

The 2nd Session of the Assembly

Agenda Item 5

PRO 1.9

Report on the informal consultation
process for the future of S-23



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VTC, 16 – 18 November, 2020

Explanatory Note

- A1 tasked the Secretary-General to facilitate an informal consultation process regarding the future of S-23 among interested Member States
- Ten Member States indicated interest:
 - China, Democratic People's Republic of Korea, Italy, Japan, Oman, Portugal, Republic of Korea, Russian Federation, United Kingdom and United States of America.
- Secretary-General started the process through some informal “talks”:
 - Involving China, Democratic People's Republic of Korea*, Italy, Japan, Portugal, Republic of Korea, Russian Federation, United Kingdom and United States of America.
- Secretary-General chaired two informal consultative meetings with participation of Democratic People's Republic of Korea, Republic of Korea and Japan, and attendance of UK and USA as observers.

* By correspondence via Permanent Rep. of DPRK to Unesco



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Explanatory Note (2)

- At first, the participants jointly reviewed the options proposed by the S-23WG between 2009 and 2012 as potential approaches for a renewed revision process.
- In a second step, the Secretary-General requested proposals for new options beyond those made by the S-23WG for such renewed approach.
- Both exercises did not result in new suggestions how to revise S-23 successfully.
- In the absence of a consensual approach for the revision of S-23, the Secretary-General presented a concept for the modernization of standardization of the limits of the oceans and seas.



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Future of S-23 – Modernization of Standardization of Limits of Oceans and Seas

- The core of the proposal to make S-23 content fit for digital dissemination is the transformation of information contained in a database of attributed area feature objects with global coverage.
- The resulting dataset should be based on modern digital technology and facilitate the following aims:
 - Compatibility with the S-100 model for the purpose of IMO's e-Navigation concept.
 - Provision for the variety of Geospatial Information Systems (GIS) being utilized by the IHO Secretariat, national Hydrographic Office services, including Marine Spatial Data Infrastructures (MSDI); and the respective national reporting obligations within the framework of UNCLOS.



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Future of S-23 – Modernization of Standardization of Limits of Oceans and Seas (1)

- Higher resolution of the standardized limits of the oceans and seas by means of vectorized chain-node topology.
- Greater flexibility offered to users and systems for geographical areas.
- Customization of displayed information about the limits according to regional and national priorities; and end user requirements.
- Preparedness for the application of future voice command functionality of GIS applications; application of artificial intelligence; and “deep learning” on marine geoinformation.
- Support of machine-to-machine communication for the facilitation of autonomous shipping.



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Conclusion

- A transformation of S-23 limits of oceans and sea areas into a digital dataset named “Polygonal demarcations of global sea areas” would facilitate the joint standardization and service activities of IHO and other adjacent domains to support the e-Navigation concept of the IMO.
- The affected standards of IHO and IMO that currently refer to S-23 can be adapted to the new dataset solution with comparably low effort.
- S-23 is kept publicly available as part of the existing IHO publications to demonstrate the evolutionary process from the analogue to the digital provision of limits of oceans and seas.



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Package of interrelated Proposals (1)

Assembly is invited to take note of the implementation of the process and its results, and subsequently:

- to agree on the provision of digital coordinates for limits of oceans and seas to meet requirements of contemporary Geographic Information Systems.
- to task the appropriate IHO subordinate technical body
 - to develop a dataset named “Polygonal demarcations of global sea areas” to designate geographic sea areas by a system of unique numerical identifiers only, and
 - to profile or adapt appropriate IHO S-100-based standards through a new S-130 dataset, to facilitate the digital provision of the “Polygonal demarcations of global sea areas”.



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Package of interrelated Proposals (2)

Assembly is invited to take note of the implementation of the process and its results, and subsequently (continued):

- to consider, if and when necessary, the development of basic guidelines for the allocation and display of attributes of sea areas to be applied to Geographic Information Systems.
- to note that S-23 is kept publicly available as part of existing IHO publications to demonstrate the evolutionary process from the analogue to the digital provision of limits of oceans and seas.
- to task the Secretary-General, as part of the process to consider subsequent amendments to the relevant IHO Resolutions 32/1919 as amended and 13/1919 as amended, for endorsement by the Council, if and when appropriate.
- to instruct the Secretary-General to take any other actions considered necessary.



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