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IOC/A-31/ Decisions

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**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)**

Thirty-first Session of the Assembly

UNESCO, Paris, 14 – 25 June 2021

ADOPTED DECISIONS & RESOLUTIONS

ADOPTED DECISIONS

IOC Decision A-31/2

Organization of the Session

The Assembly,

I. Agenda

Adopts the agenda and the timetable of work as set out in documents IOC/A-31/2.1.Doc Prov. and Add. Rev. with the following additional modifications:

- to switch the meeting of the Financial Committee (III) and the meeting of the Nominations Committee (III) on Friday 18 June;

II. Rapporteur

On a proposal of Portugal, seconded by the Russian Federation,

Designates Dr A. Ramadass, India, as Rapporteur for its present session to assist the Chairperson and the Executive Secretary in the preparation of the draft provisional report of the Session;

III. Sessional Committees and Working Groups

Establishes the following sessional open-ended committees and refers to them the following agenda items and responsibilities:

Financial Committee: to examine the documentation and prepare a resolution under items 3.1 (budget implementation and financial report), 4.1, 4.2 and 4.3; under the chairship of Dr Karim Hilmi (Morocco, Vice-chair) with the following Member States participating: Afghanistan, Algeria, Argentina, Australia, Azerbaijan, Bangladesh, Belgium, Benin, Brazil, Bulgaria, Canada, China, Colombia, Cote d'Ivoire, Cuba, Djibouti, Dominican Republic, Egypt, El Salvador, Finland, France, Germany, Greece, Grenada, Italy, India, Indonesia, Iran (Islamic Republic of), Japan, Kenya, Korea (Republic of), Kuwait, Libya, Madagascar, Malaysia, Mexico, Monaco, Morocco, Mozambique, Netherlands, Nigeria, Norway, Panama, Peru, Philippines, Portugal, Qatar, Romania, Russian Federation, Saint Vincent and the Grenadines, Senegal, Serbia, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Sweden, Tanzania, Thailand, Timor Leste, Togo, Tunisia, Turkey, Turkmenistan, UAE, UK, Uruguay, USA, Viet Nam and Venezuela. Ms Ksenia Yvinec provided the Secretariat support to the Financial Committee.

Resolutions Committee: to report on all draft resolutions duly presented for consideration at the session; under the chairship of Prof. Yutaka Michida, Japan with the following Member States participating: Angola, Argentina, Canada, China, El Salvador, France, Grenada, India, Japan, Kenya, Korea (Republic of), Kuwait, Madagascar, Malaysia, Mexico, Monaco, Philippines, Portugal, Saint Vincent and the Grenadines, Seychelles, South Africa, Spain, Sweden, Thailand, Togo, Tunisia, United Kingdom, Uruguay, and USA. Mr Julian Barbière provided the Secretariat support to the Resolutions Committee.

Nominations Committee (to examine all proposals of candidates for the elections to the chair, vice-chairs and to the Executive Council at the present session, and to report on them – item 4.5): under the chairship of Mr Amr Morsy, Egypt with the following Member States participating: Algeria, Bulgaria, China, Colombia, Egypt, El Salvador, France, Grenada, India, Indonesia, Japan, Kenya, Korea (Republic of), Madagascar, Malaysia, Mexico, Morocco, Nigeria, Philippines, Portugal, Romania, Seychelles, Sri Lanka, Thailand, Tunisia, Turkmenistan, Uruguay, USA and Viet Nam. Dr Salvatore Aricò provided the Secretariat support to the Nominations Committee.

IOC Decision A-31/3.2

Report of the Executive Secretary

The Assembly,

Having examined documents IOC/A-31/3.2.Doc(1) and Addendum, [IOC/A-31/3.2.Doc\(2\)](#), [IOC/A-31/3.2.Doc\(3\)](#) and 10 information documents on various programmatic developments,

Thanks the Executive Secretary for a very comprehensive report;

Takes note of the information provided, welcoming significant advances in many programmatic areas.

IOC Decision A-31/3.3.1

IOC Sub-Commission for Africa and the Adjacent Islands States

The Assembly,

Having examined the Executive Summary report of the 6th session of the IOC's Sub-Commission for Africa and the Adjacent Island States, online, 13–16 April 2021 (IOC/SC-IOCAFRICA-VI/3s),

Acknowledges the importance that the African Union places on the African oceans and their resources as outlined in the AU's Agenda 2063, Africa Integrated Maritime Strategy 2050, the Africa Blue Economy Strategy, as well as the adoption of 2015-2025 as the Decade of African Seas and Oceans and the 25 July each year as the African Day of Seas and Oceans;

Recalls the Priority accorded to Africa by UNESCO and its Intergovernmental Oceanographic Commission;

Takes note of the progress made in the implementation of the IOCAFRICA work programme 2019–2021 and strengthening of the IOCAFRICA Secretariat;

Congratulates the Africa Group at UNESCO for selecting the “Oceans, Peace and Sustainable Development in Africa” as the theme for the 2021 Africa Week at UNESCO;

Thanks the Member States who have provided support for the development and implementation of programmes of the sub-commission, and especially the Governments of Belgium, Cote d'Ivoire, China, Kenya, Norway, South Africa, Spain, and Sweden;

Accepts the report of IOCAFRICA-VI and the recommendations therein, including the work programme for the sub-commission for 2021–2023;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2);

Requests the IOC Executive Secretary to:

- explore opportunities for additional extrabudgetary resources for further strengthening the IOCAFRICA Secretariat and implementation of activities;
- follow up on strengthening collaboration with the African Union and joint implementation of programmes related to the Decade of African Seas and Oceans and the UN Decade of Ocean Science for Sustainable Development;

Urges Member States to continue and increase their support to IOCAFRICA and its secretariat through financial and in-kind contributions, including the secondment of staff.

IOC Decision A-31/3.3.2

IOC Sub-commission for the Western Pacific

The Assembly,

Having considered the executive summary report of the 13th Intergovernmental Session of the IOC Sub-Commission for the Western Pacific (online, 27–29 April 2021) (IOC/WESTPAC-XIII/3s),

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.3.3

IOC Sub-Commission for the Caribbean and Adjacent Region

The Assembly,

Having considered the Executive Summary Report of the 16th session of the IOC Sub-Commission for the Caribbean and Adjacent Region (IOCARIBE), online, 3–6 May 2021,

Takes note of the progress made in the implementation of the IOCARIBE work programme 2019–2021;

Thanks the Member States who have provided support for the development and implementation of programmes of the Sub-commission, and especially the Governments of Colombia, the Government of Flanders (The Kingdom of Belgium), Barbados, Mexico, Norway, Panama, the Republic of Korea, Sweden, the EU, and USA;

Accepts the report of IOCARIBE-XVI and the Recommendations therein, including the Work Programme for the Sub-commission for 2021–2023;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.3.4

IOC Regional Committee for the Central Indian Ocean

The Assembly,

Having examined the Executive Summary report of the 8th session of the IOC Regional Committee for the Central Indian Ocean, online, 17–19 May 2021 (IOC/SC-IOCINDIO-VIII/3s),

Takes note of the progress made in the implementation of the IOCINDIO work programme 2019–2021;

Thanks the IOC Member States and partners for their support to the reactivation of the Committee and the implementation of its work programme and for their sustained efforts for its transformation into an IOC Sub-Commission for the Indian Ocean, in particular, Bangladesh, India, Iran (Islamic Republic of), Kuwait and Saudi Arabia;

Takes note of the report of IOCINDIO-VIII and the recommendations therein, including the work programme for the period 2021–2023 under item 3.5.6;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.4.1

Warning Mitigation Systems for Ocean Hazards

The Assembly,

Having examined the executive summary reports of the recent sessions of the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS-XV), the North-Eastern Atlantic, the Mediterranean and Connected Seas Tsunami Warning and Mitigation System (ICG/NEAMTWS-XVI), and the reports of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (IOC/TOWS-WG-XIII and XIV),

Accepts the reports by the IOC/ICGs and TOWS-WG;

Notes with satisfaction the progress made during the intersessional period, including:

- Instituto Português do Mar e da Atmosfera (IPMA, Portugal) accredited as a Tsunami Service Provider in NEAMTWS;
- five exercises carried out (CARIBE WAVE 20, PacWave20, IOWave20, CARIBE WAVE 21 and NEAMWave21) including testing plans for tsunami response in backdrop of a pandemic, and regular communication tests performed;
- timely issued Best Practice documents and Guidelines for Tsunami Warning Services, Evacuation and Sheltering during COVID-19;
- IOTWMS Capacity Assessment of Tsunami Preparedness in the Indian Ocean – Status Report 2018 ([IOC/2020/TS/143](#)) published based on results of an online survey responded by 21 Member States;
- published Summary Statement ([IOC/BRO/2020/1](#)) of the International Symposium on lessons learnt from the 2018 tsunamis in Palu and Sunda Strait organized by UNESCO-IOC during 26–28 September 2019;
- publication of the IOC Manuals and guides 82 "Preparing for community tsunami evacuations: from inundation to evacuation maps, response plans and exercises" ([IOC/2020/MG/82](#));
- four communities in the Caribbean and Adjacent Regions (St. John's City, Antigua and Barbuda; Shermans, St. Lucy to Mullins, St. Peter, Barbados; Union Island, St. Vincent and the Grenadines; and Carenage, Trinidad and Tobago), two communities in the Pacific Ocean (Samara and Tamarindo, Costa Rica), and two communities in the Indian Ocean (Venkatraipur and Noliasahi, Odisha province, India) achieved UNESCO/IOC Tsunami Ready recognition, and growing interest for piloting Tsunami Ready expressed in NEAMTWS;
- successful and widely attended UNDRR IOC World Tsunami Awareness Day (WTAD) 2020 campaign consisting of high-level events, regional webinars, social media visuals, videos, and eyewitness accounts, as well as the creation of 15 videos highlighting countries joining the global Tsunami Ready community;
- designation of ITIC and the Indonesia BMKG as Ocean Teacher Global Academy Specialized Training Centres (OTGA STC) in 2020;
- Progress by Indonesia in their application for ISO certification of a Community Based Early Warning System;
- European Commission's support to the 3-year project project "Strengthening the Resilience of Coastal Communities in the North East Atlantic, Mediterranean Region to the Impact of Tsunamis and Other Sea Level-Related Coastal Hazards" contributing to NEAMTWS, UNESCAP funding for the project "Strengthening Tsunami Early Warning in the North West Indian Ocean Region", and ongoing renewal for an additional two years of the support provided by the Government of Australia to the Indian Ocean Tsunami Warning and Mitigation System (IOTWMS) Secretariat Office, hosted by the Bureau of Meteorology.

Welcomes the appointment of the new ICG/NEAMTWS officers for the biennium 2020–2021.

I.

Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE-EWS)

Notes the successful conduct of the CARIBE WAVE 20 and CARIBE WAVE 21 exercises with the participation of 98 percent of the Member States and Territories and almost 400,000 people in total despite the COVID-19 pandemic,

Welcomes the decision of organising CARIBE WAVE 22 with 3 scenarios that include (1) a tsunamigenic earthquake along the Muertos Trough south of Dominican Republic, (2) a flank collapse of the Cumbre Vieja Volcano (La Palma, Canary Island), and (3) an off shore event north of Panama along the Northern Panama Deformed Belt,

Recommends that ICG/CARIBE-EWS communities prone to tsunami risk, aspire to become Tsunami Ready, as this recognition includes many aspects of preparedness essential for an effective local tsunami response,

II.

Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas

Endorses the accreditation of the Instituto Português do Mar e da Atmosfera (Portugal) as a fifth Tsunami Service Provider (TSP) in the NEAM region;

Encourages Member States to explore the adaptation of community preparedness and recognition programmes such as Tsunami Ready for the NEAM region, including Tsunami Hazard and Tsunami Evacuation Maps, Plans, and Procedures (TEMPP);

Further encourages Member States to increase the number of seismic and sea-level stations available in North Africa and to share data using bilateral agreements whenever possible;

III.

Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG)

Reiterates that the UN Decade of Ocean Science for Sustainable Development provides a once-in-a-generation opportunity to address and potentially fill capability gaps by leveraging novel sensing platforms, techniques and/or infrastructures in order to more quickly detect, measure, forecast and warn for tsunamis, even from the near-instant they form, and to enhance the preparedness of coastal communities for tsunamis through the UNESCO/IOC Tsunami Ready Programme;

Approves the establishment of the Ocean Decade Tsunami Programme (the programme) and a Scientific Committee to prepare the Draft 10-Year Research, Development and Implementation Plan for this programme with Terms of Reference included as Annex 1;

Approves also the following governance structure for the UN Decade Tsunami Programme:

- (i) the TOWS-WG will perform Global Steering Committee functions for the programme;
- (ii) a Scientific Committee with an advisory role for the duration of the programme will be established;

- (iii) the Scientific Committee will be tasked to develop a Draft 10-Year Research, Development and Implementation Plan for the programme for endorsement by the TOWS-WG at its next meeting;
- (iv) the four Intergovernmental Coordination Groups (ICGs) will perform regional Steering Committee functions, including implementing coordinating roles for the regional aspects of the programme;
- (v) a special Coalition for Tsunami Ready will be established in collaboration with other critical stakeholders across the UN structure as well as national civil protection agencies and will report to the TOWS-WG on Tsunami Ready aspects of the programme;

Decides that the Draft 10-Year Research, Development and Implementation Plan for the UN Decade Tsunami Programme is dedicated to achieving transformational advances in tsunami detection, measurement and forecasting, including tsunamis generated by non-seismic sources. The programme includes the following focus areas related to tsunami warning capabilities:

- expansion of existing observational systems including seismometers, coastal tide gauges, and deep ocean tsunameters to fill identified gaps;
- deploy new technologies to address observational gaps that cannot be covered by existing networks embracing. This would include the widespread implementation of scientific instrumentation on deep-ocean telecommunications cables as developed by the ITU/WMO/UNESCO-IOC Joint Task Force (JTF) SMART Subsea Cables effort; and submission of a Programme to the UN Decade of Ocean Science for Sustainable Development;
- wide expansion of data access and availability and development of capability for real-time and near-real time sea level, seismic and GNSS-derived land motion data at an appropriate sampling rate and relevant tools to forecast tsunamis from all sources;
- increase access and regularly update the collection of coastal topographic and bathymetric data, in collaboration with the Nippon Foundation-GEBCO Seabed 2030 project, as well as high performance computational capabilities to enable more timely, accurate and comprehensive tsunami and other coastal hazard forecasts to better advise community response;
- ensure all National Tsunami Warning Centres have access to data, tools and communication platforms, protocols and training to timely and effectively warn coastal and maritime communities threatened by tsunamis and other coastal hazards and are integrated into a multi hazard framework;

Further decides that the Draft 10-Year Research, Development and Implementation Plan for the Ocean Decade Tsunami Programme contribute to achieving the societal outcome 'A Safe Ocean' of the Ocean Decade with the aim of making 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the UNESCO/IOC Tsunami Ready Programme and other initiatives to include, but not limited to:

- the adoption and continued implementation of the UNESCO-IOC Tsunami Ready Guidelines and Indicators as the international standard for evidence-based community preparedness for tsunamis;

- enhanced access and capacity development for high-resolution near shore bathymetric and topographic data and identification of potential tsunami sources for accurate and improved inundation modelling and evacuation mapping and planning in support of Tsunami Ready communities;
- enhanced integration to minimize tsunami disaster impacts and to enable rapid restoration of socio-economic activities and critical infrastructure services post tsunami impacts;

Encourages Member States to:

- (i) provide voluntary financial contributions to the IOC special account and in-kind contributions to support the Ocean Decade Tsunami Programme;
- (ii) densify sea level networks capable of Tsunami detection as well as seismic network particularly nearby tsunamigenic sources;
- (iii) implement a sample rate of 1 sample/sec. or higher on sea level gauges in order to record and transmit tsunami wave-form data from all seismic and non-seismic sources;
- (iv) register National Tsunami Warning Centres (NTWCs) and Tsunami Warning Focal Points (TWFPs) as alerting authorities in the “WMO Alerting Authority Register” via the WMO National Permanent Representative and in follow-up to WMO circular letters;
- (v) use best practices in engineering design and construction of evacuation shelters, especially where local tsunami hazards exist;
- (vi) include the IOTIC compilation of school Disaster Risk Reduction and preparedness materials as a resource, and especially as part of Tsunami Ready pilots that include schools;

Instructs the regional Intergovernmental Coordination Groups (ICGs) to:

- (i) continue the strong collaboration between the IOC and UNDRR for World Tsunami Awareness Day (5 November), noting that the 2021 WTAD will highlight Target F of the Sendai Framework on international cooperation to developing countries through support to the implementation of their national and local strategies for disaster risk reduction;
- (ii) urgently complete the IOC Manual & Guides 74 on the guidelines for the Tsunami Ready recognition programme for widespread distribution to Member States;
- (iii) include local source tsunami Standard Operating Procedures as an important component of the UNESCO-IOC Tsunami Ready programme;
- (iv) develop standardized trainings that can be delivered online or in person, in particular through the Ocean Teacher Global Academy (OTGA);
- (v) with regard to the next Tsunami Symposium, incorporate more diversity in the organizing committee by inclusion of all regions; consider a venue that can accommodate a hybrid meeting that would enable the most people to successfully participate and engage; and explore funding opportunities;

Accepts the reports from the Task Teams on Disaster Management and Preparedness and Watch Operations and instructs them to continue efforts for monitoring and responding to

tsunamis generated by non-seismic sources and possible integration into tsunami watch operations;

Extends the tenure of the Working Group on Tsunamis and Other Hazards related to Sea-Level Warning and Mitigation Systems and its Task Teams on: (i) Disaster Management & Preparedness (TTDMP), and (ii) Tsunami Watch Operations (TTTWO), with terms of reference as given in IOC Resolution XXIV-14 [for TOWS-WG], report IOC/TOWS-WG-VI/3, Annex II [for TTDMP] and report IOC/TOWS-WG-X/3, Annex II (Appendix 1) [for TTTWO].

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

Annex to Dec. A-31/3.4.1

Terms of reference of the Scientific Committee for the Ocean Decade Tsunami Programme

The Scientific Committee has an advisory role for the duration of the Ocean Decade Tsunami Programme (referred to as the programme).

Membership:

- Four (4) members nominated by the each of the TOWS-WG Task Teams;
- Three (3) members nominated by the TOWS-WG on the basis of their scientific expertise;
- All members will serve for a period of two years and would be eligible for renewal once.
- In selecting Expert Members, due consideration will be given to geographic, generational and gender balance.

The Scientific Committee will:

- (i) Develop a Draft 10-Year Research, Development and Implementation Plan for the Ocean Decade Tsunami Programme based on the concept paper “Protecting Communities from the World's Most Dangerous Waves: A Framework for Action under the UN Decade of Ocean Science for Sustainable Development”;
- (ii) Identify and address gaps in global tsunami hazard assessment as follows:
 - a. comprehensive assessment to include all potential tsunamis, anywhere in the world, regardless of their source,
 - b. strategies to validate historical tsunami sources, through the application of paleotsunami techniques and historical seismology
- (iii) Identify gaps in tsunami detection, measurement, forecasting, with a special emphasis on tsunamis generated close to populated coastlines;
- (iv) Propose to enhance sensing and analysis strategies to enable the rapid characterization of tsunami sources through the combined use of land-based seismic and geodetic sensors, GNSS terminals, coastal sea level gauges, deep-ocean

- tsunameters, SMART repeaters on deep-ocean fiber-optic cables and satellite-based observations;
- (v) Propose a roadmap for collaboration with the ITU/WMO/IOC SMART Joint Task Force cable initiative to fully explore the feasibility of widespread deployment of scientific instrumentation on deep-ocean fiber-optic cables to improve capability to rapidly detect and characterize tsunami sources as well as propagating tsunami wave fields;
 - (vi) Consider and propose strategies, programmes and content to enhance societal resilience for tsunami and other ocean hazards;
 - a. build the framework needed to ensure the training and development of the next generation of technical-scientific expertise,
 - b. identify strategies that allow to characterize structural and social vulnerability in tsunami hazard zones
 - (vii) Overview the consolidation of inputs received to IOC [Circular Letter 2825](#) on Inventory of actions being considered under the United Nations Decade of Ocean Science for Sustainable Development (2021–2030) in the field of Tsunamis and Other Sea-Level Related Hazards warning and mitigation;
 - (viii) Submit a Draft 10-Year Research, Development and Implementation Plan for endorsement by the TOWS-WG at its 15th meeting.

IOC Decision A-31/3.4.2

International Oceanographic Data and Information Exchange

The Assembly,

I – 26th Session of IODE, 20–23 April 2021

Having examined the Executive Summary Report of the 26th session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE-XXVI, 20–23 April 2021) ([IOC/IODE-XXVI/3s](#)),

Endorses the report of the 26th session of the IOC Committee on International Oceanographic Data and Information Exchange including the recommendations and workplan for 2021–2022 contained therein;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2);

II – Establishment of the IOC Ocean Data and Information System Project (ODIS)

Having examined the proposal contained in document IOC/A-31/3.4.2.Doc and document IOC/IODE-XXVI/6.1.1,

Recalling Decision IODE-XXIV.4 on the Ocean Data and Information System,

Recognizing that a significant fraction of the work on ocean data and information system takes place outside IOC and that there is a need to collaborate with those communities/systems in order to achieve improved accessibility, unrestricted use and interoperability of data and information,

Recognizing also the key role that distributed and interoperable data, information, and digitized knowledge resources will have during the UN Decade of Ocean Science for Sustainable Development,

Recalling further that the IOC decided that 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, to be referred to as the IOC Ocean Data and Information System, leveraging established solutions where possible, including existing IODE systems and others,

Noting with appreciation that IODE has:

- (i) established the IOC Ocean Data and Information System Catalogue of Sources Project (ODISCat) in 2019,
- (ii) started the implementation of the Ocean InfoHub project as a three-year project (2020–2023) funded by the Government of Flanders (Kingdom of Belgium),

Decides to establish the “IOC Ocean Data and Information System (ODIS) project” with the terms of reference as attached in Annex 1, and terms of reference of the Steering Group as attached in Annex 2 to this decision;

Invites all IOC programmes, IOC regional subsidiary bodies and partner organizations to collaborate by mobilizing their stakeholder communities to enter information into the ODIS-Cat system, and to participate in the OIH and ODIS Projects;

Annex 1 to Dec. A-31/3.4.2

Terms of Reference of the IOC Ocean Data and Information System (ODIS) project

The objectives of this project are to:

- (i) develop the IOC Ocean Data and Information System (ODIS) as an e-environment where users can discover data, data products, data services, information, information products and services provided by Member States, projects and other partners associated with IOC;
- (ii) work with partners, linked and not linked to the IOC, to improve the accessibility and interoperability of existing data and information. It will contribute to the development of a global ocean data and information system, to be referred to as the IOC Ocean Data and Information System, leveraging established solutions where possible;
- (iii) start its development using existing “ecosystem components” such as, inter alia, the ODIS Catalogue of Sources (ODISCat), the Ocean InfoHub project, and all IODE data and information products and services, and to add components within and outside the IODE programme as these become available to and interoperable with the ODIS ecosystem.

Annex 2 to Dec. A-31/3.4.2

**Terms of Reference of the IODE Steering Group
for the IOC Ocean Data and Information System (ODIS)**

Objectives:

- (i) Propose the vision, strategy, workplan and timetable for the ODIS Project;
- (ii) Advise on technical aspects;
- (iii) Establish a stakeholder forum to ensure active participation of representatives from ODIS nodes and other contributors;
- (iv) Report to the IOC and to other partners on the progress of the ODIS Project;
- (v) Provide guidance to the project manager and project technical manager;
- (vi) Identify funding sources to further develop the ODIS.

Membership: The Steering Group will be composed, inter alia, of:

- Representatives from IOC Programmes;
- Project Manager;
- Project Technical Manager;
- Invited Experts;
- Representatives of major stakeholder (user) groups including regional/international organizations;
- Representative of the IODE Secretariat;
- Representative of the Decade Coordination Unit.

III – Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019)

Having examined the proposed arrangements contained in document IOC/A-31/3.4.2.Doc(2),

Recalling IOC [Resolution XXII-6](#) that established the IOC Oceanographic Data Exchange Policy in 2003 and [Decision IOC-XXX/7.2.1\(II\)](#) that amended Clause 5 in 2019,

Noting that partner and sister organizations are changing their data policies, which can serve as a model for updating the IOC data policy,

Noting further that principles of data sharing and licensing are becoming globally recognized and adopted, e.g., FAIR Principles and Creative Commons licences,

Decides to establish the IOC inter-sessional working group on the Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019) with terms of reference as included in Annex 3 to this decision;

Annex 3 to Dec. A-31/3.4.2

Terms of Reference of the IOC Inter-sessional Working Group on the Revision of the IOC Oceanographic Data Exchange Policy (IWG-DATAPOLICY)

Objectives: This working group will:

- (i) create an inventory of existing international, national and organizational data policies,
- (ii) review and compare existing international, national and organizational data policies,
- (iii) develop a glossary with clear definitions (e.g. open vs free and unrestricted; data vs metadata vs information, licence options),
- (iv) investigate the expansion of scope and name of the IOC Oceanographic Data Exchange Policy,
- (v) gather advice from partner/sister organizations and recognized data provider/manager organizations,
- (vi) organize a broad consultation on the proposed revised IOC Ocean Data Policy with Member States, IOC global and regional programmes,
- (vii) submit a revised IOC Oceanographic Data Exchange Policy to the IOC Assembly at its 32nd Session in 2023.

