

REPORTS ON THE WORK OF THE IHO FOR THE PERIOD

2021 - 2023

WORK PROGRAMME I

Corporate Affairs

WORK PROGRAMME 1

CORPORATE AFFAIRS

Programme 1 covers the provision of the services provided by the Secretariat of the IHO and, through the Secretary-General and the Directors, the management and fostering of relations with intergovernmental and other international organizations. Work Programme 1 is directed primarily by the Secretary-General. It is integral to the achievement of all the Strategic Directions; some directly, others indirectly.

Element 1.1	Co-operation with International Organizations and participation in relevant meetings
Element 1.2	Information Management
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Element 1.4	Work Programme & Budget, Strategic Plan and Performance Monitoring
Element 1.5	Secretariat Services
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Element 1.1 Co-operation with International Organizations and participation in relevant meetings

Introduction

- 1. This element covers liaison and cooperation between the IHO and other international organizations particularly those with which the IHO has a formal relationship or agreement, such as sister intergovernmental organizations and other international organizations with interests in hydrography and marine geospatial information and services. A full list of visits and details of participation in meetings has been provided in the monthly brief meeting reports and the Annual Report of the IHO. The IHO was represented in most cases by Secretary-General, a Director or an Assistant Director. In several cases, representatives from Member States also participated in the same meetings representing their own countries in support of IHO themes.
- 2. Notable highlights resulting from cooperation with relevant organizations during the period of this report are described hereinafter. All activities presented here should be understood in the context of the limiting constraints in all international collaborative activities induced by the COVID pandemic.

Maintain relationships with the Government of Monaco and the diplomatic corps accredited in Monaco

- 3. Communications with the Government of Monaco, in particular the Department of External Relations and Cooperation, was regular and productive throughout the reporting period. Thanks to the established collaboration procedures the accession of five new Member States was successfully managed during the reporting period, namely Lebanon, Kenya, Iraq, Angola and Albania. The Democratic Republic of Congo and Republic of Vanuatu were reinstated as full members.
- 4. After twenty-five years presence of the Secretariat at the quai Antoine Ier, the Government of Monaco has generously sponsored a full refurbishment of the Secretariat's lower entrance and the lobby. The new interior design presents a fresh and modern ambience and complies with the colours of IHO's corporate design.
- 5. The highlight of this inter-Assembly period was undoubtedly the peak event of the celebrations of the 100th anniversary of the creation of the IHO on the 21st of June 2021. The Secretariat gained excellent support from all affected bodies of the local government for the smooth conduct of all those activities.
- 6. Her Excellency Madame Isabelle Picco, Permanent Representative of the Government of Monaco to the United Nations provided particularly good support in assisting the Secretary-General during his attendance at meetings in the UN Headquarters.

Maintain relationship with the Antarctic Treaty Consultative Meeting (ATCM)

- 7. The IHO is an invited expert to the Antarctic Treaty Consultative Meeting (ATCM) which is a permanent diplomatic meeting that meets annually to consider measures, decisions, and resolutions to give effect to the principles of the Antarctic Treaty and the Environment Protocol and to provide regulations and guidelines for the management of the Antarctic Treaty area. The IHO was represented at all meetings during the reporting period.
- 8. In 2019 the ATCM updated it's resolution on Hydrographic Mapping of Antarctic Waters. The Resolution provided a clear message to give priority to reviewing existing bathymetric data holdings and collecting new bathymetric data in the Antarctic region by encouraging

their national programme vessels and other vessels including non-governmental vessels, as appropriate, to:

- Review existing bathymetric data holdings for inclusion, either directly or through their national hydrographic office, in the IHO DCDB
- Undertake hydrographic and bathymetric data collection on all their Antarctic voyages, as practicable.
- Utilize IHO guidelines where appropriate, including the IHO *Publication B-12 Crowdsourced Bathymetry Guidance Document.*
- Share all data collected with the IHO Data Center for Digital Bathymetry, either directly or through their national hydrographic office.
- 9. The resolution also encourages cooperation between national research institutions and mapping institutions/authorities on hydrographic surveying and charting in the Antarctic region, to ensure the use of basic hydrographic survey guidelines, in order to secure the highest value of collected data for the widest possible (re)use and to recommend Parties to endeavor to find additional resources for improving hydrographic surveying and charting in the Antarctic region. Since this fully meets the intention of the Hydrographic Commission of Antarctica this body strives to meet back-to-back with ATCM Conferences as undertaken in Berlin in May 2022 to reestablish some traditional partnership links paused because of the COVID constraints.

