

NATIONAL REPORT OF SWEDEN TO BSHC16

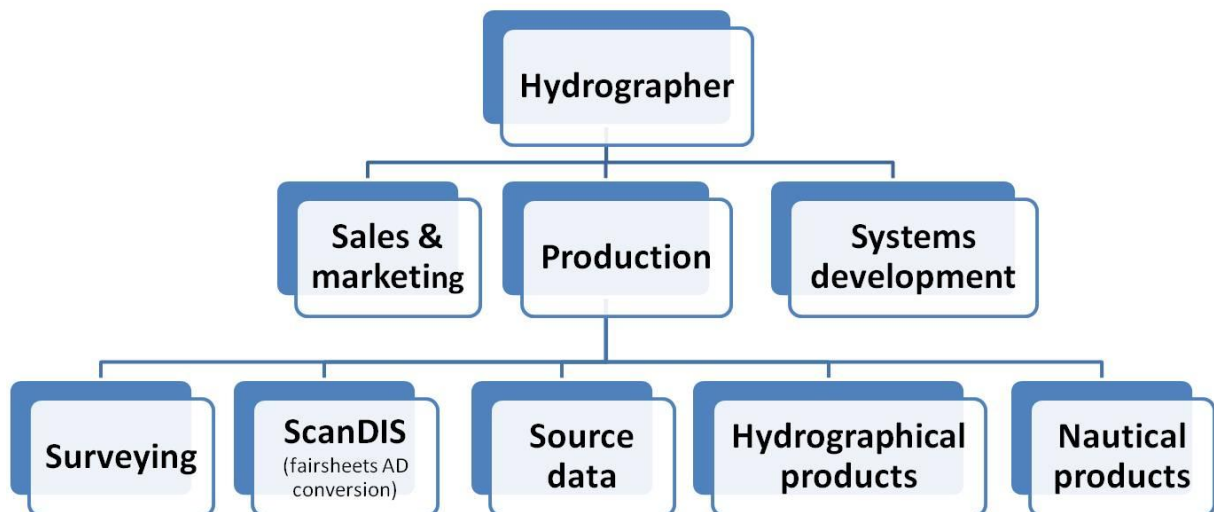
Executive summary

This report gives a summary of the main activities within the Swedish Hydrographic Office since the last report given at the 15th BSHC meeting in Gdynia in September 2010.

1. Hydrographic Office

The previous hydrographer Mr Åke Magnusson did reach retirement age during the autumn 2010 and retired by the end of 2010. New director of the Swedish Hydrographic Office and Hydrographer from January 1st 2011 is Mr Patrik Wiberg.

During the period a major reorganisation has taken place within the administration and the consequences for the Hydrographic Office has resulted in a revised organisational structure which is in effect from September 2011. (picture below)



At the time of compiling this report \approx 110 persons (including vacancies) are employed by the Hydrographic Office. A number of large additional tasks for the coming 2 to 4 years time frame, e.g. the EU TEN-T project MonaLisa, will result in some extra temporary recruitments.

The operations are certified by Lloyd's register of quality assurance in accordance with ISO 9001:2008. Yearly quality audits are conducted by Lloyds and internal auditors.

2. Surveys

Most Swedish waters are surveyed to some degree over the years and most of the areas, especially fairway areas, to a high standard. The long term objective is that all Swedish waters should be surveyed in accordance with the international standard S-44.

Surveys and resurveys now and in the coming years are focused to fairway areas in the *SMA Safe Seaways concept* (Säkra sjövägar). This concept encompasses over 81 500 km² out of totally 165 000 km² within the Swedish EEZ.

Within the concept "Säkra Sjövägar" and priority fairways surveys during 2011 have been conducted in fairways to Gävle (Sea of Bothnia) and Strömstad (northern west coast) as well as in a fairway area between Kullen and Lilla Middelgrund (west coast, entrance to Öresund).

The season 2011 (until august) so far 1 300 km² has been surveyed by own vessels.

In addition 4600 km² are going to be surveyed in open sea, in the Sea of Botnia. These surveys are conducted in accordance with the BSHC/HELCOM resurvey plan by an external contractor (FUGRO OSAE GmbH). The fundings for these operations partly come from the EU TEN-T project MonaLisa and surveys are carried out in cooperation with the finnish HO.

