

- REPRESENTATIVE REPORT ON EXTERNAL MEETING -

3rd IHO Assembly, Monaco

2-5 May 2023

REPORT

by

Adam Weintrit,
PNF (Polish Navigation Forum)

17th May 2023



TABLE OF CONTENTS

1	Introduction.....	3
2	Meeting Agenda.....	3
3	Summary of The First Plenary Session - 2 May 2023	6
4	Summary of The Second Plenary Session - 2 May 2023	8
5	Summary of The Third Plenary Session - 3 May 2023	14
6	Summary of The Fourth Plenary Session - 3 May 2023	22
7	Summary of The Fifth Plenary Session - 4 May 2023	29
8	Summary of The Sixth Plenary Session - 5 May 2023	34
9	Decisions of The 3rd Session of The IHO Assembly	39



1 Introduction

The IHO Assembly as the main organ of the International Hydrographic Organization is formed by the representatives of the Member States. It meets every three years to provide general guidance on the functioning and work of the Organization, as well as taking decisions of technical and administrative nature.

The Third Session of the Assembly of the **International Hydrographic Organization (IHO)** was held from Tuesday 02 May to Friday 05 May 2023 at the Grimaldi Forum in Monaco. The Assembly met in plenary session to enable its Member States to review the activities, administration and finances of the IHO, decide upon various Proposals submitted by the IHO Council and Member States and adopt the Work Programme of the Organization for 2023-2026.

The meeting was attended by approximately 300 delegates and observers representing the IHO Member States, non-Member States, intergovernmental and international organizations. The discussions were continuously interpreted between the four Assembly working languages: English, French, Spanish and Russian.

2 Meeting Agenda

Sunday 30 April

08:00 - 20:00 Preparation for Industry Exhibition and Member States'

Monday 1 May

08:00 - 20:00 Preparation for Industry and Member States' Exhibitions

10:00 - 18:00 Registration of Participants

14:00 - 15:00 Finance Committee Meeting (open for all delegations)

F1.1 Finance report 2020 – 2022

F1.2 Annual Finance Report 2022

F1.3 Implementation of the Budget for 2023

F1.4 The 3 years' budget 2024 – 2026

F1.5 Financial aspects of the revision of IHO M-7 Staff Regulations Proposal 1.5

F1.6 Election of the Finance Committee Chair and Vice-Chair for the term 2024 – 2026

15:00 - 15:30 Coffee break

15:30 - 16:45 Event: Empowering Women in Hydrography (open to all)

Workshop: Gender balance: how to empower organizations and leaders to change?

- Overview of achievements of EWH project over the past two years
- Feedback from RHCs on actions in their regions
- Perspective from a hydrographer
- Presentation on 21st century leadership

17:00 - 18:00 Meeting of Heads of Delegations

IHO Secretary-General welcomes Member States, introduces the Assembly Chair and explains the format and procedures of the Assembly session

Designation of the Vice-Chair of the Assembly



- General overview of the Agenda
- Records of the Session, circulation of documents, role of Rapporteurs
- Any other business
- 18:30 - 20:30 Icebreaker Reception

Day 1 Tuesday 2 May

- 08:00 - 18:30 Registration of Participants
- 09:00 - 09:40 Assembly Administration
 - 1.1 Welcome Remarks by the Secretary-General
 - 1.2 Confirmation of the Election of the Chair of the Assembly
 - 1.3 Election of the Vice-Chair of the Assembly
 - 1.4 Appointment of the Scrutineers
 - 1.5 Appointment of the Rapporteurs
- 09:40 - 10:00 Recess Invited guests take their seat
- 10:00 Arrival of HSH Prince Albert II 2
- 10:00 - 13:00 Opening Ceremony
 - 2.1 Address by the Secretary-General
 - 2.2 Address by the Chair of the Assembly
 - 2.3 Keynote address by IMO Representative
 - 2.4 Keynote address by IOC Representative
 - 2.5 Keynote address by OECD Representative
 - 2.6 Assembly Opening Address by HSH Prince Albert II of Monaco
 - 2.7 Presentation of the Prince Albert 1st Medals (2020 and 2023)
 - 2.8 Presentation of New Member States' Flags
 - 2.9 HSH Prince Albert II Opens and visits the Member States' Exhibition and Hydro-graphic Industry Exhibition
 - 2.10 Member States' Exhibition and Hydrographic Industry Exhibition open to delegates and guests
- 13:00 - 14:15 Lunch Break
- 14:15 Official Photograph (Grimaldi Forum main entrance hall)
- 14:30 - 14:40 Adoption of the Agenda
- 14:30 - 15:30 Consideration of Council Chair Report and Proposals (Work Programme 1)
 - 4.1 Summary report on Council activities (Council Chair)
 - 4.2 Summary report on WP1 (Secretary-General)
- 15:30 - 16:00 Coffee Break
- 16:00 - 17:30 Consideration of Council Chair Report and Proposals (Work Programme 1)
 - 4.3 PRO 1.1 - New IHO Resolution – S-100 Implementation (IHO Council)
 - 4.4 PRO 1.2 - Implementation and review of the Strategic Plan (IHO Council)
 - 4.5 PRO 1.3 - Gender-inclusive language to be used in IHO documents and communications (IHO Council)
- 18:00 - 20:00 Reception to be held in the Exhibition area – All Participants Welcome

Day 2 Wednesday 3 May

- 08:00 - 18:30 Registration of Participants



- 09:00 - 10:30 Consideration of Council Chair Report and Proposals (Work Programme 1)
4.6 PRO 1.5 - Revision of M-7 IHO Staff regulations (Secretary-General)
4.7 PRO 1.6 – Polygonal demarcation of global sea areas (Secretary-General)
4.8 PRO 1.7 - Deprivation of the IHO member state status from the Russian Federation (Ukraine)
- 10:30 - 11:00 Coffee Break
- 11:00 - 12:30 Consideration of Reports and Proposals (Work Programme 2)
5.1 Presentation of the highlights of WP2 (HSSC Chair)
5.2 PRO 2.1 - Dual Fuel Concept for S-100 ECDIS (IHO Council)
5.3 PRO 2.2 - Establishment of an S-100 Infra Center to support the implementation of S-100 (Republic of Korea)
- 12:30 - 14:00 Lunch break
- 14:00 - 14:30 PRO 2.3 - The future of digital charting (United Kingdom)
- 14:30 - 15:30 Consideration of Reports and Proposals (Work Programme 3)
6.1 Presentation of the highlights of WP3 (IRCC Chair)
6.2 PRO 3.1 - Amendments to General Regulations, Art. 8.e – Membership of the HCA (IHO Council)
- 15:30 - 16:00 Coffee Break
- 16:00 - 17:30 Consideration of Reports and Proposals (Work Programme 3) (continued)
6.3 PRO 3.2 - Revised Capacity Building Strategy (IHO Council)
6.4 PRO 3.3 - Recognition of Southern Ocean (Secretary-General)
6.5 PRO 3.4 - Access to software, hardware and training courses (Islamic Rep. of Iran)
- 18:00 - 20:00 Reception hosted by the United Kingdom at Monaco Yacht Club (by invitation)

Day 3 Thursday 4 May

- 08:00 - 18:30 Registration of Participants
- 09:00 - 09:30 Consideration of Reports and Proposals (Work Programme 3)
6.6 PRO 3.5 - Establishment of a task force to explore the potential merits, structures, and options for alternate fund generation to support capacity building and other IHO initiatives (United States of America, Canada, Norway, United Kingdom and Australia)
- 09:30 - 10:20 Presentation of the reports of the 15 RHCs
Presentation of the HCA report
- 10:20 - 10:30 Official signature ceremony of HCA Statutes by the new HCA members Netherlands, Poland, and Türkiye in the presence of HCA Chair
- 10:30 - 11:00 Coffee Break
- 11:00 - 12:30 Presentation of the reports of the 15 RHCs (continued)
- 12.30 - 12.45 International Hydrographic Review Centenary (IHR editor)
- 12:45 - 14:00 Lunch Break
- 14:00 - 17:30 Thematic session: future challenges for hydrography in the Ocean Decade moderated by IHO Directing Committee (open to industry and invited guests)
- 14:00 - 15:00 Thematic Block 1: Ocean Mapping
- 15:00 - 16:00 Thematic Block 2: S-100 - Next level of digitalization of hydrographic information
- 16:00 - 16:30 Coffee Break
- 16:30 - 17:30 Thematic Block 3: Hydrography – Underpinning the digital twin of the Ocean



18:00 - 20:00 US Navy Ship reception (by invitation)

Day 4 Friday 5 May

08:00 - 13:00 Information desk

09:00 - 10:00 Finance Reports, Work Programme and Budget matters

11.1 Presentation of Finance Committee Report

11.2 PRO 1.4 - 3-year Work Programme and budget 2024-2026 (Secretary-General)

11.3 Approval of the proposed Table of Tonnages 2024 - 2026

11.4 Announcement and first Instructions for the election process

10:00 - 10:15 Coffee Break

10:15 - 11:45 Election for the position of IHO Secretary-General and IHO Director

11:45 - 12:15 Endorsement of the selection process of the Members of the Council 2023 - 2026

12.1 Approval of the Members of the Council 2023-2026

12.2 Review Assembly Decisions

12:15 12.3 Award of the best MS exhibition
Hydrographic Industry and Member States' Exhibitions close

12:30 12.4 Presentation of a video of the French Government to invite for the UN Ocean Conference 2025 in Nice, France

12:35 - 13:00 Closing Ceremony

13.1 Setting the date of the 4th Session of the Assembly (A-4) in 2026

13.2 Setting the seating order at A-4

13.3 Any other business:
- Resolution expressing gratitude to the Principality of Monaco as Host Country of the Assembly and the Secretariat
- Statements by outgoing and incoming Secretary-General and Directors

13.4 Closing Remarks by the Chair of the Assembly

13:00 END OF 3rd SESSION OF THE ASSEMBLY

18:00 - 20:00 Closing Reception offered by the Chair of the Assembly and the IHO Secretary-General at IHO Secretariat by invitation Heads of Delegation +1 and invited MC Government guests

3 Summary of The First Plenary Session - 2 May 2023

WELCOME REMARKS BY THE SECRETARY-GENERAL

The Secretary-General, Dr Mathias Jonas, delivering some welcome remarks, noted that the Assembly was being held in full compliance with the Convention on the IHO and the General Regulations, Financial Regulations and Rules of Procedure of the IHO Assembly, as set out in the Basic Documents of the IHO (IHO publication M-1), and with the Resolutions of the IHO (IHO publication M-3). Since a total of 56 delegations of Member States were registered as being present, the 3rd IHO Assembly was duly quorate.

CONFIRMATION OF THE ELECTION OF THE CHAIR OF THE ASSEMBLY

The Secretary-General announced that Mrs Pia Dahl Højgaard (Denmark) had been elected as Chair of the Assembly through the usual correspondence procedure. The election of Mrs Pia Dahl Højgaard was confirmed by acclamation.



The Secretary-General handed over the chair to Mrs. Pia Dahl Højgaard.

ELECTION OF THE VICE-CHAIR OF THE ASSEMBLY

The Chair announced that Mr Adam Greenland (New Zealand) was nominated as Vice-Chair of the Assembly. Mr Adam Greenland was elected Vice-Chair by acclamation.

APPOINTMENT OF SCRUTINEERS

A team of scrutineers was appointed, consisting of one representative each from Canada, Denmark, Italy, Portugal and Singapore.

APPOINTMENT OF RAPPORTEURS

A team of rapporteurs was appointed, consisting of one representative each from Japan and Papua New Guinea and two representatives each from the United Kingdom of Great Britain and Northern Ireland and the United States of America.

OPENING CEREMONY

His Serene Highness Prince Albert II was escorted into the Assembly Hall.

