

7th MEETING OF THE IHO COUNCIL IHO C-7 Monaco, 17 – 19 October 2023

SUMMARY REPORT

(Version 1.1, 26 October 2023)

<u>Note</u>: while the 7th 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: C7-01A List of Documents

C7-01B List of Registered Participants C7-01.5A Membership Contact List

The **Secretary-General of IHO, Dr Mathias Jonas**, opened the meeting and welcomed participants to the first meeting of the third Council¹ of the IHO cycle. A total of 35 Member States, including the 30 Member States constituting the members of the Council had registered, 28 of whom were present². The main task of this Council was to direct the future activities of IHO in the light of the decisions taken by the 3rd IHO Assembly in May 2023. Seventy participants were present in the conference room of the IHO Secretariat. Australia (Observer status in this third Council) attended the meeting remotely (live streaming).

Decision C7/01: The Council welcomed the opening address from the Secretary-General, who recalled the responsibilities of the Council as per the ROPs, the balance in representation for this 3rd Council in the IHO cycle (continent, tonnage, technical capacity...) and finally the objectives of Council meetings.

1.2. Adoption of the Agenda and Timetable

Docs: C7-01.2A Agenda Rev 2
C7-01.2B Timetable
C7-01.2C Red Book Rev 1

The agenda and timetable were adopted. Attention was drawn to a recently submitted information paper from the **United States** on navigation regulatory considerations for Hydrographic Organizations (Doc. C7-09.1 INF).

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

² Angola and India, Members of the Council, were not represented.

Decision C7/02: The Council adopted the agenda and the timetable as proposed, and noted the availability of the C-7 Red Book.

The Council agreed to consider the information paper (Doc. C7-09.1 INF) at the end of the meeting under AOB, time permitting.

1.3 Formal establishment of the new Council, confirmation of the election of the Chair and Vice-Chair.

Docs: IHO CCL 03/2023 Election of Chair and Vice-Chair of the Third IHO Council

The **Secretary-General** reminded the decisions of the 3rd Session of the IHO Assembly where the selection process and the composition of the Council were agreed, and confirmed the subsequent election of Ms Pia Dahl Højgaard (Denmark) as **Chair** and Dr Masayuki Fujita (Japan) as **Vice-Chair** of the Council for the next three years.

Decision C7/03: Noting Decisions A3/31 and /32 and Council Circular Letter CCL 03/2023, the **3rd Council** of the IHO (2023-2026) was formally established, with **Ms Pia Dahl Højgaard (DK)** as Chair, and **Dr Masayuki Fujita (JP)**, as Vice-Chair.

1.4 Chair's Opening remarks

Docs: C7-01.4A

Ms Pia Dahl Højgaard, Chair of the Council, was honoured to be elected Chair, but acknowledged the considerable challenges ahead if IHO were to achieve its ambitious target of full S-100 product and service implementation in this decade. The decision of the 3rd IHO Assembly that Goal 1 of the IHO Strategic Plan (hydrographic support for safety and efficiency of maritime navigation) should be the main priority over the next three years would affect every area of the Work Programme. The Council would need to oversee the development of new services and ensure their interoperability. The new triennium brought opportunities as well as challenges, however: the new data which would be generated would contribute to the mitigation of climate change and the expansion of renewable energy sources. IHO should publicize those potential benefits widely.

The Council had proved its value at the 3rd Session of the IHO Assembly by presenting mature proposals which had enjoyed a wide consensus among Member States. The main issues it would face at the current meeting included proposals to update the S-100 Roadmap, activities to improve capacity-building, gender balance, Member State participation in IHO meetings and promote a wider knowledge base in national Hydrographic Offices, and initial preparations for the next Strategic Plan, to be finalized at C-9 and adopted at the 4th Session of the IHO Assembly in 2026.

Decision C7/04: Council Members welcomed the opening address by **Council Chair** and agreed on the participation of **RENCs/RECC** representatives (IC-ENC, PRIMAR and EACC) as Observers.

1.5 Administrative Arrangements

Docs: C7-01.5A 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

C-7 Report

Summary Report and the work of the précis-writers and five rapporteurs kindly appointed by France, the Netherlands, the United Kingdom, the United States of America and Mr Jeff Wootton from the IHO Secretariat.

Decision C7/05: IHO Member States having a seat at the Council to provide the IHO Secretariat with their updates to the IHO Council List of Contacts.

2. ITEMS REQUESTED BY THE 3rd IHO ASSEMBLY

2.1 Review of the List of Assembly Decisions affecting the Council and discussion on the way forward and effective implementation.

Docs: C7-02.1A Assembly decisions affecting the Council and way forward

The **Secretary-General** reviewed the decisions of the 3rd Session of the IHO Assembly that affected the Council, with particular reference to those that would not be discussed under the relevant agenda items of the current meeting.

The **Secretary-General** noted that the Assembly's decision that Goal 1 of the IHO Strategic Plan should have the highest priority in the implementation of the 2024–2026 Work Programme would require major restructuring of the Work Programme (Decision A3/08(b)). The Council was further instructed to develop a revised Strategic Plan for the period 2027–2032, establishing a Working Group if necessary, and submit its proposal to the 4th IHO Assembly in 2026 (Decision A3/08(e); see agenda item 6.2 below).

The Council took note that the Assembly had not reached an agreement on the future of digital charting for the "sub-ECDIS" market, but anticipated that the United Kingdom would keep Council and the Hydrographic Services and Standards Committee (HSSC) informed of progress in that area (Decision A3/15).

The Council took note that the Assembly had agreed with the Council's proposal to close the discussion on a revised definition of hydrographic interest until new submissions or proposals were received from Member States (Decision A3/05).

Decision C7/06: Based on the presentation from the Secretary-General, the **Council** agreed on the list of decisions from A-3 to be considered by the Council under the relevant agenda items of the meeting, as well as on the proposed way forward.

2.2 Cumulative List of A-3 Decisions

For reference only.

3. ITEMS REQUESTED BY THE IHO COUNCIL

3.1. Review of the Status of Decisions and Actions from C-6

Doc: C7-03.1A

IHO Assistant Director Guillam noted that many of the decisions of the Council at its sixth session had been either completed or overtaken by the Assembly decisions. Of those decisions which were not otherwise covered in the agenda of the current meeting, he said with reference to decision C6/17 on the future of the paper nautical chart that a paper had been submitted recently in support of the 9th Meeting of the Nautical Cartography Working Group (*Doc. NCWG9-05.9A*), to be held in the

United Kingdom on 27 November–1 December 2023. The IHO Secretariat had completed its revision of Miscellaneous Publication M-1 (IHO Basic Documents) to ensure gender-inclusive language.

A number of Working Groups and Committees had begun to revise their terms of reference with the same aim. Publication M-3 (IHO Resolutions) needs to be considered for gender-inclusive language as and when updates on Resolutions are needed (Decision C6/59).

Decision and Action C7/07 (former C6/67): The **Council** welcomed the update from the United Kingdom on the concept of a national committee on S-100 [See Red Book] and noted the expected benefits of such an approach.

The **Council** invited **Member States** to share their national strategies with regard to the establishment of similar national S-100 committees, as appropriate. (Deadline: C-8 (-3 months)).

4. ITEMS REQUESTED BY SUBSIDIARY ORGANS

4.1 Report and proposals from HSSC

Doc: C7-04.1A - HSSC Report

- Annex A: Draft Revision of Annex 2 to the Roadmap for the S-100 Implementation Decade (2020-2030) S-100 Timelines, Version 3.0 Dated: 12 July, 2023
- Annex B: Proposed amendments to the HSSC TORs and ROPs, redline version.

The **HSSC Chair** reported on the work of the Committee since the 6th session of the Council and especially from HSSC 15, held in June this year. He reported that the cooperation between the IHO and IEC to meet the timelines for S-100 ECDIS implementation were very good, and acknowledged the contributions of Expert Contributors (RENCs, industry) in progressing S-100 based Product Specifications development. However, he appealed to Member States and even National Hydrographers to participate more actively in the work of HSSC and / or in HSSC meetings to implement the S-100 series of standards; if Member States failed to participate, industry would step in to fill the gap, with the concomitant risk of undue commercial influence on standard-setting. Member States were invited to contribute to the discussion on inputs to the new Strategic Plan at the next meeting of HSSC.

Decision C7/08: The **Council** noted the report and commended the **HSSC**, its Working Groups and supporting organizations for the achievements since C-6.

The **HSSC Chair** reported that S-100 implementation was challenging; it was essential to speed up the development process by bringing in more people with expertise from the Member States, while ensuring a sustainable technical and administrative infrastructure for the new standards. To that end, a HSSC Project Team had been established to plan how an establishment of a S-100 Infrastructure Centre could be accomplished, which the Assembly had called for in Decision A3/14; it would hold its third meeting in late November 2023. The financial resources needed to set up the S-100 Infrastructure Centre, sustainable structure to manage S-100 and further S-100 standards development and maintenance might be obtained from additional funding resources which IHO hoped to acquire in the near future.

Decision C7/09: In accordance with Decision A3/08(b), the **Council** 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.

Action C7/10: In parallel of the establishment of the S-100 Infrastructure Centre, the **Council** tasked the **HSSC** to identify at their next meeting, the current or emerging components that are critical in the implementation of the S-100 Roadmap that could candidate for being funded by the IHO (project based in the short term on one hand, longer term operational mode for standards maintenance on the other hand). (Deadline: HSSC-16 (-7 weeks), then C-8 (-3months)).

Decision C7/11: The **Council** noted the establishment, under HSSC, of the S-100 Infrastructure Centre Establishment PT, the S-100 Security Scheme PT as well as the establishment of the ECS PT under the ENCWG.

Decision and Action C7/12: Following the update provided by the HSSC Chair on the work plan of the S-100 ICE PT, the **Council** invited **HSSC Members**, then **IHO Member States** to provide their views on the recommendations delivered by the PT, as soon as they become available and no later than HSSC-16. (Deadline: HSSC-16 (-7 weeks)).

The IMO Maritime Safety Committee was expected to approve two ECDIS-related standards: Route Plan S-421, for route exchange from ship to shore and from shore to ship, and IEC SECOM, for secure exchange of information between ship and shore and vice versa, in May 2024, with the same timeline for implementation as other S-100 standards, namely 2026–2029. IMO had also requested more detailed information from IHO about progress made in implementing the S-100 Roadmap.

HSSC had established a Project Team to review the S-100 security scheme, including developing the S-100 appointment and termination process, ensuring that current IHO agreements were legally binding, proposing processes for new agreements and monitoring of agreements, and ensuring that the process was compatible with SECOM.

The 3rd IHO Assembly had not reached an agreement on the future of digital charting for non-ECDIS mandated vessels but the item was not completely closed on working level. HSSC had considered a proposal with clarified scope focussing on the sub-ECDIS market, which had identified, after a fruitful discussion at the HSSC-15 Stakeholder's Session, three distinct sub-segments in the market: smaller SOLAS vessels; commercial vessels (for example tug boats, smaller passenger ferries, fishing vessels) and yachts larger than 300 GT; and leisure craft smaller than the previous category. HSSC had established an Electronic Chart System (ECS) Project Team, subordinate to the ENCWG, to identify and prioritize ECS navigation requirements, analyse their impacts on current IHO hydrographic standards and draw up recommendations to be addressed by existing IHO bodies, external organizations and Member States. The Project Team had a first meeting in July and will hold its second formal meeting in November 2023.

HSSC had set up a Baseline Portrayal Project Team (BSPT), subordinate to the NCWG, in 2021 to support the automated production of paper charts from S-101 data, including a baseline symbol library. However, progress was slow and more resources from Member States were required to speed it up.

With the aim to align with the planned start of work by IEC on the S-100 ECDIS Test Standard, HSSC would endorse the first operational package of S-100 Product Specifications (Edition 2.0.0) covering Phase 1 implementation for route monitoring – S-101, S-102, S-104, S-111, S-124 and S-129 between April and October 2024. Member States can expect an IHO CL, with the request for approval of the first package of S-100 Product Specifications, early November 2024.

Decision C7/13: In order to meet the IMO timelines for S-100 ECDIS transition, the **Council** agreed that an IHO CL should be issued to inform **IHO Member States** of the schedule for preparation, by early November 2024, for the beginning of the approval phase of Edition 2.0.0 of S-100-based Product Specifications (Phase 1 / Route Monitoring as a 1st step).

Action C7/14: IHO Secretariat to implement Decision C7/13 above. (Deadline: December 2023).

Calendar to be updated after HSSC-16, in May 2024 (**HSSC Chair** in preparation of C-8). (Deadline: C-8, -3 months).

The **Secretary-General** reported that the Product Specification for polygonal demarcations of global sea areas, S-130 Edition 1.0.0, was ready for initial implementation, testing and comprehensive evaluation. HSSC had recommended that it should be tested initially in two regions with widely varying conditions, namely Region M - Southern Ocean and Region E - Baltic Sea. The IHO Secretariat would coordinate through external experts to produce test datasets for the two regions and submit them to the S-130 Project Team in late November 2023.

Decision and Action C7/15: Noting the clarifications and views provided by the **Secretary-General**, the **Council** 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 *the* single IHO authoritative dataset for limits. **HSSC Chair** to provide an update at the next meeting. (Deadline: HSSC-16 / C-8 (-3 months)).

