

**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION**  
(of UNESCO)

**TWENTY-SEVENTH SESSION**  
**OF THE IOC COMMITTEE ON INTERNATIONAL OCEANOGRAPHIC DATA**  
**AND INFORMATION EXCHANGE**

UNESCO Headquarters, Paris, France  
22–24 March 2023

**EXECUTIVE SUMMARY**

In accordance with Rule of Procedure 48.3, the IOC Committee on IODE, as a primary Subsidiary Body of IOC, is reporting to the IOC Assembly at its 32<sup>nd</sup> session, which will examine relevant draft Decision A-32/3.4.2 in document IOC/A-32/AP Rev.

For ease of reference of the Assembly and its Financial Committee, the proposed IODE workplan for 2023–2024 is available in Annex II. All decisions and recommendations of the IODE at its 27<sup>th</sup> session are available [online](#).

Annexes to this document remain in English only.

1 The IODE session was attended by 112 participants from 38 IOC Member States and 16 organizations. To assist participants with their preparations for the session the annotated agenda was made available in English, French, Spanish and Russian.

2 During its 27<sup>th</sup> session, the Committee focused its attention mainly 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 projects; (v) enhanced cooperation with other IOC programmes and other organizations; (vi) suspension of ODIN (Ocean Data and Information Network) 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 (Ocean Data and Information System); and (x) work plan and budget for 2023–2024.

3 Reporting 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/>). More information and working documents are available from the page <https://oceanexpert.org/event/3615>.

**Status of the IODE network and NODC health status**

4 During the 2021-2022, 2 Member States (Panama, Portugal) established an NODC, and 7 organizations sent in ADU applications, 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 (Associate Data Units) 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.

5 In order to further expand the IODE network an email campaign had been undertaken in May 2021 whereby an email was sent to 78 IOC Member States that had not established an NODC or ADU. Out of these, 39 Member States received the email but did not respond; for 14 Member States no valid email address was available for the IOC focal point. Contact was established with 21 Member States: Angola, Barbados, Belize, Cabo Verde, Congo (DR), Cook Islands, Costa Rica, Dominican Republic, Estonia, Finland, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Poland, Portugal, Trinidad & Tobago, Venezuela and Viet Nam. The number of IODE national coordinators for data management has increased to 89 for 86 Member States. The number of IODE national coordinators for marine information management is 39 for 38 Member States.

6 The Committee decided to extend the "Inter-sessional working group on the review of NODC health status within the IODE network" for another inter-sessional period and instructed the working group to: (i) provide a status report on the procedures to the IODE Management Group (2024); and (ii) finalize the procedures for submission to the 28th Session of the IODE Committee (2025). The Committee instructed the IODE Management Group to take into account the procedures used by the OBIS Steering Group as a possible model in their deliberations. The Committee noted the publication of several IOC Manuals and Guides such as [IOC Manuals and Guides, 5](#) ('Guide for Establishing an IODE National Oceanographic Data Centre, IODE Associate Data Unit or IODE Associate Information Unit (3rd revised edition)'), [IOC Manuals and Guides, 67](#) ('IODE Quality Management Framework for National Oceanographic Data Centres and Associate Data Units (Revised edition)'), and [IOC Manuals and Guides, 73](#) ('Guidelines for a Data Management Plan').

### **Progress review of the 15 IODE global projects and ODINs**

7 After reviewing progress reports of the 15 IODE global projects, the Committee had decided to continue all projects, specifically the Committee:

- (i) instructed all IODE projects and invited Member States to contribute research and informational documents to AquaDocs, invited institutions and organizations, with insufficient capacity to host their own repository, to use AquaDocs, and recommended that AquaDocs serve as the repository for reports and documents generated by the Decade Actions;
- (ii) welcomed the discussions between the World Ocean Database (WOD) and OIH aimed at integrating WOD in the ODIS ecosystem;
- (iii) adopted [Decision IODE-XXVII.3.3.1.3](#) (Underway Sea Surface Salinity Data Archiving Project (GOSUD));
- (iv) instructed the GTSP project to engage with the GOOS OCG Open-GTS project to explore the possibility of filling in the missing data gaps;
- (v) taking into account the evolution towards ODIS, decided to close the Ocean Data Portal project;

- (vi) noted the review of the health status of OBIS nodes and agreed with regret with the proposal from the SG-OBIS to remove inactive OBIS nodes from the network and invited them to re-join when they have the necessary capacity;
- (vii) urged the IODE community to further document their methodologies and best practices and share them in the Ocean Best Practices System;
- (viii) called on Member States to participate in the Ocean InfoHub Project (OIH) to increase the visibility of their data holdings to the world, and to enable improved and more efficient access to global Ocean data;
- (ix) expressed its appreciation for the progress made by PacMAN (Pacific islands Marine bioinvasions Alert Network), decided to continue this project and requested Member States to support the Secretariat and partners involved in PacMAN to further build upon and replicate PacMAN in other States, especially developing States and SIDS that are more vulnerable to the socio-economic impacts of marine invasive species. This will directly support Member States in implementing target 6 of the recently adopted CBD COP15 Kunming-Montreal 2030 targets, which aims to reduce the introduction of new invasive alien species by 50%, and puts emphasis on priority sites, such as islands.

