



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

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

online
20–23 April 2021

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 31st session, which will examine relevant draft Decision A-31/3.4.2 in document IOC/A-31/AP Rev.

For ease of reference of the Assembly and its Financial Committee, the proposed IODE workplan for 2021–2022 is available in Annex II. Other decisions and recommendations of the IODE at its 26th session are available online.

Annexes to this document remain in English only.

- 1 The IOC Committee on International Oceanographic Data and Information Exchange held its 26th session (IODE-XXVI) online between 20 and 23 April 2021. Considering the limited time available for the Session because of the COVID-19 pandemic, only key issues were discussed at the Session. Reporting on the work of the IODE National Oceanographic Data Centres (NODC) and Associate Data Units (ADU) was made available online through the web site <https://surveys.iode.org/2019-2020-nodc-and-adu/>. Progress reports on IODE projects were made available through relevant working documents (see <https://www.iode.org/iode26>).
- 2 The IODE session was attended by 155 participants from 65 IOC Member States and 9 organizations. To accommodate participants from the wide range of time zones two plenary sessions of two hours were held on each day of the session (07:00-09:00 UTC and 15:00-17:00 UTC). To assist participants with their preparations for the session the annotated agenda was made available in English, French, and Spanish (Russian speaking participants had indicated that no translation was required for them).
- 3 During its 26th session, the Committee focused its attention mainly on the following key issues: (i) review of NODC health status within the IODE network; (ii) IODE project and activity performance evaluation methodology; (iii) future of the IODE Ocean Data and Information Networks (ODINs); (iv) establishment of the IOC Ocean Data and Information System (ODIS) project and associated partnership centre; (v) contribution of IODE to the UN Decade of Ocean Science for Sustainable Development; (vi) revision of the IOC strategic plan for data and information management (2022–2025); (vii) revision of the IOC oceanographic data exchange policy; (viii) performance review of the IOC Project Office for IODE; (ix) (first) international ocean data conference (November 2021); and (x) workplan and budget for 2021–2022.

Pre-Committee working groups

- 4 As no sessional working groups could be organized during the shortened online sessions the IODE Management Group, at its January 2021 meeting, had decided to establish pre-committee working groups on key issues. These were held between 15 February 2021 and 4 March 2021. All participants who had registered for IODE-XXVI were invited to participate in one or more of the groups. The groups were requested to discuss the substance of the key issues to get clarifications and to propose a way forward, considering the very limited time for such discussions during the IODE-XXVI Session.

Review of NODC Health Status within the IODE Network

- 5 The Committee, noting with regret the lack of progress, decided to extend the Inter-sessional working group on the review of NODC health status within the IODE network and instructed it to continue its work and provide (i) a revision of IOC Manuals and Guides, 5 (*Guide for Establishing a National Oceanographic Data Centre*); (ii) a revision of IOC Manuals and Guides, 67 (*IODE Quality Management Framework for National Oceanographic Data Centres and Associate Data Units (Revised edition)*); and (iii) finalise IODE data centre health check procedures, for submission to the IODE Management Group for its January 2022 meeting. In addition, the Committee instructed the Secretariat to publish and circulate the documents after their approval by the IODE Management Group.
- 6 To further expand the IODE network of data centres, the Committee instructed the Secretariat to contact the IOC focal points of IOC Member States that have not established NODC or ADU and invite them to consider establishing such as facility, and to offer to meet with the contact to discuss in more detail. Expanding the network requires an understanding the challenges interested member states are facing in terms of resourcing, national buy-in, etc. If the representative is interested but not in a position to participate through full NODCs/ADUs, IODE should work with the Member State on alternative opportunities to participate in a sustainable way, possibly through partnership with other regions, etc. It is strongly recommended that the NODC and ADU Community Surveys be used as a supporting resource in this work.

Joint activities with other IOC programmes and other partners

- 7 The Committee welcomed the continued and expanding cooperation of IODE with other IOC programmes and other partners and invited these programmes and partners to invite IODE and its projects as partners in their activities. Particular reference was made to collaboration between IODE and the HAB programme (Harmful Algal Information System – HAIS, and Global HAB Status Report – GHSR), and with the ocean acidification activities of the IOC Ocean Sciences Section programme, urging IODE experts and IODE data centres to actively participate in these activities.