The Secretary-General delivered his opening address, which is reproduced in these proceedings.

The Chair delivered her opening address, which is reproduced in these proceedings.

Dr Heike Deggim, Director, Maritime Safety Division of the International Maritime Organization (IMO), delivered a keynote address, which is reproduced in these proceedings.

Dr Vladimir Ryabinin, Executive Secretary of the Intergovernmental Oceanographic Commission of UNESCO (IOC), delivered a keynote address, which is reproduced in these proceedings.

Dr Kerri-Ann Jones, Deputy Secretary General of the Organization for Economic Cooperation and Development (OECD), delivered a keynote address, which is reproduced in these proceedings.

His Serene Highness Prince Albert II of Monaco delivered an address declaring open the 3rd Session of the Assembly of the International Hydrographic Organization, which is also reproduced in these proceedings.

PRESENTATION OF THE PRINCE ALBERT I MEDAL

His Serene Highness Prince Albert II of Monaco presented the Prince Albert I Medal for Hydrography 2020 to Mr Peter Doherty (United States of America) and the Prince Albert I Medal for Hydrography 2023 to Captain Mark Van der Donck (Netherlands), in recognition of their diligent and long-standing work that provided a lasting legacy in relation to the objectives of IHO.

FLAG PRESENTATION CEREMONY

The representatives of Republic of Bulgaria, Cooperative Republic of Guyana, Solomon Islands, Republic of Ghana, Republic of Iraq, Republic of Angola and the Republic of Albania were invited successively to present their flag as is the tradition. The Secretary-General presented each representative with the IHO crest.

His Serene Highness Prince Albert II was escorted from the Assembly Hall to the exhibition venue to open and visit the Industry Exhibition and the Member States' Exhibition.

Participants were encouraged to take full advantage of the opportunity the Exhibitions provided to learn about innovations in the field of hydrography.



4 Summary of The Second Plenary Session 2 May 2023

ADOPTION OF THE AGENDA (AGENDA ITEM 3)

The Chair invited the Assembly to adopt the draft agenda. The agenda was adopted.

CONSIDERATION OF COUNCIL CHAIR REPORT AND PROPOSALS (WORK PROGRAMME 1) (AGENDA ITEM 4)

SUMMARY REPORT ON COUNCIL ACTIVITIES (COUNCIL CHAIR)

Council Chair, drawing attention to the report of the IHO Council, gave a presentation outlining the Council's activities since 2020, which is reproduced in these proceedings. In particular, as directed by the second Assembly, the Council had continued to discuss the definition of "hydrographic interest" at its fourth meeting and had invited parties interested in developing a revised definition of the term to participate in an informal group with a view to producing a single, consolidated proposal on the subject.

It had further been suggested that the group review and consider all related materials, including past proposals and other Assembly or Conference outcomes. The goal had been to prepare a new proposal for the sixth meeting of the Council or the third Assembly, but the pandemic of coronavirus disease (COVID-19) had prevented interested parties from meeting in person until 2022. Since the 2020–2023 Council was now dissolved, the agenda item had been closed at the Council's sixth meeting, with the suggestion that it be taken up again by the next Council once more detailed solutions had been developed. The Council therefore recommended to the Assembly that the topic be put on hold until the interested parties had worked out and submitted a mature proposal for a revised definition.

Secretary-General explained that, as the Council had been formally disbanded pending the establishment of a new Council by the third Assembly, the issue of finding a way forward on the definition of "hydrographic interest", which the Council had recommended be put on hold, was considered formally closed. It would be placed on the agenda of either the Assembly or the Council, only if a new proposal to that effect is presented from a Member State.

Germany expressed support for this interpretation of the position by the Secretary-General. Chair concluded that the Assembly agreed to endorse both the presentation given by the Council Chair and the written report of the Council, subject to the specific approval of the proposals submitted, namely PRO 1.1, 1.2, 1.3, 1.4, 2.1, 3.1 and 3.2, and in the light of the clarification provided by the Secretary-General.

It was so agreed.

Chair further concluded that the Assembly agreed to endorse the position that the item relating to a revised definition of "hydrographic interest" would remain closed until a new submission or proposal by Member States was put forward to the Council or the Assembly.

It was so agreed.

SUMMARY REPORT ON WORK PROGRAMME 1 (SECRETARY-GENERAL)

Secretary-General gave a presentation outlining the work of IHO during the period 2021–2023 on the six elements of Work Programme 1, "Corporate affairs". In addition to the excellent relations the Organization enjoyed with the Government of Monaco, it had strong working relationships with a number of international Organizations and had continued to participate in relevant meetings.

Work within the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) provides greater scope on how to manage geospatial information, of



which hydrographic information was a subset. Together with the International Organization for Standardization Technical Committee ISO/TC 211 (Geographic Information/Geomatics) and the Open Geospatial Consortium (OGC), IHO had co-authored a key revision of the UNGGIM Guide to the Role of Standards in Geospatial Management, which was a fundamental tool for establishing Marine Spatial Data Infrastructure (MSDI). IHO also worked closely with the United Nations Division of Oceans and Law of the Sea (UN-DOALOS), the IHO–International Association of Geodesy (IAG) Advisory Board on the Law of the Sea (ABLOS) and the United Nations Open-ended Consultative Process on Oceans and the Law of the Sea.

A presentation on mapping the ocean had been well received, helping participants in the Open-ended Consultative Process to understand why it was an essential activity that provided baseline data for use in a variety of applications. UN-DOALOS had gained support through the development of the S-121 Product Specification on Maritime Limits and Boundaries as the recommended format for States to deposit data in support of maritime limits and boundaries within the United Nations, in accordance with the provisions of the United Nations Convention on the Law of the Sea. It was anticipated that legal advice would be sought from UN-DOALOS in relation to the issue of crowd-sourced bathymetry data, especially in the context of the “30 by 30” initiative on marine protected areas.

IHO’s relations with WMO continued to mature. WMO was faced with the challenge of setting up a global meteorological service based on modern data standards and had decided to use the S-4xx range of data Product Specifications, based on S-100 paradigms, which would help to increase the popularity of the S-100 framework. If S-100 became better integrated into digital frameworks, it would be better for all processes affected. There had also been promising developments in relations with the International Seabed Authority (ISA): many years of negotiations had resulted in an agreement that bathymetry data gathered by ISA contractors in their respective licence areas would be submitted for inclusion in the IHO Data Centre for Digital Bathymetry archive. IHO was grateful to the ISA for its flexibility.

One of IHO’s strategic goals was to improve links with the ocean community, and good progress had been made in that regard. In June 2022, IHO had contributed proactively for the first time to the United Nations Ocean Conference, organizing a side event on how hydrography could support a wide range of activities and help countries to develop the Blue Economy. It had also continued to work with the International Federation of Surveyors (FIG) and the International Cartographic Association (ICA) to ensure that training courses for cartographers and surveyors remained fit for purpose and responded to technological changes in the industry. In the area of information management, digital processes had been implemented to maintain relations with Member States. IHO was grateful for support from Japan and the Republic of Korea in the form of Project Officers to help provide these digital services. Public relations and outreach had also changed significantly with the vast increase in use of social media, making it easier to enhance the Organization’s visibility and to leverage resources as a result. The IHO website had been reviewed and relaunched, and the Organization was keen to hear of activities in Member States to mark World Hydrography Day, as well as taking part in events in the host State. The centenary of the Organization had been celebrated on 21 June 2021.

The conduct of Work Programme 1 was permanently overseen by the Council. The mechanism worked well and provided good oversight. The report of the Finance Committee, which had met the previous day, would be submitted to the Assembly once it had been finalized.

In terms of Secretariat services, the Staff Regulations would be discussed separately later in the week. There had been significant changes in the profile of permanent staff members. With the departure of two translators from the permanent staff, much translation into Spanish and French had been outsourced to competent external translators. Thanks were due to the officers who had helped with the process. The arrival of a dedicated Geographic Information System (GIS) expert on the permanent staff was welcome. Gratitude was also due to Japan, the Republic of Korea and Peru for providing seconded officers to work on specific projects.



The Secretariat's workload had increased with the vast expansion in video teleconferencing and hybrid formats for in-house meetings. That trend looked set to continue, especially as the S-100 framework increases in popularity.

Holding the Assembly at the Grimaldi Forum instead of the original venue of the Auditorium Rainier III, which had proved impossible as a result of continuing COVID-related measures, would have a significant impact on its cost. Consideration would need to be given to ways of compensating for the additional financial burden in the coming years. The issue would be deliberated with the Council in the context of preparing budget estimates for 2024.

The Assembly was invited to take note of the fact that the Secretariat had maintained its operational duties and had represented the Organization's scope and interests despite COVID-19 constraints; that greater levels of liaison with other international Organizations and stakeholder groups had been achieved as a result of the expansion of the Work Programme scope to the targets of Goal 2 and Goal 3 of the IHO Strategy, together with the active involvement of the Secretariat Staff in time-limited projects; and that any request for increased operational duties placed on the Secretariat should take into account the required additional personnel and material resources.

Chair invited the Assembly to comment on the Secretary-General's summary report on Work Programme 1.

Norway, emphasizing how much IHO had changed in recent years in response to broader changes in the world, welcomed the increasing professionalization of the Organization and congratulated the Secretary-General and his team on their work.

Chair took it that the Assembly agreed to endorse the summary report on Work Programme 1. It was so agreed.

CONSIDERATION OF COUNCIL CHAIR REPORT AND PROPOSALS (WORK PROGRAMME 1) (AGENDA ITEM 4)

PRO 1.1 – NEW IHO RESOLUTION – S-100 IMPLEMENTATION (IHO COUNCIL)

Council Chair said that Proposal 1.1 introduced a new, overarching Resolution on S-100, embracing concepts and pathways depicted in the Roadmap for the S-100 Implementation Decade 2020 – 2030 with reference to the new IMO Resolution on Performance Standards for ECDIS and the enforced dates agreed upon. She recalled that, at A2, Republic of Korea had proposed that IHO Resolutions be updated to include elements of S-100 implementation; it became apparent that there was a need for an overarching Resolution in order to tie together the particular elements of S-100 implementation including guidance, timelines, maintenance and which body would be responsible for monitoring the implementation. The new Resolution was to be guided by the Roadmap and its Annexes and it would emphasize the expectation of adequate S-100 ENC coverage and appropriate S-100 data products and services when S-100 ECDIS became operational in 2026. Noting the endorsement by Council, the Assembly was invited to approve the proposed Resolution.

Chair noted that there had been unanimous support in the Red Book with one comment from Canada proposing editorial changes so that the Annexes were renamed numerically to correspond with the IHO-100 implementation strategy webpage.

In the absence of any comments, the Chair took it that the Assembly approved the new Resolution on S-100 Implementation including the editorial suggestions proposed by Canada.

PRO 1.1, as amended, was adopted.

PRO 1.2 – IMPLEMENTATION AND REVIEW OF THE STRATEGIC PLAN (IHO COUNCIL)



Council Chair said that, in accordance with IHO Resolution 12/2002, the Strategic Plan was to be reviewed by the Council for fitness of purpose prior to each Session of the Assembly.

In its latest review, the Council had found that current version of the Strategic Plan was still viable and recommended that it continued to be used to provide general context and direction to the IHO Work Programme.

The Council's deliberations had also led to the proposals on adjusting priorities and on a change of focus for one of the targets. In 2022, the International Maritime Organization (IMO) had endorsed a proposal for revision to the Electronic Chart Display and Information System (ECDIS) Performance Standards and ECDIS Guidance for Good Practice to include S-100 functionality and the timelines for the phase-in of S-100 capable ECDIS from 01 January 2026.