8 The Committee, while recognizing the importance of IODE related capacity development in the regions, decided to suspend the ODIN (Ocean Data and Information Networks) projects, noting that IODE has become very active in most regions through its OBIS, ODIS/OIH, OTGA, OBPS, AquaDocs and others.

9 The Committee encouraged that IODE activities should be included in the work plans of the IOC Regional Subsidiary Bodies (RSBs) through active participation of IODE national coordinators (data management and information management), NODCs, ADUs and AIUs in meetings of the RSBs, and requested the IODE Secretariat to contact the regional IOC offices to ensure inclusion of data/information in the agenda of RSB sessions. The Committee welcomed the offer by NMDIS (China), as ODINWESTPAC Secretariat, to actively participate in OIH/ODIS in preparation for new future arrangements of ODINs.

### **Revision of structural elements of the IODE Programme**

10 The Committee noted that the IODE programme has been using the term “project” for all its activities since the 1990s for global as well as regional activities. Most of the projects have been formally established through an IODE Recommendation. The Committee observed that naming IODE activities “project” creates the perception that these are activities that are limited in duration and thus also with finite resources. This is 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.

11 The Committee therefore decided to designate IODE activities as follows:

- (i) Programme Component (PC): activity with core UNESCO/IOC Regular Programme funding and staff support, supplemented by in-kind and/or extra-budgetary support, that enables the activity to operate on a sustainable basis;
- (ii) Programme Activity (PA): Long-term activity receiving minimal UNESCO/IOC Regular Programme funding supplemented by in-kind and/or extra-budgetary support; and
- (iii) Project: Activity that is limited in time and is fully funded from extra-budgetary sources.

12 The Committee further decided to designate ODIS, OBIS and OTGA as Programme Components and to take this into consideration in the work plan and budget 2023–2025. The

Committee 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.

### **Rules of procedure for IODE projects**

- 13 The Committee noted that IODE has not adopted or documented any “rules of procedure” that assist new as well as existing projects in the drafting of the projects and steering group terms of reference, election of (Co-)Chair(s) and their terms of reference, election procedures etc. The Committee therefore approved [Document IOC/IODE-XXVII/3.3.4](#) (Rules of Procedure for IODE projects) and instructed all projects to adopt these in their management structure by the next meeting of the IODE Management Group (December 2023/January 2024).

### **Enhanced cooperation with other IOC programmes and other organizations**

- 14 The Committee welcomed cooperation between IODE and:
- (i) the Harmful Algal Information System (HAIS) developed by the IODE/OBIS team and expressed its support for the continued development of and fundraising for the HAIS data portal (<https://data.hais.ioc-unesco.org>), which will be crucial to future editions of the Global HAB Status Report;
  - (ii) the Global Ocean Oxygen Database and Atlas (GO<sub>2</sub>DAT) in which IODE is a key partner in this effort to harness and establish, if required, standard operating mechanisms (OBPS), to build capacities (OTGA) and to connect with NODCs and ADUs, many of which are key stakeholders. The Committee encouraged Member States, NODCs and ADUs to support the development of GO<sub>2</sub>DAT financially and in-kind;
  - (iii) the SDG 14.3.1 data portal (<https://oa.iode.org/>), hosted and technically maintained at IODE. The Committee invited NODCs and ADUs, as well as relevant existing regional networks, to participate in the upcoming data collection calls and expressed its support for the continued involvement of the IODE Secretariat in the further development of the SDG 14.3.1 data portal, which will be a crucial contribution to ODIS;
  - (iv) GOOS: with technical support from the IODE/OBIS team, the Global Ocean Observing System (GOOS) has been able to develop and launch the GOOS BioEco Portal on 21 July 2022, online at <https://bioeco.goosoocean.org>. The Committee instructed its Co-Chairs to engage with the Observations Coordination Group (OCG) Data Strategy Implementation Plan to ensure that it is fit for purpose from the ocean data management community standpoint. The Committee urged IODE experts to participate in (online) OCG meetings. The Committee noted with appreciation the ambitious plan for a BioEco Data Portal that is an integrated resource for national, regional and global ocean observing system monitoring and planning, and instructed IODE OBIS to identify the resource needs to fulfil it in a 2023–2025 planning proposal.
- 15 On cooperation with the Joint WMO-IOC Collaborative Board (JCB), the Committee welcomed the development of the "WMO-IOC Collaborative Strategy (2022–2025)". It urged IOC Member states to work on closer collaboration on interoperability between IOC/IODE OIH/ODIS and WMO WIS 2.0, and instructed the IODE Secretariat to invite WMO to join IODE activities under the Ocean Decade.
- 16 On cooperation with European Commission Projects the Committee welcomed participation of OBIS in four new EU Horizon projects. The Committee welcomed the active participation of the IODE Secretariat in these Horizon Europe projects which strengthen IODE

