SWEDISH MARITIME ADMINISTRATION
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BSBDWG REPORT

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Report
Item BSHC18_F_SE
BSBDWG/Sweden

BSBDWG Report to the BSHC 18th Conference

The Baltic Sea Bathymetry Database Working Group has been active during the last year and progress has been made in several aspects.

The aim has mostly been focused upon the web portal solution, testing different distribution methods and to be able to serve map-tiles in a fast and smooth way. The second goal was to improve the bathymetry model based on the member states' data deliveries.

The portrayal of bathymetry in the first published version of the database depends to a large extent on the data provided by each member state.

1. Status of the work of BSBDWG

Mr Hans Öiås has during the last year been acting as the Chair of the WG.

The manning for the work has, except of the project manager Hans Öiås, been one project employee Dr. Benjamin Hell and two part time consultants from Sweco, Rasmus Ewehag and Mårten Swärd.

The current WG members and consultants are:

Country	Name	E-mail address
Denmark	Lars Hansen *(To be replaced due to reorganization)*	larsh@gst.dk
Estonia	Peeter Väling	peeter.valing@vta.ee
Finland	Juha Tiihonen	juha.tiihonen@fta.fi
Germany	Jűrgen Monk	juergen.monk@bsh.de
Latvia	Normunds Duksis	normunds.duksis@lhd.lv
Lithuania	Viktoras Liulys (Used as point of contact)	viktoras.liulys@msa.lt
Poland	Marcin Banaszak	m.banaszak@mw.mil.pl
Russia	Ekaterina Kozar	main@gunio.ru

Sweden	Hans Öiås Ralf Lindgren Benjamin Hell	Hans.oias@sjofartsverket.se ralf.lindgren@sjofartsverket.se Benjamin.hell@sjofartsverket.se
	Consultants (Sweco)	
Sweden	Rasmus Ewehag	Rasmus.Ewehag@sweco.se
Sweden	Mårten Swärd	marten.sward@sweco.se

Denmark has not appointed a new participant since the last conference. Therefore, information from the WG has been sent also to Jens Peter Hartman jepha@gst.dk .

A workgroup meeting was held in Helsinki 8-10 of April, with participants from Sweden, Germany, Finland, Estonia and Latvia. The meeting focus was to derive an agreed specification of portal functionality. A lot of work was done in order to rank the importance of all proposed functions and formats, based on the answers to the specification questionnaire. The outcome of the meeting was the version 1.0 of the portal specification, including prioritizing of importance of each task which indicates the order of implementation.

Due to technical problems with the existing software at SMA, a decision was made in May to change to a cloud server, where we could have full control over the management and make use of open-source software running under Linux. This decision has simplified implementing functionality. The server is at this date one of the smallest available at Amazon Web Services, but can easily be upgraded to much more powerful versions if required by the work load. The cost for the server lease is at present date 48$/month which can be considered to be quite low.

The aim to create a homogenous 500m bathymetric model will be fulfilled using the provided data. Data deliveries for the compilation are still pending formal clearance in some countries. We have made an arrangement with Finland, who will create a 500m grid inside their territory, using high resolution data including data from the neighbouring EEZ. After formal clearance this model will be included into the homogenous grid. Data from Finnish EEZ will be delivered for the common compilation. This will minimize modelling artefact's and still make it possible to use high resolution data when compiling the grid, even where legal restrictions limit what may be distributed.

Sweden has requested to use data in 100 - 200m resolution in the territorial waters for the compilation, but is still waiting for a final decision from the Military Headquarter. An interim decision however makes it possible to use and present data in 500m resolution until final decision has been made.

At SMA we have set up a dedicated storage of delivered data/metadata as well as a database server containing datum transformed and rectified data together with provided metadata in order to simplify the compilation of the bathymetric grid.

The domain bshcbathy.org has been registered for testing and internal use inside the web client. The web portal is also linked to the www.bshc.pro, and available at the subdomain data.bshc.pro.

