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INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Thirty-second Session of the Assembly
UNESCO, 21–30 June 2023

Covers all items of the Revised Provisional Agenda

REVISED PROVISIONAL ACTION PAPER

The Action Paper provides the information necessary for effective participation in the discussion of the agenda items. This information includes: (i) identification of relevant documentation; (ii) identification, under each substantive agenda item, of the issue before the Assembly and the expected decision or draft resolution when available to date; (iii) background information (if the relevant background includes a separate document, it is issued as a working document).

The Action Paper also provides the basis of the draft summary report of the session. It is written in past tense to streamline the reporting process. A summary of the discussion that led to decisions under each agenda item will be prepared by the Secretariat and the Rapporteur and will be included in the draft summary report. Draft decisions and resolutions are proposed in the document in order to focus on decisions during the discussion of each agenda item without prejudice to the prerogatives of any Member State, partner organization, Officer or the Executive Secretary.

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1. Opening

1. The Chair, Mr Ariel Hernan Troisi, opened the session at 10:00 hrs on Wednesday 21 June 2023 in room II of UNESCO Headquarters, Paris.

2. The Chair asked participants to stand for a minute of silence to honour distinguished individuals who had participated in the work of the Commission and have passed away during this short intersessional period: Mr Vladimir Gruzinov (1935–2023, Russian Federation), Mr Robin Harger (–2023, Canada/New Zealand), Mr Nicolay Mikhailov (1951–2023, Russian Federation). Tributes were also paid to the former IOC Executive Secretary, Dr Patricio Bernal (1945–2022, Chile) and the former IOC Chairperson Dr David T. Pugh (1943–2022, UK).

3. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

2. ORGANIZATION OF THE SESSION

2.1. ADOPTION OF THE AGENDA

[Rule of Procedure, 8]

<u>Working documents:</u>	IOC/A-32/2.1.Doc Prov. Rev.	Revised Provisional Agenda
	IOC/A-32/2.1.Doc Add. Prov. Rev.	Revised Provisional Timetable
	IOC/A-32/AP Prov.	Provisional Action Paper (<i>this document</i>)
<u>Report:</u>	IOC/EC-56/SR Prov.	Provisional Executive Summary Report of the 56th Session of the IOC Executive Council, 20 June 2023

4. The Chair reminded that the Executive Council, acting as the Steering Committee for this Assembly session, examined the revised provisional agenda for the session and noted there was no request for supplementary items. The Executive Secretary informed that the Secretariat received four draft resolutions that can be found in the Action Paper: the one on the status of IOCINDIO (agenda item 4.5); Improving the Climate Observations (agenda item 4.10); the UN Decade of Ocean Science for Sustainable Development (agenda item 4.12) and the one on Governance, Programming and Budgeting Matters of the Commission (agenda item 6.4).

5. The Chair reminded that the Executive Council, acting as the Steering Committee for this Assembly session, examined the revised provisional agenda for the session and noted there was no request for supplementary items.

Dec. A-32/2(I)

The Assembly,

I. Agenda

1. Adopts the agenda and the timetable of work as set out in documents IOC/A-32/2.1.Doc Prov. and Add. [with the following additional modifications:]

6. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

2.2. DESIGNATION OF THE RAPPORTEUR
[Rule of Procedure 25.4]

Dec. A-32/2(II)

The Assembly,

II. Rapporteur

2. On a proposal of [country], seconded by [countries],
3. Designates _____ of [country] Rapporteur for its present session to assist the Chairperson and the Executive Secretary in the preparation of the draft provisional report of the Session;

7. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

2.3. ESTABLISHMENT OF SESSIONAL COMMITTEES AND WORKING GROUPS
[Rule of Procedure 12]

Report:

IOC/EC-56/SR Prov.

Provisional Executive Summary Report of the
56th Session of the IOC Executive Council, 20
June 2023

8. Referring to the recommendations made by the Executive Council (EC-56/Dec.3.1) on this item, acting as the steering committee for the present session, the Chair reminded of the mandate of the three statutory sessional committees, the open-ended composition thereof, and the working arrangements made for their meetings.

Dec. A-32/2(III)

The Assembly,

III. Sessional Committees and Working Groups

4. 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 3.2 (budget implementation and financial report), 6.1, 6.2, 6.3 and 6.4; under the chairship of Dr Karim Hilmi (Morocco, Vice-chair) with the following Member States participating: _____. 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: _____. 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 6.5): under the chairship of *[name] (country)* with the following Member States participating: _____. Bernardo Aliaga and Henrik Enevoldsen provided the Secretariat support to the Nominations Committee.

9. The representatives of __ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

2.4. INTRODUCTION TO TIMETABLE; DOCUMENTATION AND IOC MEMORIAL LECTURES [Rule of Procedure 11. Dec. EC-55/5.3, A-31/3.2]

<u>Working documents:</u>	IOC/A-32/2.1.Doc Prov. Rev.	Revised Provisional Agenda
	IOC/A-32/2.1.Doc Add. Prov. Rev.	Revised Provisional Timetable
	IOC/A-32/DocList Prov.	Provisional List of Documents
	IOC/A-32/AP Prov. Rev.	Revised Provisional Action Paper (<i>this document</i>)

<u>Information:</u>	IOC/A-32/2.4.Inf.1	Working Arrangements for the session
	IOC/A-32/2.4.Inf.1 Add.	Template for submission of written records to the Assembly summary report
	IOC/A-32/2.4.Inf.2	Programme of the 2023 IOC Ocean Science Day, 22 June, UNESCO Headquarters

10. The Executive Secretary introduced this item. He reminded the Assembly of the deadline for submitting nominations for the elections – 23 June, 18:00 Paris time.

11. Dr Ryabinin then referred to the Ocean Science Day programme on 22 June, which returned during this Assembly to initiate open discussion on the opportunities and challenges of ocean change adaptation and mitigation; preceded by a session highlighting IOC's current contributions to the UN Decade of Ocean Sciences for Sustainable Development.

12. The day provided a platform for the first IOC Mário Ruivo Memorial Lecture entitled 'I get by with a little help from my friends: Building the Kelp Forest Alliance, a collaborative global movement to protect and restore our underwater kelp forests', that was delivered by Aaron M. Eger, an Early Career Ocean Professional who was selected on a competitive basis on a subject related to the Ocean Decade. Dr Ryabinin welcomed a joint initiative with [EurOcean](#) and Portugal which pays tribute to late Professor Mário Ruivo's long-life commitment to ocean science and the sustainable development of the ocean, and his significant contributions to the work of IOC, ocean knowledge, international cooperation, capacity development and ocean literacy.

13. The IOC Anton Bruun Memorial Lecture 2023 "Nutrient pollution from land-based sources, the forgotten parameter" was delivered by Professor Alexander Bouwman (Netherlands Environmental Assessment Agency) as part of the Ocean Science Day. Professor Bouwman is recognized for his outstanding contribution to understanding and modelling of

global flux of nutrients from land-based sources to the ocean. Concern over the impacts of altered nutrient inputs, N, P and Si, to coastal waters has led the UN to include an “Index for Coastal Eutrophication Potential” (ICEP) as indicator for SDG Goal 14.1.1 on eutrophication. IOC is contributing with UNEP by developing and validating ICEP, and Professor Bouwman and co-workers are key partners in this effort.

14. The IOC N.K. Panikkar Memorial Lecture 2023 was delivered by videoconference by Dr Kenneth Sherman, one of the fathers of the Large Marine Ecosystems (LME) concept which provides a tool for management of resources within ecologically-bounded transnational areas through five modules (productivity, fish and fisheries, pollution and ecosystem health, socioeconomics, and governance). Dr Kenneth Sherman is recognized for his role in the development of the LME concept and for its importance as a new framework for building the capacity to manage large areas of the ocean. Since 1997, IOC has promoted the Large Marine Ecosystem approach from a scientific point of view as well as in regions by contributing to the formulation and implementation of Global Environment Facility (GEF) LME projects. The Global Environment Facility has provided support (USD 285 million, leveraging USD 1.14 billion in financing from other partners) to 124 recipient countries to work together within 23 of the world’s 66 LMEs.

15. Following their presentations, Professor Bouwman and Dr Shermann were awarded the IOC Anton Bruun Medal and the IOC N.K. Panikkar Medal, respectively.

No decision is proposed under this item. [Any changes to the timetable would be reflected in Dec A-32/2].

16. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3. IOC MATTERS AND REPORTS

3.1. STATEMENT OF THE CHAIRPERSON [Rule of Procedure 8.1(a)]

<u>Information:</u>	IOC/A-32/3.1.Inf	Statement from the IOC Chairperson on the Occasion of the 32nd Session of the Assembly, online, 31–30 June 2023 [to be published during the session]
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17. In accordance with rule of procedure 8.1(a), Chair Ariel H. Troisi delivered an oral statement on recent developments in the work of the Commission and perspectives for the coming years (Annex ____).

18. The Assembly thanked the Chair for his remarks and leadership.

No decision is proposed under this item.

19. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3.2. REPORT OF THE EXECUTIVE SECRETARY ON THE WORK ACCOMPLISHED SINCE THE THIRTY-FIRST SESSION OF THE ASSEMBLY
[Rule of Procedure 8.1(b) and (c) 8.1(g), 49.1]

<u>Working documents:</u>	IOC/A-32/3.2.Doc(1) & Addendum	Report of the IOC Executive Secretary on the work accomplished since the Thirty-first Session of the Assembly
	IOC/A-32/3.2.Doc(2)	Report on 2022–2023 (41 C/5) budget implementation as at 31 December 2022
	IOC/A-32/3.2.Doc(3)	Financial situation of the IOC Special Account as at year end 2022 and forecast for 2023
<u>Information:</u>	IOC/INF-1430	Guidance on Dialogue between IOC Programmes and Indigenous and Local Knowledge (ILK)
<u>References:</u>	IOC/EC-55/3.1.Doc(1)	Report of the IOC Executive Secretary on the work accomplished since the Thirty-first session of the Assembly (July 2021–May 2022)
	IOC/EC-55/3.1.Doc(2)	Report on 2020–2021 (40 C/5) Budget Implementation as at 31 December 2021 and outline of the 2022–2023 Integrated Budgetary Framework
	IOC/EC-55/3.1.Doc(3)	Financial situation of the IOC Special Account as at year end 2021 and forecast for 2022–2023

20. The Executive Secretary introduced this item using a PowerPoint presentation.

21. He started by recalling that 2022 has over and over been called a “super year” for the ocean, with ocean issues at the heart of the political attention and commitments on sustainability, biodiversity and climate action. Leading the Ocean Decade implementation on behalf of the UN System, IOC provided a rallying point for Member States, scientists, the private sector, civil society and citizens wishing to join this transformative undertaking.

22. From important partnerships and commitments announced at the “One Ocean Summit” in Brest and the 7th ‘Our Ocean Conference’ in Palau (April 2022) and 8th in Panama (March 2023) that catalysed ocean commitments for and from SIDS, to the African Conference on Priority Setting & Partnership Development in Egypt (May 2022) that set up the Ocean Decade Africa Roadmap, IOC spared no effort to gather ocean stakeholders worldwide behind a common framework that ensures ocean science can fully support countries in creating improved conditions for sustainable development of the Ocean.

23. The Executive Secretary specifically highlighted the UN Oceans Conference in Lisbon, in June 2022 that gathered 24 Heads of State and Government and over 6,500 participants and adopted the Lisbon Declaration explicitly recognizing the importance of the Ocean Decade and the role of the IOC of UNESCO in its coordination. The Ocean Decade Alliance at its first in-person meeting launched a joint Call to Action for investment in ocean science, complemented by the Bouknadel Statement from over 20 major philanthropic foundations.

24. Through its participation in UNFCCC COP27 (November 2022), IOC raised awareness about the ocean to be integrated into the climate conversation, setting a solid course for the climate change agenda in Africa.

25. The 15th Conference of the Parties to the Convention on Biological Diversity (COP15) adopted the Kunming-Montreal Global Biodiversity Framework, including its marine dimension.

UNESCO led the flagship ocean event, resulting in a significant increase in the visibility of marine and coastal issues and positioning IOC for a lead role in the GBF implementation.

26. The Executive Secretary provided detailed information on progress achieved across all IOC functions, highlighting the following major achievements.

27. As the custodian agency for SDG Indicator 14.3.1 on ocean acidification, the Commission continued to provide active support to its Member States, with progress well noted in *The Sustainable Development Goals Report 2022*.

28. With the dedicated pool of resources, the Ocean Teacher Global Academy platform delivered 46 e-learning courses, primarily focusing on developing countries, especially in Africa. Another area of focus was on building resilience to ocean-related hazards in SIDS of the Caribbean and Pacific regions.

29. To support monitoring, benchmarking and a shared knowledge base, UNESCO has also advanced in implementing its function to develop early awareness systems and preparedness to mitigate the risks of tsunamis and other ocean-related hazards.

30. The development of Ocean Data and Information System (ODIS) progressed with 57 pilot partner organizations from various regions being actively engaged. The IOC Project Office for IODE in Ostend will host a Decade Coordination Office (DCO) for Ocean Data Sharing as from 2023.

31. GOOS observations and predictions and a fit-for-purpose ocean observing system are fundamental to achieving the ambition of the UN Ocean Decade. Following the endorsement in 2021 of three ambitious Ocean Decade programmes, the Decade Coordination Office for Ocean Observing has been established.

32. With the dedicated pool of resources bolstered by funding from the Norwegian Agency for Development Cooperation (NORAD), IOC capacity development efforts focused on: (i) Priority Africa (ocean acidification and harmful algae, development of a database on training opportunities); (ii) tsunami ready communities in the Caribbean region; (iii) improved access to and sharing of ocean data and information in the Indian Ocean and Pacific region; (iv) development of video tutorials related to the Ocean Biodiversity Information System (OBIS); and (v) development of the Index for Coastal Eutrophication Potential (ICEP) as the Indicator for Sustainable Development Goal 14.1.1 (in cooperation with UNEP).

33. The Executive Secretary reported that the Ocean Decade also spurred innovative intersectoral work with other parts of UNESCO, focused on gender empowerment, youth engagement and ocean literacy. In this context, he attracted Member States attention to the document *Guidance on dialogue between IOC programmes and Indigenous and Local Knowledge (ILK)* proposed for Assembly's consideration (IOC/INF-1430). With ILK holders already identified as a key stakeholder group in the Ocean Decade Implementation Plan, this provides a formal framework for ensuring that “*will make a crucial contribution to the Ocean Decade by contributing knowledge through the co-development, co-design, and co-delivery of the Ocean Decade Actions*”.

34. The Executive Secretary highlighted that in 2022, IOC has mobilized \$14,8M from 30 donors, representing an increase by 100% compared to resources mobilized in 2021. He thanked Member States for their support and stressed the encouraging trend with financial contributions being provided not only by traditional donor countries but also from foundations and research institutes, attesting the growing interest of various stakeholders in ocean-related issues. Among many examples, EU funding allowed the launch of a new Maritime Spatial Planning Roadmap, a new MSP Global project and strengthening of OBIS, while fruitful collaboration with the Global Environment Facility, UNDP and UNEP continued under the

IW:Learn umbrella with a new 4-year project and two new regional projects focusing on Large Marine Ecosystems in the Sargasso Sea and in the Black Sea.

35. The Executive Secretary stressed that the momentum is here for the ocean. And in its early months, 2023 has already delivered another major victory toward a healthy, sustainable ocean. After nearly two decades of negotiation, United Nations Member States agreed on a text for an international legally binding instrument under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, the “high seas”.

36. With all these developments and the emerging consensus on what a more sustainable management of the ocean might look like, there are clear opportunities for IOC to support this emerging vision, making a strategic contribution within the UN system and at the service of its Member States.

Dec. A-32/3.2

Report of the Executive Secretary

The Assembly,

1. Having examined documents IOC/A-32/3.2.Doc(1) & Addendum, IOC/A-32/3.2.Doc(2) and IOC/A-32/3.2.Doc(3),
2. Thanks the Executive Secretary for a very comprehensive report;
3. Takes note of the information provided, welcoming significant advances in many programmatic areas.

37. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3.3. REPORTS OF THE IOC SUB-COMMISSIONS AND REGIONAL COMMITTEES [Rule of Procedure 48.3]

3.3.1. IOC Sub-Commission for Africa and the Adjacent Island States: 7th Session of IOCAFRICA, Nairobi, Kenya, 15–17 March 2023

Report

IOCAFRICA-VII/3s

Executive Summary Report of the 7th Session of the IOC Sub-Commission for the for Africa and the Adjacent Island States, Nairobi, Kenya, 15–17 March 2023

38. The IOCAFRICA Chair, Prof. Kouadio Affian (Côte d’Ivoire) presented an overview of the activities implemented by the Sub-Commission during the intersessional period 2021–2023, and the major outcomes of the Seventh session of the IOC’s Sub-Commission for Africa and the Adjacent Island States held from 15 to 17 March 2023, in Nairobi, Kenya.

39. He reported good progress in the planning of activities in the framework of the UN Decade of Ocean Science for Sustainable Development. The *Ocean Decade Africa Roadmap* ([IOC/2022/ODS/36 Rev.2](#)) was prepared through an inclusive consultative process, and the “African Conference on Priority Setting & Partnership Development for the UN Decade of Ocean Science for Sustainable Development” was hosted by the National Institute of Oceanography

and Fisheries in Cairo, Egypt from 10 to 12 May 2022 during which the roadmap was presented and opportunities for partnerships discussed. The Africa Ocean Decade Task Force comprising 14 experts and representatives of 6 organizations was established and commenced its assignment of supporting the development of regional Ocean Decade Actions.

40. Collaboration with the African Union Commission (AUC) was strengthened, in particular with the Global Monitoring for Environment and Security (GMES) & Africa Project, and AUC Division of blue Economy through the organisation of joint events in support of ocean observation and in the framework of UN Ocean Decade Africa Roadmap.

41. A comprehensive survey of the status of the ocean observations platforms in Africa and the Adjacent Island States was undertaken and a webinar organized to review the report on 23 March 2022. The participants agreed on the publication of the report on the African Ocean Observations Network, considering the discussions during the session. The workshop on the reactivation of the Ocean Data and Information Network for Africa (ODINAFRICA) was held on 24 March 2022. Participants agreed on the reactivation of ODINAFRICA to contribute to the Ocean Information Hub (OIH) as a regional and multi-thematic node that will improve online access to and synthesis of existing regional and national data, information and knowledge resources, including existing clearinghouse mechanisms. The implementation of the NORAD funded project on building capacity for ocean acidification research and observation and detection and early warning for harmful algae blooms is ongoing with the institutions in Côte d'Ivoire, Madagascar Morocco, Namibia and Nigeria, already participating.

42. The Marine Spatial Planning (MSP) continued with case studies on gender and poverty perspectives in Kenya, Madagascar and Tanzania implemented in collaboration with the Swedish Agency for Marine and Water Management (SwAM), and the first Regional Marine Spatial Planning forum for Africa and the adjacent Island states was established and held its first meeting in December 2022.

43. Prof. Affian noted that capacity development for marine science and technology continues to be a key area of focus for IOC in Africa and highlighted the establishment of new portal on training facilities (<https://africa.marinettraining.org>), as well as the conduct of several training workshops during the intersessional period.

44. He expressed his appreciation to partners that have provided support for implementation of IOCAFRICA programmes, especially the Governments of Flanders (Belgium), China, Kenya, Norway, Sweden, the African Union Commission, and the Western Indian Ocean Marine Science Association and invited other Member States and organizations to partner with IOCAFRICA.

45. Prof. Affian informed the Assembly that the IOC's Sub Commission for Africa and the Adjacent Island States at its seventh session (15–17 March 2023, Nairobi) had adopted four recommendations on: (i) Regional Implementation of the United Nations Decade of Ocean Science For Sustainable Development; (ii) GOOS–Africa; (iii) Partnerships and Resource Mobilization; and (iv) IOCAFRICA Work Plan and Budget for 2023–2025.

46. He highlighted some of the activities proposed during the session, including: strengthening of the Ocean Observations in Africa and the Adjacent Island States-including the GOOS-Africa coordination office hosted by CURAT in Abidjan, Côte d'Ivoire; reactivation of the Ocean Data and Information Network to support the development of a regional Ocean Information Hub; Harmful Algal Bloom and Ocean Acidification programmes; support for Marine Spatial Planning; development and implementation of Ocean Decade Actions for the region and establishment of the regional Decade Coordination Office; and the organisation of an African Ocean Decade Conference in 2025 to mark mid-point of implementation of the UN Ocean Decade and the end of the African Decade of Oceans and Seas (2015–2025).

47. Prof Affian recognized the limited regular programme resources available for the implementation of these programmes and urged Member States to increase extra-budgetary support to enable the Sub-Commission implement its programme and strengthen capacities for marine science and technology in the region.

Dec. A-32/3.3.1

IOC Sub-Commission for Africa and the Adjacent Island States

The Assembly,

1. Having examined the Executive Summary report of the 7th session of the IOC's Sub-Commission for Africa and the Adjacent Island States, online, 15–17 March 2023 (IOCAFRICA-VII/3s),
2. Takes note of the progress made in the implementation of the IOCAFRICA work programme 2021–2023;
3. Thanks the Member States who have provided support for the implementation of IOCAFRICA programmes during the intersessional period, especially the Governments of Flanders (Belgium), China, Kenya, Norway, Sweden;
4. Accepts the report of IOCAFRICA-VII and the recommendations therein, including the work programme for 2023–2025;
5. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission.

48. The representatives of __ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

**3.3.2. IOC Sub-Commission for the Western Pacific:
14th Session of WESTPAC, Jakarta, Indonesia, 4–7 April 2023**

Report

IOC/SC-WESTPAC-
XIV/3s

Executive Summary Report of the 14th Intergovernmental Session of the IOC Sub-Commission for the Western Pacific (WESTPAC), Jakarta, Indonesia, 4–7 April 2023

49. Mr Kentaro Ando, Chair of WESTPAC introduced this agenda item and presented the major advances over the last intersessional period and key results of the 14th WESTPAC Intergovernmental Session (4–7 April 2023).

50. He highlighted that the Sub-Commission has been making tremendous effort during the intersessional period in assisting countries to address their development challenges and taking the lead to mobilize support and actions for the Ocean Decade in the region.

