

NATIONAL REPORT OF ESTONIA

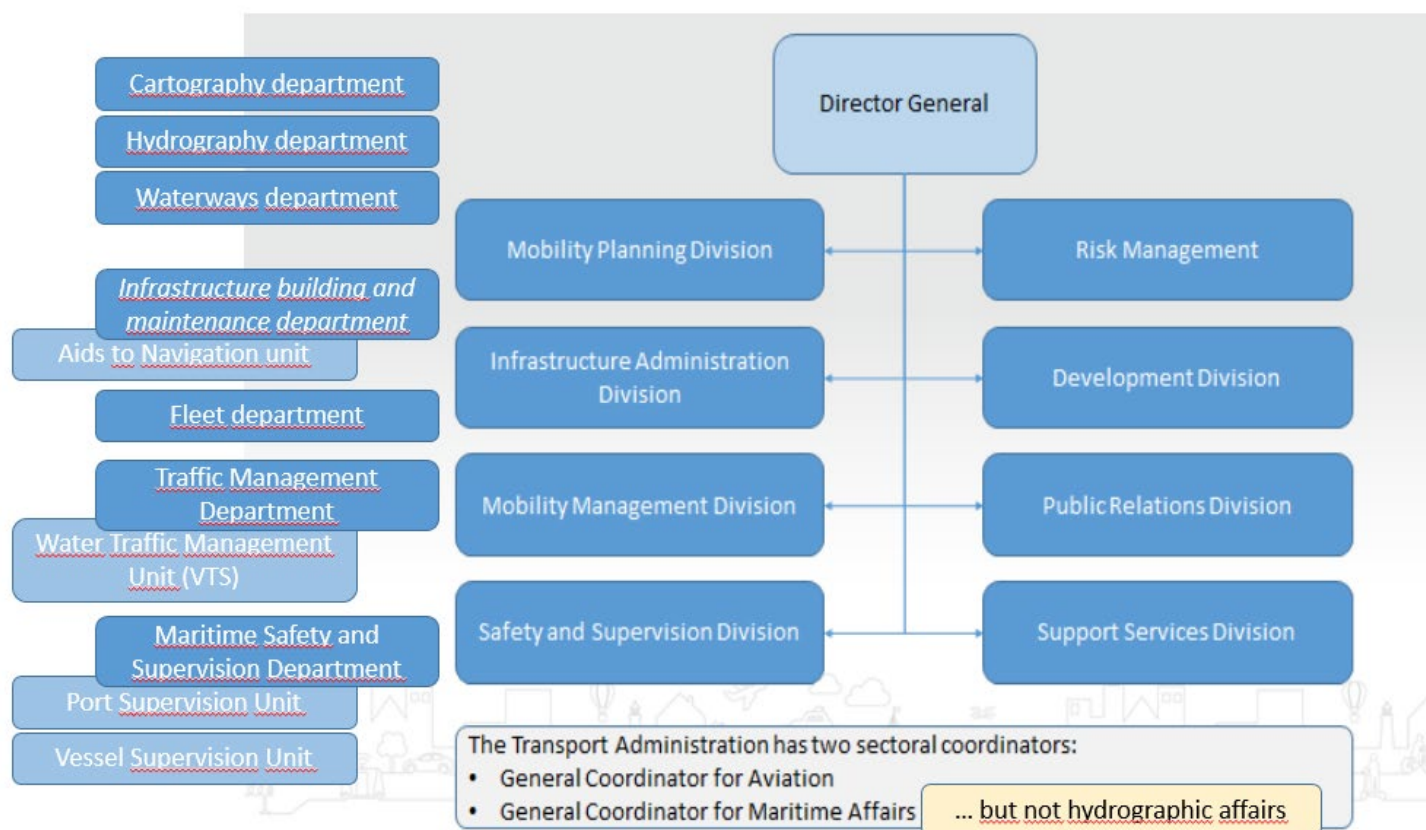
Executive summary

This report summarizes the activities of Estonian Transport Administration (ETA) in the field of hydrography since the Baltic Sea Hydrographic Commission 25th video conference in 2020.

- Merger of the Estonian Maritime Administration to Estonian Transport Administration and latter restructuring of the Maritime Division
- Information about the hydrographic surveys and cartographic production

1. Hydrographic service

On 1st of January 2021 the Civil Aviation Administration, the Maritime Administration and the Road Administration was merged into the Transport Administration that is their legal successor. From 1.01.2021 until 1.07.2021 Maritime Division of the ETA was responsible for hydrographic activities. On 1st of July Estonian Transport Administration established a new structure, where hydrographic activities in Estonian Transport Administration are handled by the Mobility Planning Division that arranges the work of cartography, hydrography and waterways departments.



