30th Session of the Assembly of the Intergovernmental Oceanographic Commission (IOC)
Paris, France, 26 June-4 July 2019

Contribution to the IHO Work Programme 2019

| Task 1.1.9.1 | Maintain relationship with the Intergovernmental Oceanographic Commission (IOC) of UNESCO, including attendance of Assembly |

The Assembly is the highest governing body of the Intergovernmental Oceanographic Commission (IOC) of UNESCO. The functions of the Assembly are to consider matters related to managing the regional subsidiary bodies and their programmes, overseeing the ocean research programmes, the ocean observing systems and data management, the regional tsunami warning systems, the coordination of warning and mitigation systems for ocean hazards, the capacity building programme and strategy, sustainable development and governance, administration and management of the IOC and governance of the IHO-IOC GEBCO Project in cooperation with the IHO.

The 30th session of the IOC Assembly was held at the UNESCO Headquarters in Paris, France from 26 June to 4 July, preceded by the 52nd Session of the IOC Executive Council held on 25 June. Ocean Science Day was also celebrated by special panel sessions on 27 June. The delegations included representatives of the Hydrographic Offices of the following IHO Member States: Argentina, Brazil, Chile, Colombia, France, Germany, Peru, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Thailand, Turkey, USA and Viet Nam. Director Mustafa Iptes and Assistant Director David Wyatt represented the IHO. The Assembly was opened by the Deputy Director-General of UNESCO, Mr Qu Xing, on behalf of the Director-General, Ms Audrey Azoulay, and Dr Vladimir Ryabinin, the Executive Secretary of the IOC.

General

The Assembly received reports from the Executive Secretary, on the activities of the IOC regional subsidiary bodies – the sub-commissions for the Western Pacific, the Caribbean and adjacent regions, and Africa and adjacent island States - the status of the IOC global ocean science report, the world climate research programme and the 2nd International Indian Ocean expedition. Introducing the discussions on the UN Decade of Ocean Science for Sustainable Development (the Decade), the Executive Secretary highlighted that there were less than two years to work with Members States, the UN, all partners and stakeholders to develop an implementation plan. He noted that this was a once-in-a-life-time opportunity for all to achieve a breakthrough in the capacity of oceanography to serve people and the planet. The Executive Secretary identified as the main challenge for the Commission’s small Secretariat the dual tasks of raising, not only extra budgetary resources necessary to maintain its core operational programmes, but also significant additional resources to lead and coordinate the Decade preparation phase. He noted a new approach to fund-raising and outreach, based on highlighting the societal benefits of the IOC’s work and demonstrating the return on investment in ocean science and observation were being developed. The Executive
Secretary highlighted that the Global Planning Meeting in Copenhagen last May represented a first step in bringing together experts and stakeholders to discuss and identify the science questions to be addressed during the Decade. He introduced the six societal outcomes of the Decade, the expected science breakthroughs, the research and development priority areas as well as the four potential pillars of the Decade (a georeferenced Atlas, observations and data system, the science-policy interface and societal applications). He stressed the need for technological innovations as well as an economic valuation of the ocean to drive the development of transformative partnerships under the Decade.

The Assembly identified that the IOC has a critical role to play in the development of UN Sustainable Development Goal (SDG) 14 indicators. In the context of biodiversity beyond national jurisdiction (BBNJ), the Commission’s contribution on capacity development and transfer of marine technology was noted as particularly important. The Assembly stressed the need for more operational services and exchange of data, with a particular focus on real-time data exchange. The Assembly welcomed the continuation of the 2nd International Indian Ocean Expedition (IIOE-2) until 2025 as an important contribution to the first half of the Decade. The potential role of Maritime Spatial Planning in addressing many issues related to economic development of coastal nations was highlighted. The Assembly discussed the UN world ocean assessment and the progress with the Global Ocean Observing System (GOOS), the Global Climate Observing System and the restructuring of the World Meteorological Organization (WMO), which will result in the establishment of a Joint WMO-IOC Collaborative Board to which the new WMO-IOC Joint technical committee for oceanography and meteorology (JCOM) will report. Two GOOS-related projects - the European Commission (EC) Horizon 2020 funded AtlantOS project and the Tropical Pacific Observing System in 2020 (TPOS 2020) project – were highlighted. It was noted that the AtlantOS has contributed to the development of a vision for an All-Atlantic Ocean Observing System as a contribution to GOOS, and is seeking to develop mechanisms to engage with Member State agencies and organizations around the Atlantic Basin.

Two resolutions adopted by the 18th World Meteorological Congress, which impact across citizen science and observation activities, were highlighted. The first resolution reaffirmed the importance of marine meteorological observations, including those in Exclusive Economic Zones (EEZs), used operationally by WMO Members to provide services in support of safety of navigation and the protection of life and property in coastal and offshore areas; it also clarifies the legal regime under which the Voluntary Operating Ship Scheme and surface observing platforms operate. The second resolution noted the 20-year history of work by the IOC to develop a cooperative framework regarding the sharing of ocean data in EEZs, recognizing that WMO’s operational forecast models and services increasingly rely on sustained global data streams of subsurface observations, and decided to identify the requirements for subsurface ocean variables to improve the quality of these forecasts and services, working closely with IOC in order to explore mechanisms that make the highest-impact subsurface ocean data freely available, and build the capacity of all WMO Members to use the resulting forecast systems and services. It was also noted work by the JCOMM Observations Coordination Group and GOOS that surveyed ocean observing networks on the impediments they faced in taking observations within EEZs in full compliance with the provisions of UNCLOS (The United Nations Convention on the Law of the Sea).