In order to meet the expectations set in place by the IMO decisions, it was important for Member States and stakeholders to accelerate the pace of development in S-100, S-98, S164 and S-128 so that the operational versions of the Specifications would be capable of supporting S-101 Electronic Navigational Chart (ENC) in use. The goal was to provide as much as possible S-101 ENC coverage where there were also S-57 ENCs, by 01 January 2026. In order to achieve that aim, Council proposed to prioritize Goal-1-related activities. The increased focus on Goal 1 was to be temporary pending progress towards complete S-101 coverage.

After careful consideration and analysis, Goal 2 / Target 2.1, to “Build a portal to support and promote regional and international cooperation in Marine Spatial Data Infrastructures (MSDI)” was deemed to be impractical and a duplication of national efforts. As an alternative, Council proposed to focus on a portal consisting of global thematic layers of information such as those that were already provided under IHO online catalogues on the IHO website.

Council believed that the Strategic Performance Indicators, as developed, were sufficient to measure progress and success and recommended that the Council begin preparations for the next Strategic Plan to be put in place for 2027–2032.

The Assembly was invited to agree on the continuation of conduct of the annual Work Programmes on the basis of the Strategic Plan in place for 2021–2026; to approve that Goal 1 of the IHO Strategic Plan and its targets should have the highest priority in the implementation of the 2024–2026 Work Programme; to direct the Inter-Regional Coordination Committee (IRCC) to provide guidance to the MSDI Working Group on the focus shift in implementation of Goal 2/Target 2.1 towards an IHO Data-Products-Services portal providing global thematic layers; to continue to measure the effectiveness and the efficiency of the three Work Programmes' implementation by means of the Strategic Performance Indicators in place; and to provide directions to the next Council for the preparation of the Strategic Plan 2027–2032.

Chair noted that there had been unanimous support and some comments in the Red Book for the five points outlined in the proposal. She invited further comments.

United Kingdom believed that, at this stage, efforts should be targeted on supporting national and regional MSDI through Regional Hydrographic Commissions (RHCs) rather than through creating a global portal. The United Kingdom advocated the use of the nine strategic pathways of the United Nations Integrated Geospatial Information Framework (UN-IGIF) to maximize the value of geospatial data to societies and economies; and took the view that technologies and portals represented only one aspect of that holistic framework. At the request of the Chair, United Kingdom undertook to provide a proposed amendment to paragraph (c) of the proposed decision, setting out the views of the United Kingdom Hydrographic Office on MSDI and the IHO Data-Products-Services portal providing global thematic layers. The United Kingdom supported all other proposed paragraphs.

United States of America supported Proposal 1.2 on implementation and review of the Strategic Plan. The next three years would be a critical period for realizing IHO's vision of the promised S-100 products and services, and the proposal recognized the important connectivity between the Strategic Plan, the Work Programme and deliverables in the efforts to achieve Goal 1. The



United States looked forward to working with Member States, the IHO Secretariat and key stakeholders in those regards. The Science on the Sphere display demonstrated the value of hydrography beyond navigation in addressing, among others, local, regional and global challenges including sea-level rise, hazard forecasting in mitigation and marine spatial planning. While Goal 1 was foundational to IHO's work, hydrography's considerable additional value beyond navigation was also affirmed in Goals 2 and 3. United States also supported United Kingdom's comments on the IGIF pathways and noted that a new version of the IGIF-Hydro would be available to Member States between May and August 2023.

Sweden supported the review and proposed implementation of the Strategic Plan. It was of particular importance that IHO focused on Goal 1 and S-100 implementation. Sweden appreciated the additional comments from Canada and the Secretariat, but believed that the existing wording was generic enough to cover any concerns.

Suriname supported the Secretariat's recommendation to refocus the function of the MSDI portal on global thematic layers.

Chair took it that the decision was agreed apart from subparagraph (c) for which United Kingdom would submit a proposal of amendment on the following day.

It was so agreed.

PRO 1.3 – GENDER-INCLUSIVE LANGUAGE TO BE USED IN IHO DOCUMENTS AND COMMUNICATIONS (IHO COUNCIL)

Council Chair recalled that, at its second session (A2), the Assembly had tasked the Secretary-General with conducting a comprehensive review of IHO basic documents and resolutions with respect to the use of gender-inclusive language and to submit draft revisions of IHO publications M-1 and M-3 to A3; to monitor IHO's progress towards the implementation of the relevant United Nations guidelines in all IHO documentation and communications; and to report to A3.

The review of the documents had revealed relatively few single-gender references and the modifications required did not impact the readability of the documents. Based on the Secretary-General's report to the fifth session of the Council (C5), it was recommended that, to the extent possible, the updating of gender references in existing IHO documents would take place in conjunction with other edits and revisions which had been received as proposals from IHO bodies; there would be no systematic updating of all IHO documents for the single purpose of addressing gender language issues. The Council also proposed that guiding principles on gender-inclusive language, once approved, would apply to all new IHO documents and communications. An amendment was proposed to IHO Resolution 1/2020 in order that the use of gender-inclusive language should become part of the regular drafting and revision process of all IHO documents and communication.

The Assembly was invited to approve the proposed amendment to IHO Resolution 1/2020 on gender-inclusive language to be used in IHO documents and communications; to direct the IHO Secretariat to implement the gender-inclusive language in M-1 as a first step and invite all IHO Committees, Sub-Committees, Working Groups and Project Teams to review their Terms of Reference and Rules of Procedure in application of the new IHO Resolution; and to endorse the proposal that the application process of the proposed revised version of IHO Resolution 1/2020 would become part of the regular drafting and revision process of all IHO documents and communications.

Japan supported the proposal, noting that the East Asian Hydrographic Commission had amended its statute to provide for the use of gender-inclusive language. Japan proposed therefore that, in paragraph (b), Regional Hydrographic Commissions should also be invited to review their Terms of Reference and Rules of Procedure in application of the new IHO Resolution.



United States strongly supported IHO's commitment to gender equity and equality and the empowerment of women in hydrography. United States supported the use of gender inclusive language in IHO documents and activities and supported the proposal by Japan to include a reference to Regional Hydrographic Commissions in the draft decision. United States recognized the administrative burden of amending documents and stood ready to provide support in the rewording of documents.

New Zealand supported the amendment proposed by Japan to include a reference to Regional Hydrographic Commissions reviewing their Terms of Reference and Rules of Procedure.

Chair took it that the decision was approved, with the amendment proposed by Japan. She suggested the following wording: “b) to direct the IHO Secretariat to implement the gender inclusive language in M1 as a first step and invite Committees, Working Groups and Regional Hydrographic Commissions to review their Terms of Reference and Rules of Procedure in application of the new IHO Resolution”.

PRO 1.3, as amended, was adopted.

PRO 1.5 – REVISION OF M-7 IHO STAFF REGULATIONS (SECRETARY-GENERAL)

Secretary-General, introducing PRO 1.5, said that the proposal to revise M-7 IHO Staff Regulations had been prompted by rearrangements made in connection with the health insurance and retirement system for IHO Secretariat staff. IHO obligations in respect of rights granted to staff members would not change as a result of the proposal, which would similarly have no impact on the IHO Budget. Based on experiences during the COVID-19 pandemic, one of the main changes proposed was to introduce teleworking as an option available to IHO staff on a permanent basis. During the revision process, the opportunity had been taken to make minor editorial changes, updates and clarifications to the publication. The proposal had been endorsed by the Council and the Finance Committee.

The Assembly was invited to take note of the need to revise the IHO Staff Regulations for the reasons set out in PRO 1.5; approve the proposed revision of the IHO Publication M-7 Staff Regulations; and endorse the proposal to put the new Edition 9.0.0 in force by 1 July 2023, subject to the inclusion of gender-inclusive language in accordance with the decision taken under agenda item 4.5.

Chair said she took it that the Assembly wished to agree to each of those three actions.

It was so agreed.

PRO 1.5 was adopted.

PRO 1.6 – POLYGONAL DEMARCATION OF GLOBAL SEA AREAS (SECRETARY-GENERAL)

Secretary-General, introducing PRO 1.6, recalled that A2 had approved the proposal for the future of S-23 as a package and had tasked him with its implementation. It had also tasked the Hydrographic Services and Standards Committee (HSSC), as the responsible technical body, with the development of a new S-130 Polygonal Demarcations of Global Sea Areas Product Specification. The 11 members of the S-130 Project Team (S-130PT) established for that purpose had worked in accordance with the Rules of Procedure and Terms of Reference endorsed by the HSSC. At the HSSC's 14th session (HSSC14), the S-130PT Chair had provided a progress report stating that S-130 Product Specification Edition 1.0.0 would be submitted to HSSC15 for endorsement in June 2023; that the related initial implementation and test phase with a view to Edition 2.0.0 would be completed by the end of 2023; and that Edition 2.0.0 and the authoritative S-130 dataset would be submitted to HSSC16 in May or June 2024 for endorsement and subsequent report to C8. On the assumption that those timelines would be met, C9 was expected to be in a position to report to A4 accordingly.

Secretary-General, noting that the Council had endorsed the timelines mentioned, said that the Assembly was invited to take note of the timeline for the development and implementation of



the S-130 Product Specification; endorse his recommendation to postpone consideration of the need for the subsequent development of basic guidelines for the allocation and display of attributes of sea areas to be applied to geographic information systems until the S-130 Product Specification and the implementation as authoritative S-130 dataset had been finalized; and endorse his recommendation to postpone the consideration of subsequent amendments to the relevant IHO Resolutions 32/1919, as amended, and 13/1919, as amended, for endorsement by the Council, if appropriate, until the S-130 Product Specification and the implementation of the authoritative S-130 dataset had been finalized.

Sweden, speaking in its capacity as HSSC Chair, confirmed that S-130 Edition 1.0.0 had already been submitted and would be made available on the IHO website in advance of HSSC15 in June 2023.

Japan expressed support for the proposal, as well as great appreciation for the sincere effort and generous support of the Secretary-General concerning the implementation of the decisions adopted in respect of PRO 1.9 at A2.

Belgium, speaking in its capacity as Chair of the S-130 Project Team and likewise expressing support for the proposal, thanked all team members who had contributed to the work to date and would continue to do so in future.

Chair said she took it that the Assembly wished to take note of the timeline detailed by the Secretary-General and to endorse his two recommendations.

It was so agreed. PRO 1.6 was adopted.

5 Summary of The Third Plenary Session 3 May 2023

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

United Kingdom presented a proposed amendment, comprising a change to the wording of the last sentence to reflect the view that guidance to the Marine Spatial Data Infrastructures Working Group (MSDIWG) should be achieved through supporting regional and national efforts through the Regional Hydrographic Commissions (RHCs) rather than through the creation of a global portal. Noting that a portal created previously by the United Kingdom Hydrographic Office had not proven successful, he said that the purpose and defined customer requirement for a global portal were not clear. United Kingdom supported the use of the United Nations Integrated Geospatial Information Framework (UN-IGIF) pathways as a modern framework to maximize the value of data to societies. Funding and capacity for such a portal would also prove challenging. The role of the MSDIWG should therefore be to support national and regional efforts instead of creating a global portal.

Norway said that work of the MSDIWG had helped to create a more mature understanding of MSDI. He supported the changes proposed by United Kingdom; it was unclear who the customer would be for a global portal. Resources should be directed towards support on a national and regional level.

India said that MSDI was still at a nebulous early stage and could not yet be considered to have “matured”. He emphasized the essential nature of global coordination so that layers were developed in a standardized way and ensured interoperability.

Germany said that their understanding had been that the proposal was not to develop another worldwide portal, but to make use of the mechanisms that already existed to provide the necessary data infrastructure, which included the UN-IGIF. The original proposal did not hinder regional or national approaches. Either option would be acceptable, but Germany suggested that in either case it be clarified that the aim was to support UN-IGIF rather than to build another portal.

