EU BSRS Flagship project
“Speed up re-surveying of major shipping routes and ports”

Executing BSHC HELCOM re-survey scheme
-
Finalising Surveys for the Baltic Motorways of the Sea

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FAMOS

FINALISING SURVEYS FOR THE BALTIC MOTORWAYS OF THE SEA

HELCOM re-survey data base

https://helcomresurvey.sjofartsverket.se/helcomresurveysite/

TEN-T MonaLisa project 2010-2013

Finland and Sweden

- ~ 50.000 km² CAT I/II surveys
- ~ 20 M€, TEN-T grant ~9 M€
- Baltic Sea Bathymetry Database:
  http://data:bshc.pro

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

Safe navigation:

Where am I, and how much water is underneath my ship?

To answer this:

- Sea floor needs to be mapped
- Vessel vertical position should known
- A reliable zero level must be defined
- All information must be easily available for the navigator

FAMOS:

✓ Activities 1 & 3
✓ (Galileo)
✓ Activity 2
✓ Activity 4

Having this information available on the vessel bridges is a critical part of the maritime infrastructure

Partners:

- SMA (Swedish HO, lead partner)
- FTA (Finnish HO)
- VTA (Estonian HO)
- MAL (Latvian HO)
- GST (Danish HO)
- Lithuanian Maritime Safety Administration (Lithuanian HO)
- BSH (German HO, activity 2)
- Swedish Land Survey
- German Federal Agency for Cartography and Geodesy
- Geoforschungszentrum Potsdam
- Technical University of Denmark

Activity 2

FAMOS project 2014-2020

89 000 km^2 of Cat I/II

Sweden, Estonia, Finland, Denmark, Latvia, Lithuania

SE
EE
FI
DK
LV
LT
Baltic Sea
Total CAT I/II
Surveyed CAT I/II
FAMOS
Baltic Sea
SE
EE
FI
DK
LV
Surveyed CAT I/II

Bored?

Expected budget per activity

Activity 2:
Where is the zero?

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http://xkcd.com/1318/

Wouldn’t the geoid be great as chart zero?

Gravity meter:

Measure the weight of a test mass in a certain place

Accuracy: about 10^{-9} of earth gravity, on a moving platform (ship, aircraft)

Very delicate and expensive instruments!

One (but not I) can model the geoid from gravity data.

But why?

Why not just use the water level as zero (e.g. Mean Sea Level)?

The Future:
Vessel navigation in 3D

Thanks!
I hope I got you nerd sniped.

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