

NATIONAL REPORT OF ESTONIA

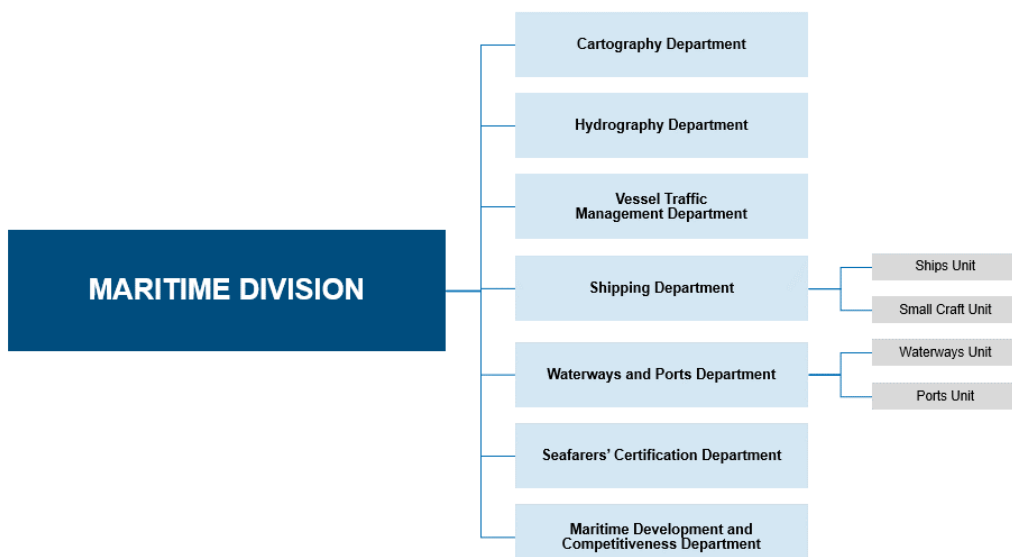
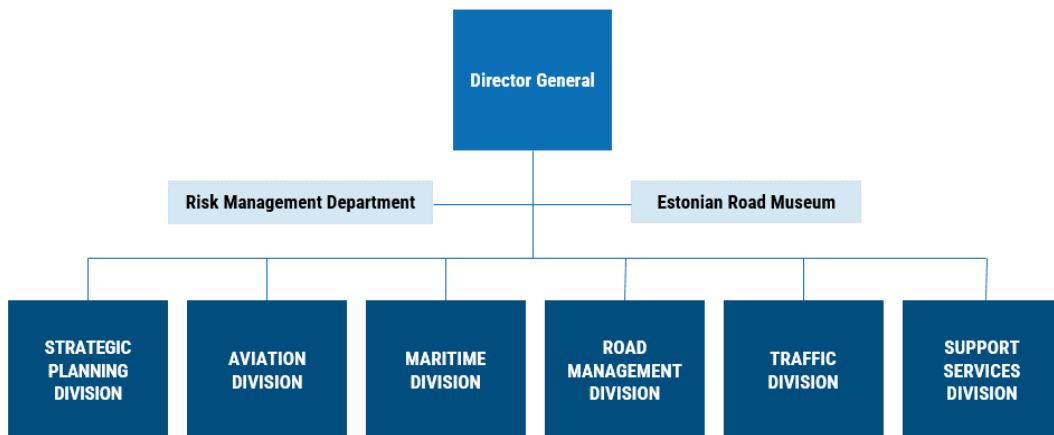
Executive summary

This report summarizes the activities of Estonian Transport Administration (ETA) in the field of hydrography since the Baltic Sea Hydrographic Commission 28th conference in 2023.

- Structural overview of the organization
- Information about the hydrographic surveys and cartographic production

1. Hydrographic service

As of 1.07.2023 the structure of the Transport Administration and Maritime Division are as follows:



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

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

Some activities also by Waterways and Ports Department. IHO Yearbook P-5 is up to date for relevant contacts.