Maintain relationship with the Comité International Radio Maritime (CIRM)

- 10. A CIRM Workshop on S-100 and the future of ECDIS was held online on in April 2021. Sixty-nine individuals participated in the Workshop, comprising CIRM and IHO members and representatives from external organizations having an active interest in the implementation of S-100. The purpose of the Workshop was to bring CIRM members and external stakeholders together in order to discuss all technical aspects related to the introduction of support for S-100 in ECDIS, and the objective was to identify and shed light on some of the associated unknowns. Four individual discussion sessions were held, each moderated by a subject matter expert from the IHO's standards development community. Every session featured wide-ranging discussion, with considerable interaction between the speakers and general participants, and between CIRM members and non-members, covering all aspects of the implementation of S-100 including:
 - the timescales associated with S-101 ENC coverage and their use in ECDIS;
 - the nature and scope of changes to standards including MSC.232(82) and IEC 61174;
 - dynamic adjustment of chart data using non-ENC S-100 based product specifications;
 - the potential impact of S-100 on user training, ECDIS hardware and data usage;
 - the definition of SENC & the role of SENC Delivery in S-100 ECDIS;
 - the capabilities of the "dual-fuel" concept for S-100 ECDIS; and
 - the possibility of encountering S-101 "anomalies.
- 11. CIRM was represented in the IHO drafting group that produced the draft amendments to the ECDIS Performance Standards (MSC232(82)) and joined the IHO as a co-sponsor in the submission to IMO in June 2022.

Maintain relationship with European Union Initiatives (such as INSPIRE and EMODnet)

- 12. On 6 May 2022, the European Commission and the International Hydrographic Organization (IHO) celebrated the tenth Anniversary of the Memorandum of Understanding between the two Organizations at the headquarters of the European Union's DG Mare. The event was attended by the European Commissioner for environment, oceans and fisheries Mr Virginijus Sinkevičius and representatives of the Directorates General of the European Union, whilst for the IHO, Director Luigi Sinapi and representatives of twelve European Hydrographic Offices were present. Participants underlined the results achieved in 10 years of fruitful cooperation between the two Organizations, thanks to the commitment of the European Hydrographic Offices and the IHO-EU Network Working Group, as well as the impact of the EU initiatives in the field of Hydrography. The IENWG which was initiated for the implementation of the MoU, identifies EU activities and processes on matters of interest to Hydrographic Offices (HOs).
- 13. Relations with the EU progressed well during the reporting period, in particular through the development of the Coastal Mapping Project in relation with the bathymetry portal of the European Marine Observation and Data Network (EMODnet) which has become the principal source of bathymetric data of European sea basins incorporated into the global GEBCO grid.
- 14. Another positive example for collaboration was on the One Ocean Summit under French EU Council Presidency in February 2022. The Secretary-General was participating in the panel discussion: Critical Ocean Knowledge Needs for Sustainable Ocean Management.

Maintain relationship with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)

- 15. The IALA has started the process to become an Intergovernmental Organization similar to the IHO, and while waiting for the minimum number of ratifications by states to be reached has decisively intensified its collaboration with the IHO, through two main directions: Capacity Building and the development of S-2xx products based on IHO's S-100 Universal Hydrographic Data Model under its own stewardship.
- 16. IALA is pursuing the development of S-2xx products related to Aids to Navigation (AtoN), Vessel Traffic Services (VTS), Positioning Systems, Communication Systems, AIS, ASM and VDES. A mention deserves the S-201, which represents the standardized method of exchanging information on AtoN between lighthouse, authorities, hydrographic offices, and related organizations. The product contains the positions, properties, operational status and general comments related to an AtoN.
- 17. In the Capacity Building sector, cooperation was marked by participation in numerous meetings of the IHO's Regional Hydrographic Commissions and the planning and conducting of joint technical visits to those countries that need more support in the development of hydrographic capacity and in the Aids to Navigation sectors.