Control over the DNS settings for the domain bshc.pro has been transferred from BSH to SMA, and is presently handled through Amazon Web Services.

2. Results of the work

The portal is today working with basic functionality and will be enhanced further following the agreed specification.

The Bathymetric dataset will be available as WMS service as soon as appropriate metadata is set up in the respective catalogues.

After officially going online, we expect the data portal to become the major visitor magnet on the BSHC web pages. It will help to expose BSHC work to a broader public. There will be links from the data portal back to the BSHC website, so that interested visitors can find more information about BSHC.

During our work with the data, it became apparent that there are many sites with low quality data not suitable for incorporation into this portal for presentation together with our model. One example is the EEZ layer available on the HELCOM site (also as WMS service), showing errors of almost 9km compared to the Swedish nautical charts.

3. Licensing

As a precaution we have so far set the licensing to allow Non Commercial use only, even though the decision of the 17th conference states ***"….available for public use, free of charge."***

There is also clearly added to the licensing conditions on the portal page that the dataset is not allowed to use for navigation.

Presently, the data and derived imagery is licensed under a Creative Commons Attribution-NonCommercial 3.0 license (CC-BY-NC), see http://creativecommons.org/licenses/by-nc/3.0/

The WG askes the BSHC conference if the licensing shall be opened to allow also for commercial use as per the Creative Commons Attribution 3.0 license (CC-BY), see http://creativecommons.org/licenses/by/3.0/

Creative Commons is a widely used standard license, but there exists alternative licenses that may be better suited for licensing the contents provided in databases.

There is also the possibility to have different levels of licensing, as an example: the 500m could be "open data" and (future) higher resolutions could be "non-commercial". If we don't allow for free use including commercial many of them will continue to use data of much lower quality from EMODNET

Remark from Denmark on the Draft report:
The use of Danish data provided for the database is subject to the same conditions as the source data models provided on the GST Web site.
The models are made available to non-commercial users on the Danish Geodata agency website.

Related issues:

- The statement "Not to be used for navigation" is always visible on the map. It is linked to a page with detailed terms and conditions (T&C) for data and imagery. As it is not a standard part of CC-BY-NC we will re-phrase the text so that it becomes clear that "not for navigation" is even the case when the data is adapted or shared.
- The copyright is noted for each layer shown in the map.
- All download possibilities will feature a T&C statement, linking to a page with more details.
- All download forms will only function when T&C are accepted through a check box.
- The IP address of the visitor will be logged when accepting T&C with a check box, or accessing any other download possibility.
- For WMS or WCS service T&C will be included in the metadata for the dataset.

4. Present workplan

- Continue with creating a homogenous bathymetric model in 500m resolution for public release based on providing data.
- The Portal is scheduled to go online publicly on September 2, 2013.
- Further enhancement of the portal functionality.
- Add delimitations of responsibility (borders) by the use of the agreed ENC limits, as there are no useable official digital EEZ borders.
- Add names of the regions of the Baltic Sea as suggested by the BSHC.
- Compile and provide additional bathymetric layers with higher resolution where the data providers and legislation so accepts.
- Enhance the coastline for presentation in the portal. The present coastline is taken only from Swedish nautical charts.
- A new WG meeting is planned to be held in the beginning of November.
- A proposal for maintenance and financing for keeping the Bathymetrical Grid and the portal services updated is to be prepared and reported both Within the MonaLisa project as well as to the Swedish Government.

5. Actions for the BSHC18th Conference

The BSHC 18th Conference is requested to:

1. Note this report
2. Consent that the portal provides bathymetry models with resolutions better than 500m resolution where data providers and legislation so accepts.
3. Decide if the whole portal shall remain “free for non-commercial use” or also allow commercial use.
4. If commercial use is not to be free, how to solve requests for commercial use and who shall be responsible for such agreements.
5. Consent that the compiled results of the bathymetry model are provided for inclusion in the GEBCO grid.
6. Consent to further enhance the portal functionality.