

DANISH MINISTRY OF THE ENVIRONMENT
National Survey and Cadastre
MAPS, GEODATA AND SPATIAL INFRASTRUCTURE

THE BALTIC SEA HYDROGRAPHIC COMMISSION 15th Conference

BSHC WORKING GROUP FOR HARMONISATION OF THE CONVEYING AND PRESENTATION OF DEPTH INFORMATION (BSHDIWG)

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BSHDIWG Report

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The BSHDIWG working group was established at the 13th BSHC Meeting.

- All members were invited to participate in the working group:
 - Denmark
 - Estonia
 - Finland
 - Germany
 - Latvia
 - Lithuania
 - Poland
 - Russian Federation
 - Sweden

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TERMS of REFERENCE

The terms of Reference for the BSHC Working Group for Harmonisation of the conveying and Presentation of Depth Information:

- **Identify and analyse existing depth** related rules and recommendations used in populating databases and creating nautical products.
- **Identify existing and future user requirements** for depth information.
- **Study possible [future] solutions and measures to avoid inconsistencies** in the future.
- **Propose ways to convey and portray** hydrographic data on products. Especially regarding to the density of soundings, contour intervals, and grid, TIN and dynamical models and their parameters,
- **Follow up development of S-100** based specifications.
- Provide a **Progress Report** to the BSHC 14th Conference. [This should include an Action plan with specified time schedule for future harmonisation actions].
- Send reports to relevant IHO and IMO bodies, if deemed appropriate.

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CONCLUSIONS from BSHC 14

- For most of the countries, inconsistencies in the presentation of depth information are usually due to old bathymetric data.
- It's difficult or impossible to harmonize depth contours and the density of soundings based on old and insufficient data.
- With new bathymetric data on both sides of the borders, it should be possible to harmonize new editions of paper charts and ENCs.
- Surveying is very costly; planning of new surveys along borders could be done in cooperation between neighbouring countries e.g. by one country undertaking a survey that covers both sides of the border.
- As an alternative to ship surveying, in some areas with no danger to navigation, airborne surveying (LIDAR) could also be a way to survey large areas; the costs could be split into several national shares.

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CONCLUSIONS from BSHC 14 (cont.)

- Following the recommendations from the BSEHWG, the SCAMIN rules could be a way to avoid some differences in the presentation of sounding densities.
- Work to harmonise the depth contour intervals and sounding densities in the bordering areas when a new edition of a paper chart or ENC is planned has proven a successful approach.

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RECOMMENDATIONS from BSHC 14

1. For future editions of paper charts and ENCs, neighbouring countries should when possible arrange to use the same contour intervals and the sounding densities in bordering areas. That harmonization shall be discussed whenever a product in a bordering area is up for a new edition shall be included in the bilateral agreements.
2. In order to give bordering countries the same conditions for producing new editions with same new source material, future re-surveying should, if possible, be done on both side of the border.
3. The BSHDIWG proposes to the BSHC 14th Conference to continue its work with the existing TORs.

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FUTURE OF THE BSHDIWG from BSHC 14

- Identify future user requirements for depth information.
- Study possible solutions and measures to avoid inconsistencies in the future.
- Propose ways to convey and portray hydrographic data on products. Especially regarding to sounding densities, contour intervals, and grid, TIN and dynamic models and their parameters.
- Follow up on the development of S-100 based specifications.

STATUS OF THE BSHDIWG

- The BSHC endorsed the report and tasked the BSHDIWG with sending a letter to all MS to check how they could provide expertise on the pending matters of the TOR.
- Only two MS responded to the letter on how they could provide expertise.
- Due to the complexity of the remaining items from the TOR, it was decided that the WG should await necessary technical expertise.

RECOMMENDATIONS

The BSHDIWG proposes that the BSHC 15th Conference considers the following proposals for further work and development of the WG.

Proposals:

1. The BSHDIWG continues its work with the existing TORs. Each HO should contribute necessary technical experts.
2. The remaining work with the existing TORs will be anchored in the Mona Lisa project. As a consequence, the BSHDIWG cease its work.
3. Due to the complexity of the remaining items from the TORs, a report will be finalised with the existing result and recommendations.

Actions required from the BSHC 15th Conference:

The BSHC 15th Conference is requested to consider the above proposals and to take appropriate action.