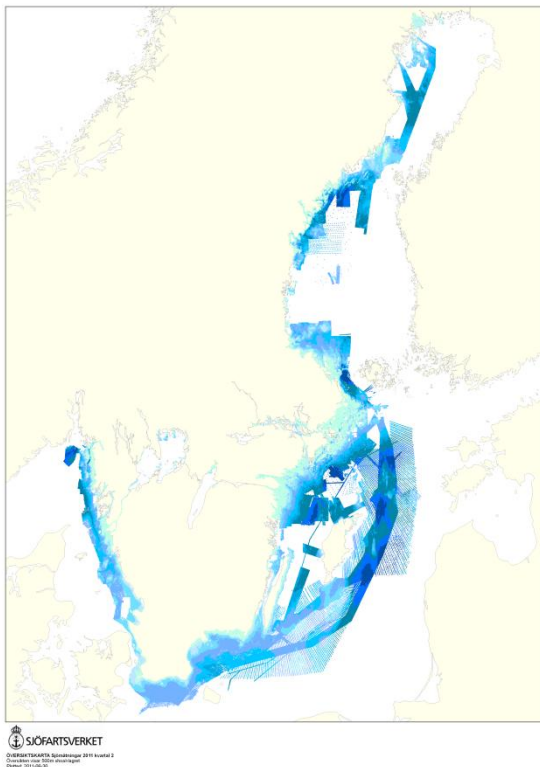


Fig 1 All data in the soundings database DIS including charts from ScanDIS (August 2011)

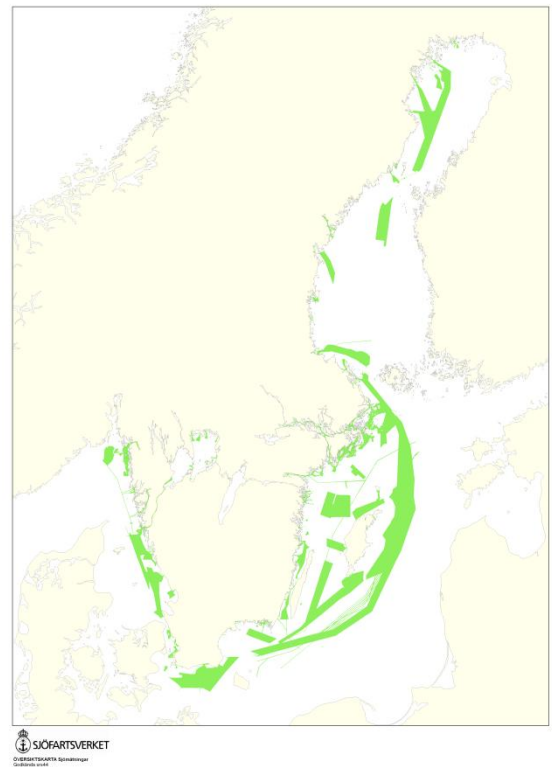
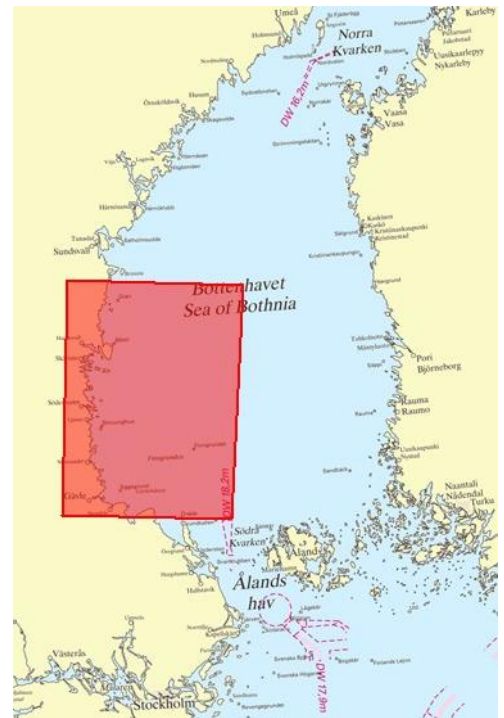
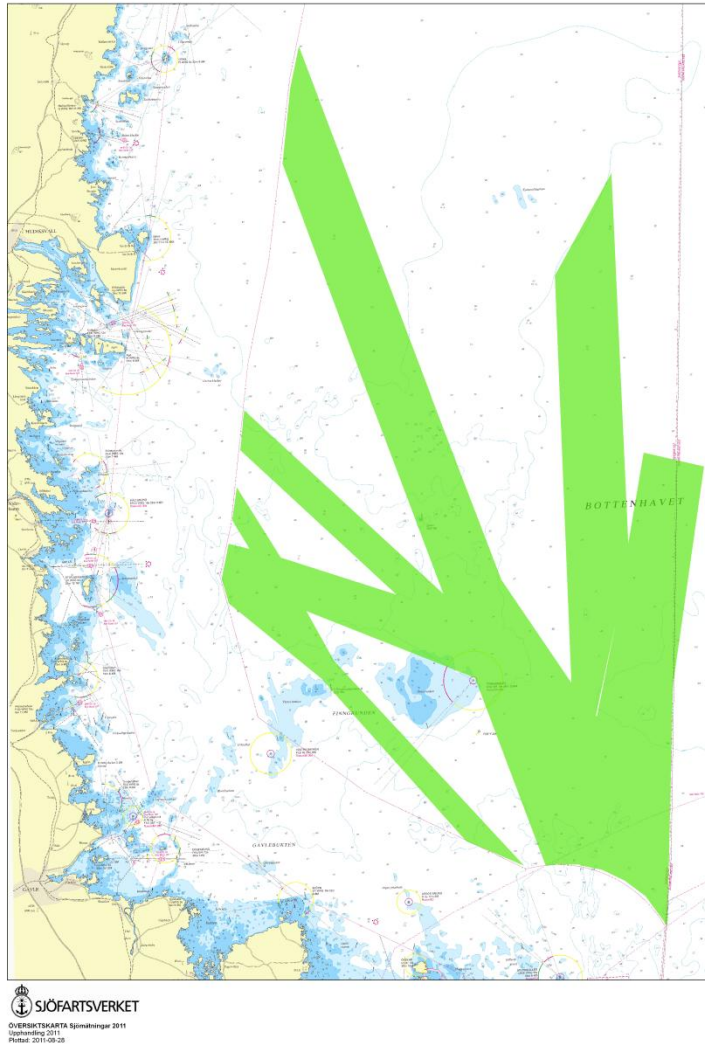


