3rd SESSION OF THE IHO ASSEMBLY SUMMARY RECORD OF THE FOURTH PLENARY SESSION

3 May 2023

PRESENTATION OF THE HIGHLIGHTS OF WP3 (IRCC CHAIR) (AGENDA ITEM 6.1)

CONSIDERATION OF REPORTS AND PROPOSALS: WORK PROGRAMME 3 (AGENDA ITEM 6)

IRCC CHAIR gave a summary report on Programme 3 of the IHO, which was the focus of the Inter-Regional Coordination Committee (IRCC), the steering committee for IHO inter-regional coordination and support. Members of IRCC included the 15 Chairs of the Regional Hydrographic Commissions (RHCs) and the Hydrographic Commission on Antarctica (HCA) as well as the chairs of the nine subordinate bodies of IRCC. Although its membership is limited, meetings of IRCC are open to all Member States. There was excellent cooperation between IRCC and the Hydrographic Services and Standards Committee (HSSC).

In recent years, meeting time allocated for exchanges of information had been reduced, with more time devoted to discussion of strategic matters. Successful workshops on strategic issues had included a 2021 workshop on the Strategic Plan including the "gap analysis" approach from the South West Pacific Hydrographic Commission (SWPHC) and a workshop in April 2022 on the Strategic Performance Indicators (SPIs). It was planned to hold workshops on other important topics. Suggestions on topics and participation from all Member States was welcomed.

Measurement of progress through the SPIs was a key focus, with the allocation of nine SPIs to IRCC that were simple, used figures to measure success, were comparable, used digital means as far as possible and were global with the aim of leaving no Member State behind. Examples included SPI 1.2.2 on adequacy of hydrographic knowledge assessed through appropriate indicators and SPI 2.2.1 on the percentage of adequately surveyed area per coastal State. Several States had sophisticated means of measuring and collating information, but simpler methods were required at the global level.

Concerning the nine subordinate bodies, of particular note was the achievement of the World-Wide Electronic Navigational Chart Database (WEND) Working Group in developing the WEND-100 Principles to ensure world-wide consistency of S-100 products developed and adopted in 2021. Guidelines on the implementation of WEND-100 principles had been developed and the United Nations Integrated Geospatial Information Framework (IGIF) Principles reviewed in close cooperation with HSSC.

The Capacity Building Strategy had been revised in cooperation with the Capacity Building Sub-Committee (CBSC). The new edition was better aligned to the IHO Strategic Plan. It had been endorsed at the sixth session of the Council (C-6) and would be presented to A3 for approval (proposal PRO 3.2). Thanks were given to the Republic of Korea for the establishment of a new IHO e-Learning Center and for its outstanding ongoing financial, technical and human resources support. Capacity building was important for all Member States and many of them depended, at least partially, on support for training and other activities. Financial contributions were primarily from Republic of Korea and the Nippon Foundation, with Canada supplying additional funds. Nonearmarked funds were limited, and new ways must be found to acquire additional resources for capacity building. IHO had launched a new project on Empowering Women in Hydrography (EWH), with the goal of raising awareness about career opportunities in hydrography and increasing the number of women in leadership positions. Supported by Canada, a project team had been established to take the matter forward.

The Sub-Committee on the World-Wide Navigational Warning Service (WWNWS-SC) was a strategic body which had focused on the challenges of alignment with new digital means in encoding and promulgating Navigational Warnings (Product Specification S-124) and transmission of NAVAREA Warnings. The Marine Spatial Data Infrastructures Working Group (MSDIWG) continued cooperation with the Marine Domain Working Group (MDWG) of the Open Geospatial Consortium (OGC) and the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) Working Group on Marine Geospatial Information.

There was intense cooperation with the European Union through the IHO-EU Network Working Group (IENWG). The tenth anniversary of the IHO-EC Memorandum of Understanding had been celebrated on 06 May 2022. Major topics of cooperation included interoperability between bathymetric data of European waters (European Marine Observation and Data Network (EMODnet)) and the General Bathymetric Chart of the Oceans (GEBCO) Grid. Marine spatial planning was becoming a major topic of interest in European waters.