Future of the IODE Ocean Data and Information Networks (ODINs)

- 8 The Committee recalled that IODE has over the years established regional Ocean Data and Information Networks to support the strengthening of capacities for ocean data and information management and encourage the development of data and information products as well as collaboration within the regions. The networks established included: (i) ODINAFRICA: Ocean Data and Information Network for Africa; (ii) ODINBLACKSEA: Ocean Data and Information Network for the Black Sea; (iii) ODINCARSA: Ocean Data and Information Network for the Caribbean and South America; (iv) ODINECET: Ocean Data and Information Network for European Countries in Economic Transition; (v) ODINWESTPAC: Ocean Data and Information Network for the Western Pacific; and (vi) ODIN-PI: Ocean Data and Information Network for the Pacific Islands. The Committee noted the limited and declining financial resources available from UNESCO Regular Programme to fund each ODIN. The Committee decided to continue ODINs and adopted [Decision IODE-XXVI.4.1.2: IODE Ocean data and information networks \(ODINs\)](#).

Establishment of the ODIS project and associated Partnership Centre

9 The Committee recalled that the IOC Assembly at its 30th Session, through Decision IOC-XXX/7.2.2 (Ocean Data and Information System (ODIS)) “*Endorses the ODIS Concept, Implementation Plan and Cost Benefit Analysis; Invites the IODE Committee to prepare a fully detailed and costed project proposal for the IOC Ocean Data and Information System (ODIS) for submission to the IOC Executive Council at its 53rd session in 2020.*” Document IOC/IODE-XXVI/6.1.1 (Proposal for the Establishment of the IOC Ocean Data and Information System (ODIS)) was prepared (authors: Tobias Spears, Pier-Luigi Buttigieg, Lucy Scott, Peter Pissierssens). It provides the “fully detailed and costed project proposal for the IOC Ocean Data and Information System (ODIS)” as requested. The Committee noted that, as a first step towards the development of ODIS, the Ocean InfoHub (OIH) project was being implemented since April 2020 (funded by the Government of Flanders, Kingdom of Belgium): a new initiative to streamline access to ocean science data and information for management and sustainable development.

10 The IODE Committee adopted [Recommendation IODE-XXVI/6.1.1](#): Establishment of the IOC Ocean Data and Information System Project (ODIS).

11 The Committee expressed its appreciation to EMODNET for joining ODIS, noting that IODE appreciates the challenges of regional systems and the need to ensure ODIS works for all partners.

12 The Committee further recalled the establishment of the IODE Ocean Data Portal project that was adopted by IODE-XIX in 2007. In addition, IODE-XIX adopted terms of reference for the Partnership Centre for the IODE Ocean Data Portal which was established at RIHMI-WDC of Roshydromet (Obninsk, Russian Federation) in 2013.

13 It was noted that technology has evolved considerably since 2007. While central portals were considered as the best way to improve regional or global data access and management, today’s data sharing aims at interoperability technology making use of existing data systems, leveraging the web as the platform, as proposed for ODIS. Within IODE it has been widely recognized that many of the 150 Member States currently do not have the required human and technical capacity to host online data and information services even when an NODC or ADU is present. It is therefore proposed that the efforts of Partnership Centre for IODE Ocean Data Portal should be concentrated now on OIH/ODIS rather than standalone tools only as it was before. Accordingly, the Committee adopted [Decision IODE-XXVI.6.1.2: Revision of the terms of reference of the Partnership Centre for the IODE Ocean Data Portal](#).

Contribution of IODE to the UN Decade of Ocean Science for Sustainable Development

14 The Committee recalled that IODE-XXV adopted recommendation IODE-XXV.5.3 on the establishment of the inter-sessional working group (IWG) (Chaired by Dr Hernan Garcia, USA) to propose a strategy on ocean data and information stewardship (SODIS) for the Ocean Decade which, *inter alia*, was instructed to “*Prepare a proposed Ocean Data and Information Stewardship Strategy*”. The IWG-SODIS has elaborated a data and information strategy for the Ocean Decade.