Fig 2 Data that fulfills IHO S-44 (August 2011).



Area (4600 km²) of survey 2011 by external contractor FUGRO OSAE

The buoy tender M/V Baltica, used for fairway maintenance, has been equipped with a survey system and will be used part of the coming years for multibeam surveys. In the end of 2011 the vessel will also be used in the Baltic Sea Region EU-project Chemsea. The survey vessel Jacob Hägg is occupied in multibeam surveys in the Sea of Bothnia in the BSHC/HELCOM resurvey plan during 2011. The two smaller, 20 meter, survey vessels Johan Månsson and Anders Bure will be delivered after refit and modernisation and will be occupied in smaller surveys along the coast. The survey launch Petter Gedda is being used for smaller port surveys.



Swedish Maritime Administration Survey Vessels 2011

3. New charts and updates

Swedish paper chart portfolio

The Swedish paper chart portfolio consists of approximately 120 charts and 15 series of charts for small craft. Special charts, tailored to the customer, such as “print on demand” charts are also available as well as a service to provide chart images to mobile phones and PDA’s.

During the period the following new (or totally renewed) charts were issued:

Chart	Scale	INT	Name
SE 62	1:250 000	INT 1204	Gotland North-Landsort
SE 71	1:250 000	INT 1203	Utlängan-Öland-Gotland South
SE 429	1:125 000	INT 1175	Norra Kvarken

During the period the introduction of TSS has continued. The new charts 62 and 71 were published 2010 and present several new TSS around Gotland and Öland that came into regulation from January 2011.