HSSC Chair summarized proposed changes to the Committee's Terms of Reference and Rules of Procedure, including the proposal to issue a standing invitation to the Regional ENC Coordinating Centres (RENCs) to attend its meetings as Observers. A proposal was made for an annual Champion of Hydrography Award to recognize the contribution of colleagues from a wide range of backgrounds, including beyond the national hydrographic offices.

In the ensuing discussion, participants agreed on the enormous potential of S-100 products and the need to speed up implementation, and acknowledged the need for increased funding. Participants asked for a detailed description of the way any additional funding would be used, to help them plead the case with their governments. Additional funding might take the form of ad hoc, project-based funding or – preferably – longer-term funding, although that might entail an increase in Member States' annual contributions. Any proposal for a long-term increase in funding would involve strategic decisions that should be included in the next Strategic Plan; for instance, such decisions would be required on the many potential applications of S-100 products other than those required for navigation. One Member State asked why some S-100 Product Specifications, e.g. S-130, as missing in the S-100 Timeline. Replying to the points raised, **HSSC Chair** explained that the S-100 Timeline only encompass S-100 products to be used in S-100 ECDIS, since IHO needs to report those explicitly to IMO. He also acknowledged the need for an efficient mechanism for reporting to IMO, for instance to report the data coverage (planned, expected, achieved) for each S-100 based Product Specification to be used in S-100 ECDIS.

Decision C7/16: While noting the existing IHO Resolution 2/2014 as amended – Prince Albert the 1st Medal for Hydrography, the **Council** endorsed the proposal from **HSSC** and **IRCC** for an annual Champion of Hydrography Award and agreed upon the proposed way forward.

Action C7/17: **HSSC** and **IRCC Chairs** supported by **IHO Secretariat**, to prepare a proposed IHO Resolution for the Champion of Hydrography Award, to be awarded on an annual basis.

Once finalized, **IHO Secretariat** to issue an IHO CL seeking the approval of **IHO Member States** on the proposed IHO Resolution. (Deadline: March 2024).

Decision C7/18: With the aim to include the **RENCs** representation in the HSSC Membership, the **Council** endorsed the proposed amendments to the HSSC TORs and ROPs.

Decision and Action C7/19: (same as former C6/20, ...and C1/06) Considering the timelines between HSSC-16 and IRCC-16 meetings in 2024 and the countdown for submission of reports and

proposals to C-7, the **Council** invited **HSSC** and **IRCC Chairs** to prepare their 2024 meeting minutes with the view that it will be used/submitted directly as reports and proposals to be considered at C-8 (Deadline: C-8 (-3 months)).

4.2 Report and proposals from IRCC

Doc: C7-04.2A - IRCC Report

- Annex A: Empowering Women in Hydrography: From Project to Programme - Annex B: Scoping Team for Fund Generation of IHO' Project Initiatives PT

The IRCC Chair presented a report and outcomes of IRCC-15 which had a particular focus on implementation of the decisions taken at A-3. Excellent cooperation existed with the HSSC which had presented a progress report on the S-100 Implementation Roadmap and on S-100 product specifications to IRCC-15. Further to the ISO Cell set up after HSSC-13 to experiment with ISO 9001 in the development of S-101 product specifications, HSSC had invited IRCC to consider mirroring the ISO Cell on the S-101 via the Regional Hydrographic Committees (RHCs). IRCC had recommended RHCs to start producing S-101 and other S-100 products by focusing on a specific part of the region.

The 15 RHCs had reported their main concerns were: the need for collaboration and coordination in the implementation of the S-100 Roadmap; the need to increase Capacity Building activities; and the lack of participation in RHC activities and meetings. It would be important to encourage more regional participation in working groups. There had been good examples of inter-regional cooperation, including in Capacity Building, and successful partnerships with industry and stakeholders. RHCs and subordinate bodies were encouraged to open debate on future engagement in climate-change related activities.

WWNWS-SC had held a joint meeting with the WMO Worldwide Met-Ocean Information Warning Service, focused on S-124 progress and Iridium SafetyCast Implementation, provided feedback on IHO SPI 3.1.1 and presented a demo on the C-55 GIS project. NCSR10 had approved the joint IMO/IHO/WMO Manual on Maritime Safety Information. IRCC recommended RHCs to encourage Member States to report to IMO and the Chair of the EGC Coordinating Panel on the progress of implementation of newly recognized mobile satellite services by MSI providers.

Generous financial contributions to Capacity Building had been received from Republic of Korea, Nippon Foundation and Canada while bilateral in-kind assistance had been provided by many Member States. Progress had been made in establishing the e-Learning Center with Phase 1 focused on cataloguing existing e-Learning material and signposting existing courses and the need to identify a general manager for the centre. C-55 publication was improved with IRCC tasking CBSC to liaise with the RENCs and the IHO Secretariat to investigate which Member States were not currently contributing to CATZOC.

A way ahead for the EWH project was developed by Canada and supported by the IHO Secretariat and IRCC. Council was invited to consider the document entitled "Empowering Women in Hydrography: From Project to Program" attached as Annex A and to discuss implementation of a programme called "Gender Balance in Hydrography (GBH)".

IRCC had asked the subordinate bodies to review the respective RoP and TOR on gender-inclusive language with the IHO Secretariat requested to issue a questionnaire on gender balance every three years before the Assembly.

WENDWG had completed WEND-100 Product and Service Matrix using IGIF pathway principles. The WEND-100 Principles and the S-1xx Implementation Guidelines were to be considered in "maintenance mode" and constantly updated. IRCC commended KHOA for leading the INToGIS III.

IRCC had tasked WENDWG to liaise with HSSC on how to mirror the HSSC ISO Cell on S-101. MSDIWG had embarked on an update of the C-17 publication. The IHO-EU Network Working Group (IENWG) and DG MARE³ had discussed new opportunities for collaboration. The involvement of the IHO Secretariat was recognized as an asset for the promotion of high-level activities in the EU Commission. The FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) had reported on the high number of inadequate submissions; in response, IRCC had tasked the IBSC, in liaison with the IHO Secretariat, to organize an online workshop to provide clarification on the preparation of submissions. IRCC had tasked CSBWG to organize an online workshop on the benefit of Crowdsourced Bathymetry and how to expand data contribution.

GEBCO had been working on a new strategy, a Code of Conduct which had been endorsed by IRCC, and a governance review. In accordance with Decision A3/20, IRCC proposed the establishment of an ad hoc Project Team to explore possible reliable alternative funding for activities including capacity building and GEBCO. A scoping team for fund generation had been established under the lead of Dr John Nyberg. IRCC unanimously re-elected Mr Thomas Dehling as Chair and elected Ms Jennifer Jencks as Vice-Chair for three years.

United States requested that the TORs of the Project Team on Fund Generation should make clear in particular the identity of any voting or non-voting members since the reference to "representatives of IHO Members or non-members (on invitation and without voting rights)" was not clear.

The IRCC Chair confirmed that the Project Team could comprise both IHO Members with voting rights and non-Members without voting rights. The TORs would be finalized but the main challenge would be to find people with the right skills and experience to do the work.

Member States emphasized the importance of the adoption of the TORs which were to be included in a circular letter, inquiring whether they should be agreed by the Council or by IRCC, to which the **Council Chair** recalled that A-3 had tasked IRCC with developing the TORs.

One Member State noted that budget had been a major issue in recent years and attempts to increase funding had been blocked by many countries. Given that funding of Capacity Building was too low, it was pleasing to see the establishment of the Project Team. There was a responsibility, at Council level, to make the Project Team a success.

The Secretary-General underlined that, in order to gain money from external sources, projects must be described with precision. In order to extend goals, extended funding was needed: Member States might wish to examine whether they were willing to mobilize resources internally.

Canada noted the improved Empowering Women in Hydrography project in recent years and in particular the increased participation of women in A-3. Some Member States had come forward with financial and in-kind contributions for continuous support of the project.

The Secretary-General said that the Gender Balance in Hydrography initiative, stemming from a proposal by Canada, was experimental in that it fell outside the usual technical and consultative scope of the organization. However, it had been a successful and timely intervention, with attention gained from within IHO and the associated community for a subject that had been underestimated in the past. Examining the documents governing IHO and whether it would be appropriate to create a new work programme item, he explained that the Convention provided the broadest scope of activities, with a second mechanism, the resolutions, providing more details on the subject matters and how they were to be dealt with. Flowing from the Convention and the resolutions, a Strategic Plan set out what was to be achieved in a six-year timeframe based on which a three-year work programme was

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³ Directorate-General – Maritime Affaires and Fisheries.

developed and approved by the Assembly. The budget, also approved by the Assembly, was linked to the three-year work programme and defined what resources could be devoted to the work programme. He was not sure whether the Council was in a position to create an additional work programme item within the current three-year work programme. However, since IHO was eager to pursue the item of Gender Balance, it could be included under the over-arching theme of diversity and inclusion – including the item of Gender Balance. A resolution would provide a sound basis within the regulatory framework of IHO and he suggested that the collective will of IHO Member States could be expressed in a Resolution on diversity and inclusion, providing guidance on what the Organization could address and achieve. The IHO Secretariat could draw up a resolution for consideration at C-8 and subsequent approval at A-4; in the meantime, work on gender balance could continue as a project supported by in-kind contributions from Member States.

Sweden and **Norway** supported the direction outlined by the Secretary-General.

One **Member State**, while supporting the Secretary-General's proposal, would have appreciated further clarity on the meaning of the word "programme".

Responding to a question from **the Chair** as to whether any other actions were requested, **Norway** referred to C-55 and inquired whether further permissions from Member States were required for CATZOC information to be harvested. Norway further wished to note the upcoming workshop in November between IHO and OECD with a focus on seabed mapping which would feed into the 2024 Ocean Decade Conference in Barcelona and the 2025 UN Ocean Conference in Nice, providing an opportunity to position IHO and seabed mapping in the wider community.

Decision C7/20: The **Council** noted the report and commended the **IRCC**, the **RHCs**, and **IRCC Sub-Committees** for their achievements since C-6.

Decision C7/21: The **Council** noted the **IRCC** (and subordinated bodies) action plan to follow-up on A-3 decisions and invited **IRCC** to report on their progress on an annual basis. (Deadline: C-8 (-3 months))

Decision and Action C7/22: Following up on Decision A3/20b, the **Council** noted the outcome of a scoping team and endorsed the recommendations from the IRCC to establish a Project Team on *Fund Generation of IHO' Project Initiatives* under the IRCC. **IHO Secretariat** to issue a CL on the establishment of the IHO FG PT, as soon as the draft TORs and ROPs are finalized by correspondence within the **IRCC**. (Deadline: December 2023)

Decision C7/23: In accordance with Decision A3/8c, the **Council** noted that **IRCC** tasked the **MSDIWG** to **not** 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 INToGIS).

Decision and Action C7/24: 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 suggested by the **Secretary-General**. As a consequence:

- a. The Council tasked the IRCC, to first define through the CBSC the regulatory framework (M-3) for a continued activity on this social theme through a proposal for an IHO Resolution; (Deadline: IRCC-16)
- b. The **Council** agreed to continue with the EWH project led by the CBSCsupported by remaining funds and future financial and / or in-kind support as currently announced by **CA**, **NO**, **DK**, **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) to be submitted to A-4. (Deadline: C-9 (-3months) in preparation of A-4).

Decision C7/25: The **Council** welcomed the proposal from the **IRCC** supported by the **IHO Secretariat** to plan two workshops as follows:

one on Standards of Competence (**IBSC**) matters, to provide clarifications for the institutions on the preparation of submissions to the Board;

- one on Crowd Sourced Bathymetry (**CSBWG**), on the benefit of crowd sourced bathymetry and how to expand data contribution.

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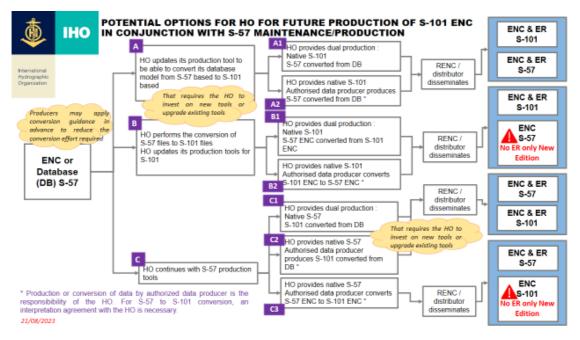
- 4.4 A. Proposed version v3.0 of the Roadmap for the S-100 Implementation Decade redline proposed working version of the main text.
 - B. Comment (France) on Annex 2 (fig. 4) of the Roadmap (Doc. C7-04.4A refers): Updated proposal on options for the future production of S-101 ENC in conjunction with S-57 ENC during the dual fuel period.

Docs: C7-04.4A – Main text, Redline Proposed Version C7-04.1A – HSSC Report, Annex A C7-04.4B Rev2

The HSSC Chair presented the Secretary General's suggestions, supported by HSSC, for amendments to the proposed version 3.0 of the S-100 Roadmap (current version 2.1), and noted that the implementation timeline had been updated in coordination with IEC since HSSC15. The Roadmap included a new Annex 4 on the Dual-Fuel concept. The timeline for completion of the operational editions of S-124 (Navigational Warnings) and S-128 (Catalogue of Nautical Products) had been brought forward to November 2024 in light of the IMO decision on the S-100 ECDIS transition plan. The criticality of completing S-98 (Data Product Interoperability in S-100 Navigation Systems) and the other components listed under the "Critical Framework" section for Phase 1 were also noted.

