



**8<sup>th</sup> MEETING OF THE IHO COUNCIL**  
**IHO C-8**  
**Monaco, 15 – 17 October 2024**

**SUMMARY REPORT**  
*(Version 1.0, 23 October 2024)*

*Note: while the 8<sup>th</sup> meeting of the IHO Council was conducted according to the timetable, this summary report is in line with the sections of the agenda.*

Annex A: *List of Registered Participants*  
Annex B: *Agenda*  
Annex C: *List of Decisions and Actions*

## **1. OPENING**

### **1.1. Secretary-General Opening remarks**

Docs: C8-01A *List of Documents*  
C8-01B *List of Registered Participants*

The **Secretary-General of IHO, Dr Mathias Jonas**, opened the meeting and welcomed participants to the eighth IHO Council (the second meeting of the third Council<sup>1</sup> of the IHO cycle). The Secretary-General recalled the Council's responsibilities and method of work as set out in the Convention, General Regulations and Rules of Procedure and in particular the requirement under Article VI of the Convention that the Council should: "*exercise such responsibilities as may be delegated to it by the Assembly*"; and "*coordinate, during the inter-Assembly period, the activities of the Organization within the framework of the strategy, work programme and financial arrangements, as decided by the Assembly*".

The Council stood ready to undertake its duties, having reached a quorum of 28 Council Member States in attendance. The Council Members, Jamaica and Malaysia, had sent notification that they were unable to attend.

A special welcome was extended to **Mr. Javier Yasnikowski**, Head of Operational Safety, Maritime Safety Division at IMO, who would provide information regarding collaboration between IHO and IMO on the S-100 uptake.

In anticipation of the proposals on inclusive participation in IHO meetings to be discussed under agenda item 7.1, the meeting was being broadcast, for the first time, to six registered IHO Member States as a passive live stream. In anticipation of agenda item 6.2, he also invited members interested in installing the Strategic Plan Review Working Group to indicate their interest in the office-bearer functions of the group.

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<sup>1</sup> Note: Council#1 (2017-2020), Council#2 (2020-2023), Council#3 (2023-2026).

The Council was also informed that the Secretariat had learned that, sadly, Rear Admiral Giuseppe Angrisano, IHO Director from 1992-1997 and IHO President from 1997-2002, had passed away on Sunday, 13 October. The approach, legacy and aspirations of Rear Admiral Angrisano would be preserved and would continue to grow.

**Decision C8/01:** The **Council** welcomed the opening address by the **Secretary-General**, who shared his opinion that this third inter-Assembly Council was fully prepared to undertake the tasks given to the Council iaw. the Articles of the Convention of the IHO that were reminded. He noted the highest level of participation ever and welcomed the 89 registered participants (in-person) and 16 IHO Member States as observers (in-person and streaming). Special welcome went to **Mr Javier Yasnikouski**, Head of Operational Safety, Maritime Safety Division of the IMO.

In anticipation of agenda item 6.2, the **Secretary-General** made a call to **Council Members** for them to consider the nomination of office bearers for the establishment of the new SPRWG<sup>2</sup>.

**Decision C8/02:** The **Council** was informed with sadness that **Admiral Giuseppe ANGRISANO**, Director and President of the IHO from 1992 to 2002, passed away on 13 October 2024.

## 1.2. Adoption of the Agenda and Timetable

*Docs: C8-01.2A      Agenda Rev 2*  
*C8-01.2B      Timetable*  
*C8-01.2C      Red Book Rev 1*

The **Secretary-General** drew attention to the Agenda Rev 2 and asked whether Council members wished to make any changes before it was adopted. He noted that no amendments were proposed.

**Decision C8/03:** The **Council** adopted the agenda and the timetable as proposed and noted the availability of the C-8 Red Book.

## 1.3 Left blank intentionally

## 1.4 Chair's opening remarks

*Docs: C8-01.4A*

**Ms Pia Dahl Højgaard, Chair of the Council**, said that, in her second year in post, she hoped to fulfil the expectations and trust of Council members as they continued their journey to develop digital charting standards and the provision of hydrographic services for the broader benefit of society. At the half-way point between Assemblies, the Council would pave the way for proposals in preparation for C-9, where it would endorse and prepare final decisions for submission to A-4.

Actions with which the Council had been tasked by A-3 included ensuring implementation of S-100 through prioritizing Goal 1 of the IHO Strategic Plan for 2021-2026 in implementing the 2024-2026 Work Programme. A focus must be maintained on: finalization of standards; building of competencies and capacity to produce S-100 data; testing of services; and securing interoperable navigational services. HSSC had put forward proposals to the Council related to implementation of

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<sup>2</sup> Strategic Plan Review Working Group.

S-100.

At A-3, IHO Members had recognized the need to establish an IHO S-100 Infrastructure Centre. A Project Team under HSSC had worked on the proposal with the Secretariat and Council would be asked to agree on the establishment of a Centre in 2025 on an interim basis, followed by a permanent establishment to be decided by A-4.

The task of developing a revised Strategic Plan for 2027-2032 had been advanced through a Correspondence Group, which had recommended the establishment of a Strategic Plan Review Working Group to provide a draft Strategic Plan in time for submission to A-4. Both HSSC and IRCC had provided input for the Strategic Plan and Council would be invited to contribute input for the SPRWG to consider.

Consideration would be given to the request from the South West Pacific Hydrographic Commission (SWPHC) for the provision of mechanisms to ensure greater inclusion and participation of all Member States at IHO meetings. An Ad-Hoc Drafting Group, established at C-7, would present the results of a survey on participation; subsequently, a draft Resolution on Maximising Active Participation in IHO Events would be submitted to Council for approval.

The number of IHO Member States participating remotely, the Member States participating as observers and the presence of development partners was a reminder of the importance of the decisions to be taken by Council and of the opportunity to engage, discuss issues of common interest and share experiences. Knowing each other made it easier to work together with trust and an open mind and to come together to manage the challenges at hand.

**Decision C8/04: The Council welcomed the opening address by Council Chair who gave a quick overview of the items to be considered with priority during the week, paving the way to C-9 as tasked by the 3<sup>rd</sup> Session of the Assembly in 2023 (S-100 Implementation, Infrastructure Centre, revised Strategic Plan, more active participation in IHO meetings, ...) and the cooperation spirit to make the IHO more efficient.**

## 1.5 Administrative Arrangements

*Docs: C8-01.5A Membership Contact List & Useful References – Marked-up Basic Docs (IHO Convention, General Regulations, Assembly ROP, Council ROP)*

The **Council Secretariat** requested members to check their entry in the Council's Membership Contact List and advise the IHO Secretariat of any amendments. Participants were reminded about the silence procedure, under which members who did not explicitly oppose a decision were deemed to have accepted it. The IHO Secretariat further explained the process and timelines of the Council Summary Report and the work of the précis-writers and rapporteurs kindly appointed by China, France, Thailand, the United Kingdom, the United States of America and Mr Jeff Wootton from the IHO Secretariat.

**C8/05: IHO Member States having a seat at the Council to check their contact details on the IHO webpage > Council > Basic Documents (as of C-8) and then on the IHO Portal when commissioned.**

## 2. ITEMS REQUESTED BY THE 3<sup>rd</sup> IHO ASSEMBLY

### 2.1 Status Report on the implementation of the List of Assembly Decisions affecting the Council.

*Docs: C8-02.1ARev1 Assembly decisions affecting the Council and way forward*

The **Secretary-General** recalled that Council reviewed each year how far it had fulfilled decisions taken by the Assembly. It was noted that a new proposal had been received concerning a revised definition of hydrographic interest (Decision A3/05) and it would be considered under agenda item 7.4.

**Decision C8/06:** Based on the presentation by the Secretary-General, the **Council** noted the progress made on the implementation of some decisions and actions from A-3 and the agenda items under which these topics will be addressed during C-8 for further discussions.

## 2.2 Reference: Cumulative List of A-3 Decisions affecting the Council (Decisions A3/05, A3/08 (a) to (e), A3/13, A3/14, A3/15, A3/20 (c), A3/21, A3/28 (c)).

*For reference only.*

### 3. ITEMS REQUESTED BY THE IHO COUNCIL

#### 3.1. Review of the Status of Decisions and Actions from C-7

*Doc: C8-03.1A*

**IHO Assistant Director Guillam** noted that most of the decisions taken by Council at its seventh session had been completed. Pending items that would be reviewed at the present meeting included Decision C7/07 concerning the permanent invitation for Member States to share their national strategies with regard to national S-100 committees. The progress made by the Council, Committees and working groups was very satisfactory.

The **Council Chair** noted the progress made and that any outstanding positions concerning many of the items would be reviewed during the course of the present meeting.

### 4. ITEMS REQUESTED BY SUBSIDIARY ORGANS

#### 4.1 Report and proposals from HSSC

*Doc: C8-04.1A – HSSC Report*

- *Annex A: Draft Revision of Annex 2 to the Roadmap for the S-100 Implementation Decade (2020-2030)*

- *Annex B: Dual Fuel Concept for S-100 ECDIS – Executive Summary Edition 1 v012. Dated 7 July 2024.*

- *Annex C: Draft Terms of Reference of the MASS WG*

- *Annex D: Draft HSSC List of funding Priorities with Financial Estimates – updated 10 July 2024.*

The **HSSC Chair** recalled that a HSSC meeting of 90 participants had been held in Japan in May 2024. The HSSC had welcomed representatives of the World Meteorological Organization (WMO) which had provided an update on the development of weather-related S-100 product specifications. Wide participation at the meeting demonstrated the attention generated by the technical programme and S-100. A three-dimensional “aquarium” diagram, showing how S-100 products worked together, had been developed by the Republic of Korea and was available in the report and on the IHO website.

On development of S-100 product specifications, progress had been made on Phase 1 (Route Monitoring Mode): S-101 ENC; S-102 Bathymetry; S104 Water Level; S-111 Surface Currents; and S-129 UKC Management; were all on time and had received HSSC endorsement. IHO Member

State approval would come next. Two Phase 1 product specifications: S-124, Navigational Warnings; and S-128 Catalogue of Nautical Products had been delayed until February or March 2025. Some operational editions set out as Phase 2 could potentially be completed in December 2025.

There were important links between IMO and IHO regarding implementation of S-100 and S-100 ECDIS; IMO's MSC 108 had approved a revision to resolution MSC.530(106) on ECDIS Performance Standards in May 2024, which included reference to a secure communication format (SECOM) for route exchange information. This communication format could technically be used for provision of S-100 data. MSC had also considered how S-100 data should be distributed. Particular attention was drawn to an input paper on distribution of S-100 products, which underlines the relationship between IHO and IMO. The paper has been submitted as MSC 109/19/3 for consideration at MSC 109 in December 2024. Document MSC 109/19/3 was complex, and it raised important issues on who would distribute S-100 products, what technology would be used for distribution and how it could be disseminated in a cyber-secure manner.

Concerning difficulties and challenges, while IHO had initiated S-100 implementation, it was currently on the agenda of a number of international Organizations and coordination between IHO and these Organizations will be increasingly important. Considering that S-100 is on the IMO agenda, it is important that IHO representatives coordinate with their IMO Member State delegations to avoid undesirable decisions. IHO needed the resources to maintain technical operations and the administrative infrastructure to support S-100 implementation, which would include organizational, financial and operational challenges. The Working Groups, Committees and Project Teams were totally reliant on contributions received from Member States.

The **HSSC** had made inputs to the IHO Strategic Plan. Having set up a system of three votes at HSSC-16, the most votes had been received by the proposal to "connect more to the IMO E-Navigation Strategy", although it was noted that a link to the IMO E-Navigation Strategy was not mentioned in the Strategic Plan and it was therefore an aspect that needed to be strengthened. Consumer confidence in S-100 had also been highlighted. (See also paragraph 6.3).

**Decision C8/07:** The **Council** noted the report and commended the **HSSC**, its Working Groups, Project Teams and supporting organizations for the achievements since C-7.

**Decision and Action C8/08:** The **Council** was informed of the important MSC 109/19/3 paper to be discussed in December 2024 at the IMO MSC 109 meeting. The **Council** invited the IHO Member States to liaise with their IMO representative prior to MSC 109 and provide support as appropriate. (deadline November 2024).

In response to a decision by C-7 (C7/10), the HSSC had developed a first list of funding priorities which were published in Annex D to the HSSC Report to C-8. Several items had been funded by Republic of Korea, IC-ENC and PRIMAR. There was a continuous need for funding to finalize S-100 implementation.

The Security Scheme Project Team (SSPT) had improved IHO processes and procedures regarding the S-63/S-100 security scheme. The HSSC had agreed with the project team's proposal to collect annual administration fees from users of the scheme; an online payment function was needed on the IHO Portal.

**Decision C8/16:** The **Council** noted the **HSSC** list of funding priorities and requirements and thanked the sponsors (IC-ENC, ROK, PRIMAR, NOAA) for their in-kind and financial contributions.

**Decision C8/09:** The **Council** agreed on **HSSC's** proposal to recourse to the IHO's Special Projects Fund to develop and integrate an online application function supporting the Security Scheme administration process in the IHO Portal, in order to collect administration fees from the OEMs using

the security scheme.

HSSC-16 had decided that SENC delivery was not needed for S-100 and had concluded that testing should focus on determining if S-100 Part 15 was feasible for use in data distribution. HSSC had tasked the S-100WG to undertake further testing and to report the results in November 2024.

**Decision C8/10:** The **Council** was informed on the general agreement reached at HSSC-16 that SENC delivery was not needed for S-100 anymore in particular due to concerns that the data producer digital signature cannot be retained. Tests are still in progress. (deadline HSSC-17).

HSSC-16 had welcomed a kind offer from Canada to designate the St Lawrence River as an IHO S-100 Sea Trial Area. Additional official sea trial areas around the world were welcomed, including in the Baltic Sea, between France and the United Kingdom and between Malaysia, Indonesia and Singapore. The HSSC ISO Cell would work with applicable WGs/PTs to agree on more structured testing of S-100 to ensure meeting end user's expectations.

**Decision C8/11:** The **Council** endorsed the principle of creating IHO S-100 Sea Trial Areas around the world and thanked **Canada** in particular for their offer on St Lawrence River (See also **C8/70** and agenda item 7.5).

**Action C8/12:** Based on the outcome of the experimentation supported by **Canada**, the **Council** invited **HSSC** through its **IHO ISO Cell** (and **Member States** having International S-100 Sea Trial Areas) to consider the possibility of developing some Guidelines (minimum requirements and expected outcomes) for IHO S-100 Sea Trial Areas (for instance: possible impact on standards, impact on equipment, impact on production tools and distribution mechanisms, impact on data services, impact on education and training for users, etc.). **Member States** having International S-100 Sea Trial Areas are also invited to contribute to the development of these Guidelines. (deadline: HSSC-17 (-7 weeks))

NIPWG had worked in close cooperation with IHMA<sup>3</sup> on development of the S-131 Marine Harbour Infrastructure product specification. Supported by NIPWG, IHMA had also developed Guidelines for Harbour Authorities on electronic and automated exchange of nautical data between ports and HOs.

**Decision C8/14:** The **Council** welcomed the effective cooperation between the **IHO** and **IHMA**<sup>4</sup> for the development of the IHMA Guidelines for Harmonized Communication and Electronic Exchange of Nautical Data for Port Calls.

**IHO Director Nyberg** presented an update on the activities of the Joint IHO-Singapore Innovation and Technology Laboratory. He drew attention to the website <https://iho.int/en/iho-singapore-lab> on which reports and outcomes could be consulted. The first project; a review of S-57 to S-101 Conversion Guidance Document and Workshop had been successfully completed. Project 2, the design of a S-131 Marine Harbour Infrastructure Database had also been completed. A website was being maintained to accommodate potential contributions from harbour and port authorities. On project 3, demonstrating interoperability of S-101 and S-102 on a prototype S-100 compatible ECDIS, an evaluation was continuing on how S-101 and S-102 worked together, from a display perspective, and work was ongoing to match user needs and requirements.

Project 4, demonstrating the handling of the old and the new type of ENC's (S-57 and S-101) in a dual-fuel environment, was well under way. It was planned to make S-101 available in major shipping routes by 2026. A significant contribution to the project would come from Italy, which had Training Ship *Amerigo Vespucci* undertaking an ambitious world tour in which it attempted to download data

<sup>3</sup> International Harbour Masters Association

<sup>4</sup> International Harbour Masters Association.

in remote areas; it would report on the results. They were also testing ENCs (S-57 and S-101) in a prototype dual-fuel ECDIS, as well as wireless updating.

In a new proposal, project 5 aimed to integrate land and sea-level datum to facilitate the development of better applications to evaluate the impacts of storm surge and to potentially address coastal inundation scenarios.

Concerning the dual-fuel S-100 ECDIS, Indonesia, Malaysia and Singapore had put together a prototype in the Malacca and Singapore Straits. Through demonstrations at sea, they had used a KHOA prototype dual-fuel ECDIS to demonstrate the dual-fuel concept.

**Decision and Action C8/17:** The **Council** noted the verbal update on the Joint IHO-Singapore Innovation and Technology Laboratory by **IHO Director Dr Nyberg**, and making reference to Doc. [HSSC16-04.4A](#), thanked the Lab and contributors (**ID, IT, MY, SG**) for the achievements (conversion S-57 to S-101, S-131 Database, Interoperability S-101 and S-102 on a prototype S-100 ECDIS, availability of ENCs S-57 and S-101 on a dual-fuel ECDIS onboard the Italian Tall Ship *Amerigo Vespucci* for her circumnavigation, etc.).

The **Council** encouraged **IHO Members States** and **industry stakeholders** to actively engage in collaborative projects with the IHO-Singapore Lab. (deadline HSSC-17).

The **HSSC Chair** drew attention to other highlights from HSSC-16: it had been decided that Project Teams under S-100WG (S-101PT, S-102PT, S129PT) would remain active until there was an S-100 ECDIS in the market, which would not be at least until 2026. HSSC had also noted the request from CIRM that IHO considered defining a retirement date for S-57 and inform IMO of the outcome. After not meeting for some years, the Hydrographic Dictionary WG had been changed to a Correspondence Group (HDCG).

At HSSC-16, the Maritime Autonomous Surface Ships Project Team (MASS PT) had proposed to reorganize the PT into a permanent IHO Working Group. HSSC had endorsed the proposed Terms of Reference for MASSWG.

**Germany** queried the value of establishing a permanent working group on MASS and noted the already very heavy workload taken on by the HSSC. The MASS Code was already in existence and Member States were dealing with the necessity of having machine-readable information.

**Norway**, further to the comment by Germany, asked whether the work programme of the proposed working group on MASS would be limited to making data machine readable or whether it would have other tasks, such as to integrate unmanned systems with land infrastructure or to take decisions on the type of data and how it should be delivered. He noted that there had been some developments in unmanned transportation. It would be good to address those issues, perhaps through a Project Team if not a Working Group.

**Germany** said that machine readability was being addressed within the S-100 suite. In light of existing work, they could not see much benefit in establishing a working group, but would accept the recommendation of the HSSC.

The **Secretary-General** said that MASS operation had a myriad of aspects, from ship construction to remote maintenance, crewing, and remote operation although it was appropriate for IHO to focus purely on the hydrographic element of MASS. A recent report<sup>5</sup> of 13 September 2024 by the Intersessional Working Group on Maritime Autonomous Surface Ships published what was expected

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<sup>5</sup> Doc. IMO MSC/ISWG/MASS 3/WP.1 dated 13 September 2024.

from the hydrographic side in supporting MASS operations, including the functionality of ECDIS and the need for information to be in a machine-readable format. It was his understanding that IMO was requesting only hydrographic support, and, in that context, he believed that it would be sufficient to continue with a Project Team rather than a permanent Working Group.

The **HSSC Chair** agreed that it would be reasonable to maintain a MASS Project Team at the present time.

**IHO Director Sinapi** asked whether the MASS Project Team would continue with the same Terms of Reference. He noted that the Strategic Plan Review Working Group (SPRWG) would review the strategic goals of IHO which, according to the feedback from HSSC and IRCC, would include e-navigation.

The **Council Chair** concluded that the MASS Project Team would stay in place at the current time and that a decision on whether to form a permanent Working Group would be taken later.

**Romania**, referring to the MASS WG, said that he agreed with the view of the HSSC Chair that a long-term plan was required. He did not understand the decision to postpone a working group. There were many aspects that still needed to be considered in the Terms of Reference, including unmanned systems.

The **Council Chair** said she believed that the same work could be undertaken, as a Project Team rather than a Working Group.

**Decision C8/13:** Following up on a proposal from **HSSC**, the **Council** decided not to establish a **MASSWG** as such, but to continue with the current **Project Team** under its current TORs, noting that the next **SPRWG** could bring more guidance on this matter, if deemed appropriate.

The **HSSC Chair**, responding to questions regarding phase out of S-57 raised by the **IC-ENC General Manager**, said that the approval phase was just being reached for the S-101 ENC product specification and an IHO circular letter would probably be issued to that effect within one or two weeks. There were no official S-101 ENCs at the present time and it was therefore too early to contemplate the phase-out of S-57. It was important to think ten years ahead: a phase-out plan could be included in the Strategic Plan Review. In terms of learning lessons from Phase 1 and incorporating them in Phase 2, it was easier to deal with product specifications in packages rather than separately. It was also important to prioritize.

The **Secretary-General** said that the matter on phase out of S-57 could be placed on the agenda of the **WENDWG** and the views of chart providers sought before providing a more detailed answer.

**Decision and Action C8/15:** Noting the evolution of the IMO ECDIS Performance Standard including two new standards (one for secure communications<sup>6</sup>, one for exchange of route plan<sup>7</sup>) agreed upon by the IMO MSC 108, the **Council** agreed with the proposal from **HSSC** to include a new work item in the IHO work plan (Programme 2) related to the technical aspects and impact of new distribution concepts of S-100 products and data services including the subsequent phase-out of S-57 ENC distribution. Liaison to be ensured with **IRCC/WENDWG** on this matter. (deadline: HSSC-17/C-9)

**Decision C8/18:** The **Council** approved the **HSSC** work plan, including the analysis technical aspects and impact of new distribution concepts of S-100-based products.

**Action C8/19:** Considering the timelines between HSSC-17 and IRCC-17 meetings in 2025 and the

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<sup>6</sup> IEC SECOM 63173-2.

<sup>7</sup> IEC S-421.



countdown for submission of reports and proposals to C-9 (then A-4), the **Council** invited **HSSC and IRCC Chairs** to prepare their 2025 meeting minutes with the view that they will be used/submitted directly as reports and proposals to be considered at C-9. (deadline: C-9 (-3 months)).

## 4.2 Report and proposals from IRCC

Doc: C8-04.2A

- Annex: Axis of evolution of the IHO Strategic Plan

The **IRCC Chair** presented the report and outcomes of the 16<sup>th</sup> meeting of IRCC, held in Ecuador in June 2024. IRCC had enjoyed excellent collaboration with HSSC, as always, particularly in the areas of dissemination of S-100 products and the development of S-11 Part C (guidelines for the coordination and management of the development of S-100 ENDS).