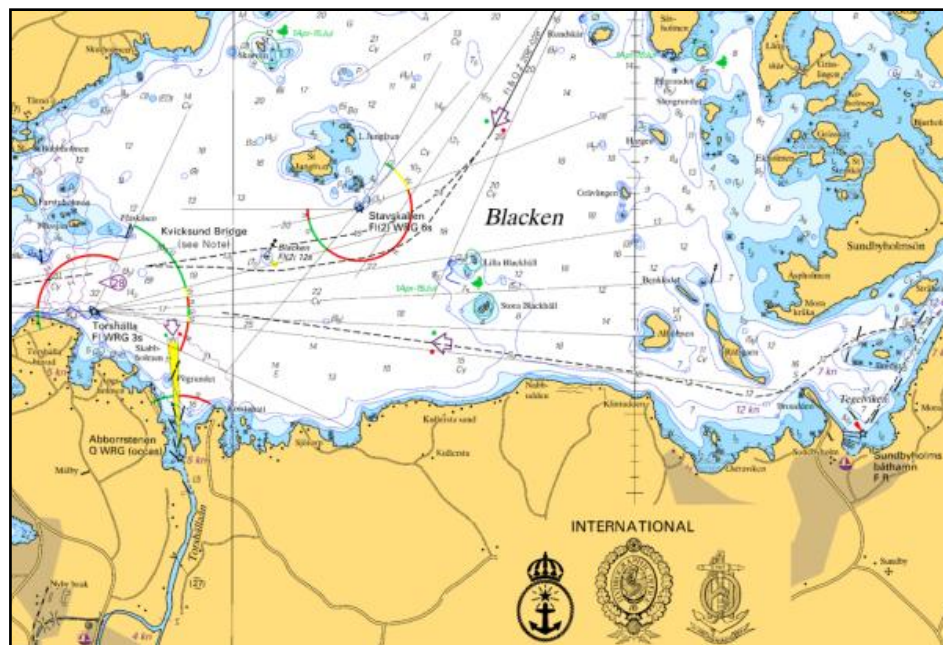
New routeing measures around Gotland and Norra Kvarken and new swedish INT-charts

1st January 2011 new routeing measures around Gotland came into force. In combination with the establishment of these new routeing measures the Swedish Maritime Administration (SMA) published two new INT charts, in October 2010, at scale 1:250 000 with the INT-numbers 1203 (national number 71) and 1204 (national number 62). These two charts replaced the previously existing SE national charts with the national numbers SE72, SE73 and SE81 at scale 1:200 000.

Apart from the above mentioned INT charts another INT chart covering Norra Kvarken (the passage between Sea of Bothnia and Bay of Bothnia) at scale 1:125 000 was published the first week of December 2010. This chart with the INT-number 1175 (national number 429) replaced the existing Swedish chart with the national number SE515. In Norra Kvarken Sweden and Finland are planning for new routeing measures and a submission was made by the two countries to the IMO NAV57 in May 2011. These routeing measures are expected to be approved at the next MSC meeting and will become effective 1 May 2013.

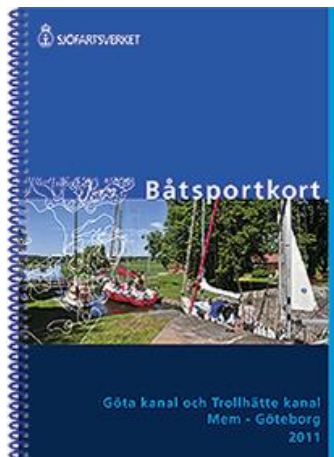
Adoption of Swedish paper charts by UKHO

During 2010 and 2011 a major part of the Swedish paper charts have been adopted by UKHO. Many interesting issues regarding interpretation of the IHO S-4 have been communicated during the year, but a good communication and understanding has now been established. UKHO produces the SE adopted charts as multi coloured charts.