2. Surveys

Survey vessels

The Hydrography Department (13 officers) deals with surveying (data collecting and post-processing). For surveys, the following hydrographic vessels of the Estonian State Fleet 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) – 7.3 m twin-hull survey-boat on rivers and shallow coastal areas.
- 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

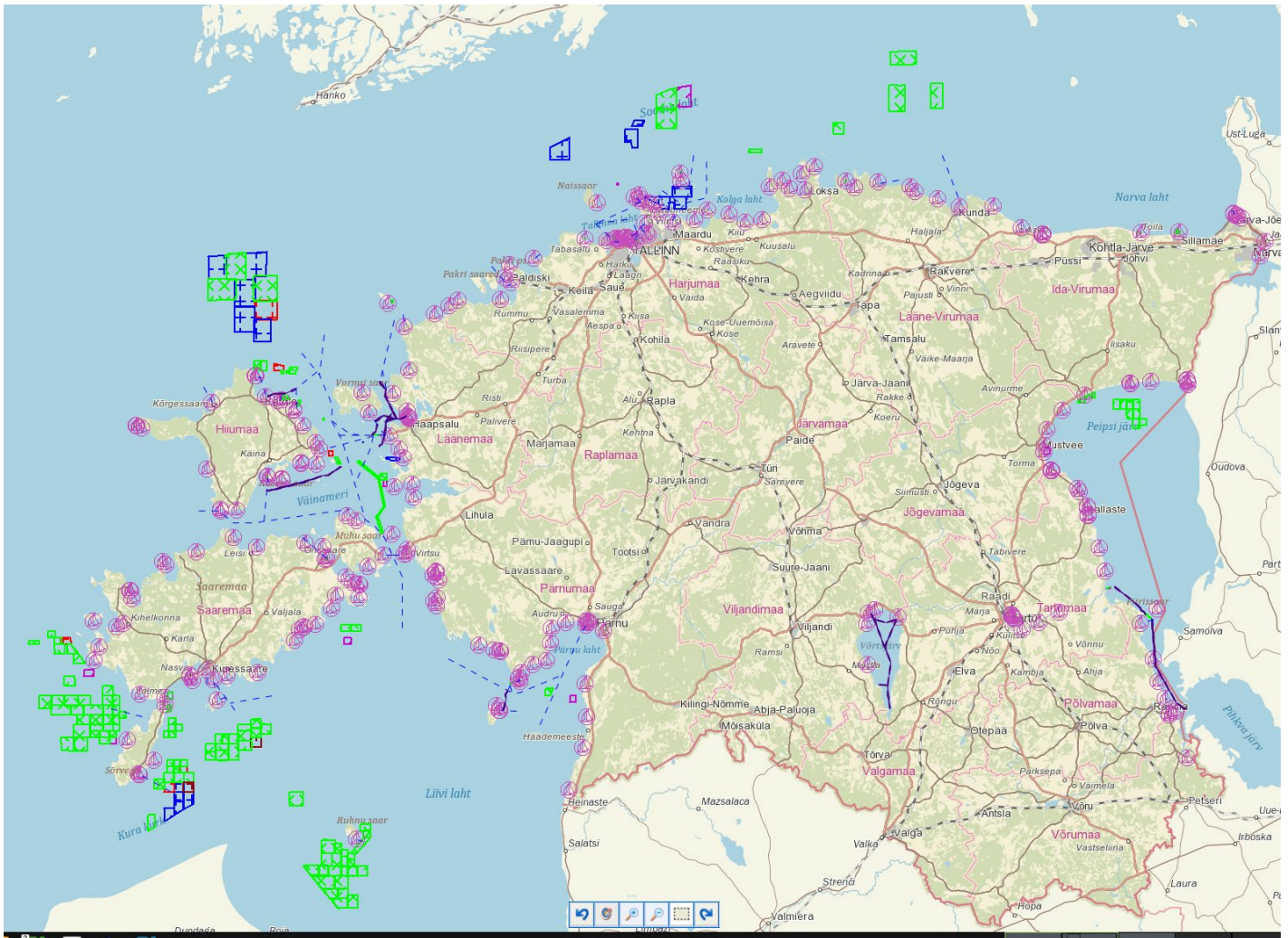
In 2023 hydrographic survey in Estonian waters was carried out as follows:

- 1) 1650 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;
- 3) 2 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>

CSB and SDB data are not used in Estonia.