In Annex 2, HSSC proposed that the two implementation priority groups of standards should be renamed as Phase 1 (Route Monitoring) and Phase 2 (Route Planning), to allow for the possible future addition of new phases. It was proposed that S-411 (Ice Information) and S-412 (Weather and Wave Hazards) should be added to Phase 2.

France presented an updated proposal, expanding on the original ENC production flow diagram developed by HSSC, on the options available to hydrographic offices for the production of S-101 ENC and S-57 ENC during the Dual-Fuel period, considering the recent developments in charting software capabilities and the implications for ENC Update (ER) production.



Source: Doc. C7-04.4B

Replying to questions raised by participants, **France** said that S-101 implementation should not be considered in isolation. Other products included in the broader S-100 Framework, primarily S-102, S-104, S-111 and S-124, would also need consideration in due course. So far, little feedback had been obtained from potential users of S-100 based products, but France, following the example of Canada and the Republic of Korea had set up national committees with maritime affairs authorities intended to raise the profile to the mariner community. There were no plans for re-scheming of S-101 ENCs as part of the process presented for the time being. **IC-ENC** stated that their Value Added Resellers (VARs) had expressed a preference for retaining identical schemes for S-57 and S-101 in the interests of easier catalogue management and better customer service, however it was acknowledged that this did not mean that current S-57 ENC schemes needed to be retained – they could be re-schemed in accordance with S-101 scheming requirements.

Decision C7/26: The Council approved the proposed amendments to the S-100 Implementation Roadmap in order to issue version 3.0 dated October 2023, presented by **HSSC Chair.** This new version includes amendments submitted (Docs C7-04.4A&4.4B):

- by the Secretary-General to the main text taking into account in particular the IMO MSC106 decision on the S-100 ECDIS transition plan;
- by the HSSC Chair to Annex 2, and by France for figure 4 in Annex 2.

Decision C7/27: IHO Secretariat to make available the finalized version 3.0 of the Roadmap. (Deadline: 30 November 2023)

Decision C7/28 (former C6/37, ..., C3/13): **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 an annual basis.

4.5 Update on the Joint IHO-Singapore Innovation and Technology Laboratory – Proposals from the Council to the Governing Board.

Doc: C7-04.5A

IHO Director Nyberg presented an update on the activities of the Joint IHO-Singapore Innovation and Technology Laboratory. The project on development of a S-57 to S-101 conversion guidance document was well under way. An associated workshop, which has attracted 31 registered participants rather than the 20 originally planned, would take place in Singapore in November 2023.

The S-131 Marine Harbour Infrastructure Database project, intended to improve information exchange between Port Authorities and Hydrographic Offices, was making good progress; the first in-person meeting of the Project Team would take place in Singapore, likewise in November 2023.

Under the revised project on creation and test-bedding of ECDIS capable of displaying S-102 Bathymetric Surface (phase 1 of the project) and S-104 Water Level products (phase 2 of the project) on S-101 ENCs, a survey of display of S-102 had been conducted in Singapore in collaboration with the Korea Research Institute of Ships and Ocean Engineering (KRISO). Work on S-104 would begin shortly.

The proof of concept of the 1st IHO and International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) collaboration to demonstrate interoperability of S-101, S-124 and S-125 at sea using wireless updating via 4G/5G telecom links had been completed with a sea trial in April 2023, conducted in collaboration with KRISO.

The Governing Body of the Joint IHO-Singapore Laboratory was keen to evaluate potential collaborations with industry and other partners. A potential future project related to the land/sea interface (for example storm surges, sea-level rise), potentially in collaboration with the recently established United Nations Global Geodetic Centre of Excellence in Bonn, Germany.

Decision C7/29: The **Council** noted the update on the Joint IHO-Singapore Innovation and Technology Laboratory and noted the progress made on the following projects:

- S-131Marine Harbour Infrastructure Database (MHID)
- Development of S-57 to S-101 Conversion Guidance Document
- Creation and Test-Bedding of ECDIS capable of displaying S-102 (Phase 1) and S-104 (Phase 2) on S-101 ENCs

and the completion of the Proof of Concept Project: IHO-IALA Collaboration to Demonstrate Interoperability of S-101, S-124 and S-125 at sea using wireless updating via 4G/5G Telecommunications links.

Decision C7/30 (former C6/43): The **Council** endorsed the recommendation from the Governing Board of the Lab encouraging more stakeholders to identify collaborative projects, especially with other organizations and industry partners.

5. IHO ANNUAL WORK PROGRAMME AND BUDGET

5.1. Review of the current Financial Status of the IHO

Doc: C7-05.1A

The **Secretary-General**, presenting a summary of the current financial status of the Organization, said that only 70% of Member State contributions had been received in 2023, a lower figure than the average contributions over the previous five years. He appealed to all Member States in arrears to pay their contributions: two Member States had unpaid contributions from 2021; 15 were overdue

for 2022; and a further 40 Member States remained to be settled in the current year. The operational budget was dependent on the contributions. Fortunately, some Member States had made advance payments for 2024, amounting to approximately 9% of the budget for that year. Between 2008 and 2023 the budget had grown with the addition of new Member States; in recent years, however, it had reached saturation with some oscillation due to a decline in world fleet tonnage on which contributions were based. Staff costs had increased both due to inflation and the medical costs which had been explained in detail at A-3. The status of Capacity Building, GEBCO and other funds, which were primarily externally funded and separate from the IHO budget, were set out in the report. The Assembly had been held in the Grimaldi Forum at considerable extra cost since the Auditorium Rainier III, usually provided to IHO free of charge, was in use as a Monegasque COVID Centre and therefore unavailable.

Decision C7/31: The **Council** noted the information provided on the current financial status as of September 2023.

5.2. Proposed IHO Work Programme for 2024

Doc: C7-05.2A

The **Secretary-General** said that the proposed Work Programme for 2024 was based on the first year of the three-year Work Programme (2024–2026) approved by A-3, with the highest priority placed on Goal 1 of the Strategic Plan: "Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation". Further explanation of profound transformation was provided: "on-going transformation in navigation, such as e-navigation, autonomous shipping, reduction of emissions, lead to profound evolution of hydrographic services, in a context of high demands for digital data".

The proposal covered all three Work Programme elements and cumulated all tasks as an instrument of control for the operations of the IHO Secretariat: Corporate Affairs (WP1); Hydrographic Services and Standards (WP2); and Interregional Coordination and Support (WP3). It took into account all activities that had taken place under the respective Work Programme items since A3. Some adaptations had been made in the internal allocation of staff to tasks 2.7.1-2.7.3 (ABLOS), and tasks 3.7.1-3.7.4 (MSDI), in order to more efficiently distribute the relevant technical competencies and experience.

The **HSSC Chair** clarified that the swapping of the roles of the two IHO Directors between ABLOS and MSDI did not mean that MSDIWG would move under HSSC; the structure would remain the same.

The **Secretary-General** said that the proposed theme for World Hydrographic Day 2024 was: "Hydrographic information – Enhancing Safety and Efficiency in Marine Activities". It was felt that the theme highlighted the priority placed on Goal 1 of the Strategic Plan.

Decision C7/32: The **Council** approved the IHO Work Programme for 2024, as presented by the **Secretary-General**, and noted the internal IHO Secretariat's arrangements for a change of the Principal Director and Principal Manager for ABLOS and MSDIWG.

Decision and Action C7/33: The **Council** noted the proposed theme for the 2024 World Hydrography Day by the **Secretary-General** which is "*Hydrographic Information -Enhancing Safety and Efficiency in Marine Activities*".

IHO Secretariat to circulate the theme for 2024 to the **IHO MS** by IHO CL. (Deadline: End of October 2023).

5.3 Proposed IHO Budget for 2024

Doc: C7-05.3

The **Secretary-General** explained that the proposed budget for 2024 was based on the first year of the three-year budget 2024–2026 and on the estimates endorsed by C-6 in 2022, with variations resulting from changes in reported national tonnage and the increase in the value of the contribution share by 3%, which had been approved at A-3. The total increase of 4.3% covered the increase in operational costs due to inflation. The expected surplus of about 0.35% of the real budget at the year-end would ensure that costs were covered, but would prevent further significant investment in specific funds such as the Special Project Fund and the Capacity Building Fund. It should not be forgotten that the IHO budget had been designed first and foremost to cover the operations costs of the IHO Secretariat. Every effort was made to save costs and to support the funds where possible.

The greater part of operational costs were taken up by personnel costs, including salaries, pension schemes and medical costs. The largest share of operating costs were devoted to travel, with smaller amounts allocated to office maintenance, IT, contract support and public relations. There had been some increases in personnel costs over the previous year but no increase in travel costs. Travel represented 6.5% of the total budget and every effort was made to curtail expenses by making smart combinations whereby one staff representative could attend different back-to-back meetings in a particular region. Necessary software and hardware changes had led to some increases in IT expenditure and an additional amount had been allocated to public relations. Additional grants had been made to the IBSC Fund (€ 10,000), to support the move to a new qualification and to the Special Project Fund (€ 5,000).

In summary, the real budget proposed for 2024, after adjustments, was in line with the budget approved at A-3. The budget had been endorsed by the Finance Committee.

Decision C7/34: In application of Decisions A3/26 to /28, the **Council** approved the proposed budget for 2024 provided by the **Secretary-General**, including the proposed adaptations.

6. IHO STRATEGIC PLAN REVIEW

6.1 Strategic Performance Indicators Update.

Doc: C7-06.1A - Secretariat's assessment on the implementation of the Strategic Plan 2021-2026 (Work Programme 1, 2 and 3)

The **Secretary-General** presented his assessment of the Strategic Plan 2021–2026, using the approved Strategic Performance Indicators (SPI) for the IHO Secretariat's activities under Work Programme 1 (Corporate Affairs), for the first three quarters of 2023 with a focus on Goals 2 and 3.

The 3rd IHO Assembly had decided not to invest further in the MSDI data portal (Goal 2, Target 2.1). The associated SPI 2.1.1 would be interpreted to mean the number of downloads of the data and information represented in the global thematic layers.

The IHO website traffic statistics showed a total of over 700,000 page views between 1 January and 1 October 2023. The most popular pages were Navigation Warnings, Standards and Specifications and Circular Letters.

The most popular social media platform was LinkedIn, with an increase of 44% in the number of followers over the previous year, to 8,448. The IHO X [formerly Twitter] and Facebook pages each had over 1,000 followers. Social media activities would continue to be focused on those three platforms. The S-44 standard on hydrographic surveys had received 1,119 hits between 1 January

and 1 October. Collaboration outreach activities had numbered 15 for notable global outreach activities; 3 for regional activities; 25 for stakeholder-specific activities; and 2 consultations.

He gave brief details of the SPI allocated to HSSC and IRCC to 31 December 2022, as submitted to the 3rd IHO Assembly.

Decision C7/35: The **Council** noted the dashboard (target 2026, WP2 and WP3 SPIs value as of **31 Dec. 2022**) allocated to the IHO Secretariat, HSSC and IRCC (IHO Annual Report 2022, Annex B (pages 153 to 167) refer) and its update for WP1 as of 1 Oct 2023.

6.2 Initial discussion and way forward (C-9 countdown) for the preparation of a Revised Strategic Plan in preparation of A-4 in 2026 (Decision A3/08 (e)).

The Chair recalled that, in Decision A3/08(e), the Assembly had tasked the Council to develop a revised Strategic Plan for 2027–2032 and to submit the result for adoption by A-4 in 2026. The Council was empowered to establish a Working Group for that discrete purpose. The Chair invited comments on whether there should be an evolutionary or revolutionary approach to revising the Strategic Plan; what parts of the Plan might be changed or improved; and how the work was to be accomplished and presented to C-9 before adoption of the Plan at A-4. In preliminary discussions, some Member States had noted the need to be clear about the value proposition and usefulness of S-100, examining the data and services provided for navigation and other uses by IHO. There had been a question as to whether the Strategic Plan should be used to define the competences that we require to deliver S-100. In discussion on further digitalization of the IHO Secretariat's operation (item 7.2), it had been made clear that the required IT infrastructure of IHO is dependent on its strategic direction. In any case, it needs to be sustainable in the longer term.

The Secretary-General said that the new Strategic Plan must be prepared within two years for submission to C-9 in 2025 prior to adoption by A-4 in 2026.

Several **Member States** echoed the view that the next Strategic Plan should provide continuity and not tackle new subjects, particularly at a time when important changes to S-100 are still under way. The plan might focus on strategic communication to potential users of S-100 products and services with a view that this improves the information provided to navigators and other customers. It was noted that the previous Strategic Plan had been developed some six years previously and an evolutionary approach will allow updating, in particular, of Goals 2 and 3. Reasons include the emergence of the UN Decade of Ocean Science for Sustainable Development and the increased interrelation between the Goals. The Plan could focus further on reaching out to the entire maritime community with emphasis on IHO as a robust marine standards organization. Targets could be sharpened and feedback obtained on experience gained in implementing the Strategic Plan to date. Consideration should be given to robust capacity building to bridge the gaps that would undoubtedly be created in the new era of S-100 implementation.

The IRCC Chair said that it would be helpful to look at changes in the outside world as a basis to rephrase and improve the way the goals were to be fulfilled.