Modalities: The IWG-DATAPOLICY aims to have at least three meetings (second half 2021, first half 2022). The group may meet online, face-to-face or mixed as appropriate. For face-to-face meetings participation will be self-funded.

Membership: The IWG-DATAPOLICY will be composed, inter alia, of:

- Chair of the working group (to be designated by the group)
- Invited experts from the global data and information communities including UN agencies
- Representatives of IOC programmes and projects
- IOC (including IODE) Secretariat

IV – The UNESCO/IOC Project Office for IODE

Having examined the Proposal to renew the MoU between VLIZ and the IOC regarding the IOC Project Office for IODE contained in document IOC/A-31/3.4.2.Doc(3),

Recalling:

- (i) IOC Resolution XXII-7 which accepted the offer of the Government of Flanders (Kingdom of Belgium) and the city of Ostend to host the IODE Project Office,
- (ii) IOC Resolution XXII-1 which adopted the Guidelines for the Establishment of IOC Decentralized Offices, subsequently published in Document [IOC/INF-1193](#),

Noting with appreciation:

- (i) the positive results of the review the IOC Project Office for IODE (2020 presented in document is IOC/A-31/3.4.2.Doc(3)),
- (ii) that the IOC Project Office for IODE has been successfully implementing its objectives:
 - the successful development and hosting of data/information products/services such as web sites and databases,
 - the successful development and hosting of the training system OceanTeacher Global Academy,
 - the continued management of an excellent international meeting and conference centre,
- (iii) the considerable financial support provided by the Government of Flanders (Kingdom of Belgium) to the IOC in general and to the IOC Project Office for IODE in particular, and the excellent in-kind support provided by the Flanders Marine Institute (VLIZ),
- (iv) the complementary nature of the activities carried out at the Project Office and the financial support provided by the Government of Flanders (Kingdom of Belgium) through the UNESCO/Flanders Fund-in-Trust for the support of UNESCO's activities in the field of Science (FUST),
- (v) the contribution by the IOC Project Office for IODE (as the IODE secretariat and Meeting & Training Facility) to the further development of Ocean Data and Information Networks in developing regions,
- (vi) the efficient and effective management of the Project Office and the professionalism of its Staff,

Expressing its profound gratitude to the Government of Flanders (Kingdom of Belgium) and the Flanders Marine Institute (VLIZ) for the considerable support provided, both financially and by hosting the Project Office since April 2005,

Invites the Government of Flanders to continue hosting the IOC Project Office for IODE as well as its considerable financial and in-kind contributions and support;

Agrees to

- (i) the continuation of the IOC Project Office for IODE; and
- (ii) the renewal of the Memorandum of Understanding between UNESCO/IOC and the Government of Flanders (Kingdom of Belgium) through the Flanders Marine Institute (VLIZ) that establishes the IOC Project Office for IODE in Ostend, Belgium.

IOC Decision A-31/3.4.3

Harmful Algal Blooms

The Assembly,

Having considered the Executive Summary Report of the 15th online session (23–25 March 2021) of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB),

Endorses the Executive Summary Report of IPHAB-XIV and the recommendations contained therein (IOC/IPHAB-XV/3s);

Takes note of the information related to the status of the FAO-WHO-IAEA-IOC Memorandum of Understanding of Ciguatera Poisoning, and commends cooperation between the four UN organizations in this area;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.5.1

Triennial assessment to be conducted by the Working Group on User Requirements and Contributions to GEBCO Products

The Assembly,

Recalling [Decision EC-LI/4.5](#) to, inter alia, conduct the Review of User Requirements and Potential Contributions to GEBCO on a biennial basis,

Having examined the report of the working group presented in IOC/A-31/3.5.1.Doc,

Recognizing the continued need of the IOC scientific community for bathymetric products and the fact that access to high quality bathymetry is important not only for navigation, but also for other purposes including ocean science, tsunami warning and preparedness and climate modelling,

Noting that significant amounts of bathymetric data are collected by the scientific and commercial sector for purposes other than chart improvement, but are not easily made discoverable or available for secondary purposes,

Takes note of the conclusions of the Working Group contained in IOC/A-31/3.5.1.Doc;

Requests the Executive Secretary to:

- (i) convey the conclusion of this review to the International Hydrographic Organization (IHO) and the GEBCO Guiding Committee;
- (ii) identify ways and means to increase the participation of respondents, particularly representing the interest of IOC programmes, as well as regional subsidiary organs, in future assessments carried out by the working group;
- (iii) share the findings of the review with relevant IOC communities;

Decides to conduct the Review of User Requirements and Potential Contributions to GEBCO on a triennial basis, with the next assessment to be presented to the IOC Executive Council in 2024;

Encourages Member States to:

- (i) cooperate to advance basin-scale campaign mapping and accelerate the delivery of GEBCO objectives and general knowledge of the ocean in particular by supporting and contributing to the Nippon Foundation–GEBCO Seabed 2030 Project;
- (ii) facilitate GEBCO capacity development, including training opportunities; and
- (iii) actively participate in the next assessment, to be conducted by the Working Group;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.5.2

I. Global Ocean Observing System Work Plan

The Assembly,

Having examined IOC/A-31/3.5.2.Doc, the *Executive Summary of the GOOS Implementation Plan*,

Takes note of the re-dynamization of GOOS-AFRICA;

Thanks the GOOS Steering Committee for the identification of proposed strategic actions in the implementation plan;

Expresses its appreciation for the planning for contributions to the Ocean Decade with the GOOS *Ocean Observing Co-Design* and *Observing Together* Programmes (detailed as IOC registered actions in Resolution A-31/1), as well as the *CoastPredict* Programme;

Requests the GOOS Steering Committee to give particular attention to the development of future actions in line with UNESCO's Global Priority Africa, in partnership with GOOS-AFRICA, IOCAFRICA, and other relevant stakeholders;

Requests IOCAFRICA to work closely with the GOOS-AFRICA office in developing and implementing joint activities;

Adopts the *Executive Summary of the GOOS Implementation Plan* (IOC/A-31/3.5.2.Doc) as the GOOS work plan for 2022–2023;

Notes the broad ambition of this implementation plan, its identified resource implications – which if all levels of priority are addressed, would imply a more than doubling of human resources in the medium term – as well as the need to reinforce partnerships and support structures;

Expresses its appreciation for Member States and organizations that have provided direct and in-kind contributions for the distributed GOOS Office;

Invites co-sponsoring organizations of GOOS to consider how they will support implementation, and to work with IOC to design ways of examining and evolving GOOS governance that would lead to improved advice and operational support, be inclusive of additional stakeholders, and be open to advice from a process of governance change;

Urges Member States to work with the GOOS Office to identify how they can help with implementation and what their contributions will enable us to achieve together;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

II. GOOS Steering Committee Regional Membership

Recalling the GOOS SC regional membership appointment defined in IOC Resolution XXVI-8, and further recalling the IOC Circular Letter inviting Member States to the 31st Assembly and requesting nominations of experts for appointment by Member State Electoral Groups,

Notes the appointment by the Member State Electoral Groups of a regional expert member of the GOOS SC for 2022–2023:

- Elaine McDonagh (Group I)
- Konstantin Lebedev (Group II)
- Alvaro Scardilli (Group III)
- Balakrishnan Nair (Group IV);

Further notes that Group V did not complete the selection process, and requests the IOC Vice-Chair for Group V to continue consultations to select an expert, to be completed well in advance of the start of the term of the SC member, 1 January 2022.

IOC Decision A-31/3.5.3

Revision of the IOC Capacity Development Strategy

The Assembly,

Recognizing the importance of Capacity Development as one of the six functions of the IOC Medium-Term Strategy (2014–2021), enabling all Member States to participate in, and benefit from, ocean research and services that are vital to sustainable development and human welfare on the planet,

Recalling [Resolution XXVIII-2](#) by which it adopted the IOC Capacity Development Strategy (2015–2021) at its 28th session,

Having examined the Report of the GE-CD Task Team related to the revision of the IOC Capacity Development Strategy 2015–2021,

Decides to extend the current IOC Capacity Development Strategy until July 2023,

Decides also to revise the Terms of Reference of the IOC Group of Experts on Capacity Development as follows:

- (i) assist global and regional programmes with the implementation of capacity development needs assessments in a consistent manner;
- (ii) assist global and regional programmes with the development of programmatic and regionally relevant capacity development work plans based on the IOC CD strategy and related needs assessments, building on ongoing activities and making use of existing training and education facilities;
- (iii) provide advice to global and regional programmes on relevant methods and tools to improve the quality and impact of CD efforts;
- (iv) repeat the CD survey at regular intervals in 2022 and biannually thereafter, possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences etc.;
- (v) ensure coordination of the work of the Group of Experts and its Task Teams with GOSR and CD aspects of the UN Decade of Ocean Science for Sustainable Development;
- (vi) advise the Assembly on the Transfer of Marine Technology Clearing House Mechanism (CHM) as requested by the *IOC Criteria and Guidelines on the Transfer of Marine Technology* ([IOC/INF-1203](#)), making use, to the largest extent possible, of existing data and information systems and building upon the Ocean InfoHub project (2020–2023);
- (vii) revise the IOC Capacity Development Strategy and prepare a proposal for submission to the IOC Assembly at its 32nd Session;
- (viii) prepare a proposal to promote visibility and reach of the revised IOC CD Strategy so that its target audience will read through and appreciate the document as a guide in implementing capacity development activities for submission and submit it to the IOC Assembly at its 32nd Session;

Calls on IOC's regional subsidiary bodies as well as regional components of global programmes to:

- (i) promote contributions to the CD survey;
- (ii) identify CD efforts of other organizations and seek complementary cooperation;
- (iii) link with other global, regional and national processes and strengthen the relationships with philanthropic, private partnerships and other regional organizations;

Invites Member States to:

- (i) participate actively in the co-development of IOC capacity development by designating focal points for IOC capacity development, and by nominating members of the IOC Group of Experts on Capacity Development;
- (ii) participate actively in IOC programmes, projects and steering groups;
- (iii) involve universities in IOC surveys on capacity development needs;
- (iv) contribute to IOC capacity development activities through financial and/or in-kind contributions;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.5.4

IOC Ocean Literacy Action Plan and Strategy

The Assembly,

Having examined the revised draft IOC Ocean Literacy 2018–2021 proposed in document IOC/A-31/3.5.4.Doc and the accompanying review analysis ([IOC/EC-53/4.5.Doc](#)),

Recalling the IOC Capacity Development Strategy 2015–2021 in which ocean literacy is identified as a main activity of the strategy output 5: Visibility and awareness increased,

Taking into account the IOC's progress on ocean literacy and the role it can play in communicating the relevance of IOC's activities for sustainable development, and in the implementation of the UN 2030 Agenda for Sustainable Development,

Also taking into account the role of ocean literacy plays in the context of the UN Decade of Ocean Science for Sustainable Development as described in the Proposed Ocean Literacy Framework of Action ([IOC/2021/ODS/22](#)),

Trustful that Ocean Literacy will remain integral to the IOC Capacity Development Strategy beyond 2021,

Establishes the IOC Group of Experts on Ocean Literacy with the terms of reference presented in the annex to this decision and invites Member States to nominate suitable candidate members for the Group;

Endorses the IOC Ocean Literacy Plan of Action 2018–2021 as contained in document IOC/A-31/3.5.4.Doc as a guidance document for the work of the IOC Group of Experts on Ocean Literacy for the next four years;

Expresses its appreciation to the Government of Sweden for the financial support provided to the IOC's Ocean Literacy activities and encourages other Member States to follow this example;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

Annex to Dec. A-31/3.5.4

Terms of Reference of the IOC Group of Experts on Ocean Literacy

- (i) The Group will be composed of 20 experts from diverse and relevant disciplines and interested parties reflecting the multi-stakeholder nature of ocean literacy and taking into consideration geographical and gender balance. Experts will be selected following a call to Member States and partner organizations and suggestions from the IOC Secretariat. The Group of Experts will elect its Chair and Vice-chair;

- (ii) The Group of Experts will provide guidance in the scoping, implementation and monitoring of the IOC Ocean Literacy portfolio of activities, specifically in relation to:
 - a. the definition of good practices in Ocean Literacy based on lessons learned in Member States;
 - b. the development of Ocean Literacy global and regional programmes guided by the IOC Ocean Literacy Plan of Action ([IOC/A-31/3.5.4.Doc](#)) and the Ocean Literacy Framework of Action for the UN Decade of Ocean Science (IOC/INF-1400);
 - c. the coordination of Ocean Literacy networks at global, regional, national and local levels;
 - d. the identification of modalities for the mobilization of financial and in-kind resources to enable the implementation of global and regional Ocean Literacy activities;
 - e. the identification of synergies with relevant UNESCO Sectors, international organizations, academic institutions, NGOs and private sector associations;
 - f. the coordination of Ocean Literacy research activities relevant to the development of tools and methodologies and the assessment of impact of Ocean Literacy initiatives;
- (iii) The Group of Experts will produce regular reports and communications to the Ocean Literacy international community through newsletters, side events, etc.;
- (iv) The Group of Experts will provide guidance on the application and possible evolution of the Ocean Literacy Framework of Action for the UN Decade of Ocean Science in coordination with the Decade Advisory Board and the Decade Coordination Unit;
- (v) The Group of Experts will be established for an initial period of four years and will report to the IOC Assembly at its 33rd session, which will decide on its continuation or termination.