Maintain relationship with the International Electrotechnical Commission (IEC)

18. IEC/TC80 prepare standards for maritime navigation and radiocommunication equipment and systems making use of electrotechnical, electronic, electroacoustic, electro-optical and data processing techniques. TC80 standards are widely used by Administrations for type approval of equipment which is a regulatory requirement under the IMO International Convention for the Safety of Life at Sea (SOLAS). The International Hydrographic Organization (IHO) is a Liaison member of IEC/TC80 and participates in its standards development and maintenance Working Groups.

- 19. In TC80 the MT7 is responsible to maintain the IEC 61174 test standard for ECDIS. This standard is based on IMO resolution MSC 232(82) and related IHO ECDIS standards S-52, S-57, S-63 and S-64. The current 4th edition of IEC 61174 was published in Aug 2015. The Plenary concluded that there was ample reason to consider a revision of IEC 61174 and considering the timelines, and such work commenced by July 2022 noting the endorsement of the Amended ECDIS Performance Standards at the 9th session of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) meeting in June 2022.
- 20. IEC was represented in the IHO drafting group that produced the draft amendments to the ECDIS Performance Standards (MSC232(82)).

Maintain relationship with the International Maritime Organization (IMO)

- 21. IHO committed to submit draft amendments for Performance Standards of ECDIS (MSC.232(82)) to IMO NCSR9 for consideration by the Sub-Committee. The IHO initiative included engagement with Member States and international organizations (CIRM, IEC and INTERTANKO) in the preparation of the proposed amendments to resolution MSC.232(82). The proposed amendments to NCSR was submitted by IHO with CIRM and INTERTANKO as co-sponsors. NCSR9 endorsed the revised ECDIS PS in June 2022 and submitted it to IMO MSC106 for adoption. On 11 November 2022 MSC106 adopted the Resolution on Performance Standards for Electronic Chart Display and Information Systems (ECDIS) and thereby making the use of S-100 and its related products a reality for improving safety of navigation. S-100 ECDIS will be legal to use after 1 January 2026 with a transition phase until 1 January 2029 when all new systems must comply with the new IMO Resolution on ECDIS Performance Standards (MSC 530(106). The Committee invited IHO to keep IMO informed on the process development of the IHO S-100 framework standard.
- 22. IMO's final approval marks the finalization of a yearlong process to let the IHO S-100 concept become inherent part of the IMO regulatory framework for international shipping. Its strategic relevance cannot be overestimated. This decision underpins the instrumental role of the IHO being IMO's relevant partner in the integration of hydrographic elements into the next phase of digitalization of sea transportation. The elevation of the ECDIS technology to the next level is instrumental for any progress in autonomous shipping and route optimization in support of green shipping and the blue economy.

Maintain relationship with the Intergovernmental Oceanographic Commission (IOC) of UNESCO

- 23. Relations between IHO and IOC have been given a major boost since 2021, with the ignition of the most important initiative ever launched by the United Nations in favor of the oceans: the UN Decade of Ocean Science for Sustainable Development (2021-2030). The overall coordination of this comprehensive programme stretching over all scientific domains engaged with the ocean is done by IOC/UNESCO.
- 24. In the context of this initiative, IHO and IOC are in full agreement of the strategic and operational value of the GEBCO programme at a global level, for a better understanding of the marine environment and its internal dynamics.
- 25. Based on this shared understanding, the collaboration between IHO and IOC has undergone a significant improvement especially in the management as Parent Organizations of the GEBCO programme, through its Guiding Committee and Sub-Committees. Specifically, IHO and IOC decided to initiate a review of GEBCO's Governance through a Working Group managed directly by representatives of the two Organizations and

- with the help of external advisors, with the aim of presenting the Assemblies of the two organizations with the first results during 2023.
- 26. An upcoming theme addressed under the framework of the Ocean Decade is the *Digital Twin of the Ocean* approach. The Secretariat highlighted on several occasions IHO's competencies in cross sectoral standardization of marine data products and will keep on striving to gain acceptance for the S-100 approach within the oceanographic domain.