projects, brings additional staffing resources and brings an international perspective into these EU projects. The Committee invited IODE NODCs, ADUs and AIUs to report (as part of the reporting in preparation for IODE Committee sessions) on projects, programmes and other initiatives in which they are involved and relevant to IODE. The Committee strongly recommended NODCs and ADUs in Europe to consider involving IOC/IODE as a partner in future EU project proposals

### **IODE contributions to the UN Decade of Ocean Science for Sustainable Development**

17 The Committee decided to disband the IWG-SODIS given the new Decade Data Coordination Group (DCG) effort to develop a UN Decade data and information strategic plan, and thanked Dr Hernan Garcia for his leadership and all the international subject matter experts that contributed to developing the IWG-SODIS plan.

18 The Committee noted with appreciation the successful submission of six Decade Actions by IODE: (i) environmental DNA expeditions in marine World Heritage sites; (ii) Ocean Practices for the Decade; (iii) OceanTeacher Global Academy: Building Capacity and Accelerated Technology Transfer for the Ocean Decade; (iv) Pacific Islands Marine Bioinvasions Alert Network (PacMAN); (v) OceanData-2030; and (vi) OBIS 2030. In addition, several proposals were submitted in cooperation with IODE: (i) The World Ocean Database Programme (WODP): Openly discoverable, accessible, adaptable, and comprehensive digital global profile oceanographic data of known quality (submitted by NCEI/NOAA, United States as a Decade contribution); (ii) CoastPredict – Observing and Predicting the Global Coastal Ocean (Italy); (iii) Ocean Observing Co-Design: evolving ocean observing for a sustainable future; and (iv) Marine Life 2030.

19 The Committee urged IODE NODCs, ADUs and AIUs to also submit projects, preferably as IODE Actions or including IODE as a "partner" in projects and invited the IODE World Ocean Database (WOD) project to submit a Decade Action proposal via the IODE Secretariat.

20 The Committee requested the DCU to keep the IODE Secretariat updated on any funding opportunities for the submitted Decade Actions and instructed the IODE Secretariat to update the IODE Management Group and IODE Committee on progress in this regard. It called on the DCU for pro-active action to attract funding to enable the implementation of the submitted Actions.

21 The Committee welcomed the successful application by the IOC Project Office for IODE, Ostend (Belgium) to host the Decade Coordination Office for Data Sharing (DCO Data Sharing). The main roles of the DCO are: "Acts as sub-unit of the central Decade Coordination Unit. Catalysis and coordination of Decade Actions including of Calls for Decade Actions, organize and coordinate Decade review processes, promote cooperation amongst UN and Member State partners, communications, monitoring, and resource mobilization."

### **Revision of the IOC Strategic Plan for Oceanographic Data and Information Management (2017–2021)**

22 The Committee recalled that IODE-XXVI had established the inter-sessional working group to revise the IOC Strategic Plan for Oceanographic Data and Information Management (2017–2021) through Decision IODE-XXVI.6.3. It was noted that the systems following the IOC Data and Information Management Strategic Plan will deliver: (i) interoperable, quality-controlled data on a diverse range of variables, generated according to scientifically and operationally sound methods and 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) by users who have a broad range of capabilities. The working group revised the strategic plan and the IODE Committee adopted

[Recommendation IODE-XXVII/6.2](#) (The IOC Strategic Plan for Ocean Data and Information Management (2023–2029)) for the consideration of the IOC Assembly in 2023 (Agenda item 3.4.2).

### **Revision of the IOC Oceanographic Data Exchange Policy**

- 23 The Committee recalled that the IOC Assembly at its 31<sup>st</sup> session (June 2021) recognized that a revision of the 20-year-old IOC Data Exchange Policy was timely and adopted Decision A-31/3.4.2 (International Oceanographic Data and Information Exchange) including part III Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019) which established the IOC Intersessional Working Group on the Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019) (IWG-DATAPOLICY). The IWG had been given seven specific tasks to complete by the 32<sup>nd</sup> Session of the IOC Assembly. [IOC Circular Letter, 2864](#) was issued on 9 November 2021 and outlined the process to facilitate the work of the IWG-DATAPOLICY and timeline. The IWG met three times in 2022 and an online information session for Member States was organized on 21 October 2022. The Committee adopted [Recommendation IODE-XXVII/6.4](#) (IOC Data Policy and Terms of Use (2023)) for the consideration of the IOC Assembly in 2023 (Agenda item 4.4).