51. During the intersessional period, the Sub-Commission has been delivering knowledge and support to serve the needs of Member States and address their development challenges, as demonstrated by its endeavours such as: (i) minimizing and addressing the impacts of ocean acidification, with an international calibration exercise on pH and Total Alkalinity Measurement conducted in May–November 2022, and tailored national ocean acidification technical training and stakeholder engagement workshops developed and organized in Malaysia (Penang, 20–22

September 2022), Viet Nam (Nha Trang, 13–15 October 2022), and Thailand (Phuket, 2–4 November 2022); (ii) advance the application of remote sensing for sustainable development, with an International Webinar Series on “Advancing the application of remote sensing for sustainable development of ocean, marine and coastal resources” organized from 22 November to 20 December 2022, and the demonstration of remote sensing application to coastal habitat mapping for Thailand authority in 2021–2022; (iii) delivering knowledge and outreach services on harmful jellyfish for public health, with a *General Management Guide for Harmful Jellyfish Stings in the Western Pacific and Adjacent Areas* published in December 2022; (iv) accelerating marine spatial planning in the Western Pacific, with the first-ever Regional MSPforum organized on 16 December 2022 marking the beginning of the implementation of the UN Ocean Decade Action 21: Accelerating MSP in the Western Pacific and adjacent areas; and (v) support coral reef marine protected area management, with the development of an integrated coral reef monitoring manual in 2022 to improve Viet Nam’s monitoring and assessment capacity for Marine Protected Areas management effectiveness in supporting fisheries recruitment and tourism services.

52. The Sub-Commission has been taking the lead in the region, motivating and engaging experts, institutions, and countries in the Ocean Decade. The Sub-Commission develops, coordinates, mobilizes, and implements the Ocean Decade related Actions and activities, including: (i) the UN Ocean Decade Kick-off Conference for the Western Pacific and its Adjacent Areas (25–26 November 2021) with the participation of nearly 3,000 participants coming from various ocean communities, which featured high-level commitments from national governments and UN agencies, ocean stakeholder roundtable dialogue, and 17 Decade Action Incubators; (ii) establishment of a Decade Coordination Office for the region, as an extension of the current WESTPAC Office, with a mandate to develop, coordinate and implement Decade Actions in the region.

53. The WESTPAC Chair informed the Assembly that the Sub-Commission has been continuously implementing the IOC Capacity Development Strategy (2015–2023), and developed specific capacity development actions in the framework of the Ocean Decade and UN Ocean Conference process. He also highlighted key training initiatives led by the Regional Training and Research Centre on Marine Biodiversity and Ecosystem Health (RTRC-MarBEST), the Regional Training and Research Centre on Ocean Dynamics and Climate (RTRC-ODC) and the Regional Training and Research Centre on Coral Reef Restoration and MPAs. Meanwhile, two other RTRCs, namely on Marine Toxin and Food Security and Plastic Marine Debris and Microplastics, have taken the pandemic as an opportunity to co-design with other stakeholders and partners their training modules and plans. In mid-2022, a proposal was made by the City University of Hong Kong to host a Regional Training and Research Centre on Coastal Contaminant Monitoring and Marine Innovative Technologies (RTRC-Coastal COMMIT) and presented at the WESTPAC-XIV Session.

54. The WESTPAC Chair reported on the major results of the Fourteenth Intergovernmental Session (WESTPAC-XIV, 4–7 April 2023). Throughout the session, Member States expressed their immense support for the tireless effort of the Sub-Commission in assisting countries to address their development challenges, and for its leading role in the region in mobilizing support and actions for the Ocean Decade. During the session, the Sub-Commission convened [A Senior Governmental Officials Roundtable](#) (SGOs Roundtable), as a follow-up to [the high-level commitments at the UN Ocean Decade Regional Kick-off Conference for the Western Pacific](#) (25–26 November 2021), and a side event on [National Decade Committees Forum](#) to share experiences and lessons learned in the NDC development and discuss how NDCs could further demonstrate their values in the Ocean Decade.

55. Regarding the 2nd UN Decade Regional Conference in conjunction with the 11th WESTPAC International Marine Science Conference, the Sub-Commission expressed its appreciation to the Government of Thailand for its firm commitment to host the two events on

22–25 April 2024 in Bangkok, as well as the preparations made so far. The 1st Announcement is expected to be made in early May 2023.

56. Recognizing the pivotal role of the WESTPAC Office/Decade Coordination Office in the overall development, implementation, coordination, and organization of the WESTPAC activities and Ocean Decade Actions, the Sub-Commission expressed its deep concern over the understaffed and overstretched situation of the Office. It strongly encouraged Member States to consider the possibility of providing human or financial resources to the Office in order to sustain the momentum of the Sub-Commission and provide impetus for the Ocean Decade.

57. Mr Ando informed the Assembly that the Sub-Commission also accepted the offer of the Government of Japan to host the 15th Intergovernmental Session of the Sub-Commission in early 2025. The Sub-Commission finally elected, by acclamation, Kentaro Ando from Japan as Chairperson, Aileen Tan Shau Hwai from Malaysia and Faldi Syamsudin from Indonesia as Vice-Chairpersons of the Sub-Commission for the next intersessional period.

Dec. A-32/3.3.2

IOC Sub-Commission for the Western Pacific

The Assembly,

1. Having considered the executive summary report of the 14th Intergovernmental Session of the IOC Sub- Commission for the Western Pacific (4–7 April 2023),
2. Notes with appreciation the efforts made during the intersessional period in assisting Member States to address their development challenges, and taking the lead in the region to mobilize support and actions for the Ocean Decade;
3. Thanks the Member States and partners who have provided support, either in cash or in kind, for the development and implementation of a wide range of programmes of the Sub-Commission, in particular to:
 - The Government of Thailand, through its Department of Marine and Coastal Resources, for the provision of office space and facilities for the WESTPAC Office and Decade Coordination Office, and for having hosted the UN Ocean Decade Kick-off Conference for the Western Pacific and its Adjacent Areas in November 2021;
 - The Government of Indonesia, through its National Research and Innovation Agency, for hosting the 14th Intergovernmental Session, 4–7 April 2023, and the Regional Training and Research Centre on Marine Biodiversity and Ecosystem Health with annual training having been provided since 2016;
 - The Government of China for hosting the Regional Training and Research Centre on Ocean Dynamics and Climate (Ministry of Natural Resources and its First Institute of Oceanography) with its annual training having been provided since 2011, and the Regional Training and Research Centre on Marine Plastic Debris and Microplastics (East China Normal University);
 - The Governments of the Philippines and Viet Nam for hosting the Regional Training and Research Centre on Coral Reef Restoration and MPAs (University of the Philippines Diliman), and Marine Toxins and Seafood Safety (Institute of Oceanography), respectively;
 - Member States for their in-cash support, such as China via its voluntary contribution to the IOC Special Account, Japan via the UNESCO/Japanese

Funds-in-Trust, and the Republic of Korea via the UNESCO/Korean Funds-in-Trust; and those for their in-kind support for various WESTPAC programmes and activities, including China, Indonesia, Japan, Philippines, Russian Federation, Thailand, USA, and Viet Nam;

4. Expresses deep concerns over the understaffed and overstretched situation of the WESTPAC Office;
5. Accepts the report of WESTPAC-XIV and the decisions therein, including the Work Programme for the Sub-Commission for May 2023–April 2025;
6. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission;
7. Appreciates the offer of the Government of Thailand to host the 2nd UN Decade Regional Conference in conjunction with the 11th WESTPAC International Marine Science Conference in April 2024, and the offer of the Government of Japan to host the 15th Intergovernmental Session in early 2025, including the SGOs Roundtable 2025;
8. Encourages Member States and partners to consider any possibility of providing and increasing their support, either in cash or in kind, to the Sub-Commission, including secondments and loans of staff.

58. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3.3.3. IOC Sub-Commission for the Caribbean and Adjacent Regions: 17th Session of IOCARIBE, Bogota, Colombia, 9–11 May 2023

Report

IOC/SC-IOCARIBE-
XVII/3s

Executive Summary Report of the 17th Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), 9–11 May 2023

59. The IOCARIBE Chair, Dr Marck Oduber, introduced this agenda item and presented the major advances over the last intersessional period and key results of the 17th session of the IOCARIBE Sub-Commission held in Bogota, Colombia (9–11 May 2023).

60. He reported excellent progress in the planning of activities in the framework of the Ocean Decade. Seven online workshops were organized for each of the seven Regional Decade Working Groups (conducted July–October 2021). The IOCARIBE Regional Decade Conference (16–17 December 2021) marked the launch of the Ocean Decade in the Region. Since then, seven projects and one activity have been endorsed by the Ocean Decade. Work is ongoing to establish a Decade Coordination Office within the IOCARIBE Secretariat, and Terms of Reference have been completed to reconstitute the Tropical Americas and Caribbean (TAC) Regional Planning Group into a UN Ocean Decade Regional Taskforce, with expanded capacity to understand the ocean science needs of all stakeholders.

61. Dr John Cortinas, IOCARIBE Vice-chairperson, leads the reorganization of the IOCARIBE-GOOS Steering Group to improve regional ocean observations and to explore the best strategy for IOCARIBE-GOOS. A pilot project is proposed, to build supporting governance, physical and social infrastructure and conduct a long-term, critical-region sampling programme using Autonomous Ocean Gliders, High-Frequency Radars (HFRs), and other existing and

developing technologies to provide real-time information resulting in hurricane forecast improvement.

62. The Working Group on Harmful Algae in the Caribbean and Adjacent Regions (HAB-ANCA Initiative) remain active in light of the potential challenges of marine poisoning and the deaths of people in Caribbean countries. In 2021, the group contributed to the Global HAB Status Report 2022 and conducted the first HAB course using Virtual Reality. The main objective for the new biennium is to link ANCA with the plans and objectives of the Ocean Decade, and for the group to explore linkages with the existing Sargassum working group.

63. The Sargassum effort aims to support an integrated approach to monitor and forecast concentrations of Sargassum based on publicly available data, such as satellite data and in situ data from countries with open data sharing policies and promote best practices for managing and using Sargassum. There is a need to develop a basin-wide forecasting system to tackle possible observing gaps and indicate where long-term measurements need to take place to improve information products. The goal is to produce an integrated and multi-lingual Sargassum Information Hub for the sharing of this information. NOAA's CoastWatch Programme continues to provide training for the use of remote sensing to monitor and forecast onshore Sargassum mats.

64. The Wider Caribbean region has recently experienced challenges as a result of oil spill accidents and lacks an operational oil spill surveillance service despite these acknowledged threats. Three Trinidad and Tobago (TT) departments have been working together since July 1st, 2021, after obtaining training from US NOAA, to build a near-real time satellite oil spill monitoring programme for their Exclusive Economic Zone (EEZ). This is a first for the Caribbean region. The organizations are the Environmental Management Authority (EMA), the Ministry of Energy and Energy Industries (MEEI), and the Institute of Marine Affairs (IMA). The majority of the satellite oil spill products use freely accessible satellite radar and optical imagery. This initiative offers good potential for replication in the region.

65. Capacity building continues to be a very important activity for the region, and it is evidenced through all programmes. The LAC Ocean Teacher Global Academy regional HUB hosted by Invemar (Colombia) conducted 9 courses for 317 students in 2021; and 7 courses for 237 students in 2022—a total of 554 students completed 16 courses.

66. Dr Oduber expressed his appreciation to partners that have provided support for the implementation of IOCARIBE programmes, including the Governments of Colombia, Barbados, Flanders (Belgium), Norway, Sweden, the European Commission, and the USA. He further invited other Member States and organizations to support the essential programmes for sustainable ocean planning and governance in the Wider Caribbean.

67. He informed the Assembly that IOCARIBE-XVII adopted 10 recommendations. The adopted recommendations focused on: (i) Regional Implementation of the United Nations Decade of Ocean Science for Sustainable Development; (ii) IOCARIBE-GOOS; (iii) Data, Information, Knowledge, and Tools; (iv) Awareness, (v) Collaboration, (vi) Communication, (vii) Youth Engagement, (viii) Stakeholder engagement, (ix) Governance, and (x) Prioritization.

68. He highlighted some of the activities agreed upon during the session, including strengthening governance and architecture for Ocean Observations; establishing the Ocean Decade regional governance structure; reconfiguring IOCARIBE regional programmes to align with the Ocean Decade; completing the Updated Strategic Science Plan and draft a Communications Plan that focuses on outreach to end-users; and ensure the inclusion of youth and Early Career Ocean Professionals in IOCARIBE work.

69. Dr Oduber emphasized that for the Sub-Commission to carry out its work plan and improve regional capacity for marine science and technology, extra-budgetary funding will be

required. Additionally, he urged Member States to support IOCARIBE's efforts to save lives through early warning, promote sustainable ocean economies, and restore healthy ocean ecosystems.

Dec. A-32/3.3.3

IOC Sub-Commission for the Caribbean and Adjacent Regions

The Assembly,

1. Having considered the Executive Summary Report of the 17th session of the IOC Sub-Commission for the Caribbean and Adjacent Region (IOCARIBE-XII/3s), 9–11 May 2023,
2. Takes note of the progress made in implementing the IOCARIBE work programme 2021–2023;
3. Notes with appreciation the Member States who have provided financial, technical and human resources support for the implementation of IOCARIBE programmes during the intersessional period;
4. Accepts the report of IOCARIBE-XVII and the recommendations therein, that form the work plan of the Sub-Commission;
5. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission.

70. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

**3.3.4. IOC Regional Committee for the Central Indian Ocean:
9th Session of IOCINDIO, Dhaka, Bangladesh, 28–30 March 2023**

Report

IOCINDIO-IX/3s

Executive Summary Report of the 9th Session of the IOC Regional Committee for the Central Indian Ocean, Dhaka, Bangladesh, 28–30 March 2023

71. The IOCINDIO Chair, Rear Admiral Khurshed Alam (Retd) Md presented an overview of the activities that the IOC Regional Committee for the Central Indian Ocean (IOCINDIO) has implemented over the intersessional period (2021–2023), including the major outcomes of the 9th intergovernmental session of IOCINDIO (Dhaka, Bangladesh, 28–30 March, 2023).

72. The Chairperson confirmed with enthusiasm to the Assembly that the Regional Committee has now fully completed its reactivation process and is now moving ahead in a proactive mode towards its transformation into an IOC Sub-Commission. He noted that since its Fifth Session considered as the first reactivation session in Chennai, India in 2016, the Regional Committee held regular consecutive intergovernmental sessions. In addition, Member States in the region are investing significant national financial and in-kind resources to maintain, reinforce and build on existing national research and academic institutional infrastructures in ocean and climate-related sciences, technologies, innovation, and governance. IOCINDIO Member States together with regional institutions, partners organizations and programmes are actively implementing major research, academic and development programmes related to the IOC programmes.

73. The IOCINDIO Chair informed the Assembly that furthering the execution of the IOCINDIO work plan, the Committee implemented during the reporting period, several programmes including the following:

- (i) The first Summit in the Indian Ocean on Blue Economy towards the United Nations Decade of Ocean Science for Sustainable Development (2021–2030) on the 6 May 2021, which attracted participants from all IOC regions beyond the Indian Ocean region.
- (ii) Capacity development activities led by the two IOC-related Category 2 Centres under the auspices of UNESCO, namely, the Regional education and research Centre on Oceanography for West Asia (RCOWA) at the Iranian National Institute for Oceanography and Atmospheric Science in the Islamic Republic of Iran and the International Training Centre for Operational Oceanography (ITCOOcean) at the Indian National Centre for Ocean Information Services (INCOIS) in India.
- (iii) IOCINDIO workshop on “Methodologies and Approaches of coastal vulnerability and Advances, hosted by the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, 13–17 December 2021.
- (iv) IOCINDIO co-organized with Mercator Ocean International, the First Mercator Regional Team meeting for the Indian Seas on 3 May 2023.

74. The IOCINDIO Chair further informed the Assembly that furthering the Decisions EC-55/3.5.2 and A31/3.5.6, the IOC Executive Secretary established the Open-ended intersessional Working Group (OEIWG) on the status of the Regional Committee for the Central Indian Ocean that he had the honour to co-chair in tandem with the Chairperson of the IOC. The OEIWG held seven meetings from February 2022 to April 2023 and concluded its mandate with the unanimous adoption by acclamation of the text of the Draft Resolution for the establishment of the IOC Sub-Commission for the central Indian Ocean (IOCINDIO). The details of activities and results of the OEIWG are reported under the agenda item 4.5 below.

75. The IOCINDIO Chair reported the results of the 9th Intergovernmental Session of the IOCINDIO generously hosted by the Government of Bangladesh in Dhaka, 28–30 March 2023, and attended by scientists and experts, as well as high-ranking dignitaries and Plenipotentiary High Commissioners from IOCINDIO Member States. The session organized three unique events to ensure the regional ownership and leadership in ocean science for sustainable development, namely the Senior Governmental and Regional Officials’ Forum, the IOCINDIO Youth Forum and the IOCINDIO Symposium on Capacity Development that brought together the High Commissioners, the leaders of the UNESCO Category 2 Centres, Chairs and the Ocean Teacher Academy in the IOCINDIO region and the Youth networks.

76. IOCINDIO reviewed implementation of its work plan 2022–2023 and established three intra-sessional Working Groups (WG) on major programmes: WG1 on Ocean policy, economy, and governance; WG 2: Coastal Vulnerability, Sea-Level Rise, Storm Surges Prediction and Forecasting in the Indian Ocean; WG3: Capacity Development and Recommendations. The session amended its work plan with the integration of the outputs of the intra-sessional Working Groups and adopted the IOCINDIO work plan for 2023–2025.

77. The Officers of the Regional Committee for the Central Indian Ocean were re-elected as follows:

- Chair: Rear Admiral Kushed Alam (Retd) Md (Bangladesh)
- Vice Chair: Dr Maryam Ghaemi (Islamic Republic of Iran)
- Vice-Chair Dr Saif Mohammed AlGhais (United Arab Emirates).

78. Finally, the IOCINDIO Chair invited the Assembly to endorse the IOCINDIO-IX Recommendations and to identify allocations of financial resources from the Regular Budget

and extrabudgetary resources of the IOC to support the full implementation of the IOCINDIO-IX Recommendations aligned with the other existing IOC Sub-Commissions.

Dec. A-32/3.3.4

IOC Regional Committee for the Central Indian Ocean

The Assembly,

1. Having examined the Executive Summary report of the 9th session of the IOC Regional Committee for the Central Indian Ocean, Dhaka, Bangladesh, 28–30 March 2023 (IOCINDIO-IX/3s),
2. Accepts the report of IOCINDIO-IX and the recommendations therein, including the work programme for 2023–2025;
3. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission.

79. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3.4 REPORTS OF OTHER IOC SUBSIDIARY BODIES

3.4.1 Warning and Mitigation Systems for Ocean Hazards

[Rule of Procedure 48.3]

3.4.1.1 Regional Early Warning Services

<u>Reports:</u>	ICG/CARIBE-EWS-XVI/3s	Executive Summary Report of the 16th Session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-XVI), Heredia, Costa Rica, 25–28 April 2023
	ICG/IOTWMS-XIII/3s	Executive Summary Report of the 13th Session of the IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS-XIII), Bali, Indonesia, 28 November–1 December 2022

[ICG/PTWS session on 11 au 15 September 2023 will not report to IOC-32. Same for ICG/NEAMTWS to be held 4th quarter 2023]

80. Mr Gérard Metayer (Haiti), elected Chair of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS), introduced the report of ICG/CARIBE-EWS. He highlighted the results of the CARIBE WAVE 2023 exercises that mobilized 780,000 people in total on 23 March 2023.

81. He reported on other results of the 16th session of ICG/CARIBE-EWS, including the planning of the CARIBE WAVE 2024 and the realignment of the ICG/CARIBE-EWS Working Groups (WG) around the Sendai Framework for Disaster Risk Reduction, the Early Warnings For All Initiative (EW4All) and the ODTP pillars, including capacity development functions for all.

82. Professor Dwikorita Karnawati (Indonesia), Chair of the Intergovernmental Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), informed the Assembly about recent developments and related progress in the Indian Ocean. She reported on the decisions and recommendations of the 13th Session of the ICG/IOTWMS.

3.4.1.2 *Global Coordination of Warning and Mitigation Systems for Ocean Hazards*
[Dec. A-31/3.4.1]

<u>Working document:</u>	IOC/A-32/3.4.1.2.Doc(1)	Research, Development and Implementation Plan for the Ocean Decade Tsunami Programme – Executive Summary
<u>Report:</u>	IOC/TOWS-WG-XVII/3	Report of the 16th session of the Working Group on Tsunamis and other Hazards related to Sea-level Warning and Mitigation Systems (TOWS-WG), UNESCO, Paris, 2–3 March 2023
<u>Information:</u>	Draft IOC Technical Series, 180	Research, Development and Implementation Plan for the Ocean Decade Tsunami Programme – Draft

83. Dr Alexander Frolov, Chair of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), introduced this item. He informed the Assembly about recent developments in Tsunami Warning and Mitigation Systems and reported on the decisions and recommendations of TOWS-WG adopted at its 16th meeting.

84. The TOWS-WG-XVI examined lessons learnt from past events including the massive eruption of the volcano Hunga Tonga-Hunga Ha'apai (HTHH) on 15 January 2022, which generated a tsunami that caused loss of life and damages across the Pacific. The eruption of the HTHH volcano has become a serious trial for the global Tsunami Warning Systems, focused primarily on the detection of tsunami waves generated by underwater earthquakes. Although a response proved difficult, the PTWC was able to develop interim procedures for responding to the HTHH tsunami and the ICG/PTWS was able to quickly implement them by 15 March 2022.

85. At its 16th meeting, the TOWS-WG recommended to the IOC Assembly that warning for tsunamis generated by volcanoes should be developed and coordinated within the framework of a UNESCO/IOC Global Tsunami and Other Ocean-related Hazards Early Warning System (GOHWMS) and also, if possible, within the framework of a multi-hazard early warning system.

86. Pursuant to IOC Assembly decision A-31/3.4.1, Dr Frolov reported that TOWS-WG recommended to the Assembly a 10-year Research, Development and Implementation Plan (RDI Plan) for the Ocean Decade Tsunami Programme (ODTP) contained in document IOC/A-32/3.4.1.2.Doc(1).