The RHCs had reported on key regional issues, including harmonized development and implementation of S-100 products and services; the need for additional resources for the production of S-101 and S-102 products; improving the services provided for ECS customers; the challenges of parallel production of S-57 and S-101 ENCs; the limited funding available for capacity building; and gender balance in hydrography. IRCC had discussed the creation of an IHO Hydrographic Commission on Antarctica (HCA) action plan addressing the impact of climate change in the *Southern Ocean* and had recommended that RHC Chairs ask their Member States to consider the extended activities in the implementation of the S-100 Roadmap for the HCA region.

**Decision C8/20:** The **Council** noted the report and commended the **IRCC**, the **RHCs**, and **IRCC Sub-Committees and Working Groups** for their achievements since C-7, as well as the excellent direct cooperation between **HSSC and IRCC** and their subordinate bodies.

**Decision C8/21:** The **Council** noted that many **RHCs** reported on the importance of CB activities and the need for additional funds especially to support S-1xx data service developments in their regions.

The IRCC Sub-Committee on the World-Wide Navigational Warning Service (WWNWS) had assessed the marine safety information (MSI) of coastal States to be 89.2%; the IHO Strategic Plan target being 90% by 2026. WWNWS had submitted S-124 version 2.0.0 on navigational warnings to HSSC for endorsement and had completed the draft version of the S-124 document encoding guide. It was working with the Capacity Building Sub-Committee (CBSC) on a geographic information system (GIS) under IHO publication C-55 (status of hydrographic surveying and charting worldwide). WWNWS recommended that the use of all recognized mobile satellite services (RMSSs) should be mandatory and had called upon IRCC to send a letter to that effect to RHCs.

Turning to capacity building, the IRCC Chair acknowledged the generous financial contributions, particularly the Republic of Korea, the Nippon Foundation and from a number of Member States in respect of the Empowering Women in Hydrography (EWH) project. The capacity building coordinators had made great efforts to identify national and regional projects that could contribute to the IHO capacity building work programme and to coordinate support for countries in need. IRCC called upon RHCs to ensure that their regions were represented on the CBSC and encourage more Member States to participate in its work.

**Decision C8/22:** (former C7/24)<sup>8</sup>: On the proposal for a new *Programme* for Gender Balance in Hydrography (as a follow-up to the successful *Empowering Women in Hydrography Project*), the **Council** agreed on the way forward in three steps as suggested at C-7 by the **Secretary-General**. Consequently:

- a. The **Council** tasked the **CBSC** through the **IRCC**, to first define the regulatory framework (M-3) for a continued activity on this social theme through a proposal for an IHO Resolution; (deadline IRCC-17)
- b. The **Council** agreed to continue with the EWH project led by the **CBSC** supported by remaining funds and future financial and / or in-kind support as currently announced by **CA, FR, NO, DK<sup>9</sup>, UK, US**, but still to be confirmed.
- c. The **Council** supported by **IRCC** to develop a proposal on the future framework for an IHO social Programme (incl. Gender Balance in Hydrography) as part of the revised IHO Strategic Plan to be submitted to A-4. (deadline C-9 (-3months) in preparation for A-4).

**Decision C8/23:** The **Council** noted the update on the *Empowering Women in Hydrography Project* provided by **Director Sinapi**.

CBSC had set up a scoping team to draft the terms of reference for a project team to develop a framework for a future IHO social programme, including issues of gender balance. The scope of the task had been considerably narrowed, and more work remained to be done before the project team could be established.

**Decision and Action C8/24:** Based on the above, and with reference to Doc. C8-05.2.1A, the **Council**:

- a. endorsed the specific recommendations of **IRCC** i.e. the establishment of an **IRCC PT** in charge of drafting a proposed IHO Resolution on Gender Balance / Inclusiveness.
- b. took note that the Scoping Team established by **IRCC** proposed ToRs for creating a dedicated **Project Team** to draft a Resolution to submit to C-9 for endorsement and then to A-4 for approval.
- c. invited the **IRCC** assisted by the **IHO Secretariat** to issue CLs for endorsement of the ToR / ROP and the subsequent creation of the **Project Team** by the end of 2024.

The Members of the Regional ENC Coordinating Centres (RENCs) had proposed two contributions to the capacity building work programme: an opt-in fund initiative from IC-ENC Members and an e-learning package for five non-RENC Member States from PRIMAR Members. IRCC decided that funded activities that had been endorsed by CBSC but not been completed in the calendar year would no longer be automatically carried over into the following year's workplan and that the resources thus freed up would be transferred to S-100 activities. A general manager group had been established at the IHO E-Learning Centre, and a systems manager provided by the Republic of Korea. IRCC called upon Member States and partners to contribute e-learning materials to the e-Learning Centre website.

The Worldwide ENC Database Working Group (WENDWG) had reassessed the WEND100 principles and considered them still adequate to meet the defined objectives. The Working Group had set up two ad hoc drafting groups, working respectively with amendments to the guidelines on the

<sup>8</sup> Kept as a reminder for the context. Still pending.

<sup>9</sup> DK contribution to EWH confirmed through 2026.

implementation of the WEND-100 principles and with the development of Edition 1.0.0 of S-11 Part C. The WENDWG is also drafting a document specifying the meaning of the term “ENDS”.

A questionnaire issued in the third quarter of 2023 had shown an estimated level of Member States S-100 readiness of 53%. Completion of the WEND100-IGIF Matrix by RHCs is now optional, although the Matrix was still considered important for hydrographic offices that had not yet scheduled the introduction of S-100 services. Several RHCs still lacked S-100 coordinators. WENDWG had identified the need for a communications strategy aimed at end-users, manufacturers and IMO to address readiness and expected geographical coverage of S-100 based products and data services from 2026 onwards. It would discuss the issue at its next meeting; and the contribution of the RENCs to the debate would be invaluable. (See also Decision C8/32 under agenda item 4.3)

**IRCC** recommended that the mandate of the Marine Spatial Data Infrastructures Working Group (MSDIWG) should be amended; the Working Group would transfer the resources allocated to the development of a portal to promote regional and international cooperation in MSDI to activities to monitor the S-122 Protected Seas pilot project, with a specific focus on the high seas and marine protected areas (MPAs) adopted by IMO, in order to demonstrate the benefits of S-122 for non-navigation purposes. The new mandate would reduce the Working Group’s workload, but it would be important to avoid duplication of the work of other bodies.

**IHO Director Nyberg** said that the work of MSDIWG under the S-122 project might also include inviting the United States philanthropic foundation ProtectedSeas to create a data set for MPAs using S-122 and monitoring the implementation of original equipment manufacturer (OEM) and GIS software. The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) could be invited to consider the S-122 data sets pursuant to the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ). It had been proposed by UN-GGIM that MSDIWG and the UN-GGIM Working Group on Marine Geospatial Information should undertake joint activities; he therefore called upon the Council to task MSDIWG with investigating that possibility, pending further discussion at C-9.

**Decision and Action C8/25:** The **Council** noted the update on **MSDIWG** activities by the **IRCC Chair**, supported by **Director Dr Nyberg**, as well as noted the request from UN-GGIM to reinforce the relation between the MSDIWG and the Marine Geospatial Working Group of UN-GGIM, for efficiency reasons.

The **Council** invited **MSDIWG** through the **IRCC** to consider Decision 14/111 -*Integrated marine geospatial information*, made at UN-GGIM 14 and propose a way forward. (deadline: IRCC-17 / C-9 (-3 months)).

**Decision and Action C8/26:** The **Council** tasked the **MSDIWG** through the **IRCC**, in liaison with the **NIPWG**, **Protected Seas**, **ECDIS OEMs**, **GIS software manufacturers**, the **UN**, **IUCN**, and **IHO Member States**, to coordinate a pilot project aiming to demonstrate the operational implementation of S-122. (deadline: IRCC-17/C-9 (-3 months)).

**Assistant Director Guillam** said that, at a time of increasing interaction and overlap between the activities of organizations working in the same area, they should come together in joint working groups or correspondence groups.

The **IRCC Chair** said that IHO EU (European Union) Network Working Group (IENWG) had issued a report on IHO and European Commission (EC) hydrographic capacity development in third countries. A representative of IENWG had joined a new group created by the EC on the European Marine Observation and Data Network (EMODnet) Vision 2035 project, and the IENWG provided joint initial input to the Vision 2035 project.

**IRCC** had approved the revised terms of reference of the International Federation of Surveyors/IHO/International Cartographic Association (FIG/IHO/ICA) International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC). IBSC had considered 17 submissions for recognition as institutions or professional bodies against the Standards of Competence and had identified significant shortcomings in 15 of them. The IHO Secretariat and members of the Crowdsourced Bathymetry Working Group (CSBWG) had conducted a workshop on CSB for coastal States in April 2024; a second online workshop happened early October 2024 and had provided guidance and clarification on the preparation of submissions. IBSC had begun the revision of the S-5 and S-8 standards and defined the subjects and fees required for recognition as institution or professional body teaching on S-5 standards. It would liaise with CBSC for the future maintenance of the C-47 publication.

**Decision C8/28:** The **Council** noted the completion by **IRCC** of two workshops:

- one on Standards of Competence (**IBSC**) matters, to provide clarifications for the institutions on the preparation of submissions to the Board; (completed October 2024).
- one on Crowd Sourced Bathymetry (**CSBWG**), on the benefit of crowd sourced bathymetry and how to expand data contribution. (completed April 2024).

The Crowdsourced Bathymetry Working Group (CSBWG) had identified 10 high-level priority work areas and added a new work item, to deliver the IHO CSB Initiative, which would coordinate national, regional, and international CSB projects and activities. IRCC called upon RHCs to encourage Member States to engage formally or informally with CSBWG and encourage vessels from all sectors to contribute bathymetric data collected during routine maritime operations.

The IHO Data Centre for Digital Bathymetry (DCDB) had archived 93 new multibeam bathymetric surveys and finalized new CSB data ingest pipelines with the Interdisciplinary Centre for the Development of Ocean Mapping, Seabed 2030, the International Seakeepers Society and the Center for Ocean Mapping and Innovative Technologies. The CSB Coastal State Review Application would soon be fully operational. IRCC called upon RHCs to encourage Member States to submit community bathymetric data to the DCDB, regardless of their origin, resolution or quality.

The General Bathymetric Chart of the Oceans programme had celebrated 120 years of ocean discovery, adopted a new strategy and code of conduct and conducted a governance review. It had also set up a new sub-committee on education and training.

In the subsequent discussion, **HSSC Chair** suggested that the Project Team on Fund Generation should explore the potential of the online payment function which was to be included in the new IHO Portal related to the Security Scheme. The **Secretary-General** suggested that the Project Team should also identify other current and future IHO standards products and services for which it might be feasible to charge a fee, just as the standards issued by the International Organization for Standardization (ISO standards) were paid-for products (See also paragraph 4.6, Action C8/27b).

**Indonesia** suggested that IHO could encourage IMO to adopt a formal regulation requiring all vessels to collect bathymetric data.

**Romania** called for a formal recommendation by the Council that RHCs should consider the coordination of the implementation of S-100 in their own regions as a priority<sup>10</sup>.

**Türkiye** drew attention to an innovative training course on ENC quality assessment and conversion, held in Istanbul in May 2024 – the first course to be organized by regional coordinators and financed by IC-ENC Members.

**United States** paid tribute to the success enjoyed by the RHCs in their role as coordinators, for instance in their liaison with non-coastal States.

**Decision C8/29:** The **Council** commended the **RHCs** for their outstanding and broad scope achievements in implementing standards, sharing best practices between coastal States, and coordinating production in their charting regions.

The activities under IRCC regarding the IHO Fund Generation Project Team are grouped under agenda item 4.6.

### 4.3 Update on the S-100 Roadmap

*Doc: A. Annex 2 of the S-100 Roadmap (See Annex A of C8-04.1A above)*

*B. Annex 4 of the S-100 Roadmap (See Annex B of C8-04.1A above)*

**The HSSC Chair**, referring to Annex 2 of the S-100 Roadmap, invited the Council to approve changes to the timeline for S-100 implementation, in particular the postponement of endorsement and implementation of the interoperability standard S-98 and the S-100 test datasets S-164 to 2025. In future, the HSSC proposed to update the S-100 product specification development timeline twice a year in future, rather than once.

The HSSC had devised a “tree” diagram to illustrate the concept of the Electronic Navigational Data Service (ENDS) and to provide a visual representation of the ways in which S-100 products supported International Maritime Organization (IMO) Maritime Service Portfolios, as defined in the IMO E-Navigation Strategy, and the Convention for the Safety of Life at Sea (SOLAS) regulations. The HSSC proposed that the diagram should be added to Annex 2 of the S-100 roadmap. HSSC further called upon the Council to consider concrete actions to increase interaction with major stakeholders, including IMO, industry and end-users of electronic chart display and information systems (ECDIS).

**United Kingdom** offered to provide explanatory text to accompany the tree diagram if not reshape the style of the diagram entirely.

Turning to Annex 4 of the S-100 Roadmap, the **HSSC Chair** presented several non-substantive changes to the dual fuel concept for S-100 ECDIS, reflecting technical developments since the adoption of the S-100 Roadmap at A-3 and the adoption of the revised ECDIS Performance Standards.

**Decision and Action C8/30:** The **Council** approved the proposed amendments to Annex 2 of the

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<sup>10</sup> Note from the Council Secretariat: S-100 implementation is a priority (Decision A2/30, IHO Resolutions 01/2021 & 01/2023, IHO SPIs, ...).

S-100 Implementation Roadmap as presented by the **HSSC Chair**.

This new version of Annex 2 includes in particular:

- the ENDS<sup>11</sup> diagram, aiming to illustrate the relationship between S-100 products, the IMO Maritime Services and the SOLAS Regulations.
- the revised S-100 timeline.

Noting the **UK's** offer to support, the **Council** tasked the **WENDWG/NIPWG** through the **IRCC/HSSC** respectively, to prepare a concise narrative to be added in the ENDS diagram, with the option to reshape it in style if appropriate. (deadline: IRCC-17/HSSC-17).

**Decision C8/31:** In accordance with Annex 1 of the S-100 Roadmap, the **Council** agreed with **HSSC Chair's** recommendation to consider concrete actions in 2025 for the reinforcement of interactions with major stakeholders (e.g. IMO, IEC, S-100 ECDIS end-users, OEM, industry, distributors), such as the establishment of an IMO-IHO S-100 ECDIS Stakeholders Forum/ Correspondence Group. (deadline: HSSC-17/C-9).

**Decision and Action C8/32:** The **Council** welcomed the intention of the **WENDWG** through the **IRCC** to provide, from 2025 onwards, inputs<sup>12</sup> to the **IHO Secretariat's** annual information reports to IMO NCSR meetings, presenting the planned availability and coverage<sup>13</sup> per **RHCs**, of S-100 Phase I Products and Data Services (deadline: WENDWG15/IRCC-17 and NCSR-12 (-13 weeks)).

Request for a lunch slot briefing session on S-100 to be considered by the **IHO Secretariat** (deadline: ASAP).

**Decision C8/33:** The **Council** approved the proposed amendments to Annex 4 of the S-100 Roadmap (Dual Fuel Concept for S-100 ECDIS) as presented by the **HSSC Chair**.

**Decision C8/34:** Noting the updates approved by the **Council** for Annexes 2 and 4, **IHO Secretariat** to prepare and make available the finalized version 4.0 of the S-100 Roadmap. (deadline: 30 November 2024).

**Decision C8/35:** **Council/HSSC/IRCC Chairs/SecGen** supported by subject matter experts and Member States as appropriate to maintain the S-100 Implementation Roadmap as an incremental version-controlled document (including narrative and timelines) on a semi-annual basis.

#### 4.4 Update on the establishment of the S-100 Infrastructure Centre.

*Doc: A. Information Paper (Republic of Korea): Establishment and effective operation of the IHO Infrastructure Centre.*

*B. Comment paper (IHO Secretariat): Preliminary considerations.*

The **HSSC Chair** said that A-3 had recognized the need to establish a S-100 Infrastructure Centre and it had approved the foundation of a new Project Team (ICE PT) under the HSSC. The first report of the Project Team had been given to HSSC-16. The purpose of the project was to secure a sustainable infrastructure for management of the operational, technical and administrative components supporting S-100 implementation. It would be underpinned by a strategic decision for

<sup>11</sup> . ENDS: *Electronic Navigational Data Service*, as introduced in the IMO Resolution MSC.530(106) Performance Standards for ECDIS.

<sup>12</sup> Eventually in digital and dynamic format, using INTToGIS III when commissioned.

<sup>13</sup> Schemed/Planned (when, where) and then produced : one stop-shop IHO Catalogue of INT/ENCs/S-100 Products and Data Services.

IHO, since it included organizational, financial and operational challenges. The Republic of Korea had made a very generous offer to become the host country for the Centre. The Infrastructure Centre would be managed by the Secretariat under the IHO Technical Director and alongside an IHO infrastructure advisory board. It was proposed to set up an interim establishment at C-8, with a permanent structure to be finally confirmed at A-4.

The Republic of Korea was grateful for the opportunity to host the S-100 Infrastructure Centre and hoped that its experience in contributing to the development of S-100 over the previous decade would benefit the international community. The IHO S-100 Infrastructure Centre would provide the foundational technology needed to set global standards for maritime navigation. As set out in C-8 04.4A Rev 1, Republic of Korea welcomed the recommendations of the ICE PT report and the endorsement by the HSSC. There was a need for managerial, technical and human resources to establish the IHO Infrastructure Centre. Republic of Korea had offered to host and support funding of the Centre on the understanding that it would be located in the Republic of Korea, that governance would be conducted by the IHO Secretariat, with details defined in a Host Agreement. Republic of Korea would support funding for the Centre's operation until 2035. Republic of Korea would provide interim support for human and financial resources to avoid delays in the Centre's core functions.

**IHO Director Nyberg** said that the Secretariat was very appreciative of the proposal by Republic of Korea to host the Infrastructure Centre. The Centre was considered to be the only viable long-term solution for IHO to provide sustainable support for S-100 and other technology-based infrastructure. The generous offer of funding by Republic of Korea until 2035 was a strong argument to be considered. Confirmation on the level and duration of engagement by Republic of Korea was to be formalized in a letter from the Republic of Korea to the IHO Secretariat to be received prior to HSSC-17 (- 7 weeks). There would be a distinct clarification of responsibilities between IHO Secretariat in Monaco acting as headquarters and the new Centre, thereby reducing the potential for future misunderstandings. Documents would need to be drafted to reflect agreed timelines for implementation. As defined in the IHO Convention, the seat of the IHO is the Principality of Monaco, a principle that would be maintained if full governance and operational oversight of the new Centre were to remain with the IHO Secretariat in Monaco. The Centre would maintain the IHO technical infrastructure. Organizational governance would remain in Monaco. On first analysis, there would be no changes in M-1 and the only new basic document that would be introduced would be a Host Country Agreement with the Republic of Korea. There would be a three-year planning cycle, guiding principles for funding and a new official resolution in M-3. Minor clarifications would be required on staff remuneration, living arrangements, holidays and travel rules in the IHO Staff Regulations. He proposed if Council decided on the interim establishment of the Centre, the Secretariat would be tasked with negotiation of a Host Country Agreement. C-9 would be asked to endorse the updates to the IHO basic documents (M-1, M-3 and Staff Regulations) and the proposed Host Country Agreement which would be presented to A-4 for approval. A continuous communications plan would be put in place.

The **Council Chair** drew attention to the favourable comment in the Red Book from the United States and to the comment from the Secretary-General concerning the IHO Secretariat's preliminary managerial, technical, financial and administrative considerations on the establishment of the Centre (C8-04.4B).

**Member States**<sup>14</sup> supported the proposal as set out by Director Nyberg and expressed gratitude for the reassurance provided on how the Centre would meet governance requirements. It was essential that the Centre should remain a core part of - and be led by - the IHO Secretariat. Funding would be required for the additional human resource management responsibilities at IHO headquarters. Due note was taken of the need to amend the IHO Staff Regulations and to establish a formal agreement. **Member States** and the **Chair of the Capacity Building Sub-Committee** expressed immense gratitude to the Republic of Korea for its impressive commitment to the Centre over the long term. The Centre was necessary and urgent but would not have been possible without the generosity of the Republic of Korea. More thought would need to be given to the ten-year funding outlook and how to ensure continuity over time.

The **HSSC Chair**, responding to questions, confirmed that the approval of Council was sought to establish the Infrastructure Centre on an interim basis, pending full approval by A-4. The purpose of the Centre was to provide operational, administrative and technical support to S-100 infrastructure but it was not intended that it would be involved in distribution of ENCs.

**IHO Director Nyberg**, responding to questions and concerns on the nature of the agreement, explained that discussions concerning the technical and operational scope as well as funding were still underway, and this included an element for management of human resources. The nature of the agreement and whether it would be a Memorandum of Understanding between IHO and the Republic of Korea, or either a Host Country Agreement or Service Level Agreement or, had yet to be worked out.

The **Secretary-General** said that it was understood that the installation of the Centre in the Republic of Korea would require an operational and managerial interface with the IHO headquarters Secretariat. He sought a mandate from Council to take forward discussions on the shared environment and strengthening of required resources.

**France** asked whether Member States might be required to pay an additional contribution for the Centre at some point, noting that the Republic of Korea had agreed to funding until 2035.

**IHO Director Nyberg** explained that the intent would not be to ask Member States for additional contributions. Once approval had been given, the Secretary-General would enter into more formal deliberations with the Republic of Korea on the details. It was expected that, as with similar projects managed within the United Nations system, the donor country would fund an account that would be managed by the IHO Secretariat.

**Monaco** noted that A-3 had approved the establishment of the Infrastructure Centre in principle, within the IHO Secretariat. The Centre would provide the technology for developing global standards for maritime navigation. According to A-3 considerations, the financial burden for setting up and operating the Centre would be significant, requiring at least three permanent employees, good IT infrastructure and a stable communication network. The Republic of Korea had offered to provide the required financial support and to host the Centre which would remain an integral part of the IHO Secretariat. The proposal seemed to go beyond operational adjustments that might be implemented to enhance the structure and functioning of IHO. The Principality of Monaco placed great importance on the sustainability and preservation of the integrity of IHO and on the Convention which set out the

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<sup>14</sup> Norway, Chile, Singapore, France, Germany, Canada (and Türkiye, Romania, observers)



establishment of the Organization. Monaco expressly requested reassurances that establishment of the Infrastructure Centre as a body of the IHO Secretariat that would be set up outside the territory of Monaco would not result in changes to the IHO Convention or to the Governing Body of the Organization.

**Monaco** noted that Republic of Korea would support an interim solution until approval of the Centre by A-4 in 2026 by providing human and financial resources. Monaco believed that splitting the Secretariat in two different locations was not a guarantee of synergies or economies of scale. Furthermore, the commitment of the Republic of Korea covered a period of ten years which was a relatively short period of time. Monaco had hosted IHO for over a century and it respectfully invited any country offering to host part of the Secretariat to consider extending the funding period or making it perennial. As the Host Country of IHO and custodian of the IHO Convention, the Principality of Monaco hoped that its concerns would be heard and addressed.

**Italy** said that the fact that the IHO had been obliged to request the assistance of a Member State to support one of the most important aspects of the Organization's work was a weakness. It would be preferable to fund such projects as an integral part of the Organization; he requested that the Secretariat should give more thought to that aspect.