### **Progress and way forward of the ODIS**

- 24 The Committee recalled that the ODIS (Ocean Data and Information System) 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 IOC Assembly in June 2021 through IOC Decision A-31/2.4.2-II (International Oceanographic Data and Information Exchange), (Establishment of the IOC Ocean Data and Information System Project (ODIS)). 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. The ODISCat catalogue contains (April 2023) over 3,100 references to online sources of data and information.
- 25 The Committee noted that the “ocean digital ecosystem” concept promoted and developed through OIH/ODIS is adopted also by the UN Decade of Ocean Science for Sustainable Development (2021–2030) and is referred to in the “Data & Information Strategy for the UN Ocean Decade” to be published in April 2023. It will furthermore be promoted by the Decade Coordination Office (DCO) for Data Sharing, that has been approved for establishment by the IOC Executive Council (2022) and will be hosted by the IOC Project Office for IODE, Ostend (Belgium). It is therefore clear that Ocean InfoHub (and the underpinning ODIS architecture) is a “trailblazer” for the Ocean Decade’s ocean digital ecosystem.
- 26 A 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 Ocean Decade. The programme will play a central role in supporting the Ocean Decade mission to catalyze transformative ocean science solutions for sustainable development, connecting people and the ocean. In order to achieve the Ocean Decade vision of ‘the science we need for the ocean we want’.
- 27 The Committee called on Member States to participate in the Ocean Data and Information System (ODIS), the Ocean InfoHub Project (OIH) and OceanData-2030 to increase the visibility of their data and information holdings to the world, and to enable improved and more efficient access to global Ocean data and information

### **First and Second International Ocean Data Conference (<https://oceandataconference.org>)**

- 28 The first conference (IODC-I) was held in Sopot, Poland, on 14–16 February 2022 as a hybrid event. It was organized jointly by the Government of Poland through the Institute of Oceanology, Polish Academy of Sciences (IOPAN), the IODE Programme of the IOC and the Decade Coordination Unit. It was attended by 591 online and 60 on-site participants. The main objectives of this Conference were to consider regional and global strategies and policies needed



to achieve the digital ecosystem, to discuss existing and required technological developments and their implementation, and to identify future directions in ocean data and information management. The mentioned objectives would furthermore be considered within the multi-sectoral vision of the Ocean Decade. The conference made several recommendations to be acted upon mainly by the global ocean data and information management community.

29 The second conference (IODC-II) was held at UNESCO Headquarters in Paris, as a hybrid event on 20–22 March 2023, prior to IODE-XXVII. The event was attended by 160 participants on site and 296 online. The goal of IODC-II was to focus on the implementation of the commitments and main recommendations identified at IODC-I, and therefore was organized around four sessions following those recommendations: (i) Session 1: Implementing the FAIR and CARE principles for ocean science and sustainable development; (ii) Session 2: Community engagement and capacity development in data literacy; (iii) Session 3: Global ocean digital ecosystem; and (iv) Session 4: Interdisciplinary, societal needs. The Session resulted in a number of specific recommendations.

30 The Committee instructed the IODE Co-Chairs to prepare a brief statement for the 32nd Session of the IOC Assembly (June 2023) on the outcome of IODC-II.

31 The Committee instructed the IODE Management Group to prepare a proposal on the way forward to take the recommendations from both IODC into consideration in the work plan of IODE during the next inter-sessional period (April 2023–March 2025) as well as in the preparations for IODE-XXVIII.

## **Other issues**

### OceanTeacher Global Academy

32 The new ISO 29993 Certification of the IOC Project Office for IODE, Ostend (Belgium) as a learning services provider was awarded in March 2022.

33 The OTGA-2 project implementation (OceanTeacher Academy) was highly impacted by the pandemic, but this has provided an opportunity to explore the possibility of implementing online learning and developing best practices on how to better address the training needs of the IODE and wider IOC community. Despite the necessary adaptations, most training centres successfully delivered at least one online training course during this reporting period (2021–2022). The OTGA Secretariat made an important effort in guiding and supporting all training centres in adapting to this new mode of course delivery, including recruiting an e-Learning Designer and providing a training course on Designing Online Training courses as well as one to one coaching for every course and uploading training contents on the e-Learning Platform. Between May 2021 and August 2022, the OTGA delivered 37 courses in three languages and hosted another 10 courses for other organizations/stakeholders, including VLIZ, BODC/MEDIN, IALA and POGO/AWI Centre of Excellence. All courses during this period have been delivered online and instructor-led, with a small number of self-paced offered. Over 1,800 people started a course and of these over 60% successfully completed it. For the first time the courses delivered in Spanish outnumbered those delivered in English, thanks to the active training centres in Latin America. A large number of learners from the Pacific Islands have also received training.

