28th BSHC Conference
19 – 21 September 2023
Helsinki, Finland

Agenda Item C.4
BSHC Sea Areas to be
tested in the S-130 PT

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Introduction/Background

At the IHO Assembly 2 (2020) the IHO Secretary-General presented a concept for the modernization of standardization of the limits of the oceans and seas by means of a digital dataset designating the geographic sea areas by a system of unique numerical identifiers only (A2/PRO 1.9). The Assembly approved the Secretary-General´s proposal for the future of S-23 made as a package and tasked him with the implementation.

The decisions made by A2 and considered at C4 tasked the Hydrographic Services and Standards Committee (HSSC) as the responsible technical body to take action to develop a new S-130 Polygonal Demarcations of Global Sea Areas Product Specification. The 13th meeting of the HSSC (2021), endorsed the requirement for a Project Team under HSSC with the proposed objectives aiming to develop the S-130 Product Specification as a dataset model for the subsequent production of the authoritative S-130 Dataset.
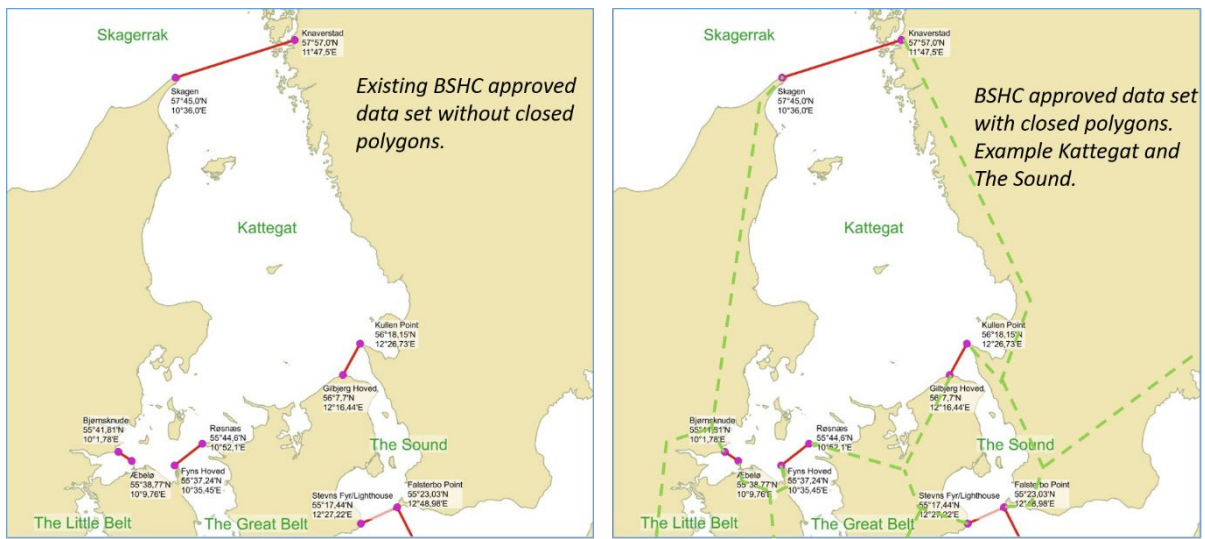
The S-130 Project Team, formed of participants nominated by 11 Member States is chaired by Ms Britt Lonneville (Belgium) and works under the RoP and ToRs endorsed by HSSC. At HSSC15 (June 2023) Edition 1.0.0 of the S-130 Product Specification was approved, which means that S-130 is ready for initial implementation, testing and evaluation. In order to further develop the standard to an operational version the S-130 PT is searching for test data to be used. Furthermore, the S-130 PT is tasked to produce an authoritative S-130 dataset.

Analysis/Discussion

BSHC24, Gdansk Poland 2019, approved a proposal from BSICCWG on sea areas for the Baltic Sea. Since then the document is available at the BSHC website. See https://www.bshc.pro/wp-content/uploads/Baltic_Sea-Limits_of_the_sub-areas.pdf. Sweden has also compiled a GIS data set (ESRI shape format) based on this Baltic Sea Limits document. The GIS data set consist only of the actual limits and boundaries defined by BSHC.

The refinement of S-23 to an agreed upon GIS compatible format is probably unique compared to other IHO RHCs. In order to support the S-130 PT, and IHO as such, Sweden suggest that BSHC provides this BSHC Sea Limit data set to S-130 PT as a test data set for further development of the S-130 product specification. Since this data set has been approved by BSHC it could also be used for the future IHO authoritative data set.

A deficiency with the BSHC Sea Limit data set is that it does not have closed polygons. To achieve closed polygons every sea area must be closed over land and in some cases narrow sounds. See image below. At BSHC24 it was also agreed upon that all lines should be considered as geodetic lines and in the event that the end coordinate of a line does not end up on mainland the lines can be extended up on land.

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It should be a recommendation to the S-130 PT that closing lines, to close the polygons (green lines in the image), should not have any authoritative status and are only used to achieve closed polygons. Especially since closing lines are not part of S-23. Closing lines in S-130 should be of a similar nature as other closing lines used in other IHO product specifications. There should not be any portrayal for closing lines.

Recommendation

It is recommended by Sweden that BSHC28 approve that the Baltic Sea Limits data set could be provided to the S-130 PT for further development of the S-130 product specification. The data set could also be used for the future IHO authoritative data set. Sweden can deliver the data set already available.

Actions required by BSHC

- Note this paper
- Agree upon the delivery of the BSHC Sea Limits data set to S-130 PT.
- Agree upon that Sweden adds closing lines to the data set, before delivery to the S-130 PT, understanding that closing lines should not have any authoritative status.
- Take any further action as deemed appropriate.