Finalising Surveys for the Baltic Motorways of the Sea

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FINALISING SURVEYS FOR THE BALTIC MOTORWAYS OF THE SEA

Area
0
10
20
30
40
50
60
70
80
90
100
%
0
1000
2000
3000
4000
5000
6000
km²
Depth / m
0
-50
-100
-150
-200
-250
-300
20% of area potential obstacle for navigation
Median depth 43m
70% of area relevant for fuel efficiency

Helsinki Commission

HELCOM Copenhagen Ministerial Declaration

Taking Further Action to Implement the Baltic Sea Action Plan
- Reaching Good Environmental Status
for a healthy Baltic Sea

14 (M). RECALLING the HELCOM Copenhagen 2001, Krakow 2007 and Moscow 2010 commitments on hydrographic re-survey and COMMENDING WITH APPRECIATION the subsequent substantial progress made in systematic re-surveying of major shipping routes and ports in the region according to the HELCOM-BSHC Re-survey Scheme aimed at ensuring that safety of navigation in the Baltic Sea region is not endangered by inadequate source information;

15 (M). WE AGREE to take actions to ensure the completion of the re-surveys for areas used by navigation (CAT I and II) within the time schedules estimated in the 2013 Re-survey Scheme, to promote wider use of accurate and reliable depth information by e.g. developing existing and/or new products including an enhanced and freely accessible Baltic Sea Depth Model, and to foster CAT III re-surveys of other areas not primarily for safety of navigation purposes, e.g. for environmental protection;

– Baltic Sea environmental ministers, Oct 2013

HELCOM Cat I & II area remaining to be surveyed

What is this based on?

Modern measurements
"Historic" measurements
Industry data
200m ship
Single sounding shoal
Modern measurements
80
Cy
94
S Cy
55
26
28
67
35
28
G
60
23
89
19
18
25
fS
S
18
16
St
26
S
21
21
S Cy
S Cy

Yes, some of it *is* that old.

Partners:

- SMA (Swedish HO, lead partner)
- FTA (Finnish HO)
- VTA (Estonian HO)
- MAL (Latvian HO)
- GST? (Danish HO)
- BSH (German HO, activity 2)
- Swedish Land Survey
- German Federal Agency for Cartography and Geodesy
- Finnish Geodetic Institute
- Geoforschungszentrum Potsdam
- Danish Technical University?

- Ambitious goal: Co-financing needed
- Source: EU transport infrastructure
- Program: Connecting Europe Facility (former TEN-T)
- Total volume 2014-2020: € 26.25 billion (for transport, including Cohesion Fund)
- 2014 call for multiannual Motorways of the Sea projects

Why a collaborative project and not just national efforts?
Collaboration fundamental for BSHC and HELCOM
EU co-financing is impossible without collaboration
Share overhead for EU administration
Collaboration within BSHC allows for synergies
We have a lot to learn from each other

What are we going to do

four
activities

Hydrographic surveys

- Over 70 000 km^2
- Ca 59 M€, 88% of budget
- Approaching HELCOM Cat I/II goal in Sweden, Finland, Latvia and Estonia
- Both own resources and tendered work (ca 27% of area)

Survey areas

Harmonising vertical datum

- Improving the Geoid in the region
- Idea: Use survey vessels for marine gravity measurements, which would be much more expensive on their own
- Contribute to future satellite navigation in full 3D
- Aligned with BSHC CDWG

Equipment to increase survey efficiency

- New survey boats in Latvia and Estonia
- Upgrades for echo sounders and navigation equipment

Data workflow improvements from sounding to bridge

- Renewal and improvement of chart production systems
- Improvement of data collection systems
- Data harmonisation and improved data exchange internationally
- Fairway modeling

Expected budget per activity

Expected co-financing per activity

SWEDISH MARITIME ADMINISTRATION

Liikennevirasto

Bundesamt für Kartographie und Geodäsie

BSH BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

LANTMÄTERIET

FINNISH GEODETIC INSTITUTE

GFZ Helmholtz Centre POTSDAM

DTU

Miljøministeriet Geodatastyrelsen

FAMOS

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EUSBSR
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