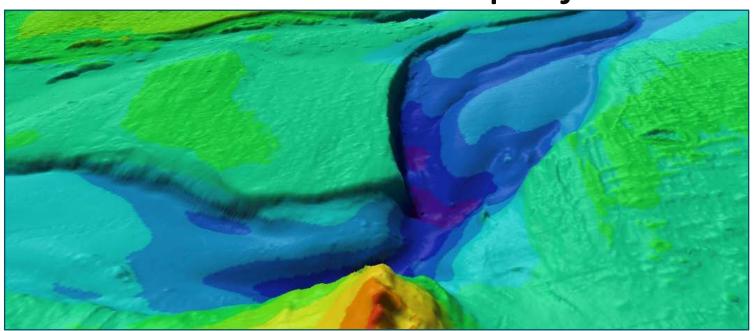


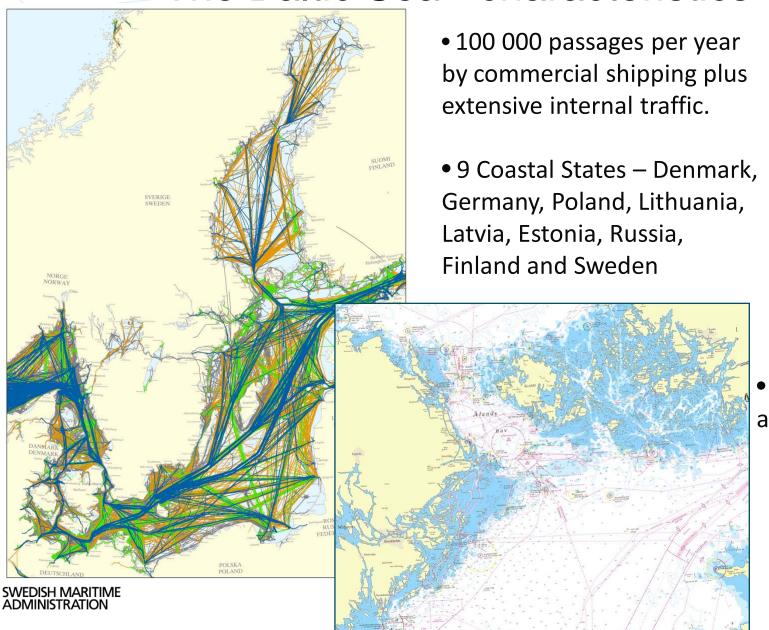
Baltic Sea Hydrographic Commission, Bathymetric Database and the MONALISA project





Magnus Wallhagen
Swedish Maritime Administration
Brussels, 10 October 2012

The Baltic Sea - characteristics

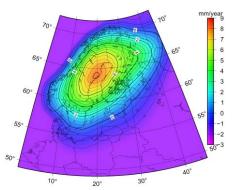


Unique archipelagos

The Baltic Sea - characteristics



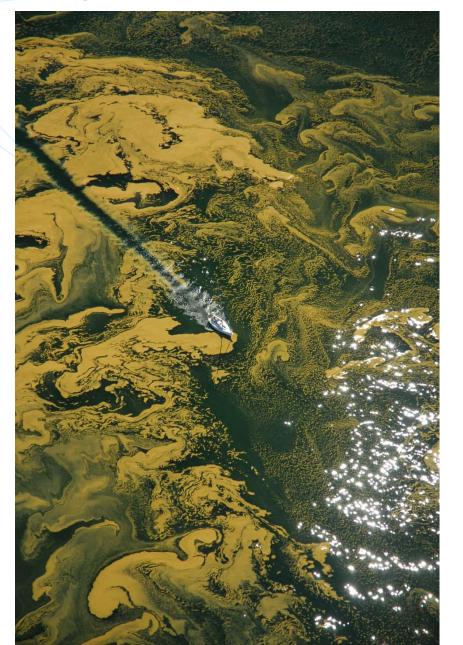
- Depth range
 0 460m
- Land uplift



- No tide
- Brackish water
- Environmental problems



Algal bloom in the Baltic Sea





The Helsinki Commission, or HELCOM, works to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation.



The Baltic Sea Hydrographic Commission BSHC



9 IHO Member States – Denmark, Estonia, Germany, Finland, Latvia, Lithuania (associated member), Poland, Russia and Sweden

Represented by respective Hydrographic Office



The BSHC Main Activities and Achievements

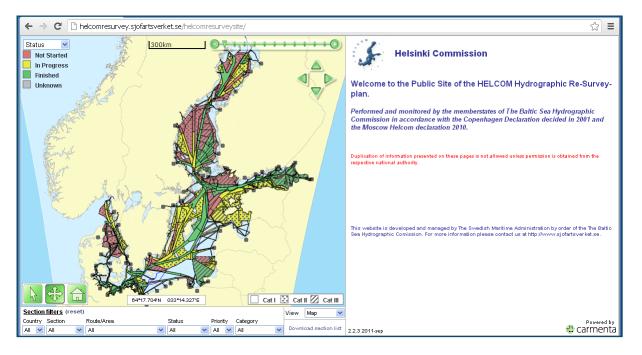
- Co-ordination of Hydrographic Surveys HELCOM Re-survey plan
- Harmonisation of Vertical Reference Levels
- Scheme for International Nautical Charts
- Harmonisation of Electronic Charts in the Baltic Sea





BHSC/HELCOM Harmonized Baltic Sea Re-survey Scheme

 Bathymetric surveys are more or less performed within the Baltic Sea, but most of the area is covered with old poor quality surveys. Large areas are only covered with old lead line surveys.

