PRIMAR Report 2010

1. Introduction
The PRIMAR international co-ordinating centre for electronic navigational charts
(ENCs) has been operated by the Norwegian Hydrographic Service (NHS) since 1. April
2002.

PRIMAR'sVision.
**In order to enhance safety at sea and protect the maritime environment,
PRIMAR's vision is to be the most efficient model for the provision of ENC services
and maritime geospatial data worldwide**

Since the last NHC meeting PRIMAR has signed a bilateral agreement with Brazil who
became the 13th member state of PRIMAR. In addition, PRIMAR has signed a distributor
agreement with India in order to distribute Indian ENC through the PRIMAR ENC
distribution service.
PRIMAR ENC service now distributes ENCs from more than 36 nations including the
IC-ENC member nations.
The following countries are members of the PRIMAR Regional ENC Coordination
Centre regime (RENC): Brazil, Croatia, Denmark, Estonia, Finland, France, Greece,
Latvia, Mozambique, Norway, Poland, Russia and Sweden.

PRIMAR makes its ENC database available through 60 authorized distributors located in
24 countries, serving all the major markets. Distributors have the possibility to
incorporate these ENCs within their own tailored, integrated service as described in the
WEND Principles.

PRIMAR today provides a worldwide coverage of official ENCs with 6278 ENCs from
PRIMAR cooperating nations (RENC members and non-members) and 3189 ENCs from
IC-ENC; a total of 9467 ENCs. A total of 16700 ER- updates are currently being
provided to mariners to enable safe navigation with up to date ENCs. PRIMAR currently
supports over 1 million ENC subscriptions annually.

2. Quality Assurance
All ENCs that are delivered to PRIMAR undergo a set of checks before they are released
through the distributors. The data is uploaded to the Virtual PRIMAR Network (VPN).
The VPN technology is a set of tools and functionalities to give Hydrographic Offices
better control over management of their national ENCs.

When data is uploaded, the system performs a set of checks on the data, e.g. S-57 data structure, filenames, issue dates, external files, order of updates, geo limits etc. In the VPN the data is validated using Validation Report Checker (VRC). The VRC is an internet based software tool linked to the Errors Database and allows upload of validation reports into a data management production database. The uploaded reports are "verified" against the Errors Database using an interactive process to accept or reject errors and warnings that are reported. The input validation reports that are loaded into the VRC are three different validation logs.

ENCs in the same navigational band should not have data overlap and all data that is uploaded to the PRIMAR database is therefore checked for overlaps with all other ENCs in the database, in the same navigational band.

The final check that is done is to upload all data into two different ECDIS systems to see that it is no problem to import the data.

When all checks mentioned above are performed with positive results, the ENCs can be released.

3. Distribution:
During 2009 five new distributors were added to the PRIMAR distribution network. A business to business (B2B) interface was successfully launched in 2007 allowing distributors to integrate their own business-systems with PRIMAR.

The NHS and its cooperating HOs are continuously working to include new nations into the PRIMAR service. Discussions are ongoing with the Hydrographic offices of China, Malaysia, Indonesia and Thailand but no agreements have been signed so far.
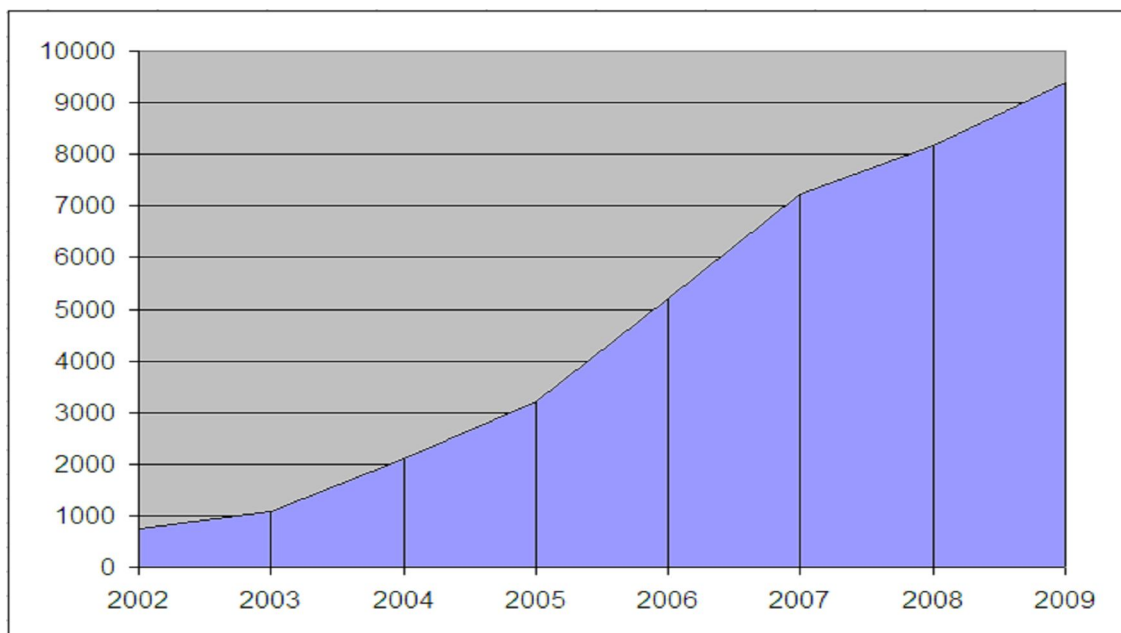