**Norway** underlined that, although the commitment of Republic of Korea for a period of ten years might seem short when compared to the lifespan of the Organization which was over one hundred years, it was the next decade that was important in considering how to support S-100 implementation. A commitment of ten years was therefore excellent. In addition, IHO Director Nyberg had examined the basic documents and established that no significant adjustments would need to be made. The proposed Centre would not be the only project established outside of Monaco. IHO existed because of the contributions from Member States and a great many IHO Member States had committed significant resources for decades.

**The representative of the IMO**, participating as an observer, indicated that it would be important to understand whether ships would be required to access the information on a continuous basis and; what would be the impact on S-100 products if the Centre was not available for any period of time.

The **HSSC Chair** said that there was no direct dependency with respect to the end users, the dependency would be for the ECDIS manufacturers that were developing the S-100 ECDIS systems.

**United States** said that the work to be undertaken by the Infrastructure Centre was critical, since for S-100 to be truly realised, it required standardized infrastructure, including consistent, machine-readable product catalogues to inform end systems of new versions of product standards and updates. As others had noted, the next decade would be an essential phase of that work. United States supported establishing the interim Infrastructure Centre as proposed, despite the associated challenges, since the requirement was too critical to wait. United States also supported IHO moving forward simultaneously in discussion with the Republic of Korea on the administrative roles and responsibilities for the permanent Centre.

The **Secretary-General** said that the present topic concerned the strategic direction that the IHO would take; the Organization would continue actively search for host countries to take on operations on its behalf, a good example of which was the Data Centre for Digital Bathymetry which was hosted by the United States National Oceanographic and Atmospheric Administration (NOAA) and the Joint

IHO-Singapore Innovation and Technology Laboratory. If the practice of seeking host countries were to be abandoned, a strategic decision would need to be taken to allocate sufficient funds within the Organization for essential projects such as S-100 implementation.

**Decision C8/36:** Following up on Decision A3/14, the **Council** commended **HSSC** (and its **S-100 ICE Project Team** in particular) for the excellent work undertaken in preparation of the design and establishment of an Infrastructure Centre.

**Decision C8/37:** Noting the generous offer made the **Republic of Korea**, noting the initial assessment provided by the **IHO Secretariat**, the **Council** agreed on the interim establishment of the IHO Infrastructure Centre<sup>15</sup> in the **Republic of Korea** starting in 2025 under the supervision of the **IHO Secretariat** and **HSSC** (supported by the **S-100 ICE PT**), based on the principles described in the HSSC Report complemented by the IHO Secretariat's preliminary considerations.

**Decision C8/38:** The **Council** agreed that the permanent establishment of the IHO Infrastructure Centre in the ROK should be finally decided by the **Assembly** (A-4), based on the following ground:

- governance, availability of rules of procedures, technical, managerial, financial, staffing arrangements compliant with current principles in IHO Basic Documents and Resolutions<sup>16</sup>
- budget and business model secured for at least 3 cycles of 3 years starting in January 2026. (2026+ (3\*3) = 2035)
- Council-approved specific IHO Infra Centre annual work plan based on the IHO 3-year work programme which will expand on the Centre's role and duties. (deadline: C-9(-3 months)).

**Decision C8/39:** The **Council** noted the comments and statements made by some **Council Members** and **IHO Member States** (**CL, DE, FR, MC, NO, RO, SG, TR**). The **Council** thanked and noted in particular the statement made by the representative of the **Government of Monaco** (See Summary Report).

**Decision and Actions C8/40:** The **Council** invited **HSSC** and its **S-100 ICE PT** in liaison with the **Republic of Korea and IHO Secretariat**, to consider the comments made at C-8 by some **Council Members** and **IHO Member States** (See above) and to pursue the preparation of all necessary basic documents (new basic docs, amendments to existing IHO Basic Documents, IHO Resolutions, procedures, etc.) to serve in the development of proposal(s) submitted to A-4.

**IHO Member States** and **Council Members** in particular, to provide their comments and inputs on these documents for discussion at **HSSC-17**.

**HSSC** in liaison with the **Republic of Korea and IHO Secretariat** to provide the draft proposal(s) to A-4 for endorsement at C-9, as a package. (deadline: C-9 (-3 months))

The **Council** mandated the **Secretary-General** to negotiate a formal Host Country Agreement between the **Republic of Korea and the IHO** to be submitted to C-9 for endorsement and subsequent approval by A-4.

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<sup>15</sup> Name endorsed by **HSSC**.

<sup>16</sup> and if not, proposed amendments to be made to current IHO Basic Documents and IHO Resolutions for IHO Members approval at A-4.

#### 4.5 Update on the development of S-130.

Doc: C8-04.5A

Doc: C8-01.2C

The **Secretary-General** reported on the S-130 project, dealing with polygonal demarcations of global sea areas. The S-130 Project Team had considered sample data sets for the Baltic Sea, Southern Ocean and parts of the North Atlantic, leading to substantive semantic changes to the application schema and the development of a draft Edition 1.1.0 of the S-130 product specification. The geographical coordinates of vertices have been taken from international (INT) charts and electronic navigational charts (ENCs), as they are considered reliable sources for the conversion of textual descriptions of locations contained in S-23, 3<sup>rd</sup> Edition (1953) for the S-130 authoritative data set.

The outstanding technical problem of representation of MultiPolygon geometry is awaiting expert input and should be resolved at the next meeting of the Project Team in October 2024 for a finalization between autumn 2024 and summer 2025, allowing the Project Team to approve Edition 1.1.0 of the product specification and begin work on the operational Edition 2.0.0. Technical support for the creation of the geographical coordinates is provided by the IHO Secretariat and the Flanders Marine Institute, Belgium, under a contract financed from the IHO Special Projects Fund.

**China** asked if a contractor has already been chosen.

**IHO Secretary-General** answered that the contractor has been assigned by the Project Team and is paid by the special project fund of the IHO.

**IHO Director Sinapi** noted that S-130 and S-122 provided standardized, digitized data, which were greatly appreciated by international authorities such as the United Nations.

**Decision and Action C8/41:** The **Council** noted the progress made by the S-130PT while testing and experimenting Ed. 1.0.0 of the Product Specification through the production of test data sets for the *Baltic Sea*, the *Southern Ocean* and for some parts of the *North Atlantic Ocean*.

With a new interim Ed. 1.1.0 planned to be developed by the end of 2024, the **Council** noted the timelines with Ed. 2.0.0 of S-130 PS to be submitted to HSSC-17 for endorsement, and then to **IHO Member States** for approval in 2025. (deadline: HSSC-17 (-7 weeks)).

#### 4.6 Update on the activities of the IHO Fund Generation Project Team

Doc:C8-04.2A – Presentation

The **IRCC Chair** reported that IRCC had approved the terms of reference and outline workplan of the Fund Generation Project Team mandated by A-3. The Project Team's initial task was to draw up a priority list of activities and identify both existing/short-term and long-term strategic funding options.

**IHO Director Sinapi** noted that the Project Team had held three online meetings in April, May and September 2024 and had agreed to hold short online meetings every month thereafter. At its third meeting, it had reviewed a skills matrix to identify areas where specific expertise was needed and discussed engagement with stakeholders, including industry, and ways of acknowledging donors and contributors.

The Project Team's main tasks were to identify IHO projects that would benefit from funding from alternative sources; identify potential sources of funding, including RENCs, multilateral organizations, commercial partners and philanthropic organizations; and identify organizational,

functional and resource requirements and gaps, as well as legal, reputational and other risks. Those tasks were laid out in the outline workplan approved by IRCC.

**Decision C8/27a:** The **Council** noted the update on the activities of the IHO Fund Generation Project Team provided by the **IRCC Chair**, supported by **Director Sinapi**, as well as the other initiatives regarding additional funding (RENCs, IENWG and the Joint IHO/IMO/IALA/IOC/WMO/FIG/AIEA/IMPA CB initiative in particular).

**Action C8/27b:** The **Council** requested the **Project Team on Fund Generation** through **IRCC** to enhance their ToRs to incorporate a systematic survey of current and future IHO standards products and services for which users can potentially be charged and propose basic conditions such as single fee, subscriptions or other options.

## 5. IHO ANNUAL WORK PROGRAMME AND BUDGET

### 5.1. Review of the current Financial Status of the IHO

*Doc: C8-05.1A*

The **Secretary-General** drew attention to a chart showing that a historic low of 68.39% of Member States contributions had been received at the end of September 2024. In the five years to 2022, the average received by the same period had been 80.85% and the figure had already decreased to 69.97% by 2023. Outstanding Member State contributions currently stood at 1.145 million euros and the situation was therefore very serious. It was difficult to determine why almost one third of contributions were still outstanding: he had believed that the decline in recent years had been due to the aftermath of the COVID-19 pandemic, but there had been no improvement in 2024. Looking at the global execution of the 2024 budget, the amount spent on travel expenses in 2024 was the same as in 2017: yet inflation had been over 15% in that period. The Secretariat capped costs wherever possible, carefully considering whether in-person attendance at meetings was necessary and whether an IHO Member State representative present in-country could represent IHO instead.

**Chile** recalled that the Secretary-General had explained at C-7 that the effect of the delays in payment of contributions had been somewhat offset by the practice of some Member States to pay in advance. Had the Secretary-General achieved a similar level of flexibility in managing the budget in 2024?

The **Secretary-General** confirmed that he was obliged to pay for current expenses by using contributions for 2025 which had been paid in advance. Furthermore, the Secretariat was understaffed by 10%, with two posts unfilled out of a total of 20. Money was invested with favorable interest rates, but the financial situation was far from sustainable. He hoped that the situation would recover in 2025. There had been a significant increase in membership over the previous years, with 20 new Members joining, although they were smaller countries that sometimes struggled to make payments. The Secretariat approached each country individually to encourage payment since the IHO needed the money to remain operational.

The **Chair of the IC-ENC** said that he would encourage participation in and contribution to capacity building trainings and he would coordinate with the IC-ENC General Manager to raise the matter at the next Steering Committee meeting.

The **Council Chair** said the proposal would be a welcome contribution. The effect of the low level of contributions on the Secretariat was noted.

**Decision C8/42:** The **Council** noted the information provided on the current financial status as of September 2024.

**Decision C8/43:** The **Council** was informed on the critical situation of the low level of incoming **Member States** contributions and the effects on the operations of the Secretariat.

## 5.2. Proposed IHO Work Programme for 2025 (inc. update on Programme 1)

*Doc: C8-05.2A*

The Secretary-General presented the proposed Work Programme for 2025, based on the second year of the three-year Work Programme (2024-2026) approved by A-3. It covered all three elements of the three-year Work Programme and considered all activities that had taken place since A-3.

**Türkiye** noted that the resources allocated to capacity building had been cut, while other programmes had seen an increase in their budget or an allocation from the IHO Special Projects Fund. It must surely be possible to make savings in other areas of the Work Programme and reallocate them to capacity building, which was a core priority of IHO.

**United States** supported the recommendations to increase mutual awareness of efforts and engagements in support of the United Nations Ocean Decade.

**Decision C8/44:** The **Council** approved the IHO Work Programme for 2025, as presented by the Secretary-General.

The **Council** noted the concerns, comments and suggestions from **Türkiye**.

### 5.2.1 Update on Empowering Women in Hydrography Project

**IHO Director Sinapi** presented an update on the Empowering Women in Hydrography (EWH) project. The IHO Secretariat had collaborated with the IMO World Maritime University in hosting joint events, setting up a mentorship programme and providing gender equality training. A scoping team had been set up to prepare a regulatory framework for future capacity building, draft an IHO resolution and propose terms of reference for a future project team for submission to C-8.

The initial phase of the project, financed by Canada, had ended on 31 December 2023. The project was now led by CBSC and supported by other IHO Member States. An EWH assistant had been recruited to the IHO Secretariat for one year, with the post being renewable for a further year.

The project addressed issues beyond technical matters, including recruitment of the best available talent, reducing barriers to gender differences and increasing sensitivity to inclusiveness. Those issues must be thoroughly integrated into the IHO Basic Documents. The Strategic Plan Review Working Group was invited to them into account when revising the Strategic Plan, and an IHO resolution focusing on inclusivity and gender balance would be submitted to A-4.

The EWH project had been endorsed as an action of the United Nations Decade of Ocean Science for Sustainable Development 2021–2030. The IHO Secretariat had co-sponsored a satellite event entitled “Empowering women for the ocean decade: achieving gender equality in ocean sciences and policymaking” at a conference to mark the Decade in Barcelona, Spain in April 2024. The proposed IHO resolution should consider similar gender-related internal resolutions and action plans developed by IMO, the World Meteorological Organization (WMO), the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and other partners.

The **IRCC Chair** drew attention to the required timeline, namely the establishment of the project team by December 2024 so that it could prepare the draft resolution for approval by C-9 and

subsequent submission to A-4.

See **Decisions and Actions C8/22, /23, and 24** above.

## 5.2.2 Update on contributions to the UN Ocean Decade

### A. IHO Contribution to the UN Decade of Ocean Science and Sustainable Development.

The **Secretary-General** recalled that contributions to the UN Ocean Decade fell under IHO Strategic Plan Goal 3 concerning active participation in international initiatives related to knowledge and sustainable use of the ocean. GEBCO contributed to the UN Ocean Decade through its partnership with the Nippon Foundation in delivering Seabed 2030. The percentage coverage of the GEBCO Grid had increased from 24.9% to 26.1%, representing an increase of 4.34 million km<sup>2</sup>. IHO and IOC intended to apply for Crowdsourced Bathymetry to become a UN Ocean Decade Action.

The United Nations Operational Framework for Integrated Marine Geospatial Information had been produced with strong participation from the IHO MSDI WG and IHO Member States. It was common practice for IHO to encourage Member States to contribute both formally and informally to the UN Ocean Decade, with 39 countries having formed National Decade Committees.

**IHO Director Sinapi** recalled that Challenge 8 of the Ocean Decade Vision 2030 was to “Create a digital representation of the ocean”. It was an important part of the Ocean Decade that raised the visibility of ocean mapping and hence the focus of GEBCO, Seabed 2030 and the work in which IHO had been engaged for more than one hundred years.

The **Chair of the GEBCO Guiding Committee** said that in contributing to the UN Decade of Ocean Science, IHO was moving beyond its role in shipping to be part of the holistic ecosystem of ocean knowledge. Historically, IHO had always been engaged in the safety of navigation with responsibility for the full value chain, from collecting the data to bringing out products for customers, but its work was not widely known. World Hydrography Day might be used to highlight IHO’s work and its relevance to the wider world.

**Decision C8/46:** The **Council** welcomed the presentation of the **IHO Secretariat** on the list of contributions to the UN Ocean Decade.

**Decision and Action C8/47:** Based on the recommendations and discussions, the **Council** invited the **IHO Secretariat** to consider developing a register of **IHO Member States** representatives who are involved in their national Ocean Decade Committee, if any, and individual Member States activities/formal contributions. (Inputs to be provided within the IRCC CL (Dec. 2024)).

In preparation of the future revised IHO Strategic Plan, the **Council** tasked the **SPRWG** (to be established) to consider the need for specific SPIs that measure contributions to the UN Ocean Decade in support of Goals 2 and/or 3. (deadline: C-9 (-3 months)).

### B. IHO Participation in the 3rd UN Ocean Conference

Doc. C8-05.2.2B

The **Secretary-General** recalled Goal 3 of the IHO Strategic Plan to participate actively in international initiatives related to knowledge and sustainable use of the ocean. IHO had participated in key international forums such as the Second UN Ocean Conference and the 2024 Ocean Decade Conference. The overarching theme of the Conference series was to support delivery of Sustainable Development Goal (SDG) 14: Conserve and sustainably use the oceans, seas and marine resources

for sustainable development. At the First UN Ocean Conference the launch of Seabed 2030 had been announced. IHO had conducted a side event at the Second UN Ocean Conference. The aim of IHO engagement in UNOC 2025 in Nice, France next year (and associated events) was to support the delivery of the IHO Strategic Plan by: ensuring international oceans policy was conducive to and supportive of the broadest utilization of S-100; advocating for investment in primary data gathering and the sharing of existing data holdings, and; protecting the domain expertise of IHO. Participating in the Conference would ensure visibility of IHO and acknowledgement of its relevance.

CBSC23 and IRCC17 would be held in the week prior to UNOC25 and the Conference would be preceded by a One Ocean Science Congress and by a Blue Economy and Finance Forum to take place in Monaco. IHO was in consultation with the Government of Monaco on how it might contribute to the Finance Forum with a focus on the Polar regions. IHO might collaborate with the OECD in a further side event at the Finance Forum. At the main UNOC25 Conference, IHO might participate in a side event with OECD and IOC on S-100 based products and services.

The IHO Secretariat was working with several partner organizations to determine how it might be involved. Member States were encouraged to make use of the co-location of IRCC17 to seek to participate in national delegations to UNOC25. Interested Member States could make themselves known to Assistant Director Harper who would serve as a point of contact and coordinate activities.

The **IRCC Chair** noted that the IRCC was due to meet from 3 to 5 June 2025 and he asked IHO to keep those dates in mind when organizing side events.

**France** confirmed that it stood ready to help IHO in organizing the side event on S-100, the details of which were still to be discussed.

**Norway** drew attention to the One Ocean Science Congress that would precede UNOC2025 and that could be of interest.

**IHO Assistant Director Harper** confirmed that the One Ocean Science Congress would run in parallel to the Blue Economy and Finance Forum. A gap had been left after IRCC to allow Member States time to participate in the Science Congress and the Finance Forum ahead of UNOC25. He stood ready to coordinate a correspondence group on the subject for all interested parties.

**Decision C8/48:** The **Council** welcomed the proposal from the **IHO Secretariat** and agreed with the proposed engagement in the Blue Economy and Finance Forum June 2025 in Monaco and UNOC 2025 in Nice, encouraged Member States to take advantage of the alignment of IRCC-17 to the Blue Economy and Finance Forum and the UNOC 2025, and to engage early with national delegations to participate accordingly.

The **Council** invited the **IHO Secretariat** to inform the IHO Member States on UNOC 2025 through an **IHO CL** (deadline: December 2024), announcing a coordination VTC meeting (eventually in January, then April, aiming to put together all the initiatives ready for June)

### **C. Proposal for inclusion of Depth as an Essential Ocean Variable.**

Doc. C8-05.2.2C

The **Secretary-General** said that the Global Ocean Observing System (GOOS) defined the scope of the ocean parameters that it monitored through a series of Essential Ocean Variables (EOVs). Depth was not currently an EOV. The present paper set out a proposal for Depth to be included as an EOV within the GOOS framework. GOOS had been set up under the auspices of the United Nations in 1991 to establish a coordination framework and services needed to provide critical ocean

date and information to decision makers. Currently, 36 EOVs comprised the observing system and they were split into three categories: Physics, Biogeochemistry; and Biology and Ecosystems. Each of the categories were overseen by a panel of experts.

The inclusion of Depth as an EOV under the GOOS system would mean that the hydrographic community would benefit from various initiatives being undertaken to raise awareness of ocean data at the highest international policy levels. IHO was the competent international body for hydrography, and it was important to be regarded as a significant part of the wider system. The proposal supported IHO Strategic Goals 2 and 3 and aligned with the new GEBCO Strategy.

Depth as an EOV would represent a shift the way that the hydrographic community viewed seabed mapping activity. It would involve a long-term commitment from IHO which would be required (probably through GEBCO) to assume the role of custodian of a GOOS EOV, thereby formally aligning IHO with GOOS. Depth as an EOV and the alignment with GOOS would need to be reflected in the IHO Strategy and in associated annual work plans.

Subject to approval by the Council, the proposal would be made to GEBCO (GGC41) where resource requirements would be considered. The GGC Secretary (IHO Assistant Director Survey and Operations) would lead the development of the subsequent submission which would include a 2–3-page report outlining the justification and rationale against GOOS principles together with a completed specification sheet.

**Sweden** supported the proposal to include Depth as an EOV but wished to know whether there would be any additional operational costs for the Secretariat.

The **Secretary-General** said that he could not foresee any additional costs other than intensified cooperation with IOC.

**United States** requested that the decision should record that the submission by the GGC Secretary would be endorsed by the IRCC Chair, given that GEBCO was overseen by IRCC.

The **IRCC Chair** indicated his agreement to the proposal by United States. Speaking as **Germany**, he believed it was essential to make Depth an EOV and he could not understand why it had not been done earlier.

**Norway** supported the proposal and, speaking as **Chair of the GEBCO Guiding Committee** he agreed with Germany that Depth should already have been made an EOV. He asked Assistant Director Harper, the GGC Secretary, whether there had already been an indication that the submission would be accepted.

**IHO Assistant Director Harper** said that he was happy to report that a significant amount of informal liaison had already taken place with GOOS: the initial feasibility analysis had been welcomed and there was significant enthusiasm from GOOS to welcome Depth as an EOV and GEBCO as one of the new observing systems.

**Brazil** requested more details on the source of the data that would be provided once Depth became a variable.

The **Secretary-General** said that the next step would be determine what sources of data would be provided.

**France** said that there was no question that Depth was an EOV, although there should be an awareness that its acceptance could bring legal consequences, including an obligation to provide information to the European Union or other governmental bodies.

The **Council Chair** agreed with France although she believed that the matter would be safe if



entrusted to GEBCO. The **Council Chair** asked Assistant Director Harper what the deadline for the proposed action would be.

**IHO Assistant Director Harper** said that there was no deadline but that, if approved by Council, the proposal would be submitted to the GEBCO Guiding Committee for review in detail. IRCC17 would report back to Council if necessary. There was an open process in which proposals could be made to GOOS on new Essential Ocean Variables. GOOS would be informed once IHO had been given the mandate to engage formally.

The **Secretary-General**, responding to Brazil and France, said that any obligations to be undertaken by IHO as part of its commitment as the formal custodian of an EOVS, shall be discussed with GOOS prior to formal recognition of Depth as EOVS.

**Decision and Action C8/49:** The **Council** agreed on **IHO Secretariat's** proposals regarding GOOS<sup>17</sup> and Essential Ocean Variable (EOVS).

The **Council**:

- Recognised the importance of the IHO aligning itself to the aims and ambitions of the broader ocean observing community.
- Tasked the **IHO Secretariat**, through the **GGC Chair/Secretary** as endorsed by **IRCC Chair**, to lead the submission of Depth as a new EOVS, liaising with **GGC** as required.
- Tasked the **GGC** to assume the role of custodian of Depth as an EOVS **on behalf of the IHO** and in liaison with IOC.
- Consider the including participation in GOOS through Depth as an EOVS, in any future IHO strategic planning.

### 5.2.3 Update on activities to acquire new IHO Member States

The **Secretary-General** said that in late 2023, IHO had welcomed the coastal state of Cabo Verde as its 99<sup>th</sup> Member, a country with 4,033 km<sup>2</sup> of land and 800,000 km<sup>2</sup> of sea. With the accession of Kiribati in 2024, a country with 811 km<sup>2</sup> of land and 5.1 million km<sup>2</sup> of sea, the Organization had reached the milestone of its one hundredth Member. IHO had been in discussion with a number of landlocked states, but it had yet to receive firm indications of interest from them.

His standing appeal to IMO Member States was the request that they should, primarily via their Regional Hydrographic Commissions, continue to promote the benefits of IHO membership in their respective regions (including to landlocked states) and in their role as the chart-producing agency for coastal states that did not run a full hydrographic office. The Secretariat stood ready to assist in that process at any time.

