



High density contours in the Finnish ENCs

by the Finnish Hydrographic Office

65th Nordic Hydrographic Conference
26 - 27 April 2022

Enriched depth information in the Finnish ENC

A new Nautical Chart Production System (AHTI) with an automatic depth contouring and (semi-) automatic sounding selection tools are in operative use at the Finnish HO.

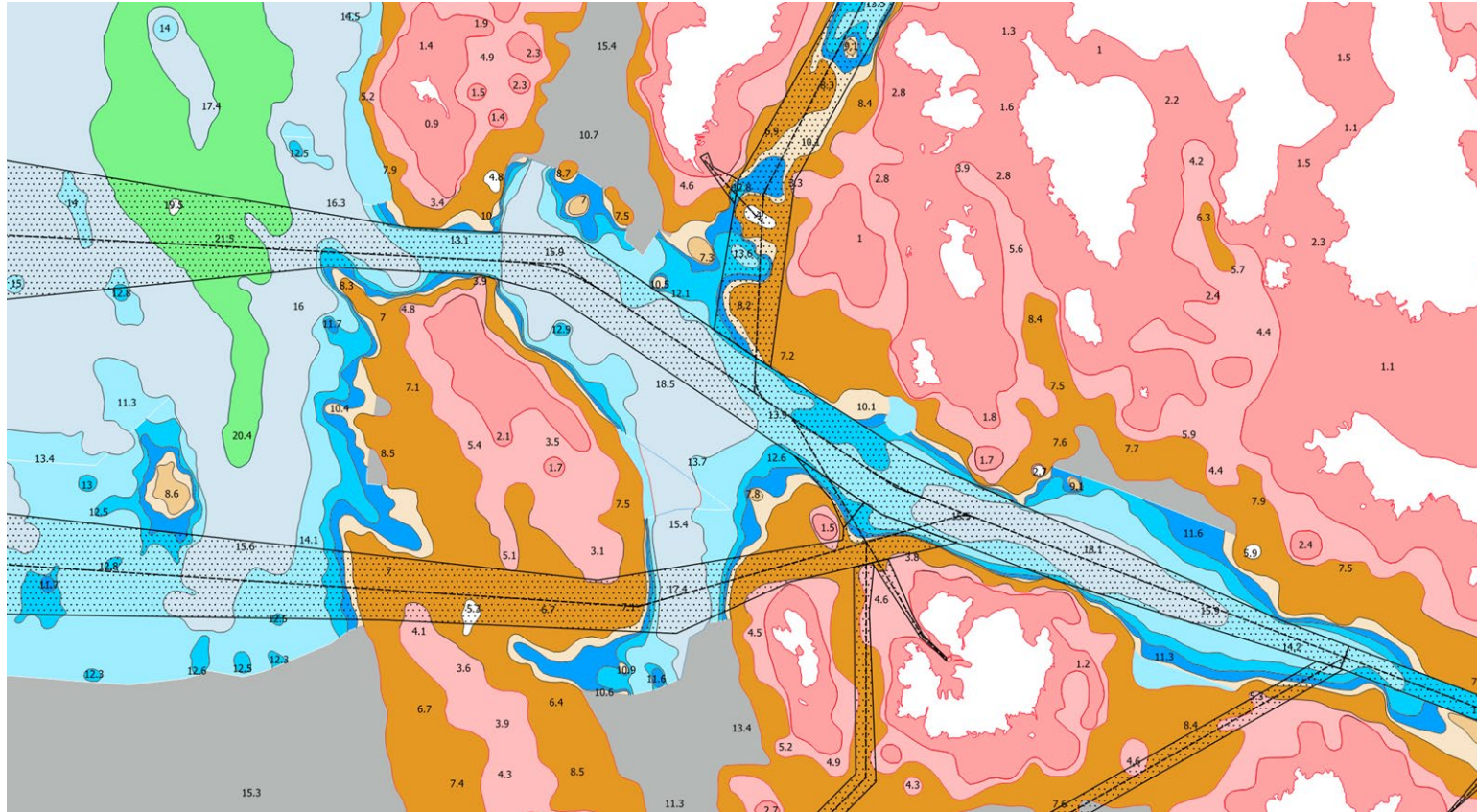
The Rolling coin –method is used for depth contour processing.

