National Report of Finland

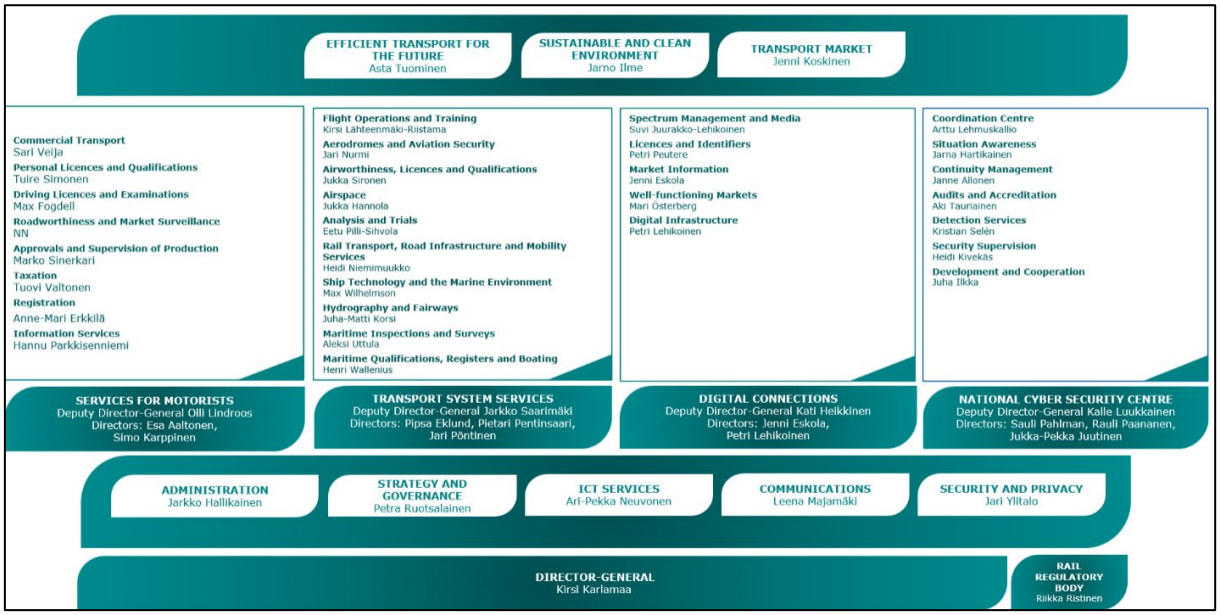
Executive Summary

This report provides information of the specific activities and point of interests to the Arctic Region Hydrographic Commission.

- Reorganisation of the Finnish Transport and Communications Agency Traficom.
- The hydrographic survey priorities.
- A new Hydrographic Data Management and Nautical Chart Production System (MERTA/AHTI).
- The implementation of new vertical chart reference - Baltic Sea Chart Datum 2000 (BSCD2000).

1 Hydrographic Office

Reorganisation of the Finnish Transport and Communications Agency Traficom at the beginning of 2020.



The Finnish HO's tasks and personnel are reorganised into "Hydrography and Fairways" unit under "Transport System Services" business sector. The staff working for hydrography consist 55 specialist. Annual budget for hydrographic activities is about 10 million euros.

The FHO has been performing according to the Quality Management System based on the ISO 9001 standard since 2011.

2 Hydrographic Surveys

Hydrographic surveys have focused on shallow nearshore sea areas on the Gulf of Finland and in the Archipelago Sea as well as on fairway resurveys in the Bay of Bothnia.

Hydrographic LiDAR surveys have utilized to replace SBES surveys on a very shallow waters targeting 100 % coverage on all Finnish waters when complemented data from multibeam surveys.

3 New Charts and Updates

Not Applicable.

4 Nautical Publications

Not Applicable.

5 MSI

Finnish Transport and Communications Agency is responsible for safety radio communications in Finnish territorial waters and for distress radio communications in the deep channels of the Saimaa (inland waters) waterways system.

6 C-55

Not Applicable.

7 Capacity building

Nothing to report.

8 Oceanographic activities

The implementation plan for changing Finnish nautical charts and related hydrographic data to the common Baltic Sea Chart (vertical) Datum (BSCD 2000) has approved 2018. The first step of implementation consist reprocessing the data and informing maritime customers and other stakeholders. FHO is preparing to publish the first set of navigational products with the new vertical reference before end of 2020.