**IHO Director Sinapi** said that the focus on landlocked States was valid and timely, given the number of States without coasts that had joined other international organizations that dealt with maritime affairs and the sea. He highlighted the importance of states acting as primary charting authorities where promising results were being achieved; continuous feedback and support was required in those cases and it was sometimes necessary to begin a new engagement following a change in government.

**Decision C8/50:** The **Council** noted the **IHO Secretariat's** report on the activities carried out since C-7 and the objectives to attract new IHO Members.

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<sup>17</sup> GOOS: Global Ocean Observing System.

#### 5.2.4 Proposed theme for World Hydrography Day 2025

The **Secretary-General** presented his proposed theme for World Hydrography Day 2025, entitled “*Seabed Mapping: Enabling Ocean Action*”. The theme was intended to tie in with the United Nations Ocean Conference, to be held in Nice in June 2025 (UNOC 2025), and to contrast with the likely theme of World Hydrography Day in 2026, which would celebrate the uptake of S-100 compliant data services in navigation.

**Türkiye** suggested that “leaving no one behind” – a principle cited by HSSC in its consideration of revisions to the IHO Strategic Plan – would also be an appropriate theme for World Hydrography Day.

**Decision and Action C8/45:** The **Council** noted the proposed theme for the 2025 World Hydrography Day by the Secretary-General which is: “*Seabed Mapping: Enabling Ocean Action*”

**IHO Secretariat** to circulate the theme for 2025 to the **IHO MS** by IHO CL for comments.

#### 5.3 Proposed IHO Budget for 2025

Doc: C8-05.3

The **Secretary-General** explained that the proposed budget for 2025 was based on the second year of the three-year budget 2024–2026 which had been approved by A-3. The budget was based on receiving all contributions due from Member States. Variations in the income for 2025 compared to the approved estimate had resulted from changes in reported national tonnage and an increase in the value of the contribution share by 3%. The resulting modest increase of 4.7% covered the increase in Secretariat operating costs arising from local and global inflation. Personnel and operational costs accounted for most of the proposed budget estimate for 2025. Some 50% of operational costs were taken up by travel.

Capacity building funds totalled 1.2 million euros, 750,000 euros of which was “earmarked”, i.e. assigned to specific types of capacity building measures by donors. There was a gap of 245,000 euros between requests for funds for capacity building compared to the amount of unearmarked funds available. If all of the Member States contributions had been paid, the Secretariat would have been able to fill the gap. The Capacity Building Sub-Committee would have to reconsider priorities and external donors must be sought.

In response to a question by **United Kingdom**, the **Secretary-General** confirmed that there had been an error in the figures relating to public relations which had been rectified. **United Kingdom** further commented that, where significant changes were made to the proposed budget, it would be useful to receive an explanation of why the change had been proposed alongside the figures.

The **Secretary-General** confirmed that he was ready to provide detailed explanations. He acknowledged that he had given more explanations in the previous year when changes had been substantial due to the cost of hiring the Grimaldi Forum for A-3. Although the Auditorium Rainier III would be provided free of charge for IHO to hold A-4 in 2026, some 150,000 euros would need to be set aside for logistics. Other minor changes in 2025 concerned the Capacity Building Fund and the Special Projects Fund although the sums involved might be comparably small at close to 20,000 euros. Money must be found to engage external contractors to support special projects such as the uptake of S-100.

**Türkiye** said that 20,000 euros could be viewed as a significant sum and that where one thousand euros could be saved, it would be seen as a positive step by Member States and would further enhance their motivation to contribute to IHO.

**IC-ENC General Manager** confirmed that, at the Steering Committee in July 2024, there had been general agreement in principle to support Capacity Building, although it was felt that better use could be made of technology to deliver training rather than spending money on travel and subsistence where resources were limited. Concerning the engagement of contractors, a portion of the IC-ENC Activity Fund would continue to be used for S-100 product specification development. However, the use of contractor resources did not guarantee complete success because with that approach came different challenges, including a very robust and secure tender process, as well as contract management for cost and time overruns.

**IHO Director Nyberg** thanked IC-ENC for the first year of support provided which had been critical to the S-100 product development process. He agreed there were challenges in engaging contractors.

The **Chair of the Capacity Building Sub-Committee** said that the Sub-Committee discussed priorities and it was clear that there was high demand in the regions for S-100-related training and courses. He would also appreciate receiving more formal instruction on identifying capacity building priorities as suggested in the relevant draft decision.

**Decision C8/51:** In application of Decisions A3/26 to /28, the **Council** approved the proposed budget for 2025 provided by the **Secretary-General**, including editorial corrections reported by the Financial Committee.

**Decision and Action C8/52:** The **Council** noted that the IHO was not in a position at the moment to fill the Capacity Building gap of ~245,000 euros (among which ~188,000 for S-100 supporting activities) due to the missing dues.

The **Council** invited the **Capacity Building Sub-Committee** through the **IRCC** to consider priorities of additional CB activities for 2025 covered by the 2024 savings with a focus on S-100 related CB activities. (deadline: CBSC-23/IRCC-17).

**Decision C8/53:** The **Council** invited **IHO Member States** and external partners (such as **RENCs**) to mobilize funding to fill the remaining gap for S-100 related CB activities through financial and/or in-kind support. (deadline: CBSC-23/IRCC-17).

## 6. IHO STRATEGIC PLAN REVIEW

*Doc: C8-06.1A*

### 6.1 Implementation of the IHO Work Programme and other affected IHO instruments resulting from the Strategic Plan 2021-2026 and Decisions A3/08 (a) to (d).

The **Secretary-General** recalled that A-3 had agreed that the annual Work Programme should continue to be conducted based on the Strategic Plan in place for 2021–2026. The Secretariat, assisted by the HSSC and IRCC Chairs, had been tasked to continue to measure the effectiveness

and efficiency of the three Work Programmes by means of the Strategic Performance Indicators which had been endorsed by C-4 and C-5.

C-7 had endorsed a new interpretation of Target 2.1 and the associated SPI 2.1.1 for assessment of the use of the global thematic layer presented by means of the IHO GIS infrastructure. The HSSC and IRCC reports were based on assessments made at the end of 2023.

The Secretariat was responsible for reporting on Work Programme 1 on the management and fostering of relations with intergovernmental and other international organizations. The amount and type of each outreach was measured quantitatively and qualitatively. The categories measured were: global outreach; regional outreach; stakeholder-specific outreach; and consultations.

Metrics for the IHO website were positive and showed the increased popularity of the Organization, with almost one million page views recorded since 1 January 2024. The pages most consulted were on standardization and circular letters. Regarding the focus on Target 2.1, on support for national and regional MSDIWG efforts, there had been 5,465 visits to the IHO Online Catalogues page. Further work to refine the statistics gathered under Target 2.1 would be carried out in 2025. Three social media channels were run on LinkedIn, Facebook and Twitter. An Instagram account had just been opened and it was planned that individual themes would be promoted on it.

HSSC had published the SPIs in its report, identifying S-44, the standard used in surveys, as the most popular. On Goal 1, evolving the hydrographic support for safety and efficiency of maritime navigation, the most statistics had been received from United States and Canada, with the least being from East Asia and the Polar regions. He appealed to the East Asia region to provide more statistics. 53% of Member States had indicated that they were ready to meet the S-100 implementation plan. On Goal 3, the percentage of adequately surveyed area per Coastal State had been reported and the IRCC Chair could provide further information on the figures recorded. The percentage of Coastal States able to provide Marine Safety Information (MSI) had risen to 87%, close to the 2026 target of 90%. Data continued to be received by the IHO Data Centre for Digital Bathymetry (DCDB), including from private organizations.

The work of IHO was based on data exchange and open data although the difficult political situation globally meant that the ambition to share data and make it available to the public was not as present as it had been three or four years previously. The activities of IHO were based on collaboration and mutual support and Member States should stand fast to those principles in order to complete the map of the ocean.

**Canada** asked whether there was potential to automate SPI reporting by leveraging the S-128 Catalogue.

**IHO Assistant Director Guillam** responded that automation for SPI was part of the project specifications for the evolution of INTogIS, third and fourth generations, which was still in progress with support from Republic of Korea. As soon as the S-128 files were available some of the SPIs would be extracted, also under the condition that CATZOC values are agreed by the remaining Member States to be made available through the RENCs. These tools will need to be implemented for the next Strategic Plan.

**Decision C8/54:** The **Council** noted the dashboard (target 2026, WP2 and WP3 SPIs value as of **31 Dec. 2023**) allocated to the Secretariat, HSSC and IRCC (IHO Annual Report 2023, Annex B (pages 121 to 134) refer).

**Decision C8/55:** The **Council** took note of the amount of notable outreach activities under WP1 in four categories.

- The assessment of Target 2.1 and the associated SPI 2.1.1 according to the new interpretation agreed at C-7 for the period January – October 2024.
- the continued increase of IHO visibility via IHO website and social media activities.
- The summaries of the HSSC and IRCC reports on their respective SPI's assessed at the end of 2023.

## **6.2 Report and recommendations from the Correspondence Group for the preparatory process of IHO Strategic Plan 2027-2032, way forward and timelines.**

The **Council Vice-Chair** reported on the work of the Correspondence Group, which he had been invited to lead at C-7 with the goal to identify the ways and means to prepare the IHO Strategic Plan 2027-2032. At C-7, it had been decided that the basic concept should remain in place and that the objective should be limited to a revision of the current Strategic Plan.

The Correspondence Group, consisting of 12 Member States, had decided to use a bottom-up approach, incorporating input from HSSC and IRCC. To facilitate the process, the Group had agreed to propose to establish a Strategic Plan Review Working Group (SPRWG) and had prepared terms of reference (TOR), rules of procedure and a timeline. The TOR had been divided into a Scoping Phase of one month and a Drafting Phase which is expected to last about nine months. After inputs and at the end of the Drafting Phase, the SPRWG would support the Council's submission of the draft Strategic Plan to A-4. It was proposed to establish the SPRWG on 1 November.

The **Council Chair** said that, given the tight timeline in which the work of the SPRWG would be undertaken, it would be preferable for the Secretary-General to issue a circular letter as soon as possible. She called for nominations for the positions of Chair, Vice-Chair and Secretary of the new Working Group.

**Member States** expressed support for the establishment of the SPRWG and 14 Member States requested to join as members. Denmark was nominated as Secretary, New Zealand as Vice-Chair and United States as Chair of the Group.

The **Council Chair**, responding to a suggestion that Regional Commission Chairs could be invited to join the Working Group, said that they would be given further opportunities to comment including at IRCC. She also stressed that all Members could indicate their interest in participation in their response to the IHO Circular Letter. HSSC and IRCC Chairs would be represented on the Working Group as well as the Secretariat.

**Decision C8/56:** The **Council** commended the **Council Vice-Chair** and the **Correspondence Group (BR, DE, DK, FR, HR, JP, NO, NZ, SE, SG, UK and US)** for their report on the preparatory process of the future IHO Strategic Plan (Action C7/38 refers).

**Decision and Action C8/57:** As proposed by the **Correspondence Group**, the **Council** established the **Strategic Plan Review Working Group (SPRWG)** and following up on a call made in session, agreed to nominate **US** (Benjamin Evans), **NZ** (Adam Greenland), and **DK** (Hendrik Justus Stang) as **Chair, Vice-Chair** and **Secretary** of the **SPRWG**, respectively.

The **Council** endorsed the proposed TORs and ROPs of the SPRWG, the timelines as proposed and invited the **IHO Secretariat** to issue an IHO CL to **all IHO MS** calling for SPRWG Membership and inviting to provide comments to the TORs if any.

**IC-ENC** suggested that the SPRWG should bring in domain experts to broaden thinking on the introduction of AI technology, rather than relying on the knowledge of Member States alone.

**United States**, referring to the remarks by IC-ENC, said that provision had not been made for SPRWG to bring in outside experts. He would support the possibility to allow broader participation by invitation beyond Member States.

**Decision and Action C8/58:** The **Council** agreed on the suggestion from **IC-ENC** supported by **US** to involve domain experts (such AI) on case-by-case basis in the activity of the SPRWG. TORs to be amended accordingly before the IHO CL is issued (**IHO Secretariat**). (deadline: end of October 2024).

**Decision C8/59:** The **Council** noted the initial intentions from **BR, CA, CN, DE, DK, FR, ID, IN, JP, NO, NZ, RO, SE, and US** to become Members of the SPRWG.

### 6.3 Initial discussion on the revision of the IHO Strategic Plan based on inputs from subordinate bodies (HSSC, IRCC), Member States and IHO Secretariat.

#### A. HSSC inputs (See paragraph 7 of Doc. C8-4.1A)

#### B. IRCC inputs (see Annex A of Doc. C8-04.2A)

The **HSSC Chair** summarized the input of HSSC to the Correspondence Group. HSSC had held a workshop with the chairs of HSSC Working Groups and Project Teams that had resulted in the drafting of a list of items for inclusion in the IHO Strategic Plan. The list had been presented at HSSC-16, where Member States could vote for three top priorities items. The top priority being to connect more to the IMO E-Navigation Strategy. Other priorities included: consumer confidence in S-100; to leave no one behind; and the S-100 Infrastructure Centre. Further priorities included: new survey technology; and connection to Agenda 2030 Goals.

The **IRCC Chair** said that the IRCC had requested regional hydrographic commissions and subordinate bodies to provide input to the revision of the Strategic Plan. It had received several contributions and had undertaken brain-storming sessions at its previous meeting. There had been strong support for improving the descriptions of the Goals and Targets so that they were fit not only for internal use but easier to use and understand in outreach situations. The SPIs should be easy to measure and comparable, including through electronic means. Language should be more transparent and accessible to IHO Members and to the broader stakeholder group. There had been a question as to whether Goal 3 was independent and whether clearer re-wording of the Goal was required. Regional hydrographic commissions might still make contributions to the consultation process.

**Türkiye** said that the delay in finalizing standards could be an advantage for small- and medium-scale hydrographic offices. Until the S-100 standards were completed and available, all countries were in the same position. It would be beneficial for all Member States to complete the process simultaneously without leaving anyone behind.

The **Secretary-General** said that the Secretariat would have an observer role in the Strategic Plan Review process, monitoring progress and evaluating how it would support Member States in execution of the process. In its own internal brainstorming, the Secretariat team had developed suggestions: its first observation was that the structure in place should be maintained, with its Goals, Targets and SPIs. He acknowledged the difficulty of separating Goal 2 and Goal 3, since they addressed similar subjects. The Secretariat team believed that there was a missing link, within the existing Strategic Plan, for all activities that affected the workforce and organizational arrangements of IHO. It would be better to keep three Goals: 1) support safety and efficiency of navigation; 2) support all ocean-related activities and hydrographic information; and 3) support capacity building and other activities addressing the human element.

The challenge after 2026 would be implementation of the Roadmap for S-100 which would be a difficult exercise for small- and mid-sized hydrographic offices. Preparation should be made for Phase 2, with a core element of e-navigation. In order to fulfil its objectives, IHO would need to collaborate with providers outside of its domain and take strategic decisions on the degree to which it would collaborate on S-100 products and on the entities with which it would engage. Underlying those decisions would be the extent to which IHO wished to be operational: the establishing of the Infrastructure Centre was a move into an operational role. The Organization would need to recognize its opportunities and limitations here.

Funding of the Organization would also require a strategy: relying on external donors was erratic and uncertain. IHO should more proactively think about whether it would provide its services on a paid for basis. It would be a substantial step to decide whether standardization work would be free or paid for, and such matters should be addressed at a high level and with clarity. An attempt should be made to automatize the SPIs as far as possible: it was a process to which Member States could contribute.

There were discrepancies between the Strategic Plan and the current Work Plan, the latter still being based on the previous strategic plan. Once the Strategic Plan had been revised, thought should be given to aligning the Work Plan to it.

The **Council Chair** said that she agreed with many of the remarks made by the Secretary-General. It would be important to make a Strategic Plan that would allow IHO to measure easily whether it was progressing. The SPRWG could strive for clearer SPIs and perhaps reduce their number. The year 2026 would mark the beginning of implementation of S-100 but the Strategic Plan would cover the period until 2032, and IHO would need to look ahead to decide how it would maintain the standards, including developing both Phase 1 and Phase 2 products and services, assessing legacy paper charts and agreeing how standards such as S-57 would be phased out.

**IHO Assistant Director Guillam** suggested that the Chair, Vice-Chair, Secretary and IHO Member representatives who had indicated an interest in joining SPRWG might wish to use the opportunity of their on-site presence to hold an initial informal meeting on the following morning before the plenary session of C-8.

**Rear Admiral Benjamin Evans, United States, nominated Chair of SPRWG**, suggested that those wishing to join SPRWG should meet at the IHO Secretariat 8.30am on the following morning. A brief verbal report could then be made to plenary.

**Decision and Action C8/60:** The **Council** noted and discussed the initial inputs on the revision of the Strategic Plan, provided by **HSSC** and **IRCC** and the **Secretary-General**...

...and tasked the **SPRWG** to consider them during the revision process. (deadline: SPRWG deadlines).

## 7. OTHER ITEMS PROPOSED BY A MEMBER STATE OR BY THE SECRETARY-GENERAL

### 7.1 Report on inclusive participation in IHO meetings and proposed Resolution

#### (Inc Annex A: Outcome of the survey on inclusive participation (IHO CL28/2024))

**New Zealand**, as the Chair of the ad hoc drafting group on inclusive participation in IHO meetings, reported on the results of the stakeholder survey conducted between June and August 2024 and on the proposed draft IHO resolution. A total of 71 responses to the survey had been received, comprising 38 responses from Member States; six responses from Chairs of RHCs and 22 responses from Chairs of committees, sub-committees, working groups, and project teams, three responses from other coastal States and two responses from the IHO Secretariat.

The survey distinguished “active” participation – namely attendance in person, online in a hybrid or livestream format or online in a virtual teleconference (VTC) format – from “passive” participation, in which the remote listener could not speak or vote. The results presented simplified the responses received into these groups which did mean it was not always clear whether a respondent preferred in-person or remote active participation.

Approximately fifty per cent of respondents expressed a preference for in-person attendance at Assembly sessions, while many fewer preferred in-person attendance at meetings of technical bodies. A high percentage of respondents welcomed online meetings, while also acknowledging the advantages of in-person meetings. A high percentage stated that they could provide online options and possessed high capacity to host online meetings.

Insights gained from the survey included the following.

- Guidelines or a good-practice guide are required for online meetings.
- In-person participation was acknowledged as the ideal, especially for building relationships.
- For major meetings, the principals should attend in person.
- Hosting and chairing online meetings can be challenging.
- Online meetings maximize participation, transparency and open access, while also minimizing travel costs, time, fatigue and carbon footprint.
- Technical support to host online meetings may be needed.

The ad hoc drafting group had also prepared a draft resolution on maximizing active participation in IHO events, which recommended that IHO bodies choose an appropriate format for their events taking into consideration the capacity of host nations and the preferences of the expected participants.

**Chile** drew attention to the need to take into account the varying time zones around the world when planning online or hybrid meetings.

**Fiji** noted that, if many meetings were conducted online or in hybrid format, some Member States would require technical assistance if they were not to be left behind.

**Singapore** asked for clarity on the large number of respondents that had suggested they preferred to attend Council and Assembly online/passive.

It was explained that these respondents were from WG and PT chairs who do not normally attend Council and Assembly but who would be interested in following the events online.

**Norway** said that effective communication, and in particular active contributions to the work of a



body as opposed to the passive reception of information, were built on trust, which was more difficult to create in an online meeting. There was also a risk that financial authorities might see the reduced costs involved in organizing or attending an online meeting as a justification for reducing the budget of the body concerned.

The **Secretary-General** said that, while passive livestreaming appeared to have worked well at the current meeting of the Council, there was no guarantee that it could be provided for sessions of the Assembly.

Turning to the proposed draft Resolution, **United States** and **India** called for in-person participation to be presented as the main and preferred option for Assembly, with online participation listed as the second choice, subject to registration.

**Decision C8/61:** The **Council** commended **NZ** as lead and the ad hoc drafting group on inclusivity for their report, and for the associated survey (IHO CL 28/2024 refers).

**Decision and Action C8/62:** Noting the selected comments and insights, the **Council** endorsed the principles of the proposed IHO Resolution submitted by the ad hoc drafting group and invited the group to add an Annex with (minimum) practical Guidelines derived from the outcome of the survey to assist Member States to host and facilitate online meetings. (deadline: January 2025).

**IHO Secretariat** to submit the proposed IHO Resolution and associated Guidelines to the **IHO Member States** for their approval. (deadline: April 2025).

## 7.2 S-100 National Strategies (Action C7/07 refers)

### A. Information paper (Australia) – Australian S-100 Working Group and National Strategy.

**Australia** presented details of the country's S-100 Working Group, established in 2022 to coordinate the implementation of a broad range of S-100 products and services in the region. The members came from State-owned and State-operated agencies and private industry. New Zealand, Papua New Guinea and the Solomon Islands attended as observers. The Working Group held two virtual meetings using Microsoft Teams and one hybrid meeting per year. One coordinator post had been made available.

The Working Group had adopted a roadmap, a work programme for 2024–2026 and a production timeline up to 2030. Its work also covered education, awareness-raising and dissemination of information. The S-100 Test Bed Focus Group (TBFG), created in October 2023, was working on a national test bed to enable the development and testing of different S-100 product prototypes.

The Working Group had conducted testing of various S-100 test data sets using the commercial software package *SEAIq Pilot*. The Italian training ship *Amerigo Vespucci* had used Australian produced S-101 data sets alongside its own ENC's while navigating in Australian waters, providing valuable feedback to the Working Group.

**IMO** suggested that the Working Group could share its valuable findings with IMO and the shipping community through the IHO Secretariat.

**Decision C8/63:** The **Council** commended the **Australian Hydrographic Office (AHO)** for their initiative in establishing a national collaborative space to develop and implement S-100 services in Australia and the region.

The **Council** noted in particular the large scope covered by their AU S-100 WG ranging from education/awareness to the coordinated production, and dissemination of harmonized S-100 products and services.

**Decision C8/64:** The **Council** invited **Member States** to share their national strategies regarding the establishment of similar national S-100 committees, as appropriate. Use cases to be considered and presented, as appropriate.

### 7.3 Update on the development of the IHO Portal

Based on the lessons learned for a testing and experimentation phase by the **S-101PT** (for S-101PT13), the **NIPWG** (for NIPWG-11) and the **ENCWG** (for ENCWG-9), the **IHO Secretariat** reported on progress in implementing the new IHO Portal, which aims to combine online meeting registration with a centralized internal document management system based on individual accounts. A guidance document entitled *How to create user account and register meetings* is available on the Portal. The registration part of the new Portal is scheduled to be fully operational from January 2025. The current online registration system will cease to operate at the end of 2024, although it will be available in parallel with the new Portal until 31 March 2025 for the management of meetings already registered. An IHO CL will be issued to all Member States after C-8 containing all details on commissioning dates, links to user manuals and other information.

The IHO website has been successfully migrated to the Portal, and the legacy website will be migrated during 2025. The documents currently publicly available on the IHO website (e.g. Basic Documents, IHO standards, publications and journals) will continue to be available, with no login required. The current document archive system will be decommissioned at the end of 2024. Users will be able to access all documents with the same login details.