Figure 1 Development of PRIMAR database

PRIMAR Chart Catalogue enables the distributors to order ENC subscriptions and deliver permits to their customers 24/7. It also provides them with tools and functionalities to perform customer management and ENC folio planning. Version 4.2 of the chart catalogue was launched in 2009 which included several new functionalities to ease the ENC ordering process and make it more efficient.
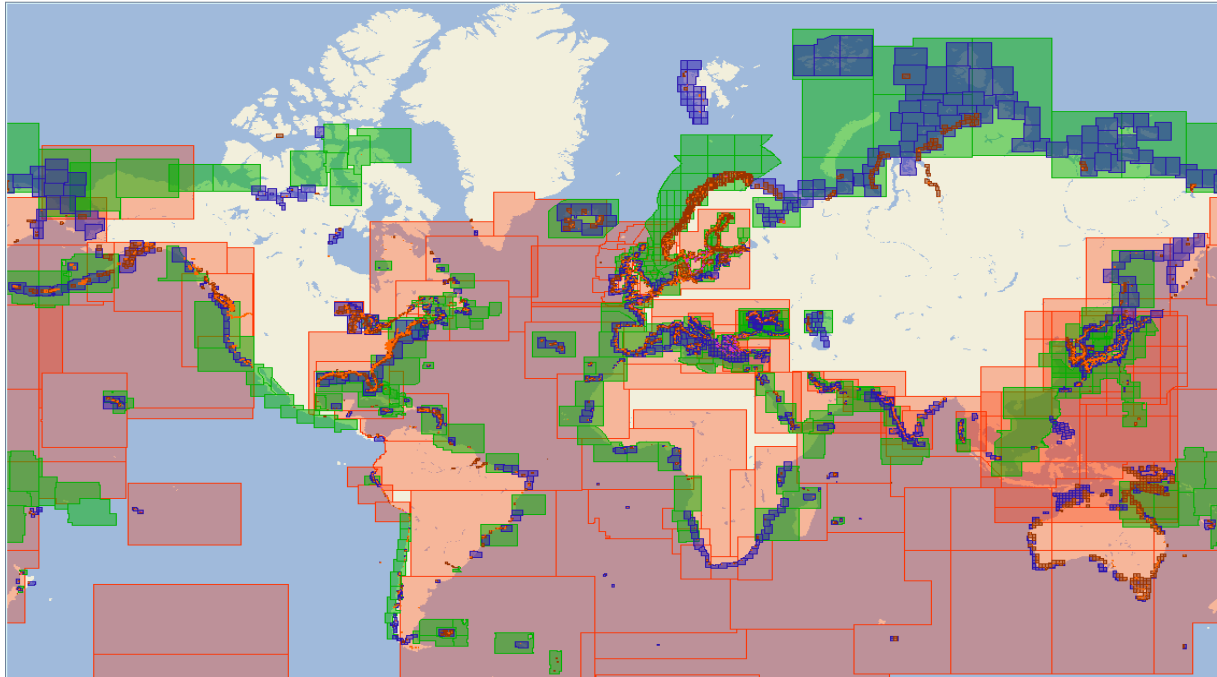

Figure 2 Coverage in PRIMAR database February 2010

Increasing demand for ENCs
The PRIMAR service continues to experience substantial growth in the number of ENC subscriptions and the number of end users. There was an increase of 20 % in the number of end users from 2008 to 2009.

PRIMAR has also been focussing on implementing standardised efficient national services for navies and governmental organisations (pilots, VTS, maritime authorities etc). The Web Map Service (WMS) based on the ENC data was launched during 2009 and it is currently available only to the national governmental users.
The Inspector tool which was developed as a project together with the Norwegian Maritime Directorate and PRIMAR/ECC was also released in 2009. This tool provides port state control inspectors with information regarding the status of ENCs on board the vessels and enables them plan the PSC inspections more efficiently.

For more information visit www.primar.org