Finalising Surveys for the Baltic Motorways of the Sea

Project Leader: Benjamin Hell

Hydrographic Office, Swedish Maritime Administration
20% of the area potential obstacle for navigation

Median depth 43m

70% of the area relevant for fuel efficiency
The Baltic Sea is shallow:

20% potential navigation obstacle

70% relevant for fuel efficiency
Traffic everywhere:

15% of the world maritime transports

2000 ships > 50m at any given time

Partly ice-covered in winter
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

Comparison: Size of Denmark

Some homework to be done!
What is this based on?
Yes, some of it is that old.
• Safety of navigation: < ca. 15m
• Fuel efficiency of marine transports: < ca. 70m

• Marine spatial planning
• Environmental concerns
• Science
• …
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?

Countries:
- Sweden
- Finland
- Estonia
- Latvia
- Denmark
- Germany

~80% of Baltic Sea water area
• 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
2014 call for multiannual Motorways of the Sea projects

- Call expected to open 1 September 2014
- Expected co-financing rate depends on character of action
  - Surveying: 30%
  - “Studies”: 50%
- Volume: 250 M€ of co-financing for MoS projects
- FAMOS will ask for roughly 20 M€ of co-financing
- Eligible funding period: From 2014 (retroactively!) to 2020
Eligible funding period starts 2014-01-01

Call opens 2014-09-01
Proposal submission to Swedish CEF coordination 2015-02-01
Proposal submission deadline EC/INEA 2015-02-28

Evaluation 2015-03 - 2015-06
Decisions 2015-10 - 2015-12
Preliminary pre-payment Q1 2016?
First regular payment 2017?
Why a collaborative project and not just national efforts?

- Collaboration fundamental for BSHC and HELCOM
- EU co-financing is impossible without collaboration
- We have a lot to learn from each other
- Collaboration within BSHC allows for synergies
- Share overhead for EU administration
What are we going to do?
Hydrographic surveys

- Over 70 000 km²
- 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)
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

- Activity 1: 58,755,518 M€
- Activity 2: 12,086,640 M€
- Activity 3: 3,290,000 M€
- Activity 4: 3,992,183 M€

Total: 67,2 M€
Expected budget per year and activity

- Activity 1
- Activity 2
- Activity 3
- Activity 4
Expected budget per partner

LM: €175,000
BSH: €94,733
GFZ: €75,000
BKG: €5,000
DTU: €5,000
GST: €1,000,000

SMA: €50,362,434
FTA: €5,094,733
MAL: €4,854,733
VTA: €5,104,733
LM: €175,000
BSH: €94,733
BKG: €175,000
GFZ: €175,000
DTU: €35,000
GST: €1,000,000
Activity 1
41 128 863 M€

Activity 2
604 332 M€

Activity 3
2 303 000 M€

Activity 4
1 996 091 M€

EU activity 1
7 626 655 M€

EU activity 2
604 332 M€

EU activity 3
987 000 M€

EU activity 4
1 996 091 M€

Expected co-financing per activity
Contact:
benjamin.hell@sjofartsverket.se (project leader)