Maintain relationship with the International Organization for Standardization (ISO)

- 27. The IHO is a class A liaison member of the ISO Technical Committee 211 (ISO/TC211) and has contributed towards the development of the 19100 series of standards and technical specifications for geospatial information. These ISO standards have been used for the development of the S-100 IHO Universal Hydrographic Data Model, the IHO Geospatial Information (GI) Registry and S-100-based product specifications.
- 28. ISO/TC 211 held its 51st, 52nd, and 53rd meetings in virtual format. Over one hundred participants from thirty countries and liaison organizations attended; some twenty working groups and advisory groups convened; open seminars addressed geospatial data in various domains and was very well-attended; the plenary session was attended by over ninety delegates. Special regard was put on the collaboration between the two internationally recognized standardization bodies. ISO and IHO, for the subject of IHO's S-100 framework as the most important implementation of the ISO 19000 series of geospatial standards for hydrographic, maritime and related issues.
- 29. Since IHO and ISO agree by a MoU on mutual recognition and cooperation between the two organizations to continue to develop relevant contemporary standards and avoid duplication of effort. In order to avoid the latter, both organizations are jointly partnered with the Open Geospatial Consortium OGC. OGC represents Geoinformation Software industry and coordinates the provision and presentation of S-100 based data products through web service and other contemporary digital means.

Maintain relationship with United Nations (UN) organizations based in New York

30. The Secretariat has progressively raised the profile of the IHO in several United Nations (UN) bodies during the reporting period.

UN-GGIM

- 31. UN Committee of Experts on Global Geospatial Information Management (UN-GGIM). The UN-GGIM reports to the UN Assembly via the UN Economic and Social Council (ECOSOC). The principal purpose of the UN-GGIM is to play a leading role in setting the agenda for the development of global geospatial information management and to promote the use of geospatial information in addressing key global challenges.
- 32. The Secretariat represented the IHO in the annual meetings of the UN-GGIM and several of its inter-sessional high-level forums as well as side events and workshops.
- 33. The IHO Secretariat co-authored with the ISO/TC 211 and the Open Geospatial Consortium key revision of the UN-GGIM Guide to the Role of Standards in Geospatial Information Management ("the Guide"). The goal of the Guide is to "provide detailed insights on the standards and good practices necessary to establish and maintain geospatial information management systems that are compatible and interoperable with other systems within and across organizations. The Guide also underscores the importance of standards in facilitating the application of the FAIR (Findable, Accessible, Interoperable, and Reusable)

data principles - promoting improved policymaking, decision making and government effectiveness in addressing key social, economic, and environmental topics, including attainment of Sustainable Development Goals" and is available as a living online recourse document.

UN Division of Oceans and Law of the Sea (UN-DOALOS)

34. The Secretariat provided to UN DOALOS the IHO contribution to the annual report of the UN Secretary General to the UN General Assembly on Oceans and Law of the Sea. Liaison was also maintained through the IHO-IAG Advisory Board on the Law of the Sea (ABLOS). DOALOS gained support through development of the S-100-based product specification on maritime limits and boundaries (S-121) to form the recommended format for States to deposit data in support of maritime limits and boundaries with the United Nations in accordance with the provisions of the UN Convention on the Law of the Sea (UNCLOS).

UN-OICP

35. The Secretary-General attended the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at the UN headquarters in New York, contributing to the session on ocean observing in June 2022. His presentation on *Mapping the Ocean* to deliver baseline information for all specific observations and interoperable Ocean data in support of the digital twin triggered discussions on the interrelation between hydrography and oceanography. The event which took place on World Oceans Day offered the opportunity to be part of the festivities at the UN in the presence of the UN Secretary-General António Guterres.

