Germany

NATIONAL REPORT

FOR THE

7th NORTH INDIAN OCEAN
HYDROGRAPHIC COMMISSION
MEETING

PATTAYA, THAILAND
27th FEBRUARY – 2nd MARCH 2007

1. The Federal Maritime and Hydrographic Agency, Germany (BSH)

The BSH is the central Federal marine and maritime authority in Germany. BSH is:

- the Hydrographic Service of Germany with responsibilities in hydrographic surveying and wreck search in the German EEZ in the North Sea and the Baltic Sea, issuing official nautical charts and publications and supervising the German navigational warning service. BSH operates the German Tidal and Storm Surge Warning Service, and the Ice Warning service.

- The marine environmental monitoring agency responsible for monitoring the quality of the sea water within the framework of the international conventions of the Helsinki Commission (Baltic Sea), and the Oslo-Paris Commission (North Sea). BSH uses sophisticated numerical hydrodynamic models for simulation and forecast of North Sea and Baltic sea dynamics, to assist in SAR and pollution accidents.

- The German Oceanographic Data Centre, which includes the German Environmental Databank, and the German Bathymetric Data Centre.

- The EEZ administration authority, responsible for dealing with applications for licences for all construction work and marine research, as well as for spatial planning within the German EEZ.

- Shipping administration responsible for ship safety and ship security issues, such as type approval of navigational equipment, approval of German flag ships in regard to the ISPS code, flag administration and other administrative matters.

All BSH operations are under an all-embracing, ISO-9001:2000 certified Quality Management.

BSH is under the Federal Ministry of Transport, Housing and Urban Development. It maintains close relationships with the German Navy. Its main offices are located in Hamburg and Rostock. BSH operates five vessels: three multi-purpose vessels for surveying, wreck search, oceanography and type approval, and two survey vessels.

BSH cooperates in all IHO Committees and its Working Groups and has dedicated particular efforts to the development of ECDIS and its standards. BSH currently chairs the Steering Committee of the UK-based RENC International Centre for ENCs (IC-ENC).

2. Surveying

The 57.000 km^2 to be surveyed by BSH are typically very shallow with a highly unstable, sandy sea bottom in a regime of strong tidal currents. German waters are

among the busiest in the world. Because of safety concerns, the shipping lanes near the coast require at least annual re-surveying. BSH, within the framework of the environmental protection conventions (Helcom, Oslo-Paris Commission), like the neighbouring HOs, have to survey the main shipping routes according to the highest IHO S-44 standard.

A particularly demanding task for BSH is wreck search. This does not only apply to the 30 to 40 new underwater obstructions to be investigated on average every year (amongst others, e.g. containers washed over board), but also to monitor the situation of those of the known about 2.700 wrecks on the German EEZ which are positioned near the main routes and exposed to strong currents which may cause changes of position and situation.

BSH is implementing a method for determining tidal corrections using GPS height measurements.

BSH does not survey waters outside its own EEZ unless agreed upon with a neighbouring country. In particularly, it has not carried out any surveys in the area of NIOHC.

BSH offers on-the-job-training in surveying and wreck search onboard ship for members of other HOs.

3. Nautical charting

BSH issues 510 charts covering European waters including the Mediterranean. It is currently implementing a fully digital work flow based on raster techniques for, e.g., INT charts adopted from other HOs, and vector technology for its 60 domestic paper charts and its 130 ENC cells.

The German waters are fully covered with ENCs including small ports. All ENCs are distributed via Value-Added Resellers (VARs) appointed to the UK-based International Centre for ENCs (IC-ENC).

Latest technological development concerns the implementation of a central S-57-based database for use for paper chart and ENC production, as well as for nautical books and NtMs. This database (Oracle), called Nautical Hydrographic Information System (NAUTHIS) is being driven by the CARIS Hydrographic Production Database (HPD).

NAUTHIS forms part of the spatial data infrastructure (SDI) of BSH currently being under development, which will accommodate all spatial databases of BSH. It is planned to develop the BSH SDI so as to become the central marine geodata portal in Germany. As such, BSH is involved with the establishment of a spatial data infrastructure within Germany which in turn is to be part of the project of the European Union (EU) called “Infrastructure for Spatial Data in Europe” (INSPIRE). This project has attained high political priority as building block of the EU strategy for

technological innovation and sustainable development, where readily available geographic information of terrestrial and marine uses and environment data plays a crucial role.

4. New publications and updates

BSH works on the development of a new format for sailing directions which is using the S-57 standard as a basis, with an extension of the S-57 Object Catalogue. It chairs the IHO CHRIS Working Group “Standardization of Nautical Publications” (SNPWG). The approach aims at making full use of the ECDIS potential also for Sailing Directions. The S-57 extension will become part of the new IHO standard S-100, the upward-compatible new version of S-57. BSH’s paper Sailing Directions follow already the new compact approach where the relevant information is displayed in tables rather than lengthy text.

BSH has no publications with relevance to NIOHC.

5. MSI

BSH responsibilities are confined to areas in the North Sea and the Baltic Sea. BSH operates a NAVTEX transmitter for German waters.

6. S-55 update

German waters are to full extent adequately surveyed and charted. Main shipping routes are being surveyed to highest IHO standard.

7. Capacity Building

BSH offers on-the-job training in hydrographic surveying and wreck search, as well as in nautical charting (paper and digital).

8. Oceanography

BSH collects oceanographic and marine chemistry data routinely from North Sea and Baltic Sea areas in conjunction with the measurement programmes of the environmental monitoring conventions in force for these areas. In addition, it participates in climate monitoring.