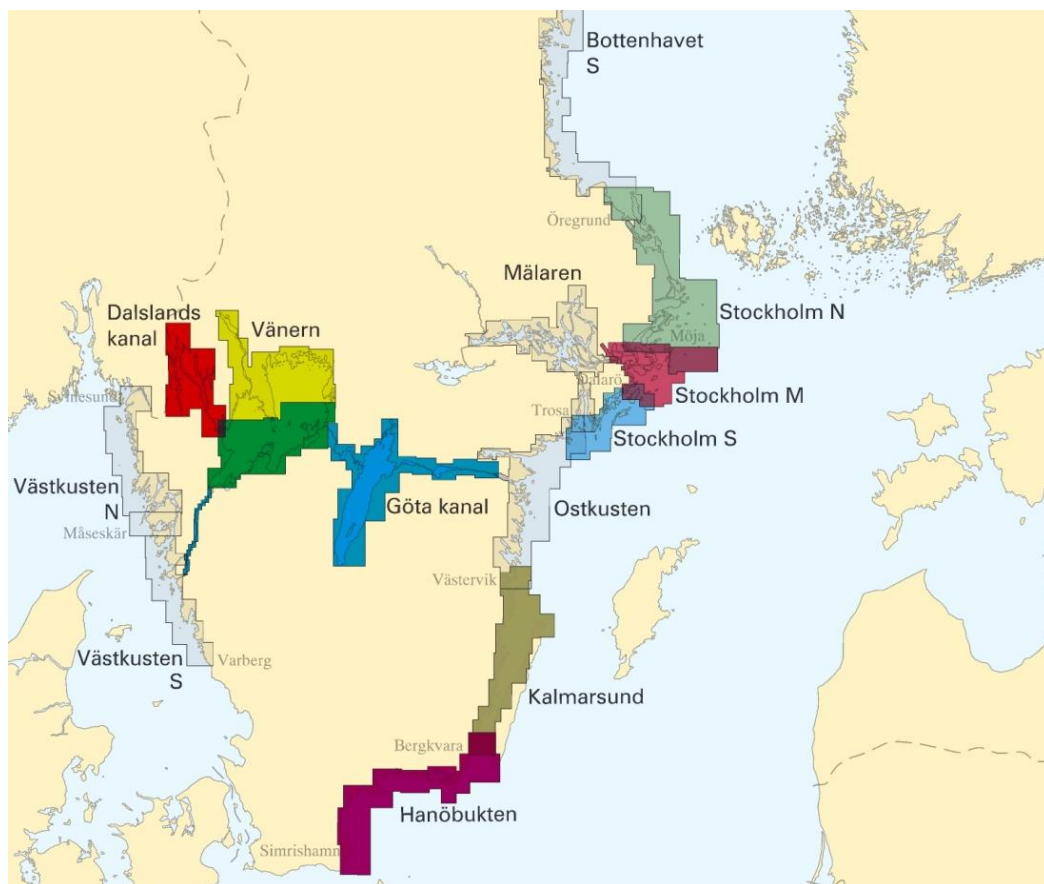
Example from chart adopted by UKHO

New small craft charts



The sales of Swedish small craft charts has not declined in spite of GPS use. For the 2011 season we have produced the following portfolios in New Editions: Stockholm norra, Stockholm mellersta, Stockholm södra, Kalmarsund, Hanöbukten, Göta kanal/Trollhätte kanal, Vänern and Dalslands kanal.