Maintain relationship with the World Meteorological Organization (WMO)

- 36. The WMO actively cooperates with the IHO as trio with IMO in maintenance of the World Wide Navigational Warning Service (WWNWS), which includes NAVAREAs and coastal warnings. To consolidate the cooperation between IHO, WMO and IMO, it is worthy to mention that after the long break due to the COVID-19 pandemic –, in 2022 the IMO/WMO/IHO Tri-Secretariat meeting aimed to enhance the cooperation on marine safety and ocean related matters, with a focus on the proper provision of Marine Safety Information in terms of coverage, availability, proper conduct and future digitalization of these global services.
- 37. In order to address the digitalization aspect under the paradigm of the S-100 Standard framework, the WMO contribution is committed to the production of S-4xx Product Specifications, amongst which particular attention has been paid to the S-413 Weather and Wave Conditions and S-414 Weather and Wave Observations.
- 38. The WMO Services Commission (SERCOM), with whom WWNWS-SC cooperates closely, has established the Worldwide Met-Ocean Information and Warning Service Standing Sub-Committee (WWMIWS-SubC) to monitor and guide the provision of met-ocean MSI in real time through the network of METAREAs which will provide valuable information for all hydrographic survey activities in open waters.

Maintain relationship with the International Seabed Authority (ISA)

39. The IHO established a MoU with the ISA. This MoU enables the IHO to provide advice and comment to the Secretariat of the ISA, particularly in relation to improving access to bathymetric data upon which the ISA manages its contracts in The Area. In May 2022 the collaboration of the two organizations culminated in a formal data submission agreement

- aiming to the provision of bathymetric data gathered by ISA contractors in their respective license areas to for inclusion in the IHO Data Centre for Digital Bathymetry (DCDB) Archive.
- 40. ISA plans to make an initial contribution of ~7,000 GB of multibeam echosounder (MBES) data, and ancillary data, to contribute to the objectives of the UN Decade of Ocean Science and eventually to IHO's and IOC-UNESCO's joint General Bathymetric Map of the Oceans (GEBCO) programme. This initial contribution covers the ISA backlog of approximately 15 years of data recording. Going forward, the ISA estimates an annual contribution of approximately 750 GB of bathymetric data each year. ISA's commitment and the resulting data contributions are of significance to fill the gaps of the GEBCO grid in deep water regions under ISA coordination.

Maintain relationships with other international and observer organizations when their agendas have relevance to the programme of the IHO

41. The Secretariat proactively contributed for the first time to the UN Ocean Conference held in June 2022 in Lisbon, Portugal. The IHO and Stockholm Environment Institute, Sweden organized a very informative side event which shed light on how hydrography can support a wide range of activities and help countries develop the Blue Economy. Participants learned how hydrographic survey data in Belize delivered measurable benefits and was used to inform decisions regarding electricity cables, coastal habitat mapping with sea grass, implementing resilience measures.

FIG and International Cartographic Conference

- 42. The International Federation of Surveyors (FIG) is a long standing partner of IHO in the lasting discussion on surveying concepts and their applicability in the marine domain. FIG was founded on 18 July 1878, in Paris, by delegates from seven national associations Belgium, France, Germany, Great Britain, Italy, Spain and Switzerland and was known as the Fédération Internationale des Géomètres. It is an UN-recognized non-governmental organization (NGO), representing more than 120 countries throughout the world, and it aims to ensure that the disciplines of surveying and all who practice them meet the needs of the markets and communities that they serve.
- 43. The cooperation between IHO and FIG has a long history based on the shared areas of interest clearly demonstrated by the fact that one of the ten Commissions of FIG is called Hydrography. One area of continued collaboration for several decades is the education with the recognized need to develop and maintain international standards of competence for the hydrographic surveying profession. A Memorandum of Understanding (MoU) between IHO and FIG was established in 2003 to provide a framework for continuing cooperation between the two organizations.
- 44. At the FIG2022, the IHO Secretariat delivered a presentation titled "The Universal Hydrographic Data Model S-100: A Revolutionary Approach to the Nautical Cartography and Maritime Services". Besides, at FIG2022, the activities executed in the last year with the participation of some members in workshops and seminars, the participation in the revision of IHO S-44, the outcomes of the e-Working Week 2021, the changes in the IBSC Members from FIG as well as the IBSC meetings, the future evolvement of the IHO International Hydrographic Review, as well as the need to develop increasing outreach of Hydrography within the FIG were discussed.
- 45. The International Cartographic Association (ICA) is a long standing partner of IHO in the lasting discussion on general cartographic concepts and their applicability in the marine domain. ICA's main organ is the International Cartographic Conference. The ICC 2021