34 The Committee had been informed that Dr Cláudia Delgado had left the IOC Project Office for IODE on 15 January 2023 to take up a position at the University of Ghent (Belgium) dealing with Marinetraining.eu which is also a partner in the Ocean InfoHub. The Committee expressed its great gratitude to Dr Cláudia Delgado who, as leader of the OTGA team during more than 10 years, has turned the old training paradigm of continuous professional development (CPD) with *ad hoc* in-person courses taught in a classroom environment, into a vibrant inclusive hybrid environment including in-person courses held in a growing network of regional (RTCs) and specialized training centres (STCs) around the world. The Committee thanked the Government of

Flanders (Kingdom of Belgium) for its continued support of IODE and its OceanTeacher Global Academy. The Committee further thanked the institutions that have agreed to host and support an IODE OTGA Regional or Specialized Training Centre.

Renewal of the MoU between the Flanders Marine Institute and IOC regarding the IOC Project Office for IODE

- 35 A new MoU was signed in October 2022 covering the period January 2022 to December 2026. 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 and VLIZ to continue their support.

IODE Achievement awards

- 36 The Committee bestowed IODE achievement awards to the following experts, who contributed exceptional time and effort to the IODE programme: (i) Mr Francisco A. Arias-Isaza In recognition of his commitment and contribution to IODE in the IOCARIBE region and to the OceanTeacher Global Academy; (ii) Ms Paula Cristina Sierra Correa In recognition of her commitment and contribution to IODE in the IOCARIBE region through the Caribbean Marine Atlas; (iii) Mr Jay S. Pearlman and (iv) Mr Johannes Karstensen in recognition of their commitment and contribution to the IODE/GOOS Ocean Best Practices Project; (v) Ms Cláudia M. Neves Delgado in recognition of her commitment and contribution to the IODE OceanTeacher Global Academy Project; (vi) Ms Kristin de Lichtervelde In recognition of her outstanding commitment and contribution to IODE since 2005; (vii) Mr Sergey Belov and (viii) Mr Taco De Bruin in recognition of their leadership as IODE Co-Chairs (2019–2023); and (ix) Mr Peter Pissierssens in recognition of his service to IODE. The Committee thanked FUGRO for co-sponsoring the reception where the awards were given.

Establishment of an Inter-Sessional Working Group on the Review of IODE Structure and Working Methods

- 37 The Committee referring to the ongoing review of NODC health status and IODE management structure as well as the progress of the UN Decade decided to establish an inter-sessional working group on the review of IODE structure and working methods which will: (i) review IODE structure and working methods and evaluate for efficacy and efficiency; (ii) develop, if necessary, a proposal of required measures to adjust programme structure and working methods; and (iii) submit its final report including a draft proposal to IODE-XXVIII. The Committee adopted [Decision IODE-XXVII/9.1](#) (Inter-sessional working group on the review of IODE structure and working methods).

**IODE workplan and budget for 2023–2024**

- 38 The Committee developed its work plan and budget based on the work plans submitted by all projects and has been revised based on available resources. As stated by the Executive Secretary, the financial situation of IOC and IODE has been at a critical level in 2022–2023. For 2024/2025 two scenarios will be presented to the UNESCO General Conference in November 2023: These are the base case (BCS) and zero nominal growth (ZNG) scenarios. The BCS will result in a substantial increase for IOC and its IODE while the ZNG will keep the budget at its current level. The budget table shows the two scenarios for 2024.

- 39 The Committee called on UNESCO Member States to approve one of the Base Case scenarios noting that the ZNG scenario would bring IODE below the minimum level of viability.

- 40 The Committee expressed its 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.



41 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 but also new IOC core activities such as ODIS, OIH, OBPS, OTGA and others. The Committee urged the IOC Executive Secretary to provide additional staff to IODE.

42 The Committee adopted [Recommendation IODE-XXVII/8.4](#) (IODE Work Plan and Budget 2023–2024).

### **Date and Place of the Next Session**

43 Colombia informed the Committee that the next session of IODE (March/April 2023) will coincide with a review of the UN Ocean Decade and with the 20<sup>th</sup> anniversary of the creation of the IODE Project Office and proposed to host the session in Santa Marta, Colombia, subject to Government approval.

### **Election of the Co-chairs**

44 The Committee elected Ms Lotta Fyrberg (Sweden) and Dr Paula Sierra-Correa (Colombia) as IODE Co-chairs for the next inter-sessional period.