87. The RDI Plan provides a science-based roadmap for achieving two interrelated objectives of the ODTP. The first is to develop the capability of warning systems to send actionable warnings within 10 minutes of a tsunami from any sources with the least possible uncertainty, in order to evacuate as many people as possible from harm's way before impact. Achieving this 10-minute goal requires the development of existing monitoring systems and the implementation of new scientific and technological advances that will allow a shift from a capability based largely on seismic assumptions and large uncertainties to one based on real-time dynamic assessment and small uncertainties.

88. The second objective of ODTP is that 100 percent of communities at risk are prepared and resilient to tsunamis by 2030 through programmes such as the UNESCO/IOC Tsunami Ready Recognition Programme (TRRP), which was approved by the IOC Executive Council in 2022. It includes 12 Assessment, Preparedness and Response Indicators that help communities at risk build their capacity to respond effectively to tsunami warning and threats.

89. The implementation of the Research and Development Plan for the ODTP will also need to ensure that particular attention is paid to the needs of Small Island Developing States (SIDS) and Least Developed Countries (LDCs) and that priority is given to addressing and supporting these needs.

Dec. A-32/3.4.1

Warning and Mitigation Systems for Ocean Hazards

The Assembly,

1. 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-XVI/3s), the IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS-XIII/3s), and the report of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG-XVI),
2. Accepts the reports by the IOC/ICGs and TOWS-WG;
3. Notes with satisfaction the progress made during the intersessional period, including:
 - (i) Wave exercises conducted in the Caribbean (CARIBE WAVE 22) and Pacific (PacWave 22) regions;
 - (ii) Work of the TOWS-WG *Ad hoc* Teams on Meteotsunamis and Tsunamis Generated by Volcanoes under the Task Team on Tsunami Watch Operations (TT TWO);
 - (iii) Continuing expansion of capabilities and services of the Tsunami Service Providers (TSPs) for each region, especially with regards to tsunami events, and including development of new products and capabilities, such as for the maritime community and growing capability in response to tsunamis generated by non-seismic and complex events;
 - (iv) Enhancements to monitoring and detection capabilities, such as growing use of GNSS data globally and installation of undersea cable systems (SMART) in the North-eastern Atlantic and Southwest Pacific Oceans;
 - (v) the appointment of Dr Laura Kong, Director, International Tsunami Information Center (ITIC as the Chair of the UNESCO/IOC Tsunami Ready Coalition);
 - (vi) Continued progress in the implementation of UNESCO/IOC Tsunami Ready in the North-eastern Atlantic, the Mediterranean and connected seas, Indian Ocean, Pacific Ocean, and Caribbean and Adjacent regions;
 - (vii) Efforts of the Indian Ocean Tsunami Information Center (IOTIC) and International Tsunami Information Center (ITIC) in preparing Tsunami Awareness, UNESCO/IOC Tsunami Ready and Tsunami Evacuation Maps, Plans and Procedures (TEMPP) training through the Ocean Teacher Global Academy (OTGA) platform and hybrid training workshops and training videos;
 - (viii) Initiatives like Hotel Resilient, as a benchmarking and certification of hotels and resorts for disaster risk management (multi-hazard including tsunami) and climate change adaptation, as well as the example for a major hotel in Waikiki, Hawaii, United States;
 - (ix) Work of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS) to develop a National Tsunami

Warning Centre (NTWC) Competency Framework (2019), and the ITIC's leadership to pilot training courses based on the Framework;

- (x) Activities undertaken by the respective regions for World Tsunami Awareness Day (WTAD) 2022, and as part of this, the strong engagement in the #GetToHighGround Initiative, and the success achieved through United Nations Office of Disaster Risk Reduction (UNDRR) and IOC collaboration;
 - (xi) Efforts of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS) and the IOC Secretariat to coordinate and contribute to global initiatives related to Multi-Hazard Early Warning Systems (MHEWS);
 - (xii) Continuing collaboration with the International Union of Geodesy and Geophysics (IUGG), World Meteorological Organization (WMO), United Nations Office of Disaster Risk Reduction (UNDRR), International Hydrographic Organization (IHO), and International Maritime Organization (IMO);
 - (xiii) The ICG/PTWS for quick implementation of the Interim Hunga Tonga-Hunga Ha'apai (HTHH) Volcano Tsunami Response Procedures by 15 March 2022 (cf. IOC Circular Letter 2882).
4. Welcomes the appointment of the new ICG/CARIBE EWS Officers for the biennium 2023–2025;

I.

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

5. Notes with appreciation:
- (i) the planned hosting of a five-day Tides Training Course to be taught in Spanish for both oceanographic and hydrographic organizations jointly organized and funded by the International Hydrographic Organization (IHO), the International Maritime Organization (IMO), and the Intergovernmental Oceanographic Commission (IOC) of UNESCO, 13–17 November 2023, hosted by Costa Rica;
 - (ii) NOAA's support to the Puerto Rico Seismic Network (PRSN) for hosting a training workshop for GNSS network operators in the region during the second week of August 2023;
 - (iii) the strong cooperation between the Caribbean Tsunami Information Center (CTIC), the Caribbean Office of the International Tsunami Information Center (ITIC-CAR), CARIBE-EWS WG4, Task Teams CARIBE WAVE and Tsunami Ready and UNDRR for advancement of preparedness, readiness and resilience to mitigate the impacts of tsunamis and other coastal hazards in the CARIBE-EWS, particularly in relation to the implementation of the Tsunami Ready programme, the dissemination and development of outreach and educational resources, support to the United Nations Decade of Ocean Science for Sustainable Development including the work of the Tropical America and Caribbean Decade Safe Ocean Working Group;
 - (iv) the consideration of the Central America Tsunami Advisory Center (CATAC) as a Tsunami Service Provider (TSP) in its 17th Session in 2024 to enable the IOC Executive Council to consider the final admission of CATAC as TSP in June 2024;

- (v) the decision to hold CARIBE WAVE 24 on Thursday 21 March 2024, commencing at 15:00 UTC with two scenarios: (a) an earthquake along the Puerto Rico Trench; and (b) an earthquake along the North Panama Deformed Belt based on the 1882 event;
- (vi) the decision to realign the ICG/CARIBE-EWS Working Groups (WG) around the Sendai Framework for Disaster Risk Reduction, the EW4ALL and the ODTP pillars, including capacity development functions for all;

II.

Indian Ocean Tsunami Warning and Mitigation System (IOTWMS)

6. Notes with appreciation:

- (vii) the successful completion and outcomes of Phases 2a and 2b of the UNESCAP funded project “Strengthening tsunami early warning in the North-West Indian Ocean through regional cooperation” and the commencement in 2023 of the Phase 2c of the project;
- (viii) the hosting of the Indian Ocean Tsunami Ready Workshop in Bali, Indonesia, 22–26 November 2022 and the UNESCO/IOC Tsunami Ready recognition of a further nine communities in Indonesia in 2022;
- (ix) IOTWMS plans to undertake a full Capacity Assessment of Tsunami Preparedness in the Indian Ocean in 2024 to evaluate progress of the IOTWMS since the Indian Ocean Tsunami of 2004;
- (x) IOTWMS plans to hold the 14th session of the ICG/IOTWMS in late 2024 to coincide with the 20th Commemoration of the Indian Ocean Tsunami of 2004 and the offer from the Government of Indonesia to host it;
- (xi) the decision to hold the Exercise IOWAVE23 in October of 2023;

III.

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

- 7. Decides that warning systems for tsunamis generated by volcanoes should be considered and coordinated as part of the UNESCO/IOC Global tsunami and other Ocean-related Hazards Warning and Mitigation System (GOHWMS), and also when possible be part of a MHEWS;
- 8. Acknowledges the WMO request to the WMO-IOC Joint Collaborative Board to review tsunami issues as they relate to meteotsunamis, to clarify the roles and responsibilities for the WMO and UNESCO-IOC, and to determine how best to strengthen collaboration in support of Member States;
- 9. Welcomes the organisation of a Global Scientific Symposium and establishment of an Organizing Committee composed of two Co-chairs nominated by the TT-TWO and TT-DMP, the Chair of the ODTP Scientific Committee, a representative from the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG), a representative of the IUGG-Joint Tsunami Commission, and a representative of each of the Tsunami Information Centres to be hosted by the Government of Indonesia in December 2024 as part of the plans by the ICG/IOTWMS to commemorate the 20th Anniversary of the Indian Ocean Tsunami of 2004;

10. Decides to endorse the 10-Year Research, Development and Implementation Plan of the Ocean Decade Tsunami Programme as presented in document IOC/A-32/3.4.1.2.Doc(1);
11. Instructs the regional Intergovernmental Coordination Groups (ICGs) to:
 - (i) encourage sea level data is sampled at one second intervals and with the highest available accuracy and transmitted in real-time as a matter of priority, given the critical need to resolve and understand the near-field threat to high at-risk communities where a tsunami generated by non-subduction earthquake sources as well as non-seismic sources (e.g. generated by volcanoes) may arrive in minutes;
 - (ii) encourage sea-level network operators to undertake regular and routine calibration of their sea-level monitoring instrumentation, following recommendations of IOC Manuals & Guides 3 and 14 (Volumes I–V);
 - (iii) routinely monitor the status of seismic and sea level related observing networks to identify and better help rectify gaps in coverage and free and open data exchange;
 - (iv) Consider and implement the recommendations of the Ad Hoc Team on Tsunamis Generated by Volcanoes with respect to the hazard assessment, monitoring and warning requirements, including costs of deploying and maintaining such systems. Where identified tsunamis generated by volcanoes may impact multiple Member States, TSPs for the relevant ocean basin tsunami warning and mitigation systems should consider if they need to be involved in monitoring and provision of threat advice;
 - (v) TSPs in collaboration with NAVAREA operators of the International Hydrographic Organization (IHO) test the tsunami maritime safety products in 2023/24, with a view to operationally implementing them in 2024-2025;
 - (vi) add the task to the Terms of Reference of the ICGs and TICs to facilitate the implementation and functioning of the UNESCO/IOC Tsunami Ready Recognition Programme;
 - (vii) add the role of ICGs as regional Steering Committees for the ODTP in their Terms of Reference;
 - (viii) undertake sub-regional exercises as part of WAVE Exercises as an efficient way to further engage Member States on exercises as appropriate;
 - (ix) follow the initiative of ICG/PTWS to enable sub-regional live information sharing during tsunami events to inform neighbouring country decision-making;
 - (x) investigate mechanisms for recognition of standards mechanisms similar to UNESCO/IOC Tsunami Ready Recognition Programme already in place in some countries and inform the TOWS-WG TT-DMP;
 - (xi) Caribbean Tsunami Information Center (CTIC) to share UNESCO/IOC Tsunami Ready survey questionnaire and feedback forms on implementation process to receive information from the UNESCO/IOC Tsunami Ready communities;
 - (xii) encourage the standard text in the UNESCO/IOC Tsunami Ready signage for vertical evacuation, such as “Go to the designated building for vertical evacuation”;

- (xiii) properly inform the public on the validity of the recognition, as indicated on the UNESCO/IOC Tsunami Ready signage and certificate under the UNESCO/IOC Tsunami Ready logo;
 - (xiv) ITIC to pilot the draft PTWS National Tsunami Warning Centre (NTWC) Competency Framework (2019) for endorsement by ICG/PTWS with the goal to develop a global framework for all ICGs to use;
12. Encourage Member States to provide voluntary financial contributions to the IOC special account and in-kind contributions to support the Ocean Decade Tsunami Programme and UNESCO/IOC Tsunami Ready Recognition Programme;
13. Requests the IOC Secretariat:
- (i) provide a timelier update of the UNESCO/IOC Tsunami Ready database;
 - (ii) explore how to develop an automated application system for UNESCO/IOC Tsunami Ready application and renewal;
 - (iii) enhance the renewal process of UNESCO/IOC Tsunami Ready and learning about the renewal experience in the United States TsunamiReady® program;
 - (iv) facilitate the finalization of the OTGA basic tsunami training materials as soon as possible to support the UNESCO/IOC Tsunami Ready Recognition Programme;
 - (v) develop a paper on the tsunami threat on coasts along the Southern Atlantic Ocean to assist concerned Member States of IOC on the decision to be part of the global Tsunami Warning and Mitigation System;
 - (vi) help inform Member States widely on the potential tsunami hazard from volcanoes by distributing the Tsunamis Generated by Volcanoes Report, including the List of Tsunamigenic Volcanoes, to:
 - Volcano Observatories;
 - UNESCO/IOC Member States.
14. 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].
15. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission.

90. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

**3.4.2 International Oceanographic Data and Information Exchange:
27th Session of IODE, UNESCO, 22–24 March 2023**
[Rule of Procedure 48.3]

Working document: IOC/A-32/3.4.2.Doc(1) Draft IOC Strategic Plan for Ocean Data and Information Management (2023–2029) – Outlines

<u>Report:</u>	IOC/IODE-XXVII/3s	Executive Summary Report of the 27 th session of the International Oceanographic Data and Information Exchange Committee, UNESCO, Paris, 22–24 March 2023
<u>Information:</u>	Draft IOC Manuals and Guides, 92	IOC Strategic Plan for Ocean Data and Information Management (2023–2029) – Draft

91. Dr Paula Correa Sierra, IODE Co-Chair, introduced this item and informed the Assembly on the outcome of the 27th session of the IODE Committee and the preceding 2nd International Ocean Data Conference (IODC-II) on 20–21 March 2023.

92. The 2nd International Ocean Data Conference (IODC-II) was attended by 160 participants on site and 296 online (<https://oceandataconference.org>). The goal of IODC-II was to focus on the implementation of the commitments and main recommendations identified at IODC-I, and therefore it was organized around four sessions. Session 1 emphasized the importance of investing in systematic data integration services, providing Application Programming Interfaces (APIs), and using controlled vocabularies to achieve harmonized and FAIR data. It also highlighted the need for collaboration across communities with different technological maturity levels and keeping licensing as open as possible. Session 2 focused on improving cooperation mechanisms for multi-stakeholder partnerships, enhancing documentation of experiences, and embedding capacity development through transdisciplinary approaches. Session 3 called for more coordination and co-governance of digital interoperability norms and developing clear, common, and computable maps of data and service flows. It also highlighted the need to update metrics for success and rally potential co-implementers to challenge the Decade Data & Information Strategy's implementation plan. Session 4 emphasized the need for inter- and trans-disciplinary research practices to ensure diversity, transparency, equity, inclusion, and trust in ocean science. Social sciences were identified as a key support for improving ocean data use and addressing injustices and discrimination in data-related practices.

93. Dr Sierra reported that the IODE-XXVII session was attended by 112 participants from 38 IOC Member States and 16 organizations. It was regretted that this was lower than the 155 participants from 65 IOC Member States and 9 organizations during the online 26th Session. This could indicate that future sessions should possibly be organized as hybrid events.

94. As had been the case for the previous inter-sessional period, information on the work of the IODE National Oceanographic Data Centres (NODC) and Associate Data Units (ADU) was made available online through a dedicated webpage (<https://surveys.iode.org/iode-national-reports-2021-2022-survey-data-management-nodc-and-adu/>).

95. The Committee focused its attention on the following key issues: (i) status of the IODE network; (ii) progress review of the 15 IODE global projects; (iii) revision of structural elements of the IODE Programme; (iv) rules of procedure for IODE activities; (v) enhanced cooperation with other IOC programmes and other organizations; (vi) suspension of ODIN projects; (vii) IODE contributions to the UN Decade of Ocean Science for Sustainable Development; (viii) revision of the “IOC Strategic Plan for Oceanographic Data and Information Management (2017–2021)”; (ix) revision of the “IOC Oceanographic Data Exchange Policy”; (x) progress and way forward of the ODIS; and (xi) work plan and budget for 2023–2024.

96. During the past inter-sessional period two Member States (Panama, Portugal) established an NODC, and seven organizations successfully applied for ADU status, including one that also applied for accreditation (South Africa MIMS). One AIU (Associate Information Unit) application was received from the SEAFDEC Aquaculture Department (SEAFDEC/AQD) (Philippines) in 2021 and approved, bringing the total number of AIUs to 6. Three applications for (re)accreditation have been reviewed and recommended by the SG-QMF and the following NODCs / ADUs have received accreditation: (i) South African Marine Information Management

System (MIMS) has been awarded the status of Accredited IODE Associate Data Unit; (ii) Marine Institute, Ireland has been re-accredited and maintains the status of Accredited IODE National Oceanographic Data Centre; and (iii) Norwegian Marine Data Centre (NMD) has been awarded the status of Accredited IODE National Oceanographic Data Centre. This brings the total numbers to 10 accredited NODCs and 2 accredited ADUs.

97. Dr Sierra recalled that IOC Decision A-31/3.4.2 had invited 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 and had agreed to 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. Dr Sierra informed the Assembly that a new agreement had been signed covering the period January 2022 to December 2026.

98. Dr Sierra informed the Assembly that the Committee had observed that naming IODE activities “project” created the perception that these are activities that are limited in duration and thus also with finite resources. This was hampering IODE efforts to partner with other programmes and organizations that do not wish to embark on collaboration unless long-term sustainability of this collaboration can be expected. For this reason, the Committee had decided to designate IODE activities as Programme Components, Programme Activities and Projects. The Committee had instructed the IODE Management Group to: (i) further clarify and finetune the naming definitions; (ii) propose the designation of all other IODE activities; and (iii) propose procedures to guide applications for new components, activities and projects, and submit these to the IODE Committee at its 28th Session in 2025. To further streamlining structure and operation of IODE activities, the IODE Committee adopted new “Rules of Procedure for IODE Programme Components, Programme Activities or Projects”.

99. Dr Sierra reported that cooperation with other IOC programmes as well as other organizations has considerably expanded including with HAIS, GO₂NE, SDG 14.3.1 data portal, GOOS BioEco portal, various training courses in OTGA, and plans are underway with GO₂DAT. IODE is also participating in various European Commission funded projects (mainly through OBIS). IODE continues to be a member of the World Data System (WDS), collaborates with FAO in the Aquatic Sciences and Fisheries Abstracts (ASFA) and is studying enhanced cooperation between OpenASFA and AquaDocs.

100. Regarding IODE’s contribution to the UN Decade of Ocean Science for Sustainable Development, Dr Sierra reported that IODE has successfully submitted 6 Decade Actions and in addition, 4 Decade Actions were submitted in cooperation with IODE. Furthermore, the IOC Project Office for IODE successfully applied to host the “Decade Coordination Office (DCO) for Data Sharing”. The DCU mobilized funding (for 11 months) for a DCO Lead and the vacancy was published in March 2023.

101. Dr Sierra then recalled that IODE at its 26th session in 2021 had tasked an inter-sessional working group with revision of the “IOC Strategic Plan for Oceanographic Data and Information Management (2017–2021)” (Decision IODE-XXVI.6.3). The new strategic plan for 2023–2029 is tabled for the consideration of the Assembly as Document IOC/A-32/3.4.2.Doc(1) following Recommendation IODE-XXVII/6.2 on ‘the IOC Strategic Plan for Ocean Data and Information Management (2023–2029)’.

102. The revision of the “IOC Oceanographic Data Exchange Policy” is discussed under agenda item 4.4.

103. Dr Sierra reported on the considerable progress with the development of the IOC Ocean Data and Information System (ODIS). She recalled that the ODIS project had been proposed by IODE-XXVI through Recommendation IODE-XXVI.6.1.1 (Establishment of the IOC Ocean Data and Information System (ODIS)) and formally approved by the 31st Session of the IOC Assembly

in June 2021 (Decision A-31/2.4.2). She further informed the Committee that the development of ODIS had gone hand in hand with the implementation of the Ocean InfoHub Project and the ODISCat (IOC Ocean Data and Information System Catalogue of Sources Project (ODISCat)) which had been established by IODE-XXV in 2019. Regarding ODISCat she noted that the catalogue contains 3105 references (April 2023) to online sources of data and information. A Decade Programme called “An Ocean Data and Information System supporting the UN Decade of Ocean Science for Sustainable Development (OceanData-2030)” has been registered with the UN Decade of Ocean Science for Sustainable Development. The programme will play a central role in supporting the Ocean Decade mission to catalyse transformative ocean science solutions for sustainable development, connecting people and the ocean.

104. To conclude, the IODE Co-chair conveyed the concern of the Committee about the continued decline in UNESCO Regular Programme funds made available to IODE. The Committee stated that the current amount available had now IODE at a critical level, unable to implement its work plan and maintain the global network of data and information centres built over the past six decades. The current level of funding no longer allows capacity development at the regional level through the regional Ocean Data and Information Networks (ODINs), with adverse consequences on the equitable participation of all Member States in IODE and the level of data and information management activities that is necessary to beneficially contribute to the Ocean Decade.

105. The Committee thanked the Government of Flanders (Kingdom of Belgium) and Flanders Marine Institute (VLIZ) for their support as an essential contribution to the resources needed by the IODE Programme and called on the Government of Flanders (Kingdom of Belgium) and VLIZ to continue their support. The Committee also thanked the Norwegian Agency for Development Cooperation (NORAD) for its extra-budgetary funding support for OBIS and OIH/ODIS.

106. Through the voice of its Vice-Chair, the Committee also expressed disappointment that, despite several requests at previous sessions of the IODE Committee, no additional regular positions had been created and that other priorities had been decided upon. The Committee noted that lack of stable staffing at the IODE Secretariat could seriously harm IOC and its IODE as extra-budgetary funding by IODE’s main donor(s) could no longer be expected to assure the long-term sustainability of its core programme activities such as OBIS, ODIS, OIH, OTGA, OBPS, and others.