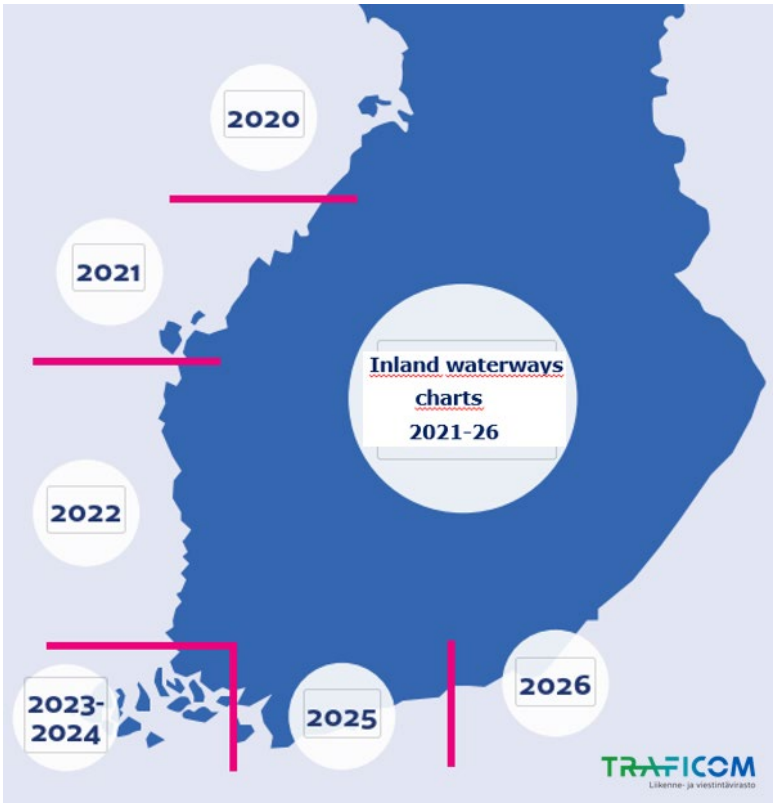


Fig.1. Implementation plan for the new vertical reference, Baltic Sea Chart Datum 2000.

9. Spatial data infratructure

National Geodata Portal

The non-navigational use of hydrographic data has increased exceedingly. A viewing service is in use via the interface of National Geodata Portal providing Inspire specific national spatial data sets, for example. The FHO is actively supporting hydrographic data to the National Geodata Portal. The metadata of FHO is also available at the National Geodata Portal.

Open data view and download services

File download service for viewing and downloading datasets
- Web Map Service
- Web Feature Service

- Tiled map service (WMTS) for viewing FHO nautical chart data in raster format

The data available from these services is not suitable for navigation and does not meet the requirements for an official nautical chart.

Links:

Finnish Transport and Communications Agency (The new data viewing and download service)
https://julkinen.traficom.fi/oskari/?lang=en

National Geodata Portal "Paikkatietoikkuna":
http://www.paikkatietoikkuna.fi/?lang=en

9 Other activities

Finnish National Geodata Portal

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10. Innovation

Bathymetric data processing and management

Additional development of the new bathymetric data management system (MERTA) for FHO is finalised and deployed. The new tools and processes consist sophisticated methods for the management of bathymetric data. The system also includes high level automation when calculating bathymetric grids and surfaces, creating contours and selecting soundings for the navigational charts.

Chart data processing and management

The new system for chart data management and production is accepted for production use (a paper chart production started as of Juni 2020). The data management part of the system has been in use since April 2019 after successful system integrations and data migrations.

The final development phase of the project is related to paper chart production i.e. editing portrayal, sophisticated tools and processes for the "dynamic" cartography and migration of the cartographic edits and products from the legacy system. The remaining project tasks also include additional development and bug-fixing for the ENC production and tools for AML production.

The final acceptance of the system delivery is expected to take place at the end of September 2020.

11. Other activities

FHO has Bilateral Arrangements with UKHO (adoptions of printed Charts), Norway (ENC RENC services), Sweden, Estonia and Germany.

Finland has been a member of the IHO Council and taking part of the HSSC and IRCC meetings.
Finnish experts are actively working in;

- HSSC/NCWG (as Chair)
- HSSC/ENCWG
- HSSC/S-100WG and HSSC/S-101PT
- HSSC/DQWG
- HSSC/NIPWG (as Vice Chair)
- HSSC/TWCWG
- IRCC/WEND-WG (representing BSHC)
- IRCC/MSDIWG
- Baltic Sea Hydrographic Commission including BSHC/BSICCWG (Chair), BSHC-HELCOM/MWG (Chair), BSHC/BSDIWG, BSHC/BS-NSMSDIWG, BSHC/CDWG
- Nordic Hydrographic Commission including NHC/NCPEG, NHC/NSEG
- Arctic Region Hydrographic Commission (as Associate Member) including ARHC/OTWG and ARHC/ARMSDIWG.

Finland is member of the PRIMAR and contribute actively the work of PRIMAR PAC and WGs.

12. Conclusions

This report highlights the general information and main activities (related to Arctic Region) of the Finnish Hydrographic Office since ARHC 9 Conference in August 2019.