IOC Decision A-31/3.5.5

Adoption of a WMO-IOC Collaborative Strategy and Report on the establishment of the Joint WMO-IOC Collaborative Board

The Assembly,

Recalling IOC [Resolution XXX-2](#) that created the Joint WMO-IOC Collaborative Board (JCB), and requested the Board to produce a WMO-IOC Collaborative Strategy for adoption in 2021,

Having examined IOC/A-31/3.5.5.Doc(1), *Proposed WMO-IOC Collaborative Strategy*,

Having further examined IOC/A-31/3.5.5.Doc(2), *Proposed Rules of Procedure for the Joint WMO-IOC Collaborative Board*,

Thanks the co-chairs and members of the JCB for their work in developing the proposed strategy;

Adopts the WMO-IOC Collaborative Strategy, subject to its parallel adoption by the WMO Executive Council at its 73rd Session (14–25 June 2021) and as amended in IOC/A-31/3.5.5.Doc(1) Rev.;

Adopts the Rules of Procedure of the Joint WMO-IOC collaborative Board as proposed in IOC/A-31/3.5.5.Doc(2), subject to its parallel adoption by the WMO Executive Council at its 73rd Session, and agrees to keep these rules of procedure under regular review, jointly with WMO governing bodies;

Requests the JCB to continue work across IOC and WMO to identify and promote priority implementation actions in support of the WMO-IOC Collaborative Strategy;

Agrees that the regular budget for these activities will be identified as part of the Resolution on Governance, Programming and Budgeting Matters of the Commission (IOC Resolution A-31/2).

IOC Decision A-31/3.5.6

Status of the Regional Committee of the Central Indian Ocean (IOCINDIO)

The Assembly,

Having examined the proposal for changing the status of IOCINDIO into an IOC Sub-Commission, as a follow-up to Decision IOC-XXX/3.3.4, by which the IOC Assembly at its 30th session requested the IOCINDIO Chair to prepare, with the help of the IOC Secretariat, the said proposal,

Thanks the former IOCINDIO Officers, notably, the Chair (India) and the Vice-Chairs (Kuwait and Bangladesh) and the IOC Vice-Chair for Group IV (India), for their sustained efforts and commitments to IOC in general and IOCINDIO in particular;

Expresses gratitude to the Government of India for its offer to provide in-kind support for the operation of a Regional Secretariat for the IOCINDIO Sub-Commission;

Thanks the IOCINDIO and IOC Member States and other partners that supported and contributed to the reactivation of the Regional Committee;

Welcomes the IOCINDIO-VIII Recommendation for changing the status of IOCINDIO into an IOC Sub-Commission and the responsive views of Member States, following the provisions of the IOC Manual (IOC/INF-785) with the Guidelines for the Structure and Responsibilities of the Subsidiary Bodies of the Commission (Chapter 5 of Part 1 of the Manual) and its section 5 on Sub-Commissions;

Decides to pursue further towards the establishment of the IOC Sub-Commission for the Indian Ocean, taking into account the proposal for changing the status of IOCINDIO into an IOC Sub-Commission, as a framework to improve coordination of IOC Member States in the region and to ensure implementation of IOC programmes in the Indian Ocean with a view to presenting a draft resolution to the Assembly of IOC at its 32nd Session;

Decides to undertake the remaining steps towards establishment of the IOCINDIO Sub-Commission through an intersessional Working Group in order to complete the work on: terms of reference; determination of the geographic scope; programme of work; the proposed projects and funding support; and mechanisms for coordination with adjacent Sub-Commissions; etc.

Requests the Executive Secretary to:

- (i) establish an open-ended intersessional Working Group and invite interested Member States to participate in the working group;
- (ii) work closely with the Government of India to explore appropriate arrangements for the establishment of the Regional Secretariat of the IOCINDIO Sub-Commission; and
- (iii) report to the Executive Council, at its 55th session, on the status of implementation of this decision.

IOC Decision A-31/3.6

IOC Report to the Forty-first General Conference of UNESCO

The Assembly,

Recalling [Article 3.2](#) of the Statutes and Rule of Procedure [49.2](#),

Having examined document IOC/A-31/3.6.Doc,

Takes note of the report to be presented to the 41st session of the General Conference of UNESCO, and requests the Executive Secretary to submit the report on IOC activities (2020–2021) to the 41st General Conference of UNESCO as document 41 C/REP.9.

IOC Decision A-31/4.1

Draft IOC Medium-Term Strategy for 2022–2029

The Assembly,

Having examined documents IOC/A-31/4.1.Doc(1) and [Resolution EC-53/2](#),

Takes note of the documents IOC/A-31/4.1.Doc(1) and [Resolution EC-53/2](#) and Annexes subject to further examination by the Financial Committee with a view of formulating a draft resolution for discussion and adoption in plenary.

IOC Decision A-31/4.2

Draft Programme and Budget for 2022–2025 (41 C/5)

The Assembly,

Having examined document IOC/A-31/4.2.Doc(1) and Resolution [EC-53/2](#),

Takes note of document IOC/A-31/4.2.Doc(1) and [Resolution EC-53/2](#) and Annexes subject to further examination by the Financial Committee with a view of formulating a draft resolution for discussion and adoption in plenary.

IOC Decision A-31/4.3

**Follow-up to Resolution EC-53/2 on Review and Update of the Rules
of Procedure to Adapt them to Online Meetings and Guidelines
for Reporting on in-kind Contributions**

The Assembly,

Having examined document IOC/A-31/4.3.Doc,

Takes note of the document IOC/A-31/4.3.Doc subject to further examination by the Financial Committee with a view of formulating a draft resolution for discussion and adoption in plenary.

IOC Decision A-31/4.5.2

IOC Elections 2021

The Assembly,

I. Election of the Chair of the Commission

Elects Mr Ariel H. Troisi (Argentina)

II. Election of the Vice-chairs of the Commission

Elects:

- Ms Marie-Alexandrine Sicre (France) (Group 1)
- Mr Alexander Frolov (Russian Federation) (Group 2)
- Mr Frederico Antonio Saraiva Nogueira (Brazil) (Group 3)
- Mr Srinivasa Kumar Tummala (India) (Group 4)
- Mr Karim Hilmi (Morocco) (Group 5)

III. Election of the Members of the Executive Council

Elects

- Canada, Germany, Italy, Portugal, Spain, Sweden, Turkey, the United Kingdom of Great Britain and Northern Ireland, and the United States of America for Group 1;
- Bulgaria and Romania for Group 2;
- Chile, Colombia, Grenada, Panama, Peru, Saint Vincent and the Grenadines, and Uruguay for Group 3;
- Australia, China, the Islamic Republic of Iran, Japan, the Philippines, the Republic of Korea, Thailand and Turkmenistan for Group 4; and
- Côte d'Ivoire, Egypt, Gabon, Guinea, Kenya, Libya, Saudi Arabia, and South Africa for Group 5.

IOC Decision A-31/ 4.6

**32nd session of the Assembly
and 55th session of the Executive Council**

The Assembly,

Recalling the recommendations of the Executive Council at its 54th session (Dec. EC-54/4),

Decides to hold:

- (i) The 55th session of the Executive Council for 3.5 days in UNESCO Headquarters, Paris over the period of 13 to 17 June 2022,
- (ii) The 32nd session of the Assembly for a duration of 6.5 days plus one Ocean Science Day, at UNESCO Headquarters, over the period from 19 to 30 June 2023, preceded by a one-day session of the Executive Council (56th session) acting as the steering committee of the Assembly and followed by an extraordinary session of the Executive Council dedicated to the adoption of a separated set of Rules of Procedure for the Executive Council.

IOC Decision A-31/5

**Adoption of Resolutions and Modalities
for the finalisation of the Report**

The Assembly,

Having considered the recommendations of the Executive Council at its 54th session (Dec. EC-54/3.1) on organization matters,

Adopts the decisions and two resolutions of the session;

Requests the Executive Secretary to circulate the narrative part of the report to Member States in the four working languages of the Commission by 30 July 2021 at the latest for its adoption by correspondence by 15 September 2021.

ADOPTED RESOLUTIONS

IOC Resolution A-31/1

Implementation of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030)

The Intergovernmental Oceanographic Commission,

Recalling IOC Assembly [Resolution XXIX-1](#) proposing the establishment of an international (UN) Decade of Ocean Science for Sustainable Development (2021–2030), the subsequent proclamation of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030) by the United Nations General Assembly (UNGA) at its 72nd session through Resolution [A/RES/72/73](#) (therein the Decade), and the invitation to the IOC to prepare an implementation plan for the Decade in consultation with Member States, specialized agencies, funds, programmes, and bodies of the United Nations (UN), as well as other intergovernmental organizations, non-governmental organizations and relevant stakeholders,

Further recalling IOC Assembly [Resolution XXX-1](#) on Progress Report on the Preparation of the United Nations Decade of Ocean Science for Sustainable Development and the call on IOC by the UNGA through Resolution [A/RES/74/19](#) to:

- (i) continue to provide information on the development of the implementation plan and present it to the UNGA at its 75th session,
- (ii) regularly consult with, and report to, (UN) Member States on the Decade and its implementation,

Also further recalling the consultation with IOC Member States in 2020 on the modalities of completion and submission of the Decade Implementation Plan (DIP) to the UNGA at its 75th session and that the UNGA through Resolution [A/RES/75/239](#) welcomed the steps taken by IOC in the preparation of the Implementation Plan and took note with appreciation of that Plan (para 304),

Noting [IOC Resolution EC-53/1](#) on Implementation of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030),

Welcoming the Report on the Implementation of the UN Ocean Decade (Document [IOC/A-31/3.7.Doc\(2\)](#)) and, in particular, the outcomes of the global consultation meetings, regional workshops, the inclusive review process of the DIP by Member States, members of UN-Oceans, and stakeholders, the engagement activities with UN and non-UN ocean stakeholders, as well as the launch of the 1st Call for Actions under the Decade;

Expressing confidence in the IOC Secretariat's ability to continue coordinating the Decade during its implementation phase (2021–2030) in consultation with Member States, specialized agencies, funds, programmes, and bodies of the United Nations, as well as other intergovernmental organizations, non-governmental organizations and relevant stakeholders;

Part I Decade Coordination matters

Takes note of the DIP as the basis for launching the Decade and establishing the governance arrangements and engagement mechanisms described therein;

Acknowledges the outcome of the 1st Call for Action and the endorsed Decade Programmes as presented in Document [IOC/INF-1417](#);

Supports the establishment of the Decade Coordination Unit (DCU) within the IOC Secretariat as the primary mechanism to achieve orderly, impactful, inclusive and effective implementation of the Decade;

Invites institutional partners to act as Decade Collaborative Centres or Decade Implementing Partners on the basis of the guidance provided in Document [IOC/2021/ODS/23](#) and **requests** the IOC Secretariat to report to IOC Governing Bodies on the establishment of such arrangements;

Invites Member States and partners to:

- (i) provide voluntary financial contributions to support the work of the IOC Secretariat in coordinating the Decade including in-kind support such as staff loans and secondments to the DCU;
- (ii) offer to host and fund Decade Actions, Decade Coordination Offices, and Decade Collaborative Centres as described in the DIP;
- (iii) establish national multi-stakeholder Decade coordination mechanisms with a view to stimulating national activities and international cooperation; and
- (iv) host regional or international Decade stakeholders events, including in the context of the International Ocean Decade Conference Series.