The RHCs will be able to upload their documents directly to the Portal, but they should contact the IHO Secretariat in advance to agree on the required procedure, file formats, etc. RHC Secretaries will be able to add links to the Portal, but ordinary users will not.

**Sweden** suggested that the IHO Secretariat should provide a structured procedure for collecting feedback on the new Portal.

The **Secretary-General** noted that basic IHO documentation (e.g. Standards and Periodical Publications, Yearbooks) will remain directly accessible without login, while access to working documents will require a login. However, anyone can create a user account; the IHO Secretariat does not check users' credentials.

**United Kingdom** offered to use both IHO webpage and IHO Portal simultaneously for the upcoming MACHC meeting in December 2024 and provide feedback on the portal to the IHO Secretariat.

**Decision and Action C8/65:** The **Council** took note of the update on the development of the IHO Portal (demo, migration status, timelines, ...).

Noting the intention that the full operation of the IHO Portal is scheduled to commence in January 2025, the **Council** invited the **IHO Secretariat** to issue an informative IHO CL announcing the commissioning date, providing links to tutorials and user manuals (inc. for accredited WGs' Secretaries, should they wish to upload documents directly), explaining the consequences and impact on the current IHO website, RHCs and WGs meetings, etc. (deadline: 01 November 2024).

**Decision and Action C8/66:** Noting the time needed between the official announcement of a

meeting and the event (~several months), the **Council** agreed that a transition period allowing the dual use of the current system and/or the new IHO Portal for IHO events held from October 2024 to end of March 2025, should be considered by the **IHO Secretariat** and decided on case-by-case in liaison with the **Chair of the WG/PT/RHC**.

All events held after 31 March 2025 should be prepared using the IHO Portal. (deadline: 31 March 2025).

#### 7.4 Proposal by Bulgaria, Georgia, Romania, Türkiye and Ukraine: Consideration of the definition of Hydrographic Interest.

**Türkiye** recalled that one third of Council members were elected based on “hydrographic interest”, which was currently calculated from the national flag tonnage of the country concerned. On several occasions, Member States had questioned the fairness of that arrangement, but no suitable alternative had yet been found. At A-3, it was decided to suspend consideration of the issue until interested parties could work out a mature proposal for a revised definition of “hydrographic interest”.

Five Member States (**Bulgaria, Georgia, Romania, Türkiye and Ukraine**) had now devised a scoring table in the form of an Excel spreadsheet, bringing together information on factors demonstrating a Member State’s hydrographic interest; they included participation as a Chair, Vice-Chair, Secretary or ordinary member of IHO bodies, hosting of and participation in working groups, meetings, workshops or training courses, and publication of articles in the *International Hydrographic Review*.

Other Member States had acknowledged that the flag tonnage criterion was imperfect, although it was objective and easy to measure. They had expressed concerns that annual completion of the scoring table would create an excessive administrative burden; however, the required information was already collected by the IHO Secretariat and could, with a little preparation, be used to generate the scoring table.

The proposed new system would particularly benefit smaller countries, but they did not have the resources to implement it. The five Member States responsible for the proposal therefore suggested that the initial, relatively minor, costs of implementation should be met from the IHO Capacity Building budget.

Council members expressed varying views about the proposal, noting that Member States were able to participate fully in the work of the Council, whether they were formally selected as members. Observers were permitted to share their views freely, and the Council had – fortunately – never yet been obliged to call a formal vote on any decision. **Romania** welcomed the principle of a scoring table but found the proposal unduly complicated. HSSC and IRCC already had tools to collect similar information, which could also be used in the present case.

Other members likewise found the proposal to be too complicated and a potential administrative burden. **Germany** noted that Member States had other mechanisms, such as CLs, for making decisions; it would do better to devote resources to increasing the currently low response rate for CLs. **Norway** and **Sweden** did not support the proposal and considered that the IHO budget should be used for technical activities rather than a governance issue. **China** mentioned that efforts should be focused on S-100 standards and product development in the first instance. **India** called for further consideration of the issue, since some Member States were clearly not satisfied with the status quo. **Greece** stated to be in line with IHO and distinguished delegate from Sweden because the standing definition for measuring Hydrographic Interest was simple and until now had not brought any issues therefore Greece did not support the proposal.

**IHO Director Sinapi** noted that the tonnage list as basis for assessment of hydrographic interest was used not only for the appointment of members of the Council, but also for determining the Member States contributions payable by each State.

**Decision C8/67:** law. Decision A3/05, the **Council** noted the proposal on the evolution of the definition of Hydrographic Interests supported by **BG, GE, RO, TR and UA**.

**Decision C8/68:** Noting the ranges of views provided in the discussion including the recommendations of the **Secretary-General** given in the Red Book, the **Council** decided neither to support the proposal to revise the definition of Hydrographic Interest at this stage, nor to allocate capacity building funds to this proposed revision.

### **7.5 Information Paper (Canada): Canadian S-100 International Sea Trial Area.**

**Canada** gave details of the S-100 International Sea Trial Area that it had set up along the St Lawrence river between Montreal and Quebec City in order to test the route monitoring layers for the following S-100 products: S-101 (ENCs), S-102 (bathymetric surface), S-104 (water level information for surface navigation), S-111 (surface currents), S-124 (navigational warnings), S-128 (catalogue) and S-129 (under keel clearance management). The project involved State agencies including defence, transport and Environment and Climate Change Canada, the Canadian Coastguard and Port Authorities.

During the trial, which would run from June to November 2025, PRIMAR would offer free access to the data service for registered participants. User feedback would be shared with the IHO S-100 Working Group. Online information sessions would be available from November 2024 and registration would be open from February 2025; a website and social media content were in preparation. Council members were urged to inform interested parties about the trial and encourage them to join. Discussions were under way with stakeholders about the use which might be made of the data in the long term.

Council members welcomed the Canadian initiative. **Finland** suggested that the data might usefully be used in simulators in the short term, since the S-100 technology was not yet widely available in the real world. **United Kingdom** and **France** drew attention to the sea trials area established between the two countries under the initiative S-100 Across the Channel.

The **HSSC Chair** said that the trial and others like it were designed to collect both data and structured feedback from users. The HSSC ISO Cell would work with Canada to prepare guidelines and principles to guide Member States in future trials.

**Assistant Director Baek** drew attention to the IHO S-100 open online platform (S-10OP), which allows Member States to share test data sets freely.

**Decision C8/69:** The **Council** welcomed the generous offer made by **Canada** to establish an S-100 International Sea Trial Area and inviting **IHO Member States** to take full advantage of this area to test the S-100 systems, to share the invitation with industry and other interested parties and to provide feedback.

**Decision and Action C8/70:** The **Council** invited the **IHO Secretariat** to issue an IHO CL informing **IHO MS** on this offer and pointing to the website for the Canadian S-100 International Sea Trials Area, which will include a registration platform. (deadline: 15 December 2024 – opening of the registration planned in Feb. 2025).

## 8. NEXT MEETING

### 8.1 Dates and venue for the 9<sup>th</sup> meeting of the IHO Council.

The **Secretary-General** confirmed the dates of C-9. He had heard some requests to stretch the third day to a full day, but he did not think that it would make the work of the Council more effective or efficient. He proposed that the current format should be retained.

**Member States**, responding to a proposal from the Chair to postpone a decision on whether to hold a full day of meeting on the third day of C-9, said that it was important for delegations to be informed at the earliest opportunity and before they had made their travel arrangements. Similarly, it would not be possible for some delegations to attend additional meetings at the Assembly, if they were only communicated one month in advance.

**United Kingdom** asked whether additional information sessions could be held prior to C-9.

The **Secretary-General** said that the informal gatherings on the day before the Council had been introduced to welcome new Members and ensure that any questions were answered prior to commencement of the plenary.

The **Council Chair** took it that Member States were willing to maintain the third day of C-9 as a half day, with the opportunity for information meetings, working groups or informal groups to be held in the afternoon or on the following day for those who so wished.

The **Secretary-General** recalled that, in view of space restrictions, Council members were requested to send no more than two representatives to the meeting room at any one time, with one representative allowed for observers.

The **Council Chair** noted that live streaming of the meeting had been tried for the first time at C-8 and that it would provide an additional opportunity for Council members to follow proceedings in the future.

**Decision and Action C8/71:** The **Council** agreed to hold C-9 in the known format in Monaco, at the IHO Secretariat, from 14 to 16 Oct. 2025 (full in-person meeting, live streaming by registration).

## 9. Ad hoc DRAFTING GROUPS - ANY OTHER BUSINESS

### 9.1 IMO Regulatory Framework and IHO S-100 Roadmap

**Mr Javier Yasnikouski**, Head, Operational Safety, Maritime Safety Division, IMO, briefly described the longstanding collaboration between IMO and IHO, mainly based on SOLAS (which was celebrating its 50<sup>th</sup> anniversary in 2024) and strengthened by the Agreement of Cooperation between the two agencies, concluded in 2013.

IMO instruments and publications relevant to S-100 implementation included Circular MSC.1/Circ. 1595 on the e-navigation strategy implementation plan (update 1), which had set S-100 as the baseline standard for maritime services. Most recently, the revised ECDIS performance standards (resolution MSC.530(106)/Rev.1) had been issued, along with the ECDIS Guidance for Good Practice (Circular MSC.1/Circ.1503/Rev.2). From 2026, ships could use either original ECDIS navigation systems, or S-100-compliant ECDIS with dual-fuel functionality. ECDIS equipment

installed on board ships on or after 1 January 2029 should be S-100 ECDIS-compliant. Older ships, in particular, could continue to use non-S-100 ECDIS or, indeed, paper charts, but their number would gradually decline through natural wastage. The new data products met the long-felt need for a globally standardized system that would allow for the exchange and constant updating of route and other data between ship and shore, as required by S-100 products.

S-100 implementation faced several challenges. S-100 products needed data, but there was no legal obligation to provide it in the S-100 format. Compliance with the S-100 standards would be required not only for ECDIS systems, but for many other types of equipment used on board ship. Data exchange must be assured at the prescribed intervals and in all geographical areas, which might require regulation of the communications links to be used; however, the process of regulation was slow and prescriptive and risked stifling innovation. Finally, not only seafarers, but many other ship-based and shore-based workers would need to be trained and familiarized with the S-100 technology; IMO was already planning an update of its model training course 1.27 on the operational use of ECDIS.

In the immediate future, the IMO Maritime Safety Committee would consider proposals for a new output to develop guidance for a framework for data distribution and global internet protocol (IP) based connectivity - in other words, to standardize the exchange of dynamic data between ship and shore over the internet. Compliance with the IEC standard 63173-2 on secure communication between ship and shore (SECOM) was recommended, and amendment of the ECDIS Performance Standards and potentially, in future, Chapters 4 and 5 of SOLAS might be required. Equipment manufacturers were concerned that the latter two requirements could lead to delays and extra costs; they had also drawn attention to the differing technical requirements of older ECDIS systems and more modern ones that required data exchange in real time.

IHO Member States were invited to contribute to forthcoming meetings of the IMO Maritime Safety Committee (2-6 December 2024), IMO Sub-Committee on Human Element, Training and Watchkeeping (HTW) (10–14 February 2025), Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) (13–22 May 2025) and Maritime Safety Committee (18–27 June 2025).

**IHO Director Sinapi** said that the IHO Secretariat had informed Capacity Building coordinators of the possibilities for collaboration with IMO.

**IHO Director Nyberg** mentioned the importance of S-100 national committees but also the S-100 coordinator roles to ensure data is being coordinated and collected in S-100 compliant formats. He also suggested the reinvigoration of the ECDIS stakeholder workshop to ensure close collaboration with IMO and encouraged a correspondence group to ensure coordination.

**Decision C8/72:** The **Council** commended **Mr Javier Yasnikouski**, Head Operational Safety, Maritime Safety Division, for his very enlightening presentation on S-100 Implementation from an IMO perspective.

**Decision C8/73:** The **Council** noted the challenges affecting different domains to be considered throughout the S-100 implementation phase (information providers, data exchange/updates, carriage requirements, machine-machine interface, new regulations?, users).

**Decision C8/74:** The **Council** noted the information on MSC Circulars already addressing S-100, and the future events that are in the interest of **IHO Member States**:

- MSC 109 (2-6 Dec 2024)

- HTW 11 (10-14 Feb 2025)
- NCSR 12 (13-22 May 2025)
- MSC 110 (18-27 June 2025)

## 9.2 Reports from Ad hoc Drafting / Working Groups, if any (or for informal kick-off meeting of the SPRWG, tbc) Any Other Business

Rear Admiral Benjamin Evans, United States, nominated Chair of SPRWG, said that an unofficial gathering of interested Member States had taken place earlier that morning. Full membership of SPRWG would be confirmed after a Circular Letter had been issued and responded to. The informal session had enabled an exchange of initial thoughts and views prior to identification and confirmation of the full membership. Member States joining SPRWG thus far were diverse both in their wide geographical representation and in the size and scale of their hydrographic offices; future members would also be highly welcome.

At its first informal meeting, SPRWG had reviewed the Rules of Procedure which had been developed by the Correspondence Group and the general schedule of work to be undertaken in a Scoping Phase of approximately one month, which would begin as soon as possible. A Drafting Phase would follow, in which the Strategic Plan and Strategic Performance Indicators would be developed. There would be logistical challenges, as SPRWG was expected to work in a compressed timeframe and to produce a first draft in time for review by HSSC and IRCC in 2025. The informal group had discussed the critical decisions that would need to be taken immediately in order to frame the scope of work, with communication by correspondence and an occasional VTC. A kick-off VTC would be scheduled as soon as the full membership had been identified. He was appreciative of the support provided by Member States, the IHO Secretariat, the Vice-Chair (Adam Greenland, New Zealand) and the Secretary (Hendrik Justus Stang, Denmark).

**Decision C8/76:** The **Council** noted the main outcome of the informal meeting of the SPRWG enhancing the large geographic diversity of potential Members, the scope of the work, logistic issues, confirming the **SPRWG** will start its work early November as soon as the IHO CL is issued.

## 9.3 A-4 Countdown

**IHO Director Sinapi** said that A-4 would be held at the Auditorium Rainier III, Monaco, from 20 to 24 April 2026. The first day, 20 April, would be set aside for the meeting of the Finance Committee and any other preliminary meetings; the opening of the first plenary session of the Assembly would take place on 21 April 2026. Reports and other documents would be circulated to Member States two months ahead of the meeting. The deadline for submission of proposals to the Secretariat by Member States, the Council and the Secretary-General, was 15 December 2025. Any comments to proposals must be submitted by 17 January 2026. The revised agenda and the Red Book would be published on 16 February 2026.

**Decision and Action C8/75:** The **Council** noted the countdown for the preparation of A-4 (dates of A-4 now confirmed: 20 – 24 April 2026).

## 10. REVIEW OF ACTIONS AND DECISIONS OF THE MEETING

**IHO Assistant Director Guillam** read out the draft decisions and actions taken during C-8, providing brief explanations where necessary. He drew attention to a decision on “S-100 new distribution concepts” (C8/15) which represented an important addition to the Work Plan and could be viewed as opening a new domain and a new challenge. He drew attention to a decision proposed by a Member State (C8/29) commending the RHCs for their outstanding and broad scope achievements in implementing standards and sharing best practices in their charting regions.

The **Secretary-General** requested that additional text be added to decision C8/27 to the effect that the Council invited the IRCC to expand the scope of the Fund Generation Project Team to consider options for charging the IHO digital standards services. The **Council Chair** noted that there were no objection for the IHO Funding Generation Project Proposal Team to consider that proposal in their work. (See Action C8/27b).

With respect to decision C8/32, the **Chair of WENDWG** said that he was concerned about the coverage per Regional Hydrographic Commission since there were currently insufficient tools available with which to assign feedback from Member States to the relevant Regional Hydrographic Commissions. WENDWG was able to collect data from Member States but there was no way in which it could be managed per region at the present time.

**IHO Assistant Director Guillam**, in response, drew attention to a footnote attached to Decision C8/32: “Eventually in digital and dynamic format, using INTToGIS III when commissioned.” It was expected that, with the assistance of Republic of Korea, the INTToGIS III would be commissioned in January 2025.

**Mr Javier Yasnikouski**, Head, Operational Safety, Maritime Safety Division, IMO, asked whether the IHO’s annual information reports to IMO NCSR referred to in decision C8/32 would be submitted for information only since currently, NCSR did not have a work output dedicated to S-100. Since NCSR also had a heavy workload, it would be helpful to send advance notification of any substantive items. **IHO Assistant Director Guillam**, confirmed that the purpose of the communication was to engage with and attract stakeholders at IMO. It had previously been standing practice for IHO to provide for information only relevant updates to S-57 ECDIS Carriage Requirements, on small-medium- and large-scale ENC’s planned and existing availability.

**Mr Javier Yasnikouski** seconded by **IHO Assistant Director Harper** said that, with respect to reporting into IMO, it could be helpful to request a slot for a lunchtime briefing session since the agenda of NCSR had been condensed from ten days to one week. A briefing slot would allow time to share information whereas an information paper might simply be noted in plenary. **IHO Assistant Director Guillam**, said that he would include the reference to the IMO briefing in the decision.

With reference to decisions C8/52 and C8/53, dealing with the shortfall in payment of Member States’ annual contributions, **Norway** suggested that the Council issue a formal statement expressing its deep concern about the financial status of the Organization.

With reference to decision C8/57, dealing with the nomination of officers to the new SPRWG, the IHO Secretariat confirmed that the persons specified in the decision had merely indicated their



willingness to stand for the officer posts. All Member States having a seat at the Council were free to nominate further candidates if they wished.

### ***Ex Abyssis ad Alta* Award**

The **Secretary-General** introduced the inaugural *Ex Abyssis ad Alta* Award – IHO Award for Hydrographic Excellence, intended to honour an individual who had made a significant contribution to pursuing the aims and objectives of the IHO. The Latin phrase, meaning “from the depths to the heights”, was the personal motto of Prince Albert I of Monaco.

The **Council Chair** said that the *Ex Abyssis ad Alta* Board, of which she was a member, had unanimously decided to present the first Award to Mr Yves Guillam, outgoing Assistant Director, IHO, for his many years of sterling service to the Organization. She presented Mr Guillam with the Award and a certificate, amid sustained applause.

**IHO Assistant Director Guillam** declared himself moved and honoured to receive the first *Ex Abyssis ad Alta* Award on the eve of his retirement from IHO. He expressed his warmest thanks to the Member States of the Organization, the two Committees, Working Groups and Council Chairs with whom he had worked over the years, and his colleagues at the IHO Secretariat, for their unflinching support and inspiration.

**Action C8/77:** The **Council Chair** concluded the meeting awarding Mr Yves GUILLAM with the new *Ex Abyssis ad Alta* IHO Award for Hydrographic Excellence.

## **11. CLOSURE OF THE MEETING**

**Romania** informed the Council that the Romanian national hydrographic office, the Maritime Hydrographic Directorate, would celebrate its 100<sup>th</sup> anniversary in February 2025. He would keep the Council informed of the associated commemorative events.

The **Council Chair** expressed her thanks to her fellow officers, the representatives of Member States, observers and partners, and the IHO staff who had worked so hard to make the meeting run smoothly. She declared the meeting closed.

## LIST OF REGISTERED PARTICIPANTS

8th Meeting of the IHO Council

Face, Online, 15-Oct-2024 ~ 17-Oct-2024

No	Category	Country	Organization / Company	Name	Status	E-mail	Participant Method	Date
1	IHO Member State	Angola	Agência Marítima Nacional	Helder DA CONCEIÇÃO	Head of delegation	helderufno46.hr@gmail.com	Face-to-face	2024-09-14
2	IHO Member State	Angola	Agência Marítima Nacional	Filomeno Lopes	Member of delegation	flison02.fl@gmail.com	Face-to-face	2024-09-14
3	IHO Member State	Australia	AUSTRALIAN HYDROGRAPHIC OFFICE	Hilary THOMPSON	Member of delegation	hilary.thompson@defence.gov.au	VTC	2024-08-16
4	IHO Member State	Australia	AUSTRALIAN HYDROGRAPHIC OFFICE	Robyn PHILLIPS	Head of delegation	robyn.phillips1@defence.gov.au	Face-to-face	2024-08-21
5	IHO Member State	Bangladesh	Bangladesh Navy	MOHAMMAD ANWAR HOSSAIN	Head of delegation	anwarbd613@gmail.com	Face-to-face	2024-09-12
6	IHO Member State	Belgium	MCD-COASTAL DIVISION - Flemish Hydrography/MDK -Afdeling Kust-Vlaamse Hydrografie	Kaatje VANDAELE	Member	kaatje.vandaele@mow.vlaanderen.be	VTC	2024-08-22
7	IHO Member State	Brazil	DIRETORIA DE HIDROGRAFIA E NAVEGAÇÃO (DHN, Directorate of Hydrography and Navigation)	Marco Antônio LINHARES SOARES	Head of delegation	dhn.intrel@marinha.mil.br	Face-to-face	2024-09-04
8	IHO Member State	Brazil	DIRETORIA DE HIDROGRAFIA E NAVEGAÇÃO (DHN, Directorate of Hydrography and Navigation)	Cesar Reinert BULHÕES DE MORAIS	Member of delegation	reinert@marinha.mil.br	Face-to-face	2024-09-04
9	IHO Member State	Canada	CANADIAN HYDROGRAPHIC SERVICE	Sonja BHATIA	Member of delegation	sonja.bhatia@dfo-mpo.gc.ca	Face-to-face	2024-09-04
10	IHO Member State	Canada	Fisheries and Oceans Canada (DFO)	Manon LAROCQUE	Head of delegation	manon.larocque@dfo-mpo.gc.ca	Face-to-face	2024-09-04
11	IHO Member State	Chile	SERVICIO HIDROGRAFICO Y OCEANOGRAFICO DE LA ARMADA	Arturo OXLEY	Head of delegation	direcolon@shoa.cl	Face-to-face	2024-07-15
12	IHO Member State	Chile	SERVICIO HIDROGRAFICO Y OCEANOGRAFICO DE LA ARMADA	Christian MARCHANT	Member of delegation	cmarchant@shoa.cl	Face-to-face	2024-07-16
13	IHO Member State	China	MARITIME SAFETY ADMINISTRATION (MSA)	Hongyin LI	Head of delegation	hydro@msa.gov.cn	Face-to-face	2024-08-21
14	IHO Member State	China	MARITIME SAFETY ADMINISTRATION (MSA)	Bing SUN	Member of delegation	hydro@msa.gov.cn	Face-to-face	2024-08-21
15	IHO Member State	China	MARITIME SAFETY ADMINISTRATION (MSA)	Yiran XU	Member of delegation	xuyiran092@126.com	Face-to-face	2024-08-21
16	IHO Member State	China	HYDROGRAPHIC OFFICE OF MARINE DEPARTMENT THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION	Michael CM CHAU	Member of delegation	michaelchau@mardep.gov.hk	Face-to-face	2024-08-21
17	IHO Member State	China	HYDROGRAPHIC OFFICE OF MARINE DEPARTMENT THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION	Yue Yan Ricky CHEUNG	Member of delegation	ryycheung@mardep.gov.hk	Face-to-face	2024-08-21
18	IHO Member State	Croatia	HRVATSKI HIDROGRAFSKI INSTITUT (Hydrographic Institute of the Republic	Vinka KOLIC BUBIC	Head of delegation	vinka.kolic@hhi.hr	Face-to-face	2024-04-09