The FIG/IHO/ICA International Board on Standards of Competence of Hydrographic Surveyors and Nautical Cartographers (IBSC) had reviewed individual recognition schemes and the need to improve the quality of initial submissions. The Board had been enlarged from ten to 12 members. First discussions had been held on how to reflect better the growing relevance of geodata management expertise in the course of schemes.

Concerning GEBCO, crowd-sourced bathymetry, the Data Centre for Digital Bathymetry (DCDB) and the Seabed2030 Project, joint efforts and successes in gathering more existing and new bathymetric data included: Crowd Sourced Bathymetry Working Group (CSBWG) and the GEBCO Guiding Committee (GGC).

Future challenges included finding ways to acquire additional resources for capacity building; the steadily increasing need for coordination on and between RHCs in the different fields of the IHO Strategic Plan; active participation in the development of S-100 products and services; how to map the remaining 75% of the planet's unmapped ocean seafloor; and achieving improvements in outreach – to do good things and talk about them. In closing, IRCC Chair thanked Member States for their valuable and indispensable contributions to the work of IRCC and its subordinate bodies.

DENMARK expressed appreciation for the work of the e-Learning Center: the first of Denmark's staff had just completed all four of the training courses and, in view of their success, the e-learning courses would be incorporated in the on boarding programme for new staff members of the Danish Hydrographic Office.

NORWAY, speaking as CHAIR of the CBSC, expressed appreciation for the work accomplished by the IRCC and highlighted the importance of e-learning and the contributions of Republic of Korea, the Nippon Foundation of Japan and others who had made it possible. Capacity building was a strategic pillar of the work of IHO.

CANADA expressed support and gratitude to Republic of Korea for its work on e-learning. Canada viewed it as a way forward for training and was pleased to note the positive feedback from Denmark. Canada hoped to contribute some modules or content to the e-Learning Center. The Center would remain relevant with ongoing contributions from Member States. Concerning the Empowering Women in Hydrography Project, there was one more year of funding left from Canada: additional contributions, whether in cash or in-kind, from other Member States would be

most welcome and would send a strong statement that the Project had been successful and that it was worth continuing to fund.

The Assembly endorsed the Report of Work Programme 3.

PRO 3.1: AMENDMENTS TO GENERAL REGULATIONS, Art. 8.e – MEMBERSHIP OF THE HCA (IHO COUNCIL) (AGENDA ITEM 6.2)

(A3_2023_EN_PRO_3.1)

SECRETARY-GENERAL, speaking as Chair of the Hydrographic Commission on Antarctica (HCA), said that the IHO Strategic Plan had recognized a broader user community of data, products and services beyond IHO's traditional safety of navigation customers. In order to address that point and to reflect the changing data and user environment and the shift from paper to digital services, it was proposed to change the current wording of Article 8(e) of the General Regulations of the IHO to remove the limitation on full HCA membership by proposed new wording to allow HCA participation by IHO Member States more broadly.

Noting the endorsement by the Council, the Assembly was invited to: a) approve the proposed revision of Article 8(e) of the General Regulations of IHO; and b) note the possibility now offered to all IHO Member States by the revised HCA Statutes to become more engaged in HCA activities.

CHAIR said that the Red Book recorded unanimous support for the proposed change. She invited other comments.

CHILE expressed approval of the proposal and expressed its wish to participate in the work of the Antarctic Treaty System.

SECRETARY-GENERAL agreed that it was a fundamental assumption that current and future Member States of the IHO would be included in the work of the Antarctic Treaty System.

UNITED STATES OF AMERICA supported the change and congratulated the HCA for the advancement of IHO Goal 2 in the Antarctic region. It was noted that Netherlands, Poland and Türkiye were in the process of becoming full members. United States welcomed new members and encouraged all IHO Member States that were parties to the Antarctic Treaty to consider becoming full members in the region.