- summit consisted of the Conference, where numerous scientific papers on cartographyrelated matters were presented throughout the week in sessions running in parallel and a Cartographic Exhibition, where various maps and other cartographic products from ICA member countries were presented with several examples of Nautical Charts.
- 46. In the programme of the Conference there were sessions dedicated to the Marine Cartography organized by the ICA Commission on Marine Cartography that has as Chair and Vice-Chair who are also the two ICA representatives on the IHO/FIG/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC). ICA's Marine Cartography Commission held a side meeting to which the IHO delegation was invited. The meeting focused on the activities of the Commission and the need to recruit members that can eventually become members of the IBSC.
- 47. The IHO Delegation used the opportunity of participation to discuss improvements of future collaboration in different areas such as the Capacity Building, the Spatial Data Infrastructures, the IBSC and Cartographic Exhibitions.

Element 1.2 Information Management

- 48. The information management infrastructure of the Secretariat and the IHO has been progressively developed and improved over the reporting period.
- 49. The internal IT personnel continues to rely on a combination of one dedicated member of staff and approximately a third of the time of an Assistant Director, together with assistance and services provided by several service providers under contract terms. A new challenge was the provision of matured hard- and software infrastructure for remote and hybrid meeting formats. Investments were made in cameras, microphones, loudspeaker, and video production software.
- 50. In-kind contributions of Member States hosting applications such as the DCDB (USA), S-100 Registry and IHO e-learning center (both by Republic of Korea). The Secretariat's operational maintenance of the S-100 Registry forming the core digital component of the S-100 framework absorbs three third of the time of the appointed staff expert. Digital tools such as the online meeting registration system and the *formstack* system enabling the digital management of Member States responses to Circular Letters performing only thanks to the technical and operational support of project officers from Japan and Republic of Korea.

Element 1.3 Public Relations and Outreach

Digital communication

51. The outreach of IHO themes is more than ever based on digital provisions. Social media such as linkedIn, facebook and twitter have become relevant communication channels in parallel to the IHO website. The website of the International Hydrographic Review underwent a full re-launch providing now substantially extended functionality. The use of VTC and hybrid formats for meetings hosted by the Secretariat have become common practice.

World Hydrography Day

- 52. World Hydrography Day was celebrated each year during the reporting period but had to be adapted in its format to COVID constraints.
- 53. The Secretariat organized various forms of communication outreach, some in conjunction with Monacology, a marine science based event to raise children's awareness about the environment and sustainable development and the Monaco Ocean week. The peak event were the celebrations of the IHO Anniversary on 21st June 2021. The celebrations in Monaco included speeches by high level participants such as HSH Prince Albert II of Monaco, HEM Peter Thomson, UN special Envoy to the Oceans, the visit of the Italian Navy training ship *Amerigo Vespucci* and the live presentation of modern autonomous survey vehicles by French Companies iXblue and ECA group.
- 54. The 2021 years' motto was promoted by the publication of the prestige book titled *One hundred years of international cooperation in hydrography*. The Editor in Chief, Mr. Gilles Bessero, former IHO Director, managed the contributions of more than a dozen co-authors to finalize this important publication coming in separate English and French versions in an outstanding manner. Germany sponsored the production of the printed samples.
- 55. The Secretariat maintained a record of the principle IHO activities in the monthly publication of the International Hydrographic Bulletin composed of the meeting brief reports, as well as providing a quarterly article in the journal *Hydro International*.

Element 1.4 Work Programme & Budget, Strategic Plan and Performance Monitoring

56. This element of the work programme concerns the execution of the IHO work programme, the future structure and organization of the IHO and its capacity to meet future requirements.