Katarina Lotta FYRBERG  
Marine Data Manager  
Oceanographic Unit  
Sveriges meteorologiska och hydrologiska institut  
Folkborgsvägen 1  
Sweden

Paula SIERRA-CORREA  
Research and Information Coordinator  
Research and Information for Coastal Zone  
Management  
Instituto de Investigaciones Marinas y Costeras  
José Benito Vives de Andreis  
Colombia

### **Adoption of Decisions, Recommendations and Summary Report**

45 The Committee adopted two decisions and three recommendations:

Decision IODE-XXVII.3.3.1.3 Underway Sea Surface Salinity Data Archiving Project (GOSUD)

Decision IODE-XXVII/9.1 Establishment of an Inter-Sessional Working Group on the Review of IODE Structure and Working Methods

Recommendation IODE-XXVII.6.2 The IOC Strategic Plan for Ocean Data and Information Management (2023–2029)

Recommendation IODE-XXVII.6.4 IOC Data Policy and Terms of Use (2023)

Recommendation IODE-XXVII.8.4 IODE Work Plan and Budget 2023–2024

46 The text of all above decisions and recommendations is available at the "[IODE-XXVII Decisions and Recommendations](#)" web page.



## ANNEX I

### AGENDA

1. **OPENING**
2. **ADMINISTRATIVE ARRANGEMENTS**
  - 2.1. ADOPTION OF THE AGENDA
  - 2.2. DESIGNATION OF A RAPPORTEUR
  - 2.3. SESSION TIMETABLE AND DOCUMENTATION
  - 2.4. ESTABLISHMENT OF SESSIONAL WORKING GROUPS
  - 2.5. TECHNICAL ARRANGEMENTS
3. **REPORT ON THE PAST INTER-SESSIONAL PERIOD (2021-2022)**
  - 3.1. PROGRESS REPORT ON THE IODE-XXVI WORK PLAN (IODE-XXVI ACTION SHEET)
    - 3.1.1 Outcome of IOC-31
  - 3.2. STATUS OF THE IODE NETWORK
    - 3.2.1 New NODCs, accredited NODCs, ADUs, accredited ADUs and AIUs
    - 3.2.2 Reporting summary of NODCs, ADUs and AIUs
    - 3.2.3 Review of NODC health status within the IODE network
    - 3.2.4 Possible actions to further expand the network
  - 3.3. PROGRESS REPORTS OF IODE PROJECTS
    - 3.3.1 Global Projects
    - 3.3.2 Regional activities
    - 3.3.3 Structural Elements of the IODE Programme
    - 3.3.4 Rules of procedure for IODE projects
  - 3.4. IODE QUALITY MANAGEMENT FRAMEWORK IMPLEMENTATION
    - 3.4.1 Data Centre/ Information Centre accreditation: status and way forward
    - 3.4.2 IODE Project and activity performance evaluation: status and way forward
  - 3.5. PROGRESS REPORTS OF JOINT ACTIVITIES WITH OTHER IOC PROGRAMMES AND OTHER PARTNERS
    - 3.5.1 IOC global programmes
    - 3.5.2 IOC regional programmes (sub-commissions and regional committees)
    - 3.5.3 Post JCOMM: JCB
    - 3.5.4 Participation in European Commission Projects
    - 3.5.5 ICSU World Data System (WDS)
    - 3.5.6 Aquatic Sciences and Fisheries Abstracts (ASFA)
    - 3.5.7 Cooperation with the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC)
    - 3.5.8 Cooperation of IODE in the UN Ocean Decade
  - 3.6. OUTCOME OF THE “INTERNATIONAL OCEAN DATA CONFERENCE - THE DATA WE NEED FOR THE OCEAN WE WANT” 2022 AND 2023
    - 3.6.1 International Ocean Data Conference 2022 - The Data We Need for the Ocean We Want”
    - 3.6.2 International Ocean Data Conference 2023 - The Data We Need for the Ocean We Want”
4. **IODE CAPACITY DEVELOPMENT**
  - 4.1. CONTRIBUTIONS OF IODE TOWARDS THE IMPLEMENTATION OF THE IOC CAPACITY DEVELOPMENT STRATEGY
    - 4.1.1 OceanTeacher Global Academy project: Phase 2
    - 4.1.2 CD activities of other IODE projects
    - 4.1.3 Other potential IODE contributions towards the CD strategy
    - 4.1.4 Reporting on the ODINs