The HSSC Chair said that it was proposed to hold virtual meetings with the chairs of working groups to brainstorm with a report on the findings being presented first to HSSC and then to Council

The Secretary-General said that, as described by the Chairs of HSSC and IRCC, revision of the Strategic Plan would be a bottom-up approach, receiving input from IRCC and HSSC and incorporating the views of those potentially affected, including Regional Hydrographic Commissions.

Assistant Director Guillam said that Capacity Building was linked to the development of the S-100 Implementation Roadmap and it was recognized that not all IHO Member States would have to produce all S-100 products and data services for their waters. He invited Council members to read

the last circular letter of WENDWG4 which stated: "One of the most important topics of the next meeting, WENDWG14, will be the discussion of the S-1xx production readiness level, in a capabilities-based approach, at regional level." There was a need to create an environment at regional level for Member States to share capacities and data as had been done since the origins of IHO.

IHO Director Sinapi noted the wide consensus on the evolutionary approach to development of the Strategic Plan and endorsed the involvement of the two main committees, since IRCC and HSSC would both have important inputs, including on the current achievements of implementing S-100.

The Chair noted the support for an evolutionary revision of the Strategic Plan and that some suggestions had been made on the changes to be considered. As a first step, she proposed the formation of a correspondence group to determine how the revision should be approached. The correspondence group could then report to C-8 on its proposal for the TORs of a Strategic Plan Review Working Group that would submit a draft revised Strategic Plan to C-9. The chairs of the two main committees could be asked to provide input on content to the Strategic Plan Review Working Group. She requested volunteers for the correspondence group.

Decision C7/36: The Council 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 revision of the current SP.

Decision C7/37: The Council tasked the HSSC and IRCC to provide their inputs on the possible axis of evolution of the existing SP in preparation of the revision phase (2024-2025) of the current SP. (Deadline: C-8 (-3 months)).

Decision C7/38: The Council welcomed the offer from the Council Vice-Chair to lead a correspondence group consisting of BR, DE, DK, FR, GB, HR, JP, NO, NZ, SE and US on the ways and means⁵ to prepare the next IHO Strategic Plan 2027-2032. (Deadline: C-8 (-3 months)).

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

- 7.1 Increased participation on IHO bodies activities - Proposal (Secretary-General) for discussion of the situation and follow up activities (Decision A3/21 refers).
 - B. Proposal (AU, NZ, GB): Making IHO Events More Inclusive

Docs: C7-07.1A

The Secretary-General recalled that, in Decision A3/21, the Assembly had tasked IHO to provide mechanisms "as soon as possible" to ensure greater participation of all Member States at IHO meetings. In response, the IHO Secretariat had submitted a proposal for discussion in Document C7-07.1A. Concerning the regulatory situation, certain IHO Basic Documents could be subject to changes to reflect new working procedures, including hybridization and virtualization of meetings. In particular, the reference to "present and voting" had originally been intended to denote physical presence. A joint proposal on how to make meetings more inclusive had been received from Australia, New Zealand and United Kingdom (C7-07.1B) which differed from the IHO Secretariat's proposal for instance in its recommendation that Member States might "vote by postal ballot in elections of the Secretary-General and of Directors".

⁴ WENDWG CL 01/2023 https://iho.int/en/wendwg-letters

⁵ Proposal on the scope, TORs of a Strategic Plan Review Working Group if any, to be submitted to C-8 for approval and implementation

New Zealand and Fiji recalled that the request to ensure greater inclusion and participation of Member States had been made at A-3 following concerns raised at a meeting of the South West Pacific Hydrographic Commission (SWPHC) in February 2023. Some Member States lacked the resources to attend in-person meetings while others highlighted the time and distance to be travelled and the consequent carbon footprint. Goals 2 and 3 of the Strategic Plan could be better achieved through widened participation and there would be a clear return on investment by allowing online participation. SWPHC had made recordings of meetings, including a meeting with the World Bank, which were made available to all online. The enduring value of recorded meetings was part of the value proposition. Online meetings including streaming and online participation, were being considered by a number of intergovernmental organizations. Pacific Island Coastal States (PICS) relied on the Blue Economy with tourism, fisheries, maritime trade, transport and security amounting to some two-thirds of trade. Hydrography was therefore key to the economy and it was important for PICS to participate in IHO events whether in person or online.

The proposal contained in Document C7-07.1B requested that IHO events should be inclusive on all working levels and reflected in the TORs and working practices of subordinate bodies. An Ad Hoc Drafting Group could prepare an IHO resolution on guidelines for making IHO events more inclusive, including an implementation plan, cost efficiency measures and investments to be made. There would be an impact assessment on existing IHO Basic Documents.

Member States agreed that online meetings should be accepted and provision made for the valid adoption of decisions online. One Member State believed that Assembly meetings should be inperson only. Different time zones might also make online participation more difficult.

One Member State questioned whether the technological and practical requirements of especially online hybrid meetings might deter some Member States from holding meetings.

The Secretary-General acknowledged that online meetings had been a valuable tool during the exceptional circumstances of the pandemic. The IHO Secretariat was often obliged to apply pressure in order to receive responses to Circular Letters which were also a means of participation ahead of meetings. He appealed to Member States to make use of established means of communication. At the present time it would not be advisable to make inclusivity compulsory but the aspiration for inclusivity could be expressed. IHO was dependent on the willingness of Member States to host meetings other than the Council and Assembly and he was concerned that if the solution was too radical, the number of Member States willing to host meetings might drastically decrease. A balanced and realistic approach would therefore be necessary. A circular letter could be sent with a survey asking Member States to what extent they could commit to hosting hybrid or virtual meetings.

New Zealand explained that the principle that IHO events should be inclusive was at present expressed as an aspiration. In the experience of the SWPHC, a fully hybrid meeting had been held successfully with directional microphones set up by technicians who had remained for the first morning, thereafter handing over to SWPHC for the rest of the meeting. Rather than jumping straight to hybrid meetings, the streaming of live events could prove to be a positive experience. Host nations would have to assess what was required in terms of technology and participants would need to understand what was required for their participation. Meetings held online during the COVID pandemic had already provided experience and acceptance of the technology required and how to make the most effective contributions.

United Kingdom agreed that the proposal to make a decision that IHO events were to be inclusive on all working levels was not meant to be prescriptive but to enable meeting organizers and participants to consider the most appropriate format in relation to their geographic location and group. Hybrid meetings could enable a wide range of valuable contributions, including from industry participants who were unable to travel.

Malta fully supported the proposal to enable hybrid meetings and did not perceive time differences to be a barrier to participation. The points raised by the Secretary General concerning technological and practical barriers to implementation were also well recognized. Special permissions were required to access documents at IMO and it would be important for administrations to ensure that all hydrographers had access to IHO documentation. It would be regrettable if all hydrographers were unable to see documentation, as was currently the case at IMO. However, IMO also provided a valuable resource in making available audio recordings of its Council and other meetings after the event. Circular Letters might not always be clear but audio recordings could sometimes be more readily understood. IHO might follow the same path in making available both meeting documents and audio recordings post-session.

Member States noted that IMO had made significant technological investments in order to record its meetings. The requirement for financial outlay might lead to more meetings being held at IHO Headquarters. If an Ad Hoc Drafting Group or project team were to be set up to examine the matter, it must include members of the IHO Secretariat as it was important that their perspective was represented. Hybrid attendance made it more difficult for participants to understand who all of the attendees were. Face-to-face meetings provided a different quality of interaction. Member States also acknowledged that, in future years, geographic distance might not be the only barrier to inperson attendance since climate change and the moral obligation to reduce carbon footprints would also limit the number of meetings delegates could physically attend. Where countries hosting meetings were not able to pay for the infrastructure required for hybrid meetings, a registration fee might be imposed on online attendees by way of contributing to costs.

A representative of the IHO Secretariat noted that it had been possible to organize an Assembly and a Council meeting under exceptional circumstances during the COVID pandemic and that all had worked well. There was a choice to hold meetings either fully in virtual mode, in-person or in hybrid format or with some participants following in passive format. The value of in-person attendance often lay in the informal conversations that could take place outside of the recorded meetings. With the tools currently at hand and noting potential future costs, including the need to take account of carbon footprint, pragmatic solutions would be possible.

Member States underlined the need for clarity on participation, especially when decisions about policy or the finances of the Organization were being taken.

The Chair, summarizing the discussion, said that there was substantial support for a policy of inclusion although clarity was lacking on what was meant by the term, bearing in mind the need to balance the value of informal discussions which could be held in-person with possible future travel restrictions as a result of climate change. The Council might wish to decide that events must be "inclusive" or "more inclusive". There was a proposal to install an Ad Hoc Drafting Group to examine the financial implications and impact on working methods and the Secretary-General had referred to a Circular Letter to gauge the views of Member States and of potential future meeting hosts. The Assembly had emphasized the need to act with speed and it was possible that views could be sought by Circular Letter before C-8. She noted the willingness of some Member States to join the Ad Hoc Drafting Group. It was clear that the Assembly would continue to be held in Monaco.

The Chair said that the Ad Hoc Drafting Group would examine potential timelines for receipt of comments from Member States and for production of an implementation plan, costs and impact assessment on existing IHO Basic Documents.

The HSSC Chair commented that it was too early to ask subordinate bodies to reflect on their TORs and ways of working; it would be preferable to await the outcome of the deliberations of the Ad Hoc Drafting Group.

The Secretary-General said that IHO was already inclusive and the practical question was how to continue to offer options of participation beyond physical presence. He supported the view of the HSSC Chair that pressure should not currently be placed on subordinate bodies.

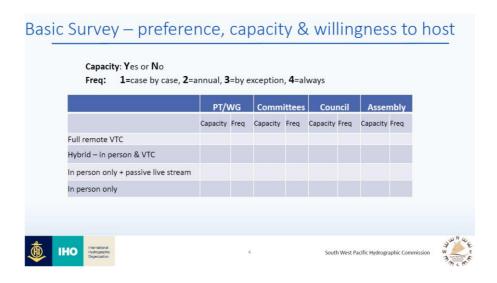
A member of the **IHO Secretariat** noted that there was almost one VTC meeting per day of working groups and subordinate bodies.

The Chair noted that the Ad Hoc Drafting Group would revert to the Council on the final morning session of C-7 with the outcome of their discussions.

At the request of the **Chair**, the item was introduced on the last day of the meeting by **New Zealand** in its capacity as **Lead** of the **Ad Hoc Drafting Group on Making IHO Events More Inclusive**. The Drafting Group had convened on the two previous days and had met with the IHO Secretariat. The proposed working title of the draft resolution: "Guidelines for Making IHO Events More Inclusive" based on recommendations made by the Secretary-General and the preliminary analysis set out in the paper from Australia, New Zealand and United Kingdom (Document C7-07.1B) but still need to be confirmed. The Drafting Group members were: **Australia, Chile, Fiji, Singapore, New Zealand, United Kingdom and United States**. The objective was to maximize participation in IHO meetings: project teams, working groups, Committees, the Council and Assembly were encouraged, where possible, to consider technology to increase participation, diversity and inclusion to ensure the widest possible contributions in delivery of the IHO strategy and work plan. Technology allowed IHO to engage with a much broader group by extending to additional participants through remote connections.

The **Drafting Group** had produced a draft basic survey that would be sent to Member States, Working Group Chairs, Committee Chairs and the IHO Secretariat, asking for them to outline their preference, capacity and willingness to host meetings based on different criteria. The proposed timeline, as discussed and agreed with the IHO Secretariat, was to present a draft IHO resolution to Council by the end of January 2024. The Ad Hoc team would then launch the basic survey at the end of January 2024. At the end of March 2024, a consolidated version of the IHO Resolution would be submitted to Member States by Circular Letter for approval.

The survey on preferences, capacity and willingness to host set out the categories of meeting: Full remote VTC; Hybrid (in person and VTC in active mode); in-person only with passive live stream; and in-person only (Note: first draft presented below for information only at this stage).



A member of the **IHO Secretariat**, responding to questions, explained that some of the boxes in the table relating to the Assembly for instance would need to be shaded to indicate that the option is not applicable. It should be noted that A-2 had been held in mixed mode, by exception, after formal approval by CL that some Rules of Procedure had to be waived.

The **Chair of the Ad Hoc Drafting Group**, responding to questions, said that it was proposed to elaborate a first draft of the resolution prior to sending out the survey and to finalize it once responses to the survey had been received. He agreed that Member States could be asked to indicate the category of meeting they would prefer.

One **Member State** asked for clarification on the meaning of "hybrid meeting", what level of participation would be accommodated and what technical equipment would be required to support it. Some Member States might not respond positively to the survey if they were unclear about the commitment involved in each category of meeting.

IHO Director Sinapi asked whether a more in-depth survey could be sent to Regional Hydrographic Commissions in order to gauge the capacity of the regions as well as of individual Member States.

A member of the **IHO Secretariat** said that, for the sake of simplification, it had been proposed to limit the scope of the survey to IHO Member States and bodies, including Working Group Chairs. Regional hydrographic commissions operated independently of IHO and there would be added complexity in attempting to identify potential host countries in the regions since many within the regions might not be willing to participate.

IHO Director Sinapi said that he would prefer to include the regional hydrographic commissions in order to promote inclusiveness and to take into account external views and capacities.

The **Chair of the Ad Hoc Drafting Group** said that the survey would be sent to all Member States and since a Member State was chair of each regional hydrographic commission, their response as regional hydrographic commission chairs could be recorded to give a sense of the willingness to host within each region.

