

National Report of Finland

[16 August 2013]

Executive Summary

This Report highlights only the main activities and achievements of the Finnish Hydrographic Office since BSHC 17th Conference in September 2012.

- Re-organisation of the Finnish Transport Agency by 1 July 2013
- Hydrographic surveys has been performed as planned
- Production of nautical charts has been performed as planned

1. Finnish Hydrographic Office

The Finnish Transport Agency and the Hydrographic Office has been reorganised by 1 July 2013. In [Fig.1](#) there is the new FTA organisation.

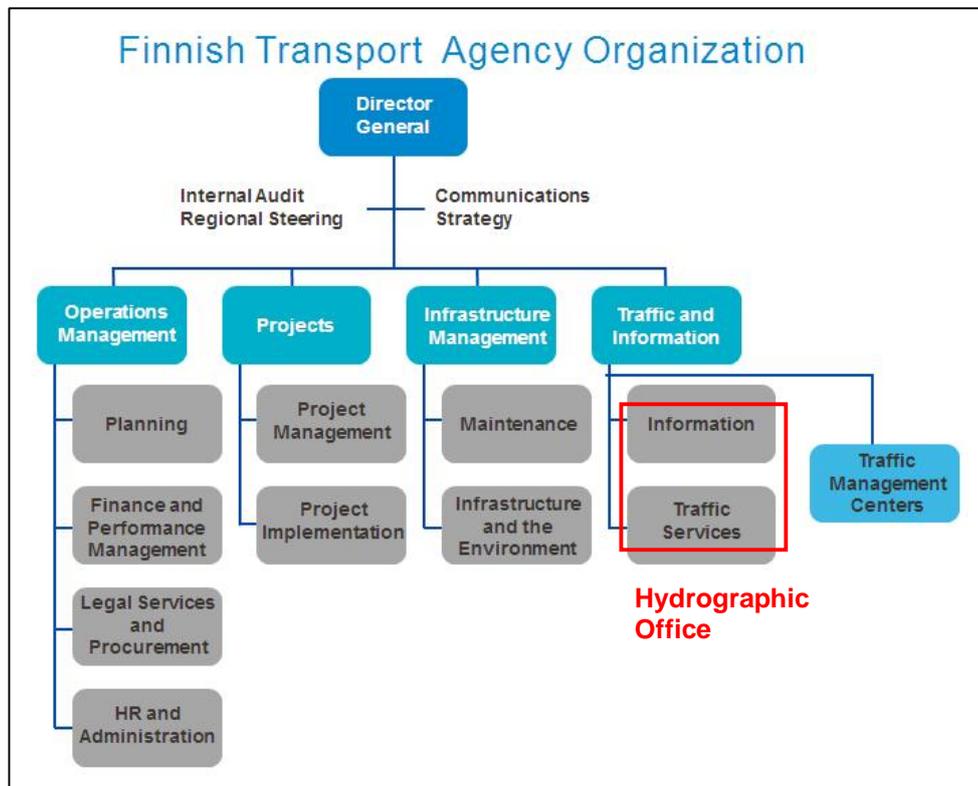


Fig. 1. Finnish Transport Agency Organisation by 1 July 2013.

The Hydrographic Office is situated in two units; management of hydrographic survey data belong to *Information unit* which includes almost

all FTA data management activities. Nautical charting is situated in *Traffic Services unit*.

This reorganisation should have no effects to the staff or the budget of the Hydrographic Office.

The FHO has working according to the Quality Management System. A yearly auditing was performed successfully, including also the NtM process.

2. Hydrographic surveys

There were open procurements for three survey tasks; on Bay of Bothnia a two year project (part of the TEN-T *MonaLisa* project, ~M€ 2,6), on inland lake area in Northern Savolax (~€ 600.000) and on three fairway areas (summing ~€ 200.000). In the *Table 1* there are statistics of these tasks. In *Fig.2* there are shown the survey areas in 2012. In *Fig.3* there are shown the total status and planned surveys for 2013-2014.

