

## **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 20th Conference in 2015.

### **1. Hydrographic service**

The service in the field of hydrography is generally provided mainly by two departments and partly by Fleet Department of the Hydrography and Aids to Navigation Division (head Mr Taivo Kivimäe) of the Estonian Maritime Administration:

- 1) Hydrography Department (head Mr Peeter Väling),
- 2) Cartography Department (head Mr Tõnis Siilanus)

Altogether about 34 specialists are occupied in those two departments and partly 18 seafarers from Fleet Department.

#### **Survey vessels**

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

- 1) JAKOB PREI (crew 8 person) – 25 m SWATH type survey vessel for open sea;
- 2) EVA-320 (crew 4 person) – 18 m twin-hull survey vessel for coastal areas;
- 3) KAJA (crew 1 person) – Operates since April 2016. 7,3 m twin-hull survey-boat on rivers and shallow coastal areas. Building was partly financed by FAMOS.
- 4) EVA-301 (crew 5 person) – 20 m twin-hull multipurpose vessel for survey in inland waters and for maintenance of the aids to navigation.

#### **Hydrographic survey**

In 2015 hydrographic survey in Estonian waters was carried out as follows:

- 1) 1900 km<sup>2</sup> – on HELCOM routes in the Gulf of Finland and the Northern Baltic (CAT I and CAT II). CAT I areas are now completed.
- 2) 173 km<sup>2</sup> – on coastal routes in the Gulf of Finland (CAT II);
- 3) 65 km<sup>2</sup> – Lake Peipsi;
- 4) 21,5 km<sup>2</sup> – Lake Võrtsjärv;
- 5) 4 km<sup>2</sup> – Harbour areas (surveyed by private companies).

All surveys were carried out according the IHO S-44 standards Special, Ia and Ib. Both Cat I and Cat II surveys are fully covered by FAMOS.

For maintaining and accessing survey data a web-accessible database called the Hydrographic Information System (HIS) is used. It is a seamless database for hydrographic information such as survey areas, depths, underwater objects, contours and storage for raw data. Management of all Estonian survey areas including inland waters is carried on depending on the status of the area (planned, under survey, surveyed, under cleaning, cleaned, under validation or final). Survey data from other parties/companies are included in HIS as well. Backup of data is automatic. Public access (without download services so far) is available at the following link: <https://195.80.112.238:8443/HIS/Avalik?REQUEST=Main> .



New twin-hull survey-boat KAJA

### 3. New charts & Updates

#### ENCs:

Estonian waters are completely covered with all relevant navigational bands.

Total: 127 cells in navigational purpose bands 2 – 6 (band 2 – 7 cells, band 3 – 14 cells, band 4 – 25 cells, band 5 – 17 cells, band 6 – 64 cells). ENCs are updated in real time. In 2015 10 new cells, 25 new editions and 317 updates were produced.

At the end of 2009 WMS web page was accomplished where the navigational charts and topographical maps are assembled. For more information please click on the Estonian Maritime Administration home page “MAP APPLICATION FOR ESTONIAN LAND AND SEA AREAS”

Starting from 2015 EMA is developing new WMS web page for smart devices. The first version is available on the web page <http://gis.vta.ee/nutimeri/> .

In 2016 12 new cells, 17 new editions and 312 updates were produced.

## **ENC Distribution method**

EMA has signed Distribution Agreements with: Norwegian Hydrographic Service (PRIMAR – Stavanger), Transas DataCo Ltd, NAVIONICS, JEPPESEN Italia SRL, Garmin Ltd, Tridentnav Systems HB, Euronav Ltd and several other derived product producers.

## **RNCs**

Not produced.

## **INT charts**

EMA produces and updates 18 INT charts.

## **National paper charts**

The portfolio of the currently updated charts for the Estonian waters comprises 65 charts produced in accordance with international standards. In 2015 8 new charts were printed. In 2016 7 new charts were printed.

The scheme of the Estonian paper charts is given in:

<http://adam.vta.ee/teenused/hnt/dokumendid/4kartogrammi.pdf>

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

New revised edition of “Charts of Estonia”, Vol 3, “From Saaremaa to Ruhnu” was published in March 2016. For pleasure craft EMA produce all together 4 volumes of “Charts of Estonia” in A3 format.

## **4. New publications & Updates**

### **New Publications**

Starting from 2011 EMA is publishing the *List of Lights* and *Notice to Mariners* digitally, available on the home page (<http://www.vta.ee/database-of-aids-to-navigation/> and <http://www.vta.ee/atp/index.php?id=1748>).

Starting from 2012 EMA is also publishing the *Sailing Directions* digitally on the homepage (<http://www.vta.ee/atp/index.php?id=18625>).

Starting from 2013 EMA is administrating State Port Register (<http://www.vta.ee/state-port-register-2/>) State Port Register will provide an overview of all ports registered in Estonia, including maritime ports and inland ports. The register contains information about port location, port technical data, port services, port manager and harbour master.

Starting from 2015 EMA is publishing the full digital database of aids to navigation, available only in estonian language on the EMA home page (<http://www.vta.ee/database-of-aids-to-navigation/>).

## **5. MSI**

### **Existing infrastructure for transmission**

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

## **6. S-55**

### **Latest update (Tables)**

See ANNEX 1 and ANNEX 2

## **7. Capacity Building**

One cartographer is receiving CAT B training course, financed by NIPPON Foundation, on nautical cartography at UKHO, September – December, 2016.

## **8. Oceanographic activities**

Nothing to report

## **9. Other activities**

### **Participation in IHO Working Groups**

EMA is participating in the following committees and WG:  
HSSC, ENCWG, S-100WG, NIPWG

### **Meteorological data collection**

In frame of the project EfficienSea (Efficient, Safe and Sustainable Traffic at Sea) for the Baltic Sea a portal called METOC (<http://on-line.msi.ttu.ee/metoc/>) was established. This portal gives information about all operative/ real time measurements in the Estonian coast and coastal sea. The METOC collects all measured data from different measurement stations of the Marine System Institute of the University of Technology of Tallinn, the Estonian Environment Agency (EEIC) and also from sensors of navigational buoys of the Estonian Maritime Administration. From measurement stations the following information is available, which is important for navigation: wind speed and direction, visibility, sea level, wave height etc. From buoys information regarding wave height and period is available.

Information regarding weather observation and forecast is available on the home page of the Estonian Environment Agency (<http://www.ilmateenistus.ee/?lang=en>).

### **Geospatial studies**

Data for INSPIRE Directive Annex I, II ja III is available for public.

## ANNEX 1

### Basic Data

Maritime Nation/Area	Nation or Area Code	Region ID	Nation or Area (N or A)	EEZ (sq km x 1000)	Length of Coastline (km)	Data for S-55 Edition No.	Latest Update	IHO Member State
Estonia	EE	EU	N	36,3	3780	1	June-08	Y

## ANNEX 2

### Hydrographic Resources

Maritime Nation/Area	Hydrographic Surveying Vessels				Hydr. Staff		Positioning Methods		
	> 100 m	50 m - 100 m	25 m - 50 m	< 25 m	Specialists	Assistants	Long > 40 km	Medium 5-40 km	Short Range
Estonia	-	-	1	3	13	-	LRTK	RTK	RTK