Dec. A-32/3.4.2

International Oceanographic Data and Information Exchange

The Assembly,

I – 27th Session of IODE, 22-23 March 2023

1. Having examined the Executive Summary Report of the 27th session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE-XXVII, 22–23 March 2023) (IOC/IODE-XXVII/3s),
2. Endorses the report of the 27th session of the IOC Committee on International Oceanographic Data and Information Exchange including the recommendations and workplan for 2023–2024 contained therein;
3. Strongly encourages Member States to establish IODE National Oceanographic Data Centres (NODCs), Associate Data Units (ADUs) or Associate Information Units

(AIUs);

4. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission;

II – The IOC Strategic Plan for Ocean Data and Information Management (2023-2029)

5. Having examined the proposal contained in document IOC/A-32/3.4.2.Doc(1),
6. Recalling Decision IOC-XXIX/6.2.2 which adopted the IOC Strategic Plan for Oceanographic Data and Information Management (2017–2021) and also agreed that the Plan should be regularly reviewed and revised by the IODE Committee,
7. Recalling further Decision IODE-XXVI.6.3 (Establishment of an inter-sessional working group to revise the IOC Strategic Plan for Oceanographic Data and Information Management (2017-2021)),
8. Recognizing that IODE has developed a global network of National Oceanographic Data Centres, Associate Data Units, Associate Information Units and related networks, representing a considerable pool of expertise in data and information management and sharing, and that many IOC Member States have developed distributed networks of data management facilities involving IODE, as well as other centres, to deal with a wide variety of ocean observations,
9. Considering that the vision of the IOC Strategic Plan for Ocean Data and Information Management (2023–2029) is to achieve a comprehensive and integrated ocean data and information system, serving the broad and diverse needs of IOC Member States, for management, policy-making and scientific use,
10. Considering further that the objectives of the IOC Strategic Plan for Ocean Data and Information Management for 2023-2029 are to deliver:
 - (i) interoperable, quality-controlled data on a diverse range of variables: (i) generated according to scientifically and operationally sound methods; and (ii) persistently archived in well-documented, globally applicable standards and formats;
 - (ii) timely dissemination of data on a diverse range of variables (generated from observations and model outputs) both in real-time and delayed modes depending on the needs of user groups and their technical capabilities ("on demand" as well as automatically scheduled); and
 - (iii) easy discovery and access to data and information about a diverse range of variables and derived products (including forecasts, alerts and warnings) in a way that is user friendly for a wide variety of users.
11. Endorses the IOC Strategic Plan for Ocean Data and Information Management (2023-2029) as given in document IOC/A-32/3.4.2.Doc(1),
12. Agrees that the Plan should be:
 - (i) published and distributed widely and used as a basic data strategy throughout the programmes and projects of the IOC, and
 - (ii) regularly reviewed and revised by the IODE Committee, in close consultation with all IOC programmes.

107. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3.4.3 IOC-FAO Intergovernmental Panel on Harmful Algal Blooms: 16th Session of IPHAB, FAO, Rome, 27–29 March 2023

[Rule of Procedure 48.3]

Report

IOC-FAO/IPHAB-XVI/3s Executive Summary Report of the 16th Session of IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, FAO, Rome, 27–29 March 2023

108. Mr Joe Silke, past Chair of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms (IPHAB), presented the main outputs of the 16th session of the Panel. The Sixteenth Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms (IPHAB-XVI) was held at FAO Headquarters on 27–29 March 2023. He highlighted that that this was the first session with FAO back as cosponsor of IPHAB as set out in IOC Assembly Resolution XVI-4.

109. The Panel reviewed the actions completed during the intersessional period, noted the progress made and that several of the UN Ocean Decade challenges are being addressed. The Panel concluded that the Decisions and Recommendations of the Fifteenth session (March 2021) had been implemented highly satisfactorily within the available resources.

110. The Panel took eleven decisions and endorsed two recommendations for the consideration of the IOC Assembly at its thirty-second session, and of the FAO Committee on Fisheries (COFI). The decisions concern: (i) Regional HAB Programme Development taking into account the difference of support for the various groups and networks depending on whether they are affiliated to a regional IOC subsidiary body or not; (ii) the continuation of the Task Team on the Early Detection, Warning and Forecasting of HAB Events; with new terms of reference; (iii) the continuation of the Task Team on the development of the Harmful Algal Information System and a periodic Global Harmful Algal Bloom Status Report with new terms of reference; (iv) the continuation of the Task Team on a Global Ciguatera Strategy for Improved Research and Management with new terms of reference with updated terms of references; (v) the continuation of the Task Team on Harmful Algae and Desalination of Seawater to formulate a proposal for a joint FAO/WHO water safety risk assessment for drinking water coming from desalination plants; (vi) the continuation of the Task Team on Biotxin Monitoring, Management and Regulations with new terms of reference; (vii) the continuation of the Task Team on Algal Taxonomy with new terms of reference; (viii) the continuation of the Task Team on Fish Killing Microalgae and Ecosystem Effects with new terms of reference; (ix) establishment of a Task Team on HAB Communication; (x) IOC-SCOR GlobalHAB beyond 2025; and (xi) the development of HAB Solutions (HAB-S) an UN Ocean Decade Programme Proposal.

111. In addition to the above, the Intergovernmental Panel submitted to the Assembly its planned intersessional activities in the form of a workplan and budget for the IOC HAB Programme 2024–2025 and recommended to it the continuation of IPHAB as a major technical subsidiary body with unchanged terms of reference.

112. The Chair of IPHAB informed the Assembly that the Memorandum of Understanding between FAO, IAEA, IOC and WHO on Ciguatera Poisoning, presented to the 30th session of the Assembly as IOC-XXX/Inf.4, and subsequently approved by the UNESCO's Executive Board, had not been signed by WHO and therefore remains on hold. He also informed the Assembly that a draft MoU with FAO on IPHAB as a follow-up to IOC Assembly Resolution XVI-4 is planned to be submitted for approval by the 217 Session of the UNESCO Executive Board (Autumn 2023).

113. The Assembly was informed that Dr Philipp Hess (France) was elected as Chair and Dr Maggie Broadwater (USA) was elected as Vice-Chair.

Dec. A-32/3.4.3

Harmful Algal Blooms

The Assembly,

1. Having considered the Executive Summary Report of the 16th session (Rome, Italy, 27–29 March 2023) of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms (IPHAB),
2. Endorses the Executive Summary Report of IPHAB-XVI and the recommendations contained therein (IOC-FAO/IPHAB-XVI/3s);
3. Notes that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission.

114. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

3.5 IOC REPORT TO THE 42nd GENERAL CONFERENCE OF UNESCO
[Statutes Art. 3.2; Rule of Procedure 49.2]

Working document: IOC/A-32/3.5.Doc(1) Report of the IOC activities (2022–2023) to the Forty-second General Conference of UNESCO

115. The Executive Secretary briefly introduced this item, considering that the essence of the information contained in the draft report presented for Assembly's consideration has already been covered in his presentation under item 3.2. He also highlighted that a report on the implementation of the Ocean Decade will be presented to the UNESCO General Conference, primarily drawing on document IOC/A-32/4.12.Doc(1). Furthermore, a high level event tentatively entitled '*Ocean Science as a Pillar of Sustainable Ocean Management*' will be organised on the margin of the IOC and SC Commission of the General Conference on 15 November 2023. The primary objective of the side event would be to highlight the fundamental importance of science-based sustainable ocean management to meet global, regional and national policy goals for climate, biodiversity, sustainable ocean economies, and coastal resilience, amongst others.

Dec. A-32/3.5

IOC Report to the Forty-second General Conference of UNESCO

The Assembly,

1. Recalling [Article 3.2](#) of the Statutes and Rule of Procedure [49.2](#),
2. Having examined document IOC/A-32/3.5.Doc,
3. Takes note of the report to be presented to the 42nd session of the General Conference of UNESCO, and requests the Executive Secretary to submit the report

on IOC activities (2022–2023) to the 42nd General Conference of UNESCO (November 2023) as document 42 C/REP.9.

116. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4. PROGRAMMATIC DEVELOPMENTS

4.1 REPORT OF THE IHO-IOC GEBCO GUIDING COMMITTEE AND OUTCOMES OF THE GEBCO GOVERNANCE REVIEW 2023 [Rule of Procedure 48.3; Dec. EC-55/3.1]

<i>Working document:</i>	IOC/A-32/4.1.Doc(1)	Progress report on the GEBCO Governance Review (2023)
<i>Information:</i>	IOC/INF-1423	Report of the GEBCO Guiding Committee to the IOC on its activities (2021–2023)

117. Mr Evert Flier, the Chair of the GEBCO Guiding Committee (GGC), introduced this item. He provided an overview of GEBCO developments for the period 2022–2023 as well as the outcomes of the 39th Meeting of the GEBCO Guiding Committee (November 2022, Southampton, UK). These include: (i) progress in raising the percentage of ocean floor mapped under GEBCO and Nippon Foundation-GEBCO Seabed 2030 Project; (ii) celebrations of the 120th Anniversary of GEBCO in 2023; (iii) the establishment of a new Sub-committee on Education and Training (SCET) to develop and coordinate the education and training strategy of the GEBCO Programme; (iv) the development of a GEBCO Charter/Code of conduct to consolidate the ethical expectations of all GEBCO's participants; (v) and the development of a GEBCO Mid-term Strategic Plan that clearly sets out the connections between the strategic objectives of the parent organizations (IOC and IHO), the future direction of GEBCO and the work of the subordinate bodies, initiatives and activities.

118. Mr Samuel Harper, GEBCO Secretary (IHO) and Chair of the GEBCO Governance Review Task Team presented a progress report on the conduct of the GEBCO Governance review initiated in 2022. He recalled that at the initiative of the parent organisations, the GGC agreed to launch a governance review of GEBCO, recognising the need to periodically review the governance of organizational frameworks and acknowledging recent important new developments with the two parent organizations (e.g. IOC-IHO new strategic frameworks, the Ocean Decade, the Nippon Foundation/GEBCO Seabed 2030 Project). The Terms of Reference of the Review were presented to the IOC Executive Council at its 55th session (document IOC/EC-55/3.1.Doc(4)). The core elements of the review are stakeholder mapping and engagement, mapping of the existing organization and functional structure, a review of the legal structure and framework, a gap analysis of existing governance instruments, a review of the financial status and the identification associated of findings and recommendations. Due to the complexity of activity, and despite significant progress in completing core elements of the review, the GEBCO Guiding Committee still needs to discuss the final report and recommendations at its 40th Meeting in November 2023, prior to consideration by the parent organizations in 2024.

Dec. A-32/4.1

**Report of the GEBCO Guiding Committee and
Outcomes of the GEBCO Governance Review 2023**

The Assembly,

1. Having examined the Progress report on the GEBCO Governance Review (2023) in document IOC/A-32/4.1.Doc,
2. Takes note of the Report of the GEBCO Guiding Committee to the IOC on its activities (2022–2023) (IOC/INF-1423);
3. Requests the Executive Secretary to present the outcomes of the GEBCO governance review to the Executive Council at its 57th session; and
4. 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 on User Requirements and Contributions to GEBCO Products in 2024.

119. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.2 PRESENTATION OF THE REVISED PILOT IOC STATE OF THE OCEAN REPORT
[Dec. EC-53/3.1 & EC-55/3.3]

<u>Working document:</u>	IOC/A-32/4.2.Doc(1)	Revised Concept Note on the IOC State of the Ocean Report (StOR)
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<u>Reference:</u>	IOC Circular Letter 2899	Second Consultation on the pilot edition of the 'IOC State of the Ocean Report' (StOR)
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120. The a.i. Head of the IOC Ocean Science Section introduced the revised concept note for the IOC State of the Ocean Report (StOR) — detailed in document IOC/A-32/4.2.Doc(1) — following comments of the IOC Executive Council in 2022 as expressed in Decision IOC/EC-55/3.3 and the subsequent consultation of IOC Member States through IOC Circular Letter [2899](#) of 20 July 2022. A group of seven experts from seven IOC Member States and the IOC Secretariat provided inputs to the review process and constituted the basis of the StOR Advisory Board that will guide the preparation of the next edition.

121. Mr Henrik Enevoldsen emphasised that structuring the StOR around the Decade Outcomes rather than the Challenges is expected to increase the uptake of the presented findings. It will strongly complement the other elements of the monitoring and evaluation framework of the Ocean Decade that focus on to meet the action-oriented Ocean Decade Challenges and on the key elements of the Ocean Decade enabling environment.

122. He then invited the IOC Assembly to endorse the updated StOR concept note, which takes into account the review by IOC Member States and advice from the StOR Advisory Board, includes the themes and timetable for StOR, and outlines the production of the next edition, leading up to its planned launch at the Second Ocean Decade Conference in Barcelona in April 2024.

Dec. A-32/4.2

Second edition of the *IOC State of the Ocean Report*

The Assembly,

1. Recalling the needs and views of IOC Member States with regard to the value-added, contribution, contents and structure of an IOC State of the Ocean Report as compiled by the IOC Secretariat in response to the dedicated IOC Circular Letter issued on 28 May 2021 (IOC/INF-1393 Rev.);
2. Having considered the contents and format of the Pilot edition of the *IOC State of the Ocean Report* as expressed by the Executive Council in its Decision IOC/EC-55/3.3, which lays out the consecutive process for the preparation of the StOR;
3. Taking note of the outcomes of the Pilot StOR further review consultation with IOC Member States through IOC Circular Letter 2899 and the incorporation of the outcome in the revised StOR Concept Note as detailed in document IOC/A-32/4.2.Doc(1),
4. Welcomes the establishment of the StOR Advisory Board;
5. Endorses the revised StOR Concept Note, based on the review provided by Member States and the advice by the StOR Advisory board, including the themes and storylines outlined;
6. Invites IOC Member States to provide extrabudgetary financial resources to the realization of the *IOC State of the Ocean Report*.

123. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.3 REVISION OF THE IOC CAPACITY DEVELOPMENT STRATEGY
[Dec. A-31/3.5.3; Dec. IOC-XXIX/10.1]

<u>Working documents:</u>	IOC/A-32/4.3.Doc(1)	IOC Capacity Development Strategy for 2023–2030
	IOC/A-32/4.3.Doc(2)	Outreach and Communications Plan to Promote the Visibility and Reach of the IOC Capacity Development Strategy 2023–2030
<u>Information:</u>	IOC/A-32/4.3.Doc(1) Addendum	IOC Capacity Development Strategy for 2023–2030 – Background information
<u>Reference:</u>	IOC/INF-1332	IOC Capacity Development Strategy, 2015–2021

124. Mr Alan Evans, Chair of the IOC Group of Experts on Capacity Development (GE-CD) introduced this item. He recalled that the Assembly, at its 31st session, through Decision A-31/3.5.3, had instructed the Group to submit the final draft of the IOC Capacity Development Strategy for 2023-2030, together with a proposed outreach and communication plan to this session of the Assembly.

125. He reported that based on the recommendations of the GE-CD Task Team relating to the revision of the Capacity Development Strategy (IOC/INF-1396), the GE-CD established a Working Group on IOC CD Strategy revision which met three times in early 2022 to work on the draft IOC Capacity Development Strategy for 2023–2030.

126. He referred to Document IOC/A-32/4.3.Doc(1) 'IOC Capacity Development Strategy for 2023–2030' for the main body of the Strategy and its Addendum for extensive background information related to the process of reviewing and revising the strategy towards the IOC Capacity Development Strategy 2023–2030. The key updates made in the strategy resulted in a slightly shortened version, removed references relating to selected projects, and were instead captured by the Ocean CD-Hub, an online compendium of CD opportunities worldwide. The Executive Summary incorporated an increased recognition that the ocean plays in political, commercial, science circles and society and the importance of capacity development in the delivery of the Decade of Ocean Science. It also highlighted IOC's critical role in fostering international cooperation while using the strategy as the motivation to develop an implementation plan, such that IOC CD activities are clearly articulated and that the benefits are more readily identified.

127. The resulting IOC Capacity Development Strategy for 2023–2030 framework maintained the original six outputs, with 16 activities detailed in 31 actions. Mr Evans noted that while this framework provides general guidance on elements of an implementation plan yet to be developed, it explores venues for elevating IOC's impact to the required scale.

128. Mr Evans referred to Document IOC/A-32/4.3.Doc(2) 'Outreach and Communications Plan to Promote the Visibility and Reach of the IOC Capacity Development Strategy'. The document lays out the recommendations from the Outreach Working Group on concrete plans to highlight the core messages of the IOC Capacity Development Strategy for 2023–2030, and proposed ways for the strategy to reach its target audience. Other than promotional materials and activities, the plan contains strategies for communications in two stages following the launch of the IOC Capacity Development Strategy for 2023-2030, utilizing existing platforms and resources of the IOC.

129. The GE-CD subsequently considered the results of the work of the Working Groups and their recommendations which resulted in the draft decision for consideration by the Assembly.

Dec. A-32/4.3

**IOC Capacity Development Strategy (2023–2030)
and related Outreach and Communications Plan**

The Assembly,

1. Recognizing the importance of Capacity Development as one of the six functions of the IOC Medium-Term Strategy (2022–2029), 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,
2. Recalling the adoption, at its 28th session, of the IOC Capacity Development Strategy

(2015–2021,

3. Noting that the current Strategy will expire in July 2023,
4. Noting also that through IOC Decision A-31/3.5.3, the Assembly revised the Terms of Reference of the Group of Experts on Capacity Development (GE-CD), instructing the Group to submit an updated IOC Capacity Development Strategy and a proposed outreach and communications plan to the Assembly,
5. Having examined documents IOC/A-32/4.3.Doc(1) and IOC/A-32/4.3.Doc(2),
6. Adopts the IOC Capacity Development Strategy, 2023–2030 as contained in document IOC/A-32/4.3.Doc(1);
7. Adopts also the Outreach and Communications plan for the IOC Capacity Development Strategy, 2023–2030 as contained in document IOC/A-32/4.3.Doc(2);
8. Agrees that, by the 33rd Session of the IOC Assembly, IOC Primary Subsidiary Bodies (global programmes and Regional Subsidiary Bodies) should take the following actions:
 - (i) develop programmatic and regionally relevant capacity development work plans based on this strategy and related needs assessments conducted in a consistent manner, building on on-going activities and making use of existing training and education facilities;
 - (ii) mobilize resources in order to reinforce the Secretariat staffing of the regional Sub-Commissions, other subsidiary bodies and global programmes;
 - (iii) promote the visibility and reach of the IOC Capacity Development Strategy 2023–2030 in accordance to the outreach and communications plan to reach its target audience and appreciate the document as a guide in implementing capacity development activities;
 - (iv) catalyze capacity development through global, regional, and national programme development; and
 - (v) enhance collaboration and communication between its global programmes and Regional Subsidiary Bodies, to contribute to (i) and (ii) above;
9. Urges IOC Member States to:
 - (i) identify new opportunities to participate in, and benefit from, reinforced partnerships through the IOC to achieve their capacity development goals in marine science and ocean governance;
 - (ii) mobilize the knowledge, personnel, infrastructural and financial resources to support IOC's catalytic role in helping Member States achieve these goals; and
 - (iii) raise the visibility of IOC's unique niche in capacity development.

130. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.4 REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY
(2003, 2019)
[A-31/3.4.2(III)]

Working document: IOC/A-32/4.4.Doc(1)

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

Reference:

https://www.iode.org/index.php?option=com_content&view=article&id=51&Itemid=95

IOC Oceanographic Data Exchange Policy (2019, 2003)

131. Ms Lotta Fyrberg, Co-Chair of the International Oceanographic Data and Information Exchange (IODE) introduced this item. She recalled that the IOC Assembly at its 31st session (June 2021) recognized that a revision of the 20-year-old “IOC Oceanographic Data Exchange Policy (2003)” (with minor revision in 2019) was timely and adopted by Decision A-31/3.4.2 which established the IOC Intersessional Working Group on the Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019) (IWG-DATAPOLICY) with the following mandate:

- (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 32nd Session of the IOC Assembly (2023).

132. The working group had invited membership as instructed by IODE-XXVI and included representatives from IOC global and regional programmes (GOOS, IODE, HAB, Ocean Acidification, GOSR, Tsunami, IOCAFRICA, and WESTPAC). [IOC Circular Letter 2864](#) of 9 November 2021 outlined the process to facilitate the work of the IWG-DATAPOLICY and timeline. Meetings of the working group were held in April and May 2022. An information session for IOC Member States was held on 21 October 2022, with 60 participants from 18 Member States. The final draft was prepared by the working group in December 2022 after which it was submitted to IODE at its 27th session in March 2023.

Dec. A-32/4.4

IOC Data Policy and Terms of Use (2023)

The Assembly,

1. Recalling that the IOC Oceanographic Data Exchange Policy was published in 2003 (IOC Resolution XXII-6, 2003) and since then has only had one minor change: Clause

5 revised in 2019 by Decision IOC-XXX/7.2.1(II) of the Assembly at its 30th session, Paris, 26 June–4 July 2019,

2. Recognizing that:

- (i) the timely and unrestricted international exchange of oceanographic data is essential for the efficient acquisition, integration and use of ocean observations gathered by the countries of the world for a wide variety of purposes including the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible,
 - (ii) the global digital data, information, and knowledge ecosystem has radically changed since 2003,
 - (iii) rapidly advancing technologies have altered the Data Stewardship paradigm,
 - (iv) that there is a need to improve interoperability and align the IOC data policy with those at national, regional, and international levels,
 - (v) more and more Public-Private Partnerships are being established. To allow the best use of the data in this context as well as in the context of using data in journals from private publishers, the IOC data policy should provide clear guidance for commercial use of data,
3. Noting that partner and sister organizations are changing their data policies, which can serve as a model for updating the IOC data policy,
4. Noting also that principles of data sharing and licensing are becoming globally recognized and adopted, e.g., FAIR Principles and Creative Commons licences,
5. Decides to close the IOC Intersessional Working Group on the Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019) (IWG-DATAPOLICY);
6. Adopts the IOC Data Policy and Terms of Use (2023) as detailed in Annex to this decision;
7. Decides to develop guidelines for the development of detailed data and metadata sharing guidelines by all IOC programmes and projects.

Annex to Dec. A-32/4.4

IOC Data Policy and Terms of Use (2023)

Section 1. Preamble

The timely, open and unrestricted international sharing, in both real-time and delayed mode of ocean metadata, data and products is essential for a wide variety of purposes and benefits including scientific research, innovation and decision making, the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, economic welfare, safety and security of society, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible. Metadata, data and products should be accessible, interoperable and openly shared with minimum delay and minimum restrictions.

Section 2. Purpose

The purpose of this data policy is to outline the requirements with respect to sharing, access, preservation, and attribution to facilitate the broad use and reuse of metadata, data and products.