United States, speaking as a member of the **Ad Hoc Drafting Group**, said that the Drafting Group had hoped to reach both IHO Member States and coastal states, where regional participation had led to the successful hosting of meetings in the past. In order to broaden inclusion, the survey might be sent initially to IHO Member States and then to all coastal states.

A **Member State** recalled that some Working Groups preferred to hold an annual meeting in person and to hold online meetings for the remainder of the year. The survey could be used to understand how and in what format regional hydrographic commission meetings were held. **Another Member State** underlined the importance of understanding regional contexts: it was planned to host a meeting of the Mediterranean and Black Seas Hydrographic Commission (MBSHC) in Romania in 2024 but the situation at present with Russian Federation and Ukraine as Members and Israel and the Palestinian Authority as Associate Members would make that meeting "inclusive" quite problematic.

Chile, speaking as a member of the **Ad Hoc Drafting Group**, said that the Drafting Group had discussed the importance of placing boundaries around the term "inclusive" in order to avoid overcomplication of the process and to refer instead to "maximizing participation".

The **Secretary-General** suggested as a compromise that Regional Hydrographic Commission Chairs could be consulted through the IRCC.

The **Chair of the Ad Hoc Drafting Group** clarified that the proposal by the Secretary-General would involve two surveys, one of which would be sent directly to IHO Member States. A second survey would be sent to regional hydrographic commission chairs via IRCC.

One **Member State** said that experience had shown that questionnaires must be carefully worded to remove the possibility of unintended responses. The process of clarifying the questions was therefore an important one. The proposal to issue a survey on "capacity and willingness to host meetings" was broadly phrased and did not encompass circumstances in which a meeting might be hosted externally with full IT infrastructure and not in the offices of an administration.

The **Chair**, summarising the discussion, said that timelines had been set out for sending out the survey and finalizing the draft resolution. Further refinement of the questions was required to establish whether potential hosts were able to host in their own offices and with their own resources and to establish any additional costs with respect to external premises and IT providers. In addition to capacity and willingness to host meetings, preferences for a particular category of meeting would be sought. In parallel to the survey which would be sent to IHO Member States and to Working Group and Committee Chairs, a separate survey would be sent to regional hydrographic commissions and coastal states through IRCC. The IHO Resolution would be issued for approval by Circular Letter in March 2024.

United Kingdom, speaking as a member of the **Ad Hoc Drafting Group**, said that, in addition to the surveys, information could be gathered from the online meeting registration system and used as a baseline in current and future years to establish meeting format preferences.

Decision C7/39: Noting the comments made in session and collated in the Red Book, the **Council** agreed to prepare an IHO Resolution on *Guidelines for Making IHO Events More Inclusive* (title to be confirmed) based on the recommendations made by the **Secretary-General** (Doc. C7-07.1A, paragraph 37) and preliminary analysis from **AU, NZ and GB**, available in Doc. C7-07.1B).

Decision and Actions C7/40: The **Council** endorsed the principle of considering an initial proposal for a IHO Resolution *Guidelines for Making IHO Events More Inclusive* (title to be confirmed) to be prepared by an ad hoc drafting group (**AU, CL, FJ, NZ**⁶, **SG, GB, US...**) (Deadline: 31 January 2024)

The **Council** tasked the **ad hoc drafting group** (respectively **IRCC**) to conduct a survey⁷ on behalf of the Council to assess the feasibility, preference and willingness of **MS**, **WGs**, **Committees Chairs**... (respectively **RHCs**), to host and attend meeting in the four different modalities (in-person, in-person with live streaming, hybrid, or full VTC). (Deadline: 31 January 2024).

Once the outcome of the survey are compiled by the ad hoc drafting group, **IHO Secretariat** to refine the draft proposed IHO Resolution in liaison with the ad hoc drafting group if appropriate, and submit it to **IHO Member States** for approval.

(Deadline 31 March 2024/deadline 31 May 2024).

Decision C7/41: Left blank intentionally

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⁶ Lead.

⁷ Clear definitions of categories of meetings arrangements to be provided as part of the survey.

7.2 Further digitalization of IHO Secretariat's operation - Development and introduction of improved registration and information sharing.

Docs: C7-07.2A

The Secretary-General recalled that the IHO Secretariat was currently using a meeting registration system developed and technically maintained by KHOA (Republic of Korea) which would cease at the end of 2023. In addition to replacing the meeting registration system, IHO would also review its website, which provided open access to information and documents but with limitations on file size and storage.

The IHO Secretariat aimed to introduce a system that combined meeting registration with a centralized internal document management approach based on individual accounts. In contrast to the solution at IMO, to which Malta had referred on the previous day, the individual accounts on the IHO website would be offered in principle to everybody who demonstrated an interest in IHO although access would be customized to the position and needs of the applicant. The new IHO Portal would be embedded in the IHO website. IHO Member States and stakeholders would have access to the Portal while information on IHO Standards, GIS functions, Basic Documents, including Work Programmes and Bulletin Reports, would continue to be freely available on the public part of the website.

Development of the portal had been contracted to an external partner and resources would be retained for operational and maintenance costs. The system would be introduced in a phased approach with the meeting registration module projected to be in use from January 2024. The centralized document management module was due to be in operation by the end of the second quarter. The annual IT budget for IHO was just under € 100,000 and therefore careful planning of expenditure on hardware, software and licensing and maintenance was required. United Kingdom had made a comment in the Red Book on which it might wish to provide further explanation.

United Kingdom supported the proposed improvements to the infrastructure and the possibility for Member States to test it; the purpose of the comment in the Red Book had been to address whether the wider technology used by IHO was sustainable in the longer term. This has strategic aspects and should be included in the discussion on the revision of the Strategic Plan.

The Secretary-General agreed that the action on the S-100 Infrastructure Centre development would need to be discussed in the wider context of IHO's IT infrastructure.

Chile requested that revised documents posted on the website should highlight changes so that it was possible to easily identify the new aspects of the latest version.

Norway, while fully supporting the proposed changes, pointed out that some working groups or subordinate bodies that were dependent on input from communities outside of IHO, such as the Crowdsourced Bathymetry Working Group (CSBWG) and GEBCO, would require clear information concerning the new website.

United Kingdom, following on from the comments by Malta on the previous day, noted that the proposed log-in system would result in less transparency than that available under the present arrangement, resulting in the potential loss of usability. Could the logic of placing the documents behind a log-in be explained?

The Secretary-General said that there was a repository dating back almost 20 years and, historically, the lack of management of files and of current and previous meeting documents had made the system unwieldy. The requirement for a user log-in might appear more restrictive, but it would make internal management of the website easier. In terms of marketing, requesting that website users should register with an email address would enable IHO to identify popular content and draw the attention of users to content that might be of interest to them. Responding to the request

for clearly highlighted changes in documents, he undertook to review and improve where necessary, the correct numbering of revised documents. Occasionally, last-minute changes to documents were necessary.

Assistant Director Baek explained that it was current practice for individual users to send email requests and information concerning their contact details to members of the IHO Secretariat. Under the new system, users would be able to update their own details, thereby making for a faster, more efficient service.

The Chair invited Member States to participate in the testing phase of the new website.

Decision and Action C7/42: The **Council** endorsed the **IHO Secretariat's** ambitions to further digitalize the services rendered to IHO Member States and welcomed the offer to **IHO MS** who would like to be involved in the different testing and acceptance phases of the new IHO Portal (POC: addt@iho.int). (from December 2023).

The **Council** noted the potential participation in the testing phase of **BR**, **DK**, **FR**, **ID**, **JP**, **NO**, **SE**, **GB**, and the **US**.

7.3 Implementation of a new global MSDI layer dedicated to Marine Protected Areas (MPA) - Proposal (IHO Secretariat) for discussion of the situation and follow up activities

Docs: C7-07.3A

Useful Reference: NIPWG10-11.1.2A

The **Secretary-General** introduced an IHO Secretariat's proposal for a new global MSDI layer dedicated to MPAs. It would allow compatible GIS systems to monitor progress towards the goal of protecting 30% of the ocean in MPAs by 2030, 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), adopted by a United Nations intergovernmental conference in June 2023. It also served Goal 3 of the IHO Strategic Plan by contributing to ocean policy.

At its 10th meeting in September 2023, the Nautical Information Provision Working Group (NIPWG) had reported that work to implement S-122 was likely to be completed on schedule by April 2024. However it was difficult to supply the correct information for the dataset because the authority responsible for information on MPAs was different in each country, multiple jurisdictions might be involved, and the MPA was often defined in terms more useful to fisheries or extractive industries than to navigation.

The United States philanthropic foundation ProtectedSeas had built up a remarkably comprehensive repository of global MPA information, the ProtectedSeas Navigator. The IHO Secretariat now proposed a project to encode those data in an S-122 dataset. The project would have a valuable political and visibility impact as part of the IHO contribution to the activities of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030). He suggested that the IHO Secretariat should pursue the idea further with ProtectedSeas and, if appropriate, create a test dataset before returning to the Council for further instructions.

Participants were divided in their response to the proposal. Several participants voiced the concern that data obtained from an external, private company would not be authoritative while displayed on the IHO website, with possible consequences in terms of liability. They noted that the boundaries of some MPAs were the subject of dispute between States. Some felt that the project was not consistent with the priority of Goal 1 of the Strategic Plan mandated by the 3rd IHO Assembly. France drew attention to an existing resource, the World Database of Protected Areas, a joint project of the

United Nations Environment Programme and the International Union for Conservation of Nature. It is important to avoid duplication of data, but instead to harvest exiting data without duplication, as duplication leads to discrepancies over time.

Some participants were concerned that unofficial and unverified data might inadvertently be used in navigation, thereby posing a risk to safety: if mariners saw information in ECDIS, they would assume it was authoritative. The **IHO Secretariat** and other participants assured them that only data authorized by the relevant national hydrographic office would be usable in ECDIS navigation: unauthorized products and data would not be included by the RENCs in the S-128 national catalogue of products and could therefore not appear in ECDIS. **Malta** nevertheless asked for a formal assurance that it would be impossible for any future MSDI layer related to MPAs to appear on an ENC to be used in an ECDIS, unless the data it contained had been validated. The **IHO Secretariat** answered that this summary report could be used as such.

Some participants saw the proposed project as an opportunity for IHO to contribute to the ocean community and increase the visibility of the S-100 framework. It was important to show how to use S-100 data in the real world and how users could benefit. The project would demonstrate the first S-100 data service with global coverage, and could provide an incentive for GIS companies to include S-100 compatibility in their products. There were indeed some challenges, but they could be overcome. For instance, the project could begin with MPAs in the high seas, to avoid potential territorial disputes; it could begin with MPAs already adopted by IMO; it could use data verified by the RENCs. The **United States** informed that nations had referenced a guidance document from UN-GGIM on the definition of "authoritative" data⁸.

Some participants felt that the opportunity to gain access to a wealth of data, provided by an organization eager to adopt S-122 at relatively little cost in effort or money to IHO itself, should not be missed. The **IHO Secretariat** pointed to previous projects that had successfully taken the Organization out of its comfort zone and demonstrated the value of a product in a new context. If IHO did not take the offered opportunity, others would do so.

Decision C7/43: The **Council** noted the valid concerns raised by some Members during discussion and in the Red Book on the proposal to engage the IHO in the development of a new global MSDI MPA layer but did not reach a consensus for the MPA concept approach proposed by the IHO Secretariat.

Decision and Action C7/44: Following on clarification on the objectives provided by the **Secretary-General**, including updates from the last NIPWG-10 meeting on S-122 development, the **Council** agreed on the strategic need to promote the S-100 Concept with a quick-win through S-122.

The **Council** tasked the **IHO Secretariat** to establish liaison with relevant data providers of MPAs and tasked the **IRCC** through the **MSDIWG** 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. (Deadline: C-8).

8. **NEXT MEETING**

8.1 Dates and venue for the 8th meeting of the IHO Council.

The Secretary-General proposed that the Council should next meet in-person from 15 to 17 October 2024.

Decision and Action C7/45: The Council agreed to hold C-8 in Monaco, at the IHO Secretariat,

⁸ Available on the C-7 webpage as Useful Reference in Doc. C7-09.1A.

from 15 to 17 Oct. 2024 (full in-person meeting, live streaming on request). (Deadline: Go/no-go decision 15 June 2024).

9. ANY OTHER BUSINESS

9.1 Navigation regulatory considerations for Hydrographic Organizations

The United States introduced a Council Information Paper related to IHO Assembly Proposal 2.3 – The future of digital charting and Decision A3/15. The United States wished to share the various challenges it had experienced in applying regulations to all classes of vessels including public and sub-ECDIS vessels. By raising awareness among Member States, it was hoped that appropriate action could be taken.

International and national navigation regulations had been in place for many years but there was a move to digital navigation and the S-100 framework was viewed as the future of the maritime geospatial environment for several decades to come. It was generally agreed that digital navigation improved the safety of navigation of vessels.

Unfortunately, existing national and international regulations, which had been in place for many years, were typically built around paper charts. SOLAS, national and regional regulations would have to be taken into account in ensuring that all vessels benefited from digital data. SOLAS defined carriage requirements as "affecting all ships, irrespective of size". It was generally accepted that if a vessel was fitted with ECDIS, it could use digital data. Some vessels were allowed to deviate from SOLAS regulations and in those situations, national regulations applied.