The validity of the Special Generic Economic Interest (SGEI) law has been expired at the end of 2012. The value of SGEI work in 2012 was ~M€ 3,9.

Task	Surveyed by	Multibeam [Km ²]	Line sounding [Km ²]
Bay of Bothnia	<i>Marin Mättekniik Ab</i>	5938	
Bay of Bothnia	<i>Fugro-OSAE GmbH</i>	1402	
Inland	<i>Meritaito Oy</i>	203	223
Various areas	<i>Meritaito Oy [SGEI]</i>	1502	40

Table 1: Survey statistics for 2012.

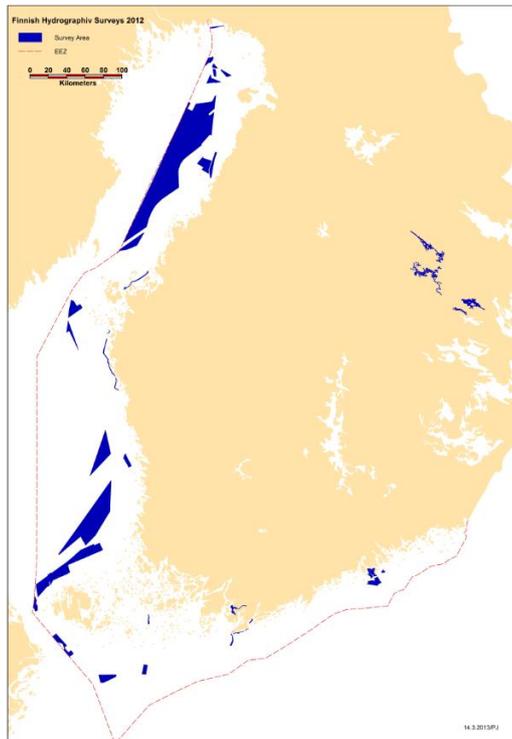


Fig. 2. Hydrographic Surveys in 2012.

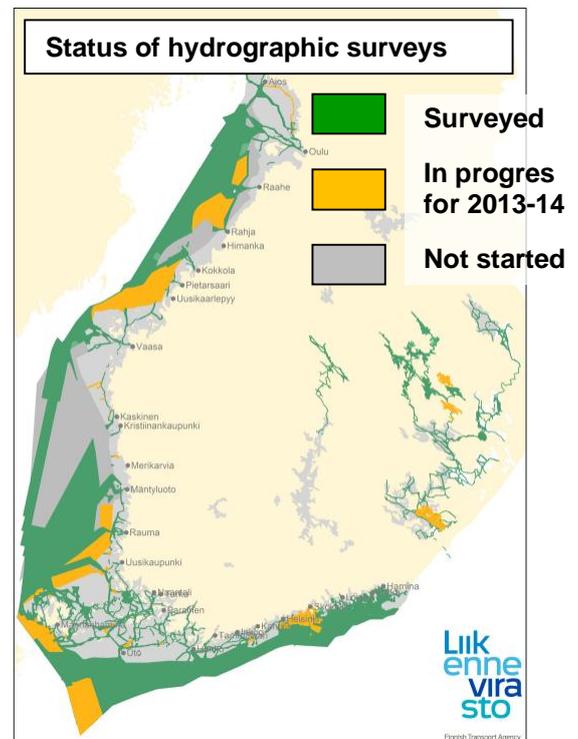


Fig. 3. Status of Hydrographic Surveys by 1 January 2013.

The Finnish part of the HELCOM-BSHC Revised Harmonised Hydrographic Re-Survey Scheme has been enhanced and the database updated. The HELCOM survey plan is the driving force to perform the hydrographic surveys in Finnish waters. For 2013 - 2014 HELCOM Category II surveys have been procured in the Åland Sea, southern Bothnian Sea and southern Bay of Bothnia totalling about M€ 2,7 and roughly 5.500 km².