CHAIR took it that the proposed change to Article 8(e) of the General Regulations of IHO was accepted.

PRO 3.1: The Assembly approved the revision of clause (e) of Article 8 of the General Regulations of the IHO.

PRO 3.2: REVISED CAPACITY BUILDING STRATEGY (IHO COUNCIL) (AGENDA ITEM 6.3) (A3_2023_EN_PRO_3)

COUNCIL CHAIR presented the request for approval of the revised Capacity Building Strategy. Capacity building remained a core function of the IHO and the need would be even greater as Member States transitioned to S-100 products and services and given the need to not leave any nation behind. In recognition of the ongoing transformation in navigation, such as e-Navigation, autonomous shipping and reduction of emissions, leading to a profound evolution in hydrographic services, IRCC had tasked the CBSC to revise the Capacity Building Strategy in alignment with the IHO Strategic Plan 2021–2026. The revision had been conducted by a CBSC ad hoc Project Team and the resulting revised Strategy had been approved by the CBSC and, subsequently, by

the sixth Session of the Council. The purpose of the revision was to refine the context and the processes that would lead to improving hydrographic capability, capacity, training, science and data management.

The Assembly was invited to: approve and adopt the proposed revised Capacity Building Strategy; and undertake, through IRCC and CBSC, the measurement of effectiveness of capacity building assistance through continued monitoring and evaluation.

CHAIR noted the unanimous support in the Red Book for the proposal to approve and adopt the revised Capacity Building Strategy and to undertake measurement of the effectiveness of capacity building assistance. In the absence of any further comment, she took it that the proposal was approved.

PRO 3.2: The Assembly approved and adopted the revised Capacity Building Strategy.

PRO 1.2 - IMPLEMENTATION AND REVIEW OF THE STRATEGIC PLAN (IHO COUNCIL) (AGENDA ITEM 4.4) (continued)

(A3/2023/EN/PRO 1.2)

SECRETARY-GENERAL, continuing the discussion of PRO 1.2, presented a proposed alternative to paragraph c) of the proposal, amended to reflect both the wording as originally presented and the alternative to that wording as proposed by the United Kingdom. The proposed alternative read:

"c) To direct IRCC to provide guidance to the MSDI Working Group on the implementation of Goal 2/Target 2.1 through supporting national and regional MSDIWG efforts via RHCs and the continued provision of global thematic layers by means of the existing IHO GIS infrastructure (trusted source, standardized, interoperable). Any proposed extension of the portfolio of global thematic layers by MSDIWG has to be brought forward to IRCC for endorsement and Council for approval."

NORWAY expressed support for the proposed alternative.

CHAIR said she took it that the Assembly wished to endorse to the proposed alternative version of paragraph c) of PRO 1.2.

It was so agreed.

PRO 1.2: c) The Assembly directed IRCC to provide guidance to the MSDI Working Group on the implementation of Goal 2/Target 2.1 through supporting national and regional MSDIWG efforts via RHCs and the continued provision of global thematic layers by means of the existing IHO GIS infrastructure (trusted source, standardized, interoperable). Any proposed extension of the portfolio of global thematic layers by MSDIWG has to be brought forward to IRCC for endorsement and Council for approval.

PRO 2.3 – THE FUTURE OF DIGITAL CHARTING (UNITED KINGDOM) (Agenda item 5.4) (continued)

(A3/2023/EN/PRO 2.3)

CHAIR, continuing the discussion of PRO 2.3, said that the proposal had been amended in the light of views expressed and that the Assembly was accordingly invited to approve the request for the IHO to consider development of digital navigation capability for the sub-ECDIS community; approve the request to task the HSSC to set up a sub-ECDIS Project Team or Working Group to

validate the requirement for international technical standards related to data format, display, encryption and licensing for those vessels below the mandated Electronic Chart Display and Information System (ECDIS) requirements; and approve the request to inform the International Maritime Organization (IMO) of the establishment of the sub-ECDIS Project Team or Working Group highlighting the global trend towards digital navigation and, when work is at an appropriate level of maturity, to request Member States to approach their IMO representative to consider an update to the relevant resolutions.