Work Programme & Strategic Plan

57. The conduct of the IHO Work Programme was permanently overseen by the Council. As a result of 2nd Assembly's approval of the revised Strategic Plan each item of the Work Programme was associated with the respective goals and targets. Despite the COVID constraints most programmed work items were met. The detailed review of the IHO Work Programme items addressed at Council meetings resulted in concrete proposals for decisions and actions, which are now brought forward to the Assembly for consideration and subsequent approval.

Performance Monitoring

58. The second Assembly tasked the Council to monitor closely the appropriateness and applicability of the proposed Strategic Performance Indicators and amend them if deemed necessary (Decision A2/20). Under the aegis of the responsible Committee chairs, both HSSC and IRCC managed a comprehensive review of the proposed indicators and submitted proposals for endorsement at Council. The annual Status Report on Performance Monitoring available forms Annex B to the IHO Annual Report (Publication P-7). This Annex also includes a set of SPI's for Work Programme 1 *Corporate Affairs* which is based on the proposals made by the Secretary-General and endorsed by Council.

Budgetary and financial situation

- 59. The Council has permanently overseen the budget and the financial situation by consideration of the respective annual reports of the Secretary-General and the endorsement of annual budget estimates during the inter-Assembly period. The Council also endorsed the budget estimates for the period 2023 2026 proposed by the Secretary-General and to put forward as Assembly Proposal A3 PRO 1.5 for approval.
- 60. The current financial situation as of April 2023 will be reported separately based on the Finance Committee Report as a result of the meeting of the Finance Committee meeting on the day preceding the Assembly. (see future Assembly document A.3/F/01).

Element 1.5 Secretariat Services

61. This element covers the provision of a range of Secretariat's and other services required by Member States and relevant stakeholder organizations.

Staff Regulations

- 62. As reported regularly to the Council, the IHO Secretariat's collective medical insurance and the regime to meet the Secretariat's retirement obligations for active and retired staff have to be renegotiated with competent insurers.
- 63. Another unexpected development for the Secretariat's working regime was triggered by various constraints as a result of the COVID pandemic. In order to comply with the containment measures announced by the Governments of France and the Principality of Monaco to slow the spread of the virus, one of the preventive measures to minimize the risk of infection through pragmatic measures was the introduction of teleworking to enable the staff to work from home. After two years of practice this tool has now turned out to be flexible and efficient for most of staff members.
- 64. All three items require an adaptation of the IHO Publication M-7 Staff Regulations. As a consequence, the Secretariat has drafted a revised version of M-7 which focuses on adaptations to the changed situation. The proposed revision was discussed with the Joint Staff Consultation Committee, submitted to the Finance Committee for comments and will be brought forward to Assembly for discussion and approval by means of A3 PRO 1.5.

Staff Numbers

65. For two thirds of the reporting period, the Secretariat comprised 20 Members of Staff, supplemented by three officers seconded by Member States to work on specific projects otherwise beyond the resources of the Secretariat. The total number of employees remained unchanged compared to the previous reporting period. One staff position is

- currently pending replacement but the job description may be redefined from administrative work towards IT system maintenance.
- 66. Significant changes have been applied to the profile of permanent staff members. Two outgoing translators have not been replaced internally. Instead, the Spanish translation work is fully outsourced to a competent external translator and the French translation work is partly outsourced and partly done internally by the remaining head of the translation post who also coordinates all internal and external translations.
- 67. In the face of evolving new requirements in the provision of GIS services hosted by the Secretariat, a dedicated GIS expert was hired as permanent staff. His expertise is instrumental for the proper provision of the thematic geodata services bundled under the INtoGIS portal.
- 68. Registration and operational management tasks for Capacity Building was concentrated on one post. This gave leeway to hire a Public Relations Assistant to permanently aggregate content for all digital and printed media streams served.

Seconded Officers

69. One officer each from the Korea Hydrographic and Oceanographic Agency and the Hydrographic and Oceanographic Department of the Japan Coast Guard have been posted to the Secretariat throughout the period. An officer from the Directorate of Hydrography and Navigation of Peru is seconded to the Secretariat from January 2022.