Further invites UN-Oceans partners, UN Member States, international scientific and academic organizations, non-governmental organizations and other relevant stakeholders to support the Decade, and contribute to its implementation by proposing Decade Actions in accordance with the DIP;

Thanks the Governments of Canada, the Republic of Korea, Japan, the Kingdom of Belgium (Government of Flanders), Norway, Sweden, Portugal, the United Kingdom of Great Britain & Northern Ireland, and the People's Republic of China as well as REV-Ocean for their financial contribution to the Decade and further **thanks** Germany for their hosting of the High Level Launch of the Ocean Decade – First International Ocean Decade Conference, and the UN Ocean Decade Laboratories;

Part II **Establishment of the Decade Advisory Board**

Thanks members of the Decade Executive Planning Group for their work in supporting the preparation phase of the Decade in 2018–2020 and for acting as *Interim Decade Advisory Board* in 2021 in accordance with the revised terms of reference of the group adopted by IOC Executive Council at its 53rd session through Resolution EC-53/1;

Approves the terms of reference for the Decade Advisory Board as presented in the Annex therein, including the selection process of its members envisaged for the balanced constitution of such a group, to be established under the coordination of the IOC Executive Secretary;

Part III IOC Contribution to the Decade

Emphasizes the unique position of IOC to make a substantial contribution to the Decade through the implementation of High-Level Objectives (HLOs) as reflected in its Draft IOC Medium Term Strategy for 2022–2029 (41 C/4) and Draft Programme and Budget for 2022–2025 (41 C/5);

Works closely and in concert with IOCAFRIKA Member States, the GOOS-AFRICA Regional Alliance, the African Union, and specialized African institutions, to ensure that the implementation of the Decade in Africa contributes to the priorities of the Decade of African Seas and Oceans (2015–2025);

Further works through multi-stakeholder collaboration and IOC's Regional Subsidiary Bodies to ensure that the tangible initiatives and endeavours that will be implemented will mobilize support towards Small Island Developing States (SIDS), enable them to achieve their ocean-related 2030 Agenda priorities and contribute to the implementation of the SIDS Accelerated Modalities of Action (SAMOA) Pathway;

Invites IOC Subsidiary Bodies, relevant IOC governance structures, and relevant UNESCO Category 2 Centres to continue identifying programmatic contributions to the Decade during the intersessional period;

Welcomes the active role of the IOC Regional Subsidiary Bodies in facilitating Decade regional coordination and engagement activities;

Supports the registration or planned registration of IOC-led Decade Actions, specifically:

- (i) “Ocean Observing Co-Design” Programme by the Global Ocean Observing System (GOOS), which will build the process, infrastructure and tools for ocean observing co-design necessary to support the Decade;
- (ii) “Observing Together” Programme by GOOS, which will transform ocean data access and availability by connecting ocean observers and the communities they serve through enhanced support to both new and existing community-scale projects;
- (iii) the establishment of a Decade Tsunami Programme aimed at achieving transformational advances in tsunami detection, observing and warning, including tsunamis generated by non-seismic sources, making 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the UNESCO/IOC Tsunami Ready Programme, as reflected in decision Dec. A-31/3.4.1 of the Assembly;
- (iv) the “Ocean Literacy With All (OLWA)” Programme to respond to priorities identified in the Ocean Decade Ocean Literacy Action Framework (Document [IOC/2021/ODS/22](#)); and
- (v) “Ocean Practices for the Decade” as a Programme connected to the IODE-GOOS Ocean Best Practices System;
- (vi) the registration of Ocean Data and Information System (ODIS), Ocean Biodiversity Information System (OBIS), OceanTeacher Global Academy (OTGA), World Ocean Database (WOD), and Pacific islands Marine bioinvasions Alert Network (PacMAN) as Ocean Decade Actions;

Further invites Member States, partners, and donor organizations to support these Decade Actions including through allocation of extra-budgetary resources to relevant IOC programmes to achieve their transformative ambitions, guide their respective communities, and act as a catalyser of further actions within and beyond the Decade.

Annex 1 to IOC Resolution A-31/1

**Advisory Board of the UN Decade of Ocean Science for Sustainable Development
(the Decade Advisory Board)**

Terms of Reference

The Advisory Board of the UN Decade of Ocean Science for Sustainable Development (the “Decade Advisory Board”) is established as a technical advisory body to the Secretariat and Governing Bodies of the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

Role of the Decade Advisory Board

The Decade Advisory Board is responsible for providing direct advice to the IOC Executive Secretary on the implementation of the UN Decade of Ocean Science for Sustainable Development (‘the Ocean Decade’) over its ten-year implementation phase (2021–2030) with a focus on the endorsement of Decade Actions and scoping of Calls for Decade Actions, and reports to IOC Governing Bodies on strategic matters related to implementation of the Ocean Decade. Specifically, and in accordance with the Ocean Decade Implementation Plan, the Decade Advisory Board will:

- (i) Review and make recommendations to the IOC Executive Secretary on the endorsement of Decade Programmes;
- (ii) Advise the IOC Executive Secretary on the scope of Calls for Actions under the Decade to support the mobilisation of proponents worldwide;
- (iii) Review the regular resource needs assessments prepared by the Decade Coordination Unit and recommend approaches for resource mobilisation and support outreach efforts to potential funders, including Member States, multilateral development banks, climate financing mechanisms, philanthropic foundations, and the private sector in order to help create the enabling environment needed to achieve the ambitions of the Decade;
- (iv) Advise on the engagement and outreach strategy of the Decade in order to help catalyse high-level interest and engagement among key stakeholders, including leaders from Member States, UN Agencies, business, civil society and academia to ensure that the scientific outputs of the Decade support the successful achievement of the UN Sustainable Development Goals;
- (v) Advise on the regular reviews to be undertaken subject to decision by IOC Governing Bodies, during the implementation phase, including review of the scientific objectives and orientations of the Implementation Plan, annual progress reports, and the mid-term and final reviews, and make recommendations on the results of such reviews, as requested;
- (vi) Advise on the engagement of relevant communities regarding contributions to the objectives of the Decade, with priority given to engaging early career ocean professionals and disadvantaged groups and regions and to the science-policy interface;

- (vii) Monitor the progress and review the outputs of any working groups established by the IOC Secretariat related to structural and cross-cutting operational elements of the Decade Implementation Plan;
- (viii) Provide information to the IOC Executive Secretary to enable his reporting to the IOC Governing Bodies;
- (ix) Report as needed to the Governing Bodies in relation to strategic issues.

Chairing of the Decade Advisory Board

The Decade Advisory Board will appoint two Co-chairs amongst its members, ideally one representing the science fields and another one representing the societal end-users of the Decade. The Co-chairs will be appointed by the IOC Executive Secretary for one year with the possibility of a second one-year term.

Decision-making process and organization of work

The Decade Advisory Board will strive for consensus on all issues in providing recommendations and advice to the IOC Executive Secretary. The minutes of the meeting will record any instances when consensus was not reached.

The working language of the Board will be English. No interpretation will be provided.

Decade Advisory Board Composition

The Decade Advisory Board will comprise up to 15 expert members serving in their individual capacity drawn from government, private sector, philanthropy, civil society, and the scientific community, as well as representatives of UN Agencies. In total, the Decade Advisory Board should not exceed 20 members, including Expert members and UN representatives. Expert members will be nominated through open calls for nominations. The calls will be circulated through the following means:

- IOC Member States via IOC Circular Letters;
- Relevant UN bodies via UN-Oceans;
- Scientific networks using formal and informal communication mechanisms;
- Dedicated ocean policy, business, and sustainable development networks through announcements; and
- The Ocean Decade and IOC website.

Proposals for nominations can be made by IOC-UNESCO and United Nations Member States or United Nations entities, as well as intergovernmental organizations. Self-nomination will also be possible to encourage nominations from non-governmental entities.

Expert members will be selected with due consideration to expertise, geographic, generational, and gender balance and will serve on a voluntary basis in their personal capacities. Decade Advisory Board members do not represent their institutions or countries. They should be able to commit sufficient time to the work of the Decade Advisory Board and will take the responsibility to request the authorization of their employer to participate in this process.

Membership on the Decade Advisory Board will be for a two-year term, renewable for a second mandate. Members' terms will be staggered to ensure there is information exchange

and mentoring between current and new Board members. Operational procedures for this process will be defined with the Board and its co-chairs.

Each Member shall comply with the Conflict of Interest guidelines to be prepared by the Secretariat and notify the Decade Coordination Unit with respect to any such potential conflicts.

A Selection Panel convened by the IOC Executive Secretary and composed of the IOC Chair and elected IOC Officers representing the five IOC electoral groups, with the technical support of the Decade Coordination Unit, will be tasked with selecting the members of the Decade Advisory Board.

The Selection Panel will ensure that the proposed members have sufficient skills, knowledge, influence and impartiality regarding the vision and objectives of the Decade and are able to undertake the work outlined in the terms of reference. Their skills and expertise should cover at least one of the following areas:

- (i) Intergovernmental processes and coordination;
- (ii) The ocean aspects of sustainable development;
- (iii) Ocean science (natural / social dimensions);
- (iv) Science-policy / decision / end-user interface and engagement;
- (v) Ocean Economy / finance/ partnerships;
- (vi) Innovation / technology/ infrastructure development;
- (vii) Capacity development, training and transfer of marine technology, education, communications and outreach; and/or
- (viii) Development of large-scale multi/inter-disciplinary international programmes / projects.

UN Agencies representation on the Decade Advisory Board

UN Legal Counsel/DOALOS, which is the Secretariat and focal point of UN-Oceans and the United Nations Convention on the Laws of the Sea, will have one permanent seat on the Decade Advisory Board. The IOC Secretariat as coordinator of the Decade will also have a permanent seat on the Board. Three more seats will be reserved for UN Agencies and will be identified through consultations via UN-Oceans.

Secretariat of the Decade Advisory Board

The Decade Coordination Unit located within the IOC Secretariat will be the Secretariat for the Decade Advisory Board.

Meetings of the Decade Advisory Board

The Decade Advisory Board shall meet four (4) times per year, with at least one (1) in presentia meeting annually when possible. Additional in-person or virtual meetings will be held as necessary. The Co-chairs of the Decade Advisory Board will be primarily responsible for the development of the Board Meeting Agenda and directing the Decade Advisory Board meetings. All Decade Advisory Board Members can recommend agenda items. The Decade Advisory Board may invite external experts as needed to address specific issues or tasks. The decision to invite these external experts would be a decision of the Board.

Minutes of the Board meetings will be developed and distributed by the Secretariat for the Decade Advisory Board. These will be made public on the Ocean Decade website. Expert Members of the Decade Advisory Board are expected to attend all meetings of the Board in person, without replacement.

IOC Resolution A-31/2

Governance, programming and budgeting matters of the Commission

The Intergovernmental Oceanographic Commission,

Having examined documents:

- (i) IOC/A-31/3.2.Doc(2) – Report on 2020–2021 (40 C/5) budget implementation as at 31 December 2020,
- (ii) IOC/A-31/3.2.Doc(3) – Financial situation of the IOC Special Account as at year end 2020 and Forecast for 2021,
- (iii) IOC/A-31/4.1.Doc – Draft IOC Medium Term Strategy for 2022–2029 (41 C/4),
- (iv) IOC/A-31/4.2.Doc – Draft Programme and Budget for 2022–2025 (41 C/5) – First Biennium 2022–2023,
- (v) IOC/A-31/4.3.Doc – Report of the Chairperson of the IOC Intersessional Financial Advisory Group (2021),

I. 2020–2021 budget implementation as at 31 December 2020 and Financial situation of the IOC Special Account as at year end 2020 and Forecast for 2021

Confirms that the IOC workplans for 2020–2021, as reported in IOC/A-31/3.2.Doc(2), have been implemented in accordance with the budgetary allocations approved by the IOC Assembly at its 30th session through Resolution XXX-3, as presented in document IOC-XXX/2 Annex 9;

Notes the slightly lower than usual implementation rate in the first year of the 2020–2021 biennium, due to the working conditions under the COVID-19 pandemic, as well as the Secretariat's intention to fully implement the biennial programme of work by the end of 2021;

Further notes that as at 31 December 2020, the extrabudgetary resource mobilisation targets set for the 2020–2021 biennium have been achieved to the level of 76% overall, but with considerable variance between the Commission's Functions;

Acknowledges the information on the financial situation of the IOC Special Account as at year end 2020 and Forecast for 2021 as provided in IOC/A-31/3.2.Doc(3);

Approves the adjustments to the 2020–2021 budgetary appropriations as proposed in Table 1 of IOC/A-31/3.2.Doc(3);

Thanks Member States who have already contributed or committed to contributing extrabudgetary funds for the 2020–2021 programme implementation;

Encourages all Member States to provide voluntary contributions to ensure full achievement of the collectively agreed extrabudgetary resource mobilization targets for 2020–2021, preferably to the IOC Special Account;

Requests the IOC Executive Secretary to continue efforts to obtain further voluntary contributions, including from private sector donors and other partners and to achieve full implementation of the IOC's programmatic targets for 2020–2021;

II. Draft Medium-Term Strategy for 2022–2029

Welcomes the revisions and improvements introduced by the Secretariat in the IOC's Draft Medium-Term Strategy for 2022–2029, in response to the recommendations of the IOC Executive Council at its 53rd session through [Resolution EC-53/2](#);

Endorses the IOC Medium-Term Strategy for 2022–2029 with the amendments to IOC/A-31/4.1.Doc as contained in Annex I to this Resolution;

III. Draft Programme and Budget for 2022–2025

Expresses its appreciation to the IOC Secretariat for the proposal contained in IOC/A-31/4.2.Doc as consistent with the guiding principles set out in Resolution EC-53/2 and the high level objectives defined in the Draft IOC Medium-Term Strategy for 2022–2029;

Takes note of the Executive Secretary's programmatic choices, while also expressing concern regarding the decrease in the regular programme budget for operations;

