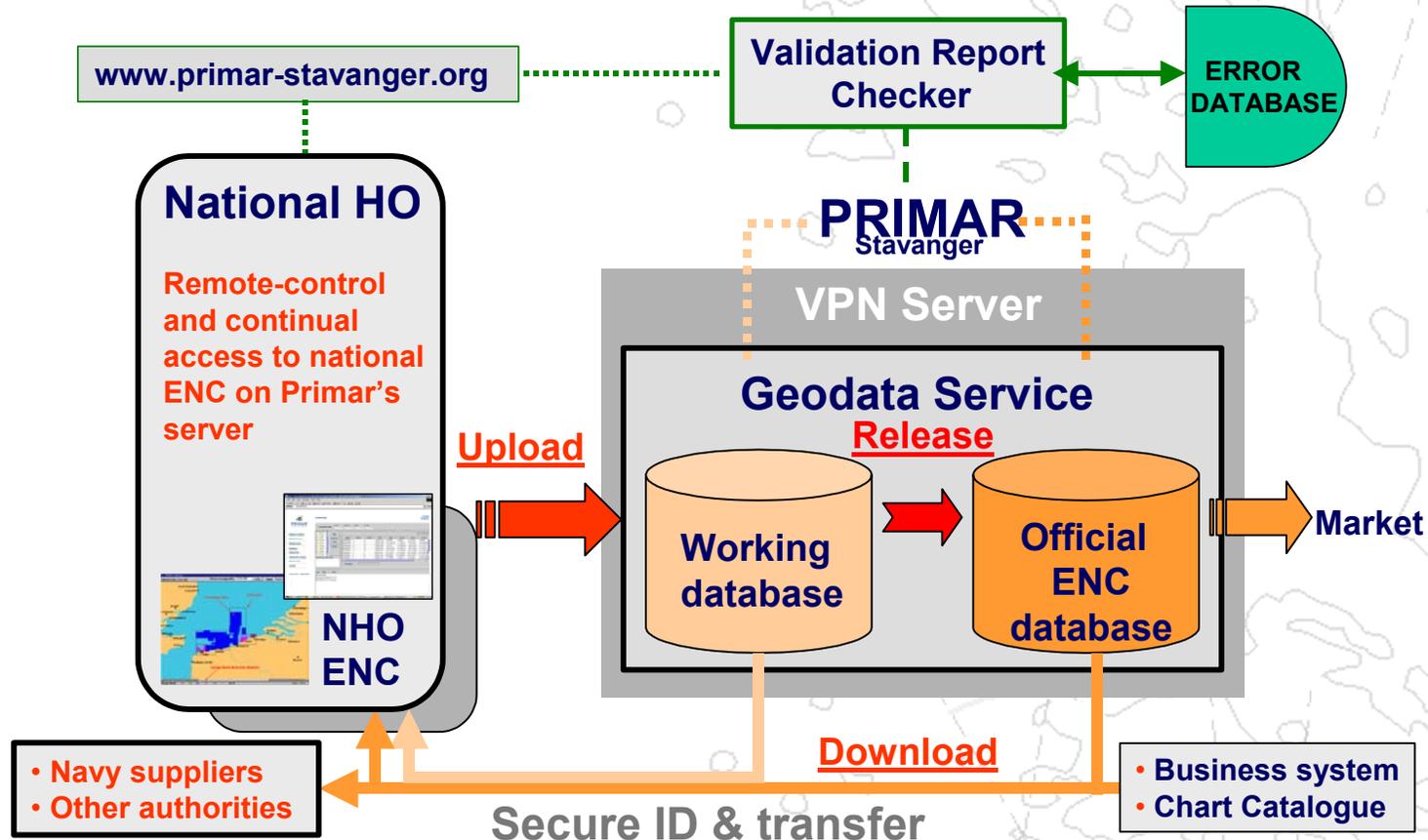
✓ **Primar Chart Catalogue (PCC)**

An onscreen graphical tool to view the information of current availability of ENC's in Primar Stavanger database, and to define and order interactively a customised portfolio of ENC's.

The major components



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Primar Chart Catalogue



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An onscreen graphical tool to view the information of current availability of ENC's in Primar Stavanger database, and to define and order interactively a customised portfolio of ENC's.

Chart Catalogue 2.0

File Edit Tools Options Help

Office

Microsof...

Zoomed in to 8.0 times magnification. No basket file loaded/saved. Catalogue file created Jan 9, 2003.

1:33 PM

Chart Catalogue 2.0

File Edit Tools Options Help

Office

Microsof...