Retirements, termination of service and replacements

70. Three long-standing members of the Secretariat staff retired during the reporting period. Mr. Daniel Menini, Cartographic & Graphic Arts Assistant left in August 2021 after 38 years' service and so did Ms. Mary Paz Muro, Spanish Translator after 29 years' service. Ms. Ghislaine Fauchois, Manager Finance & Administration, went for retirement in September 2022 after 12 years' service. Ms. Perrine Sauveur, French translator, left the Secretariat because of family reasons after five years in March 2022. Mr David Wyatt, Assistant Director Surveying and Operations left after the elapse of nine years' service in August 2021. He was replaced by Mr. Samuel Harper. Mr. Rémy Roquefort joined the Secretariat as GIS Services & Graphic Arts Assistant in October 2021.

Workload

- 71. The principal tasks of the administrative staff in the Secretariat involve the management and production of IHO documentation. The drastic increase of VTCs and hybrid formats for in-house meetings added a new work item to the IT related personnel. Another add on comes with the extended GIS services hosted by the Secretariat and the coordination of the increasing digitalization of the IHO standards maintenance through web based applications such as the S-100 Registry and the variety of digital tools related to. The continued supply of all those services was only possible thanks to the dedicated assistance of the project officers detached to the Secretariat.
- 72. The workload of the Secretary-General, Directors and Assistant Directors remained at a very high tempo throughout the reporting period. This has been caused by a combination of added burden induced by the COVID constraints, greater levels of liaison with other international organizations and stakeholder groups as a result of the expansion of the work programme scope to the targets of Goal 2 and Goal 3 of the IHO Strategy, together with the active involvement of the Secretariat Staff in timely limited projects such as Empowering Women in Hydrography. As a result, the senior staff are fully stretched.

Element 1.6 IHO Council and Assembly

Fourth, fifth and sixth meeting of Council

- 73. For more than two years the activities of this Council were cast against the backdrop of the COVID-19 pandemic. The 2nd IHO Assembly and the 4th meeting of the IHO Council, which launched this triennium, was virtual and abbreviated. The 5th meeting was in hybrid virtual/in-person format, and Council members were finally able to meet in person for the 6th meeting of the IHO Council.
- 74. The main reference for all Council activities in the inter-assembly period have been the A-2 Decisions allocated to the Council. Despite the COVID pandemic, Council has made significant progress on the items it was tasked by Assembly. Two key objectives have been first priority: the effective implementation of the revised Strategic Plan and second: the launch of the decade of implementation of delivery of S-100 services.
- 75. During the course of its business the Council produced a number of decisions leading to concrete directions for action by the Secretariat, HSSC and IRCC. The detailed review of the Work Programme items addressed at Council meetings resulted in concrete proposals for decisions and actions, which are now brought forward to the Assembly for consideration and subsequent approval.

Third Assembly

- 76. The 3rd Session of the IHO Assembly was originally planned to be held at the principal venue, the Rainier III Auditorium in Monaco from 25 28 April 2023. Unfortunately, due to the continuing presence of the COVID Centre of the Principality of Monaco at this venue and the uncertainty if and when this arrangement will cease, the IHO Secretariat had to proceed to find an alternative venue.
- 77. The only sensible option identified was the Grimaldi Forum of Monaco. The Grimaldi Forum, being a conference center by design, offers excellent conditions for the conduct of the Assembly and the associated exhibitions, however the only available slot offered in timely vicinity of the originally planned dates is the period from 2 to 5 May 2023, which in essence results in a shift of the event by one week.
- 78. The Directing Committee has, after careful consideration and in anticipation of the unplanned substantial extra burden to the IHO Conference Funds, decided that the 3rd Session of the IHO Assembly will take place at the Grimaldi Forum in the Principality of Monaco from 2 to 5 May 2023.
- 79. The IHO Secretariat is well aware of the inconvenience and difficulties this change may cause to the IHO Member States and all participants (International Organizations, National Institutions and Industry Stakeholders), but is convinced that this timely shift and change of the venue is the best arrangement for the proper conduct of the Assembly.