Brazil and New Zealand expressed full support for the United Kingdom’s proposed amendment.



The Secretary-General explained that the idea of a portal had originally emerged in deliberations on the Strategic Plan during the 1st Session of the IHO Assembly. He fully concurred that there was no good purpose for a global portal to be maintained by IHO. He further stated that there was a system already in place under the Secretariat that provided Member States access to global thematic layers. Instead of a global portal, he suggested maintaining the current mechanism to provide global thematic layers, while also integrating the United Kingdom's proposal to enhance support to national and regional MSDIWG efforts through the RHCs.

Germany supported the Secretary-General's solution and expressed willingness to contribute to the development of the necessary wording.

United States of America endorsed that approach and said that, conceptually, the United States was a strong supporter of using the UN-IGIF pathways. They noted that it was a major change from the task assigned, and expressed willingness to help develop the necessary wording.

India and France supported the Secretary-General's solution and expressed willingness to help develop the necessary wording.

United Kingdom endorsed the approach and said they saw value in articulating the problem the portal was seeking to solve and being specific about the outputs and outcomes it hoped to achieve.

PRO 1.2: 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 the MSDIWG has to be brought forward to IRCC for endorsement and Council for approval.

PRO 1.7 – DEPRIVATION OF THE IHO MEMBER STATE STATUS FROM THE RUSSIAN FEDERATION (UKRAINE) (AGENDA ITEM 4.8)

The Chair said that Ukraine had unfortunately been unable to attend the Assembly to present its proposal. She noted that the proposal invited the Assembly "to consider the ability" of the Assembly to make a decision of deprivation of IHO Member State status from the Russian Federation on the basis of its military aggression against Ukraine. She clarified that the Assembly's ability to make such a decision was determined by the IHO Convention and General Regulations that do not provide for any mechanism for suspending a Member State for reasons other than two consecutive years' non-payment of contributions. She therefore concluded that the Assembly did not have such an ability.

Sweden, speaking on behalf of European Union Member States, who were also IHO Member States, delivered a statement expressing full solidarity with Ukraine and the Ukrainian people. He called on the Russian Federation to cease action and withdraw from Ukraine. He further stated that the Russian Federation must respect international law, including human rights. Sweden requested that their statement is reproduced in these proceedings.

United States condemned in the strongest possible terms the Russian Federation's unprovoked and illegal war against Ukraine, and the fact that the event had created a humanitarian catastrophe. The United States expressed full support for all efforts to ensure the safety of seafarers, commercial vessels, and the marine environment in the Black Sea and Sea of Azov, and further stated that it was important that lawful hydrographic services and activities be facilitated, even in situations involving armed conflict. It was noted that the armed conflict was blocking such activities. The swiftest way to ensure that maritime activities could continue in those areas would be for the Russian Federation to immediately end its illegal war and withdraw all its forces.

Norway stated that it was not a member of the European Union, but expressed support for the statement made by Sweden.

Japan expressed concern about the impact of Russian Federation's actions, which were shaking



the very foundation of the international order based on the rule of law. Japan took seriously the maritime safety of civilian vessels in the regions that were being attacked and condemned the Russian Federation's actions. Japan was hopeful that a peaceful environment would return to Ukraine.

United Kingdom stated that it was not a member of the European Union, but supported the statement by Sweden. The United Kingdom expressed full support for Ukraine in standing against ongoing illegal aggression from the Russian Federation and condemned that country's unprovoked and premeditated invasion of Ukraine. It was through international bodies such as the IHO that countries should seek to hold the Russian Federation accountable for its illegal and unsafe actions, which were impacting Ukraine's ability to undertake its duties as a national hydrographic office and jeopardizing the safety of the international mariner. Working with other IHO partners, the United Kingdom had responded fully to Ukraine's request for support, detailed in Circular Letter 16/2022, by providing support and assistance to Ukraine to enable it to undertake its responsibilities under the International Convention for the Safety of Life at Sea (SOLAS) as a sovereign coastal State. The United Kingdom would continue to do so, for as long as necessary.

Russian Federation thanked colleagues who had shown professionalism in abstaining from any comments in what was a political matter. The Russian Federation was making every effort to maintain hydrographic activities and assure navigational safety in the region. The Russian Federation had never stopped conducting bathymetric activities in the Black Sea and Sea of Azov, charting activities and updating maps, and assuring safe navigational activities. The practical results of those efforts were that more than 12,500 ships had passed the Kerch Strait in both directions since navigation had opened. The Russian Federation noted revision efforts by the Russian hydrographic service to support navigational security in the region.

China attached great importance to the sovereignty of Member States, and noted that unilateral sanctions impacted safety of navigation in the region. China called for all countries to strengthen solidarity and work together to avoid adverse effects. They stated that the IHO was an intergovernmental technical advisory body and not a political organization. The Assembly was not a forum suitable for discussion of political issues.

The Assembly took note of the Chair's clarification that neither the IHO Convention nor the General Regulations of the IHO provide a mechanism to suspend a Member State from IHO membership for reasons other than non-payment of contributions for two consecutive years.

CONSIDERATION OF REPORTS AND PROPOSALS: WORK PROGRAMME 2 (AGENDA ITEM 5.1)

HSSC Chair presented a summary report of activities under Work Programme 2. The main focus of HSSC's work was to develop and maintain the IHO Standards necessary for safe navigation in a way that also supported the harmonized use of data beyond navigation. HSSC organized its work through nine working groups, whose areas of work he outlined. The S-100 Working Group included five Project Teams. A further Project Team was focused on Maritime Autonomous Surface Ships (MASS) and another on S-130. Lastly the Advisory Board of the Law of the Sea (ABLOS) comprised four representatives of IHO Member States and four from the International Association of Geodesy. HSSC Chair shared an implementation dashboard, which was kept up to date by the HSSC Vice-Chair and was reported annually to the Council.

Explaining the need for the move to S-100, HSSC Chair gave examples to highlight the value of moving to an ECDIS based on multiple interoperable layers. Moving beyond electronic versions of a chart format optimized for the paper media would allow the full potential of available data to be utilized. For example, enabling the creation of a unique safety depth layer that would also take into account dynamic information about water level and currents would contribute to reduced fuel consumption and so fewer emissions. Major benefits included improved safety (high



resolution bathymetry in combination with other datasets such as under keel clearance management), optimized loading and route optimization and just-in-time arrival (decreased fuel consumption, avoid squat, usage of tide currents and weather information). The ability for ships to be able to share their planned route with shoreside entities would be another major innovation that would allow ports to work more effectively. S-100 would also be maintainable and cyber-secure, and constituted a start towards automated navigation as machine-readable nautical information could facilitate the development of MASS.

In replacing S-57 ENC's with multiple interacting layers, the concept was that S-101 ENC would always act as the base layer. Further information could then be layered on top, but users should always be able to revert to the ENC in one click. The system was under development, and HSSC Chair encouraged Member States to engage to ensure that IHO could deliver new systems in a safe but understandable manner. He emphasized the importance of information being issued for use with ECDIS by or on the authority of a government-authorized hydrographic office or other relevant government institution. The navigational base layer of the newly defined Electronic Navigational Data Service (ENDS) was the ENC.

A two-step approach to implementation will focus first on a package of Product Specifications relating to navigational route monitoring mode, then on those relating to navigational route planning mode. In the transition from S-57 to S-101 ENC, backwards conversion was expected to be a more automatic process, which would mean it may be preferable to first produce S-101 data and convert this back to S-57. Various ongoing activities and initiatives were aimed at supporting the transition from S-57 to S-101 so that Member States could achieve substantial coverage before the new IMO ECDIS Performance Standards in-force dates. He encouraged technical experts to study carefully the options for hydrographic offices as there were strategic decisions that needed to be made in relation to parallel production of S-57 and S-101.

IHO had organized a drafting group and a draft redline version of the revised IMO ECDIS Performance Standards had been submitted to the IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) 9th meeting, held in June 2022. With the exception of the withdrawal of functionalities for route exchange all other proposed changes were endorsed by NCSR9. The proposal was subsequently approved by the IMO Maritime Safety Committee (MSC) 106th meeting in November 2022. A transition period had been agreed upon, meaning that S-100 ECDIS would be legal to use after 01 January 2026 and from 01 January 2029 new systems must comply with the new IMO Resolution MSC.530(106) on ECDIS Performance Standards. The inclusion of S-100 in the IMO regulatory framework was a major success for IHO, but meant that IHO had commitments towards IMO and other stakeholders to achieve operational status on the prioritized S-100 Product Specifications. An increase in active contributions in S-100-related Working Groups and Project Teams was therefore needed and Member States must do as much as possible to achieve substantial coverage of S-101 by 2026.

A Project Team was established under the Nautical Cartography Working Group (NCWG) to develop a baseline symbology set to support the automated production of paper charts from S101 data. Some Member States had suggested a varied approach to achieve better guidance. The HSSC and NCWG perspective was that the IHO Chart Specifications S-4 provided enough flexibility. The general approach agreed upon at A-2 in 2020, regarding paper charts, is reasonable. Member States were encouraged to engage in the work of HSSC, which would help them to ensure competencies in their own organizations while contributing to the development of new Standards. The involvement of Member States was important to avoid becoming too dependent on industry, and to ensure that the whole S-100 ecosystem was implemented in a safe way. As IHO's operational resources were limited, a sustainable structure was needed. HSSC Chair thanked all those who participated in the activities of the Working Groups and the HSSC Chair team.

United Kingdom expressed appreciation for the report. They said that the move away from paper charts towards digital charts was evidenced by a significant reduction in the volume of paper



charts sold by Admiralty internationally, from 5 million sheets of paper charts in 2015 to 575 000 charts sold internationally in 2022.

United States of America expressed appreciation for the report and looked forward to continuing to support such work in future.

The Assembly endorsed the Report of Work Programme 2.

PRO 2.1 – DUAL FUEL CONCEPT FOR S-100 ECDIS (IHO COUNCIL) (AGENDA ITEM 5.2)

Council Chair, explaining the rationale behind the dual fuel concept, said that S-100-compliant additional data layers would be interoperable only with S-101 Electronic Navigational Charts (ENCs). Introducing PRO 2.1, she noted that there were no substantive objections to the concept and that the Hydrographic Services and Standards Committee (HSSC) and Council had endorsed the document “Dual Fuel Concept for S-100 ECDIS” and the related executive summary.

The Assembly was invited to approve the dual fuel concept for S-100 Electronic Chart Display and Information Systems (ECDIS), including the prefacing executive summary as presented in Annex A, and to note the importance of the fundamental strategic change introduced by the S100 ECDIS dual fuel concept with regard to multiple interacting navigational data layers.

Suriname said that it supported the proposal.

Chair said she took it that the Assembly approved both proposals.

PRO 2.1: The Assembly took note of and approved the dual fuel concept for S-100 ECDIS including the prefacing Executive Summary as presented in Annex A. The Assembly further took note and approved the fundamental strategic change introduced by the S-100 framework and approved the dual fuel concept for S-100 ECDIS.

PRO 2.2 – ESTABLISHMENT OF AN S-100 INFRASTRUCTURE CENTRE TO SUPPORT THE IMPLEMENTATION OF S-100 (REPUBLIC OF KOREA) (AGENDA ITEM 5.3)

Republic of Korea, introducing PRO 2.2, said that a permanent and stable support structure would be essential for the IHO to achieve the S-100 Implementation Roadmap and related commitments. The proposed S-100 Infrastructure Centre could assist Member States in implementing the S-100 framework through the sustainable operation of the Geospatial Information Registry, with efficient communication with existing IHO bodies and the Secretariat, and through the update and maintenance of S-100 catalogues and development tools and S-164 test datasets.