As a total Baltic Sea re-survey scheme, the requirements of the HELCOM Moscow 2010 Ministerial Declaration are almost fulfilled by all Baltic Sea countries. This will be reported to HELCOM Ministerial Meeting on 3 October 2013.

Hydrographic data processing and management

The development of a new system for Source data management ("LOKI") has been developed with a new *agile software development* method. An example user interface can be seen in [Fig.4](#). LOKI has been taken into use during the summer 2013.

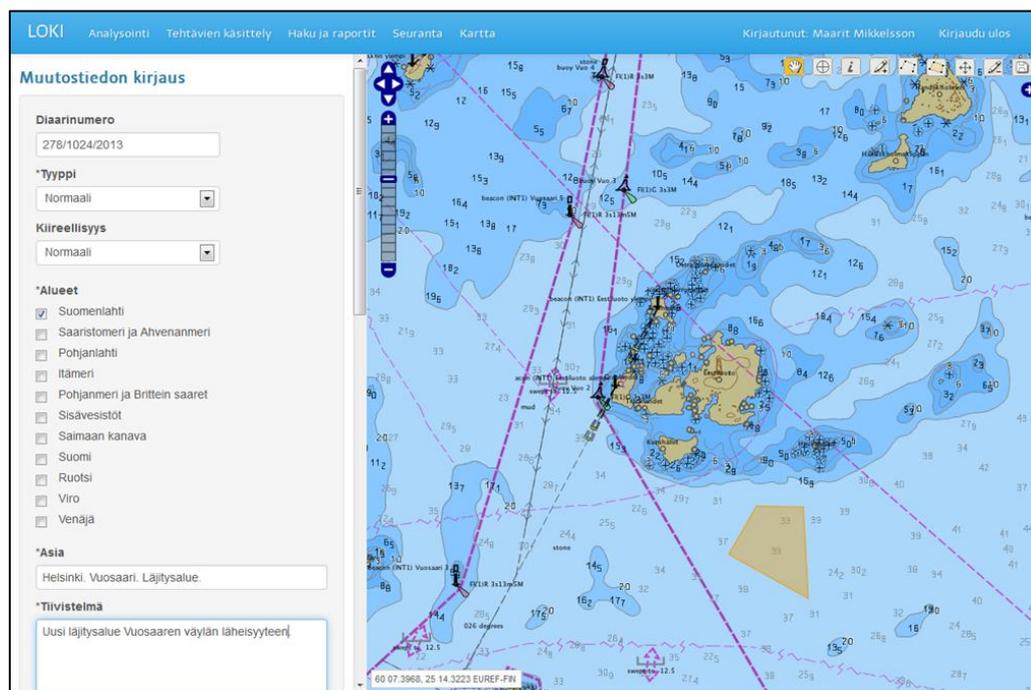


Fig. 4. Example user interface of the Source Data Management "LOKI"

Quality control of ENC's has been improved in the whole process. Some software tools for hydrographic data quality control and operation guidance have been enhanced.

A plan for processing bathymetric data during 2013-2017 into the chart database will be updated during 2013. In [Fig. 5](#) there are shown full coverage areas that are processed into the chart database ("Katiska") by the end of June 2013 (approximately 79 % of all soundings). However, all the critical observations are processed immediately.