Highlights the importance of ensuring that the IOC has the strategy and the necessary resources, both in terms of regular programme budget and voluntary contributions, to fulfil its role in the implementation of the UN Decade of Ocean Science for Sustainable Development (2021–2030), hereafter the Decade;

Invites the Director-General of UNESCO to:

- (i) reinforce the human resources of the IOC in the 41 C/5, to enable the IOC to fulfil its increasing mandate and to address current and emerging priorities, including those related to the implementation of the UN Sustainable Development Goals and the Decade;
- (ii) continue every effort to enhance the financial resources available to the IOC in the 41 C/5;
- (iii) ensure that the budgetary appropriation for the IOC approved in the 41 C/5 shall not be decreased by transfers of funds to other parts of UNESCO's budget;

Invites IOC Member States to:

- (i) continue to advocate to the Director-General of UNESCO and the Governing Bodies of UNESCO on the importance of the IOC as a body with functional autonomy within UNESCO, focusing in particular on the value that the IOC provides to UNESCO and to sustainable development;
- (ii) support the reinforcement of the IOC in the consultation process for the UNESCO Draft Medium-Term Strategy for 2022–2029 (Draft 41 C/4) and the Draft Programme and Budget for 2022–2025 (Draft 41 C/5);

- (iii) increase their voluntary contributions to support the IOC in the face of its increasing responsibilities, preferably to the IOC Special Account, as well as, *inter alia*, by providing in-kind support such as staff loans (either in-person or via telework arrangements) to the IOC Secretariat;
- (iv) further increase their non-earmarked contributions to enable the IOC to cover the collectively agreed priorities of IOC programmes;

Requests the IOC Executive Secretary to:

- (i) keep the IOC Officers and Member States updated on the 41 C/5 adoption process by UNESCO;
- (ii) following the approval of the 2022–2023 budget by the General Conference of UNESCO, develop the workplans based on the overall approach set out in IOC/A-31/4.2.Doc;
- (iii) support the work of the Intersessional Financial Advisory Group (IFAG) by providing timely information on the relevant programming and budgetary planning process, in order to facilitate informed decision-making by Member States at the 55th session of the IOC Executive Council in 2022;

IV. Governance and Working Methods

Recalling that the IOC Assembly at its 30th session through Resolution XXX-3 invited the IFAG 'to continue reflecting on the best practices to further enhance the efficiency of the IOC Governing Bodies' meetings',

Acknowledging that the COVID-19 pandemic highlighted the need to review and possibly update the IOC's Rules of Procedure in order to align them with the prevailing United Nations' best practices facilitating informed and timely decision-making by IOC Member States,

Noting that the IOC Executive Council at its 53rd session through Resolution EC-53/2 acknowledged the need to adapt the IOC's Rules of Procedure to on-line meetings,

Welcomes the information provided in the Report of the Chairperson of the Intersessional Financial Advisory Group (2021), (IOC/A-31/4.3.Doc) regarding the consultations held on this matter with the UNESCO Legal Advisor;

Requests the IOC Executive Secretary to prepare, in consultation with the UNESCO Legal Advisor and IFAG, a preliminary proposal for the revised separate sets of Rules of Procedure for the IOC Assembly and Rules of Procedure for the IOC Executive Council, making the necessary clarifications and aligning language versions, for review and adoption by these two bodies, in accordance with the following timeline:

- (i) the first draft of the Rules of Procedure of the IOC Executive Council will be reviewed by the IOC Executive Council at its 55th session in 2022;
- (ii) draft Rules of Procedure of the IOC Assembly will be presented for review and adoption by the IOC Assembly at its 32nd session in 2023;
- (iii) the IOC Assembly at its 32nd session will also review the draft Rules of Procedure for the IOC Executive Council;

- (iv) the IOC Executive Council will hold an extraordinary session immediately following the 32nd session of the IOC Assembly in order to adopt its Rules of Procedure;

Agrees that each IOC governing body will adopt the recommendations on the working methods for online sessions at the same time as the Rules of Procedure, following the practice of the UNESCO Executive Board;

Invites IFAG to develop a proposal for a systematic approach and methodology for reporting in-kind contributions, consistent with the updated Guiding Principles for Programming and Budgeting (Annex I to Resolution EC-53/2) and Article 10 of the IOC Statutes, to be considered by the IOC Assembly at its 32nd session.

Annex to Resolution A-31/2

IOC Medium-Term Strategy for 2022–2029 (41 C/4)

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PREFACE

1. IOC HIGH-LEVEL OBJECTIVES & PRIORITIES
2. IMPLEMENTING THE STRATEGY
3. WORKING CLOSER TO THE FIELD
4. ENGAGEMENT WITH KEY PARTNERS & STAKEHOLDERS



IOC MISSION

The purpose of the Commission is to promote international cooperation and to coordinate programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of its Member States.

(IOC [Statutes](#), Article 2.1)

IOC VISION STATEMENT

To bring together governments and the science community in achieving the 'Ocean We Need for the Future We Want.'

Preface

The ocean is the largest ecosystem on the planet Earth. It is also the key feature of how our planet looks from the Space. Humans have to find harmony in living with the ocean. To continue benefitting from the ocean life-supporting function, an equilibrium must be sought between the continuously increasing use of ocean space and resources and restoring and maintaining the ocean's health, which is currently in rapid decline. This understanding is captured in the formulation of the Sustainable Development Goal 14 of the 2030 Agenda: *Conserve and sustainably use the oceans, seas and marine resources for sustainable development.*

The role of the ocean for climate, disaster risk reduction, future of island States is reflected in the Paris Agreement of UNFCCC, the Convention on Biological Diversity, the UN Sendai Framework for Disaster Risk Reduction, and the SIDS Accelerated Modalities of Action (SAMOA Pathway) and a number of regional, sub-regional and national action frameworks or development strategies. In the complex world we live in, with continuing and accelerating climate change, the success of all these frameworks depends on capacity of science to deliver needed solutions and on the ability and will of stakeholders to effectively use these solutions.

The pivotal role of the Intergovernmental Oceanographic Commission of UNESCO is therefore to bring together the scientific communities, the governmental decision-making system, and a broader set of stakeholders within our Member States, including the private sector and the civil society as a whole, to develop efficient, science-based integrated ocean and coastal management and corresponding solutions., taking in consideration relevant indigenous, local and traditional knowledge. Never in the history of our civilization has such cooperation been so urgently required.

There is a need to mainstream ocean science for managing the ocean, . The emergence of an international legally-binding instrument on conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) under the UN Convention of the Law of the Sea (UNCLOS) means that legally-binding obligations of nations are becoming increasingly ocean science-dependent. Successful execution of the IOC programme during the period of Medium-Term Strategy 2014–2021 and the IOC-led planning and coordination of the UN Decade of Ocean Science for Sustainable Development (2021–2030) brought IOC to the leading position in the work on systematic provision of ocean-related solutions to the global challenges of our time. However, the ability of IOC to deliver on its expanding mandate and

respond both to the ambitions placed on the Decade and its Member States' aspirations and needs will require, in turn, stronger support from governments, more authoritative decision-making capacity of IOC governing bodies, and adequate and reliable co-design of and investment in the whole value chain of modern ocean science.

Ariel Hernan Troisi
Chairperson

Vladimir Ryabinin
Executive Secretary

IOC HIGH-LEVEL OBJECTIVES AND PRIORITIES

Through international cooperation, IOC aspires to build and apply scientific knowledge to achieve the following High-Level Objectives (HLOs), with particular attention to ensuring that all Member States have the capacity to meet them:

1. Healthy ocean and sustained ocean ecosystem services;
2. Effective warning systems and preparedness for tsunamis and other ocean-related hazards;
3. Resilience to climate change and contribution to its mitigation;
4. Scientifically-founded services for the sustainable ocean economy; and
5. Foresight on emerging ocean science issues.

Objective 1 – Healthy ocean and sustained ocean ecosystem services

Improving scientific understanding of ocean ecosystems, identifying robust indicators of their health, and understanding ecosystem vulnerability, e.g., to multi-stressors, are vital for monitoring and predicting the ecosystem health and resilience and developing ecosystem-based management, underpinning sustainable ocean economy and improved ocean governance. Current ecosystem research and management require stronger coordination and cooperation between key stakeholders.

Objective 2 – Effective warning systems and preparedness for tsunamis and other ocean-related hazards

With accelerating coastal development and changing environment, society becomes increasingly vulnerable to coastal hazards such as harmful algal blooms, coastal flooding, tsunamis and tropical cyclones. Nations should be aware of the hazards and have access to the necessary information for coastal planning, hazard mitigation, adaptation to climate change, and for safe operations at sea. This calls for continued implementation of ocean and coastal observing systems, improvements in the ocean, meteorological and climate models, and the development of a suite of local decision-support tools, including early warning systems.

Objective 3 – Resilience to climate change and contribution to its mitigation

Climate change and variability encompass temperature changes, altered patterns and intensities of tropical cyclones, storms, rainfall and droughts, sea-level rise, etc. Carbon emissions lead also to ocean acidification. Combined effects manifest themselves in ocean deoxygenation, coastal erosion, etc. Many human development goals, such as food security and health, access to water resources, and preparedness for disasters, are threatened by climate change. Ocean is a key regulator of climate. Coordinated global and regional efforts,

including through the assistance of the WMO-IOC Joint Collaborative Board, are needed therefore to comprehensively include the ocean dimension in our improved capacity to understand and predict climate change, its impacts on the ocean, guiding the development and accelerated implementation of effective adaptation and mitigation strategies.

Objective 4 – Scientifically-founded services for the sustainable ocean economy

Sustainability of ocean economy relates to the long-term capacity of ocean ecosystems to support human activities. Maintaining this equilibrium requires ocean observations, fit-for-purpose data products and services, scientific assessments, and monitoring and forecasting of ocean ecosystem health. Knowledge-based ocean management tools such as marine spatial planning, coastal zone management, marine protected areas, and management of Large Marine Ecosystems (LMEs) can help ocean stakeholders to set environmental and socio-economic objectives, develop operational plans, define safe boundaries and guidelines for operations, as well as reduce conflicts among multiple uses of ocean space.

Objective 5 – Foresight on emerging ocean science issues

The ocean remains one of the least studied environmental domains of the Earth System. Oceanographic discoveries are still possible. New issues constantly emerge in the ocean that may potentially affect the health of ocean ecosystems as well as human wellbeing. New stressors, e.g. contaminants or pressures from emerging activities or industries, may combine with known stressors such as ocean acidification, altered patterns of the ocean carbon cycle, de-oxygenation, and climate change, and create complex impact on ecosystems. Cutting-edge research, innovation, technological development, including in observations and in developing a global “data and information ecosystem”, should augment our capacity to anticipate such emerging issues, inform policy-making, including in the context of relevant regional and global conventions, and advance timely solutions involving relevant stakeholders.

Global Priority Africa: Africa is an overarching priority for UNESCO, and IOC will ensure that it is mainstreamed into all its programmes and reflected in its performance indicators. The *2050 Africa’s Integrated Maritime Strategy* (AIMS) specifically recognizes the role of IOC/UNESCO in the promotion of scientific research and capacity development (CD) as well as in transfer of marine technology (TMT). IOC will provide the science base for the development of the sustainable Ocean Economy in Africa as outlined in the African Union’s Agenda 2063 (*The Africa We Want: A shared strategic framework for inclusive growth and sustainable development*) and the AIMS.

Global Priority of Gender Equality: The IOC contribution to Global Priority of Gender Equality will focus on ensuring that international science cooperation for peace and sustainability promotes equal representation and voice for women and men and that conditions for both women and men to be agents of mitigation, adaptation, resilience and sustainability are equally enabled. The IOC *Global Ocean Science Report* will continue to monitor progress and assist Member States in achieving parity of men and women in the marine sciences community.

Small Island Developing States (SIDS): The SIDS Accelerated Modalities of Action (SAMOA) Pathway of 2014 has a strong bearing on the ocean and draws increased attention of the international community to extreme weather events, sea-level rise, coastal erosion and ocean acidification. The Pathway calls for heightened support in technology, finance and capacity-development for climate change adaptation, including need to assist in baseline monitoring of island environment. IOC will continue to help building a wide scope of SIDS actions including related to tsunami early warning systems and strengthening resilience of coastal communities through the Tsunami Ready programme, development of marine scientific and technological capacity of SIDS, and enhancing cooperation to manage all aspects of the ocean health including ocean acidification impacts.

Early Career Ocean Professionals: Ocean sustainability and ocean science require human resources that are balanced across generations. IOC will actively engage talents and energy of early career ocean professionals and strive to offer them opportunities for professional development. This will be done through the establishment of networks of early career professionals and their equitable and gender-balanced engagement in ocean affairs.