No	Category	Country	Organization / Company	Name	Status	E-mail	Participant Method	Date
19	IHO Member State	Cyprus	HEADQUARTERS OF DEPARTMENT OF LANDS AND SURVEYS	GEORGIOS KOKOSIS	Head of delegation	gkokosis@dis.mol.gov.cy	Face-to-face	2024-09-02
20	IHO Member State	Denmark	DANISH GEODATA AGENCY - GEODASTYRELSEN (GST)	Pia DAHL HØJGAARD	Chair / Vice-Chair	pdh@gst.dk	Face-to-face	2024-06-25
21	IHO Member State	Denmark	DANISH GEODATA AGENCY - GEODASTYRELSEN (GST)	Sophie HØHWÜ-CHRISTENSEN	Head of delegation	sohoh@gst.dk	Face-to-face	2024-06-25
22	IHO Member State	Denmark	DANISH GEODATA AGENCY - GEODASTYRELSEN (GST)	Hendrik Justus STANG	Member of delegation	hejus@gst.dk	Face-to-face	2024-06-25
23	IHO Member State	Fiji	REPUBLIC OF FIJI NAVY HYDROGRAPHIC OFFICE	Apenisa CAVUILATI	Member of delegation	director.fho@fjnavy.org	Face-to-face	2024-07-25
24	IHO Member State	Fiji	REPUBLIC OF FIJI NAVY HYDROGRAPHIC OFFICE	Humphrey TAWAKE	Head of delegation	humphrey.tawake@fjnavy.org	Face-to-face	2024-07-25
25	IHO Member State	Finland	FINNISH TRANSPORT AND COMMUNICATIONS AGENCY	Rainer MUSTANIEMI	Head of delegation	rainer.mustaniemi@traficom.fi	Face-to-face	2024-07-02
26	IHO Member State	France	SERVICE HYDROGRAPHIQUE ET Océanographique DE LA MARINE	Gablin SOGORB	Member of delegation	gablin.sogorb@shom.fr	Face-to-face	2024-05-06
27	IHO Member State	France	SERVICE HYDROGRAPHIQUE ET Océanographique DE LA MARINE	LAURENT KERLEGUER	Head of delegation	laurent.kerleguer@shom.fr	Face-to-face	2024-07-19
28	IHO Member State	Germany	BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE	Thomas DEHLING	Head of delegation	thomas.dehling@bsh.de	Face-to-face	2024-06-24
29	IHO Member State	Germany	BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE	Jens SCHRÖDER-FÜRSTENBERG	Member of delegation	jens.schroeder-fuerstenberg@bsh.de	Face-to-face	2024-06-24
30	IHO Member State	Greece	HELLENIC NAVY HYDROGRAPHIC SERVICE	IOANNIS ASTERIOU	Head of delegation	director_hnhs@navy.mil.gr	Face-to-face	2024-09-08
31	IHO Member State	Greece	HELLENIC NAVY HYDROGRAPHIC SERVICE	Vasileios PETROPOULOS	Member of delegation	geopol_hnhs@navy.mil.gr	Face-to-face	2024-09-08
32	IHO Member State	India	NATIONAL HYDROGRAPHIC OFFICE	Lochan Singh PATHANIA	Head of delegation	la-inho-navy@nic.in	Face-to-face	2024-08-21
33	IHO Member State	India	NATIONAL HYDROGRAPHIC OFFICE	Rahul BHATT	Member of delegation	la-inho-navy@nic.in	Face-to-face	2024-08-21
34	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	Budi PURWANTO	Head of delegation	infohid@pushidrosal.id	Face-to-face	2024-09-10
35	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	Dwi JANTARTO	Member of delegation	infohid@pushidrosal.id	Face-to-face	2024-09-10
36	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	Agus SUTRIYANTO	Member of delegation	infohid@pushidrosal.id	Face-to-face	2024-09-10
37	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	Indragiri Yani WARDHONO	Member of delegation	infohid@pushidrosal.id	Face-to-face	2024-09-10
38	IHO Member State	Italy	ISTITUTO IDROGRAFICO DELLA MARINA (Italian Hydrographic Institute)	Massimiliano NANNINI	Head of delegation	massimiliano.nannini@marina.difesa.it	Face-to-face	2024-09-09
39	IHO Member	Italy	ISTITUTO IDROGRAFICO DELLA	Erik BISCOTTI	Member of delega	erikd.biscotti@marina.difesa.it	VTC	2024-09-11

No	Category	Country	Organization / Company	Name	Status	E-mail	Participant Method	Date
			MARINA (Italian Hydrographic Institute)					
40	IHO Member State	Jamaica	National Land Agency	Diego BILLINGS	Head of delegation	diego.billings@nla.gov.jm	Face-to-face	2024-09-12
41	IHO Member State	Japan	HYDROGRAPHIC AND OCEANOGRAPHIC DEPARTMENT	Masayuki FUJITA	Chair / Vice-Chair	lao@jhod.go.jp	Face-to-face	2024-08-22
42	IHO Member State	Japan	HYDROGRAPHIC AND OCEANOGRAPHIC DEPARTMENT	Kentaro KANEDA	Member of delegation	lao@jhod.go.jp	Face-to-face	2024-08-22
43	IHO Member State	Japan	HYDROGRAPHIC AND OCEANOGRAPHIC DEPARTMENT	Yuto NAKAMURA	Member of delegation	lao@jhod.go.jp	Face-to-face	2024-08-22
44	IHO Member State	Japan	Ministry of Foreign affairs	Masatora ONO	Member of delegation	masatora.ono@mofa.go.jp	Face-to-face	2024-09-12
45	IHO Member State	Malta	HYDROGRAPHIC OFFICE, PORTS AND YACHTING DIRECTORATE, TRANSPORT MALTA	Fritz FARRUGIA	Member	fritz.farrugia@transport.gov.mt	Face-to-face	2024-05-27
46	IHO Member State	Malta	HYDROGRAPHIC OFFICE, PORTS AND YACHTING DIRECTORATE, TRANSPORT MALTA	Godwin BORG	Member of delegation	godwin-louis.borg@transport.gov.mt	Face-to-face	2024-05-27
47	IHO Member State	Mauritius	Ministry of Housing and Land Use Planning	D MADHOW	Chair / Vice-Chair	oic_hydrounit@govmu.org	VTC	2024-09-24
48	IHO Member State	Mauritius	MAURITIUS HYDROGRAPHIC SERVICE	Hembal TECKMUN	Observer	hydrounit@govmu.org	VTC	2024-09-27
49	IHO Member State	Monaco	Département des Relations Extérieures et de la Coopération	Isabelle ROSABRUNETTO	Observer	irosabrunetto@gouv.mc	Face-to-face	2024-09-20
50	IHO Member State	Netherlands	HYDROGRAPHIC SERVICE - ROYAL NETHERLANDS NAVY	Toine BARTEN	Head of delegation	wa.barten@mindex.nl	Face-to-face	2024-06-26
51	IHO Member State	Netherlands	HYDROGRAPHIC SERVICE - ROYAL NETHERLANDS NAVY	Bjorn VAN VLIET	Member of delegation	b.v.vliet@mindex.nl	Face-to-face	2024-06-26
52	IHO Member State	New Zealand	LAND INFORMATION NEW ZEALAND (LINZ)	Adam GREENLAND	Head of delegation	agreenland@linz.govt.nz	Face-to-face	2024-06-25
53	IHO Member State	New Zealand	LAND INFORMATION NEW ZEALAND (LINZ)	Verena BOSSELMANN	Member	vbosselmann-borsos@linz.govt.nz	VTC	2024-08-16
54	IHO Member State	New Zealand	LAND INFORMATION NEW ZEALAND (LINZ)	Stuart CAIE	Member	scale@linz.govt.nz	VTC	2024-09-24
55	IHO Member State	Norway	Norwegian Mapping Authority	Gudmund JØNSSON	Head of delegation	Gudmund.Jonsson@kartverket.no	Face-to-face	2024-05-21
56	IHO Member State	Norway	Norwegian Mapping Authority	Evert FLIER	Member of delegation	evert.flier@kartverket.no	Face-to-face	2024-05-21
57	IHO Member State	Peru	DIRECCION DE HIDROGRAFIA Y NAVEGACION	Javier FERNÁNDEZ	Head of delegation	reInt@dhn.mil.pe	Face-to-face	2024-05-24
58	IHO Member State	Peru	DIRECCION DE HIDROGRAFIA Y NAVEGACION	Rodrigo TORRES	Member of delegation	reInt@dhn.mil.pe	Face-to-face	2024-05-24
59	IHO Member State	Poland	HYDROGRAPHIC OFFICE OF THE POLISH NAVY	Dariusz KOLATOR	Head of delegation	d.kolator@ron.mil.pl	Face-to-face	2024-08-26
60	IHO Member State	Portugal	INSTITUTO HIDROGRAFICO	João Paulo RAMALHO MARREIROS	Head of delegation	ramalho.marreiros@hidrografico.pt	Face-to-face	2024-07-19
61	IHO Member State	Portugal	INSTITUTO HIDROGRAFICO	Paula SANCHES	Member of delegation	paula.sanches@hidrografico.pt	Face-to-face	2024-07-19

No	Category	Country	Organization / Company	Name	Status	E-mail	Participant Method	Date
62	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	Kyusam JUNG	Head of delegation	infokhoa@korea.kr	Face-to-face	2024-09-02
63	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	Bongseok PARK	Member of delegation	bong1510@korea.kr	Face-to-face	2024-09-02
64	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	Martin PARK	Member of delegation	martin.park@korea.kr	Face-to-face	2024-09-02
65	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	Eunju PARK	Member of delegation	infokhoa@korea.kr	Face-to-face	2024-09-02
66	IHO Member State	Republic of Korea	Ministry of Foreign Affairs	Eun Jung CHOI	Member of delegation	ejchol11@mofa.go.kr	VTC	2024-09-19
67	IHO Member State	Republic of Korea	Ministry of Foreign Affairs	Yeong-jae JEONG	Member of delegation	yjeong23@mofa.go.kr	VTC	2024-09-20
68	IHO Member State	Romania	DIRECTIA HIDROGRAFICA MARITIMA	Lucian GRIGORESCU	Observer	lucian.grigorescu22@gmail.com	Face-to-face	2024-09-17
69	IHO Member State	Romania	DIRECTIA HIDROGRAFICA MARITIMA	Della CACIULOIU	Observer	della.cacluloiu@dhmfn.ro	Face-to-face	2024-09-17
70	IHO Member State	Russian Federation	GLAVNOE OUPRAVLENIE NAVIGATSII I OKEANOGRAFI (Department of Navigation and Oceanography of the Ministry of Defence, DNO)	Konstantin SPERANSKII	Head of delegation	shmelev.mbox@yandex.ru	Face-to-face	2024-10-09
71	IHO Member State	Russian Federation	GLAVNOE OUPRAVLENIE NAVIGATSII I OKEANOGRAFI (Department of Navigation and Oceanography of the Ministry of Defence, DNO)	Aleksandr ALEKSEEV	Member	shmelev.mbox@yandex.ru	VTC	2024-10-09
72	IHO Member State	Russian Federation	GLAVNOE OUPRAVLENIE NAVIGATSII I OKEANOGRAFI (Department of Navigation and Oceanography of the Ministry of Defence, DNO)	Dmitrii SHMELEV	Member	shmelev.mbox@yandex.ru	VTC	2024-10-09
73	IHO Member State	Russian Federation	GLAVNOE OUPRAVLENIE NAVIGATSII I OKEANOGRAFI (Department of Navigation and Oceanography of the Ministry of Defence, DNO)	Stanislav KRUTKO	Member	shmelev.mbox@yandex.ru	VTC	2024-10-09
74	IHO Member State	Saudi Arabia	GENERAL AUTHORITY FOR SURVEY AND GEOSPATIAL INFORMATION (GASGI)	Saud ALRUWAYS	Head of delegation	s.alruways@geosa.gov.sa	Face-to-face	2024-09-05
75	IHO Member State	Saudi Arabia	GENERAL AUTHORITY FOR SURVEY AND GEOSPATIAL INFORMATION (GASGI)	Salem ALGHZWANI	Member of delegation	s.alghzwani@geosa.gov.sa	Face-to-face	2024-09-05
76	IHO Member State	Singapore	MARITIME AND PORT AUTHORITY OF SINGAPORE (MPA)	Ying-Huang THAI LOW	Head of delegation	Thai_Low_Ying-Huang@mpa.gov.sg	Face-to-face	2024-08-31
77	IHO Member State	Singapore	MARITIME AND PORT AUTHORITY OF SINGAPORE (MPA)	LUGMAN HAKIM	Member of delegation	Luqman_hakim_abdul_razak@mpa.gov.sg	Face-to-face	2024-09-27

No	Category	Country	Organization / Company	Name	Status	E-mail	Participant Method	Date
78	IHO Member State	Solomon Islands	Solomon Islands Maritime Authority	John DALOMAE	Member of delegation	john.dalomae@sima.gov.sb	VTC	2024-08-29
79	IHO Member State	South Africa	South African Navy Hydrographic Office (SANHO)	Nicolette Le Roux	Head of delegation	nicoletteleroux1@gmail.com	VTC	2024-09-09
80	IHO Member State	Sri Lanka	Sri Lanka Navy	Jayamal JAYAWARDANE	Member of delegation	jayamalwpgbj@gmail.com	VTC	2024-08-26
81	IHO Member State	Sri Lanka	Sri Lanka Navy	Kosala WARNAKULASOORIYA	Head of delegation	sinho@outlook.com	VTC	2024-08-27
82	IHO Member State	Sri Lanka	Sri Lanka Navy	gayan JAYAWARDHANA	Observer	gayan.k.jayawardhana@gmail.com	VTC	2024-09-19
83	IHO Member State	Suriname	MARITIEME AUTORITEIT SURINAME (MAS)	Bernice MAHABIER	Head of delegation	bmahabier@mas.sr	Face-to-face	2024-09-21
84	IHO Member State	Sweden	SJOFARTSVERKET (SWEDISH MARITIME ADMINISTRATION)	Magnus WALLHAGEN	Head of delegation	magnus.wallhagen@sjofartsverket.se	Face-to-face	2024-06-26
85	IHO Member State	Sweden	SJOFARTSVERKET (SWEDISH MARITIME ADMINISTRATION)	Annikka AXNE	Member of delegation	annika.axne@sjofartsverket.se	Face-to-face	2024-08-27
86	IHO Member State	Thailand	HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY	KOMSAN KLINSUKON	Head of delegation	hydrotechhdrtn@gmail.com	Face-to-face	2024-06-14
87	IHO Member State	Thailand	HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY	Chatchai LUANGTHONGKUM	Member of delegation	hydrotechhdrtn@gmail.com	Face-to-face	2024-08-03
88	IHO Member State	Thailand	HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY	Intira NETMUKDA	Member of delegation	hydrotechhdrtn@gmail.com	Face-to-face	2024-08-03
89	IHO Member State	Thailand	HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY	Parinyawat TANTIPHUTTIROJ	Member of delegation	hydrotechhdrtn@gmail.com	Face-to-face	2024-08-03
90	IHO Member State	Türkiye	SEYİR HİDROGRAFI VE OSİNOGRAFI DAİRESİ BASKANLIĞI (Office of Navigation Hydrography and Oceanography)	Emre TUKENMEZ	Observer	etukenme@gmail.com	VTC	2024-08-17
91	IHO Member State	Türkiye	SEYİR HİDROGRAFI VE OSİNOGRAFI DAİRESİ BASKANLIĞI (Office of Navigation Hydrography and Oceanography)	Burak İNAN	Member	burak.inan.na@gmail.com	Face-to-face	2024-09-30
92	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Viktoriya TUZAK	Observer	tuzak.v@hydro.gov.ua	VTC	2024-09-27
93	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Iurii SMIRNOV	Observer	smimov.yu@hydro.gov.ua	VTC	2024-09-27
94	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Oleh MARCHENKO	Observer	chart_dpt@charts.gov.ua	VTC	2024-09-27
95	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Oleh KARBIVNYCHYI	Observer	kcarbivnychylo@hydro.gov.ua	VTC	2024-09-27
96	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Yevheniia MAHAS	Observer	mahas.y@hydro.gov.ua	VTC	2024-09-27
97	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Artem KHARLOV	Observer	kharlov.a@hydro.gov.ua	VTC	2024-09-27
98	IHO Member State	Ukraine	STATE HYDROGRAPHIC SERVICE OF UKRAINE	Viktor BELINSKYI	Observer	belinskyi.v@hydro.gov.ua	VTC	2024-09-28
99	IHO Member State	United Kingdom of Great Britain and	UNITED KINGDOM HYDROGRAPHIC OFFICE	Helena PATTON	Member of delegation	helena.patton@ukho.gov.uk	Face-to-face	2024-08-03

No	Category	Country	Organization / Company	Name	Status	E-mail	Participant Method	Date
		Northern Ireland						
100	IHO Member State	United Kingdom of Great Britain and Northern Ireland	UNITED KINGDOM HYDROGRAPHIC OFFICE	Angus ESSENHIGH	Head of delegation	angus.essenhigh@ukho.gov.uk	Face-to-face	2024-08-03
101	IHO Member State	United Kingdom of Great Britain and Northern Ireland	UNITED KINGDOM HYDROGRAPHIC OFFICE	Tom RICHARDSON	Member of delegation	thomas.richardson@ukho.gov.uk	Face-to-face	2024-08-19
102	IHO Member State	United Kingdom of Great Britain and Northern Ireland	UNITED KINGDOM HYDROGRAPHIC OFFICE	Chris HUNT	Member of delegation	chris.hunt@ukho.gov.uk	Face-to-face	2024-09-06
103	IHO Member State	United Kingdom of Great Britain and Northern Ireland	UNITED KINGDOM HYDROGRAPHIC OFFICE	Lucy FIELDHOUSE	Member of delegation	lucy.feldhouse@ukho.gov.uk	VTC	2024-10-10
104	IHO Member State	United States of America	NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA)	John LOWELL	Member of delegation	john.e.jowell@nga.mil	Face-to-face	2024-04-08
105	IHO Member State	United States of America	COMMANDER, NAVAL METEOROLOGY AND OCEANOGRAPHY COMMAND (CNMOC)	Matthew BORBASH	Member of delegation	matthew.borbash2.civ@us.navy.mil	Face-to-face	2024-05-16
106	IHO Member State	United States of America	National Oceanographic and Atmospheric Administration (NOAA)	Jonathan JUSTI	Member of delegation	Jonathan.Justi@noaa.gov	Face-to-face	2024-08-07
107	IHO Member State	United States of America	Office of Coast Survey / National Ocean Service (OCS/NOS)	BENJAMIN EVANS	Head of delegation	benjamin.k.evans@noaa.gov	Face-to-face	2024-08-07
108	IHO Member State	United States of America	NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA)	Keith DOMINIC	Member of delegation	Keith.E.Dominic@nga.mil	Face-to-face	2024-08-07
109	IHO Member State	United States of America	NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA)	Todd JOHANESSEN	Member of delegation	todd.e.johanesen@nga.mil	Face-to-face	2024-08-21
110	IHO Member State	United States of America	Department of State	Amanda WILLIAMS	Member	williamsac3@state.gov	VTC	2024-08-27
111	IHO Member State	United States of America	Department of State	Carle LACROSSE	Observer	LaCrosseC@state.gov	VTC	2024-09-11
112	IHO Member State	United States of America	National Oceanographic and Atmospheric Administration (NOAA)	Julia POWELL	Member of delegation	Julia.Powell@noaa.gov	VTC	2024-10-01
113	IHO Member State	United States of America	National Oceanographic and Atmospheric Administration (NOAA)	Jennifer JENCKS	Chair / Vice-Chair	jennifer.jencks@noaa.gov	VTC	2024-10-07
114	IGO	-	International Maritime Organization (IMO)	Javier YASNIKOUSKI	Head of delegation	Jyasniko@imo.org	Face-to-face	2024-09-15
115	IHO Secretariat	-	International Hydrographic Organization	Yves GUILLAM	Staff	yves.guillam@iho.int	Face-to-face	2024-04-05
116	IHO Secretariat	-	International Hydrographic Organization	Leonel MANTEIGAS	Staff	adcc@iho.int	Face-to-face	2024-04-26
117	IHO Secretariat	-	International Hydrographic Organization	Mathias JONAS	Secretary	mathias.jonas@iho.int	Face-to-face	2024-05-07
118	IHO Secretariat	-	International Hydrographic	Rémy ROQUEFORT	Staff	remy.roquefort@iho.int	Face-to-face	2024-05-08

**8<sup>TH</sup> MEETING OF THE IHO COUNCIL**  
**IHO Secretariat, Monaco, 15 – 17 October 2024**  
**FINAL AGENDA**

- References:** A. Rule 8 of the Rules of Procedure of the Council.  
B. IHO Resolution 12/2002 as amended – *Planning Cycle*.

**1. OPENING**

- 1.1 Secretary-General Opening Remarks.
- 1.2 Adoption of the Agenda and Timetable
- 1.3 *Left blank intentionally.*
- 1.4 Chair's Opening Remarks.
- 1.5 Administrative Arrangements.

**2. ITEMS REQUESTED BY THE 3<sup>rd</sup> IHO ASSEMBLY**

- 2.1 Status Report on the Implementation of the List of Assembly Decisions affecting the Council.
- 2.2 Reference: Cumulative List of A-3 Decisions affecting the Council (Decisions A3/05, A3/08 (a) to (e), A3/13, A3/14, A3/15, A3/20 (c), A3/21, A3/28 (c)).

**3. ITEMS REQUESTED BY THE IHO COUNCIL**

- 3.1 Review of the Status of Decisions and Actions from C-7.

**4. ITEMS REQUESTED BY SUBSIDIARY ORGANS**

- 4.1 Report and proposals from HSSC.
- 4.2 Report and proposals from IRCC.
- 4.3 Update on the S-100 Roadmap.
  - A. Annex 2 of the Roadmap (See Annex A of Doc. C8-04.1A).
  - B. Annex 4 of the Roadmap (See Annex B of Doc. C8-04.1A)
- 4.4 Update on the establishment of the S-100 Infrastructure Centre.
  - A. Information Paper (Republic of Korea): Establishment and Effective Operation of the IHO Infrastructure Centre
  - B. Comment Paper (IHO Secretariat)
- 4.5 Update on the development of S-130.
- 4.6 Update on the activities of the IHO Fund Generation Project Team.

**5. ANNUAL WORK PROGRAMME AND BUDGET**

- 5.1 Review of the Current Financial Status of the IHO.
- 5.2 Proposed IHO Work Programme for 2025 (inc. update on Programme 1)



- 5.2.1 Update on the Empowering Women in Hydrography Project.
- 5.2.2 Update on contributions to the UN Ocean Decade:
  - A. IHO Contribution to the UN Decade of Ocean Science for Sustainable Development.
  - B. IHO Participation in the 3rd UN Oceans Conference.
  - C. Proposal for inclusion of Depth as an Essential Ocean Variable.
- 5.2.3 Update on activities to acquire new IHO Member States.
- 5.2.4 Proposed theme of the World Hydrography Day 2025.
- 5.3 Proposed IHO Budget for 2025.