Section 3. FAIR & CARE principles

To support knowledge discovery and innovation both by humans and machines and to acknowledge indigenous data governance, data should meet the FAIR Guiding Principles (Findable, Accessible, Interoperable and Reusable)[1] and In the case of indigenous data and information, data should meet the CARE principles (Collective Benefit, Authority to Control, Responsibility, Ethics)[2] to the greatest extent practicable.

Section 4. Conditions of use

Data should be licensed (respecting Section 8) under a minimally restrictive and voluntary common-use licence[3] that grants permission, ensures proper attribution (for example, citable using a persistent identifier) and allows others to copy, distribute and make use of the data.

Section 5. Data Repositories and the IOC ocean data and information system (ODIS)

Data should be quality controlled (using community adopted and documented best practices or standards), accompanied by complete metadata and stored in an openly discoverable and accessible long-term data repository and made available through standards-based data services. Member States shall encourage convergence and interoperability and, where possible, use IODE data centres (National Oceanographic Data Centres or Associate Data Units) or other IOC programme related data centres that share metadata and data using the IOC Ocean Data and Information System (ODIS). ODIS is an interoperability layer and supporting technology, to allow existing and emerging ocean data and information systems to interoperate with one another.

Section 6: Secure long-term data archives

To support long-term and secure archival, data and associated metadata should be submitted, to the best practicable degree, to IODE's World Ocean Database (WOD), the Ocean Biodiversity Information System (OBIS), Global Sea Level Observing System (GLOSS), other IOC related global data archives, and data centres linked to the World Data System (WDS), their successors or other global data archives.

Section 7. Access restrictions

Data and associated metadata should be made available with minimal restrictions on use unless there are valid reasons to restrict access. Legitimate reasons to restrict access to, and reuse of, data include, *inter alia*, privacy and confidentiality, protection of species, populations or habitats of concern, and national security.

Section 8. Data sharing policies of Member States

This Policy acknowledges the right of Member States and data owners to determine the terms of metadata, data and products sharing in a manner consistent with national jurisdictions, international conventions, and treaties, where applicable.

Section 9. Data and metadata sharing guidelines

IOC programmes, projects as well as other communities of practice should develop and/or apply, where applicable, detailed metadata, data and products sharing guidelines that are consistent with this IOC Data Policy and Terms of Use.

Section 10. Definitions

'Data' is a set of values, symbols or signs (recorded on any type of medium) that represent one or more properties of an entity[4].

'Metadata' is 'data about data' describing the content, quality, condition, and other characteristics of data that allows their inventory, discovery, evaluation or use.

'Timely' in this context means the distribution of data and/or products, sufficiently rapidly to be of value for a given application.

'Openly' means data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and share alike.

'Product' means a value-added enhancement of data applied to a particular use.

[1] Wilkinson, M., Dumontier, M., Aalbersberg, I. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* **3**, 160018 (2016).

<https://doi.org/10.1038/sdata.2016.18>

[2] CARE Principles for Indigenous Data Governance. <https://www.gida-global.org/care>

[3] For example: the Creative Commons family of licences

<https://creativecommons.org/about/cclicenses/>

[4] [Ocean Decade Implementation Plan](#)

133. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.5 STATUS OF THE REGIONAL COMMITTEE OF THE CENTRAL INDIAN OCEAN (IOCINDIO) [Dec. EC-55/3.5.2; A31/3.5.6]

<u>Working document:</u>	IOC/A-32/4.5.Doc(1)	Final Report of the Open-ended intersessional Working Group on the Status of the Regional Committee for the Central Indian Ocean (IOCINDIO), 2022-2023: Proposal for the establishment of an IOC Sub-Commission for the central Indian Ocean (IOCINDIO)
<u>Report:</u>	IOCINDIO-IX/3s	Executive Summary Report of the 9 th Session of the IOC Regional Committee for the Central Indian Ocean, Dhaka, Bangladesh, 28–30 March 2023
<u>Reference:</u>	IOC Circular Letter, 2872	Invitation to Member States to nominate members of the open-ended intersessional Working Group on the Status of the IOC Regional Committee for the Central Indian Ocean (IOCINDIO)
	IOC/EC-55/3.5.2.Doc(1)	Progress Report of the Open-ended intersessional Working Group on the Status of the Regional Committee for the Central Indian Ocean (IOCINDIO)

134. The Chairperson of the IOC, Mr Ariel Troisi, as the Co-Chair of the Open-ended intersessional Working Group (OEIWG) on the Status of the Regional Committee for the Central Indian Ocean (IOCINDIO) introduced this item. After his presentation, he gave the floor to the Co-Chair of the OEIWG, the Chairperson of IOCINDIO, Rear Admiral (Retd) Khurshed Alam who presented the draft Resolution submitted by interested IOC Member States for the establishment of the IOC Sub-Commission for the central Indian Ocean (IOCINDIO).

135. The Chairperson of the IOC, as the Co-Chair of the OEIWG, recalled that at its 31st Session (UNESCO, Paris, 14–25 June 2021), the IOC Assembly considered the proposal of IOCINDIO for changing its status into an IOC Sub-Commission and, in its Decision A-31/3.5.6, decided to pursue further towards the establishment of the IOC Sub-Commission for the central Indian Ocean with the view to presenting a corresponding draft resolution to the IOC Assembly at its 32nd Session in 2023. The IOC Assembly at its 31st Session further decided to undertake the remaining steps towards establishing IOCINDIO as a Sub-Commission through an open-

ended intersessional working group to work on: terms of reference; determination of the geographic scope; programme of work; the proposed projects and funding support; mechanisms for coordination with adjacent Sub-Commissions. The IOC Assembly, at its 31st Session subsequently requested the IOC Executive Secretary to: (i) establish an open-ended intersessional Working Group and invite Member States to participate in its work; (ii) work closely with the Government of India to explore appropriate arrangements for the establishment of the Regional Secretariat of the future IOCINDIO Sub-Commission; and (iii) report to the Executive Council, at its 55th session in 2022, on the status of implementation of the above decision.

136. Subsequently, the OEIWG was established following the IOC Circular Letter No 2872 of 4th January 2022 and comprised the following Member States and observers including Australia, Bangladesh, Benin, Côte d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, France, India, Indonesia, Islamic Republic of Iran, Kenya, Kuwait, Madagascar, Maldives, Mauritius, Morocco, Oman, Pakistan, Philippines, Russian Federation, Saudi Arabia, Seychelles, Tanzania, Thailand, Togo, United Arab Emirates, United Kingdom and United States of America as well as the Vice-Chair of electoral Group IV of IOC, the Chairpersons of IOCAFRICA and WESTPAC, the former Officers of IOCINDIO, the Regional Coordination Operations Centre (RCOC) based in Seychelles and some individual scientists. The working group was co-chaired by both the Chairpersons of IOC and IOCINDIO. The Acting IOCINDIO Technical Secretary served as the Technical Secretary. The Executive Secretary also participated in and contributed to the OEIWG as well as a number of IOC staff occasionally.

137. The IOC Chair informed the Assembly that in his capacity as the Co-Chair of the OEIWG, he presented the Progress Report on the status of implementation of Decision A-31/3.5.6 to the IOC Executive Council, at its 55th session (UNESCO, Paris, 14–17 June 2022). He recalled that the Ambassador of Bangladesh to France and Permanent Delegate to UNESCO, H.E. Mr Khondker M. Talha, provided a complementary presentation on behalf of IOCINDIO Chair, the Co-Chair of the OEIWG, Rear Admiral (Retd), Khurshed Alam who was unable to attend the 55th Session of the Executive Council.

138. The IOC Executive Council at its 55th Session, welcomed the Progress Report of the OEIWG (IOC/EC-55/3.5.2.Doc(1)), took into consideration the interventions of Member States, Chairpersons of IOCAFRICA, WESTPAC and Observers. There was a general support for the establishment of the IOCINDIO Sub-Commission, however, concerns were also expressed related to the areas of geographic scope and the potential undermining of the responsibilities of existing Sub-Commissions, notably IOCAFRICA and WESTPAC. The Executive Council subsequently, adopted Decision IOC/EC-55/3.5.2, which invited the intersessional working group to continue its consultations, including with the IOC Sub-Commissions, and to submit its final report and recommendation, for consideration by the IOC Assembly at its 32nd Session. Recommendations were to respect geographic coverage of other IOC Sub-Commissions and to define such necessary specifications of the potential future IOC Sub-Commission for the central Indian Ocean (IOCINDIO) as its title, terms of reference, programme of work with proposed projects and funding support and coordination mechanisms with adjacent Sub-Commissions on geographical areas of common interest while avoiding duplications and overlaps.

139. Finally, the Chairperson of IOC informed the Assembly that the OEIWG held seven (7) online consultation meetings from 28 February 2022 to 13 April 2023 and concluded its work with the unanimous adoption of the draft Terms of Reference of the IOC Sub-Commission for the central Indian Ocean on the understanding, with a consensual agreement that it should not interfere with, undermine, diminish, or weaken the work and/or responsibilities of existing neighbouring IOC Sub-Commissions. The OEIWG further agreed that the IOCINDIO Sub-Commission should maintain the current geographic coverage of the Regional Committee limited to the central Indian Ocean. For the purposes of this document, "central Indian Ocean" refers to the area of the Indian Ocean adjacent, to the West, with that of IOCAFRICA, and to the East, with that of WESTPAC. Adequate coordination with adjacent Sub-Commissions is

proposed to avoid overlaps, focusing on cooperation, collaboration, and integration of IOC activities for the benefit of all regions.

140. The IOCINDIO Chairperson, as the Co-Chair of the OEIWG presented the detailed elements of a draft Resolution along these lines.

Draft Resolution A-32/[4.5]

Submitted by Bangladesh, Islamic Republic of Iran, Kenya, Kuwait, Pakistan, United Arab Emirates

Establishment of an IOC Sub-Commission for the central Indian Ocean (IOCINDIO)

The Intergovernmental Oceanographic Commission,

1. **Recalling** IOC Resolution XX-14 'IOC Programme Group for the central Indian Ocean' and Decisions A-31/3.5.6 and IOC/EC-55/3.5.2 on the Status of the Regional Committee for the Central Indian Ocean,
2. **Taking into consideration** that the central Indian Ocean plays an important role in, *inter alia*, regional, and global climate, including the monsoons, El Niño-Southern Oscillation, precipitation and snow in Eurasia, weather, and extreme events,
3. **Also taking into consideration** that after more than three decades of activities, IOCINDIO has gathered invaluable experiences, learned lessons, and developed best practices, which contributed to the deliberations of the Open-ended intersessional working Group (OEIWG) on the transformation of IOCINDIO into an IOC Sub-Commission,
4. **Noting with appreciation** that there is a strong interest in many IOCINDIO Member States to work together towards the establishment of the Sub-Commission, strengthen implementation of the IOC programmes in the region, achieve the objectives of the UN Decade of Ocean Science for Sustainable Development, 2021–2030, and develop the capacity of IOCINDIO Member States in ocean sciences and sustainable ocean management,
5. **Noting further** that it is practice of the IOC to invite every Member State to participate in the work of the Commission and its regional subsidiary bodies,
6. **Expresses its gratitude and appreciation** to the Member States which participated in and contributed to the deliberations of OEIWG;
7. **Acknowledges** the leadership and **appreciates** the commitment of both the IOC Chairperson and IOCINDIO Chairperson, who acted as Co-Chairs of OEIWG;
8. **Expresses its appreciation** to the IOC Vice-Chairperson for Electoral Group 4 and Chairpersons of the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA) and the IOC Sub-Commission for the Western Pacific (WESTPAC) for their contribution to the work of the OEIWG, as well as to Executive Secretary of IOC and the Technical Secretary of IOCINDIO for the support provided;
9. **Decides:**
 - (i) to establish the IOC Sub-Commission for the central Indian Ocean (IOCINDIO) with the Terms of Reference laid out in the Annex to this resolution;

- (ii) that the decision to establish IOCINDIO as IOC Sub-Commission will enter into force after nine (9) formal Letters of Adhesion have been received by the IOC Executive Secretary from competent national focal points of IOC Member States;
- (iii) that the IOCINDIO as IOC Regional Committee will be dissolved at the beginning of the first meeting of IOCINDIO as IOC Sub-Commission;

10. **Requests** the Executive Secretary to:

- (i) issue, within four (4) months following the adoption of the present Resolution, a Circular Letter inviting Member States to submit a Letter of Adhesion to the IOCINDIO Sub-Commission;
- (ii) upon entry into force of the present resolution on establishment of IOCINDIO as IOC Sub-Commission, call the first Session of the Sub-Commission at which its Officers will be elected.

Annex to Draft Resolution A-32/[4.5]

**Terms of Reference
for the IOC Sub-Commission for the central Indian Ocean (IOCINDIO)**

1. Title

IOC Sub-Commission for the central Indian Ocean (IOCINDIO)

2. Mission

The IOC Sub-Commission for the central Indian Ocean (IOCINDIO) is a primary regional intergovernmental subsidiary body of the Intergovernmental Oceanographic Commission of UNESCO, with its area of interest within central Indian Ocean¹, and its purpose is to promote international cooperation and to coordinate programmes in research, services, and capacity development, in order to learn more about the nature and resources of the ocean 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.

3. Objectives

The Sub-Commission shall:

- (i) Promote international cooperation and coordinate activities agreed by the governing bodies of the Intergovernmental Oceanographic Commission of UNESCO;
- (ii) Make recommendations to the Intergovernmental Oceanographic Commission of UNESCO on issues and areas of its competency;
- (iii) Prepare a plan for implementation of the agreed activities;
- (iv) Offer a platform for identifying regional issues and solutions based on international cooperation;

¹ The "central Indian Ocean", as IOCINDIO area of interest, is adjacent, to the West, to that of IOCAFRICA, and to the East, to that of WESTPAC.

- (v) Cooperate with relevant organizations, agencies, and institutions;
- (vi) Cooperate with other subsidiary bodies and programmes of the Intergovernmental Oceanographic Commission of UNESCO on matters of common interest, in particular with adjacent Sub-Commissions, IOCAFRICA and WESTPAC.

4. Structure

The Sub-Commission will include:

- Member States
- Officers
- Thematic or subregional Working Groups or Task Teams, as required; and
- Secretariat.

5. Member States

The Sub-Commission will include the IOC Member States that have appropriately informed the IOC Executive Secretary about their adhesion. IOCINDIO membership will not be limited to Member States geographically attached to the Indian Ocean. IOC national focal points for IOCINDIO Member States will be the same as for IOC.

6. Officers

The Board of Officers of the Sub-Commission will comprise the Chair and two Vice-Chairs elected by its Member States. The Board shall serve in accordance with the Guidelines for Structure and Responsibilities of the Subsidiary Bodies of the IOC.

7. Working Groups and Task Teams

The Sub-Commission will establish its subsidiary working bodies as required and in accordance with the Guidelines for Structure and Responsibilities of the Subsidiary Bodies of the IOC. Joint subsidiary working bodies, especially with IOCAFRICA and WESTPAC, may be established.

8. Secretariat

The IOCINDIO Secretariat will operate as a part of the IOC Secretariat under the authority of the IOC Executive Secretary.

9. Meetings

IOCINDIO Member States will meet for the intergovernmental session of the Sub-Commission regularly, at least once in two years, preferably in the first part of the year of an IOC Assembly and well in advance of that Assembly to ensure quality statutory reporting.

10. Budget

The IOC Sub-Commission for the central Indian Ocean shall be funded from the IOC Regular Budget and extrabudgetary contributions. IOCINDIO should actively explore opportunities for raising additional resources for implementation of its programmes.

11. Mechanisms for coordination with adjacent Sub-Commissions

The principle will be to maximise the value of joint work of adjacent IOC Sub-Commissions on issues of common interest, exclude duplication, and ensure no interference in governance of IOC subsidiary bodies, including adjacent bodies. Cooperation on issues of common interest and using capacity development opportunities of adjacent regional subsidiary bodies is encouraged. Coordinated contribution of regional subsidiary bodies to IOC global programmatic activities is strongly encouraged. Regular consultations between Sub-Commissions' Chairs, Boards of Officers, and Secretariats will be established to achieve co-design, co-development, and co-delivery. Normative and standard setting functions will be uniform and global, at the IOC level. Regional implementation shall follow global standards and contribute to the development of common best practices, taking into account, where required, regional differences and circumstances.

141. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.6 IOC CONTRIBUTIONS TO UN GOVERNANCE PROCESSES [Rule of Procedure 8.1(g)]

<i>Working document:</i>	IOC/A-32/4.6.Doc(1)	IOC Contributions to UN Governance Processes
<i>Information:</i>	UNGA document of 4 March 2023	Draft agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (advanced, unedited)
	CBD/COP/DEC/15/4	Kunming-Montreal Global Biodiversity Framework
	A/CONF.230/2022/12	Political Declaration – UN Ocean Conference, Lisbon, Portugal, 2022

142. Mr Barbière, Head of the Marine Policy and Regional Coordination Section, introduced this agenda item. Recognising its role in the UN system, in accordance with its Statutes, as a competent international organization in the fields of Marine Scientific Research and Transfer of marine technology, IOC contributes to various United Nations processes related to the ocean. Mr Barbière recalled that one of most prominent ocean development in recent decades, was the agreement reached amongst UN Member States in March 2023 for an international legally-binding instrument under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. This “High Seas” agreement covers a range of issues, including marine genetic resources, environmental impact assessments, area-based management tools, and capacity building and technology transfer. Importantly for the Commission, the final agreed text of the Agreement makes reference to the possible cooperation with IOC/UNESCO in the implementation of the clearing-house mechanism to be created under the auspices of the new treaty potentially opening a pathway for deploying IOC’s tested, and fully operational platforms and programmes in capacity development and transfer of marine technology for the benefit of all countries. Given that IOC possesses recognized technical expertise in several areas of relevance to the BBNJ agreement, further discussion will be required with Member States and the future Secretariat of the Treaty (undefined at this stage) to identify and develop further collaborative approach so that the IOC can contribute scientific and technical inputs in the operationalization and implementation of the Agreement, in accordance with its mandate.

143. Mr Barbière also referred to development in the area of marine biodiversity with the adoption in December 2022 of the new Kunming-Montreal Global Biodiversity Framework at the 15th Conference of the Parties (COP15) of the Convention on Biological Diversity. The Framework is divided into four overall goals and 23 targets for the protection of the world's biodiversity. The most emblematic of these is “at least 30 percent of terrestrial, inland water, and of coastal and marine areas” by 2030 (Target 3) – when the current areas under protection respectively account for 17 and 8%. Several other targets are also relevant to the work of IOC and the Ocean Decade, in areas of ocean science, biodiversity assessment, ocean observation and data management, marine spatial planning and capacity development to name a few.

144. Mr Barbière also reported on the follow-up of the UN Ocean Conference 2022, Lisbon, with planning for the UN Ocean Conference in 2025 to be hosted by France and Costa Rica well under-way, the IOC contributions to the Ocean-Climate Dialogue (June 2023) and Conference of Parties meeting (COP-28) under the UN Framework Convention for Climate Change, and planned support to the Third Cycle of the Regular Process for Global Reporting and Assessment of the State of Marine Environment, including plans for organising a joint Symposium on science/policy aspects with the UN Division of Ocean Affairs and the Law of the Sea (DOALOS) at UNESCO in December 2023.

Dec. A-32/4.6

IOC Contributions to UN Governance Processes

The Assembly,

1. Having examined document IOC/A-32/4.6.Doc,
2. Welcomes the adoptions of the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, of the Kunming-Montreal Global Biodiversity Framework by Convention on Biological Diversity, as well as recent developments under UNFCCC and the implementation of 2030 Agenda and its SDG 14;
3. Requests the Executive Secretary to continue engaging the Commission in these UN processes by providing scientific and technical support as well as supporting the development of IOC Member States capacity to contribute to achievement the goals of these ocean governance frameworks.

145. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.7 DEVELOPMENT OF A NEW IOC-WIDE STRATEGY ON SUSTAINABLE OCEAN PLANNING AND MANAGEMENT [Dec. IOC-XXVI/8.2]

<u>Working document:</u>	IOC/A-32/4.7.Doc(1)	Development of a new IOC-wide Strategy on Sustainable Ocean Planning and Management
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<u>Information:</u>	IOC Technical Series, 182	Updated Joint Roadmap to accelerate Marine/Maritime Spatial Planning processes worldwide – MSProadmap (2022–2027)
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[IOC-XXIX/2 Annex
16](#)

Progress in the Implementation of the Integrated Coastal Area Management (ICAM) Strategy including Marine Spatial Planning, Sustainable Blue Growth and Large Marine Ecosystems

146. Mr Barbière, Head of the Marine Policy and Regional Coordination Section, introduced this agenda item, recalling that over the last three decades, the IOC has embarked on the development of science-based approaches to support integrated ocean management efforts at local, national, and transboundary levels. These include: (i) the Large Marine Ecosystem approach focusing on transboundary management of marine resources with partners such as NOAA, GEF, and UNDP; (ii) the establishment of Integrated Coastal Area Management programme focusing on technical tools and related capacity development for coastal management, adaptation and hazard mitigation (ref. *ICAM Strategy* endorsed by the IOC Assembly in 2015 through document [IOC-XXIX/2 Annex 16](#)); and (iii) since 2006, IOC has been leading international efforts in Marine Spatial Planning, developing technical guidance supported by related capacity development actions in all ocean basins. This was reinforced in 2017 with the development of a joint roadmap between IOC and the European Commission to advance MSP implementation globally and the establishment of the MSPGlobal initiative. The Joint Roadmap was renewed in 2022 for a further five years.

147. Building on the political commitments of the High-Level Panel to sustainably manage 100% of the ocean area under national jurisdiction by 2030, the provisions of the UN Ocean Conference Lisbon Declaration highlighting the role of science-based actions and innovation to “informing integrated ocean management, planning and decision-making”; various initiatives of international, regional and national institutions to support the implementation of ocean management, sustainable ocean planning, marine/maritime spatial planning, and other area-based/ecosystem management approaches, there is now an opportunity to accelerate these efforts in all ocean basins through the UN Decade of Ocean Science for Sustainable Development 2021–2030.