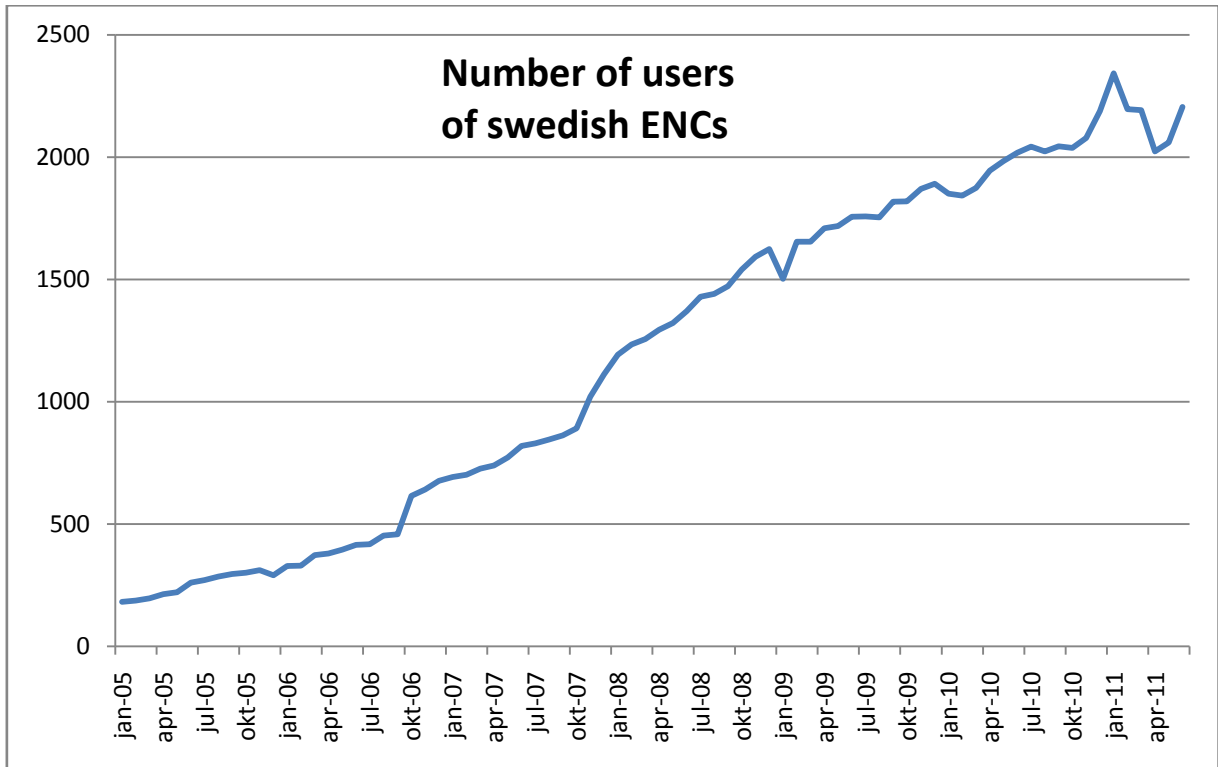
For the 2012 season we are producing a new small craft chart series for the Skåne area. This product will also contain Danish data (insets) which we plan to insert in pdf-format.



Small craft chart series in southern Sweden

ENC

Swedish ENC's continue to be distributed through services provided by PRIMAR in Norway.



4. New publications and updates

Although reported earlier in some national reports we continue to advertise our Internet service named WebbUfs.

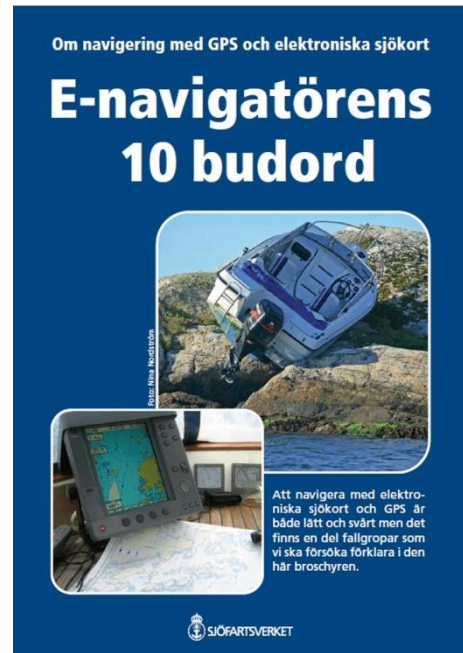
(<http://www.sjofartsverket.se/ntm>)

This service makes it possible to search information in the Swedish NtM database in many different ways, e.g. geographical area, a certain chart, publishing period etc. Almost every weekday new notices are published making this the most up to date service available regarding swedish NtM's

On a weekly basis all new notices since the previous week are published in the printed publication Ufs as well as in PDF-format on the Web.

The screenshot shows the 'Search the database' page for the NtM database. The page includes a navigation menu with options like Home, About us, Infrastructure & Maritime Traffic, Maritime Sector, Press, e-Services, and e-Library. The main content area has a search form with the following fields: Area (dropdown menu set to 'Southern Baltic'), Chart number (dropdown menu), Small vessel chart (dropdown menu), Notice number (text input), and Free text search (text input). There is also a checkbox for 'Show announcements only' and an 'Issue period' dropdown menu set to 'Past week'. The page also displays the NtM database updated date as '2010-09-08 04:21' and a 'Search' button.