**5. IODE COMMUNICATION AND OUTREACH**

5.1 RE-DEVELOPMENT OF THE IODE WEB SITE

**6. THE FUTURE OF IODE**

6.1. IODE CONTRIBUTION TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

6.1.1 The IWG-SODIS

6.1.2 Establishment of the Decade Coordination Office (DCO) for Ocean Data

6.1.3 Submission of, and participation in, Decade actions by IODE

6.1.4 Other areas of cooperation with the Decade

6.2. REVISION OF THE IOC STRATEGIC PLAN FOR OCEANOGRAPHIC DATA AND INFORMATION MANAGEMENT (2022-2026)

6.3. ESTABLISHMENT OF THE IODE PARTNERSHIP CENTRE FOR ODIS

6.4. REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY

6.5. THE IOC OCEAN DATA AND INFORMATION SYSTEM (ODIS) - PROGRESS AND WAY FORWARD

6.6. RENEWAL OF THE MOU BETWEEN THE FLANDERS MARINE INSTITUTE AND IOC REGARDING THE IOC PROJECT OFFICE FOR IODE

**7. INTRODUCTION TO WORK PLAN AND BUDGET (FINANCIAL RESOURCES 2023-2025)**

7.1. UNESCO REGULAR PROGRAMME FINANCIAL RESOURCES REMAINING FOR THE BIENNIUM 2022-2023

7.2. UNESCO REGULAR PROGRAMME FINANCIAL RESOURCES EXPECTED FOR THE BIENNIUM 2024-2025

7.3. IODE HUMAN RESOURCES (CURRENT AND REQUIRED)

7.3.1 UNESCO Regular Programme, Government of Flanders staff contribution and extra-budgetary project staff

7.3.2 Internships and Secondments

7.4. CONFIRMED EXTRA-BUDGETARY FINANCIAL RESOURCES

7.4.1 Government of Flanders (VLIZ)

7.4.2 Other

7.5. OTHER RESOURCE OPPORTUNITIES FOR 2023-2025

**8. PROPOSED WORK PLAN FOR THE NEXT INTER-SESSIONAL PERIOD (2023-2025)**

8.1. CURRENT PROJECTS

8.2. NEW INITIATIVES

8.3. IODE PROMOTION OPPORTUNITIES 2023-2025

8.4. WORK PLAN AND BUDGET 2023-2025

**9. ANY OTHER BUSINESS**

**10. DATE AND PLACE OF THE NEXT SESSION (IODE-XXVIII, 2025)**

**11. ELECTION OF CO-CHAIRS**

**12. IODE ACHIEVEMENT AWARDS 2023**

**13. ADOPTION OF DECISIONS AND RECOMMENDATIONS**

**14. ADOPTION OF THE SUMMARY REPORT**

**15. CLOSURE**

ANNEX II

IODE Work Plan and Budget 2023–2024

([Recommendation IODE-XXVII/8.4](#))

	Requested by IODE projects	Requested by IODE projects	scen1: 41 C/5 continued	scen1: ZNG	scen2: 41 C/5 continued	scen2: potential increase 2024-2025
	2023	2024	2023	2024	2023	2024
<b>Global Projects</b>	41 C/5	42 C/5	41 C/5	42 C/5	41 C/5	42 C/5
<b>AquaDocs</b>						
- WP2 tech development and maintenance (Dspace hosting and maintenance)	20,000	20,000	5,000	5,000	5,000	5,000
<b>sub-total</b>	<b>20,000</b>	<b>20,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>
<b>GODAR</b>					0	
- Conduct online meetings to identify historical oceanographic data sets to be added to WOD. Catalogued and prioritized data digitation requests. Identify costs to digitize relevant data within budget. Identify Crowdsourced Weather opportunities. Travel for data rescue workshops	5,000	0	2,000	0	2,000	0
<b>sub-total</b>	<b>5,000</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>2,000</b>	<b>0</b>
<b>GOSUD</b>					0	
Organise steering group meetings and assist to meeting that could improve GOSUD project	5,000	5,000	2,000	5,000	2,000	5,000
<b>sub-total</b>	<b>5,000</b>	<b>5,000</b>	<b>2,000</b>	<b>5,000</b>	<b>2,000</b>	<b>5,000</b>
<b>GTSP</b>					0	
Hold in-person biennium steering group meeting - event cost	50,000	0	2,000	0	2,000	0
<b>sub-total</b>	<b>50,000</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>2,000</b>	<b>0</b>
<b>ICAN</b>						
SG-ICAN (in person)	0	20,500	0	0	0	0
Seagrant summer scholar participation	3,500	3,500	0	3,500	0	3,500
Online ICAN workshop (interpretation and hosting)	12,500	0	0	0	0	0
In-person conference in conjunction w CoastGIS	0	2,000	0	2,000	0	2,000
Expert travel	4,000	4,000	2,000	2,000	2,000	2,000
<b>sub-total</b>	<b>20,000</b>	<b>30,000</b>	<b>2,000</b>	<b>7,500</b>	<b>2,000</b>	<b>7,500</b>
<b>IQUOD</b>						
Continued development of the IQuOD expert quality control tool	1,000	1,000	1,500	1,000	1,500	1,000
Workshop Berlin	15,000	0	0	0	0	0
Workshop 2024	0	15,000	0	5,000	0	5,000
<b>sub-total</b>	<b>16,000</b>	<b>16,000</b>	<b>1,500</b>	<b>6,000</b>	<b>1,500</b>	<b>6,000</b>
<b>OBIS</b>						
Two annual SG-OBIS sessions organized, report including workplan agreed and published (May 2023 and 2024), co-chair travel	25,000	25,000	12,000	14,000	12,000	14,000
OBIS training material and OBIS manual maintenance and organize regular webinars or online workshops.	60,000	60,000	0	0	0	0
Monthly OBIS QC meetings	11,000	11,000	0	0	0	0