The Assembly also discussed the regional tsunami warning and mitigation systems – the Pacific (PTWS), the Indian Ocean (IOTWMS) and the North-Eastern Atlantic, the Mediterranean and connected seas (NEAMTWS) – the tsunami and other coastal hazards warning system for the Caribbean and adjacent regions (CARIBEWS) as well as the global coordination of warning and mitigation systems for ocean hazards and harmful algal blooms. During the presentation of the reports and subsequent discussions covering the Tsunami and Other Hazards Warning System Working Group (TOWS-WG), the IHO was highlighted as one of the significant partner organizations, particularly with respect to the transmission of warning information. The adoption of the TOWS-WG report and recommendations, means that the World-Wide Navigational Warning Service Sub-Committee (WWNWS-SC) and the TOWS-WG can move forward on the implementation of the operational processes for the dissemination of tsunami warnings and structured messages via the International Maritime Organization/IHO WWNWS. The Chair of the IHO-IOC GEBCO Guiding Committee (GCC) highlighted the importance of comprehensive bathymetric datasets to model tsunami impacts and the speed of propagation of the energy wave.

The Assembly received a briefing on the proposed development of the IOC Ocean Data and Information System (ODIS), that will be a framework in which existing ocean data and information systems, products and services will be promoted and where connections between these systems will be promoted and possibly developed by relevant stakeholders. It was noted that the International Oceanographic Data and Information Exchange (IODE) will work with existing stakeholders, linked and not linked to the IOC, to improve the accessibility and interoperability of existing data and information, and to contribute to the development of a global ocean data and information system, leveraging established solutions where possible. The IOC ODIS will target scientists, government agencies/policy-makers, IOC global and regional programmes, IODE National Oceanographic Data Centres, Associate Data Units,
Associate Information Units, UN agencies, IGOSs, and Industrial and commercial enterprises. The Assembly stressed the need to develop ODIS with involvement from the widest possible range of stakeholders, ensuring active participation from IOC Member States but also from other UN agencies, NGOs, national and regional programmes and projects, as well as the private sector.

**Ocean Bathymetry and Capacity Building**

The Assembly considered the biennial report of the Chair of the GGC and expressed its support for the increased IOC engagement in the work of GEBCO activities. The Chair of the GGC highlighted the various activities undertaken in the recent biennium, in particular highlighting the commencement, in February 2018, of the operational phase of the Nippon Foundation-GEBCO Seabed 2030 project and the progress achieved to increase the global bathymetric coverage. He noted that more details had been provided in the Seabed 2030 side event the previous day. The proposed revisions, as amended by IRCC11, to the Guiding Committee terms of reference and rules of procedure were endorsed. During the GEBCO discussions the IHO representative noted that the widespread verbal support needs to be supported by real actions to gather bathymetry and make data available. He also urged all IOC Member States, that owned or operated research vessels, to ensure that their vessels were collecting and storing bathymetric data whenever they were at sea and that the data was provided to the IHO Data Center for Digital Bathymetry so as to be freely and openly available to all who may wish to make use of it, sentiments reiterated by the Executive Secretary of the IOC.

The Assembly discussed the IOC Capacity Development Strategy, including its regional programmes and proposals for the IOC Capacity Development Fund. The IOC Ocean Literacy activities, including contributions to the Ocean Literacy in 2018-2021 Action Plan, which had been undertaken in the last intersessional period, were highlighted including progress on global and regional cooperation.

**Side Event and Discussion Panel on the Nippon Foundation - GEBCO Seabed 2030 Project**

A side event and discussion panel on the Nippon Foundation – GEBCO Seabed 2030 project was held during the lunch time break of the Assembly on 2 July, moderated by Mr Shin Tani, GEBCO Guiding Committee Chair. Assistant Director David Wyatt, representing the IHO, was invited as a panellist. During the introductions to the discussions he stressed the long association of the IHO with the GEBCO Project and its governance. He highlighted the importance of completing the picture of the ocean floor to support the numerous UN initiatives, which needed a comprehensive bathymetric dataset to achieve their goals.

**Office Bearers**

The Assembly elected Mr Ariel Hernán Troisi of Argentina as new President of the IOC for 2019 to 2020.

**Next Sessions**

The next session of the IOC Assembly (Assembly-31) is scheduled from 14-25 June 2021 with the 53rd and 54th Executive Councils to be held 29 June-3 July 2020 and 13 June 2021 respectively. All documents of the 30th session of the IOC Assembly will be available from the IOC of UNESCO website. It was also highlighted that the Ocean Conference was programmed 2-6 June 2020.