The service in the field of hydrography is provided by two departments:

- 1) Hydrography Department (head Mr. Peeter Väling),
- 2) Cartography Department (head Mr. Olavi Heinlo)

Also partly by Waterways Department and Fleet Department under the Infrastructure Administration Division of the ETA. IHO Yearbook has been updated for new National Hydrographer and contacts.

2. Surveys

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 2020 hydrographic survey in Estonian waters was carried out as follows:

- 1) 1216 km² – on HELCOM routes in the Gulf of Finland, Gulf of Riga and the Northern Baltic (CAT II and III).
- 2) 47 km² – Lake Peipsi and river Emajõgi;
- 3) 3 km² – Harbor areas (surveyed by private companies)

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

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://his.vta.ee:8443/HIS/Avalik?REQUEST=Main>

At 2020 new Multibeam Echosounder RESON T50 was installed on Jakob Prei replacing the old RESON 7125 SV2. This in turn is now used on another ship EVA-301 working in inland waters.



New surveys on 2020

CSB and SDB data are not used in Estonia.

3. New charts & Updates

From 01st of January 2018 Estonian gave up the Kronstadt Tide Gauge that served as zero point of the height system so far and Estonian Maritime Administration started implementation of Baltic Sea Chart Datum (BSCD2000) from beginning 2018 for ENC-s and Paper Charts

ENCs:

Estonian waters are completely covered with ENC-s on all relevant navigational bands.
Estonia has no overlaps according to BSICCWG7 BSHC overlap report – May 2021.

At the end of 2020 total 136 cells in navigational purpose bands 2 – 6 (band 2 – 7 cells, band 3 – 14 cells, band 4 – 26 cells, band 5 – 17 cells, band 6 – 72 cells).

In 2020 3 new cells, 91 new editions and 391 updates were produced.

In 2020 new editions of 4 harbour ENC-s, 29 berthing ENC-s were produced in new height system – BSCD2000. By the end of 2020 95% of berthing and harbour ENC-s was published in BSCD2000 vertical system. In 2021 is planned to finish the remaining large scale ENC-s and start transition of large scale ENC to BSCD2000 vertical system.

ENC Distribution method

ETA is a member of RENC (PRIMAR) and also provides data for usage in derived products for various producers.

RNCs

Not produced.

INT charts

At the end of 2020 ETA produced and updated 23 INT charts.

National paper charts

Estonian waters are completely covered with paper charts on all relevant navigational bands. The portfolio of the currently updated paper charts for the Estonian waters comprises 66 charts produced in accordance with international standards.

In 2020 new editions of 1 harbour and 3 berthing paper charts were produced in new height system – BSCD2000. 28 harbour plans was produced for Sailing Directions and published for chart albums through NtM in BSCD2000.

The scheme of the Estonian paper charts is given here:

<https://veeteedeamet.ee/en/hydrography-and-aids-navigation/navigational-carts>

Other charts, e.g. for pleasure craft

For pleasure craft ETA produces all together 3 volumes of “Charts of Estonia” in A3 format. In 2020 a new edition of Charts of Estonia Vol 2 Väinameri “Suurupi Peninsula to Saaremaa” was produced. In this edition all berthing and harbour plans are in BSCD2000 and approach/coastal charts in BHS-77 vertical system.

4. New publications & Updates

New Publications

No new navigational publications were published in 2020

Digital publications *List of Lights*, *Notice to Mariners* and *Sailing Directions* are available on the homepage of ETA <https://transpordiamet.ee/en> under the Mobility and Transport section and updated monthly.

In 2020 Port Register database was released <https://www.sadamaregister.ee/>


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 harbor master.


Full digital database of aids to navigation, available in Estonian language (but successfully translatable by browser) is available at <https://nma.vta.ee/>