Internal regulations in the United States broadly followed SOLAS and had been updated in 2015 to identify Electronic Chart Systems (ECS) as a reasonable approach to navigation. However, neither United States commercial regulations nor SOLAS applied to public vessels which were regulated by the relevant public agency: the Navy; United States Coast Guard; NOAA; Customs, etc. None of the public agencies are regulated by the commercial rules and it was not known whether any of the agency regulations in the United States recognized digital navigation. A new Radio Technical Committee Maritime (RTCM)regulation was created for United States internal operators of commercial vessels specifying minimum operation, performance and technical requirements including methods of testing RTCM-compliant ECS for use as a back-up to ECDIS. The United States was currently engaging with multiple agencies, including the United States Coast Guard, to develop the necessary regulation to allow ECS for all vessels subject to national regulations.

For ships not subject to SOLAS (public ships, smaller craft), chart producing agencies should consider how they are regulated. HOs should examine how they could support the move away from paper and encourage the approved use of digital data, including the S-100 framework. HOs should consider the future of digital navigation and the international and national regulatory environment, reviewing their national regulatory situation for all vessels, including those which might be nationally exempted. RHCs might review the regional situation and encourage regulatory agencies to consider the improved safety and utility of digital data.

Member States expressed gratitude for the shared information and agreed that many countries faced a similar situation to that described in the United States. One Member State recommended that all countries should adopt a top-down regulatory solution based on SOLAS.

A member of the **IHO Secretariat** recalled that a similar discussion had taken place some 15 years previously when S-57 (the IHO standard for the exchange of digital hydrographic data used for encoding ENCs) had been introduced. Subsequently, S-66, last updated in 2018, had been a useful

reference in IMO circulars. Definitions of ECDIS and ECS were provided in the standard. As noted at this Council, HSSC had begun a project team on ECS and it would provide recommendations for future action for HOs, Port State control and customers. There was a need to review S-66 and to update it since it was currently out of step with S-100.

One **Member State** explained that its national regulations were governed by regional regulations and directives (concerning the requirement for carriage of ECDIS and other matters) that were issued by the European Union. Performance standards would continue to be updated in step with progress in technology. Obviously, anyone operating ECDIS must have appropriate training. The IMO Instruments Implementation Code (III Code) should also be followed and the relevant Port State control officer must have had the appropriate training to identify whether a ship was in compliance in all respects. All shipping within the European Union must comply with SOLAS but also with EU own regulations and directives or risk being banned from ports within the European Union. European regulations were therefore rigorous. Non-Convention vessels (not in compliance with SOLAS) operated in local waters in some countries as in the United States. However, all passenger ships in the European Union must comply fully with SOLAS. Vessels that did not operate in international waters should be subject to Flag State control, a role carried out in the United States by the United States Coast Guard.

IC-ENC thanked the United States for bringing recognition of a challenging situation on which progress had been slow. IC-ENC had sought to identify international consistency within the small group with which it worked but a myriad of approaches currently existed on sub-ECDIS craft. IC-ENC had begun to bring together a group of some 30 HOs which had signed up to a set of principles and terms and conditions defined in a legal contract for appointing companies which put obligations on the companies to deliver digital services for those type of craft. The situation was not perfect, but evolving, and it was possible to envisage a core of international consistency. IC-ENC, in its capacity as an observer, proposed to report back to C-8 on progress made.

The United States acknowledged the proposal to regulate via SOLAS but believed the difficulty lay in regions where not all vessels had ECDIS. It would be more realistic to allow individual nations to develop their own regulations.

A **Member State**, replying on the question of whether or not SOLAS could be adopted by all administrations, noted that SOLAS required that all vessels that did not have ECDIS must have a paper chart.

United Kingdom encouraged all those interested to join the HSSC ECS project team in order to progress standards; given the introduction of S-100, it was timely that standards should be brought into line with practice. SOLAS required paper charts where ECDIS were not used but, in practice, many vessels used electronic solutions that were not assured.

The Chair thanked United States for having brought attention to the difficult task of introducing regulations. She looked forward to hearing more from the HSSC ECS project team in 2024.

Decision C7/46: The **Council** noted the information paper provided by the **US** on national regulations as well as the useful experience shared by other Member States.

The **Council** encourages **Member States** to participate in the activities of the ENCWG / ECS PT.

10. REVIEW OF ACTIONS AND DECISIONS OF THE MEETING

IHO Assistant Director Guillam went through the identified actions, providing brief comments and explanations for actions and decisions where necessary (see Annex C). He explained the timetable for production of the draft summary report and feedback from participants.

With reference to Decision C7/13 on the timeline for approval of Edition 2.0.0 of the S-100-based Product Specifications, **HSSC Chair** encouraged participants to attend the 16th meeting of HSSC in May 2024 if at all possible, so that they were aware of the status of the project and the issues involved before the approval process began.

With reference to Decision C7/24, on the proposal for a programme on gender balance in hydrography, the **IHO Secretariat** noted that the decision was intended to allow work to begin on the proposal; it did not prejudice any future discussions and decisions about the regulatory framework or the content of the proposed resolution.

11. CLOSURE OF THE MEETING

The Chair thanked all participants for their active participation and commitment during the meeting.

The **Secretary-General** expressed his appreciation and gratitude to the Chair for her very capable management of the meeting. The IHO Secretariat would make full use of the Council's guidance as it continued the work of the new cycle. He commended the IHO Secretariat staff for their hard work, which had enabled the meeting to run smoothly.

The Chair declared the meeting closed.

Annex A

LIST OF REGISTERED PARTICIPANTS

7th Meeting of the IHO Council

Face-to-face, 17-Oct-2023 ~ 19-Oct-2023

	Category	Country	Organization / Company	Name	Status	E-mail	Date
1	IHO Member State	Angola	Agência Marîtima Nacional	Hélder CONCEIÇÃO	Member of delegation	helderufino46.hr@gmail.com	2023-09-27
2	IHO Member State	Angola	Agência Maritima Nacional	José SANTANA	Head of delegation	josesantana.14js.js@gmail.com	2023-09-27
3	IHO Member State	Angola	Agência Marítima Nacional	MANUEL NARCISO	Member of delegation	mnarciso156@gmail.com	2023-09-27
4	IHO Member State	Argentina	SERVICIO DE HIDROGRAFIA NAVAL	Valentin Alejandro SANZ RODRÍGUEZ	Head of delegation	dhidro@hidro.gov.ar	2023-06-27
5	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	2023-08-17
3	IHO Member State	Brazil	DIRETORIA DE HIDROGRAFIA E NAVEGAÇÃO (DHN, Directorate of Hydrography and Navigation)	Carlos ANDRÉ MACEDO	Head of delegation	dhn.intrel@marinha.mil.br	2023-08-17
7	IHO Member State	Canada	CANADIAN HYDROGRAPHIC SERVICE	Annie BIRON	Member of delegation	annie.biron@dfo-mpo.gc.ca	2023-09-19
В	IHO Member State	Canada	CANADIAN HYDROGRAPHIC SERVICE	Manon LAROCQUE	Head of delegation	manon.larocque@dfo-mpo.gc.ca	2023-08-08
9	IHO Member State	Chile	SERVICIO HIDROGRAFICO Y OCEANOGRAFICO DE LA ARMADA	Arturo OXLEY	Head of delegation	shoa@shoa.cl	2023-08-17
10	IHO Member State	China	HYDROGRAPHIC OFFICE OF MARINE DEPARTMENT THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION	Tak-ming KOO	Member of delegation	tmkoo@mardep.gov.hk	2023-09-18
11	IHO Member State	China	MARITIME SAFETY ADMINISTRATION (MSA)	Yuan CAO	Head of delegation	41283509@qq.com	2023-09-07
2	IHO Member State	Croatia	HRVATSKI HIDROGRAFSKI INSTITUT (Hydrographic Institute of the Republic of Croatia)	Vinka KOLIC	Head of delegation	vinka.kolic@hhi.hr	2023-07-10
13	IHO Member State	Cyprus	HEADQUARTERS OF DEPARTMENT OF LANDS AND SURVEYS	GEORGIOS KOKOSIS	Head of delegation	gkokosis@dls.moi.gov.cy	2023-09-15
14	IHO Member State	Denmark	DANISH GEODATA AGENCY - GEODATASTYRELSEN (GST)	Hendrik STANG	Member of delegation	hejus@gst.dk	2023-06-27
15	IHO Member State	Denmark	DANISH GEODATA AGENCY - GEODATASTYRELSEN (GST)	Pia DAHL HØJGAARD	Chair / Vice-Chair	pdh@gst.dk	2023-07-3
16	IHO Member State	Denmark	DANISH GEODATA AGENCY - GEODATASTYRELSEN (GST)	Sophie HOHWÜ-CHRISTENSEN	Member of delegation	sohoh@gst.dk	2023-06-30
17	IHO Member State	Fiji	REPUBLIC OF FIJI NAVY HYDROGRAPHIC OFFICE	Jervis ROBINSON	Member	Director.FHO@fijinavy.org	2023-07-18
18	IHO Member State	Fiji	REPUBLIC OF FIJI NAVY HYDROGRAPHIC OFFICE	Apenisa CAVUILATI	Member of delegation	ben.cavuilati@gmail.com	2023-07-21
19	IHO Member State	Fiji	REPUBLIC OF FIJI NAVY HYDROGRAPHIC OFFICE	Humphrey TAWAKE	Head of delegation	humphrey.tawake@fijinavy.org	2023-07-2
20	IHO Member State	Finland	FINNISH TRANSPORT AND COMMUNICATIONS AGENCY	Rainer MUSTANIEMI	Head of delegation	rainer.mustaniemi@traficom.fi	2023-06-30
21	IHO Member State	France	SERVICE HYDROGRAPHIQUE ET OCEANOGRAPHIQUE DE LA MARINE	Laurent KERLÉGUER	Head of delegation	laurent.kerleguer@shom.fr	2023-05-23
22	IHO Member State	France	SERVICE HYDROGRAPHIQUE ET OCEANOGRAPHIQUE DE LA MARINE	Gabin SOGORB	Member of delegation	gabin.sogorb@shom.fr	2023-05-23
23	IHO Member State	Germany	BUNDESAMT FUR SEESCHIFFFAHRT UND HYDROGRAPHIE	Thomas DEHLING	Head of delegation	thomas.dehling@bsh.de	2023-05-29
24	IHO Member State	Germany	BUNDESAMT FUR SEESCHIFFFAHRT UND HYDROGRAPHIE	Jens SCHRÖDER-FÜRSTENBERG	Member of delegation	Jens.schroeder-fuerstenberg@bsh.de	2023-05-29

No	Category	Country	Organization / Company	Name	Status	E-mail	Date
26	IHO Member State	Greece	HELLENIC NAVY HYDROGRAPHIC SERVICE	Dimitrios EFSTATHIOU	Head of delegation	director_hnhs@navy.mil.gr	2023-08-29
27	IHO Member State	India	NATIONAL HYDROGRAPHIC OFFICE	LOCHAN SINGH PATHANIA	Head of delegation	ia-inho@navy.gov.in	2023-08-10
28	IHO Member State	India	NATIONAL HYDROGRAPHIC OFFICE	PARIKSHIT KUMAR SHAHRAWAT	Member	ia-inho@navy.gov.in	2023-08-10
29	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	MOH. QISTHI AMARONA	Member of delegation	Infohid@pushidrosal.id	2023-09-15
30	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	NURHIDAYAT NURHIDAYAT	Head of delegation	Infohid@pushidrosal.id	2023-09-15
31	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	RENNY LILIK ASMORO	Member of delegation	Infohid@pushidrosal.id	2023-09-15
32	IHO Member State	Indonesia	HYDROGRAPHY AND OCEANOGRAPHY CENTRE, INDONESIA NAVY (Pushidrosal)	LALU KURNIA DARMAWAN	Member of delegation	Infohid@pushidrosal.id	2023-09-15
33	IHO Member State	Italy	ISTITUTO IDROGRAFICO DELLA MARINA (Italian Hydrographic Institute)	Erik BISCOTTI	Member of delegation	erikd.biscotti@marina.difesa.it	2023-09-11
34	IHO Member State	Italy	ISTITUTO IDROGRAFICO DELLA MARINA (Italian Hydrographic Institute)	Massimiliano NANNINI	Head of delegation	massimiliano.nannini@marina.difesa.it	2023-09-11
35	IHO Member State	Jamaica	National Land Agency	Diego BILLINGS	Head of delegation	diego.billings@nla.gov.jm	2023-09-13
36	IHO Member State	Japan	HYDROGRAPHIC AND OCEANOGRAPHIC DEPARTMENT	Masayuki FUJITA	Chair / Vice-Chair	iao@jhod.go.jp	2023-08-29
37	IHO Member State	Japan	HYDROGRAPHIC AND OCEANOGRAPHIC DEPARTMENT	Kentaro KANEDA	Member of delegation	iao@jhod.go.jp	2023-08-29
38	IHO Member State	Malaysia	NATIONAL HYDROGRAPHIC CENTRE	Lukman Hanafiah AZAMAR OMAR	Head of delegation	lukman@navy.mil.my	2023-09-21
39	IHO Member State	Malaysia	NATIONAL HYDROGRAPHIC CENTRE	Siong Hui LIM	Member of delegation	limsionghui@navy.mil.my	2023-09-21
40	IHO Member State	Malta	HYDROGRAPHIC OFFICE, PORTS AND YACHTING DIRECTORATE, TRANSPORT MALTA	MARK ANTHONY CHAPELLE	Member	mark.chapelle@transport.gov.mt	2023-08-17
41	IHO Member State	Monaco	DIRECTION DES AFFAIRES MARITIMES	Pierre BOUCHET	Head of delegation	pbouchet@gouv.mc	2023-09-16
42	IHO Member State	Netherlands	HYDROGRAPHIC SERVICE - ROYAL NETHERLANDS NAVY	Toine BARTEN	Head of delegation	wa.barten@mindef.nl	2023-07-27
43	IHO Member State	Netherlands	HYDROGRAPHIC SERVICE - ROYAL NETHERLANDS NAVY	Leendert DORST	Member of delegation	LL.Dorst@mindef.nl	2023-07-27
44	IHO Member State	New Zealand	LAND INFORMATION NEW ZEALAND (LINZ)	Adam GREENLAND	Head of delegation	agreenland@linz.govt.nz	2023-07-10
45	IHO Member State	Norway	Norwegian Mapping Authority	Birte Noer BORREVIK	Head of delegation	borbir@kartverket.no	2023-05-29
46	IHO Member State	Norway	Norwegian Mapping Authority	Evert FLIER	Member of delegation	evert.flier@kartverket.no	2023-05-29
47	IHO Member State	Portugal	INSTITUTO HIDROGRAFICO	João MARREIROS	Head of delegation	ramalho.marreiros@hidrografico.pt	2023-07-10
48	IHO Member State	Portugal	INSTITUTO HIDROGRAFICO	Paula SANCHES	Member of delegation	paula.sanches@hidrografico.pt	2023-09-11
49	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	Kwanchang LIM	Head of delegation	kclim00@korea.kr	2023-09-14
50	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	lji KIM	Member of delegation	izzykim@korea.kr	2023-09-14
51	IHO Member State	Republic of Korea	KOREA HYDROGRAPHIC AND OCEANOGRAPHIC AGENCY (KHOA)	Eok Dong KIM	Member of delegation	qksel1501@korea.kr	2023-09-14
52	IHO Member State	Republic of Korea	Ministry of Foreign Affairs	KEUNHWA KANG	Member of	khkang22@mofa.go.kr	2023-09-15