## **6. IHO STRATEGIC PLAN REVIEW**

- 6.1 Implementation of the IHO Work programme and other affected IHO instruments resulting from the Strategic Plan 2021-2026 and Decisions A3/08 (a) to (d).
- 6.2 Report and recommendations from the Correspondence Group for the preparatory process of IHO Strategic Plan 2027-2032, way forward and timelines.
- 6.3 Initial discussion on the revision of the IHO Strategic Plan based on inputs from subordinate bodies (HSSC, IRCC), Member States and IHO Secretariat.
  - A. HSSC inputs (See Paragraph 7 of Doc. C8-04.1A).
  - B. IRCC inputs (See Annex A of Doc. C8-04.2A).

## **7. OTHER ITEMS PROPOSED BY A MEMBER STATE OR BY THE SECRETARY-GENERAL**

- 7.1 Report on inclusive participation in IHO meetings and proposed Resolution (inc. Annex A: Outcome of the survey on inclusive participation (IHO CL 28/2024)).
- 7.2 S-100 National Strategies (Action C7/07 refers).
  - A. Information Paper (Australia) - Australian S-100 Working Group and National Strategy.
- 7.3 Update on the development of the IHO Portal.
- 7.4 Proposal by Bulgaria, Georgia, Romania, Türkiye and Ukraine: Consideration of the definition of Hydrographic Interest.
- 7.5 Information Paper (Canada): Canadian S-100 International Sea Trial Area.

## **8. NEXT MEETING**

- 8.1 Dates and venue for the 9<sup>th</sup> meeting of the IHO Council (14 to 16 October 2025, Monaco) (*dates to be confirmed*).

## **9. ANY OTHER BUSINESS**

- 9.1 IMO Regulatory Framework and IHO S-100 Roadmap
- 9.2 Reports from Ad hoc Drafting / Working Groups, if any (or for informal kick-off meeting of the SPRWG, tbc) Any Other Business
- 9.3 A-4 Countdown

## **10. REVIEW OF ACTIONS AND DECISIONS OF THE MEETING**

## 11. CLOSURE OF THE MEETING

Annex C

LIST OF **DECISIONS** and ACTIONS FROM C-8

(as of 23 October 2024)

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at 23 October 2024)
<b>1. OPENING</b>					
<b>1.1 Secretary-General Opening remarks and introduction</b>					
1.1	Opening	C8/01	<p><b>The Council</b> welcomed the opening address by the <b>Secretary-General</b>, who shared his opinion that this third inter-Assembly Council was fully prepared to undertake the tasks given to the Council iaw. the Articles of the Convention of the IHO that were reminded. He noted the highest level of participation ever and welcomed the 89 registered participants (in-person) and 16 IHO Member States as observers (in-person and streaming). Special welcome went to <b>Mr Javier Yasnikowski</b>, Head of Operational Safety, Maritime Safety Division of the IMO.</p> <p>In anticipation of agenda item 6.2, the <b>Secretary-General</b> made a call to <b>Council Members</b> for them to consider the nomination of office bearers for the establishment of the new SPRWG<sup>18</sup>.</p>		Decision
1.1	Opening	C8/02	<p>The <b>Council</b> was informed with sadness that <b>Admiral Giuseppe Angrisano</b>, Director and President of the IHO from 1992 to 2002, passed away on 13 October 2024.</p>		Decision

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<sup>18</sup> Strategic Plan Review Working Group.

<b>1.2 Adoption of the agenda</b>					
	Agenda	C8/03	The <b>Council</b> adopted the agenda and the timetable as proposed and noted the availability of the C-8 Red Book.		Decision
<b>1.3 Left blank intentionally</b>					
			<i>Left blank intentionally</i>		
<b>1.4 Chair's Opening Remarks</b>					
1.1, 1.4	Opening	C8/04	<b>The Council</b> welcomed the opening address by <b>Council Chair</b> who gave a quick overview of the items to be considered with priority during the week, paving the way to C-9 as tasked by the 3 <sup>rd</sup> Session of the Assembly in 2023 (S-100 Implementation, Infrastructure Centre, revised Strategic Plan, more active participation in IHO meetings, ...) and the cooperation spirit to make the IHO more efficient.		Decision
<b>1.5 Administrative Arrangements</b>					
	Contact List	C8/05	<b>IHO Member States having a seat at the Council</b> to check their contact details on the IHO webpage > Council > Basic Documents (as of C-8) and then on the IHO Portal when commissioned.	Permanent	Last Update: 25 July 2024
<b>2. ITEMS REQUESTED BY THE 3<sup>rd</sup> IHO ASSEMBLY</b>					
<b>2.1 Status Report on the Implementation of the List of Assembly Decisions affecting the Council.</b>					
2.1	A-3 Decisions	C8/06	Based on the presentation by the Secretary-General, the <b>Council</b> noted the progress made on the implementation of some decisions and actions from A-3 and the agenda items under which these topics will be addressed during C-8 for further discussions.		Decision
<b>2.2 Cumulative List of A-3 Decisions affecting the Council (Decisions A3/05, A3/08 (a) to (e), A3/13, A3/14, A3/15, A3/20 (c), A3/21, A3/28 (c)).</b>					

			<i>Left blank intentionally</i>		
<b>3. ITEMS REQUESTED BY THE IHO COUNCIL</b>					
<b>3.1 Review of the status of Decisions and Actions from C-7 (pending actions)</b>					
3.1		Former Decisions and Actions C7/24, C7/25, C7/28, C7/42, C7/44	<i>Addressed under relevant agenda items.</i>		
<b>4. ITEMS REQUESTED BY SUBSIDIARY ORGANS</b>					
<b>4.1 Report and proposals from HSSC</b>					
4.1	Report of HSSC	C8/07	The <b>Council</b> noted the report and commended the <b>HSSC</b> , its Working Groups, Project Teams and supporting organizations for the achievements since C-7.		<u>Decision</u>
4.1, 9.1	MSC 109, S-100	C8/08	The <b>Council</b> was informed of the important MSC 109/19/3 paper to be discussed in December 2024 at the IMO MSC 109 meeting.  The <b>Council</b> invited the <b>IHO Member States</b> to liaise with their IMO representative prior to MSC 109 and provide support as appropriate.	<b>November 2024</b>	
4.1	S-100 Infrastructure and Standards Development	C7/09	In accordance with Decision A3/08(b), the <b>Council</b> endorsed the principle that additional funding resources (Decision A3/20 and IRCC15 Decision 41 refer) should be considered for setting up a sustainable technical and administrative infrastructure around S-100 including standards development to meet the S-100 timeline.	<b>Reminder</b>	<u>Decision</u>
4.1	Security Scheme Administration	C8/09	The <b>Council</b> agreed on <b>HSSC</b> 's proposal to recourse to the Special Projects Fund to develop and integrate an online application function supporting the Security Scheme administration process in the IHO Portal, in order to collect administration fees from the OEMs using the security scheme.		<u>Decision</u>

4.1	SENC	C8/10	The <b>Council</b> was informed on the general agreement reached at HSSC-16 that SENC delivery was not needed for S-100 anymore in particular due to concerns by which the data producer digital signature cannot be retained. Tests are still in progress.	<b>HSSC-17</b>	<u>Decision</u>
4.1, 7.5	IHO Sea Trial Area	C8/11	The <b>Council</b> endorsed the principle of creating IHO S-100 Sea Trial Areas around the world, and thanked <b>Canada</b> in particular for their offer on St Lawrence River.		<u>Decision</u> <i>See also C8/70 under agenda item 7.5</i>
4.1, 7.5	IHO Sea Trial Area	C8/12	Based on the outcome of the experimentation supported by <b>Canada</b> , the <b>Council</b> tasked the <b>IHO ISO Cell</b> through <b>HSSC</b> to consider the possibility of developing some Guidelines (minimum requirements and expected outcomes) for IHO S-100 Sea Trial Areas (for instance: possible impact on standards, impact on equipment, impact on production tools and distribution mechanisms, impact on data services, impact on education and training for users, etc.). <b>Member States</b> having International S-100 Sea Trial Areas are also invited to contribute to the development of these Guidelines.	<b>HSSC-17 ( - 7 weeks)</b>	
4.1	MASS WG	C8/13	Following up on a proposal from <b>HSSC</b> , the <b>Council</b> decided not to establish a <b>MASSWG</b> <sup>19</sup> as such, but to continue with the current <b>Project Team</b> under its current TORs, noting that the next <b>SPRWG</b> could bring more guidance on this matter, if deemed appropriate.		<u>Decision</u>

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<sup>19</sup> Under HSSC.

4.1	IHMA	C8/14	The <b>Council</b> welcomed the effective cooperation between the <b>IHO</b> and <b>IHMA</b> <sup>20</sup> for the development of the IHMA Guidelines for Harmonized Communication and Electronic Exchange of Nautical Data for Port Calls.		Decision
4.1, 5.2	S-100 new distribution concepts	C8/15	Noting the evolution of the IMO ECDIS Performance Standard now including two new standards (one for secure communications <sup>21</sup> , one for exchange of route plan <sup>22</sup> ) agreed upon by the IMO MSC 108, the <b>Council</b> agreed with the proposal from <b>HSSC</b> to include a new work item in the IHO work plan (Programme 2) related to the technical aspects and impact of new distribution concepts of S-100 products and data services including the subsequent phase-out of S-57 ENC distribution. Liaison to be ensured with <b>IRCC/WENDWG</b> on this matter.	<b>HSSC-17/C-9</b>	Decision
4.1, 5.3	Funding Priorities	C8/16	The <b>Council</b> noted the <b>HSSC</b> list of funding priorities and requirements and thanked the sponsors (IC-ENC, ROK, PRIMAR, NOAA) for their in-kind and financial contributions.		Decision

<sup>20</sup> International Harbour Masters Association.

<sup>21</sup> IEC SECOM 63173-2.

<sup>22</sup> IEC S-421.

4.1	IHO Singapore Innovation and Technology Lab	C8/17	<p>The <b>Council</b> noted the verbal update on the Joint IHO-Singapore Innovation and Technology Laboratory by <b>IHO Director Dr Nyberg</b>, and making reference to Doc. <a href="#">HSSC16-04.4A</a>, thanked the Lab and contributors (<b>ID, IT, MY, SG</b>) for the achievements (conversion S-57 to S-101, S-131 Database, Interoperability S-101 and S-102 on a prototype S-100 ECDIS, availability of ENC's S-57 and S-101 on a dual-fuel ECDIS onboard the Italian Tall Ship <i>Amerigo Vespucci</i> for her circumnavigation, etc.).</p> <p>The <b>Council</b> encouraged <b>IHO Members States</b> and <b>industry stakeholders</b> to actively engage in collaborative projects with the IHO-Singapore Lab.</p>	HSSC-17	Decision
4.1, 5.2	HSSC Work Plan	C8/18	The <b>Council</b> approved the <b>HSSC</b> work plan, including the analysis of technical aspects and impact of new distribution concepts of S-100-based products.		Decision
4.1, 4.2	HSSC&IRCC Reports and Proposals to C-9	C8/19 (same as former C7/19, ...and C1/06)	Considering the timelines between HSSC-17 and IRCC-17 meetings in 2025 and the countdown for submission of reports and proposals to C-9 (then A-4), the <b>Council</b> invited <b>HSSC and IRCC Chairs</b> to prepare their 2025 meeting minutes with the view that they will be used/submitted directly as reports and proposals to be considered at C-9.	<b>C-9 (- 3 months)</b>	
<b>4.2 Report and proposals from IRCC</b>					
4.2	Report of IRCC	C8/20	The <b>Council</b> noted the report and commended the <b>IRCC</b> , the <b>RHCs</b> , and <b>IRCC Sub-Committees and Working Groups</b> for their achievements since C-7, as well as the excellent direct cooperation between <b>HSSC</b> and <b>IRCC</b> and their subordinate bodies.		Decision

4.2	Report of IRCC	C8/21	The <b>Council</b> noted that many <b>RHCs</b> reported on the importance of CB activities and the need for additional funds especially to support S-1xx data service developments in their regions.		<u>Decision</u>
4.2	Gender Balance in Hydrography	C8/22 (former C7/24)	<p>On the proposal for a new <i>Programme</i> for Gender Balance in Hydrography (as a follow-up to the successful <i>Empowering Women in Hydrography Project</i>), the <b>Council</b> agreed on the way forward in three steps as suggested at C-7 by the <b>Secretary-General</b>. Consequently:</p> <ul style="list-style-type: none"> <li>d. The <b>Council</b> tasked the <b>CBSC</b> through the <b>IRCC</b>, to first define the regulatory framework (M-3) for a continued activity on this social theme through a proposal for an IHO Resolution;</li> <li>e. The <b>Council</b> agreed to continue with the EWH project led by the <b>CBSC</b> supported by remaining funds and future financial and / or in-kind support as currently announced by <b>CA, FR, NO, DK<sup>23</sup>, UK, US</b>, but still to be confirmed.</li> <li>f. The <b>Council</b> supported by <b>IRCC</b> to develop a proposal on the future framework for an IHO social Programme (incl. Gender Balance in Hydrography) as part of the revised IHO Strategic Plan to be submitted to A-4.</li> </ul>	<p><b>Reminder</b></p> <p><b>IRCC-17</b></p> <p><b>C-9 (- 3 months) in preparation of A-4</b></p>	<u>Decision</u>  In progress (Doc. C8-04.2A)
5.2.1	EWH	C8/23	The <b>Council</b> noted the update on the Empowering Women in Hydrography Project provided by <b>Director Sinapi</b> .		<u>Decision</u>

<sup>23</sup> DK contribution to EWH confirmed through 2026.



4.2, 5.2.1	Empowering Woman and Gender Balance in Hydrography	C8/24	<p>Based on the above, and with reference to Doc. C8-05.2.1A, the <b>Council</b> endorsed:</p> <ul style="list-style-type: none"> <li>- the specific recommendations of <b>IRCC</b> i.e. the establishment of an <b>IRCC PT</b> in charge of drafting a proposed IHO Resolution on Gender Balance / Inclusiveness.</li> <li>- took note that the Scoping Team established by <b>IRCC</b> proposed ToRs for creating a dedicated <b>Project Team</b> to draft a Resolution to submit to C-9 for endorsement and then to A-4 for approval.</li> <li>- The <b>Council</b> invited the <b>IRCC</b> assisted by the <b>IHO Secretariat</b> to issue CLs for endorsement of the ToR / ROP and the subsequent creation of the <b>Project Team</b> by the end of 2024.</li> </ul>	<p><b>C-9 (- 3 months) in preparation of A-4</b></p> <p><b>End of December 2024</b></p>	
4.2	GIS thematic layers	C7/23	<p>In accordance with Decision A3/8c, the <b>Council</b> noted that <b>IRCC</b> tasked the <b>MSDIWG</b> to <b>not</b> invest in another portal, but to focus on global thematic layers by means of the existing IHO GIS infrastructure (like those already available on the INTtoGIS).</p>	Reminder	

4.2	MSDIWG	C8/25	<p>The <b>Council</b> noted the update on <b>MSDIWG</b> activities by the <b>IRCC Chair</b>, supported by <b>Director Dr Nyberg</b>, and noted the request from UN-GGIM to reinforce the relation between the MSDIWG and the Marine Geospatial Working Group of UN-GGIM, for efficiency reasons.</p> <p>The <b>Council</b> invited <b>MSDIWG</b> through the <b>IRCC</b> to consider Decision 14/111 -<i>Integrated marine geospatial information</i>, made at UN-GGIM 14 and to propose a way forward.</p>	<b>IRCC-17 / C-9</b> <b>(- 3 months)</b>	
4.2	MSDIWG / MPA	C7/44	<p>Following up on the clarification on the objectives provided by the <b>Secretary-General</b>, including updates from the last NIPWG-10 meeting on S-122 development, the <b>Council</b> agreed on the strategic need to promote the S-100 Concept with a quick-win through S-122.</p> <p>The <b>Council</b> tasked the <b>IHO Secretariat</b> to establish liaison with relevant data providers of MPAs and tasked the <b>MSDIWG</b> through the <b>IRCC</b> to establish a pilot project for the High Sea and MPAs adopted by IMO, to demonstrate the benefits of S-122 for non-navigation purposes.</p>	<b>Reminder</b>	Decision
4.2	MSDIWG / MPA	C8/26	<p>The <b>Council</b> tasked the <b>MSDIWG</b> through the <b>IRCC</b>, in liaison with the <b>NIPWG</b>, <b>Protected Seas</b>, <b>ECDIS OEMs</b>, <b>GIS software manufacturers</b>, the <b>UN</b>, <b>IUCN</b>, and <b>IHO Member States</b>, to coordinate a pilot project aiming to demonstrate the operational implementation of S-122.</p>	<b>C-8</b>	Closed. Superseded by C8/26
4.2	MSDIWG / MPA	C8/26	<p>The <b>Council</b> tasked the <b>MSDIWG</b> through the <b>IRCC</b>, in liaison with the <b>NIPWG</b>, <b>Protected Seas</b>, <b>ECDIS OEMs</b>, <b>GIS software manufacturers</b>, the <b>UN</b>, <b>IUCN</b>, and <b>IHO Member States</b>, to coordinate a pilot project aiming to demonstrate the operational implementation of S-122.</p>	<b>IRCC-17 / C-9</b> <b>(- 3 months)</b>	

4.2	A-3 Decisions	C7/22	<p>Following up on Decision A3/20b, the <b>Council</b> noted the outcome of a scoping team and endorsed the recommendations from the IRCC to establish a Project Team on <i>Fund Generation of IHO' Project Initiatives</i> under the IRCC.</p> <p><b>IHO Secretariat</b> to issue a CL on the establishment of the IHO FG PT<sup>24</sup>, as soon as the draft TORs and ROPs are finalized by correspondence within the <b>IRCC</b>.</p>	Reminder  <b>December 2023</b>	Decision  Complete (IHO CL 42/2023 refers)
4.2, 4.6	Fund Generation Project	C8/27a	The <b>Council</b> noted the update on the activities of the IHO Fund Generation Project Team provided by the <b>IRCC Chair</b> , supported by <b>Director Sinapi</b> , as well as the other initiatives regarding additional funding (RENCs, IENWG and the Joint IHO/IMO/IALA/IOC/WMO/FIG/AIEA/IMPA CB initiative in particular).		<u>Decision</u>
4.2, 4.6	Fund Generation Project	C8/27b	The <b>Council</b> requested the <b>Project Team on Fund Generation</b> through <b>IRCC</b> to enhance the ToRs to incorporate a systematic survey of current and future IHO standards products and services for which users can potentially be charged and propose basic conditions such as single fee, subscriptions or other options.	<b>C-9 (- 3 months)</b>	

<sup>24</sup> Note from the Secretariat: compliance with M-3 Resolutions, IHO Resolution 1/2014 – *Guiding Principles for IHO Funds*, in particular, to be ensured.

4.2	IBSC and CSBWG	C8/28 (former C7/25)	<p>The <b>Council</b> noted the completion by <b>IRCC</b> of two workshops:</p> <ul style="list-style-type: none"> <li>- one on Standards of Competence (<b>IBSC</b>) matters, to provide clarifications for the institutions on the preparation of submissions to the Board;</li> <li>- one on Crowd Sourced Bathymetry (<b>CSBWG</b>), on the benefit of crowd sourced bathymetry and how to expand data contribution.</li> </ul>	<p><b>1<sup>st</sup> semester 2024</b></p> <p><b>1<sup>st</sup> semester 2024</b></p>	<p><u>Decision</u></p> <p>Complete (held on 2<sup>nd</sup> and 3<sup>rd</sup> Oct. 2024)</p> <p>Complete (held 26 April 2024)</p>
4.2	RHCs	C8/29	<p>The <b>Council</b> commended the <b>RHCs</b> for their outstanding and broad scope achievements in implementing standards, sharing best practices between coastal States, and coordinating production in their charting regions.</p>		
<b>4.3 Update on the S-100 Roadmap</b>					
4.3	Annex 2 - Roadmap for S-100 Implementation Decade	C8/30	<p>The <b>Council</b> approved the proposed amendments to Annex 2 of the S-100 Implementation Roadmap as presented by the <b>HSSC Chair</b>.</p> <p>This new version of Annex 2 includes in particular:</p> <ul style="list-style-type: none"> <li>- the ENDS<sup>25</sup> diagram, aiming to illustrate the relationship between S-100 products, the IMO Maritime Services and the SOLAS Regulations.</li> <li>- the revised S-100 timeline.</li> </ul> <p>Noting the <b>UK</b>'s offer to support, the <b>Council</b> tasked the <b>WENDWG/NIPWG</b> through the <b>IRCC/HSSC</b> respectively, to prepare a concise narrative to be added in the ENDS diagram, with the option to reshape it in style if appropriate.</p>	<p><b>IRCC-17/HSSC-17</b></p>	<p><u>Decision</u></p>

<sup>25</sup> ENDS: *Electronic Navigational Data Service*, as introduced in the IMO Resolution MSC.530(106) Performance Standards for ECDIS.

4.3, 9.1	Annex 1 - Roadmap for S-100 Implementation Decade	C8/31	In accordance with Annex 1 of the S-100 Roadmap, the <b>Council</b> agreed with <b>HSSC Chair</b> 's recommendation to consider concrete actions in 2025 for the reinforcement of interactions with major stakeholders (e.g. IMO, IEC, S-100 ECDIS end-users, OEM, industry, distributors), such as the establishment of an IMO-IHO S-100 ECDIS Stakeholders Forum/ Correspondence Group.	<b>HSSC-17/C-9</b>	<u>Decision</u>
4.3	Annex 3 - Roadmap for S-100 Implementation Decade	C8/32	The <b>Council</b> welcomed the intention of the <b>WENDWG</b> through the <b>IRCC</b> to provide, from 2025 onwards, inputs <sup>26</sup> to the <b>IHO Secretariat</b> 's annual information reports to IMO NCSR meetings, presenting the planned availability and coverage <sup>27</sup> per <b>RHCs</b> , of S-100 Phase I Products and Data Services.  Request for a lunch slot briefing session on S-100 to be considered by the <b>IHO Secretariat</b> .	<b>WENDWG-15/IRCC-17 and NCSR-12 (- 13 weeks)</b>  <b>Asap</b>	
4.3	Annex 4 - Roadmap for S-100 Implementation Decade	C8/33	<b>The Council</b> approved the proposed amendments to Annex 4 of the S-100 Roadmap (Dual Fuel Concept for S-100 ECDIS) as presented by the <b>HSSC Chair</b> .		<u>Decision</u>
4.3	Roadmap for S-100 Implementation Decade	C8/34	Noting the updates approved by the <b>Council</b> for Annexes 2 and 4, <b>IHO Secretariat</b> to prepare and make available the finalized version 4.0 of the S-100 Roadmap.	<b>30 November 2024</b>	

<sup>26</sup> Eventually in digital and dynamic format, using INTtoGIS III when commissioned.

<sup>27</sup> Schemed/Planned (when, where) and then Produced : one stop-shop IHO Catalogue of INT/ENCs/S-100 Products and Data Services.