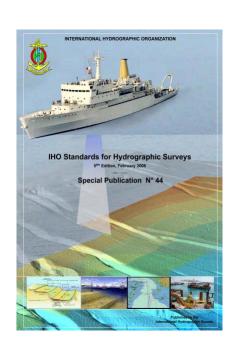






BHSC/HELCOM Harmonized Baltic Sea Re-survey Scheme

- The re-survey plan, co-ordinated by BSHC, focus on covering the Baltic Sea with modern full coverage bathymetric surveys according to the IHO standard S-44.
- First phase is to focus on major shipping routes (in the plan defined as category I and II)
- Re-surveying of HELCOM routes is included in the priority area 13 of the EU Baltic Sea Strategy







The EU Baltic Sea Strategy

Flagship project 13.3. "Speed up re-surveying of major shipping routes and ports", as agreed in HELCOM

Lead: HELCOM in cooperation with IHO



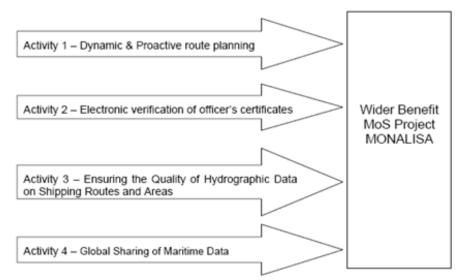




TEN-T and Motorways of the Sea

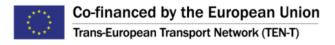
The Motorways of the Sea (MoS) can be seen as the maritime dimension of the TEN-T





http://www.sjofartsverket.se/en/MonaLisa/EU-project-for-the-Baltic-Sea/

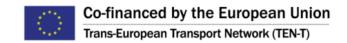




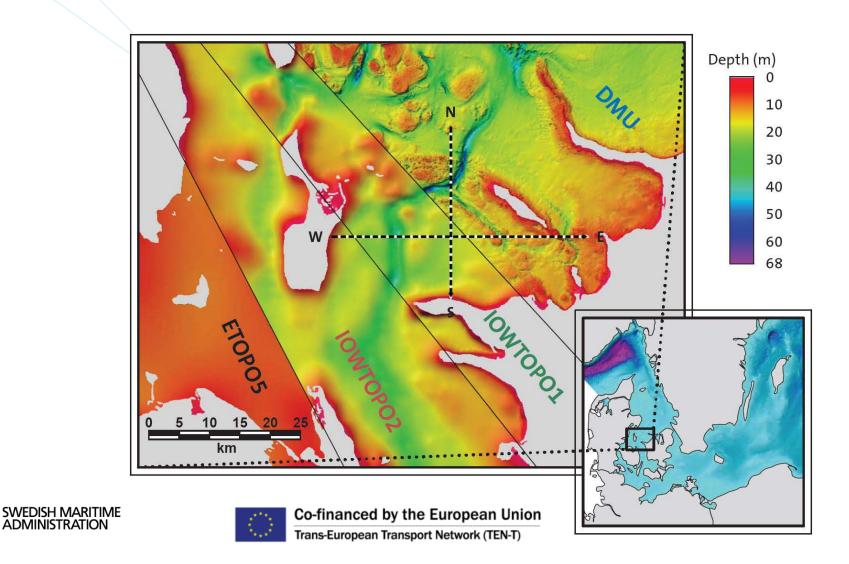
BSHC Baltic Sea Bathymetry Database WG

- Gather high density bathymetric data, as provided by national Hydrographic Offices, for the entire Baltic Sea.
- Identify and study differences of existing regulations concerning depth data in the Member states.
- Specify bathymetric datasets including application schema to be able to render a homogenous bathymetric model for the entire Baltic Sea.
- Develop concepts concerning storage, maintenance, exchange and distribution of the bathymetric data aiming to a "virtual" database and distribution by metadata, view and download services in line with the applying EU initiatives for Geoinformation (e.g. Inspire).





Existing Datasets in the Baltic Sea compared to a high resolution grid



BSHC Baltic Sea Bathymetry Database WG

- BSHC Bathymetrical portal will be localized at SMA in Norrköping, Sweden. A gridding method developed by Stockholm University (used also by GEBCO and IBCAO) will be used.
- Data will be provided from each Hydrographic Office and stored by SMA and used for computation of a homogenous Baltic bathymetry model. This will not only support the traditional range of navigational charts but addresses many other stakeholders and needs in the fields of transportation, environmental protection and production at sea (energy, fish farms, exploration).
- A homogenous bathymetrical model, initially with 500m resolution for public use. Forms the ideal source to satisfy EU-requests for maritime geoinformation, i.e. for reuse in different portals like Emodnet.







BSHC Baltic Sea Bathymetry Database