No	Category	Country	Organization / Company	Name	Status	E-mail	Date
					delegation		
53	IHO Member State	Saudi Arabia	GENERAL AUTHORITY FOR SURVEY AND GEOSPATIAL INFORMATION (GASGI)	Salem Salman ALGHZWANI	Member	s.alghzwani@geosa.gov.sa	2023-09-10
54	IHO Member State	Saudi Arabia	GENERAL AUTHORITY FOR SURVEY AND GEOSPATIAL INFORMATION (GASGI)	Saud Homod ALRUWAYS	Head of delegation	s.alruways@geosa.gov.sa	2023-09-10
55	IHO Member State	Singapore	MARITIME AND PORT AUTHORITY OF SINGAPORE (MPA)	Jia Rui Gary CHEW	Member	gary_chew@mpa.gov.sg	2023-09-15
56	IHO Member State	Singapore	MARITIME AND PORT AUTHORITY OF SINGAPORE (MPA)	Ying-Huang THAI LOW	Member	Thai_Low_Ying-Huang@mpa.gov.sg	2023-09-15
57	IHO Member State	Spain	INSTITUTO HIDROGRAFICO DE LA MARINA (IHM)	Rebeca COPÉ DE LOS MOZOS	Observer	rcopdel@fn.mde.es	2023-09-13
58	IHO Member State	Sweden	SJOFARTSVERKET (SWEDISH MARITIME ADMINISTRATION)	Magnus HOVBERG	Member of delegation	magnus.hovberg@sjofartsverket.se	2023-08-29
59	IHO Member State	Sweden	SJOFARTSVERKET (SWEDISH MARITIME ADMINISTRATION)	Magnus WALLHAGEN	Head of delegation	magnus.wallhagen@sjofartsverket.se	2023-06-21
60	IHO Member State	Thailand	HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY	Taywan SUKKASEM	Member of delegation	hydrotechhdrtn@gmail.com	2023-08-25
61	IHO Member State	Thailand	HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY	CHAIRIT KIRDPOL	Head of delegation	hydrotechhdrtn@gmail.com	2023-08-25
62	IHO Member State	United Kingdom of Great Britain and Northern Ireland	UNITED KINGDOM HYDROGRAPHIC OFFICE	Helena PATTON	Member	helena.patton@ukho.gov.uk	2023-07-15
63	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	2023-06-21
64	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	2023-07-15
65	IHO Member State	United States of America	NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA)	John LOWELL	Head of delegation	john.e.lowell@nga.mil	2023-08-08
66	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	2023-08-28
67	IHO Member State	United States of America	National Oceanographic and Atmospheric Administration (NOAA)	Benjamin EVANS	Member of delegation	benjamin.k.evans@noaa.gov	2023-08-29
68	IHO Member State	United States of America	NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA)	Keith DOMINIC	Member of delegation	Keith.E.Dominic@nga.mil	2023-08-29
69	IHO Secretariat		International Hydrographic Organization	Luigi SINAPI	Secretary	luigi.sinapi@iho.int	2023-07-19
70	IHO Secretariat		International Hydrographic Organization	Yves GUILLAM	Staff	yves.guillam@iho.int	2023-05-18
71	IHO Secretariat	-	International Hydrographic Organization	Mathias JONAS	Secretary	mathias.jonas@iho.int	2023-06-21
72	IHO Secretariat	-	International Hydrographic Organization	John NYBERG	Staff	john.nyberg@lho.int	2023-09-10
73	IHO Secretariat		International Hydrographic Organization	Yong BAEK	Staff	yong.baek@iho.int	2023-08-31
74	Other Organization		IC-ENC	James HARPER	Observer	james.harper@ic-enc.org	2023-09-18
75	Other Organization		PRIMAR	Hans Christoffer LAURITZEN	Observer	lauhan@kartverket.no	2023-09-18
75		*	PRIMAR	Hans Christoffer LAURITZEN	Observer	lauhan@kartverket.no	-

Annex B

7TH MEETING OF THE IHO COUNCIL IHO Secretariat, Monaco, 17 – 19 October 2023

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 Red Book.
- 1.3 Formal establishment of the new Council, confirmation of the election of the Chair and Vice-Chair.
- 1.4 Chair's Opening Remarks.
- 1.5 Administrative Arrangements.

2. ITEMS REQUESTED BY THE 3RD IHO ASSEMBLY

- 2.1 Review of the List of Assembly Decisions affecting the Council and discussion on the way forward and effective implementation.
- 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))].

3. ITEMS REQUESTED BY THE IHO COUNCIL

3.1 Review of the status of Decisions and Actions from C-6.

4. ITEMS REQUESTED BY SUBSIDIARY ORGANS

- 4.1 Report and proposals from HSSC.
 - Annex A: Draft Revision of Annex 2 to the Roadmap.
 - Annex B: Proposed amendments to the HSSC TORs and ROPs.
- 4.2 Report and proposals from IRCC.
 - Annex A: Empowering Women in Hydrography: From Project to Program.
 - Annex B: Scoping Team for Fund Generation of IHO' Project Initiatives PT.
- 4.3 Left blank intentionally
- 4.4 A. Proposed version v3.0 of the Roadmap for the S-100 Implementation Decade.
 - B.Comment (FR) on Annex 2 (fig. 4) of the Roadmap (Doc. C7-04.4A refers): Updated proposal on options for the future production of S-101 ENC in conjunction with S-57 ENC during the dual fuel period.

4.5 Update on the Joint IHO-Singapore Laboratory – Proposals from the Council to the Governing Board.

5. IHO ANNUAL WORK PROGRAMME AND BUDGET

- 5.1 Review of the Current Financial Status of the IHO.
- 5.2 Proposed IHO Work Programme for 2024.
- 5.3 Proposed IHO Budget for 2024.

6. IHO STRATEGIC PLAN

- 6.1 Strategic Plan 2021-2026 and Decisions A3/08 (a) to (d).
 - Status report on the Strategic Performance Indicators.
 - Secretariat's assessment on the implementation of the Strategic Plan (Work Programme 1).
- 6.2 Initial discussion and way forward (C-9 countdown) for the preparation of a Revised Strategic Plan in preparation of A-4 in 2026 (Decision A3/08 (e)).

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

- 7.1 A.Increased participation on IHO bodies activities Proposal (Secretary-General) for discussion of the situation and follow up activities (Decision A3/21 refers).
 - B. Proposal (AU, NZ, GB): Making IHO Events More Inclusive.
- 7.2 Further digitalization of Secretariat's operation Development and introduction of improved registration and information sharing.
- 7.3 Implementation of a new global MSDI layer dedicated to Marine Protected Areas (MPA)
 Proposal (IHO Secretariat) for discussion of the situation and follow up activities.

8. **NEXT MEETING**

8.1 Dates and venue for the 8th meeting of the IHO Council (15 - 17 October 2024, Monaco) (*location and dates to be confirmed*).

9. ANY OTHER BUSINESS

9.1 Information Paper (US): Navigation regulatory considerations for Hydrographic Organizations.

10. REVIEW OF ACTIONS AND DECISIONS OF THE MEETING

11. CLOSURE OF THE MEETING

Annex C

LIST OF DECISIONS and ACTIONS FROM C-7

AGE!		SUBJECT	DECISION or ACTION	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct.
1.	OPI	ENING	No.			2023)
1.1			ening remarks and i	ntroductions		
1.1	Seci	ctary-ocherar op	C7/01	The Council welcomed the opening address from the Secretary-General, who reminded the responsibilities of the Council iaw ROPs, the balance in representation for this 3 rd Council in the IHO cycle (continent, tonnage, technical capacity) and finally the objectives of Council meetings.		
1.2	Ado	ntian of the agend				
1.2	Ado	ption of the agend Agenda	C7/02	The Council adopted the agenda and the timetable as proposed, and noted the availability of the C-7 Red Book. The Council agreed to consider the information paper (Doc. C7-09.1 INF) at the end of the meeting under AOB, time permitting.		Decision
1.3	For			nfirmation of the Election of Chair	and Vice-Chair	
		Council Establishment – Chair and Vice- Chair	C7/03	Noting Decisions A3/31 and /32 and Council Circular Letter CCL 03/2023, the 3 rd Council of the IHO (2023-2026) was formally established, with Ms Pia Dahl Højgaard (DK) as Chair, and Dr Masayuki Fujita (JP), as Vice-Chair.		Decision
1.4		ir's Opening Rem				
1.1,	1.4	Opening	C7/04	Council Members welcomed the opening addresses by Council Chair and agreed on the participation of RENCs/RECC representatives (IC-ENC, PRIMAR, and EACC) as Observers.		Decision

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
1.5 Adn	 ninistrative Arran	gements			
	Contact List	C7/05	IHO Member States having a seat at the Council to provide the IHO Secretariat with their updates to the IHO Council List of Contacts.	Permanent	
2. ITE	MS REQUESTEI	BY THE 3rd IHO	ASSEMBLY	<u>'</u>	
	iew of the List of A	Assembly Decisions a	ffecting the Council and discussion	on the way forwa	rd and
2.1	A-3 Decisions	C7/06	Based on the presentation from the Secretary-General, the Council agreed on the list of decisions from A-3 to be considered by the Council under the relevant agenda items of the meeting, as well as on the proposed way forward.		Decision
	nulative List of A- 20 (c), A3/21, A3/2		the Council (Decisions A3/05, A3/0	08 (a) to (e), A3/13,	, A3/14,
			Left blank intentionally		
3. ITE	MS REOUESTEI	BY THE IHO COU	NCIL		
			ns from C-6 (pending actions)		
	National S-100 Committees	C7/07 (former C6/67)	The Council welcomed the update from the UK on the concept of a national committee on S-100 [See Red Book] and noted the expected benefits of such approach. The Council invited Member States to share their national strategies with regard to the establishment of similar national S-100 committees, as appropriate.	C-8 (- 3 months)	Ongoing
4. ITE	MS REOUESTEI	O BY SUBSIDIARY (ORCANS		
	ort and proposals		ONUMB		
4.1	Report of HSSC	C7/08	The Council noted the report and commended the HSSC , its Working Groups and supporting organizations for the achievements since C-6.		Decision

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
4.1	S-100 Infrastructure and Standards Development	C7/09	In accordance with Decision A3/08(b), the Council 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.		Decision
4.1	S-100 Infrastructure and Standards Development	C7/10	In parallel of the establishment of the S-100 Infrastructure Centre, the Council tasked the HSSC to identify at their next meeting the current or emerging components that are critical in the implementation of the S-100 Roadmap that could candidate for being funded by the IHO (project based in the short term on one hand, longer term operational mode for standards maintenance on the other hand).	HSSC-16 (- 7 weeks), then C- 8 (- 3 months)	
4.1	Establishment of new PTs	C7/11	The Council noted the establishment, under HSSC, of: - the S-100 Infrastructure Centre Establishment PT - the S-100 Security Scheme PT as well as the establishment of the ECS PT under the ENCWG.		
4.1	S-100 ICE PT	C7/12	Following the update provided by the HSSC Chair on the work plan of the S-100 ICE PT, the Council invited HSSC Members, then IHO Member States to provide their views on the recommendations delivered by the PT, as soon as they become available and no later than HSSC-16.	HSSC-16 (- 7 weeks)	