4.3	S-100 Implementation Strategy	C8/35 (former C7/28, ..., C3/13)	<b>Council/HSSC/IRCC Chairas/SecGen</b> supported by subject matter experts and Member States as appropriate to maintain the S-100 Roadmap as an incremental version-controlled document (including narrative and timelines) on a semi-annual basis.	<b>Permanent</b>	
<b>4.4 Update on the establishment of the S-100 Infrastructure Centre</b>					
4.4, 4.1	IHO Infrastructure Centre	C8/36	Following up on Decision A3/14, the <b>Council</b> commended <b>HSSC</b> (and its <b>S-100 ICE Project Team</b> in particular) for the excellent work undertaken in preparation of the design and establishment of an Infrastructure Centre.		
4.4A & B	IHO Infrastructure Centre	C8/37	Noting the generous offer made by the <b>Republic of Korea</b> , noting the initial assessment provided by the <b>IHO Secretariat</b> , the <b>Council</b> agreed on the interim establishment of the IHO Infrastructure Centre <sup>28</sup> in the <b>Republic of Korea (ROK)</b> starting in 2025 under the supervision of the <b>IHO Secretariat</b> and <b>HSSC</b> (supported by the <b>S-100 ICE PT</b> ), based on the principles described in the HSSC Report complemented by the IHO Secretariat's preliminary considerations.		<b>Decision</b>

<sup>28</sup> Name endorsed by **HSSC**.

4.4	IHO Infrastructure Centre	C8/38	<p>The <b>Council</b> agreed that the permanent establishment of the IHO Infrastructure Centre in the ROK should be finally decided by the <b>Assembly</b> (A-4), based on the following ground:</p> <ul style="list-style-type: none"> <li>- governance, availability of rules of procedures, technical, managerial, financial, staffing arrangements compliant with current principles in IHO Basic Documents and Resolutions<sup>29</sup></li> <li>- budget and business model secured for at least 3 cycles of 3 years starting in January 2026. [2026+ (3*3) = 2035]</li> <li>- Council-approved specific IHO Infra Centre annual work plan based on the IHO 3-year work programme which will expand on the Centre's role and duties.</li> </ul>	C-9 (- 3 months)	
4.4	IHO Infrastructure Centre	C8/39	<p>The <b>Council</b> noted the comments and statements made by some <b>Council Members</b> and <b>IHO Member States (CL, DE, FR, MC, NO, RO, SG, TR)</b>.</p> <p>The <b>Council</b> thanked the participants and noted in particular the statement made by the representative of the <b>Government of Monaco</b>. (see Summary Report)</p>		Decision

<sup>29</sup> and if not, proposed amendments to be made to current IHO Basic Documents and IHO Resolutions for IHO Members approval at A-4.

4.1, 4.4	IHO Infrastructure Centre	C8/40	<p>The <b>Council</b> invited <b>HSSC</b> and its <b>S-100 ICE PT</b> in liaison with the <b>Republic of Korea and IHO Secretariat</b>, to consider the comments made at C-8 by some <b>Council Members</b> and <b>IHO Member States</b> (See above) and to pursue the preparation of all necessary basic documents (new basic docs, amendments to existing IHO Basic Documents, IHO Resolutions, procedures, etc.) to serve in the development of proposal(s) submitted to A-4.</p> <p><b>IHO Member States</b> and <b>Council Members</b> in particular, to provide their comments and inputs on these documents for discussion at HSSC-17.</p> <p><b>HSSC</b> in liaison with the <b>Republic of Korea and IHO Secretariat</b> to provide the draft proposal(s) to A-4 for endorsement at C-9, as a package.</p> <p>The <b>Council</b> mandated the <b>Secretary-General</b> to negotiate a formal Host Country Agreement between the <b>Republic of Korea and the IHO</b> to be submitted to C-9 for endorsement and subsequent approval by A-4.</p>	<p><b>HSSC-17</b> <b>(- 7 weeks)</b></p> <p><b>HSSC-17 (at the latest)</b></p> <p><b>C-9 (- 3 months)</b></p>	
<b>4.5 Update on the development of S-130</b>					
4.5	S-130	C7/15	<p>Noting the clarifications and views provided by the <b>Secretary-General</b>, the <b>Council</b> agreed upon the proposed way forward to test S-130 Product Specification Ed. 1.0.0 in two regions (Region E – Baltic Sea, Region M - Southern Ocean) before the publication of the operational version of S-130 Edition 2.0.0 and official production of <i>the</i> single IHO authoritative dataset for limits.</p> <p><b>HSSC Chair</b> to provide an update at the next meeting.</p>	<p>Reminder</p> <p><b>HSSC-16/C-8</b> <b>(- 3 months)</b></p>	<p>Decision</p> <p>Complete</p>



4.5	S-130	C8/41	<p>The <b>Council</b> noted the progress made by the S-130PT while testing and experimenting Ed. 1.0.0 of the Product Specification through the production of test data sets for the <i>Baltic Sea</i>, the <i>Southern Ocean</i> and for some parts of the <i>North Atlantic Ocean</i>.</p> <p>With a new interim Ed. 1.1.0 planned to be developed by the end of 2024, the <b>Council</b> noted the timelines with Ed. 2.0.0 of S-130 PS to be submitted to HSSC-17 for endorsement, and then to <b>IHO Member States</b> for approval in 2025.</p>	HSSC-17 (- 7 weeks)	
<b>5. IHO ANNUAL WORK PROGRAMME AND BUDGET</b>					
<b>5.1 Review of the Current Financial Status of the IHO</b>					
5.1	Financial Reporting Statement	C8/42	The <b>Council</b> noted the information provided on the current financial status as of September 2024.		Decision
5.1	Financial Reporting Statement	C8/43	The <b>Council</b> was informed on the critical situation of the low level of incoming <b>Member States</b> contributions and the effects on the operations of the Secretariat.		Decision
<b>5.2 Proposed IHO Work Programme for 2025</b>					
5.2	Proposed IHO WP for 2025	C8/44	<p>The <b>Council</b> approved the IHO Work Programme for 2025, as presented by the <b>Secretary-General</b>.</p> <p>The <b>Council</b> noted the concerns, comments and suggestions from <b>Türkiye</b>.</p>		Decision

5.2, 5.2.4	World Hydrography Day	C8/45	<p>The <b>Council</b> noted the proposed theme for the 2025 World Hydrography Day by the <b>Secretary-General</b> which is:</p> <p><i>“Seabed Mapping: Enabling Ocean Action”</i></p> <p><b>IHO Secretariat</b> to circulate the theme for 2025 to the <b>IHO MS</b> by IHO CL for comments.</p>	<b>End of October 2024</b>	<u>Decision</u>
5.2.1, 4.2	Empowering Woman and Gender Balance in Hydrography		<i>See C8/22, /23 and /24 above</i>		
5.2.2	UN Decade of Ocean Science for Sustainable Development	C8/46	The <b>Council</b> welcomed the presentation of the <b>IHO Secretariat</b> on the list of contributions to the UN Ocean Decade.		<u>Decision</u>
5.2.2	UN Decade of Ocean Science for Sustainable Development	C8/47	<p>Based on the recommendations and discussions, the <b>Council</b> invited the <b>IHO Secretariat</b> to consider developing a register of <b>IHO Member States</b> representatives who are involved in their national Ocean Decade Committee, if any, and individual <b>Member States</b> activities/formal contributions. (Inputs to be provided within the IRCC CL (Dec. 2024)).</p> <p>In preparation of the future revised IHO Strategic Plan, the <b>Council</b> tasked the <b>SPRWG</b> (once established) to consider the need for specific SPIs that measure contributions to the UN Ocean Decade in support of Goals 2 and/or 3.</p>	<b>December 2024</b>	<b>C-9 (-3 months)</b>

5.2.2	3 <sup>rd</sup> UN Oceans Conference (UNOC 2025)	C8/48	<p>The <b>Council</b> welcomed the proposal from the <b>IHO Secretariat</b> and agreed with the proposed engagement in the Blue Economy and Finance Forum June 2025 in Monaco and UNOC 2025 in Nice, encouraged Member States to take advantage of the alignment of IRCC-17 to the Blue Economy and Finance Forum and the UNOC 2025, and to engage early with national delegations to participate accordingly.</p> <p>The <b>Council</b> invited the <b>IHO Secretariat</b> to inform the IHO Member States on UNOC 2025 through an <b>IHO CL</b>, announcing a coordination VTC meeting (eventually in January, then April, aiming to put together all the initiatives ready for June)</p>	<p><b>June 2025</b></p> <p><b>December 2024</b></p> <p><b>VTC (January 2025 tbc)</b></p>	
5.2.2	Depth as an Essential Ocean Variable	C8/49	<p>The <b>Council</b> agreed on <b>IHO Secretariat</b>'s proposals regarding GOOS<sup>30</sup> and Essential Ocean Variable (EOV).</p> <p>The <b>Council</b>:</p> <ul style="list-style-type: none"> <li>- Recognised the importance of the IHO aligning itself to the aims and ambitions of the broader ocean observing community.</li> <li>- Tasked the <b>IHO Secretariat</b>, through the <b>GGC Chair/Secretary</b> as endorsed by <b>IRCC Chair</b>, to lead the submission of Depth as a new EOV, liaising with <b>GGC</b> as required.</li> <li>- Tasked the <b>GGC</b> to assume the role of custodian of Depth as an EOV <b>on behalf of the IHO</b> and in liaison with IOC.</li> <li>- Consider the including participation in GOOS through Depth as an EOV, in any future IHO strategic planning.</li> </ul>	<p><b>IRCC-17</b></p>	<p>Decision</p>

<sup>30</sup> GOOS: Global Ocean Observing System.

5.2.3	Increasing IHO Membership	C8/50	The <b>Council</b> noted the <b>IHO Secretariat's</b> report on the activities carried out since C-7 and the objectives to attract new IHO Members.		Decision
<b>5.3 Proposed IHO Budget for 2025</b>					
5.3	2025 IHO Budget	C8/51	In application of Decisions A3/26 to /28, the <b>Council</b> approved the proposed budget for 2025 provided by the <b>Secretary-General</b> , including editorial corrections reported by the Financial Committee.		Decision
5.3	CB fund statistics	C8/52	The <b>Council</b> noted that the IHO was not in a position at the moment to fill the Capacity Building gap of ~245,000 euros ( among which ~188,000 for S-100 supporting activities) due to the missing dues.  The <b>Council</b> invited the <b>Capacity Building Sub-Committee</b> through the <b>IRCC</b> to consider priorities of additional CB activities for 2025 covered by the 2024 savings with a focus on S-100 related CB activities.	<b>CBSC-23/IRCC-17</b>	Decision
5.3	CB fund statistics	C8/53	The <b>Council</b> invited <b>IHO Member States</b> and external partners (such as <b>RENCs</b> ) to mobilize funding to fill the remaining gap for S-100 related CB activities through financial and/or in-kind support.	<b>CBSC-23/IRCC-17</b>	
<b>6. IHO STRATEGIC PLAN REVIEW</b>					
<b>6.1 IHO Strategic Plan – Decisions A3/08a to /08d - Strategic Performance Indicators Update</b>					
6.1	Status on the Strategic Plan - SPIs	C8/54	The <b>Council</b> noted the dashboard (target 2026, WP2 and WP3 SPIs value as of <b>31 Dec. 2023</b> ) allocated to the Secretariat, HSSC and IRCC (IHO Annual Report 2023, Annex B (pages 121 to 134) refer).		Decision

6.1	Status on the Strategic Plan - SPIs	C8/55	<p>The <b>Council</b> took note of the amount of notable outreach activities under WP1 in four categories.</p> <ul style="list-style-type: none"> <li>• The assessment of Target 2.1 and the associated SPI 2.1.1 according to the new interpretation agreed at C-7 for the period January – October 2024.</li> <li>• the continued increase of IHO visibility via IHO website and social media activities.</li> <li>• The summaries of the HSSC and IRCC reports on their respective SPI's assessed at the end of 2023.</li> </ul>		Decision
<b>6.2 Report and recommendations from the Correspondence Group for the preparatory process of IHO Strategic Plan 2027-2032, way forward and timelines</b>					
6.2	Strategic Plan 2027-2032	C8/56	The <b>Council</b> commended the <b>Council Vice-Chair</b> and the <b>Correspondence Group (BR, DE, DK, FR, HR, JP, NO, NZ, SE, SG, UK and US)</b> for their report on the preparatory process of the future IHO Strategic Plan (Action C7/38 refers).		Decision
6.2	Strategic Plan 2027-2032	C8/57	<p>As proposed by the <b>Correspondence Group</b>, the <b>Council</b> established the <b>Strategic Plan Review Working Group (SPRWG)</b> and following up on a call made in session, agreed to nominate <b>US</b> (Benjamin Evans), <b>NZ</b> (Adam Greenland), and <b>DK</b> (Hendrik Justus Stang) as <b>Chair, Vice-Chair</b> and <b>Secretary</b> of the <b>SPRWG</b>, respectively.</p> <p>The <b>Council</b> endorsed the proposed TORs and ROPs of the <b>SPRWG</b>, the timelines as proposed and invited the <b>IHO Secretariat</b> to issue an IHO CL to <b>all IHO MS</b> calling for <b>SPRWG Membership</b> and inviting to provide comments to the TORs if any.</p>	<p><b>End of October 2024 (Deadline for response: 15 December 2024)</b></p>	Decision

6.2	SPRWG	C8/58	The <b>Council</b> agreed on the suggestion from <b>IC-ENC</b> supported by <b>US</b> to involve domain experts (such as <b>AI</b> ) on case-by-case basis in the activity of the <b>SPRWG</b> . TORs to be amended accordingly before the <b>IHO CL</b> is issued ( <b>IHO Secretariat</b> ).	<b>End of October 2024</b>	<u>Decision</u>
6.2	SPRWG	C8/59	The <b>Council</b> noted the initial intentions from <b>BR, CA, CN, DE, DK, FR, ID, IN, JP, NO, NZ, RO, SE, US</b> to become Members of the <b>SPRWG</b> .	<b>Confirmation expected in response to the IHO CL (Dec. 2024)</b>	
<b>6.3 Initial discussion on the revision of the IHO Strategic Plan based on inputs from subordinate bodies (HSSC, IRCC), Member States and IHO Secretariat.</b>					
	Strategic Plan 2027-2032	C7/36	The <b>Council</b> acknowledged that the current structure of the Strategic Plan (SP) 2021-2026 was still relevant at conceptual level (vision, goals, etc.), and agreed that the objective for the next SP 2027-2032 should be limited to a <i>revision</i> of the current SP.	Reminder	Decision
6.3, 4.1, 4.2	Strategic Plan 2027-2032	C8/60	The <b>Council</b> noted and discussed the initial inputs on the revision of the Strategic Plan, provided by <b>HSSC</b> and <b>IRCC</b> and the <b>Secretary-General</b> ...  ...and tasked the <b>SPRWG</b> to consider them during the revision process.	<b>SPRWG deadlines</b>	<u>Decision</u>
<b>7. OTHER ITEMS PROPOSED BY A MEMBER STATE OR BY THE SECRETARY-GENERAL</b>					
<b>7.1 Report on inclusive participation in IHO meetings and proposed Resolution</b>					

	IHO events more inclusive	C7/40	<p>The <b>Council</b> endorsed the principle of considering an initial proposal for a IHO Resolution <i>Guidelines for Making IHO Events More Inclusive</i> (title to be confirmed) to be prepared by an ad hoc drafting group (AU, CL, FJ, <b>NZ</b><sup>31</sup>, SG, UK, US...)</p> <p>The <b>Council</b> tasked the <b>ad hoc drafting group</b> (respectively <b>IRCC</b>) to conduct a survey<sup>32</sup> on behalf of the Council to assess the feasibility, preference and willingness of <b>MS, WGs, Committees Chairs...</b> (respectively <b>RHCs</b>), to host and attend meeting in the four different modalities (in-person, in-person with live streaming, hybrid, or full VTC).</p> <p>Once the outcome of the survey are compiled by the ad hoc drafting group, <b>IHO Secretariat</b> to refine the draft proposed IHO Resolution in liaison with the ad hoc drafting group if appropriate, and submit it to <b>IHO Member States</b> for approval.</p>	<p>Reminder</p> <p><b>31 January 2024</b></p> <p><b>31 January 2024</b></p> <p><b>31 March 2024 (deadline 31 May 2024)</b></p>	<p>Complete</p> <p>Complete</p> <p>Complete (Doc. C8-07.1A and IHO CL 28/2024)</p>
7.1	Inclusive participation in IHO meetings	C8/61	The <b>Council</b> commended <b>NZ</b> as lead and the ad hoc drafting group on inclusivity for their report, and for the associated survey (IHO CL 28/2024 refers).		Decision

<sup>31</sup> Lead.

<sup>32</sup> Clear definitions of categories of meetings arrangements to be provided as part of the survey.

7.1	Inclusive participation in IHO meetings	C8/62	<p>Noting the selected comments and insights, the <b>Council</b> endorsed the principles of the proposed IHO Resolution submitted by the ad hoc drafting group and invited the group to add an Annex with (minimum) practical Guidelines derived from the outcome of the survey to assist Member States to host and facilitate online meetings.</p> <p><b>IHO Secretariat</b> to submit the proposed IHO Resolution and associated Guidelines to the <b>IHO Member States</b> for their approval.</p>	<p><b>January 2025</b></p> <p><b>April 2025</b></p>	
<b>7.2 S-100 National Strategies</b>					
7.2, 3.1,	National S-100 Committees	C8/63	<p>The <b>Council</b> commended the <b>Australian Hydrographic Office (AHO)</b> for their initiative in establishing a national collaborative space to develop and implement S-100 services in Australia and the region.</p> <p>The <b>Council</b> noted in particular the large scope covered by their AU S-100 WG ranging from education/awareness to the coordinated production, and dissemination of harmonized S-100 products and services.</p>		Decision
7.2, 3.1	National S-100 Committees	C8/64 (former C7/07, C6/67)	The <b>Council</b> invited <b>Member States</b> to share their national strategies regarding the establishment of similar national S-100 committees, as appropriate. Use cases to be considered and presented, as appropriate.	<p><b>Permanent</b></p> <p><b>C-9</b> <b>(- 3 months)</b></p>	
<b>7.3 Update on the development of the IHO Portal</b>					



7.3	IHO Portal	C8/65	<p>The <b>Council</b> took note of the update on the development of the IHO Portal (demo, migration status, timelines, ...).</p> <p>Noting the intention that the full operation of the IHO Portal is scheduled to commence in January 2025, the <b>Council</b> invited the <b>IHO Secretariat</b> to issue an informative IHO CL announcing the commissioning date, providing links to tutorials and user manuals (inc. for accredited WGs' Secretaries, should they wish to upload documents directly), explaining the consequences and impact on the current IHO website, RHCs and WGs meetings, etc.</p>	1 November 2024	Decision
7.3	IHO Portal	C8/66	<p>Noting the time needed between the official announcement of a meeting and the event (~several months), the <b>Council</b> agreed that a transition period allowing the dual use of the current system and/or the new IHO Portal for IHO events held from October 2024 to end of March 2025, should be considered by the <b>IHO Secretariat</b> and decided on case-by-case in liaison with the <b>Chair of the WG/PT/RHC</b>.</p> <p>All events held after 31 March 2025 should be prepared using the IHO Portal.</p>	31 March 2025	Decision
<b>7.4 Proposal by Bulgaria, Georgia, Romania, Türkiye and Ukraine: Consideration of the definition of Hydrographic Interest</b>					
7.4	Hydrographic Interest	C8/67	<p>Iaw. Decision A3/05, the <b>Council</b> noted the proposal on the evolution of the definition of Hydrographic Interests supported by <b>BG, GE, RO, TR and UA</b>.</p>		

7.4	Hydrographic Interest	C8/68	Noting the ranges of views provided in the discussion including the recommendations of the <b>Secretary-General</b> given in the Red Book, the <b>Council</b> decided neither to support the proposal to revise the definition of <i>Hydrographic Interest</i> at this stage, nor to allocate capacity building funds to this proposed revision.		
<b>7.5 Information Paper (Canada): Canadian S-100 International Sea Trial Area</b>					
7.5, 4.1	Canadian S-100 International Sea Trial	C8/69	The <b>Council</b> welcomed the generous offer made by <b>Canada</b> to establish an S-100 International Sea Trial Area and inviting <b>IHO Member States</b> to take full advantage of this area to test the S-100 systems, to share the invitation with industry and other interested parties and to provide feedback.		Decision
7.5	Canadian S-100 International Sea Trial	C8/70	The <b>Council</b> invited the <b>IHO Secretariat</b> to issue an IHO CL informing <b>IHO MS</b> on this offer and pointing to the website for the Canadian S-100 International Sea Trials Area, which will include a registration platform.	<b>15 December 2024</b> (opening of the registration planned in Feb. 2025)	<i>See also C8/11 and /12</i>
<b>8. NEXT MEETING</b>					
<b>8.1 Dates and venue for the 9<sup>th</sup> Meeting of the IHO Council</b>					
	C-9	C8/71	The <b>Council</b> agreed to hold C-9 in the known format in Monaco, at the IHO Secretariat, from 14 to 16 Oct. 2025 (full in-person meeting, live streaming by registration).		Decision
<b>9. ANY OTHER BUSINESS</b>					
<b>9.1 IMO Regulatory Framework and IHO S-100 Roadmap</b>					
9.1	S-100 by IMO	C8/72	The <b>Council</b> commended <b>Mr Javier Yasnikowski</b> , Head Operational Safety, Maritime Safety Division, for his very enlightening presentation on S-100 Implementation from an IMO perspective.		Decision

9.1, 4.1	S-100 by IMO	C8/73	The <b>Council</b> noted the challenges affecting different domains to be considered throughout the S-100 implementation phase (information providers, data exchange/updates, carriage requirements, machine-machine interface, new regulations?, users).		<i>See also C8/08, /30 to /32</i>
9.1	S-100 by IMO	C8/74	The <b>Council</b> noted the information on MSC Circulars already addressing S-100, and the future events that are in the interest of <b>IHO Member States</b> : <ul style="list-style-type: none"> <li>• MSC 109 (2-6 Dec 2024)</li> <li>• HTW 11 (10-14 Feb 2025)</li> <li>• NCSR 12 (13-22 May 2025)</li> <li>• MSC 110 (18-27 June 2025)</li> </ul>		
<b>9.2 A-4</b>					
9.2	A-4	C8/75	The <b>Council</b> noted the countdown for the preparation of A-4 (dates of A-4 now confirmed: 20 – 24 April 2026).		
9.2	SPRWG	C8/76	The <b>Council</b> noted the main outcome of the informal meeting of the SPRWG enhancing the large geographic diversity of potential Members, the scope of the work, logistic issues, confirming the <b>SPRWG</b> will start its work early November as soon as the IHO CL is issued.		Decision
<b>10. REVIEW OF ACTIONS AND DECISIONS OF THE MEETING</b>					
<b>11. CLOSURE OF THE MEETING</b>					
	Ex Abyssis ad Alta Award	C8/77	The <b>Council Chair</b> concluded the meeting awarding Mr Yves GUILLAM with the new <i>Ex Abyssis ad Alta</i> IHO Award for Hydrographic Excellence.		