Increased understanding of the value of IOC work including its socio-economic benefits: The work of IOC concerns all aspects of human relations with the ocean: the economy, policy and politics, and social, cultural, spiritual, and emotional connections. It will continue to result in multiple tangible and intangible benefits to society. Above all, the work of IOC will continue to directly save lives, e.g., through tsunami warnings. International cooperation in ocean sciences and services is a significant factor of supporting multilateralism and maintaining peace in the world. IOC will also contribute to informing international political decisions that shape the future of our civilization, e.g., through the climate change debate. Knowledge of the marine environment enables the ocean economy, which annually generates monetary value measured in trillions of US dollars. It will be advantageous therefore to link the benefits of IOC work to national economy accounts. Through ocean-climate risk assessments, it will be possible to demonstrate the value of investments in nature-based climate adaptation solutions and mainstream the ocean considerations in sustainable economic development plans. This will lead to new business opportunities and perspectives of increased prosperity and safety of people. To understand and demonstrate the full value of the IOC work, assessments of tangible value of ocean ecosystems and their delivered goods and services, can be sustainably utilized. The role of IOC will only continue to increase in the future, because maintaining vital life-support functions of the ocean is becoming more and more science-intensive. Thus, to realise the full current and future potential of IOC and maximize benefits stemming from IOC activities in a large number of socio-economic domains, IOC will have to further strengthen its collaboration and partnerships within the UN system and beyond it, with many stakeholders and partners.

UNITED NATIONS DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT (2021–2030)

The UN Decade of Ocean Science for Sustainable Development (the “Decade”) will run from 2021 to 2030. The aim of this unique long-term high-level campaign is to bring ocean science to the new level or readiness to deliver that is required to inform decisions and to catalyse efficient actions and policies for sustainable use and protection of the ocean.

The Decade offers an exceptional opportunity to highlight the societal benefits of IOC and its programmes. During the years 2022–2029, a major responsibility of IOC will be to support and facilitate the Decade implementation and to regularly report progress to the United Nations Secretary General and General Assembly.

The Decade will be guided by a vision of “the Ocean we need for the future we want”, namely:

- **a clean ocean** where sources of pollution are identified, reduced or removed;
- **a healthy and resilient** ocean where marine ecosystems are understood and managed;
- **a productive ocean** supporting sustainable food supply and a sustainable ocean economy;
- **a predicted ocean** where society understands and can respond to changing ocean conditions;
- **a safe ocean** where life and livelihoods are protected from ocean-related hazards;

- **an accessible ocean** with open and equitable access to data, information and technology, and innovation; and
- **an inspiring and engaging ocean** where society understands and values the ocean in relation to human wellbeing and sustainable development.

The main transformation to be achieved in the course of the Decade is to make the science able to deliver not only diagnostics of existing or emerging problems but to offer effective solutions and to motivate the society and elevate its readiness to implement them. The Decade will aim therefore to build science capacity, mobilize scientists, facilitate an enabling environment for engagement of practitioners, decision-makers and the private sector in the development and use of science-based solutions to start managing the ocean sustainably.

The Decade will also provide a powerful stimulus for IOC to contribute to implementing collectively-agreed global and regional priorities. Successful realization of the Decade will rely on true ownership by many partners and stakeholders who will use the Decade framework and the opportunities it generates to deliver on their own mandates in sustainable development.

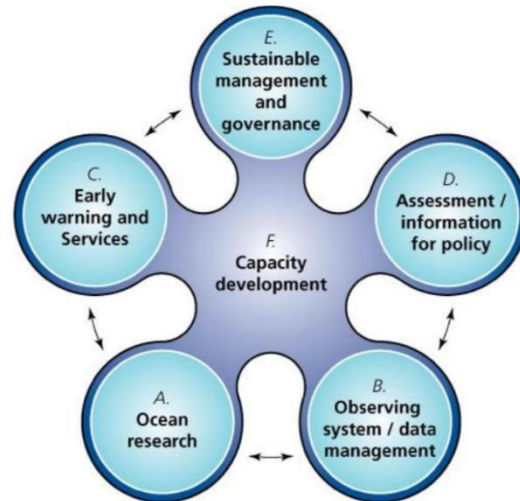
IMPLEMENTING THE STRATEGY

When working towards the high-level objectives, IOC will focus on the broad areas of:

- strengthening scientific knowledge of the ocean and human impact on it;
- applying that knowledge for societal benefit; and
- building institutional, human, and technical capacities for sound management and governance of the ocean and human activities.

This strategy is organized as a framework of six *functions*, distinct types of relatively uniform sets of processes, actions or tasks, that help the Commission to fulfil its purpose and achieve its High-Level Objectives. The 'IOC Functions' are to:

- A. Foster research to strengthen knowledge of ocean and coastal processes and human impacts upon them [*Ocean research*]
- B. Maintain, strengthen and integrate global ocean observing, data, prediction and informationsystems [*Observingsystem / data management*];
- C. Develop early warning systems, services, and preparedness for risks of tsunamis and ocean-related hazards [*Early warning and services*];
- D. Support assessment and provision of information through the science-policy interface [*Assessment and Information for policy*];
- E. Enhance ocean governance through a shared knowledge base and improved regional cooperation [*Sustainable management and governance*]; and
- F. Develop the institutional capacity in all of the functions above, as a cross-cutting function [*Capacity Development*].



These functions are realized through existing IOC and co-sponsored programmes, work of IOC regional subsidiary bodies and various mechanisms of cooperation.

The value chain of IOC: IOC generates value through interaction of all its functions. In order to maximize the value, the IOC should work as an end-to-end system, in which observations and research enable various services and assessments, leading to informed decisions and guidance to policy and culminating in multiple societal and economic uses. Feedback from various functions in the system should lead to evolving and, generally, increasingly more and more demanding requirements for observations, science and services. The capacity development will act as the catalyst of the whole system, working both at the cutting edge and leaving no one behind.

The IOC functions will be realised through the continuously developing programmes, acting globally, regionally, nationally and locally, through activities of regional subsidiary bodies, and by undertaking shorter-term project activities. In reality, all the programmes, constituencies and projects act as co-design and coordination mechanisms, while the true groundwork is done in and by Member States. The Decade will provide an opportunity to mainstream IOC programmes and activities internationally and within Member States. The work will be directed towards achieving IOC High-Level Objectives, as described below.

Achieving Objective 1 (Healthy Ocean Ecosystems): The IOC will strengthen sustainable management of ecosystem health and services through coordinated actions in research, observations, assessments, design and implementation of management tools and CD, with specific activities to:

- coordinate and catalyse research on ocean acidification, de-oxygenation, biogeochemistry, and contaminants; identifying ecosystem indicators and tipping points and the impacts of multiple stressors on marine biodiversity and ecosystem functioning;
- improve and augment sustained global observations of essential biological, biogeochemical, and ecosystem variables of relevance and necessity to describing the ecosystem state, as part of GOOS;
- strengthen the IODE data and information centres and networks including OBIS, ensuring resources and best practices are available to advance standardized collection of species and ecosystem data and development of data products and services contributing to the continuous monitoring of identified indicators of

ecosystem state, as well as the long-term preservation and availability of high-quality ocean data and information;

- support global and regional marine assessments through the United Nations World Ocean Assessment and other scientific assessments, e.g., of Large Marine Ecosystems and those under IPBES;
- assist Member States in developing the necessary capacity and ecosystem-based management tools, such as maritime spatial plans, coastal area management; marine protected areas, and
- use the IOC convening authority for strengthening cooperation and coordination between key stakeholders in the domain of ecosystem management and for building an effective science-policy-society interface.
- Contribute to the UN Decade of Ecosystem Restoration (2021-2030)

Achieving Objective 2 (Early Warning for Ocean Hazards): The IOC will help coastal communities and operators at sea to manage risks from ocean-related hazards and to increase preparedness for them. IOC will work with Member States and UN partners to increase the understanding of ocean-related risks and to implement effective multi-hazard early warning systems. IOC will:

- support closer intergovernmental coordination of multi-level regional tsunami warning systems;
- promote the involvement of key stakeholders in the tsunami warning systems, including civil defence authorities and national hydrometeorological services;
- accelerate implementation of the Tsunami Ready programme;
- promote research and development of more technically developed tsunami detection and warning systems capable of addressing non-seismic sources of tsunami;
- strengthen the regional Tsunami Information Centres and augment their ability to provide a clearinghouse for the development of educational and preparedness materials;
- coordinate research, monitoring, and development of management tools for Harmful Algal Blooms;
- increase technical and scientific capacity of early detection and warning of marine invasive species (e.g., by applying novel observing technologies such as DNA metabarcoding);
- target CD and technical assistance to enhance Member States' abilities to develop preparedness, mitigation and awareness in a multi-hazard framework;
- ensure that the ocean observing system responds to requirements for ocean data, exchanged in real time, for operational early warning of ocean-related hazards; and
- support modelling, research, data processing tools, policy development and planning tools contributing to improved warning systems, preparedness for ocean hazards, and ocean information services.

Achieving Objective 3 (Resilience to Climate Change and Variability): The IOC will work towards increased resilience to climate change and variability through an end-to-end approach that:

- begins with an ocean observing system to monitor global to regional scale drivers of climate and its change and variability; measure essential variables of the

ocean, e.g., ocean physics and climate, biogeochemistry, biology and ecosystems; quantify climate impacts on the ocean manifesting, for example, through ocean warming, including ocean heatwaves; characterize ocean acidification and deoxygenation; describe climate's influence on marine and coastal ecosystems, including biodiversity loss; and contribute to an advanced data management enterprise built on global standards and best practices;

- coordinates and guides ocean climate research, including through WCRP, that improves the understanding of ocean processes and climate change, ocean carbon cycle, skill of predictions of climate variability and change, and builds a knowledge base of ocean ecosystem changes and adaptation strategies;
- informs IOC-affiliated and other assessment processes;
- also informs the UNFCCC process on the full range of ocean-related aspects of climate;
- contributes to the development of next-generation ocean and climate services, including the Global Framework for Climate Services coordinated by the WMO;
- applies the scientific knowledge to inform and strengthen ocean governance, coastal management, development and implementation of climate adaptation and mitigation strategies; and
- builds capacity through training, demonstration projects, and shared tools.

Achieving Objective 4 (Scientific Services for a Sustainable Ocean Economy): The IOC will develop scientific and technical information, services, and management tools for the responsible growth of a sustainable ocean economy. By 2030, the ocean economy, buoyed *inter alia* by growth in ocean renewable energy, aquaculture, and tourism is predicted to be a much more significant component of national economies. Open access to information and a sound ocean knowledge base will promote economic opportunities and job growth while also protecting the marine environment and ensuring sustainable use of ocean resources. The IOC will deepen its engagement and partnership with the maritime sector by:

- delivering ocean observations and data for operational services to marine industries and for biogeochemical and biological study/research and assessments of the sustainability of ecosystem services;
- delivering fit-for-purpose data and information products and services through the Ocean Data and Information System and Ocean InfoHub including their regional nodes;
- coordinating scientific assessments required to define ecosystem thresholds for safe operations and to identify sustainable pathways;
- facilitating the development of ecosystem-based approaches to environmental protection and transboundary management approaches such as Large Marine Ecosystems;
- promoting coastal zone management and marine spatial planning globally as effective processes to facilitate sustainable economic activities and resolve conflicts among competing users of ocean space;
- promoting the economic value of the IOC end-to-end chain of activities, with an evaluation of return on investment into ocean research and observations; and
- assisting Member States in developing their capacity to responsibly manage and sustainably exploit ocean resources.

Achieving Objective 5 (Foresight of Emerging Ocean Issues): In order to identify, and, if possible, anticipate emerging issues, IOC will coordinate scientific research at the cutting edge

of science and act as a platform to call out such issues in a policy-relevant manner. Strengthened and expanded ocean observation and associated global data/information management systems will support research on emerging issues and further develop the capacity to address knowledge gaps. With partners, IOC will foster necessary international collaboration to support research on emerging ocean environmental issues, including:

- coordinated scientific research on the marine ecosystem impacts by new contaminants and multiple new stressors resulting from changing climate and anthropogenic influence;
- an ocean observing system, with technologically advanced autonomous instruments and global data/information processing and management systems that are adaptable to new needs;
- scientific syntheses and assessments that provide actionable information about new threats or opportunities; and
- communication of results to decision-makers and providing a platform for Member States to bring emerging national and regional issues for the attention of UN and other intergovernmental fora.

CAPACITY DEVELOPMENT

The United Nations Convention on the Law of the Sea (UNCLOS) recognizes IOC as a competent international organization in the fields of Marine Scientific Research (Part XIII of UNCLOS) and TMT (Part XIV).

The IOC efforts in Capacity Development (CD) will continue to be guided by the IOC Capacity Development Strategy. These efforts will be further strengthened in the course of implementation of the Decade. The *Global Ocean Science Report 2020* will serve as a key benchmark for the IOC's work, and further editions of the Report will allow monitoring progress. The IOC will continue to systematically enhance the capacity of all IOC Member States to conduct scientific research and benefit from its results, leaving no one behind. This pillar of the IOC CD work will include the operationalization of the IOC Criteria and Guidelines on the Transfer of Marine Technology (TMT) and the TMT Clearing House Mechanism.