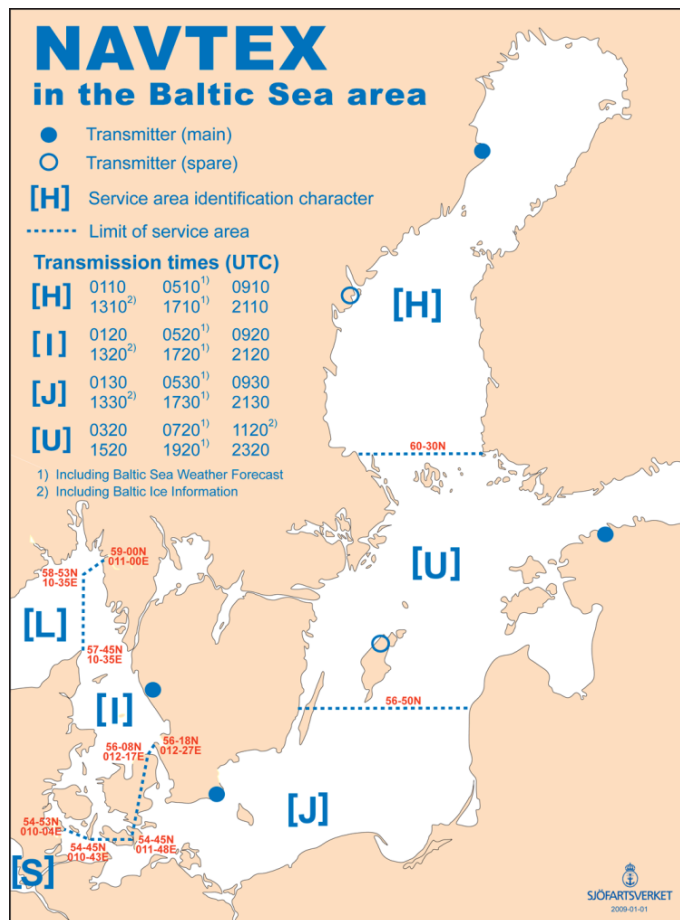
The number of groundings with pleasure craft in the archipelagos have tended to increase on recent years. One reason for this could be that more boats now are navigating in parts of the arcipelagos wich are really difficult to navigate with traditional means and hence have been only rarely used by others than local fishermen. The surveys in these waters are often old and do not meet the demands from the “E-navigator”. To highlight this problem SMA have published a booklet (in swedish) with 10 good advise to the “E-navigator”.



5. MSI

“NtM-BALTICO” at the Swedish Hydrographic Office is acting as National Co-ordinator of Sweden as well as Baltic Sea Sub-area Co-ordinator.

The table below shows the number of Navigational Warnings that were transmitted on NAVTEX within the Baltic Sea Sub-area during the past three years:



Number of Navigational Warnings on NAVTEX

Nation	2008	2009	2010
Baltic Sea Nav Warn	48	28	37
Swedish Nav Warn	97	97	117
Finnish Nav Warn	13	28	91
Petersburg Nav Warn	16	29	33
Estonian Nav Warn	5	3	7
Latvian Nav Warn	22	24	20
Lithuanian Nav Warn	34	27	34
Kaliningrad Nav Warn	32	49	66
Polish Nav Warn	72	70	74
German Nav Warn	71	73	99
Danish Nav Warn	105	98	87
TOTAL	515	526	665

The following table shows Operational Points of Contact for National Co-ordinators within the Baltic Sea Sub-area and national websites containing current Navigational Warnings.