FRANCE said that the second subparagraph relating to the establishment of an ECDIS Project Team or Working Group could be spared due to redundancy and should be deleted.

UNITED STATES OF AMERICA agreed with the removal of the second subparagraph.

UNITED KINGDOM said that the second subparagraph provided context for the aims sought and should be retained; if one were to be removed, it was the first subparagraph that should be deleted.

SWEDEN suggested as a compromise that the Council should be tasked with taking the proposal forward.

UNITED KINGDOM, noting that 13 Member States had expressed support for the initiative in the earlier discussion, said that a Project Team should be set up without further delay so as to identify the requirements for a single digital solution that suited the needs of all users across all different vessel types and thereby end the production of paper charts.

AUSTRALIA expressed strong support for the amended proposal and stated its willingness to provide expertise and personnel for such a project team.

NEW ZEALAND also expressed support for the proposal, as amended.

CHAIR, responding to FRANCE's assertion that it was essential to avoid entering into a commitment to develop any additional standards, said that the intention was to work with existing standards only in the endeavour to support the sub-ECDIS community.

UNITED STATES OF AMERICA said that, unlike the ECDIS market, the sub-ECDIS market had been involved in highly innovative navigational testing and development that had produced good and interesting ideas, including in the area of data implementation. Care should therefore be taken not to reproduce in a sub-ECDIS environment the challenges faced by the ECDIS market.

GERMANY said that the second paragraph would limit the outcome, while the first subparagraph of the amended proposal embodied a wider approach and therefore offered more flexibility. The elimination of paper charts was an entirely different matter requiring a different approach. In any event, there was no need to develop standards for the ECDIS market, as the standards in place were sufficient. Moreover, the continued use of paper charts was not a matter within the IHO remit; it fell instead to IMO.

UNITED KINGDOM said that it was already working with its national regulator to identify ways of developing capabilities for enabling it to withdraw from paper charting. United Kingdom expressed disappointment that the matter was not destined to be resolved at the current Session, but proposed to take the matter outside of the group and keep HSSC involved. If such work could not be undertaken within the IHO framework, the United Kingdom proposed that it should keep the HSSC informed of progress achieved, including in conjunction with like-minded Member States, and of its engagement with the IMO.

PRO 2.3: The Assembly was not able to reach an agreement but anticipates that the United Kingdom will keep Council and HSSC informed on the progress achieved with IMO and other interested partners.

PRO 3.3 - RECOGNITION OF THE SOUTHERN OCEAN (HCA CHAIR) (AGENDA ITEM 6.4)

(A.3/PRO 3.3)

The SECRETARY-GENERAL, introducing PRO 3.3, which he had submitted in his capacity as HCA Chair, said that the full proposal had been distributed by 20 December 2022, in accordance with the applicable regulations. The proposal was indirectly related to PRO 1.6, on Polygonal Demarcation of Global Sea Areas (S-130). Appendix 1, containing general information, national positions and reservations expressed by Member States, formed an integral part of the proposal and was therefore open to further amendment.

In 2021, National Geographic USA, quoting the IHO, had informed the public of its formal recognition of the Southern Ocean as the fifth ocean. The IHO Secretariat had subsequently received a significant number of requests for explanations on how the name had been discussed during the review of S-23. The Secretariat had noted the global popularity of the designation of Antarctic waters as "Southern Ocean", a term not limited to academic circles but also used by international bodies such as the Antarctic Treaty Consultative Meeting (ATCM), the Scientific Committee on Antarctic Research (SCAR) and the International Bathymetric Chart of the Southern Ocean (IBCSO), the media, and teachers and universities all over the world.

As reported under item 1.6 of the Agenda, the S-130 Project Team was currently defining a polygonal demarcation dataset model using a system of unique numerical identifiers only. When the corresponding dataset was produced, a decision would be needed on whether the limits of the Southern Ocean existed.