Specifically, IOC will establish a network of regional and thematic TMT nodes and enhance sharing scientific and technical capacities between Member States helping them render a wider range of data and information products and services. The IODE Ocean InfoHub project will be the starting point for building the IOC future Ocean Data and Information System delivering interoperable local, regional and thematic data and information and connecting contributors and users with required resources. These developments will be implemented taking into account the IOC Strategic Plan for data and information management and in compliance with the IOC oceanographic data exchange policy. Regular surveys of CD needs will be conducted, and a united online database of training opportunities will be created to capitalise on bilateral and multilateral relationships including contributions by intergovernmental organizations.

The work of the IOC Group of Experts on Capacity Development will continue and intensify. IOC will contribute substantially to the development of Member States' capacities in relation to the new international legally-binding instrument on BBNJ, while simultaneously working towards achieving Target 14.a of the 2030 Agenda¹. International multilingual training on diverse aspects of ocean management will continue through the new generation of the IOC

¹ Target 14.a: "Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission *Criteria and Guidelines on the Transfer of Marine Technology*, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing "

OceanTeacher Global Academy with its network of regional and specialized Training Centres, Regional Training and Research Centres of WESTPAC and UNESCO Category 2 Centres in marine sciences.

IOC will continue to expand its activities in the area of ocean literacy by implementing a dedicated strategy. This work will enhance appreciation for the ocean by key stakeholders, including general public. It will deepen the understanding of the role of the ocean for people and the human impact on the ocean, and the value of science to ensure human impacts are understood and addressed as necessary to ensure sustainable use of the ocean for all. Working within UNESCO and partners, IOC will strive to include basic knowledge of the ocean into school curricula.

WORKING CLOSER TO THE GROUND

To achieve the ambitions of the 2030 Agenda and better respond to the needs of its Member States, the United Nations is reforming itself, strengthening the emphasis on regional dimension and coordinated work of all UN agencies through the UN Regional Collaborative Platforms and Country Teams. The IOC will also step up its assistance and delivery of services at the level of Member States.

To embrace the needed global scope of activities, IOC will work through Member States, and seek partnerships and synergies with ocean-related organizations including those with a regional focus. IOC will also aim to build visibly on the activities of its Member States, acknowledging their significant capacities, often already deployed in many of the global and regional IOC programmes. IOC will liaise with relevant national, regional and large-scale international initiatives of those Member States with a view to involve them in the execution of its various functions and ensure that they contribute to and take advantage of the UN Decade of Ocean Science for Sustainable Development.

The regional and local development is most efficiently achieved through the work of IOC regional subsidiary bodies and focussing both on Member States' particular development goals and on internationally-agreed development priorities. The four IOC regional subsidiary bodies (WESTPAC, IOCARIBE, IOCAFRICA, and IOCINDIO) are of paramount importance to the IOC mission, adding value and ensuring solid ownership of programmes by Member States. The IOC regional subsidiary bodies adapt their approach and agenda based on the specific needs and opportunities existing in their respective regions. In addition to carrying out IOC global programmes in the regions, they foster partnerships to execute and coordinate regional programmes, projects and activities. Amongst their other activities, they are the most efficient platforms for co-designing and co-delivering IOC CD activities with Member States, leaving no one behind.

People and Member States of the IOC Sub-Commission for the Western Pacific (**WESTPAC**), a highly populous and rapidly technologically advancing region, in which the ocean is characterized by the richest marine biodiversity, need solutions to balance the development with ocean sustainability. WESTPAC aims to further strengthen the science-policy interface, foster multi-disciplinary solution-oriented ocean research and innovations, enhance ocean forecasting services and applications, and build and mobilize long-term partnerships. The Sub-Commission will continue to co-develop its programme priorities among Member States and carry out a broad range of activities underpinning ocean sustainability across, but not limited to, ocean and climate change, marine biodiversity, seafood safety and security, health of ocean ecosystems and other emerging issues. To accelerate the CD and transfer of marine technology, the Sub-Commission will keep empowering individuals, institutions and Member States, notably through integrated and sustainable CD structures such as the WESTPAC Regional Network of Training and Research Centres on Marine Science (RTRCs), inclusion of CD into its international research programmes, development and conduct of tailored national

and international training, engagement of early-career ocean professionals into international research programmes and encouragement of their research work. WESTPAC will assist the IOC to coordinate regional engagement in the Decade.

The IOC's Sub-Commission for Africa and the Adjacent Island States (**IOCAFRICA**) will focus its work and energy on providing the ocean science base for solving societal challenges and contributing to development of the sustainable ocean economy in the region. CD will continue to be a priority, in particular the improvement of infrastructure and facilities for research, provision of training for scientific and technical staff, as well as translation of science to policy. In line with the Implementation Plan for the Decade, IOCAFRICA will develop and implement programmes in ocean monitoring and forecasting, coastal vulnerability and disaster risk reduction, climate change impacts on coastal zones, marine spatial planning, marine biodiversity and biogeography, ocean literacy and the translation of research results to policy required for sustainable management of the ocean and coastal areas. IOCAFRICA will strive to develop "home grown solutions" through the involvement of African innovators and support for locally developed technology. In this regard, IOCAFRICA will in particular engage African youth and early career professionals. The programmes of IOCAFRICA will be aligned with the initiatives of the African Union such as its Agenda 2063, which recognizes the ocean economy as a major contributor to continental transformation and growth, and the 2050 African Integrated Marine Strategy, which provides a road for increased wealth creation from Africa's oceans and seas by developing a sustainably thriving ocean economy.

The IOC Sub-Commission for the Caribbean and Adjacent Regions (**IOCARIBE**) will continue to be a strong regional contributor to the work of all IOC programmes and will align its activities with the strategic framework of the Decade. The main objective will be to assist the continental coastal Latin-American and the Caribbean SIDS Member States to achieve sustainable use of the ocean and coastal resources. In doing so, IOCARIBE will capitalize on the advantages of its region, which is rich in biodiversity and resources and is a key world's tourism destination. Ocean science will be central for addressing major regional challenges of IOCARIBE, where manifestations of climate change, such as hurricanes, severe storms, coastal inundation, coastal erosion, and Sargasso beaching, occur on the background of generally low resilience of island countries. The main avenue will be strengthening Member States' capacity of managing the ocean, in national and transboundary context, through an ecosystem-based management approach, continuing to implement the CLME Strategic Action Programme and supporting the creation of a Coordination Mechanism and sustainable financing plan for ocean governance. The Sub-commission will also assist Member States in formulating national and regional policies and plans to develop ocean science and technology. IOCARIBE will reinforce and broaden scientific cooperation, regionally and internationally, through regional networking and institutional arrangements between organizations of the UN system, IGOs, NGOs, and the scientific community. Recognizing Member States asymmetry in CD and technology, IOCARIBE will undertake projects to enhance transfer of marine technology.

The IOC Regional Committee for the Central Indian Ocean (**IOCINDIO**) will unite governments of the region and communities of global and regional scientists towards sustainable management of Indian Ocean space and resources. It will capitalize on the activities of existing and active IOC-affiliated programmes and structures in the region, including but not limited to the Second International Indian Ocean Expedition (IIOE-2), regional components of GOOS, and the work of communities engaged in sustainable management of marine ecosystems of Indian Ocean. Such alliance should be able to address regional specifics, such as dominance of monsoons, the Indian Ocean dipole, Madden-Julian oscillations, strong upwellings, etc. Advantages of maritime spatial planning and coastal zone management will be promoted to address coastal development and mitigate coastal vulnerability in a focused manner, considering impacts of the global change on the ocean. IOCINDIO will be coordinating its programme and cooperating with IOCAFRICA and WESTPAC and will also reinforce cooperation with regional institutions in Indian Ocean. The region will continue to build the

capacity of its Member States, with the help of IOC global facilities, such as centres of OceanTeacher Global Academy and the two active UNESCO Category 2 Centres. Successful strengthening and expansion of activities of IOCINDIO will aim to reach the level of activity, positive influence, and role in the ocean governance commensurate with the ones of an IOC Sub-Commission, leading to its transformation into a Sub-Commission.

ENGAGEMENT WITH KEY PARTNERS & STAKEHOLDERS

The IOC has been established as a body with functional autonomy within UNESCO. The Commission defines and implements its programme according to its stated purposes and functions, with the budget framework adopted by its Assembly and the budget envelope agreed by the General Conference of UNESCO. In accordance with its Statutes, the *‘Commission will collaborate with international organizations concerned with the work of the Commission, and especially with those organizations of the United Nations system which are willing and prepared to contribute to the purpose and functions of the Commission and/or to seek advice and cooperation in the field of ocean and coastal area scientific research, related services and capacity-building’*.²

IOC WITHIN UNESCO, UN SYSTEM, AND BEYOND

Within UNESCO, IOC will continue to cooperate with many UNESCO programmes and field offices, and maximize the comparative advantage of UNESCO’s multidisciplinary approach to key societal issues. IOC will work with several UNESCO programmes towards their strong contribution to the UN Decade of Ocean Science for Sustainable Development. This concerns the marine programme of the World Heritage Centre, the Education Sector’s leading role in SDG-4 on Education for Sustainable Development, the Convention on the Protection of the Underwater Cultural Heritage, and the Science Sector’s priority areas in SIDS and Indigenous Knowledge, the Man and Biosphere Programme, the Intergovernmental Hydrological Programme, and programmes in Disaster Preparedness and Risk Management. IOC will continue to act as part of the Task Force on Climate Change, a consultative forum of more than 30 programmes in the sciences, education, culture and communication spheres.

IOC enjoys a recognized role in the UN system, in accordance with its Statutes. As a competent international organization in the fields of Marine Scientific Research and TMT, IOC contributes to various UNCLOS processes, including the emerging international legally binding instrument on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. The IOC will continue collaboration at the programmatic level and/or via co-sponsorship of joint programmes with many UN agencies including FAO, IAEA, IMO, ISA, ITU, UNDP, ESCAP, UNEP (including CBD), WHO and WMO.

The IOC will continue to contribute to major UN global agreements and frameworks including: the UN 2030 Agenda and its Sustainable Development Goals (SDGs), in particular of the stand-alone Goal 14 on the ocean, also acting as a custodian UN agency for reporting on SDG Targets 14.3 and 14.a; the UNFCCC Paris Agreement by advocating for the increasing role of the ocean; the Sendai Framework for Disaster Risk Reduction, the Convention on Biological Diversity and the Samoa Pathway.

The IOC will continue to contribute, as the UN’s core body for ocean science, to the UN-Oceans, a UN interagency collaboration mechanism on ocean and coastal issues, focussing, *inter alia*, on the development of “SDG enabling activities”.

New forms of cooperation and, potentially, stronger formal links of IOC with other UN organizations will be explored based on the understanding that ocean science represents a

² Article 2.2 of the IOC Statutes

cross-cutting, underpinning necessity for fulfilling mandates of UN agencies. Such cooperative agreements will be especially promising for successful implementation of the Decade. The enhanced role of ocean science in assisting Member States to achieve the goals of sustainable development, to implement international agreements and to address national priorities may warrant a reinforced coordination between UN agencies and a review of the IOC role and position in the UN system.

In addition to fulfilling its role in the UN system, IOC also enjoys strong collaboration with a large number of non-UN global and regional, intergovernmental and non-governmental organizations, such as GBIF, GEO, IHO, ICES, PICES, ISC and its SCOR, and IUCN. Through its global programmes and regional subsidiary bodies, IOC will also foster partnership with regional ocean management organizations such as the UNEP Regional Seas Conventions, Regional Fisheries Organizations, and LME Commissions.

EXPANDING PARTNERSHIPS & RESOURCE MOBILIZATION

The ability of IOC to implement this Medium-Term Strategy and provide an authoritative platform for science-based sustainable ocean management will require significant human and financial resources deployed in all core IOC programmes and regional subsidiary bodies. The capacity of the IOC's programmes and regions to deliver on priorities approved by IOC governing bodies will necessarily require raising the level of extra-budgetary funding, especially in periods of financial constraints. The IOC will work to develop new public-private partnerships and intensify resource mobilization from Member States, institutional partners, and the private sector. The UN Decade of Ocean Science for Sustainable Development presents an unprecedented opportunity to expand IOC's partnership base and boost fund-raising.

COMMUNICATION AND VISIBILITY

IOC is providing the scientific foundation for using the ocean sustainably and in doing so benefits multiple "end users". The value of fundamental up-stream service of IOC is, however, not apparent to beneficiaries such as decision-makers, funders, and general public. This warrants investment into dedicated, active, and well-targeted communications. IOC will need to implement an efficient and tailored communication strategy enabling it to fully and convincingly demonstrate the positive impact of its work on society and to attract new extra-budgetary support. An efficient and attractive website and active presence on the web will be maintained and further improved.