# NATIONAL REPORT OF ESTONIA 

## Executive summary

This report summarizes the activities of the Estonian Maritime Administration in the field of hydrography since the Baltic Sea Hydrographic Commission 15th Conference in 2010.

## 1. Hydrographic service

The service in the field of hydrography is generally provided by two departments of the Hydrography and Aids to Navigation Division (head Mr Toivo Prela up to May 2011 and currently Mr Taivo Kivimäe) of the Estonian Maritime Administration:

1) Hydrography Department (head Dr Jaan Lutt),
2) Cartography Department (head Mr Tõnis Siilanarusk)

Altogether about 35 specialists are occupied in those two departments.

## Survey vessels

The Hydrography Department (13 employees) deals with surveying (data collecting and post-processing). For surveys the following hydrographic vessels are used:

1) SEKTORI - a 36 m single-hull multipurpose ship (buoy tender and hydrographic vessel) for open sea (starting from the beginning of 2009);
2) EVA-320 - a 18 m twin-hull survey vessel for coastal areas;
3) AMA-080 - a 6 m single-hull survey-boat on rivers and shallow coastal areas;
4) EVA-301 - a 20 m twin-hull multipurpose vessel for survey in inland waters and for maintenance of aids to navigation.

All survey vessels are equipped with multi-transducer sonar-systems (developed by Ahero Ltd, Estonia). Survey software has been developed by R-SYSTEM Ltd. For positioning RTK-GPS is used.

In August 2009 the Estonian Maritime Administration signed an agreement with Abeking \& Rasmussen (Germany) for building a specially designed and equipped hydrographic vessel for survey in open sea and coastal areas. The type of the ship is SWATH, and technical data are: length -25 m , width -13 m , draught 2.7 m . The vessel will be completed in spring 2012.

## Hydrographic survey

Hydrographic survey in Estonian waters was carried out as follows:
2010
a) $580 \mathrm{~km}^{2}$ - on HELCOM routes in the Gulf of Finland;
b) $630 \mathrm{~km}^{2}$ - on coastal routes (Gulf of Finland);
c) $138 \mathrm{~km}^{2}$ - in inland waters (Lake Peipsi - $98 \mathrm{~km}^{2}$, Lake Võrtsjärv - $40 \mathrm{~km}^{2}$ );
d) $4.0 \mathrm{~km}^{2}$ - in harbour areas (private companies).

2011 (until 30.08.2010)

1) $246.3 \mathrm{~km}^{2}$ - on HELCOM routes in the Gulf of Finland;
2) $292.5 \mathrm{~km}^{2}$ - on coastal routes (Gulf of Finland);
3) $77.6 \mathrm{~km}^{2}$ - in inland waters (Lake Peipsi - $49 \mathrm{~km}^{2}$, Lake Võrtsjärv - $28.6 \mathrm{~km}^{2}$ );
4) $2.0 \mathrm{~km}^{2}$ - in harbour areas (private companies).

All surveys were carried out according to IHO S-44 standards Special, Ia and Ib.

## 3. New charts \& Updates

ENCs:
Estonian waters are completely covered with all relevant navigational bands.
Total: 79 cells in navigational purpose bands $2-6$ (Band $2-7$ cells, Band $3-14$ cells, Band $4-21$ cells, Band 5-13 cells, Band $6-15$ cells (from which 6 cells cover inland waters).
ENCs are updated in real time.
At the end of 2009 WMS website, where the navigational charts and topographical maps are assembled, was accomplished. For more information please click on "MAP APPLICATION FOR ESTONIAN LAND AND SEA AREAS" on the Estonian Maritime Administration home page.
In 2011, 11 new cells, 23 new editions and 237 updates Have been produced.

## ENC Distribution method

EMA has signed Distribution Agreements with: Norwegian Hydrographic Service (PRIMAR - Stavanger), Transas DataCo Ltd, NAVIONICS, JEPPESEN Italia SRL, Maptech, Garmin Ltd, Tridentnav Systems HB, Euronav Ltd and ChartPilot Ltd.

Currently (at the beginning of September 2011) 865 vessels are using more than 22500 of our ENC cells for navigation in Estonian waters.

## RNCs

Not produced

## INT charts

The EMA produces and updates 11 INT charts.

## National paper charts

The portfolio of the currently updated charts for Estonian waters comprises 65 charts produced in accordance with international standards (11 of them are INT charts). In 2010, 7 new charts were printed, in 2011 - 3 charts.

## Other charts, e.g. for pleasure craft

In 2010 one small (A1) chart album and in 2011 one (A2) chart album were printed.

## 4. New publications \& Updates

## New Publications

In 2010 a new List of Lights for Estonian waters was published. From May 2011 the List of Lights for Estonian waters (monthly updated) is available on the EMA website.

## 5. MSI

## Existing infrastructure for transmission

NAVAREA 1 Baltic sea sub area co-ordinator Sweden is responsible for NAVTEX Service covering Estonian waters and messages are transmitted by Swedish (Stockholm Radio) and Estonian (Tallinn Radio) transmitters.

## 6. S-55

Latest update (Tables)
See Annex 1

## 7. Capacity Building

Offer of and/or demand for Capacity Building
Nothing to report

## 9. Other activities

## Participation in IHO Working Groups

The EMA is participating in the following committees and WGs:
HSSC, SNPWG and MSDIWG.
Meteorological data collection
None

Geospatial studies
Cooperation with involved institutions to prepare for INSPIRE Directive.

## Annex 1

| Maritime <br> Nation/Area | Nation or <br> Area Code | Region <br> ID | Nation or <br> Area <br> $(\mathbf{N ~ o r ~ A ) ~}$ | EEZ <br> $(\mathbf{s q ~ k m ~ x ~}$ <br> $\mathbf{1 0 0 0})$ | Length of <br> Coastline <br> $(\mathbf{k m})$ | Data for S <br> Edition M |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Estonia | EE | EU | N | 36.3 | 3780 | 1 |

Annex 2
Hydrographic Resources

| Maritime Nation/Area | Hydrographic Surveying Vessels |  |  |  | Hydr. Staff |  | Positioning Methods |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | > 100 m | $\begin{aligned} & 50 \mathrm{~m}- \\ & 100 \mathrm{~m} \end{aligned}$ | $\begin{gathered} 25 \mathrm{~m}- \\ 50 \mathrm{~m} \end{gathered}$ | < 25 m | Specialis ts | Assistan ts | $\underset{\mathrm{km}}{\text { Long }>} 40$ | Medium 5-40 km |
| Estonia | - |  | 1 | 3 | 13 | - | LRTK | RTK |