1:43 PM

Distributor Information

Distributor account number:

User Name:

Password:

Distributor contact:

Order reference number:

End-User Information

End User reference number:

E-mail (optional):

Delivery Information

Delivery method:

Permits: Only new All permits

Basket

Cell Name	Description	Edition Number	Update Number	Usage Band	Price Band	Subscription
EE350201	Estonian-Russian border	1	0	0 Coastal	Small	12 months
F13E1R1	App to Haapasaari from SE	1	2	2 Coastal	Small	12 months
RU3N5K0	Koiganpya Pt to Gotland I.	1	0	0 Coastal	Large	12 months
RU3N1K0	Primorsk to Sommers Light	1	0	0 Coastal	Large	12 months
RU3N1K00	St-Petersburg to Shepelyov...	1	0	0 Coastal	Large	12 months
RU4N1K0	Moshchnyy I. to Gogland I.	1	0	0 Approach	Large	12 months
RU4N1K00	Seskar I. to Moshchnyy I.	1	0	0 Approach	Large	12 months
RU4N1K00	Koiganpya Pt to Strisudden Lt	1	0	0 Approach	Large	12 months
RU4N1K00	Kronshtadt to Shepelyovsky...	1	0	0 Approach	Large	12 months
RU5N1K0	Moshchnyy and Malyy Islands	1	0	0 Harbour	Large	12 months
RU5N1K00	Seskar I. to Maly I.	1	0	0 Harbour	Large	12 months
RU5N1K00	Kronshtadt to Krasnaya Gerka	1	0	0 Harbour	Large	12 months
F129GFEP	Gulf of Finland, E part	1	0	0 General	Medium	12 months
EE350403	Port of Kunda	2	0	0 Coastal	Medium	12 months
EE350404	North Estonia	1	1	1 Coastal	Medium	12 months
F13E1I0X	Tainio	1	1	1 Coastal	Small	12 months
F13E1I0Y	Kotka lighthouse	1	1	1 Coastal	Small	12 months
F13E1I0Z	IW of Kotka lighthouse	1	1	1 Coastal	Small	12 months

Selection Summary

Small	Medium	Large	Total
93	11	16	120

Displaying basket No basket file loaded/saved. Catalogue file created Jan 9, 2003.

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Terms of Delivery



- ✓ Users subscribe to the service via one of the distributors. A listing of distributors is accessible on www.primar-stavanger.org
- ✓ The subscription period is **12 months or 6 months**. This includes provision of the basic ENC data file and all succeeding new editions and detailed corrections to the data file during the period.
- ✓ The recommended distributor subscription rate (retail price) is **24 USD** for a paper equivalent ENC (Coverage 60%-30%: 16 USD, less than 30%: 8 USD)
- ✓ All ENC files are released **encrypted on CD**. This means that to be able to display the ENCs, you need a security key that unlocks the data.
- ✓ The subscription is automatically **renewed every 12 months** until cancellation received by the distributor.

Distributor network



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Belgium



Canada



Finland



France



Germany



Greece



Netherlands



Norway



Sweden



United Kingdom



Total: 21 distributors in 10 countries

Compliant navigation systems



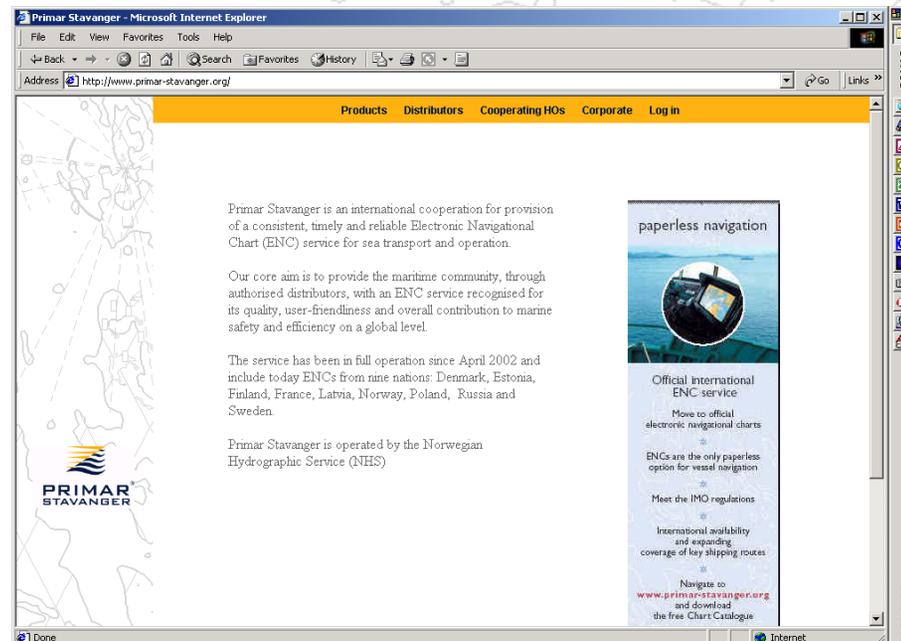
- All major OEMs can read ENC's and have implemented the Primar Security Scheme from Primar Stavanger
- 16 OEMs which have implemented Security Scheme are already ECDIS certified.
- The list of compatible systems also includes simulators and non-ECDIS systems, also called Electronic Chart Systems (ECS)
- For complete list, visit our web site





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For more information visit:



www.primar-stavanger.org

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