Noting the well-established global use of the denominator "Southern Ocean" by geographers, the scientific community and broader society, HCA Members had finally agreed at HCA-18 to submit a proposal for a new IHO Resolution for approval by IHO Member States, focusing solely on recognizing the existence of the Southern Ocean. Such recognition came with the demarcation of its northern geographic limit at 60°S latitude and attendant consequences for the southern geographic limits of the Atlantic, Indian and Pacific Oceans, which would become identical to the northern geographic limit of the Southern Ocean, superseding the limits mentioned in Publication S-23, Ed. 3, 1953, for the areas concerned. Such a decision would have a direct impact on the vertices of the planned authoritative S-130 dataset for the region.

The Assembly was invited to approve the proposed IHO Resolution on the recognition of the Southern Ocean; to take note of the consequences on the limits of some global sea areas as a result of recognition of the existence of the Southern Ocean; and to endorse the fact that the new Resolution was without prejudice to or limitation of the views of the IHO or any IHO Member State regarding the subject-matter addressed.

The CHAIR, noting that all but one of the comments contained in document A.3/G/02/v1/Rev.2 (the "Red Book") were generally supportive of the proposal, invited further comments on the matter.

INDIA said that IHO's approach of polygonal demarcation had been a positive response to political difficulties that had arisen in the naming of various areas of water around the world. With regard to the area under discussion, naming it and defining its limits were two separate issues. Should it be named? If so, should the term "Southern Ocean" be used? As for its limits, some countries already had an established approach to where they lay, while others either recognized the area but had not defined its limits, or did not recognize it at all. Further reflection was needed on the proposal.

AUSTRALIA said that it supported the proposal as submitted because of the wording in the fourth paragraph of the draft Resolution to the effect that the limits referred to therein had neither political nor oceanographic nor, more generally, any environmental significance whatsoever, so that hydrographic offices could continue to adopt their own limits as long as they remained technically consistent with the data model of the polygonal demarcation of global sea areas.

ARGENTINA said that there were no technical, scientific or hydrographic grounds for assigning a separate name to the area in question, which corresponded to the southern zones of the Atlantic, Indian and Pacific Oceans; moreover, such a decision would exceed IHO's consultative and technical mandate. Adopting the draft Resolution submitted would therefore have no political or legal implications for Member States. Given the lack of consensus on the issue and its complexity, it should be discussed further.

CHILE, welcoming the Secretary-General's work on the issue in his capacity as HCA Chair, expressed support for the proposal.

NORWAY, while acknowledging the views of Argentina, expressed support for the proposal. The term "Southern Ocean" had been in use among the science community and mariners for centuries.

GERMANY, expressing full support for the proposal, said that the approach being taken would positively impact IHO's visibility on the international stage.

UNITED KINGDOM, echoing the comments made by Norway, expressed strong support for the proposal, which would afford recognition to the use of the term "Southern Ocean" and the identification of that sea area.

UNITED STATES OF AMERICA supported the position of Australia, Germany, Chile, Norway and the United Kingdom, observing that the fourth paragraph of the draft Resolution and Appendix 1 provided the necessary context and caveats.

AUSTRALIA, reaffirming its support for the proposal, added that the term "Southern Ocean" was commonly used and well understood in Australia and was taught in schools. From a scientific perspective, the area in question was almost a distinct body of water.

The SECRETARY-GENERAL, emphasizing that IHO had no authority to name areas of water, said that the proposal was merely intended to recognize the existence of a commonly used name. The limit of 60°S latitude was likewise in widespread use among cartographers and geographers. The best means of reflecting the fact that adopting the Resolution would have no political or legal implications for Member States would be to annex Argentina's comments to the text. The process of preparing the draft Resolution had been fully transparent, with ample opportunity for Member States to comment and all avenues of argument fully explored. The Secretary-General was confident that adopting the draft Resolution was the logical conclusion.

ARGENTINA said that it is willing to discuss the issue; however, the fact that its requests for circulation of its national position had not been met until a late stage of the Assembly preparatory process meant that further discussion would be needed before agreement could be reached.