148. In light of these recent advancement in the area of ocean management and considering the objectives of the IOC Medium-term Strategy (2022–2029), it is timely for IOC and its Member States to consider adopting an IOC-wide Strategy on Sustainable Ocean Planning & Management which would guide the contribution of the Commission across its programmes on ocean sciences, observation and data, early warning services and assessments, through the development of new services, ecosystem-based management tools, assessment and related information products, as well as capacity development in support to sustainable ocean management.

149. Mr Barbière finally outlined the suggested process for developing the IOC-wide Strategy on Sustainable Ocean Planning Management (2024–2030), as well as the consultation process foreseen to collect inputs from Member States, IOC programmes and technical bodies as well as relevant stakeholders engaged in ocean management, prior to its presentation to the IOC Council at its 57th session in 2024.

Dec. A-32/4.7

**Development of a new IOC-wide Strategy
on Sustainable Ocean Planning and Management**

The Assembly,

1. Having examined document IOC/A-32/4.7.Doc,

2. Takes note of the scope and process for developing the IOC-wide Strategy on Sustainable Ocean Planning Management Strategy for the period 2024–2030; and
3. Requests the Executive Secretary to present the Draft Strategy at the 57th session of the IOC Executive Council.

150. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.8 GLOBAL OCEAN OBSERVING SYSTEM [Rule of Procedure 8.1(j)]

4.8.1 GOOS Work Plan for 2024–2025

<u>Working documents:</u>	IOC/A-32/4.8.1.Doc(1)	Global Ocean Observing System (GOOS) Implementation plan (2024–2025) – Summary
	IOC/A-32/4.8.1.Doc(2)	Canadian Integrated Ocean Observing System (CIOOS) Proposal for a new GOOS Regional Alliance – Summary
<u>Reference:</u>	IOC Circular Letter, 2931	Updated Terms of Reference for Global Ocean Observing System (GOOS) National Focal Points (NFP)
	IOC/INF-1308	GOOS regional policy 2013

151. Dr Anya Waite, co-chair of the GOOS Steering Committee, introduced this item. She recalled that the Assembly at its 30th session adopted a Global Ocean Observing System 2030 Strategy in 2019 ([IOC/BRO/2019/5](#)), which now forms the basis of the work of the GOOS Office and Components. The GOOS vision is for a truly integrated ocean observing system that delivers the essential information needed for sustainable development, safety, wellbeing and prosperity. Key to this vision of an integrated system is connection across the value chain — from observations, through data management and forecast systems, assessments, policy and ocean management, through services to end users — ensuring that the ocean observations are fit for purpose and support the needs of society across climate, weather and hazard warnings, ocean health and the blue economy.

152. The ocean plays a key role in climate, the livelihoods of billions of people, global biodiversity, and national economies. Without ocean observations we will not be able to respond to climate change, tackle the decline in global biodiversity, create viable markets for carbon credits, and build stable economies based on sound ocean management. GOOS’s work in supporting nations in reaching global sustainability goals remains urgent and vital.

153. Dr Waite reviewed the status of the sustained ocean observing system, through the regular tracking of the GOOS global ocean observing networks by OceanOPS (IOC-WMO-GOOS operational centre), and the new [GOOS BioEco Portal](#) (hosted by IODE’s OBIS) which shows the sustained biological and ecological focused observing programmes around the 12 BioEco Essential Ocean Variables (EOVs). She also highlighted some key advances from the advances GOOS Implementation Plan Summary 2024-2025 (IOC/A-32/4.8.1.Doc(1)).

154. The GOOS Ocean Decade Programmes are all advancing. The Ocean Observing Co-Design Programme has recently published summary of a Co-Design Workshop and has identified pilot *Exemplar Projects* to co-design our capacity to deliver carbon data to inform

climate targets and carbon markets, to advance cyclone forecasting to save lives and property, to understand community needs to meet post 2020 biodiversity targets, to predict and track marine heatwaves for food security and climate and weather services, and to observe key current systems for coastal erosion, fisheries, shipping and tourism. CoastPredict has defined an implementation strategy with key partners that focuses on revolutionizing coastal ocean observing and prediction services in key regional Global Coast Experiments. Observing Together is working with 5 Ocean Decade Projects. The DCO Ocean Observing Decade Coordination Office for Ocean Observing has been established and a lead appointed with support from the IOC Decade Coordination Unit. This will support coordination and collaboration across the 10 Decade Programmes focused on ocean observing.

155. Dr Waite however also noted that despite these advances, investment in ocean observing is flatlined across the global networks at a time when the need for ocean information underpinned by sound science and observations is growing exponentially. The situation has recently worsened with budget pressure caused by inflation, and she urged Member States towards considering sustained funding for global ocean observing infrastructure.

156. The GOOS Steering Committee at its twelfth session (25–27 April 2023, Halifax, Canada) assessed GOOS progress towards the 11 Strategic Objectives (GOOS 2030 Strategy, GOOS Report 239; GOOS Implementation Plan Summary 2024–2025, IOC/A-32/4.8.1.Doc(1)), and identified key priorities for the next intersessional period. These include: process for evolving GOOS governance with stakeholders and its co-sponsors; advancing partnership for delivery with key global organizations and operational ocean forecasting systems; supporting the Ocean Decade through the GOOS Ocean Decade Programmes; strengthening regional and national coordination as an important part of evolving the GOOS structure; and continuing work to support the renewed activity for regional coordination in the Pacific Islands (PI-GOOS), Caribbean (IOCARIBE-GOOS), and Africa. The GOOS Steering Committee endorsed the proposal for a new GOOS Regional Alliance from the Canadian Integrated Ocean Observing System (CIOOS, IOC/A-32/4.8.1.Doc(2)) and agreed the updated Terms of Reference for the GOOS National Focal Points (cf. IOC Circular letter [2931](#)). The work to communicate and advocate for the ocean observing system remains a strong focus and underpins the work of the GOOS Core Team.

157. The plan is supported by a GOOS Office with distributed contributions from IOC, WMO, and a large number of Member States and organizations — and Dr Waite thanked them for their support. There has been a modest increase in support for the GOOS Core Team in 2022–2023, but not sufficient to fully support delivering the sustained, fit-for-purpose and expanded ocean observing system needed to adapt to climate, biodiversity, sustainable ocean management and a sustainable ocean economy. Funding will be another area of focus for GOOS, to be considered hand in hand with evolving GOOS governance.

158. Dr Waite concluded with an affirmation that GOOS had made good progress in the GOOS Implementation Plan and encouraged Member States to support the GOOS Ocean Decade Programmes as key cross-cutting drivers of transformational change and as well support GOOS Office in delivering for the United Nations and the challenges faced by Member States of building a fit-for-purpose ocean observing system to serve multiple societal challenges.

Dec. A-32/4.8.1

I. GOOS Work Plan for 2024–2025

The Assembly,

1. Having examined IOC/A-32/4.8.1.Doc(1) 'the GOOS Implementation Plan Summary for 2024–2025',
2. Takes note of the implementation steps 2021–2022, including work to rejuvenate the GOOS Regional Alliances PI-GOOS, GOOS-AFRICA and IOCARIBE-GOOS;
3. Thanks the GOOS Steering Committee for the identification of priorities and work in guiding implementation actions;
4. Expresses its appreciation for the work to advance GOOS Ocean Decade Programmes, Ocean Observing Co-Design, CoastPredict, and Observing Together;
5. Requests IOCAFRICA to work closely with the GOOS-AFRICA office in developing and implementing joint activities;
6. Notes the updated GOOS National Focal Point Terms of Reference (IOC Circular Letter, 2931);
7. Urges Member States to nominate a GOOS National Focal Point, where one does not already exist, and to consider developing a GOOS National Committee, where one does not already exist, to support the work of GOOS at national level and ensure that national priorities are brought to the attention of GOOS;
8. Invites GOOS Sponsors to support 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;
9. Notes also that the regular budget for these activities will be identified as part of the overall Resolution on Governance, Programming and Budgeting matters of the Commission;
10. Adopts the GOOS Implementation Plan Summary for 2024–2025 as the GOOS work plan for 2024–2025 as presented in IOC/A-32/4.8.1.Doc(1);
11. Noting the GOOS Regional Policy 2013 (IOC/INF-1308), which indicates the role and requirements for a regional body to be accepted by as a GOOS Regional Alliance,
12. Also noting the Twelfth GOOS Steering Committee Meeting (GOOS SC-12), held in April 2023, endorsed the Canadian Integrated Ocean Observing System (CIOOS) Proposal to become a GOOS Regional Alliance;
13. Accepts the proposal from the Canadian Integrated Ocean Observing System (CIOOS) to become a GOOS Regional Alliance (GRA), see IOC/A-32/4.8.1.Doc(2);
14. Expresses its appreciation for Member States and organizations that have provided direct and in-kind contributions for the distributed GOOS Office;
15. Urges Member States work with the GOOS Office to identify how they can help with implementation, including support for the three transformational GOOS Ocean Decade Programmes, and the distributed GOOS Office and Components, what their contributions will enable us to achieve together;
16. Invites co-sponsoring organizations of GOOS to consider how they will support implementation;

- II. GOOS Steering Committee Regional Membership**
17. Recalling the GOOS SC regional membership appointment defined in IOC Resolution XXVI-8, and further recalling the IOC Circular Letter 2940 inviting Member States to the 32nd Assembly and requesting nominations of experts for appointment by Member State Electoral Groups,
 18. Notes the appointment by the Member State Electoral Groups of a regional expert member of the GOOS SC for 2024–2025:
 - (Group I)
 - (Group II)
 - (Group III)
 - (Group IV)
 - (Group V)

159. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.8.2 Ocean Observation in Areas under National Jurisdiction
 [Dec. IOC/EC-55/3.4]

<u>Working document:</u>	IOC/A-32/4.8.2.Doc(1)	Summary Report on the Consultation on Ocean Observations in Areas under National Jurisdiction
<u>Information:</u>	IOC/INF-1431	Details on the results from the 2023 survey to global ocean observing networks on ocean observations in areas under national jurisdiction
<u>Reference:</u>	IOC Circular Letter, 2938	Member State feedback regarding sustained ocean observations in Areas under their National Jurisdiction

160. The acting Head of the IOC Ocean Observations Section, Dr Emma Heslop, introduced this item. She recalled that ocean observing networks reported to GOOS Steering Committee and the GOOS Observations Coordination Group that there are “issues” in undertaking sustained ocean observations in areas under national jurisdiction. An expert workshop on “Ocean Observations in Areas under National Jurisdiction” (OONJ, GOOS Report, 246) was held in 2020, and the results and recommendations were presented to the IOC Executive Council at its Fifty-fifth session. After considering the summary report the Executive Council requested the Executive Secretary to invite Member States and GOOS Networks to provide information on their experiences regarding sustained ocean observations in areas under their national jurisdiction including on the issues identified by GOOS through the Expert Workshop on “Ocean Observations in Areas under National Jurisdiction” (Decision IOC/EC-55/3.4).

161. The global ocean observing networks were requested to provide more details via a survey in November 2022 and 66 responses were received. The IOC Member States were asked to provide feedback via IOC Circular Letter 2938 in February 2023, and 10 Member States provided feedback. A summary of the results is provided in IOC/A-32/4.8.2.Doc(1).

162. Dr Heslop reviewed results from the networks survey, which indicated that the global networks face issues, as previously identified in the OONJ workshop and that for some networks these were reasonably significant issues, impacting coverage, cost and efficiency.

163. The results of the Member States feedback were both interesting and varied. Some Member States reported no issues with the taking of sustained observations in areas under national jurisdiction, others reported several, including instances where Marine Scientific Research clearance was refused or provided just before the mission commenced, and some Member States do not undertake sustained ocean observing in other States waters. Interestingly, most Member States reported granting permission for other/foreign States to conduct sustained ocean observing in their waters, often processing MSR clearance in 2–4 months. Several Member States reported on differences between applications for marine scientific *versus* fisheries research. Most Member States noted that one or more of the solution spaces suggested in the OONJ Report would be helpful in reducing issues encountered. Of the seven solution spaces, considering ‘an Argo-like process’ was referenced several times, and interesting details were provided on successful approaches to MSR clearance processes.

164. Dr Heslop concluded that there would be value in developing an *ad hoc* working group of Member States to assess the results of the surveys, identify and study some of the specific issues and successful approaches taken by Member States, and to make recommendations for action to the IOC Executive Council in 2024.

Dec. A-32/4.8.2

Summary Report on the Consultation on Ocean Observations in Areas under National Jurisdiction

The Assembly,

1. Having examined document IOC/A-32/4.8.2.Doc(1) and taking note of the report of the experts workshop on “Ocean Observations in Areas under National Jurisdiction” (GOOS Reports, 246),
2. Considering the unique convening power of the IOC between Member State representatives and the scientific community,
3. Takes note that the global ocean observing networks reported on specific issues associated with the taking of ocean observations in areas under national jurisdiction which impact the efficiency, cost, and coverage of the global ocean observing networks;
4. Takes also note of the feedback from Member States with regard to the taking of sustained ocean observing in waters under national jurisdiction, also reporting some issues and assessing solutions;
5. Decides to establish an *ad hoc* intersessional working group on Ocean Observations in Areas under National Jurisdiction with the Terms of Reference annexed to this decision;
6. Invites the IOC Executive Secretary to present recommendations for action to IOC Assembly at its 33rd session in 2025;
7. Invites Member States to volunteer to be part of this *ad hoc* working group.

Annex to Decision A-32/4.8.2

IOC *ad hoc* intersessional working group on Ocean Observations in Areas under National Jurisdiction

Terms of Reference

Membership

Member States on a voluntary basis. Membership will be sought through a call via IOC Circular Letter.

The Committee will select Co-Chairs from its membership and may call upon experts from the global ocean observing networks and/or Law of the Sea Experts to provide a deeper insight into topics or questions.

Mandate

1. Review the report of the Experts Workshop on Ocean Observations in Areas under National Jurisdiction (OONJ, GOOS-246), including the seven 'solution spaces' within UNCLOS that were identified through this Workshop, and the information provided to IOC from Member States and GOOS Networks on their experiences regarding sustained ocean observing in Areas under their National Jurisdiction, following the decision adopted at the Executive Council (Decision IOC/EC-55/3.4), and synthesised in the Summary Report on the Consultation on Ocean Observations in Areas under National Jurisdiction (IOC/A-32/4.8.2.Doc(1)).
2. Define a limited number of concrete test cases (less than 10) for consideration in relation to the seven potential 'solution spaces' identified in the OONJ Experts Workshop Report (GOOS-246), perhaps focusing on the four most promising 'solution spaces' that were identified in the Summary Report on the Consultation on Ocean Observations in Areas under National Jurisdiction (IOC/A-32/4.8.2.Doc(1)).
3. Discuss the concrete test cases with regard to exploring more deeply the potential of the most promising 'solution spaces' and/or other 'solution spaces' within UNCLOS that might be uncovered through this process, and identify if would they solve the issues presented, and the value to the networks, ocean observing system and Member States of taking action in this regard.
4. Identify recommendations with regard to potential action on this issue for discussion at the IOC Assembly.
5. Present the results from these discussions, with any recommendations for action on this issue to the IOC at the Assembly in 2025, with a progress report provided to the Executive Council in 2024.

165. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.9 FOUR-YEAR REVIEW OF THE JOINT WMO-IOC COLLABORATIVE BOARD
 [Res. XXX-2; dec. A-31/3.5.5]

<i>Working document:</i>	IOC/A-32/4.9.Doc(1)	Summary of progress of the Joint WMO-IOC Collaborative Board
<i>Reference:</i>	IOC/INF-1420	WMO–IOC Joint Collaborative Board Session Report (March 2022) and workplan for 2022–2023

166. Dr Srinivasa Kumar Tummala, Co-Chair of the Joint WMO-IOC Collaborative Board and IOC Vice Chair, introduced this agenda item. He reminded Member States that the Joint WMO-IOC Collaborative Board (hereafter JCB) was created by IOC Assembly Resolution XXX-2

(2019). He noted that Resolution XXX-2 requested the Joint WMO-IOC Collaborative Board to: (i) facilitate the continued work of all JCOMM functions and activities by recommending connections to appropriate working structures on both sides; (ii) make recommendations on evolving the governance of GOOS, in consultation with all co-sponsors, to further develop the partnership and functional connections between GOOS and WMO Integrated Global Observing System (WIGOS); (iii) prepare, in consultation with WMO and IOC technical, scientific and regional bodies, a comprehensive and coordinated WMO-IOC Collaborative Strategy, based on existing sectoral strategies, and submit it in 2021 to the governing bodies of WMO and IOC for adoption; The IOC also decided further to review, in coordination with WMO governing bodies, the performance of the JCB in four years, reporting to the IOC Assembly at its 32nd session in 2023.

167. Dr Kumar noted that the JCB has made progress (IOC/A-32/4.9.Doc(1)). In 2021, IOC Decision A-31/3.5.5 adopted the WMO-IOC Collaborative Strategy and Report, focused on setting broad ambition for cooperation across the value chain, in observations, data, modelling, services and research. In 2022, the JCB met virtually in March, and identified a set of potential actions to support the implementation of these aims. However, overall progress has perhaps been slower than anticipated, as a result of COVID-19 restrictions impacting the ability of the JCB to meet in person and other resource issues.

168. Dr Kumar noted that in order to fulfil its mandate, the JCB would need to meet in person in September 2023, with a virtual pre-meeting in July 2023 to agree on the agenda. At this face to face meeting the JCB will undertake a self-evaluation review of performance and discuss specific areas for greater potential IOC-WMO collaboration.

169. Dr Kumar confirmed that there is strong commitment from IOC and WMO towards supporting the JCB in fulfilling its mandate and invited comments from Member States in view of the forthcoming meeting of JCB and its evaluation.

Dec. A-32/4.9

Four-Year Review of the Joint WMO-IOC Collaborative Board

The Assembly,

1. Recalling IOC Assembly Resolution XXX-2 (2019) creating the Joint WMO-IOC Collaborative Board, as a high-level coordination mechanism with broader engagement of the key relevant bodies of the WMO and IOC, and the decision to further to review, in coordination with WMO governing bodies, the performance of the Joint WMO-IOC Collaborative Board (JCB), at its 32nd session in 2023,
2. Having examined document IOC/A-32/4.9.Doc(1) on the progress of JCB,
3. Notes that WMO-IOC JCB has a role to play in providing oversight to the functional connections and identifying areas for closer collaboration between WMO and IOC;
4. Requests the IOC Executive Secretary to oversee the WMO-IOC JCB self-evaluation review of performance, and report back with the findings to IOC Executive Council in 2024;
5. Encourages WMO and IOC to provide sufficient resource to support the work of the WMO-IOC JCB.

170. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.10 FOLLOW-UP TO WMO-ISC-IOC-UNEP GLOBAL CLIMATE OBSERVING SYSTEM (GCOS) REVIEW AND GCOS IMPLEMENTATION PLAN 2022 [IOC-XXX/item 7.1.2, Dec. IOC-XXIX/6.1.2]

<u>Working documents:</u>	IOC/A-32/4.10.Doc(1)	IOC Supplement to the Global Climate Observing System (GCOS) Implementation Plan 2022
	IOC/A-32/4.10.Doc(2)	Summary of the Final Report of the Joint Study Group on GCOS (JSG-GCOS)
<u>Information:</u>	GCOS-246	Final Report of the Joint Study Group on GCOS (JSG-GCOS)
	GOOS-272 (GCOS-244)	The 2022 GCOS Implementation Plan
	GCOS-245	The 2022 GCOS Essential Climate Variables (ECVs) Requirements

171. Prof. Han Dolman, recent past Chair of the Global Climate Observing System (GCOS) introduced this agenda item. He noted that this item will cover two key activities: the 2022 GCOS Implementation Plan, in which GOOS experts (through its Expert Panel for Physics and Climate—OOPC) played a key role to deliver the ocean content; and the recommendations from the WMO-IOC-ISC-UNEP Joint Study Group on GCOS (JSG-GCOS).

172. He reminded Member States that GCOS is sponsored by IOC, WMO, ISC and UNEP, and its role is to determine the requirements for observing for climate across four domains - atmosphere, ocean, cryosphere and terrestrial, and to set the framework for the Essential Climate Variables (ECVs). GOOS, through OOPC, interfaces into GCOS for the ocean component of this work, and the GOOS Essential Ocean Variables framework is harmonized with the ocean ECVs. A number of GOOS networks also observe some ocean and atmospheric ECVs. GCOS’s success in providing critical baseline information to the international climate processes (especially UNFCCC) is widely recognized and it also interfaces the evolving requirements for climate observations into the international climate processes.

173. The 2022 GCOS Implementation Plan ([GCOS-244](#), GOOS-272) is the latest in a series of implementation plans produced by GCOS since its inception in 1992. It provides a set of high priority actions which, if undertaken, will improve global observations of the climate system and our understanding of how it is changing. The 2022 GCOS ECVs Requirements planning document ([GCOS-245](#)) provides revised requirements for the ECVs. The plan aims at identifying the major practical actions that should be undertaken in the next 5–10 years. It identifies six major themes that should be addressed, including sustainability of observations, filling data gaps, and data management, amongst others. Within each theme, several actions are identified, and Prof. Dolman outlined the major actions within each theme that are targeted at GOOS, and which are presented in IOC/A-32/4.10.Doc(1).

174. Prof. Dolman commended Member States for their investment in ocean observations for climate to date, and often in waters beyond national jurisdiction, which have provided information on the vital role of the ocean in the Earth’s climate system and have underpinned the global climate agreements. He encouraged Member States to review the 2022 GCOS Implementation Plan and to expand our ocean observing capacity as imperative to supporting adaptation and global resilience to the many impacts of climate change.

175. The sponsors last reviewed the GCOS in 2014, and at that time made some suggestions for change. However, after 30 years of GCOS existence, its governance structure needed a comprehensive review to articulate: more clearly the relationships with its sponsors, observing networks, supporters and key users, as essential to how GCOS recommendations can be implemented across the wide range of stakeholders and network partners. Finally, the funding for the GCOS coordination as well as for several of its networks needed review.

176. The Joint WMO, IOC, ISC and UNEP Study Group on the Global Climate Observing System (JSG-GCOS) was formed in 2020 under the Infrastructure Commission of WMO. The Joint Study Group reviewed the GCOS governance and structure, making a number of key recommendations in IOC/A-32/4.10.Doc(2). Prof. Dolman highlighted the recommendations that relate to the IOC and noted that the JSG-GCOS had drafted a revised Memorandum of Understanding for consideration by all sponsors that clarifies aspects of GCOS governance. (Refer to Appendix A of [GCOS-246](#)).