National Co-ordinators Operational Points of Contact

Country	Telephone (h24)/ Telefax	E-mail	Website with current Navigational Warning
Denmark	+45 89 43 32 11 / +45 89 43 32 30	mas@sok.dk	http://frv.dk/en/SailingInformation/Warnings/Pages/default.aspx
Estonia	+372 6205 665 / +372 6205 766	navinfo@vta.ee	http://adam.vta.ee/teenused/tm/KehtivadNavigatsioonihoiatused/KehtivadNavigatsioonihoiatused.txt
Finland	+358 204 48 6400 / +358 204 48 6533	turku.radio@fta.fi	http://portal.liikennevirasto.fi/sivu/www/e/
Germany	+49 (0) 4927 1877283 / +49 (0) 4927 1877 288	seewarndienst.wsa-emd@t-online.de	http://www.bsh.de/aktat/nwn/nwn-ost.pdf
Latvia	+371 67323103 /	navarea@lhd.lv	http://www.navtex.lv
Lithuania	+370 46 469713 / +370 46 469701	hydrography@msa.lt	http://www.msa.lt/en/hydrography/navigational-warnings-and-kq74/notices-to-mariners-scx9.html
Poland	+48586266208 / +48586266203	bhwm@mw.mil.pl	http://www.hopn.mw.mil.pl/index.php?akcja=on
Russian Federation	+7 812 717 59 00 / +7 812 717 59 00	navarea13@gunio.ru	
Sweden	+46 11 19 10 45 / +46 11 23 89 45	ntm.baltico@sjofartsverket.se	http://www.sjofartsverket.se/baltico

Baltico Meeting

Every second year a meeting with National Co-ordinators and meteorologists within the Baltic Sea sub-area is arranged in one of the member states. The purpose of these meetings is to improve and harmonise the MSI services within the Baltic Sea region. The latest *Baltico meeting* took place in Gdynia in June 2010. Documents and meeting information is available on <http://www.sjofartsverket.se/balticomeeting>.

Next meeting will take place in Klaipeda, Lithuania, 4-5 June 2012.

EfficienSea

BALTICO is presently giving assistance to the Danish Maritime Safety Administration (DaMSA) in the MSI-part of the EfficienSea project (WP4 e-navigation) by inserting current Coastal Navigational Warnings into the EfficienSea MSI-database. Later other nations in the Baltic Sea region will also be asked to do the same.

6. C-55

An update regarding Sweden in the C-55 database has been delivered in March 2011.

7. Capacity building

Sweden has not been active in the area of capacity building during the period.

8. Oceanographic activities

The Swedish Maritime Administration (SMA) is responsible for a number of water level stations but it is the Swedish Meteorological and Hydrological Institute (SMHI) that has the main responsibility for the Swedish oceanographic activities. Other actors are the Swedish Geological Survey and universities and research institutes.

In conjunction with the MonaLisa project a working relationship with Stockholm University department of Geological Sciences has been established. Especially worth mentioning here is the cooperation with Professor Dr. Martin Jakobsson who is professor of Marine Geology and Geophysics and also active in the GEBCO work.

9. Other activities

National Geodata Portal and Inspire

The Swedish HO continues to take part in the national activities to implement the Inspire directive of the EU and the establishment of the national SDI (Spatial Data Infrastructure) and a geodata portal. A national geodata portal is established and Swedish HO contributes with metadata according to the Inspire directive and some basic datasets to start with.

<http://www.geodata.se/en/>

National Shore Line data quality improvement

For a number of years the HO is involved in a joint project with the National Land Survey to manage and improve a national shore line data theme together. One fundamental aim apart from a need to improve quality is to facilitate products that are cross-shore-line for coastal zone management and other applications. For new and totally revised charts this data has been used for some years now. In 2010 we also started to do thematic updates in the chart database of the shore line based on this high quality data starting with layers corresponding to the the largest scale charts. This is a major improvement for use together with absolute GPS navigation.

Converting fair sheet archive (ScanDIS)

The digitizing of soundings from fair sheets and similar maps in our archive continues with the overall aim to create national coverage in the soundings database (DIS). For the Hydrographic Office in particular, this will enable new and more efficient production of chart information.

This operation is, after some years as a project, since 2007 permanent in our organization and will continue at least until 2013. The Swedish government assists with funding we cooperate with the Swedish Environmental Protection Agency (Naturvårdsverket) in

planning and prioritizing this work. To date we have processed approximately 4500 of an estimated 8 000 sheets and maps in the archive.

A new national commission for revision of maritime boundaries

After many, many years of lobbying towards our ministry for foreign affairs and other government bodies a maritime boundaries commission is started now 2011. The task is to revise baselines and associated features and subsequently establish the territorial limits and boundaries in an up to date fashion. The last revision of maritime boundaries was in the early 1960's and there has been considerable land uplift to consider and also changes in legislation since then. The Swedish HO looks forward to contribute considerably in this work and then to be able to present and publish maritime boundaries in a manner suitable in the digital era.