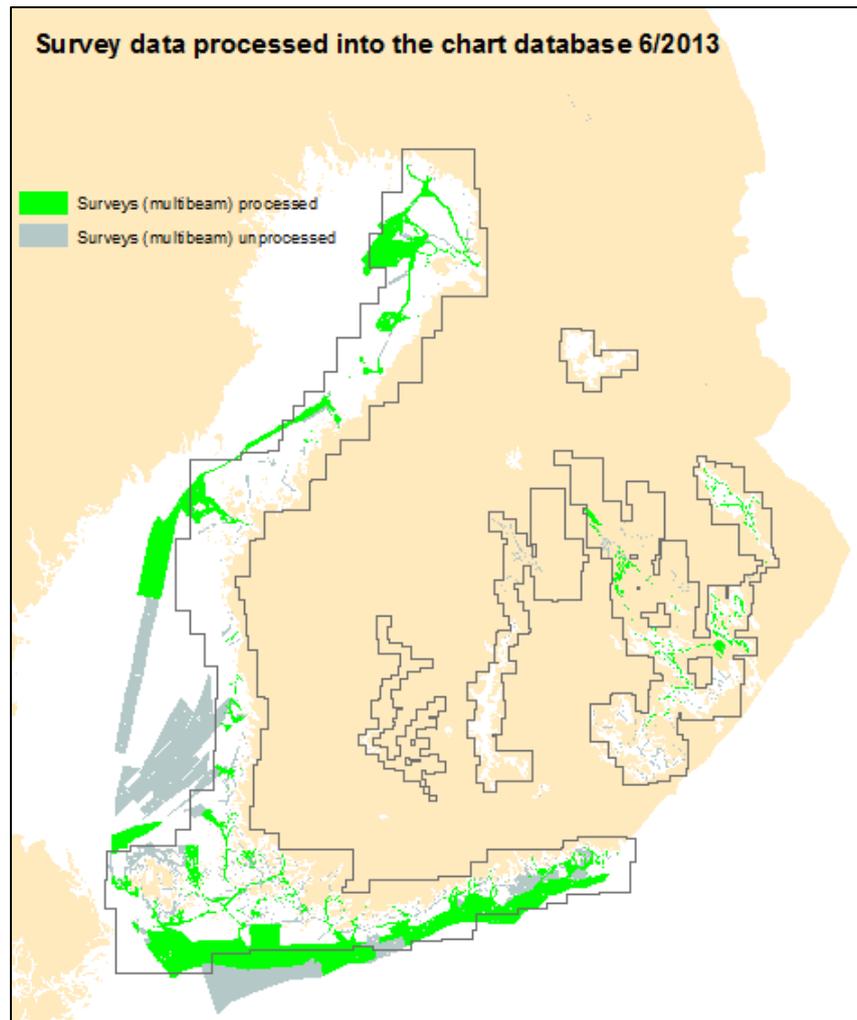


Fig. 5. Multibeam survey data processed into the chart database by end of June 2013.

3. Nautical Charts

Printed charts

Printed charts have been produced mainly according to the plans. Three deviation reports have been issued. New editions were published on three chart series (G, B, L) and 19 nautical charts. Three totally new charts (103, 109 and 132) were published. To keep (some) charts in continuous updating has helped to release new editions.

Statistics for sold charts are shown in *Table 2* and in *Fig.6*. In addition to these there are many adopted charts sold by UKHO and Germany.

The publishing and marketing contract for printed charts was completed. For the next years the Finnish nautical charts will be published and marketed by *Karttakeskus Oy*. From the beginning of 2013 end user prices have been reduced by 30%.

Chart product	2009	2010	2011	2012
<i>International traffic</i>				
Approach charts	5082	6098	3580	5379
General charts	2856	2539	1772	1620
Harbour charts	937	659	732	1267
Inland charts (for international traffic)	826	882	337	114
Inland chart series (for international traffic)	1488	1672	2103	1998
<i>Domestic traffic</i>				
Chart series (sea area)	10478	14674	11695	11116
Inland charts	1521	1423	1384	1000
Inland chart series (for domestic traffic)	1841	2218	1862	1503
Other charts	377	222	5	0
Total sold copies	25406	30387	23470	24006
Change [%]		19,6	-22,8	2,20 %

Table 2 Statistics of sold Finnish nautical charts in 2009 – 2012.

