

### **Digital Terrain Model fully covering the seabed topography of German Waters**

Due to different German authorities with diverse responsibilities in hydrographic surveying each agency fulfils their own surveys and different products are being processed. Although the survey areas and the quality of the surveys are highly coordinated, there is no common digital terrain model derived from the different surveys. Up to now these different survey data are stored separately in a common digital archive only.

More and more users are interested in data covering whole sea areas, thus forcing them to integrate separated survey results from different authorities. To provide useful data with an economically justifiable effort it is necessary to overcome the fragmented and heterogeneous character of the depth information and to provide them in a comprehensive digital terrain model (DTM) for the German part of North Sea and Baltic Sea.

Therefore BSH and the federal waterways and shipping administration (WSV) just started a project to set up a common DTM from their survey products. The aim is also to integrate the survey data from other agencies in a second stage. This basic product will be processed in addition to the regular applications in each agency involved. It will substantially facilitate the provision of the data in marine spatial data infrastructures and for all different kinds of users.

Concerning the production of nautical charts it is expected that the BSH will simplify their work flow in processing the different surveys from different sources and find an automatism to that.

One challenging aspect will be to keep the DTM up to date, as the sea floor is changing constantly and re-surveys are being accomplished very often. Quite some areas are being re-surveyed on a monthly or yearly basis.

For the provision of a common DTM it will be necessary to:

- define a procedure for implementing the different survey results
- decide on the responsibilities of each agency involved
- who will administer and process the data
- clarify the access to the DTM
- assure a defined quality and to include all relevant metadata.

The Conference is invited to take note of this information.