NEW ZEALAND said that it supported the proposed Resolution, noting that the term "Southern Ocean" had been in common usage in scientific and other journals for many years and that there was no political, geographical or environmental significance whatsoever to the limits referred to in the draft Resolution.

NORWAY said that, as pointed out by the Secretary-General, a wide range of arguments had been put forward and discussed fully during the preparatory process; further debate was unlikely to be fruitful. Formally noting Argentina's comments in the draft Resolution might present a solution.

MALTA, while raising no objection to the substance of the matter at hand, asked whether consideration had been given to any possible implications for ships' compliance with the Polar Code, which made no mention of the term "Southern Ocean".

URUGUAY, as a party to the Antarctic Treaty and member of the HCA, expressed support for Argentina's request for the issue to be discussed at greater length.

NORWAY reiterated that the aim of the proposal was simply to recognize the use of an existing name, with no legal or political implications attached.

UNITED STATES OF AMERICA suggested that the concerns expressed by Malta might be allayed by including a reference to "any other international body with recognized competence" in the third paragraph of the proposed text.

POLAND expressed full support for the position stated by Norway.

AUSTRALIA said that not adopting the proposal would imply an active decision on IHO's part not to recognize a widely used term, putting its practice at odds with that of other organizations. Did the Assembly wish to place the Organization in that position?

FRANCE expressed support for the proposal, which reflected common usage.

The CHAIR, summing up the debate, said that very few reservations had been expressed to the proposal, which otherwise seemed to enjoy overwhelming support.

ARGENTINA, reiterating its position, said that consensus had not yet been reached. Uruguay had supported its call for further discussion; other Member States might also have reservations on the issue.

The CHAIR, while acknowledging the lack of consensus, nevertheless emphasized that the majority of speakers had supported the proposal. She asked whether the Assembly agreed to adopt it.

ARGENTINA said that, if the rest of the Assembly so agreed, it would not block such a decision; however, it requested that its position statement be annexed thereto.

PRO 3.3: The Assembly approved the proposed IHO Resolution on the recognition of the Southern Ocean; took note of the consequences on the limits of some global sea areas as a result of recognition of the Southern Ocean; endorsed the fact that this new Resolution is without prejudice to or limitation of the views of the IHO, any other international body or any IHO Member State regarding the subject matter addressed.

PRO 3.4 – ACCESS TO SOFTWARE, HARDWARE AND TRAINING COURSES (ISLAMIC REPUBLIC OF IRAN) (AGENDA ITEM 6.5)

(A3/2023/EN/PRO 3.4)

ISLAMIC REPUBLIC OF IRAN, presenting PRO 3.4, said that, in addition to Article II of the IHO Convention, the achievement of the IHO Strategic Plan, in particular Goal 1 thereof, of the threeyear IHO Work Programme and of the Roadmap for the S-100 Implementation Decade (2020-2030) was dependent on Member States' full access to the latest software, hardware and relating training for the production and updating of Electronic Navigational Charts. Such access was now limited, however, for a number of Member States on various pretexts, which should not include safety of navigation. With the community bound to ensure that no one was left behind, the Assembly was invited to take note of that critical issue and to task the Secretariat with taking action through relevant channels. CHAIR noted that the Secretary-General had stated in the Red Book in response to Member States' comments on PRO 3.4 that Member States were invited to take note of Article II of the IHO Convention and IHO Resolution 2/1972, as amended, which addressed the scope of the proposal.

SECRETARY-GENERAL said that, while empathetic to the Iranian request, the IHO could do little in the way of support other than to call on Member States to implement Resolution 2/1972, as amended, on technical assistance and cooperation in the field of hydrography.

CHAIR said that the IHO Secretariat could not be tasked with any action unless it had the means at its disposal for achieving an outcome. She therefore suggested that the Assembly take note of the critical issue raised by the Islamic Republic of Iran.

It was so agreed.

The Assembly noted that the scope of PRO 3.4 is sufficiently addressed by Article II of the IHO Convention and IHO Resolution 2/1972.