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Finnish Transport and Communications Agency

National report of Finland: Status of vertical datum change Overview to new organization

Jyrki Mononen / Traficom

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Reorganization since 1.1.2019

- Finnish Transport Agency splitted in three new organizations
- Transport and Communications Agency – Traficom
- Transport Infrastructure Agency – Väylä
- Traffic Management Finland - state-owned special assignment company

Liikennevirasto (Hydrographic Office)

Trafi Finnish Transport Safety Agency

Viestintävirasto Finnish Communications Regulatory Authority

Liikennevirasto Finnish Transport Agency

TRAFICOM Liikenne- ja viestintävirasto Transport- och kommunikationsverket

Transport and Communications Agency (incl. Hydrographic office)

TRAFFIC MANAGEMENT FINLAND

VTS Finland

VÄYLÄ

Transport Infrastructure Agency

Finnish Hydrographic Office divided in three units

Hydrographic Survey Data Management

Nautical Chart Data Management

Nautical Chart Quality Control

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New datum in the Baltic Sea area and in Finland: Baltic Sea Chart Datum 2000 (BSCD2000)

- New datum in Finnish waters, charts and navigational publications: Baltic Sea Chart Datum 2000, BSCD2000. (realization in Finland: national geodetic height system N2000)
- All the bathymetric data will be stored in data management systems in BSCD2000-datum, legacy data will be transformed from MSL and old height system to BSCD2000.
- First charts to be published in BSCD2000 in 2020.

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Water level information

- Today sea level information is provided mainly in MSL (current year theoretical mean sea level, calculated in Finnish Meteorological Institute)
- Differences between MSL and N2000(BSDC2000) are provided: https://en.ilmatieteenlaitos.fi/theoretical-mean-sea-level.
- Sea levels are given in N2000 (BSDC2000) if asked.
- The plan is to provide sea level information in both MSL and N2000 (BSDC2000) from 2020 ->
- N2000-option will be added to FMI´s open data service.

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The effects of the new datum

- In sea areas, the magnitude of changes will vary depending on the area and age of the data. Difference between reference systems (MSL – BSCD2000) will be 10-20cm and the effect of the land uplift appr. 0 - 60cm.
- In sea areas, authorised draught of fairways may decrease 0–20 cm.
- No changes in inland waters.

Changes, test chart 55 (1:50 000)

Changes, test chart 55 (1:50 000)

The schedule

- BSCD 2000 will be introduced in the nautical charts starting in 2020.
- Expected transition period is 6–8 years.
- Within transition period MSL- and BSCD2000 charts will be published.
- Also water level information shall be given in both datums.

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Communication/co-operation

- Co-operation with Finnish Meteorological Institute has started
- Most important stakeholders (Finnpilot, VTS, ice-breaking) are contacted

Thank you!

jyrki.mononen@traficom.fi

www.traficom.fi

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