Taking into consideration Sweden’s comment in the Red Book, Republic of Korea proposed that the Project Team should develop the objectives, scope and operational governance of the proposed Centre and report to HSSC, which should in turn report to Council for approval. Council should then report to the Assembly. It was hoped that the Project Team would find a suitable funding solution to avoid burdening the IHO. As a proponent of the proposal, the Korea Hydrographic and Oceanographic Agency (KHOA) would be actively involved in the Project Team’s work.

The Assembly was invited to recognize the need to establish the S-100 Infrastructure Centre and approve the foundation of a new Project Team under HSSC, with a three-year Work Plan including the establishment of the S-100 Infrastructure Centre to prepare for the actual implementation period, with consideration of the possible location of the centre; request the HSSC to propose to the Council how the S-100 Infrastructure Centre could support the S-100 framework; and request the Council to report to the 4th IHO Assembly on the progress of the three-year operation of the Project Team, including the establishment of the S-100 Infrastructure Centre.

Norway, acknowledging the need to address the topic, said that it wished to help to develop a solution. It stressed, however, that a decision on the exact form or name of the structure might be premature at the present stage.



United Kingdom agreed with Norway that the proposed effort might be premature, but expressed a willingness to work with the Republic of Korea to develop the proposal.

Singapore said that HSSC was the appropriate body, and stressed the need for further discussion about the roles and responsibilities of the proposed Centre. It looked forward to exploring possible collaboration between the Centre and the IHO–Singapore Innovation and Technology Laboratory on S-100 related projects.

United States of America, emphasizing the need for an S-100 technical support centre, said that it endorsed the proposal. There were clear roles for both the IHO Singapore Innovation Laboratory and the proposed Centre, and it would be important to put in place a well-documented, coordinated management structure at the IHO to avoid duplication of efforts. United States stood ready to contribute to the planning process.

Suriname supported the proposal.

Canada said that its concerns documented in the Red Book had been addressed. It looked forward to supporting Republic of Korea with the proposed centre.

Malta, welcoming the initiative, said that, in preparation for the S-100 ECDIS compliance deadline, the proposed centre should consider issues regarding end-user equipment and the implementation of S-100 requirements; for example, whether the ship was new, whether S-100-compliant equipment had been built into a new ship or was retrofitted into an existing ship; whether existing ship equipment would need to be replaced in the medium term; and matters regarding port State control and flag State. Malta stated that these were questions for the International Maritime Organization (IMO), and not the IHO. The proposed S-100 Infrastructure Centre should consider the end-user and how it would benefit end-users without too much hardship.

Portugal, having received answers to a number of questions, expressed support for the proposal. Secretary-General, stressing the indispensability of making the IHO a cutting-edge technical standardization body, said that a complex digital ecosystem consisting of all the elements contained in the proposal was necessary. The maintenance of that constantly evolving ecosystem would become an operational role requiring substantial human and material resources. Consideration must therefore be given to where to locate the proposed Centre and to how to maintain and resource it.

Republic of Korea thanked Member States for supporting the proposal and looked forward to fruitful discussions in the project team.

United Kingdom asked whether “recognize” in paragraph (a) of the proposal should be changed to “approve” or “investigate further”.

Republic of Korea confirmed that agreement was sought on the need for the proposed Centre and on the establishment of a Project Team.

Norway suggested rewording paragraph (a) to recognize only the need to address the topic, as it was too early to specify the nature of the solution.

Chair said that she understood the proposal was to establish an S-100 Infrastructure Centre and to create a Project Team to explore the matter and report to HSSC, which would in turn report to Council on whether to establish such a Centre and how it would support S-100 implementation. HSSC Chair suggested changing the wording to “the possibility of establishing an Infrastructure Centre Project Team”.

Republic of Korea said that if the proposed Centre could not be established within the three year Work Plan, Council would report that the work was still in progress. It hoped, however, that that would not be the case, given the urgency of S-100 implementation.

Director Kampfer, noting broad support for recognizing the need for such a structure, suggested including a reference to the operational establishment of the proposed Centre. In view of the approaching S-100 deadlines, it was important to put the Centre into operation as soon as possible.



United States of America endorsed the proposal as presented by Republic of Korea and concurred with Chair's interpretation.

Chair clarified that HSSC would report to Council on whether to establish the proposed Centre and how it could support the S-100 framework. She therefore proposed amended wording of paragraph (b) of the proposal to that effect.

In the absence of any comments, the Chair took it that the Assembly wished to adopt the proposal with her amendment.

PRO 2.2: The Assembly recognized the need to establish the S-100 Infrastructure Centre and approve the foundation of a new Project Team under HSSC with a three-year Work Plan including the establishment of the S-100 Infrastructure Centre and to prepare for the actual implementation period with consideration of the possible location of the Centre; requested HSSC to propose to the Council to establish the S-100 Infrastructure Centre and determine how it can support the S100 framework; and tasked Council to report to the 4th IHO Assembly on the progress of its three-year operation, including the establishment of the S-100 Infrastructure Centre.

PRO 2.3 THE FUTURE OF DIGITAL CHARTING (UNITED KINGDOM) (AGENDA ITEM 5.4)

United Kingdom noted that, with the development of the new S-100 standards and mobile technology, hydrographic offices were in a position to offer accessible official digital solutions that would increase the safety of navigation for those below the ECDIS-mandated sector. However, the regulations, standards and infrastructure required to use hydrographic data in systems below the ECDIS mandate were currently not in place. It was proposed that a Project Team should be established under IHO to investigate the potential issues in the current S-100 infrastructure to support Electronic Chart System (ECS) users and to elaborate recommendations that would allow for regulated and approved non-ECDIS vessel equipment to utilize hydrographic data from navigational charts. The establishment of a Project Team would enable different maritime administrations to contribute to a single solution, developed in conjunction with IHO, that would propose changes, where necessary, to the regulations at IMO and for those to be mandated.

New Zealand supported the proposal, believing that all sectors of the global maritime community should benefit from the shared future of digital charting using S-100. The time was right to engage with the regulator and enable a regulatory regime where approved ECSs, when loaded with official Electronic Navigational Charts, could meet the requirements of all commercial vessels.

Germany noted that extending the regulations was primarily a task for IMO, assisted by IHO.

Suriname supported the proposal, since it would further enhance the safety of navigation.

Sweden said that IHO should focus its attention and resources, until 2026, on implementation of S-100 in the ECDIS market. The proposal under discussion was mainly a regulatory issue, and hence not a primary question for IHO; nor was it a technical problem that required additional standards or specialized products. Sweden did not support the proposal for the time being; such an initiative should come instead from the regulatory side, possibly through IMO Member States. International Centre for Electronic Navigational Charts (IC-ENC) said that it had been looking into the possibility of harmonization of the regulatory environment but had paused that work pending the outcome of the discussion at the 3rd Assembly. On that basis, it lent its support, as an observer, to the proposal.

Nigeria supported the proposal, as it sought to improve navigational safety.

United Kingdom said that ECDIS had been in place before being regulated retrospectively by IMO. Setting up a Project Team to look at the sub-ECDIS sector would benefit implementation of the whole S-100 Roadmap. IHO should take the lead on work in that sector.



Norway said that ECDIS consisted of two components: software and data, or content, for which IHO was responsible; and hardware, the system itself, for which IMO was the regulatory body. They wondered how realistic it would be, from an IMO perspective, to expand on the current ship types using ECDIS. Norway was continuing to provide S-57 and S-101 data for use in ECS. From a regulatory perspective, the country was well prepared for the next step in S-100 implementation.

Italy strongly supported the proposal, in view of the large numbers of fishing and leisure vessels registered in the country. The process of applying S-100 to the sub-ECDIS sector should be speeded up, under the umbrella of IMO, with proper digital products available to all users.

United States of America agreed that IHO should consider a short-term Project Team to assess potential differences between the ECDIS and sub-ECDIS markets. It supported the request for IHO to work with IMO and other relevant organizations to ensure that the relevant sub-ECDIS Specifications acknowledged the importance of IHO Standards.

Malta noted that SOLAS had not yet been amended to accommodate S-100, so the performance appraisal for the equipment had not been established. The S-100 Infrastructure Centre should start work in that area forthwith. The task of amending national codes was made more difficult by the need to specify the equipment that would be required in order to replace paper charts. National maritime administrations would have to conduct extensive discussions on the matter.

Türkiye fully supported the proposal. The needs of non-SOLAS vessels should be addressed without further ado. Even though S-57 data were provided to ECS, they did not meet IMO chart carriage requirements.

Denmark said that IHO should have a place where the sub-ECDIS market could be discussed. It supported the suggestion to have a short-term Project Team look at the question and elaborate the IHO position.

Ireland supported the proposal, drawing attention in particular to workboats, fishing boats and other domestically mandated vessels.

Singapore supported the proposal, noting that it had many vessels sharing very limited waters but not all sharing the same data. It was noted that the IHO issues guidelines that are not enforced by international regulations; if it did so for the sub-ECDIS sector, Singapore would seriously consider adopting them for non-SOLAS ships.

Spain said that the non-ECDIS sector needed standards in order to improve safety, and it therefore supported the proposal.

Secretary-General said that IHO was an accredited observer of IMO and its role within the IMO framework was anchored in SOLAS Chapter V, Regulation 9. As such, IHO had been invited by IMO in 1986 to draft ECDIS Performance Standards and Specifications for Chart Content and Display, which were adopted in 1995. The mandated carriage requirement had come many years later, in 2012. IHO did not have a role in proposing to IMO an enhancement with regard to carriage requirements. That was the sovereign right of an IMO Member State.

Uruguay supported the proposal, believing that the sector needed regulation by IMO.

The Chair suggested that the last phrase of the proposal could be amended so that Member States, rather than IHO, would request IMO to consider an update to the relevant resolutions.

Türkiye said that non-SOLAS vessels were one reason why hydrographic offices continued to produce paper charts, which was a considerable burden on them. It would be beneficial to contact IMO and explore the possibility of changing carriage requirements.

Secretary-General reiterated that a proposal to amend carriage requirements must be presented to IMO by Member States. The IHO could not propose actions to the IMO but could agree to work out guidelines as it had been suggested by Singapore.

United Kingdom said that most hydrographic offices did not have the resources to continue “triple fuelling”, or issuing paper charts as well as S-57 and S-101 products. The narrative with IMO was not about imposing additional carriage requirements but about moving to digital navigation



and retiring paper charting.

Denmark proposed that the first paragraph in the proposal could be amended to read “development of guidelines”, as had been suggested by Singapore. The third paragraph in the proposal should be reworded to address the request to IHO Member States to approach IMO.

France was concerned about the mention of “supplementary standards” in the first paragraph of the proposal. S-100 had the flexibility to allow for the development of products for the non-ECDIS sector. France also expressed concern at the reference to international standards in the second paragraph of the proposal, believing that the existing standards could be applied to vessels below the mandated ECDIS requirements.

Germany supported the amendments proposed by Denmark and France.

Sweden, speaking in its capacity as HSSC Chair, doubted whether there was regulatory expertise within HSSC to set up a sub-ECDIS Project Team. Perhaps such a body should be established under the Council.

Director Kampfner said that getting items on the agenda of IMO was a lengthy process. The Project Team might wish to conduct a study to ascertain what impact the proposal to replace paper charts would have on IMO and its Member States.

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

6 Summary 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 WorldWide Electronic Navigational Chart Database (WEND) Working Group in developing the WEND100 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 SubCommittee (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. Non earmarked 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)

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)

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)

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)

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)

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)

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 three-year 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.