177. Prof. Dolman noted that there is a both a Resolution and a Decision attached to this Agenda item. The Resolution relates to the recommendations from the Global Climate Observing System (GCOS) Implementation Plan 2022. The decision concerns the Final Report of the WMO-IOC-ISC-UNEP Joint Study Group on GCOS (JSG-GCOS). For simplicity this approach mirrors that taken by WMO.

Dec. A-32/4.10

Report of the Joint Study Group on the Global Climate Observing System (GCOS)

The Assembly,

1. Having examined document IOC/A-32/4.10.Doc(2),
2. Recalling:
 - IOC Assembly Resolution XVI-8 to undertake the development of a Global Ocean Observing System (GOOS) and participate in the Global Climate Observing System (GCOS),
 - IOC Executive Council Decision EC-XLIX/Dec.4.3(IV) – ‘IOC co-sponsorship of the Global Climate Observing System (GCOS): revised memorandum of understanding’,
 - WMO Resolution 1 (INFCOM-1) – ‘Establishment of standing committees and study groups of the Commission for Observation, Infrastructure and Information Systems (Infrastructure Commission)’, that established the Joint Study Group on GCOS to develop a proposal for an optimal governance and structure for GCOS that recognizes GCOS as an activity across the WMO Infrastructure Commission, the Services Commission and Research Board as well as relevant programmes of IOC, ISC and UNEP and to make recommendations on GCOS outputs,
3. Having examined the Final report of the Joint Study Group on GCOS (GCOS-246) and its summary (IOC/A-32/4.10.Doc(2)),
4. Welcomes the support of the co-sponsors of GCOS in the work of the Joint Study Group;
5. Takes note of the recommendations of the Joint Study Group on GCOS contained in Document IOC/A-32/4.10.Doc(2);

6. Recognizes with appreciation:
 - (i) the important contribution of the GCOS Steering Committee and its panels in providing scientific and technical guidance to IOC and other sponsoring and participating organizations for the planning, implementation and further development of the global observing systems for climate,
 - (ii) the substantial contributions made by members in their climate monitoring that has contributed greatly to the improved understanding of climate change,
 - (iii) the collaboration of GCOS with the Global Ocean Observing System (GOOS),
 - (iv) the support received from national and international donors for the planning and implementation of GCOS,
 - (v) the reporting by GCOS to the United Nations Framework Convention on Climate Change (UNFCCC) on the state of climate observations and how they can be improved to meet current needs;
7. Decides to continue and strengthen institutional support to GCOS as a co-sponsored programme as regulated by the 1998 Memorandum of Understanding with partners – WMO, ISC and UNEP or any new memorandum agreed with the partners;
8. Requests the Executive Secretary:
 - (i) to prepare a revised GCOS Memorandum of Understanding (MoU) with the co-sponsors for consideration by the Executive Council at its 57th session, based upon the draft MoU contained in the Joint Study Group Report (GCOS-246), as recommended in High-level Recommendation 1 and available in document IOC/A-32/4.10.Doc(2);
 - (ii) to continue contributing to the Climate Observing System Fund (COSF) and encourage the other GCOS co-sponsors to make their commitments (financial or/and in-kind) in order to ensure the basic resources for the operation of the GCOS secretariat, as recommended in Recommendation 14 and available in document IOC/A-32/4.10.1.Doc(2);
9. Invites the GCOS Chair, in consultation with the Head of Ocean Observing and Services Section of IOC, to inform IOC on the progress, performance and requirements of the global observing systems for climate;
10. Urges Members to consider supporting the GCOS programme either financially or with in-kind contributions.

Draft Resolution A-32/[4.10]

Submitted by Germany

Improving Climate Observations

The Intergovernmental Oceanographic Commission,

1. Recalling:

- IOC Assembly Resolution XVI-8 to undertake the development of a Global Ocean Observing System (GOOS) and participate in the Global Climate Observing System (GCOS),

- the United Nations Framework Convention on Climate Change (UNFCCC) [Decision 19/CP.22](#) entitled 'Implementation of the Global Observing System for Climate',
- the conclusions of SBSTA 52–55 ([UNFCCC/SBSTA/2021/3](#) – items 63, 65, 70) that welcomed the [GCOS Status Report 2021](#) (GCOS-240), noted with concern the status of the global climate system, and encouraged Parties and relevant organizations to strengthen support for sustained systematic observations of the climate system for monitoring changes in the atmosphere, ocean and cryosphere and on land,
- the conclusion of SBSTA 57 ([UNFCCC/SBSTA/2022/L.20](#) – item 7) that welcomed the 2022 GCOS Implementation Plan and the 2022 GCOS essential climate variables requirements, and encouraged Parties and relevant organizations, as appropriate, to work towards the implementation of the 2022 GCOS Implementation Plan, in accordance with Article 5 of the Convention,

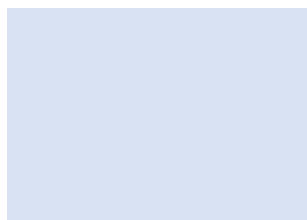
2. **Noting** that the GOOS 2030 Strategy has one of its key delivery areas focused on supporting climate services and decision-making,
3. **Having examined** the 2022 GCOS Implementation Plan (GCOS-244, GOOS-272) and the 2022 GCOS ECVs Requirements (GCOS-245),
4. **Having also examined** the IOC Supplement to the GCOS Implementation Plan 2022 (IOC/A-32/4.10.Doc(1)),
5. **Having considered** the parallel Draft WMO Resolution 4.2(9)/1 (Cg-19),
6. **Endorses** the conclusions of the 2022 GCOS Implementation Plan (GCOS-244, GOOS-272) and the 2022 GCOS ECVs Requirements (GCOS-245);
7. **Encourages** Members to collaborate with national partners with the view to address the full set of actions pertaining to the ocean and relevant above ocean atmospheric variables provided in the 2022 GCOS Implementation Plan (GCOS-244, GOOS-272);
8. **Urges** Members to take action to address the relevant actions highlighted in document IOC/A-32/4.10.Doc(1);
9. **Requests** the Head of the IOC Ocean Observations and Services Section to facilitate the coordination and implementation of the relevant actions provided in the IOC Supplement to the GCOS Implementation Plan 2022 (IOC/A-32/4.10.Doc(1)).

178. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.11 UPDATE ON IOC CUSTODIANSHIP ROLE IN RELATION TO UN SDG 14 INDICATORS [Dec. IOC-XXX/3.2]

<i>Working document:</i>	IOC/A-32/4.11.Doc(1)	Update on IOC Custodianship Role in relation to SDG 14 Indicators, 2023
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<i>Reference:</i>	IOC Circular Letter; 2911	Fourth annual data compilation towards Sustainable Development Goal 14.3.1 Indicator: Average marine
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IOC Circular Letter;
[2919](#)

acidity (pH) measured at agreed suite of representative sampling stations

Invitation to contribute information for the compilation of the first edition of the IOC Ocean Science Tracker and inputs to the IOC Capacity Development Needs Assessment Survey

179. Mr Henrik Enevoldsen introduced this agenda item by recalling that the 2030 Agenda for Sustainable Development adopted by United Nations Member States in 2015, and in particular SDG 14 ('Conserve and sustainably use the oceans, seas and marine resources for sustainable development'), constituted an essential point of reference for IOC's engagement with its Member States, as well as for its programmatic presence at global, regional and country levels. Several targets of SDG 14 are directly relevant to IOC's work, particularly in the areas of marine pollution (14.1), ocean acidification (14.3) and ecosystem-based management (14.2), as well as marine research capacity and the transfer of marine technology (14.A), as a cross-cutting element to all SDG 14 targets.

180. He recalled that the Commission was supporting the development of a global SDG indicator framework for specific targets, primarily 14.3 (ocean acidification) and 14.A (scientific knowledge and ocean research capacity), for which IOC had been identified as the United Nations custodian agency by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs). The technical support provided by IOC includes building expert and Member States capacities to implement the respective methodologies to populate respective SDG indicators and underpin data standards to collect data from Member States and report those data globally to the United Nations Statistics Division.

181. He also highlighted that IOC successfully continued its role as custodian agency for SDG indicators 14.a.1 and 14.3.1. New data sets were collected for both indicators (through IOC Circular Letters 2911 and 2919) and are visible in the 2022 annual UN Report of the Secretary General 'Ocean and the Law of the Sea'.

182. Since the launch of the SDG 14.3.1 data portal in December 2019, an increasing number of ocean acidification observations have been reported to IOC and are included in the annual 14.3.1 assessment (308 stations in 35 countries reported in 2022 to 539 stations in 41 countries in 2023). However, the current global coverage of ocean acidification remains inadequate, with gaps in observations and data in all areas of the ocean. The rate of change in ocean acidification, its pattern and scale, show great regional variability and therefore require observations with high spatial and temporal resolution. The latest results from the IOC SDG 14.3.1 reporting will be published on the UN Department of Economic and Social Affairs (DESA) website in July 2023.

183. Future developments will include the facilitation of data submissions for the SDG 14.3.1 data collection.

184. The *Global Ocean Science Report* survey is the main mechanism to collect data for SDG 14.a.1, however as the next full edition of the GOSR is expected to be published in 2025, IOC Secretariat launched Global Ocean Science Report Tracker questionnaire in January 2023 (cf IOC Circular Letter [2919](#)) to collect basic information on current ocean science capacity in a given country, including SDG 14.a.1 data. The updated information submitted to UN DESA now includes data from 39 Member States and will be also published in July 2023.

185. Mr Enevoldsen also reported that IOC directly supported the work to develop the Index of Coastal Eutrophication Potential (ICEP) as the indicator for United Nations SDG 14.1.1 on the nutrient pollution of coastal marine ecosystems. The development of the ICEP was being carried out for the United Nations Environment Programme (UN Environment), the custodian

agency for SDG indicator 14.1.1, under the coordination of IOC. ICEP is expected to be fully developed by 2nd quarter 2024.

Dec. A-32/4.11

IOC Custodianship Role in relation to SDG 14 indicators

The Assembly,

1. Having examined document IOC/A-32/4.11.Doc(1),
2. Recalling IOC decision EC-XLIX/4.1 defining the strategic contributions of IOC to the implementation of the 2030 Agenda and SDG process and acknowledging the role of IOC as custodian agency for SDG indicator,
3. Welcomes the inclusion of SDG 14.a.1 and SDG 14.3.1 data in the UN Secretary General reports and the Sustainable Development Goal Reports in 2021, 2022 and July 2023;
4. Encourages Member States to continue regular measurements and collections for SDG 14.3.1 and 14.a.1, as well as the support to relevant IOC mechanisms, particular the Global Ocean Acidification Observing Network, the Ocean Acidification Research for Sustainability Ocean Decade programme, the SDG 14.3.1 data portal working groups, the GOSR report and tracker.

186. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

4.12 REPORT ON THE DECADE IMPLEMENTATION PLAN [Res. EC-55/1]

<u>Working document:</u>	IOC/A-32/4.12.Doc(1)	Status of Implementation of the UN Decade of Ocean Science for Sustainable Development and Perspectives for 2024
<u>Information:</u>	IOC/INF-1424	Update of status of endorsed Decade Actions and Coordination Structures including Resource Needs
	IOC/INF-1425	Update of IOC Contributions to the Ocean Decade and Resource Needs
	IOC/INF-1426	Overview of Work of Decade Advisory Board 2022/2023
	IOC/INF-1427	Ocean Decade Data and Information Strategy (IOC/2023/ODS/47)
	IOC/INF-1428	UN Engagement in the Ocean Decade – Roadmap and Priority Actions
	IOC/INF-1429	Best Practice Manual for National Decade Committees (IOC/2023/ODS/43)

187. The Executive Secretary introduced this item. He highlighted that the Decade is now in its third year of implementation and that the portfolio of Decade Actions is continuing to grow rapidly with close to 50 Decade programmes and over 240 Decade projects now endorsed. He underscored the importance of the work of the Decade Advisory Board and thanked its co-chairs

and members for their commitment. He emphasized the emergence of a growing network of regional and thematic decentralized coordination structures to support the work of the Decade Coordination Unit and recalled that 34 National Decade Committees are now operational. He reminded Member States that a number of Decade Actions and coordination structures are led by IOC and that, if adequately resourced, these initiatives have the potential to substantively contribute to the sustained growth, positioning and impact of IOC. He recalled the presence of the Ocean Decade in international and regional ocean convenings and conferences over the last 12 months that has contributed to an increasing global visibility for IOC and Decade Actions. Finally, he recalled the urgent need for continued investment and engagement by Member States in the Decade, both to support the coordination role of the IOC as well as IOC and partner-led Decade Actions, and invited Member States to increase their support to the Ocean Decade.

188. Following the Executive Secretary's introduction, Mr Julian Barbière, Ocean Decade Focal Point supported by Ms Alison Clausen, Programme Specialist, presented an overview of the progress in operationalizing the Implementation Plan. He reported that to date, four Calls for Decade Actions have been concluded and have resulted in the endorsement of 47 Decade programmes, 235 Decade projects and 79 Decade contributions. The fifth Call for Decade Actions is currently open until 31 August 2023. He reported that while the portfolio of Decade Actions exhibits strong thematic diversity, there are still important gaps in leadership from partners in SIDS and LDCs. He indicated that future Calls for Decade Actions will increasingly target strategic geographic and thematic gaps in the overall ecosystem of Decade Actions.

189. Mr Barbière reported that the growing network of decentralised coordination structures including 8 Decade Collaborative Centres, 3 Decade Coordination Offices and 11 Decade Implementing Partners are essential partners to coordinate and support existing Decade Actions, analyze gaps and future priorities, and catalyze new Decade Actions in response to future Calls for Decade Actions. He thanked partner institutions for their commitments in establishing decentralized coordination structures but indicated that gaps in the network remained in priority thematic areas and geographies, and also reminded the Assembly that the Decade Coordination Offices led or proposed by IOC required additional resources to become fully operational.

190. He reported on the work of the Decade Advisory Board that met four times over the last 12 months and played an important role in making recommendations on Decade programme endorsement, as well as providing advice on strategic issues including related to the engagement of SIDS and LDCs in the Decade, measures to enhance the engagement of Indigenous and local knowledge holders, and resource mobilisation. He noted that the term of the current membership of the Decade Advisory Board will come to an end in December 2023 and indicated that new call for nominations will be launched in the third quarter of 2023.

191. Mr Barbière confirmed that 34 National Decade Committees have been established and are operational but highlighted the uneven geographic distribution of these Committees with very few Committees in SIDS or LDCs. He reminded the Assembly of the recent analysis of experiences of National Decade Committees (IOC/INF-1428) and indicated the importance of National Decade Committees to convene diverse stakeholders to identify national ocean science and capacity development priorities, and the important role that Committees can play in aligning national resource allocation decisions with Decade priorities. He encouraged Member States to develop new National Decade Committees and indicated that the Decade Coordination Unit and existing group of National Decade Committees could provide mentoring and support to this process.

192. He outlined the contribution of IOC to the Decade in the form of Decade programmes and projects, the central Decade Coordination Unit, and the supporting role of its Sub-Commissions Secretariats acting as Decade Coordination Offices. He highlighted the strong potential for IOC-led Decade Actions and coordination structures to contribute to the

strengthening and strategic expansion of IOC programmes and Regional Subsidiary Bodies, but noted the significant resource constraints that persist. He strongly encouraged Member States to provide additional in-kind and financial resources to support the central positioning of IOC within the Decade both in its coordination role as well as through its programmatic contributions. He indicated that the majority of UN-led Decade Actions are led by IOC and highlighted a recent analysis (IOC/INF-1428) that identifies priority actions for increased engagement of other UN agencies in the Decade that will be implemented via UN-Oceans over the next 12 to 24 months.

193. Mr Barbière indicated that priorities for the Ocean Decade over the next 12 to 18 months will include increased focus on engagement of African countries and SIDS, including exploration of mechanisms for dedicated streams of funding for Decade Actions led by partners in these countries. He particularly recognized the work of the Africa Ocean Decade Taskforce in its role to provide strategic advice to the implementation of the Africa Ocean Decade Roadmap. He also indicated that the recent operationalization of the Ocean Decade Capacity Development Facility would focus on delivering demand-driven capacity development to Decade partners, with a focus on LDCs, SIDS and Early Career Ocean Professionals. He recalled the importance of the work of the Foundations Dialogue and the Ocean Decade Alliance, both for direct support to Ocean Decade initiatives and to raise awareness of the importance of investing in ocean science, and thanked the members of these groups for their continued engagement.

194. He recalled that the 2024 Ocean Decade Conference will be generously hosted by Spain in Barcelona in April 2024 and will be a critical moment in the implementation of the Decade. This Conference will provide an opportunity to take stock of achievements of the Decade to date, and to set a collective vision for the way forward. He noted that the presentation of the results of the 'Vision 2030' process that is currently being implemented will be a central element of the Conference and will allow the refinement and measurement of progress towards the Ocean Decade Challenges. Mr Barbière noted the importance of strong articulation of the outcomes of the Conference with the 2025 United Nations Ocean Conference to be co-hosted by France and Costa Rica. He noted several other important international events and conferences in the lead up to the 2024 Ocean Decade Conference that will be used to raise awareness of the Ocean Decade and incite enthusiasm for participation in the Conference in April 2024.

195. Finally, Mr Barbière informed the Assembly about a number of information documents related to the implementation of the Decade including detailed updates on the status of Decade Actions and resource needs for IOC and partner-led initiatives, as well as the Ocean Decade Data and Information Strategy. He reminded the Assembly that the Decade was a voluntary mechanism, and that coordination was resourced entirely from extrabudgetary sources. He highlighted the call made to Member States through previous circular letters to provide in-kind and financial support to the Decade and warmly thanked those Member States and partners who have provided essential support to Decade coordination and Decade Actions.

Draft Resolution A-32/[4.12]

Submitted by India

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

The Intergovernmental Oceanographic Commission,

1. **Recalling** IOC Resolutions EC-53/1, A-31/1 and EC-55/1 on the Implementation of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030), thereafter the Decade,

2. **Considering** document IOC/A-32/4.12.Doc(1) on the Status of the implementation of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030) and its addenda,
3. **Takes note** of the establishment of Decade coordinating mechanisms (Decade Coordination Offices, Decade Collaborative Centres, Decade Implementing Partners, National Decade Committees) as presented in document IOC/INF-1424;
4. **Further takes note with satisfaction** of the contribution of the Decade Advisory Board (DAB) to the implementation and strategic development of the Decade, and **acknowledges** the process for renewing its membership for the period 2024–2025 in accordance with its rules of procedure;
5. **Welcomes** the development of the Ocean Decade Vision 2030 process aimed at enhancing the strategic delivery of the Decade under its 10 Decade challenges;
6. **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 Decade Coordination Unit (DCU);
 - (ii) offer to host and fund Decade Actions, DCOs, and DCCs as described in the *Decade Implementation Plan*;
 - (iii) establish National Decade Committees with a view to stimulating national activities and international cooperation; and
 - (iv) host regional or international Decade stakeholders events;
7. **Further invites** UN-Oceans members, UN Member States, international scientific and academic organizations, non-governmental organizations and other relevant stakeholders to support the Decade in collaboration with IOC, and contribute to its implementation by proposing Decade Actions in accordance with the Decade Implementation Plan;
8. **Thanks** the Governments of Canada, China, France, India, Japan, Belgium (Government of Flanders), Norway, Portugal, the Republic of Korea, Sweden, as well as REV-Ocean, Panerai, and FUGRO for their financial contributions to the Decade;
9. **Further thanks** the Government of Spain for offering to host the 2nd International Ocean Decade Conference in Barcelona, 10–12 April 2024 and **encourages** all Member States to actively take part;
10. **Supports** the registration of new IOC-led Decade Actions, specifically:
 - (i) The Ocean Decade Tsunami Programme,
 - (ii) OBIS 2030 – The biodiversity data hub for the Ocean Decade Actions (OBIS 2030),
 - (iii) Strengthening the Resilience of Coastal Communities in the Northeast Atlantic, Mediterranean Region to the Impact of Tsunamis and Other Sea Level-Related Coastal Hazards
11. **Also supports** the active role of the IOC Regional and Technical Subsidiary Bodies and Programmes in facilitating Decade regional and thematic coordination and engagement activities, and in particular of:

- (i) IOC WESTPAC Secretariat acting as Decade Coordination Office for the Western Pacific Region;
 - (ii) IOCARIBE Secretariat acting as Decade Coordination Office for the Tropical Americas and Caribbean Region;
 - (iii) IOCAFRICA Secretariat acting as Decade Coordination Office for Africa;
 - (iv) IODE Programme Office acting as Decade Coordination Office for Ocean Data Sharing;
 - (v) GOOS Project Office acting as Decade Coordination Office for Ocean Observations;
12. **Welcomes** the establishment of the Ocean Decade African Task Force aimed at operationalising the Ocean Decade Africa Roadmap and its nine priority actions, and the plans for the establishment of a Tropical Americas and Caribbean Regional Task Force with the support of the IOCARIBE Secretariat;
13. **Notes** the remaining gaps in the development of Decade Actions led by partners in Small Island Developing States and Least Developed Countries, and **welcomes** the establishment of the Ocean Decade Capacity Development Facility supported by the Government of Belgium/Flanders;
14. **Takes note** of the resource needs identified by IOC-led DCOs and IOC Programmes to fulfil Decade coordination functions;
15. **Further invites** Member States, partners, and donor organizations to support these Decade Actions and Coordination mechanisms, including through allocation of extra-budgetary resources to relevant IOC programmes and regions, to achieve their transformative ambitions, guide their respective communities, and act as catalysers of further actions within and beyond the Decade.

196. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

5 IOC AND THE FUTURE OF THE OCEAN: SUSTAINABLE DELIVERY AND EXPANSION OF IOC ACTIVITIES

[Res. XXX-3; Dec. IOC/EC-55/3.2]

Working document: IOC/A-32/5.Doc(1) IOC and the Future of the Ocean: Sustainable Delivery and Expansion of IOC Activities

197. The Executive Secretary introduced this agenda item. He referred to recent developments in ocean research and observations, which are spearheaded by IOC, including the UN Ocean Decade. He recalled the emerging notion of Sustainable Ocean Planning, which was developed by the expert community associated with the High-Level Panel for a Sustainable Ocean Economy. He also noted seminal ocean dimensions of key international agreements and frameworks that are either in force or are awaiting entering into force or are in preparation. Further, he briefly described the advances associated with the series of UN ocean conferences. The Our Ocean Conferences, the 2022 One Ocean Summit in France, the World Ocean Summits by *The Economist* also added momentum to the work in the ocean. IOC has been a participant in all of them. New perspectives are associated with the third UN Ocean Conference co-hosted by Costa Rica and France (Nice, first half of June 2025).

198. Dr Vladimir Ryabinin expressed his conviction that major changes in human relations with the ocean require a renewed discussion of how IOC could optimally support ocean sustainability. In the history of the IOC, there have been several periods of intensive and healthy self-reflection, including the well-known discussion under the slogan “We have a problem” in 2005. A recent, objective, positive but critical, forward-looking view on IOC capacity to deliver was initiated by the UNESCO Internal Oversight Service in the form of evaluation of the IOC strategic positioning. The discussion of its recommendations by the IOC Executive Council in 2022 (EC-55) led to a request to Executive Secretary to prepare an assessment of resources, including human resources, necessary to sustainably deliver the expanding range of IOC services, including coordination of the Ocean Decade. That assessment was completed and submitted to IOC Member States on 22 October 2022 in the IOC Circular Letter [2912](#). The plan of actions resulting from the evaluation was included in the Assembly agenda under item 6.3.

199. The Executive Secretary also reflected on the long-term evolution of IOC. While in 1960 IOC was established by UNESCO as a UN platform for international dialogue of oceanographers from different political systems, during recent times the Commission acquired heightened responsibility to bring ocean science for the solution of key global issues of existential nature. These issues are reflected in major international agreements or frameworks — on climate, biodiversity, disaster risk reduction, SIDS, high seas, plastic pollution, etc. There is also significant number of thematic and regional agreements, conventions and protocols related to the ocean concerning fisheries, ocean pollution, safety at sea, distress and search and rescue. Still, some of critical ocean issues, such as sea-level rise and chemical pollution, are not yet reflected in agreements and do not have internationally established targets. While sea-level rise is strongly related to the global warming, adaptation to it does not have an international coordination mechanism.

200. The opinion of the Executive Secretary was that humankind was approaching now a historic moment in its relations with the ocean. On the basis of new science, a possibility is emerging to reverse the decline in ocean health and to start living in harmony with the ocean. The way forward would be to develop a climate-smart, ecologically-oriented, ethical ocean management on the basis of science-supported ocean planning for a sustainable ocean economy. But we still need to design it. However, in many countries of the world, the ocean science — policy interface is not mature enough to provide authoritative ocean science guidance for effective national ocean action. We also need to transform ocean science and enable it to systematically generate solutions for managing the ocean. This is the chief task of the Ocean Decade.

201. Dr Ryabinin also briefly discussed the evolution of the ocean activities in the UN System. A positive division of labour between various agencies with ocean mandate has been emerging. The role of IOC is more and more seen as the core provider of science for specialized UN agencies with an ocean mandate. Nevertheless, many ocean aspects of work are still pursued in parallel structures, with elements of duplication, while they could strongly benefit from integrated sustainable ocean planning supported by ocean science and observations. In addition, key stakeholders should stop working in silos and should develop a common plan of actions for the ocean in the UN system.

202. Summarising his analysis, the Executive Secretary suggested that the Action Plan on implementation of recommendations following from the IOS Evaluation of strategic positioning of IOC, being the first step in the right direction, would help the Commission to initiate an even broader and longer-term consultation on how it can optimize and strengthen its support to existing UN conventions and frameworks. The consultation would involve IOC constituent bodies and external partners. The scope and modalities of this consultation could be reviewed by the IOC Executive Council in 2024. The consultation would be able to inform preparations for the 2025 UN Ocean Conference in Nice. The IOC Assembly at its 33rd Session in 2025, scheduled soon after the completion of the UN Ocean Conference in Nice, would review the results of the consultation in the light of results of the UN conference, and agree on an

appropriate course of future IOC action. The consultation would offer a perspective for further evolution of IOC as the home of ocean science in the UN system.

Dec. A-32/5

**IOC and the Future of the Ocean: Sustainable Delivery
and Expansion of IOC Activities**

The Assembly,

1. Having examined document IOC/A-32/5.Doc(1),
2. Noting the key role of ocean science, observations, services, and related policy interface in addressing the global challenges of our time,
3. Taking into account the IOS Evaluation of the strategic positioning of the IOC and the corresponding Action Plan as a significant step forward and a framework for reporting on progress to the UNESCO Executive Board and the IOC Governing Bodies,
4. Agrees to initiate a consultation on how IOC could optimally facilitate science-based sustainable ocean planning, ocean science support to implementation of UN environmental conventions and frameworks, and development of a sustainable ocean economy;
5. Requests the IOC Executive Secretary to prepare and initiate the consultation involving appropriate stakeholders and present a progress update to the IOC Executive Council in 2024.

203. The representatives of __ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

6 GOVERNANCE, PROGRAMMING AND BUDGETING
[Statutes Art. 6B]

6.1 DRAFT PROGRAMME AND BUDGET FOR 2024–2025 (Draft 42 C/5)

<u>Working document:</u>	IOC/A-32/6.1.Doc(1)	Draft Programme and Budget for 2022–2025 (Second Biennium 2024–2025 – 42 C/5)
<u>Reference:</u>	IOC/A-31/6.2.Doc	Draft Programme and Budget for 2022–2025 (41 C/5) First Biennium 2022–2023

204. The Executive Secretary introduced this item.

205. An integral part of the UNESCO Draft Programme and Budget for 2024–2025 (42 C/5) submitted by the Director-General to the UNESCO Executive Board at its 216th session (May 2023), the document proposed for consideration by the Assembly presents the strategic focus for the final two years of the Approved Programme and Budget for the 2022–2025 quadrennium (41 C/5), endorsed by IOC Resolution A-31/2. As such, it represents IOC's ambition, focus and continuity, building on achievements made during the first biennium towards delivering on the Commission's mandate.

206. The Executive Secretary explained that in accordance with the decision of the UNESCO Executive Board at its 215th session (October 2022), two budget scenarios are presented with respect to the regular budget:

- a. **Base Case scenario** – a total UNESCO programme budget of \$564.6 million, which represents an increase of \$30 million in assessed contributions compared to \$534.6 million for the 41 C/5 approved regular budget (2022–2023). This scenario responds to strategic priorities set by Member States, as well as projected increases in staff costs and the impact of inflation on non-staff costs. It foresees a significant reinforcement of the IOC with the allocation of \$13,5 million, which represents a budget increase of \$2.2 million (+19.7% variation compared to 41 C/5), including \$0.4 million to strengthen IOC's contribution to Intersectoral Programme 2 in the area of environmental and climate change education.
- b. **Zero Nominal Growth (ZNG) scenario** – a total UNESCO programme budget of \$534.6 million, requiring programmatic and budget adjustments to absorb programme and staff statutory increases in inflation, significantly impacting UNESCO's capacity to deliver on the approved Programme for 2022–2025. It foresees the allocation of \$11.7 million to the IOC (+0.4 million or +3.1% compared to 41 C/5).

207. The Executive Secretary highlighted that the significant increase in the IOC's budget proposed in the Base Case scenario is a very encouraging direct response to Member States' support of the work of the Commission and a source of great motivation to the Secretariat.

208. If adopted, it will solidify the Commission's funding base, enhance its ability to mobilize and implement additional resources and empower it to:

- lay the foundations for sustainable ocean management, contributing to the attainment of many ocean-dependent Sustainable Development Goals;
- deliver quality research, observations, services and data & information products offering to its Member States the needed guidance on risk-resilient ocean planning;
- achieve a 100%-increase of the number of communities recognized as tsunami ready will be pursued through building awareness and preparedness, with a focus on SIDS and LDCs;
- scale up its work on the ground and strengthen the regional Sub-Commissions;
- develop a new on-line Ocean Decade Capacity Development Facility focusing on the training needs of SIDS and LDCs;
- expand its work in Ocean Literacy with specific targets under the UNESCO Intersectoral Programme 2; and
- increase capacity of Member States and civil society to access, communicate and use critical ocean information through policy-relevant assessments and knowledge products, combining UN processes and IOC's own assessments and reporting mechanisms on SDG 14 targets for which IOC is a UN custodian agency.

209. The document IOC/A-32/4.1.Doc(1) considered by the Assembly presents the narratives and the tables with the detailed presentation of the IOC's Draft 42 C/5 budget proposal in an Integrated Budget Framework (IBF), setting out the resources required for implementation for all sources of funds. It includes the proposed IBF budget based on the Base Case scenario, as well as the impact of the ZNG scenario with respect to all figures (programmes, global priorities, priority groups), as well as performance targets.

210. The Executive Secretary highlighted that the Zero Nominal Growth of regular programme resources — the only stable funding for core operations — will have a dramatic effect on the IOC ability to function at a time when the Commission is coordinating an unprecedented transformative undertaking of the UN Ocean Decade and is building foundation for sustainable ocean management.

211. Having updated the Assembly on the outcome of the Draft 42 C/5 review by the 216th session of the UNESCO Executive Board, he concluded by inviting Member States to support the Base Case scenario for the UNESCO's programme and budget for 2024–2025 as the minimum required to ensure that the Organisation is able to adequately implement the mandate they entrusted to it.

Dec. A-32/6.1

Preparation of the Draft Programme and Budget for 2024–2025 (Draft 42 C/5)

The Assembly,

1. Having examined documents IOC/A-32/6.1.Doc(1) and Resolution EC-55/2,
2. Takes note of document IOC/A-32/4.1.Doc(1), subject to further examination by the Financial Committee with a view of formulating a draft resolution for discussion and adoption in plenary.

212. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

6.2 FOLLOW-UP TO RESOLUTION A-31/2 AND EC-55/2 ON REVIEW & UPDATE OF THE RULES OF PROCEDURE AND GUIDELINES FOR REPORTING ON IN-KIND CONTRIBUTIONS
[Res. EC-55/2]

<u>Working documents:</u>	IOC/A-32/6.2.Doc(1)	Second Proposed Revision of the IOC Rules of Procedure
	IOC/A-32/6.2.Doc(2)	Report of the Chairperson of the IOC Intersessional Financial Advisory Group (2023) <i>(available at the beginning of the session)</i>

213. The Chair of the Intersessional Financial Advisory Group, Prof. Karim Hilmi, introduced this agenda item.

214. He started by recalling that the process of revision of the IOC Rules of Procedure was started at the 31st session of the IOC Assembly in order to 'align and adapt them to the prevailing United Nations' best practices concerning online meetings facilitating informed and timely decision-making by IOC Member States'.

215. In accordance with resolutions A-31/2 and EC-55/2 and in line with the discussions of Member States in the Intersessional Financial Advisory Group and the Sessional Financial Committee, the revised text of the Rules of Procedure presented to the Assembly in this document is based on the following principles:

- in conformity with Article 6.B.3 of the Statutes, maintain a single set of the Commission's Rules of Procedure, to be formally determined by the IOC Assembly,

- revise the current Rules of Procedure on the basis of a distinction among general rules, rules applicable to the IOC Assembly and the IOC Executive Council, and rules applicable only to one of these bodies,
- refrain from any substantial review of the Rules of Procedure by reorganizing them, rather than truly reviewing them,
- improve clarity and align language versions, focusing on fixing only what needs to be fixed,
- submit draft guidelines for online meetings to the IOC Assembly along with the revised draft of the Rules of Procedure.

216. Prof. Hilmi highlighted that following Member States' decision to include in the Rules of Procedure a provision for holding online sessions, but only as an exceptional measure, and to develop guidelines on working methods for such online sessions, section I.13 'Online sessions' was added.

217. In response to Member States' decision to develop guidelines for consultations by correspondence, applicable both to the IOC Assembly and the IOC Executive Council, a separate new section I.14 'Consultation by correspondence' was added and current rule 23 (new rule 38) was amended to cover both governing bodies.

218. In addition, a list of online appendices to the Rules of Procedure is proposed for greater consistency. These texts are already adopted and available under various references, with the exception of the new Guidelines on the working methods for online sessions to be adopted by this Assembly.

219. Prof. Hilmi concluded by indicating that the text in front of the Assembly benefitted from in-depth discussions in sessions and intersessionally and, in his opinion as the Chair of the Intersessional Financial Advisory Group, it is respectful of Member States wishes.

220. As regards the reporting on in-kind contributions (IKCs), he recalled that in line with the more systematic and inclusive approach endorsed by the IOC Governing Bodies (IOC Resolutions A-31/2 and EC-55/2), the pilot reporting exercise was launched for calendar year 2022 and the result presented to the Assembly as part of the Report on 2022–2023 (41 C/5) budget implementation as at 31 December 2022 in document IOC/A-32/3.2.Doc(2). The matter having been discussed in the Intersessional Financial Advisory Group, he invited Member States to participate in the work of the sessional Financial Committee in order to finalize the recommendations and the reporting methodology for adoption by Assembly under agenda item 6.4, based on the proposal already favourably considered by the IOC Executive Council in document IOC/EC-55/5.1.Doc(2).

Dec.A-32/6.2

Follow-up to Resolutions A-31/2 and EC-55/2 on Review & Update of the Rules of Procedure and Guidelines for Reporting on In-kind Contributions

The Assembly,

1. Having examined document IOC/A-32/6.2.Doc(1) and IOC/A-32/6.2.Doc(2),
2. Takes note of document IOC/A-32/6.2.Doc(1) and Resolution EC-55/2 and Annexes subject to further examination by the Financial Committee with a view of formulating a draft resolution for discussion and adoption in plenary.

221. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

6.3 DRAFT ACTION PLAN IN RESPONSE TO THE IOS EVALUATION OF THE IOC STRATEGIC POSITIONING

<u>Working document:</u>	IOC/A-32/6.3.Doc(1)	Draft Action Plan in response to the IOS Evaluation of the IOC Strategic Positioning
<u>Reference:</u>	IOC Circular Letter, 2912 212 EX/9 IOS/EVS/PI/197	Follow-up to Internal Oversight Service Evaluation of the Strategic Positioning of IOC Internal Oversight Service (IOS) evaluation of the strategic positioning of the Intergovernmental Oceanographic Commission (IOC-UNESCO) Evaluation of the strategic positioning of IOC-UNESCO

222. The Executive Secretary introduced this item.

223. He recalled that in September 2021, the UNESCO's Internal Oversight Service published *The Evaluation of the Strategic Positioning of IOC-UNESCO*—[IOS/EVS/PI/197](#) (the Evaluation). The Evaluation included a set of six recommendations and suggested actions. Its key findings and the management response were presented to the UNESCO Executive Board at its 212th session ([212 EX/9](#)).

224. The first Draft Action Plan was presented to the IOC Executive Council at its 55th session in June 2022 as document IOC/EC-55/3.2Doc.(1). Following the positive review by the IOC Executive Council and consultation of Member States through IOC Circular Letter [2912](#), the Draft Action Plan, including updates on progress, where relevant, was presented for endorsement by the Assembly as document IOC/A-32/6.3.Doc(1).

225. The Executive Secretary gave a brief overview of the context in which the Draft Action Plan was prepared and the rationale behind proposed specific actions, their timelines and modalities of implementation. He stressed that Member States discussion and feedback at this Assembly was essential in order to properly guide Secretariat in its work moving forward and reporting on progress both to IOC and UNESCO governing bodies. In addition to the exchange in the plenary, in-depth consideration of the proposals by the Financial Committee, should allow to achieve this.

226. The Executive Secretary explained that the specific decision made by the IOC Executive Council at its 55th session requesting him to prepare 'an estimate of the budget, including the needs in human resources, necessary to sustainably deliver IOC's core programmes and to expand its activities in response to increasing demands of Member States and other stakeholders' (cf Resolution IOC-XXX-3 and Resolution EC-55/2) was implemented through IOC Circular Letter 2912. The Draft Action Plan in response to the IOS Evaluation is the first step in the implementation of this vision. However, given its strategic scope and mid- to long-term ambition, it required further discussion by Member States and was therefore included in the agenda as a separate item 5 – 'IOC and the Future of the Ocean'.

Dec. A-32/6.3

Draft Action Plan in Response to the IOS Evaluation of the IOC Strategic Positioning

The Assembly,

1. Having examined document IOC/A-32/6.3.Doc(1),
2. Takes note of the document IOC/A-32/6.3.Doc(1) subject to further examination by the Financial Committee with a view of formulating a draft resolution for discussion and adoption in plenary.

227. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

6.4 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE
[Statutes Art. 1.2]

228. The Chair of the Financial Committee, Prof. Karim Hilmi, reported to the Assembly on the results of the Committee’s examination of the items entrusted to it by the plenary in addition to the statutory ones foreseen in the Rule of Procedure 8.1(c).

229. The Assembly expressed its high appreciation to the Chair of the Financial Committee Prof. Karim Hilmi, for his effective and efficient way of leading the work of the Financial Committee in a truly inclusive and collegial spirit. Once again, this constructive approach allowed the Committee to complete its expanded and challenging mandate in a very limited period of time.

Draft Resolution A-32/[6.4]

Submitted by

Governance, programming and budgeting matters of the Commission

The Intergovernmental Oceanographic Commission,

[Draft Resolution to be finalised during the session]

230. The representatives of ___ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

6.5 ELECTIONS OF THE OFFICERS OF THE COMMISSION AND MEMBERS OF THE EXECUTIVE COUNCIL
[Statutes Art. 6. B.5 and 7; Annex I to the Rules of Procedure]

Information:

IOC/A-32/6.5.Inf(1)	Updated listing of the IOC electoral groups and listing of the distribution of seats on the Executive Council among the electoral groups
IOC/A-32/6.5.Inf(2)	List of candidates for Elections
IOC/A-32/6.5.NOM	Report of the Chair of the Nominations Committee

231. The Chair of the Nominations Committee reported on this item (IOC/A-32/6.5.NOM).

232. The membership of the Executive Council for the next intersessional period and the 32nd session of the Assembly is given in Annex ____ to the present report.

6.5.1 Election of the Chairperson of the Commission

6.5.2 Election of the Vice-Chairpersons of the Commission

6.5.3 Election of the Members of the Executive Council

Dec. A-31/4.5.2

IOC Elections 2023

The Assembly,

I. Election of the Chair of the Commission

1. Taking note that:
 - (i)
 - (ii)
2. Elects _____ (country)

II. Election of the Vice-chairs of the Commission

3. Taking note that:
 - (i)
 - (ii)
4. Elects
 - _____ (country) (Group 1)
 - _____ (country) (Group 2)
 - _____ (country) (Group 3)
 - _____ (country) (Group 4)
 - _____ (country) (Group 5)

III. Election of the Members of the Executive Council

5. Taking note that:
 - (i)
 - (ii)
6. Elects _____

**6.6 33rd SESSION OF THE ASSEMBLY
AND 57TH SESSION OF THE EXECUTIVE COUNCIL**

233. Dr Ryabinin reminded the Assembly of the recommendations of the 56th session of the Executive Council, acting as the Steering Committee for this Assembly, on the dates and duration of the 57th session of the Council in 2024 and duration of the 33rd session of the Assembly in 2023 (dec. EC-56/4).

234. The Executive Secretary also informed the Assembly of the main events/conferences that will need to be taken into account when choosing the dates for the next sessions.

Dec. A-32/6.6

Dates and Places of next Sessions of the Executive Council and Assembly

The Assembly,

1. Recalling the recommendations of the Executive Council at its 56th session (Dec. EC-56/4),
2. Decides to hold:
 - (i) The 57th session of the Executive Council for ____ days in UNESCO Headquarters, Paris over the period of _____,
 - (ii) The 33rd session of the Assembly for a duration of six [or days 6.5] plus one Ocean Science Day, at UNESCO Headquarters, over the period from _____ to _____ in June-July 2024, preceded by a one-day session of the Executive Council (58th session) acting as the steering committee of the Assembly.

235. The representatives of __ Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: _____.

7 ADOPTION OF RESOLUTIONS AND MODALITIES FOR THE FINALISATION OF THE REPORT

[Statutes, Art. C.7; Rule of procedure 19.2]

236. The Chairperson thanked the Rapporteur Mr/Ms _____ from [country] for his/her excellent work in support of the work of the session.

237. The Chair of the Resolutions Committee reported to the Assembly on the work of the Committee during the session (Annex __ to the present report).

238. The IOC Chair then invited the Assembly to adopt, in plenary, the draft decisions that were still pending after discussion in plenary and __ resolutions. Parts of the draft summary report of the discussions at the present session were presented to the Assembly in English for information.

Dec. A-31/5

Adoption of Resolutions and modalities for the finalisation of the Summary Report

The Assembly,

1. Having considered the recommendations of the Executive Council at its 56th session (Dec. EC-56/3.4) on organization matters,
2. Adopts the decisions and __ resolutions of the session;

3. Takes note of the draft summary report of the session; and
4. 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 2023 at the latest for its approval by correspondence by 15 September 2023.

8 CLOSURE

239. In concluding the session, the Chair expressed his personal appreciation of the Executive Secretary's support over his tenure, and thanked him for his service to IOC on behalf of all the IOC Member States. In response to the Chair and various messages from the floor, the Executive Secretary addressed the outgoing Chair and the Assembly with a concluding statement.

240. The Assembly congratulated the Chair for his dedicated work to the Commission during two consecutive terms and the Executive Secretary offered him the gavel of the session.

241. The new Chair invited the elected Officers, delegates of IOC Member States and representatives of partner organizations to work actively during the intersessional period.

242. The Chair of the Commission, Mr Ariel Hernan Troisi, closed the 32nd Session of the Assembly at ___ on Friday 30 June 2023.

243. The Assembly met in plenary session during __ days from ____, considered __ items on its agenda and approved __ decisions and __ resolutions. The plenary meeting was supported by some __ preparatory meetings and __ information side meetings during the session. The Chair of the Commission closed the 32nd Session of the Assembly at __ on 30 June 2023. The gender ratio of Assembly Member State representatives and all participants, including speakers, was _____ (female:male).