A high density contours will be applied for the major merchant fairways and ports in large scale ENCs i.e Berth, Harbour and Approach products.

As a common rule: A one meter interval DEPCONs and DEPAREs for range between 6 meter depth and depth > one meter over the safe clearance depth of the fairway in question.

The first set of ENCs including additional contour intervals and respective depth areas was published in January 2022 from the northern part of the Bay of Bothania.

High density depth contours and depth areas



Traditional contour (depth area) intervals on Finnish ENC and Printed Charts

- ahti:U3_DEPARE_A_0m-3m
- ahti:U3_DEPARE_A_3m-6m
- ahti:U3_DEPARE_A_6m-10m
- ahti:U3_DEPARE_A_10m-15m
- ahti:U3_DEPARE_A_15m-20m
- ahti:U3_DEPARE_A_20m-30m
- ahti:U3_DEPARE_A_30m-50m
- ahti:U3_DEPARE_A_50m-100m
- Etc ...



Additional contour (depth area) intervals on Finnish ENC

- ahti:U3_DEPARE_A_0m-3m
- ahti:U3_DEPARE_A_3m-6m
- ahti:U3_DEPARE_A_6m-10m
- ahti:U3_DEPARE_A_8m-9m
- ahti:U3_DEPARE_A_9m-10m
- ahti:U3_DEPARE_A_10m-11m
- ahti:U3_DEPARE_A_11m-12m
- ahti:U3_DEPARE_A_12m-13m
- ahti:U3_DEPARE_A_13m-15m
- ahti:U3_DEPARE_A_10m-15m
- ahti:U3_DEPARE_A_15m-20m
- ahti:U3_DEPARE_A_20m-30m
- ahti:U3_DEPARE_A_30m-50m
- Etc ...

High density contours from navigators perspective, case Port of Pietarsaari (Jakobstad)

FI4EIYAJ cell before 30 March 2022



Two-way route part (TWRTPT)
 CATGEO Area
 12.3 m
 ORIENT 180°
 TRAFIC two-way(4)
 INFORM Design draught 11 m
 SORDAT 20150625
 SORIND FI,FI,rgstr,VÄRE Dnro VÄYLÄ/1071/06.02.02/2020

Depth area (DEPARE)
 CATGEO Area
 10 m - 15 m
 SORDAT 20150828
 SORIND FI,FI,rgstr,Syvå

Two-way route part (TWRTPT)
 CATGEO Area
 12.8 m
 ORIENT 106°
 TRAFIC two-way(4)
 INFORM Design draught 11 m
 SORDAT 20200219
 SORIND FI,FI,rgstr,VÄRE Dnro VÄYLÄ/1071/06.02.02/2020