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
4.1	S-100 Operational Implementation Countdown	C7/13	In order to meet the IMO timelines for S-100 ECDIS transition, the Council agreed that an IHO CL should be issued to inform IHO Member States of the schedule for preparation, by early November 2024, for the beginning of the approval phase of Edition 2.0.0 of S-100-based Product Specifications (Phase 1 / Route Monitoring as a 1st step).		Decision
4.1	S-100 Operational Implementation Countdown	C7/14	IHO Secretariat to implement Decision C7/13 above. Calendar to be updated after HSSC-16, in May 2024 (HSSC Chair in preparation of C-8).	December 2023 C-8 (- 3 months)	
4.1	S-130	C7/15	Noting the clarifications and views provided by the Secretary-General , the Council 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. HSSC Chair to provide an update at the next meeting.	HSSC-16/C-8 (- 3 months)	Decision
4.1	Champion of Hydrography Award	C7/16	While noting the existing IHO Resolution 2/2014 as amended – Prince Albert the 1 st Medal for Hydrography, the Council endorsed the proposal from HSSC and IRCC for an annual Champion of Hydrography Award and agreed upon the proposed way forward.	(Displayed	Decision

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
4.1	Champion of Hydrography Award	C7/17	HSSC and IRCC Chairs supported by IHO Secretariat, to prepare a proposed IHO Resolution for the Champion of Hydrography Award, to be awarded on an annual basis. Once finalized, IHO Secretariat to issue an IHO CL seeking the approval of IHO Member States on the proposed IHO Resolution.	February 2024 March 2024	
4.1	HSSC TORs and ROPs	C7/18	With the aim to include the RENCs representation at the HSSC Meetings, the Council endorsed the proposed amendments to the HSSC TORs and ROPs.		Decision
	HSSC&IRCC Reports and Proposals to C- 6	C7/19 (same as former C6/20,and C1/06)	Considering the timelines between HSSC-16 and IRCC-16 meetings in 2024 and the countdown for submission of reports and proposals to C-8, the Council invited HSSC and IRCC Chairs to prepare their 2024 meeting minutes with the view that it will be used/submitted directly as reports and proposals to be considered at C-8.	C-8 (- 3 months)	
4.2 Rep	ort and proposals	from IRCC			
4.2	Report of IRCC	C7/20	The Council noted the report and commended the IRCC, the RHCs, and IRCC Sub-Committees for their achievements since C-6.		Decision
4.2	A-3 Decisions	C7/21	The Council noted the IRCC (and subordinated bodies) action plan to follow-up on A-3 decisions and invited IRCC to report on their progress on an annual basis.	C-8 (- 3 months)	

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
4.2	A-3 Decisions	C7/22	Following up on Decision A3/20b, the Council noted the outcome of a scoping team and endorsed the recommendations from the IRCC to establish a Project Team on <i>Fund</i> Generation of IHO' Project Initiatives under the IRCC. IHO Secretariat to issue a CL on the establishment of the IHO FG PT ⁹ , as soon as the draft TORs and ROPs are finalized by correspondence within the IRCC.	December 2023	Decision
4.2	GIS thematic layers	C7/23	In accordance with Decision A3/8c, the Council noted that IRCC tasked the MSDIWG to not 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 INToGIS).		

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 $^{^9}$ Note from the Secretariat: compliance with M-3 Resolutions, IHO Resolution $1/2014 - Guiding \ Principles \ for \ IHO \ Funds$, in particular, to be ensured.

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
4.2	Gender Balance in Hydrography	C7/24	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 suggested by the Secretary-General. As a consequence: d. The Council tasked the IRCC, to first define through the CBSC the regulatory framework (M-3) for a continued activity on this social theme through a proposal for an IHO Resolution; e. 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, NO, DK, US, but still to be confirmed. f. The Council supported by IRCC to develop a proposal on the future framework for an IHO social Programme (incl. Gender Balance in Hydrography) to be submitted to A-4.	C-9 (- 3 months) in preparation of A-4	Decision

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
4.2	IBSC and CSBWG	C7/25	The Council welcomed the proposal from the IRCC supported by the IHO Secretariat to plan two workshops as follows: - one on Standards of Competence (IBSC) matters, to provide clarifications for the institutions on the preparation of submissions to the Board; - one on Crowd Sourced Bathymetry (CSBWG), on the benefit of crowd sourced bathymetry and how to expand data contribution.	1 st semester 2024 1 st semester 2024	Decision
4.3 Upd	late on the Dual-F	uel Concept (transiti	on from S-57 to S-101 ENCs)		
			Covered under agenda 4.1 (See HSSC Report to C-7.		
4.4 Proj	posed version 3.0 (of the Roadmap for t	he S-100 Implementation Decade		
	S-100 Implementation Strategy – Roadmap Annex 1	C7/26	The Council approved the proposed amendments to the S-100 Implementation Roadmap in order to issue version 3.0 dated October 2023, presented by HSSC Chair. This new version includes amendments submitted (Docs C7-04.4A&4.4B): - by the Secretary-General to the main text taking into account in particular the IMO MSC106 decision on the S-100 ECDIS transition plan; - by the HSSC Chair to Annex 2, and by France for figure 4 in Annex 2.		Decision
	Roadmap for S- 100 Implementation Decade	C7/27	IHO Secretariat to make available the finalized version 3.0 of the Roadmap.	30 November 2023	

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
	S-100 Implementation Strategy	C7/28 (former C6/37,, C3/13)	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 an annual basis.	Permanent	
	ate on the Joint II ling Board (Decision		ation and Technology Laboratory -	- Proposals from t	he Council to
	IHO-Singapore Innovation and Technology Laboratory	C7/29	The Council noted the update on the Joint IHO-Singapore Innovation and Technology Laboratory and noted the progress made on the following projects: - S-131Marine Harbour Infrastructure Database (MHID) - Development of S-57 to S- 101 Conversion Guidance Document - Creation and Test-Bedding of ECDIS capable of displaying S-102 (Phase 1) and S-104 (Phase 2) on S-101 ENCs and the completion of the Proof of Concept Project: IHO-IALA Collaboration to Demonstrate Interoperability of S-101, S-124 and S-125 at sea using wireless updating via 4G/5G Telecommunications links.		
	IHO-Singapore Innovation and Technology Laboratory	C7/30 (former C6/43)	The Council endorsed the recommendation from the Governing Board of the Lab encouraging more stakeholders to identify collaborative projects, especially with other organisations and industry partners.		
		K PROGRAMME A			
5.1 Rev	iew of the Current	t Financial Status of t	the IHO		

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)	
	Financial Reporting Statement	C7/31	The Council noted the information provided on the current financial status as of September 2023.		Decision	
5.2 Pro	nosed IHO Work	Programme for 2024				
3.2 110	Proposed IHO WP for 2024	C7/32	The Council approved the IHO Work Programme for 2024, as presented by the Secretary-General, and noted the internal IHO Secretariat's arrangements for a change of the Principal Director and Principal Manager for ABLOS and MSDIWG.		Decision	
	World Hydrography Day	C7/33	The Council noted the proposed theme for the 2024 World Hydrography Day by the Secretary-General which is "Hydrographic Information - Enhancing Safety and Efficiency in Marine Activities" IHO Secretariat to circulate the theme for 2024 to the IHO MS by IHO CL.	End of October 2023	Decision	
5.3 Pro	posed IHO Budget	for 2024				
110	2024 IHO Budget	C7/34	In application of Decisions A3/26 to /28, the Council approved the proposed budget for 2024 provided by the Secretary-General, including the proposed adaptations.		Decision	
	STRATEGIC PI Strategic Plan = 1		08d - Strategic Performance Indica	ntors Undate		
6.1	Strategic Flan – Status on the Strategic Plan - SPIs	C7/35	The Council noted the dashboard (target 2026, WP2 and WP3 SPIs value as of 31 Dec. 2022) allocated to the Secretariat, HSSC and IRCC (IHO Annual Report 2022, Annex B (pages 153 to 167) refer) and its update for WP1 as of 1 Oct 2023.	iors opuate	Decision	
6.2 Initial Discussion and Way Forward for the preparation of a Revised Strategic Plan in preparation of A-4 (C-9 countdown)						

AGENDA	SUBJECT	DECISION or	DECISION or ACTIONS	TARGET	STATUS
ITEM		ACTION	(in bold, action by)	DATE/EVENT	(at Oct.
		No.			2023)
	Preparation of	C7/36	The Council acknowledged that		Decision
	A-4 (IHO		the current structure of the		
	Strategic Plan)		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 revision of the		
			current SP.		
	Preparation of	C7/37	The Council tasked the HSSC		
	A-4 (IHO		and IRCC to provide their inputs		
	Strategic Plan)		on the possible axis of evolution		
			of the existing SP in preparation	C-8 (- 3	
			of the <i>revision</i> phase (2024-2025)	months)	
			of the current SP.		
6.2	Preparation of	C7/38	The Council welcomed the offer		
	A-4 (IHO		from the Council Vice-Chair,,		
	Strategic Plan)		to lead a correspondence group		
			consisting of NO, SE, GB, US,		
			DE, DK, JP, BR, NZ, FR and		
			HR on the ways and means ¹⁰ to		
			prepare the next IHO Strategic	C-8	
			Plan 2027-2032.	(- 3 months)	
		POSED BY A MEM on on IHO Bodies Ac	IBER STATE OR BY THE SECRE	CTARY-GENERA	L
, ti inci	IHO events	C7/39	Noting the comments made in		Decision
	more inclusive	01/37	session and collated in the Red		200151011
	more merusive		Book, the Council agreed to		
			prepare an IHO Resolution on		
			Guidelines for Making IHO		
			Events More Inclusive based on		
			the recommendations made by		
			the Secretary-General (Doc. C7-		
			07.1A, paragraph 37) and		
			preliminary analysis from AU ,		
			NZ and GB, available in Doc.		
			C7-07.1B).		
	l .	<u>L</u>	[0. 0/.IB).	<u>L</u>	

 $^{^{10}}$ Proposal on the scope, TORs of a Strategic Plan Review Working Group if any, to be submitted to C-8 for approval and implementation

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
	IHO events more inclusive	C7/40	The Council endorsed the principle of considering an initial proposal for a IHO Resolution <i>Guidelines for Making IHO</i> Events More Inclusive (title to be confirmed) to be prepared by an ad hoc drafting group (AU, CL, FJ, NZ ¹¹ , SG, GB, US)	31 January 2024	
			The Council tasked the ad hoc drafting group (respectively IRCC) to conduct a survey ¹² on behalf of the Council to assess the feasibility, preference and willingness of MS, WGs, Committees Chairs (respectively RHCs), to host and attend meeting in the four different modalities (in-person, in-person with live streaming, hybrid, or full VTC).	31 January 2024	
			Once the outcome of the survey are compiled by the ad hoc drafting group, IHO Secretariat to refine the draft proposed IHO Resolution in liaison with the ad hoc drafting group if appropriate, and submit it to IHO Member States for approval.	31 March 2024 (deadline 31 May 2024)	
		C7/41	Left blank intentionally		

7.2 Further digitalization of Secretariat's operation - Development and introduction of improved registration and information sharing

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¹² Clear definitions of categories of meetings arrangements to be provided as part of the survey.

AGENDA ITEM	SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)
		C7/42	The Council endorsed the IHO Secretariat's ambitions to further digitalize the services rendered to IHO Member States and welcomed the offer made to IHO MS who would like to be involved in the different testing and acceptance phases of the new IHO Portal (POC: addt@iho.int)).	from December 2023	Decision
			The Council noted the potential participation in the testing phase of BR , DK , FR , ID , JP , NO , SE , UK , and the US .		
_		y global MSDI layer on and follow up active	ledicated to Marine Protected Are	as (MPA) - Propos	sal for
uncus.	MPA	C7/43	The Council noted the valid concerns raised by some Members during discussion and in the Red Book on the proposal to engage the IHO in the development of a new global MSDI MPA layer but did not reach a consensus for the MPA concept approach proposed by the Secretariat.		Decision
	MPA	C7/44	Following on clarification on the objectives provided by the Secretary-General, including updates from the last NIPWG-10 meeting on S-122 development, the Council agreed on the strategic need to promote the S-100 Concept with a quick-win through S-122. The Council tasked the IHO Secretariat to establish liaison with relevant data providers of MPAs and tasked the IRCC through the MSDIWG 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.	C-8	Decision
8. NEX	T MEETING				

AGE		SUBJECT	DECISION or ACTION No.	DECISION or ACTIONS (in bold, action by)	TARGET DATE/EVENT	STATUS (at Oct. 2023)		
8.1	1 Dates and venue for the 8 th Meeting of the IHO Council							
		C-8	C7/45	The Council agreed to hold C-8 in Monaco, at the IHO Secretariat, from 15 to 17 Oct. 2024 (full in-person meeting, live streaming on request).	Go / no-go decision 15 June 2024	Decision		
9.	ANY	Y OTHER BUSIN	ESS					
9.1	Info	rmation Paper (U	S): Navigation regula	ntory considerations for Hydrograp	phic Organizations	S		
		C-8	C7/46	The Council noted the information paper provided by the US on national regulations as well as the useful experience shared by other Member States. The Council encourages MS to participate in the activities of the ENCWG / ECS PT.				
10								
10.	10. REVIEW OF ACTIONS AND DECISIONS OF THE MEETING							
4.4								
11.	CL	OSURE OF THE	MEETING					