Implement chronometric data into the OBIS platform (due May 2023).	11,000	0	0	0	0	0	0
Development and maintenance of the OBIS system	60,000	60,000	7000	7000	7000	7000	7000
Establishment of new OBIS nodes	11,000	11,000	0	0	0	0	0
Helpdesk support to existing OBIS nodes and users	53,000	53,000	0	0	0	0	10,000
<b>sub-total</b>	<b>231,000</b>	<b>220,000</b>	<b>19,000</b>	<b>21,000</b>	<b>19,000</b>	<b>19,000</b>	<b>31,000</b>
<b>OBPS</b>							
project manager contribution (committed: 3125)	5,500	13,750	0	13,750	0	0	13,750
Co-Chair travel	1,500	1,000	2,000	1,000	2,000	0	0
AWS hosting costs			0	0	0	0	3,050
Secure a CORE Trust Seal Repository Certification	0	1,000	0	1,000	0	0	1,000
Continue efficient fit-for-purpose operations of the OBPS repository including user-required technology enhancements	8,000	3,000	0	0	0	0	0
Implement a user-tested automated metadata submission system	5,000	0	0	0	0	0	0
Design and implement machine readability of templates	0	5,000	0	0	0	0	0
Semantic capabilities to accommodate broader range of disciplines including contractor changes and additional vocabularies	10,000	12,500	0	0	0	0	0
Develop a pilot demonstration of a federated system so that queries across partner systems enable access to best-practices methodology content hosted elsewhere	0	2,500	0	0	0	0	0
Provide guidance to communities on process for endorsing BP / develop rigorous OBPS criteria for endorsement acceptance	2,500	0	2,000	0	2,000	0	0
Expanded communication plans to broaden engagement of ocean communities in creation and use of BP	2,000	1,000	0	1,000	0	0	0
<b>sub-total</b>	<b>34,500</b>	<b>39,750</b>	<b>4,000</b>	<b>16,750</b>	<b>4,000</b>	<b>4,000</b>	<b>17,800</b>
<b>OCEANEXPERT</b>							
no cost	0	0	0	0	0	0	0
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ODIS</b>							
base support cost part time staff and basic operational expenses	0	0	0	0	0	0	45,000
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45,000</b>
<b>ODISCAT</b>							
no cost	0	0	0	0	0	0	0
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ODP</b>							
ended	0	0	0	0	0	0	0
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OIH</b>							
extrabudgetary project - then part of ODIS	0	0	0	0	0	0	0
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTGA</b>							
extrabudgetary project until 6/2024 - base support cost (ex staff)	0	0	0	0	0	0	30,000
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,000</b>
<b>PACMAN</b>							



extrabudgetary project - no RP cost, ending 6/2024	0	0	0	0	0	0	0
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>QMF</b>							
no cost	0	0	0	0	0	0	0
<b>sub-total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>WOD</b>							
continue development of WODc	50,000	50,000	0	0	0	0	0
<b>sub-total</b>	<b>50,000</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Regional projects</b>							
<b>ODINAFRICA</b>	0	0	0	0	0	0	0
<b>ODINCARSA</b>	0	0	0	0	0	0	0
<b>ODINCINDIO</b>	0	0	0	0	0	0	0
<b>ODINWESTPAC</b>					0		
OTGA RTC Tianjin Training Course on Marine Information Technologies (May 15-26,2023, Hybrid, Tianjin, China)	30,000	0	0	0	0	0	0
Second ODINWESTPAC advisory group meeting (May 27,2023, Hybrid, Tianjin, China)	0	20,000	0	0	0	0	0
<b>sub-total</b>	<b>30,000</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Project Office general expenses</b>							
travel cost	5,000	5,000	5,000	5,000	5,000	10,000	10,000
IT general (misc subscriptions, Domain registrations, ...) (estimated at 14000)	14,000	14,000	0	14,000	0	14,000	14,000
<b>sub-total</b>	<b>19,000</b>	<b>19,000</b>	<b>5,000</b>	<b>19,000</b>	<b>5,000</b>	<b>24,000</b>	<b>24,000</b>
<b>IODE Management group meeting</b>							
meeting january 2024	0	10,000	0	0	0	10,000	10,000
<b>sub-total</b>	<b>0</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>10,000</b>
<b>GRAND TOTAL</b>	<b>480,500</b>	<b>429,750</b>	<b>42,500</b>	<b>80,250</b>	<b>42,500</b>	<b>181,300</b>	<b>181,300</b>
Available (estimated: depends on cost IODE27) - status 14/3/2023			50,000	75,000	50,000	175,000	175,000
Balance			7,500	-5,250	7,500	-6,300	-6,300