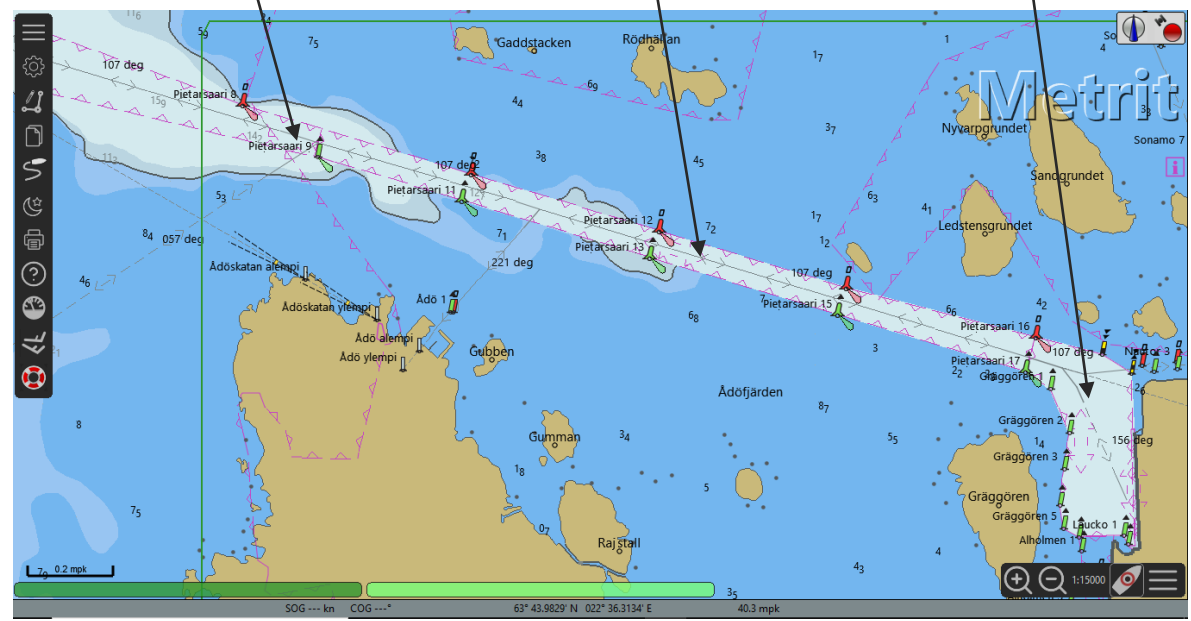
Dredged area (DRGARE)
 CATGEO Area
 12.8 m
 SORDAT 2015
 SORIND FI,FI,rgstr,SYVÅ 26.8.2015 9:47:09

Two-way route part (TWRTPT)
 CATGEO Area
 12.3 m
 ORIENT 180°
 TRAFIC two-way(4)
 INFORM Design draught 11 m
 SORDAT 20150625
 SORIND FI,FI,rgstr,VÄRE Dnro VÄYLÄ/1071/06.02.02/2020

Depth area (DEPARE)
 CATGEO Area
 10 m - 15 m
 SORDAT 20150828
 SORIND FI,FI,rgstr,Syvå

FI4EIYAJ cell after 30 March 2022

<p>Two-way route part (TWRTPT) CATGEO Area 12.9 m ORIENT 102° TRAFIC two-way(4) INFORM For fairway information, see https://fiho.fi/fwy/A215484 SORDAT 20161130 SORIND FI,FI,rgstr,VÄRE Dnro VÄYLÄ/1071/06.02.02/2020</p>	<p>Two-way route part (TWRTPT) CATGEO Area 12.6 m ORIENT 106° TRAFIC two-way(4) INFORM For fairway information, see https://fiho.fi/fwy/A236842 SORDAT 20200219 SORIND FI,FI,rgstr,VÄRE Dnro VÄYLÄ/1071/06.02.02/2020</p>	<p>Two-way route part (TWRTPT) CATGEO Area 12.1 m ORIENT 180° TRAFIC two-way(4) INFORM For fairway information, see https://fiho.fi/fwy/A200195 SORDAT 20150625 SORIND FI,FI,rgstr,VÄRE Dnro VÄYLÄ/1071/06.02.02/2020</p>
<p>Depth area (DEPARE) CATGEO Area 13 m - 15 m SORDAT 20210623 SORIND FI,FI,rgstr,Ahti</p>	<p>Depth area (DEPARE) CATGEO Area 12.6 m - 13 m SORDAT 20210623 SORIND FI,FI,rgstr,Ahti</p>	<p>Depth area (DEPARE) CATGEO Area 12.1 m - 13 m SORDAT 20210623 SORIND FI,FI,rgstr,Ahti</p>





Thank You