7 Summary of The Fifth Plenary Session 4 May 2023

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

PRO 3.5 ESTABLISHMENT OF A TASK FORCE TO EXPLORE THE POTENTIAL MERITS, STRUCTURES, AND OPTIONS FOR ALTERNATE FUND GENERATION TO SUPPORT CAPACITY BUILDING AND OTHER IHO INITIATIVES (UNITED STATES OF AMERICA, CANADA, NORWAY, UNITED KINGDOM AND AUSTRALIA) (AGENDA ITEM 6.6)

United States Of America, introducing PRO 3.5, said that coastal nations required more capacity building support to achieve the IHO Strategic Plan. With funding requests for capacity building in recent years persistently exceeding the amounts available, only a relatively small number of projects were accepted each year. That situation would be exacerbated by the challenge of fulfilling the S-100 implementation plan. Moreover, annual Member State contributions were unlikely to increase, and the finite solution of adding new Member States was undermined by the fact that those same States generally required the most capacity building assistance. Highlighting the generally supportive comments in the Red Book, the United States noted that the suggested changes had been taken into account and invited the Assembly to approve the exploratory and non-binding proposal.

Portugal, expressing concern at the decline in funding for capacity building, said that it endorsed



the proposal. It welcomed initiatives to seek new, stable funding sources which strengthened IHO's commitment to capacity building.

Sweden, strongly supportive of the proposal, said that it agreed that the task force should be established under the Inter-Regional Coordination Committee (IRCC). It was also important to strengthen IHO's work concerning the S-100 infrastructure.

Norway thanked the United States for proposing a long-overdue solution. It was crucial to address the strategic pillar of capacity building and ensure that Member States' requests in that area could be met.

Chile said that it fully backed the proposal and encouraged the exploration of innovative pathways to fund capacity building.

Italy, endorsing the proposal, suggested strengthening the role of the Capacity Building SubCommittee (CBSC) by adding "especially regarding the search for reliable alternative funding sources" in the second paragraph of the proposal.

Suriname said that it supported the proposal, which would ensure that no one was left behind.

New Zealand, recognizing that alternative funding was indispensable to achieve the IHO Strategic Plan, said that it supported the proposal.

Canada said that it supported the proposal and the search for new sources of stable and sustainable funding. At a time of significant transformation and change, capacity building was vital to ensure that no one was left behind. Canada looked forward to participating in the initiative.

International Centre For Electronic Navigational Charts (IC ENC), noting the reference in the proposal to Regional Electronic Navigational Chart Coordinating Centres (RENCs), said that it stood ready to provide guidance to the proposed task force in areas such as financial infrastructure, policies and processes.

Finland said that it supported the proposal as presented.

France, endorsing the proposal, reiterated that the task force should come under IRCC.

Director Sinapi said that the establishment of a powerful task force would require networking with national, regional and international institutions able to support hydrographic capacity building.

The Secretariat therefore stood ready to support the proposed initiative by facilitating those connections.

IRCC Chair, appreciative of the proposal and the Secretariat's offer of assistance, agreed that an ad hoc project team under IRCC would be the most suitable format. Given that the revised Capacity Building Strategy adopted the previous day entailed a greater number of S-100 activities, creative ways to increase funding were urgently needed. If the Assembly decided to make IRCC responsible for the task force, work could begin at the upcoming IRCC meeting in June 2023.

Indonesia, expressing support for the proposal, said that the Regional Hydrographic Commissions (RHCs) should explore ways to fund regional capacity building, in particular for young hydrographers.

Chair, highlighting the overwhelming support for the proposal, suggested amending the second and third paragraphs to specify that the Project Team would come under IRCC and that Council would be authorized to review progress via that body.

In the absence of any objections, the CHAIR took it that the Assembly agreed with the amended wording.

It was so agreed.

Türkiye said that the proposed task force should also consider ways to improve spending efficiency. A lack of coordination among RHCs sometimes led to duplicate capacity building requests, thereby contributing to the lack of funding.

IRCC Chair said that the CBSC was working to improve interregional cooperation and had already delivered several cross regional training sessions. However, the limited funds had to be focused on those Member States most in need.



PRO 3.5: The Assembly recognized the important global maritime issues facing the hydrographic community worldwide and that addressing those issues would require expanded global hydrographic capacity; approved the proposal to establish an ad hoc Project Team under the IRCC to explore the possible establishment of reliable alternative funding for activities including capacity building and GEBCO; and, authorized Council via IRCC to review progress reports from the Project Team at least annually and provide guidance to the Project Team in preparation to report out to 4th Assembly (A4).

PRESENTATION OF THE REPORTS OF THE 15 REGIONAL HYDROGRAPHIC COMMISSIONS (AGENDA ITEM 7)

The Chair invited the Chairs of the Regional Hydrographic Commissions to present summaries of their reports, noting that the full reports were available on the IHO website.

Denmark presented the report of the Nordic Hydrographic Commission. The Assembly took note of the report.

Sweden presented the report of the North Sea Hydrographic Commission. The Assembly took note of the report.

Croatia presented the report of the Mediterranean and Black Seas Hydrographic Commission. The Assembly took note of the report.

Denmark presented the report of the Arctic Regional Hydrographic Commission. The Assembly took note of the report.

Finland presented the report of the Baltic Sea Hydrographic Commission. The Assembly took note of the report.

United States Of America presented the report of the US–Canada Hydrographic Commission. The Assembly took note of the report.

Indonesia presented the report of the East Asia Hydrographic Commission.

Chair congratulated the East Asia Hydrographic Commission on its 50th anniversary in 2021. The Assembly took note of the report.

PRESENTATION OF THE REPORT OF THE IHO HYDROGRAPHIC COMMISSION ON ANTARCTICA

Secretary-General, as Chair of the IHO Hydrographic Commission on Antarctica (HCA), presented the report of the HCA and concluded by commending Mr Lee Truscott (United Kingdom), Chair of the HCA Hydrographic Priority Working Group and ENC/INT Chart Coordinator, for his outstanding achievements and sustained support to the work of the Commission. The Assembly took note of the report.

France presented the report of the Eastern Atlantic Hydrographic Commission. The Assembly took note of the report of the Eastern Atlantic Hydrographic Commission.

Peru presented the report of the South East Pacific Regional Hydrographic Commission. The Assembly took note of the report of the South East Pacific Regional Hydrographic Commission.

New Zealand presented the report of the South West Pacific Hydrographic Commission. The Assembly took note of the report of the South West Pacific Hydrographic Commission and agreed to consider the implementation of appropriate mechanisms to ensure greater inclusion, representation and participation of Member States at IHO meetings, in particular the IHO Assembly.

United Kingdom presented the report of the Meso American & Caribbean Sea Hydrographic Commission. The Assembly took note of the full report of the Meso American & Caribbean Sea Hydrographic Commission and noted that work on maintenance of IHO Capacity Building Fund for annual Seminars on Raising Awareness in Hydrography, Technical Visits and High-Level Technical Visits for Associate Members was already under way.



United Kingdom presented the report of the Southern African and Islands Hydrographic Commission. The Assembly took note of the report of the Southern African and Islands Hydrographic Commission.

Indonesia presented the report of the North Indian Ocean Hydrographic Commission. The Assembly took note of the report of the North Indian Ocean Hydrographic Commission.

Oman presented the report of the ROPME Sea Area Hydrographic Commission. The Assembly took note of the report of the ROPME Sea Area Hydrographic Commission.

Brazil presented the report of the South West Atlantic Hydrographic Commission. The Assembly took note of the report of the South West Atlantic Hydrographic Commission.

IMPLEMENTATION OF APPROPRIATE MECHANISMS TO ENSURE GREATER INCLUSION, REPRESENTATION AND PARTICIPATION OF MEMBER STATES AT IHO MEETINGS, IN PARTICULAR THE IHO ASSEMBLY

The Chair proposed that Assembly should task Council with discussing appropriate mechanisms to ensure greater inclusion, representation and participation of Member States at IHO meetings, in particular the IHO Assembly, and bring a proposal to the next Assembly. The initial request had come from the South West Pacific Hydrographic Commission (SWPHC).

New Zealand supported the proposal but asked how the process might be expedited, given that the next Assembly was three years away.

United Kingdom strongly supported the proposal and shared the concerns that three years was too long. He noted that although the Assembly was quorate, many countries were unrepresented.

Suriname supported the proposal and suggested that a hybrid meeting format be utilized to facilitate participation.

Secretary-General said that the proposal was to put the item on the agenda of the Council for its October 2023 session. His understanding was that Members would be invited to put proposals, the Secretariat would provide its position, and the Council could start discussions in October about how to address the issue in a balanced way. He noted that certain technical, regulatory and financial conditions set down in the IHO Basic Documents would need to be assessed for any changes required; an open discussion was therefore needed on if and how to make any changes. If there were decisions to be made that might affect the next Assembly, those decisions could be made at Council level, as Council was mandated to oversee operations of the Organization in between Assemblies. He understood that there was no intention to move the Assembly itself. The changes needed would depend on what mechanisms were wanted. He noted that it was not realistic to change the IHO Convention but that amending other instruments might be possible in due course if it were so agreed.

Chair proposed a two-step approach, in which it was first considered what could be done within the existing framework and then what facilitatory changes it might be necessary to ask the next Assembly to make to the Basic Documents.

Norway noted that the IRCC meeting would be the next opportunity for discussions.

Sweden appreciated the concerns expressed by New Zealand but fully supported the idea of delegating the task to Council as the current Assembly did not have a mature proposal for its consideration.

United Kingdom said that although he recognized that procedurally IHO must wait for Council, he noted that remote and hybrid meetings were already a de facto way of working for Regional Hydrographic Commissions and that remote working arrangements for the Secretariat had already been approved. Given IHO's responsibility of stewardship towards the environment, hybrid work was a way to reduce the Organization's carbon emissions.

Chair said there was a recognized need for greater inclusion, as well as a need to have a balance between meeting physically and virtually at Assembly, Council and RHCs. Council could be tasked with discussing the request and coming back as quickly as possible with proposals. She



emphasized the need for a specific proposal from a Council member, and the desire for the Council to work together to find solutions as fast as possible.

Secretary-General said that the Secretariat had done its best to prepare the technology needed to accommodate hybrid meetings, which had already become common practice in Secretariat working groups. However, the high-level decision-making bodies of the Organization came with a different level of responsibility, as the use of remote or hybrid formats came with substantial side effects, including financial implications as digital meetings were not free. IHO's working methods had already begun to reflect the changes being seen in the world, but discussion was needed of how the Organization wished to go further.

The Assembly tasked the Council to discuss the request from the SWPHC for the provision of mechanisms to ensure greater inclusion and participation of all Member States at IHO meetings, in particular the IHO Assembly, and come up with solutions as soon as possible.

OFFICIAL SIGNATURE CEREMONY OF THE STATUTES OF THE IHO HYDROGRAPHIC COMMISSION ON ANTARCTICA (AGENDA ITEM 8)

The new HCA members, Netherlands, Poland and Türkiye, signed the HCA Statutes in the presence of HCA Chair.

INTERNATIONAL HYDROGRAPHIC REVIEW CENTENARY (EDITOR IN CHIEF OF THE INTERNATIONAL HYDROGRAPHIC REVIEW) (AGENDA ITEM 9)

Editor In Chief Of The International Hydrographic Review presented a history of the publication through to the present day. First issued as The Hydrographic Review from 1923 to 1946, with the aim of communicating the purposes of hydrography and sharing new developments in the field, the name of the publication was changed to International Hydrographic Review (IHR) in 1947. Since 2009 the review had been a digital publication and was made available free of charge. A new website, ihr.iho.int, had been launched in 2021. A printed anniversary issue had been provided to Assembly participants. It included a compendium of 13 reprinted articles chosen by the editorial board and showcased the new format for the review. He thanked the German hydrographic office for printing and binding the anniversary issue. He emphasized the value of the review in facilitating interdisciplinary knowledge exchange. As an applied science, hydrography encompassed fields such as geophysics, oceanography, geodesy, acoustics, cartography, remote sensing and others. The goal was that the International Hydrographic Review would become the go-to international journal for people with a hydrographic background as well as for those working in neighbouring disciplines. The Review published double-blind peer-reviewed articles, as well as event announcements, book reviews and so on, and so provided a platform for discussion to allow exchange within the hydrographic community. A number of changes had been made to make the journal more attractive to publish in, including a new and modern layout and the introduction of digital object identifiers, improvements to the review process and to correspondence with authors and more effective use of social media. Key next steps included registering IHR for journal ranking lists and feeding relevant repositories with new International Hydrographic Review content, more frequent publication of special issues and further optimization of the website. The infrastructure was thus in place, but contributions still had to be chased up: he therefore encouraged participants to consider submitting or encouraging colleagues to submit contributions as a means of sharing knowledge. He thanked colleagues at IHO as well as the editorial board, whose members were representatives of hydrographic commissions.