5. MSI

Existing infrastructure for transmission

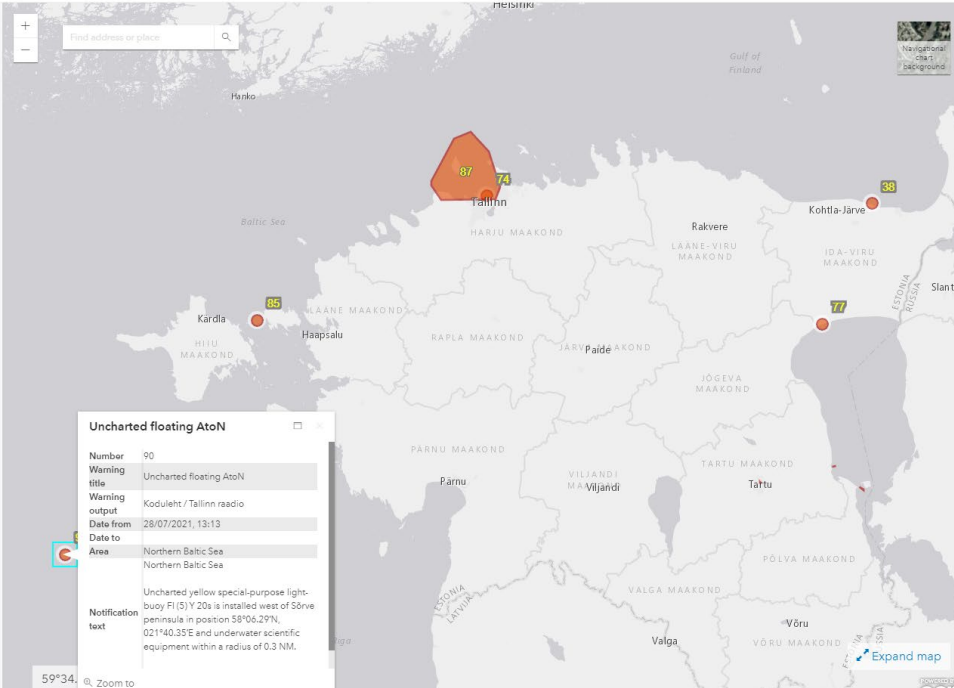
Navigational warnings are published on the ETA navigational warning GIS application (<https://gis.vta.ee/navhoiatused/en.html>) and are also announced over the maritime radio in Estonian and English. The radio frequencies, channels and times can be checked on the State Infocommunication Foundation website - <https://www.riks.ee/maritime-radio-communications/chart-of-base-stations/submitted-and-monitoring-messages-incl-mf-vhf>


Navigational Warnings
 Estonian Transport Administration

[Subscribe to warnings](#)


No 90: Uncharted floating AtoN 28/07/2021, 1:13 PM -	🔍
No 89: Competitions 28/07/2021, 11:00 AM - 01/08/2021, 6:00 PM	🔍
No 88: Construction works 27/07/2021, 3:00 PM -	🔍
No 87: Radar coverage 26/07/2021, 1:35 AM -	🔍
No 85: Uncharted obstruction 21/07/2021, 3:34 PM -	🔍
No 80: Dredging works 14/07/2021, 9:03 AM -	🔍
No 77: Fixed beacon light temporarily unlit 07/07/2021, 1:47 PM -	🔍
No 74: Fixed beacon light temporarily unlit 01/07/2021, 1:27 PM -	🔍
No 70: Dredging works 28/06/2021, 11:04 AM -	🔍
No 38: Harbour entrance limit 23/04/2021, 11:10 AM -	🔍

Additional information about: [NAVTEX](#) and [Tallinn radio](#).



Navigational warning GIS application

NAVAREA 1 Baltic Sea sub area coordinator Sweden is responsible for NAVTEX Service covering the Estonian waters, while ETA provides the content for the NAVTEX warnings for Estonian sea area. Messages are transmitted by State Infocommunication Foundation transmitters.

In 2020 Estonia published 143 navigational warnings of which 37 warnings was transmitted over NAVTEX

6. C-55

Information about surveys updated July 2020 (details on IHO webpage)

7. Capacity Building

No capacity building to report for 2020

RENC S-100 training planned for 2021

8. Oceanographic activities

Nothing to report

9. Spatial Data Infrastructures

Marine data is used for variety of non-navigational purposes in Estonia. Maritime spatial planning, infrastructure development, environmental-, educational- and scientific purposes. ETA has published marine spatial data according to the INSPIRE requirements in National Spatial Data Portal - <https://geoportaal.maaamet.ee/eng/INSPIRE-p712.html>

ETA is a member of Estonian Maritime Spatial Planning working group that is led by Ministry of Finance Overview of MSP activities can be found here <http://mereala.hendrikson.ee/>

10. Innovation

At 2020 new Multibeam Echosounder RESON T50 was installed on Jakob Prei replacing the old RESON 7125 SV2. This in turn is now used on another ship EVA-301 replacing old Estonian multichannel system.

11. Other activities

Participation in IHO Working Groups

ETA is participating in the following committees and WG: HSSC, ENCWG, S-101PT, NIPWG, CDWG, NCWG, BSICCWG, BSMSIWG, NSBSMSDIWG, MWG and BSBDWG.

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>).

Good solution for checking water level during the transition period from BHS77 to BSCD2000 is provided by the Tallinn University of Technology Marine Systems Institute <http://on-line.msi.ttu.ee/meretase/?en>

Geospatial studies

GIS

All ENC-s, hydrographic data, waterways data, aids to navigation data for Estonia is displayed in web application Nutimeri. Since 2019 the web application also displays AIS data <http://gis.vta.ee/nutimeri/>

All Estonian navigational warnings are available on GIS <https://gis.vta.ee/navhoiatused/en.html>

Magnetic and gravity surveys

Magnetic and gravity surveys are handled by Estonian Geological Service and Estonian Land Board respectively.