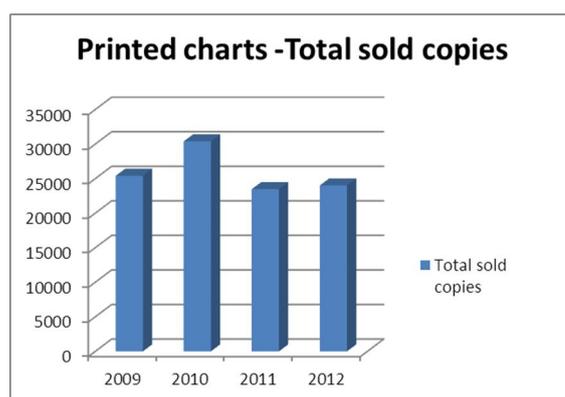


Fig. 6. Amount of sold Finnish nautical charts in 2009 – 2012.

ENC production and distribution

ENC production and distribution has been mainly according to the plans. In 2012 8 new cells and 44 New Editions have been released. ENC Statistics are in [Table 3](#) and [Table 4](#).

	No of releases		
	2010	2011	2012
New cells	54	14	8
New editions	23	1	44
ER updates	453	142	449
Total cells	151	205	192

Table 3. Statistics of produced Finnish ENCs

	Use of Finnish ENCs			
	2009	2010	2011	2012
No of ships	937	1153	1094	1239
No of customers	304	340	386	453
No of licenced cells	45804	53472	50628	53629

Table 4. Statistics for the use of Finnish ENCs

4. Nautical publications

NtMs has been published according to the plans. Statistics are shown in *Table 5*. The Notices to Yachtsmen has been suppressed by the end of 2012. The content and presentation of the information in Finnish NtMs are being harmonized more with IHO S-4 specifications.

Publication/ Service	No of releases		
	2011	2011	2012
NtM issues	36	36	36
NtM notices	596	680	398
NtY issues	5	5	5
ER updates	453	766	449

Table 5: Statistics for nautical publications

There are currently 56 charts in chart based NtM update service.

5. MSI

In total 265 navigational warnings were published during 2012 (248 in 2011).

6. C-55

Latest updates to C-55 have been sent to the IHB in August 2013, but it seems that the C-55 has not been updated on IHO web pages since September 2011.

7. Capacity building

Nothing to report.

8. Oceanographic activities

There have been contacts to Finnish Geodetic and Marine Research institutes and to BOOS representative within the Chart Datum Working Group issues.

9. Other activities

A study of service level assignment for leisure craft customers has completed. Some harmonization actions will be taken place between fairway maintenance and chart publication.

Based on Bilateral Arrangements the adoptions of printed charts with Germany (12 charts) and UKHO (9 charts) have been expanded. Some obstacles for adoption have been solved during the last year i.e. two sided charts have been replaced by one sided.

FHO has adopted one Swedish HO chart covering both parties sea area. FHO will evaluate the experiences. Especially the updating process is in focus.

The FHO has continued the implementation of "Open Data" services. A proposal was made to the Ministry of Finance for compensating the opening. The outcome was that fees will still be collected but this issue will be re-evaluated on 2014.

Finland is participating to the following IHO Committees and WGs: IRCC, HSSC, IRCC/WEND-WG (representing BSHC), HSSC/TSMAD, HSSHC/DIPWG, HSSC/DQWG, HSSC/CSPCWG, HSSC/MSDIWG, HSSC/SNPWG, HSSC/TWLWG, BSHC, NHC, ARHC, BSHC/CDWG (Chair), BSHC/BSICCWG (Chair), BSHC/BSDIWG, BSHC/BSMSDIWG, BSHC-HELCOM/MWG (Chair), and PRIMAR and its WGs.

In 2012 the FHO has arranged the BSHC/DBWG meeting (June), BSHC/CDWG meeting (August), BSHC/MWG meeting (September), BSHC 17th Conference (September), IHO-HSSC/SNPWG15 meeting (November) and in 2013 NHC Workshop on Validation of Multibeam data (February), BSHC/MWG meeting (March), BSHC/DBDB meeting (April) and HSSC/TWLWG5 (May).

10. Conclusions

This report highlights the main achievements of the Finnish Hydrographic Office since BSHC 17th Conference in September 2012.