Sweden thanked the Editor in Chief of the International Hydrographic Review for his work, which had raised the standard of the publication to a much higher level.

The Chair commended the Editor in Chief on the new approach he had introduced and noted that all should seek to increase the wisdom of the IHO community by contributing to IHR.



8 Summary of The Sixth Plenary Session 5 May 2023

FINANCE REPORTS, WORK PROGRAMME AND BUDGET MATTERS (AGENDA ITEM 11)

PRESENTATION OF FINANCE COMMITTEE REPORT (AGENDA ITEM 11.1)

Chair invited the Vice-Chair of the Finance Committee to introduce the agenda item.

Vice-Chair Of The Finance Committee reported that the Finance Committee had met on Monday, 1 May 2023, the day before the opening of A-3, with representatives of 23 Member States attending. Agenda items discussed at the meeting had included the Finance report 2020–2022 (A3/2023/F/01/EN) and Annual Finance Report 2022 (A3/2023/F/02/EN); implementation of the budget for 2023; the three-year budget 2024–2026; and election of the Finance Committee Chair and Vice-Chair for the term 2024–2026.

The Finance Committee had recommended that the Assembly should:

- Approve the Finance Report 2020–2022;
- Approve the Annual Finance Report 2022;
- Approve the Secretary-General’s recommendations for the transfer of the 2022 budget surplus to the Assembly Fund;
- Appoint Cabinet Taramazzo to audit the 2022 IHO accounts (approval ex post facto) and to audit the fiscal years 2023–2025;
- Note the implementation of the Budget for 2023;
- Approve the three-year budget 2024–2026;
- Approve an increase in the value of the Member States’ contribution share by 3% to €4,145.05 (approximately 120 euros per share) in one step, taking effect in 2024;
- Take note of the fact that the revision of the IHO M-7 Staff Regulations had no financial implications other than those already reported in the annual reports and budget plans.

The Finance Committee had further re-elected Ms Isabelle Rosabrunetto as Chair and elected Ms Sonia Chanell as Vice-Chair by acclamation. The Finance Committee transmitted the above recommendations to the Assembly for adoption.

Chair opened the floor to Member States for comments on the report of the Finance Committee. United Kingdom fully endorsed the recommendations of the Finance Committee and thanked the Vice-Chair for his service to IHO.

Germany commended the work done by the Finance Committee and fully supported its recommendations.

The Assembly approved the Finance Report 2020–2022.

The Assembly approved the Finance Report 2022 (Annual Report 2022 Part II) and noted the Annual Report 2022 (draft Edition 1.1.0, April 2023).

The Assembly approved the Secretary-General’s recommendation to A3 for the use of the 2022 surplus to add it to the Assembly Fund.

The Assembly endorsed the appointment of Cabinet Taramazzo (Monaco) to audit the 2022 IHO’s accounts ex post facto and to audit the fiscal years 2023–2025.

The Assembly approved the 3 years’ budget 2024 – 2026.

The Assembly approved the increase in the value of the Member States’ contribution share by 3% to €4,145.05 (~€120 per share) in one step, taking effect in 2024.

The Assembly took note of the fact that the revision of the IHO M-7 Staff Regulations had no



financial implications other than those already reported in the annual reports and budget plans.

The Assembly took note of the re-election of Ms Isabelle Rosabrunetto (Monaco) as Chair and the election of Ms Sonia Chanell (United Kingdom) as Vice-Chair of the Finance Committee for the term 2024–2026.

APPROVAL OF THE THREE-YEAR WORK PROGRAMME AND BUDGET 2024–2026 (IHO COUNCIL) (AGENDA ITEM 11.2)

Secretary-General explained that, as part of the IHO Planning Cycle for Assembly years, the IHO Convention mandated the Council to prepare a proposal for the three-year Work Programme and budget estimates for Assembly adoption. The Council, assisted by the Secretary-General, had drafted a proposal of a three-year Work Programme 2024–2026, based on the priorities of the existing IHO Strategic Plan. The Council had endorsed the three-year budget estimates 2024–2026 including recommendations regarding pragmatic allocations in case the Assembly decided in favour of an increase of the value of the Member States' contribution share. As the Assembly had approved that Goal 1 and its Targets in the IHO Strategic Plan should have the highest priority in the 2024–2026 Work Programme, it was expected that the Assembly would task the Council to review and possibly adapt the Work Programme 2024–2026 at the Council's seventh meeting in October 2023. The Assembly: a) approved the 3 years' Work Programme 2024-2026; b) approved the threeyear budget estimates 2024-2026; c) tasked the Council to adapt the Work Programme 2024-2026 and budget estimates 2024-2026 according to the applying decisions made at A3.

APPROVAL OF THE TABLE OF TONNAGES 2024–2026 (AGENDA ITEM 11.3)

Secretary-General presented the recommendation of the Finance Committee that the Assembly adopt the proposed Table of Tonnages as submitted in document A.3/2023/G/03. The Assembly approved the Table of Tonnages, Shares, Contribution and Votes as prepared according to IHO Financial Regulations.

ANNOUNCEMENT AND FIRST INSTRUCTIONS FOR THE ELECTION PROCESS (AGENDA ITEM 11.4)

Chair instructed that only one delegate from each Member State can be present in the Auditorium during the vote, accompanied only by a personal interpreter as necessary. All delegates and observers who were not entitled to vote were asked to leave the Auditorium Hall.

Secretary-General noted that the election process would comprise two rounds of voting in closed session, the first round to elect the Secretary-General and the second round to elect a Director. Director Sinapi would perform the responsibilities of the Secretary-General for the Assembly during the election process.

ELECTION FOR THE POSITION OF IHO SECRETARY-GENERAL AND IHO DIRECTOR (AGENDA ITEM 12)

Assistant Director Guillam displayed the names of the eligible candidates for the position of Secretary-General and asked if the representatives had received the correct number of ballot papers. In the absence of a response to the contrary, he instructed the delegates to fill out their ballot papers.

(A vote was taken by secret ballot, and the ballot box was then handed to the Scrutineers for counting.)

Chair confirmed that the expected 308 ballot papers had been received and read the results as compiled by the Chair of the Scrutineers:



- Rhett Hatcher, 91
- Mathias Jonas, 181
- Abraham Kampfer, 36.

Assistant Director Guillam displayed the names of the eligible candidates for the position of Director. He asked if the representatives had received the correct number of voting papers and received no response.

(A vote was taken by secret ballot, and the ballot box was then handed to the Scrutineers for counting.)

Chair, confirming that the expected 308 ballot papers had been received, reporting that there had been three abstentions. He read the results as compiled by the Chair of the Scrutineers:

- Abraham Kampfer, 128
- John Nyberg, 177.

The Assembly elected successively:

- Dr Mathias Jonas (Germany) to the post of Secretary-General, for a term of office of three years starting on 1 September 2023;
- Dr John Nyberg (United States of America) to a post of Director for a term of office of six years starting on 1 September 2023.

(Delegates and observers resumed their seats in the Auditorium Hall.)

ENDORSEMENT OF THE SELECTION PROCESS OF THE MEMBERS OF THE IHO COUNCIL 2023–2026 (AGENDA ITEM 12.1)

Secretary-General gave a short presentation about the selection process and read out the list of Council members for 2023–2026. He concluded by explaining the election process for the positions of Chair and Vice-Chair of the Council.

The Assembly endorsed the selection process of the Members of the Council 2023-2026.

The Assembly approved the Members of the Council 2023-2026.

REVIEW OF ASSEMBLY DECISIONS (AGENDA ITEM 12.2)

Assistant Director Manteigas presented the list of draft decisions of the 3rd Assembly. In the absence of any comments, CHAIR took it that the Assembly wished to adopt the decisions. The Assembly decisions were adopted.

AWARD FOR THE BEST MEMBER STATE EXHIBITION (AGENDA ITEM 12.3)

Chair announced that the United States of America was the winner, with Greece in second place, and Portugal, Saudi Arabia, United Kingdom and Uruguay in joint third place.

PRESENTATION OF A VIDEO OF THE FRENCH GOVERNMENT INVITING PARTICIPANTS TO THE UNITED NATIONS OCEAN CONFERENCE 2025 IN NICE, FRANCE (AGENDA ITEM 12.4)

The video was unfortunately not available. It will be shown at a future IHO meeting.

CLOSING CEREMONY (AGENDA ITEM 13)

DATE OF THE FOURTH SESSION OF THE ASSEMBLY IN 2026 (AGENDA ITEM 13.1)

Chair announced that the date proposed for the next session of the Assembly was 20–24 April 2026. The Assembly agreed to plan the fourth session of the Assembly (A4) for 20–24 April 2026.



SEATING ORDER AT THE NEXT SESSION OF THE ASSEMBLY (AGENDA ITEM 13.2)

The letter “A” was drawn by the Assembly Vice-Chair to be used in determining the seating order. The Assembly agreed to start the seating order of 4th Session of the Assembly (A-4) with letter A of the French alphabet.

ANY OTHER BUSINESS (AGENDA ITEM 13.3)

RESOLUTION EXPRESSING GRATITUDE TO THE HOST COUNTRY (A.1/MISC/02)

Chair read out the following resolution:

The Assembly: Recognizing the continued close association and significant support of His Serene Highness Prince Albert II and the Government of the Principality of Monaco in hosting the International Hydrographic Organization, Appreciating the kind generosity of His Serene Highness and the Government of the Principality of Monaco in providing premises for the Organization, Further appreciating the provision of a reception to the participants of the 3rd Session of the Assembly, Further appreciating the provision of the Port Facilities of Monaco for the ships that called during the 3rd Session of the Assembly, Expresses its profound gratitude to His Serene Highness Prince Albert II and the Government of the Principality of Monaco for their graciousness and kind hospitality extended to the Organization, and Requests the delegation of the Principality of Monaco to convey to His Serene Highness and the Government of the Principality of Monaco the sincere sentiments of the Assembly expressed above.

The Chair said she took it that the Assembly wished to adopt the resolution. The resolution was adopted.

STATEMENTS BY OUTGOING AND INCOMING SECRETARY-GENERAL AND DIRECTORS (AGENDA ITEM 13.3 - continued)

Mr Kampfer, outgoing Director, extended congratulations to Dr Mathias Jonas, the SecretaryGeneral, on his re-election and to Dr John Nyberg on his election as Director. He had been deeply honoured to serve as Director of the IHO technical programme for six years. He thanked everyone for their support and confidence. He knew that he was not the only one to be excited about the future of the Organization, with the focus on the S-100 standards being ready to provide compatible data and services in 2026. The well-functioning Secretariat, Committees and Working Groups, with their dedicated office bearers, had been in evidence during the course of the Assembly. He was confident in the future of the Organization. He would follow the progress of S100 with great interest and wished the new team in the Secretariat every success.