New surveys on 2023

3. New charts & Updates

ENCs:

Estonian waters are completely covered with ENC-s on the relevant navigational bands.

Estonia has no overlaps according to BSICCWG10 BSHC overlap report – January 2024 (which is currently the latest overlap report).

In September 2024 Estonia has total of 142 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 – 78 cells).

In 2023 2 new cell, 69 new editions and 365 updates were produced.

All berthing and harbour ENC-s are published in BSCD2000 vertical system. In the beginning of 2025 first 6 Approach ENC is planned to be published in BSCD2000 vertical system and new scale 1 : 22 000.

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

In September 2024 ETA has 24 INT charts published, out of total 27 INT numbers. Latest new editions of INT charts are chart 823/INT1794 "Vene-Balti sadam, Piirivalvesadam, Bekkeri sadam, Meeruse sadam", chart 827/INT1795 " Pakri laht" and 305/INT INT1215 "Ventspils – Paldiski"

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 64 charts produced in accordance with international standards. Chart 951/INT1349 has been canceled due to low demand. We will continue the optimization of paper chart portfolio according to demand.

In 2023 and 2024 no new editions of paper charts were produced in new height system – BSCD2000. Two new editions of paper charts were produced in old height system- BK77. One chart atlas for pleasure crafts were produced (containing 29 harbour plans in new height system-BSCD2000 and 25 charts in scale 1:50 000, 3 charts in scale 1:250 000 and 9 charts about Narva River in scale 1:5000- all in old height system BK77. 24 harbour plans and paper chart cutouts were produced for Sailing Directions and published for chart albums through NtM in BSCD2000. And 3 harbour plans and paper chart cutouts were produced in old height system- BK77.

As of today, we have all paper charts in scales 1:2000 to 1:25 000 published in new height system.

The scheme of the Estonian paper charts is given here:

<https://transpordiamet.ee/en/mobility-and-transportation/navigational-information/navigational-charts>

Other charts, e.g., for pleasure craft

For pleasure craft ETA produces all together 3 volumes of "Charts of Estonia" in A3 format.

4. New publications & Updates

New Publications

No new navigational publications were published in 2023 and all existing publications were updated monthly

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.

Port Register database <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/submitting-and-monitoring-messages-incl-mf-vhf>

Navigational Warnings
Estonian Transport Administration

Subscribe to warnings

Find address or place

Uncharted floating AtoN
Number 90
Warning title Uncharted floating AtoN
Warning output Koduleht / Tallinn radio
Date from 28/07/2021, 13:13
Date to
Area Northern Baltic Sea
Notification text
Uncharted yellow special-purpose light-buoy F(5) Y 20a is installed west of Sõrve peninsula in position 58°06.29'N, 021°40.35'E and underwater scientific equipment within a radius of 0.3 NM.

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 Estonian State Infocommunication Foundation transmitters.

In 2023 Estonia published 166 navigational warnings of which 56 warnings were transmitted over NAVTEX

6. C-55

Information about surveys updated 10.09.2024 (details on IHO webpage)

7. Capacity Building

Nothing to report.

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

In the S-100 related activities ETA is involved in testing conversion of S-57 to S-101 and sharing their results with RENC and members of the community. The aim is to improve the ETA S-57 data for better readiness for

conversion and also to provide feedback to RENC, software producers and IHO WG-s for developing better standard and software tools. HIS is now capable of producing S-102 version 2.2 datasets. Sample data was sent to Primar RENC for testing and the tests were successful. Now the process of defining areas for S-102 datasets and their resolution is in progress. Delivery of these datasets is planned to do via PRIMAR.

Baltic Sea e-Nav project

ETA is a partner in the Baltic Sea e-Nav project.

Common S-102 dataset between Estonia and Latvia from test area in Irbe strait has been compiled and delivered to BS e-Nav project place. Conversion of test datasets from S-57 to S-101 for the common Estonia-Latvia test area in Irbe Strait is in progress.

ETA is collaborating with Estonian Environmental Agency in looking possibilities to start the provision of S-104 and S-111 data.

11. Other activities

Participation in IHO Working Groups

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

ETA was actively involved in Primar S-101 Conversion Task Force until the end of 2023, contributing to standard and software development. The task force project is now closed.

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.