Dr Jonas, incoming Secretary-General, expressed his relief, gratitude, pride and joy for the recognition shown on his re-election. When he had first been elected in 2017, he had found that no one could be fully prepared for the position, since there was no “Category A” course for incoming Secretaries-General! He had learned the job by doing it and had tried to make as few mistakes as possible. The IHO was in excellent shape but faced technical and organizational challenges in the coming decade, including promoting technical standards to the next level of digitization and investing in the capacity to apply them both inside and outside the IHO community, and liaising with collaborating partners with greater intensity. Those goals and targets were addressed in the agreed IHO Strategic Plan. As an organization with a technical focus, IHO’s leverage to build a global system of hydrographic services crossed administrative, cultural and political boundaries. Digitization would allow IHO to become more visible while visibility would, at the same time, raise expectations from a much-expanded range of stakeholders. In order to meet those expectations, IHO would do more on sustainability. His motivation was high and the dedication and commitment of Member States would be crucial to the success and evolution of the Organization. IHO faced the challenge of reaffirming its



constitutional nature as a technical and consultative organization, as IHO's predecessors had done for over a century through times of political conflict. His guiding principle remained multilateralism for global cooperation in hydrography. He extended his wholehearted gratitude to the outgoing Director of the IHO Technical Programme for his tireless work, achievements and personal friendship. He welcomed the incoming Director and looked forward to working with him. He renewed his promise as Secretary-General to work as the first servant of the Organization.

Dr Nyberg, incoming Director, thanked Member States, the Secretariat and his own country for the support he had received. He would not forget that he had been elected to work for Member States. He was aware of the messages received during the Assembly that no country should be left behind in their hydrographic capacity and ability to meet the challenges of the Strategic Plan. Together, Member States and the Secretariat must see through implementation of the S-100 data model and expand opportunities through diversity and inclusion. He expressed sincere gratitude and respect to the candidates for the posts of Secretary-General and Director, who had all contributed greatly to the hydrographic community. He sincerely looked forward to working with the IHO Secretariat and for Member States over the coming six years.

CLOSING REMARKS BY THE CHAIR OF THE ASSEMBLY (AGENDA ITEM 13.4)

Mrs Dahl Højgaard, Chair of the Assembly, said that, in a week of hard work, an impressive number of decisions had been taken that would guide the cooperation within the hydrographic community during the coming years. The strategic decision to put focus on the implementation of the S-100 standards in the next triennium to be ready to provide compatible data and services in 2026 was of particular significance. IHO Member States had chosen a pathway to follow together and had committed to sharing their experiences and coordinating efforts regionally and internationally. She wished to rephrase the vision “from the Ocean we have, to the Ocean we want” to read “from the Hydrography we have, to the Hydrography we want”, since it framed very well the discussions held that week.

The new organizational structure, which was put into play with the first Assembly in 2017, had shown its strength. The role of the Council, working in the interim to facilitate discussions, had provided and matured a number of proposals for final decision at Assembly, which had been unanimously supported. She thanked the Council Chair, Geneviève Bécharde, who had made the decision-making possible with her very inclusive and consultative manner, which had made sure that everyone was heard. Acknowledgement was also due to the Chairs of the subsidiary bodies, the Inter-Regional Coordination Committee and the Hydrographic Services and Standards Committee.

The lively discussions had focused mostly on the new proposals coming from Member States or regional commissions, and common ground had been reached. She thanked Member States for the respectful and positive atmosphere in which the proceedings had been held. She had been glad to feel part of an international community in which there was a shared passion for hydrography and a common wish to preserve the world's oceans and keep seafarers safe.

In closing, she congratulated the elected Secretary-General and Director and thanked Mr Kampfer, who would be missed. She thanked the guests, exhibitors, rapporteurs and interpreters who had enabled the development of the proceedings and lasting record of the Assembly. Thanks were due also to the Vice-Chair, Adam Greenland, for his support, and to all members of the Secretariat, whose dedicated efforts behind the scenes had helped the Assembly to run smoothly. The Secretary-General presented a commemorative gift to the outgoing Chair in acknowledgement of her outstanding work in guiding the Assembly.

(Following the customary exchange of courtesies, the 3rd Session of the Assembly of the International Hydrographic Organization was declared closed.)



9. Decisions of The 3rd Session of The IHO Assembly

The IHO Assembly at its 3rd Session made the following decisions:

1. The Assembly confirmed the election of Mrs Pia Dahl Højgaard (Denmark) as Assembly Chair by acclamation.
2. The Assembly elected Mr Adam Greenland (New Zealand) as Assembly ViceChair by acclamation.
3. The Assembly adopted the Agenda
4. The Assembly endorsed the Council Report subject to the specific approval of the proposals submitted.
5. The Assembly endorsed that the item related to a revised definition of hydrographic interest is closed until a new submission or proposal by Member State(s) is put forward to the Council/Assembly.
6. The Assembly endorsed the Report of the Work Programme 1.
7. PRO 1.1: The Assembly approved the new Resolution on S-100 Implementation including the editorial suggestions proposed by Canada.
8. PRO 1.2: The Assembly:
 - a) agreed on the continuation of conduct of the annual Work Programmes on the basis of the Strategic Plan in place for 2021 – 2026 and directed the Council accordingly.
 - b) approved that Goal 1 of the IHO Strategic Plan and its targets shall have the highest priority in the implementation of the 2024–2026 Work Programme.
 - c) 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.
 - d) agreed to task the Secretariat, assisted by the HSSC and IRCC chairs, to continue to measure the effectiveness and the efficiency of the three Work Programmes implementation by means of the Strategic Performance Indicators as endorsed by the Council.
 - e) tasked the Council with the development of the revised Strategic Plan to be put in place for 2027 – 2032 in compliance with the Planning Cycle and to submit the result for adoption by A-4 in 2026. The Council is empowered to establish a Working Group for this discrete purpose, if appropriate.
9. PRO 1.3: The Assembly:
 - a) approved the proposed amendment to IHO Resolution on gender-inclusive language to be used in IHO documents and communications.
 - b) directed the IHO Secretariat to implement the gender-inclusive language in M-1 as a first step and invited all IHO Committees, Sub-Committees, Working Groups, Project Teams and Regional Hydrographic Commissions to review their TORs and ROPs in application of the new IHO Resolution.
 - c) endorsed that the application process of IHO Res.1/2020 will become part of the regular drafting and revision process of all IHO documents and communication.
10. PRO 1.5: The Assembly:
 - a) approved the Revision of the IHO Publication M-7 Staff Regulations.
 - b) endorsed to set the new Edition 9.0.0 in force by 1 July 2023 subject to a check of gender neutral language prior to its publication.



11. PRO 1.6: The Assembly:
 - a) endorsed the Secretary-General's recommendation to postpone the consideration of the necessity of the subsequent development of basic guidelines for the allocation and display of attributes of sea areas to be applied to Geographic Information Systems after the S-130 Product Specification and the implementation as authoritative S-130 dataset will be finalized.
 - b) endorsed the Secretary-General's recommendation to postpone the consideration of subsequent amendments to the relevant IHO Resolutions, for endorsement by the Council, if appropriate, after the S-130 Product Specification and the implementation as authoritative S-130 dataset will be finalized.
12. The Assembly endorsed the Report of the Work Programme 2.
13. PRO 2.1: The Assembly took note and approved the fundamental strategic change introduced by the S-100 framework and approved the Dual Fuel Concept for S-100 ECDIS.
14. PRO 2.2: The Assembly:
 - a) recognized the need to establish the S-100 Infra Center and approved the foundation of a new Project Team under HSSC with a three-year work plan including the establishment of the S-100 Infra Center and to prepare for the actual implementation period with consideration of the possible location of the Center.
 - b) requested HSSC to propose to the Council to establish the S-100 Infra Center and how it can support the S-100 framework.
 - c) tasked Council to report to the 4th IHO Assembly the progress of its three-year operation including the establishment of the S-100 Infra Center.
15. PRO 2.3: The Assembly was not able to reach an agreement but anticipate that the UK will keep Council and HSSC informed on the progress achieved with IMO and other interested partners.
16. The Assembly endorsed the Report of the Work Programme 3.
17. PRO 3.1: The Assembly approved the revision of clause (e) of Article 8 of the General Regulations of the IHO.
18. PRO 3.2: The Assembly approved and adopted the revised Capacity Building Strategy.
19. PRO 3.3: The Assembly:
 - a) approved the proposed IHO Resolution on the recognition of the Southern Ocean.
 - b) took note of the consequences on the limits of some global sea areas as a result of recognition of the Southern Ocean.
 - c) 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.
20. PRO 3.5: The Assembly:
 - a) Recognized the important global maritime issues facing the hydrographic community worldwide and that addressing these issues will require expanded global hydrographic capacity.
 - b) Approved the proposal to establish an ad hoc Project Team under IRCC to explore the possible establishment of reliable alternative funding for activities including capacity building and GEBCO.
 - c) Authorized Council via IRCC to review progress reports from the Project Team at least annually and provide guidance to the Project Team in preparation to report out to 4th Assembly (A4).
21. The Assembly tasked the Council to discuss the request from the SWPHC for the provision of mechanisms to ensure greater inclusion and participation of all Member States at IHO meetings, in particular the IHO Assembly and come up with solutions as soon as possible.



22. The Assembly approved the Finance Report 2020 – 2022.
23. The Assembly approved the Annual Finance Report 2022 (Annual Report 2022 Part II) and noted the Annual Report 2022 (draft Edition 1.1.0, April 2023)
24. The Assembly approved the Secretary-General's recommendations for A3 for the use of the 2022 surplus to add it to the Assembly Fund.
25. The Assembly endorsed the appointment of Cabinet Taramazzo (Monaco)
 - to audit the 2022 IHO's accounts ex post facto
 - to audit the fiscal years 2023 – 2025.
26. The Assembly approved the 3 years' budget 2024 – 2026.
27. The Assembly approved the increase of the value of the Member States contribution share by 3% to 4,145.05 Euro (~ 120 Euro per share) in one step taking effect in 2024.
28. PRO 1.4: The Assembly:
 - a) approved the 3 years' Work Programme 2024 – 2026;
 - b) approved the 3 years' budget estimates 2024 – 2026;
 - c) tasked the Council to adapt the Work Programme 2024 – 2026 and Budget Estimates 2024 – 2026 according to the applying decisions made at A3.
29. The Assembly approved the Table of Tonnages, Shares, Contribution and Votes as prepared according to IHO Financial Regulations, Articles 5 and 6.
30. The Assembly elected successively:

Dr Mathias Jonas (Germany) to the post of Secretary-General, for a term of office of three years starting on 1 September 2023,

Dr John Nyberg (USA) to a post of Director for a term of office of six years starting on 1 September 2023.
31. The Assembly endorsed the selection process of the Members of the Council 2023-2026.
32. The Assembly approved the Members of the Council 2023-2026.
33. The Assembly agreed to plan the 4th Session of the Assembly (A-4) for **20-24 April 2026**.
34. The Assembly agreed to start the seating order of 4th Session of the Assembly (A4) with Character A of the French alphabet.
35. The Assembly:
 - Recognizing the continued close association and significant support of His Serene Highness Prince Albert II and the Government of the Principality of Monaco in hosting the International Hydrographic Organization,
 - Appreciating the kind generosity of His Serene Highness and the Government of the Principality of Monaco in providing premises for the Organization,
 - Further appreciating the provision of a reception to the participants of the 3rd Session of the Assembly,
 - Further appreciating the provision of the Port Facilities of Monaco for the ships that called during the 3rd Session of the Assembly,
 - Expresses its profound gratitude to His Serene Highness Prince Albert II and the Government of the Principality of Monaco for their graciousness and kind hospitality extended to the Organization, and
 - Requests the delegation of the Principality of Monaco to convey to His Serene Highness and the Government of the Principality of Monaco the sincere sentiments of the Assembly expressed above.