15 IODE organized two online workshops in 2020: (i) Workshop on data sharing between UN agencies as a contribution to the UN Decade of Ocean Science for Sustainable Development (20 April 2020); and (ii) International data sharing workshop for non-UN IGOs, Global and Regional organizations and projects, NGOs and private sector (12 October 2020). The main objectives of these two events were: (i) to organize a meet-and-greet for the invited organizations so they can familiarize themselves with IODE; (ii) to invite the participating organizations to join the IWG-SODIS; (iii) to invite the participating organizations to provide input to the [ODIS Catalog of Sources](#); and (iv) to invite the participating organizations to collaborate on ocean data sharing under the Ocean Decade umbrella. In addition, the (First) International Ocean Data Conference is planned to take place November 2021 (Sopot, Poland).

16 The Committee adopted [Decision IODE-XXVI.6.2: IODE Contributions to the UN Decade of Ocean Science for Sustainable Development \(2021–2030\) and Establishment of an IODE Inter-Sessional Working Group](#).

17 The Committee welcomed the invitation extended to IODE to collaborate in "Ocean Observing Co-Design – Evolving ocean observing for a sustainable future" and "CoastPredict – Observing and Predicting the Global Coastal Ocean", "Marine Life 2030" – A Global Integrated Marine Biodiversity Information Management and Forecasting System for Sustainable Development and Conservation, and "BOON" – Biomolecular Ocean Observing Network, but regretted that the lead of the "Digital Twins of the Ocean" – DITTO Decade action had not involved IODE, taking into account the action's objectives that are close to those of ODIS. The Committee invited the leads of Decade Actions to discuss cooperation with IODE and requested the IODE Co-Chairs to establish contact with the Decade Action leads. The Committee requested that in addition to the Decade Action proposals where IODE is already engaged, the IODE Co-Chairs seek IODE involvement in other relevant Decade Actions, both current and future, and to regularly report back to the IODE Management Group.

IOC Strategic Plan for Data and Information Management

18 The IODE-XXV Committee established an inter-sessional working group to update the Strategic Plan, through Decision IODE-XXV.5.4 with the following Terms of Reference:

"This working group will review and update the IOC Strategic Plan for Oceanographic Data and Information Management (2017–2021). The revised version of the Strategic Plan (2022–2026) will be presented to IODE-XXVI for endorsement and the IODE Co-chairs will formally submit the 2022–2026 Strategic Plan, on behalf of the IODE Committee, to the 31st Session of the IOC Assembly. The working group will carry out its work electronically".

The IODE Management Group, at its January 2021 meeting proposed that the inter-sessional working group should take into account its progress to propose a strategy on ocean data and information stewardship for the Ocean Decade (IWG-SODIS), particularly Document IOC/IODE-MG-2021/5.1 (Proposed Data and Information Strategy for the Ocean Decade). The IODE Management Group stated that:

"the proposed Ocean Decade data and information strategy is comprehensive and covers ocean data and information from all sources, at all spatial and temporal scales, and for all purposes. The vision is to achieve timely and openly discoverable, accessible, and adaptable digital data and information of known quality about the ocean. This would enable the rapid and equitable development of solution-oriented value-added products and services by and for the Ocean Decade community for relevant decision-making. Central to this strategy is to achieve the greatest public good".

The Committee decided to close the inter-sessional working group to update the Strategic Plan and to establish a new group with new terms of reference.

19 The Committee adopted [Decision IODE-XXVI.6.3: Establishment of an Inter-Sessional Working Group to Revise the IOC Strategic Plan for Oceanographic Data and Information Management](#).

Revision of the IOC Oceanographic Data Exchange Policy

20 The Committee noted that the current IOC Oceanographic Data Exchange Policy (<https://www.iode.org/policy>) dated from 2003 (IOC Assembly adopted Resolution XXII-6), slightly updated in 2019. The Committee agreed that there are enough elements that warrant a revision of the IOC data policy. The result should be an ambitious new data policy that further promotes and

supports free and open exchange of data. The IOC data policy, which was developed 20 years ago, will therefore be reviewed to ensure alignment with data policies at national, regional and international level as well as those from other sectors, and should reflect current international principles, which did not yet exist in 2003.

21 The Committee noted that the current data exchange policy does not refer to information as used by IODE. The Committee referred to (iv) of the objectives of the inter-sessional working group. The Committee noted that this policy would also pertain to information and information products.

22 The Committee adopted [Recommendation IODE-XXVI.6.4](#): Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019).

Performance Review of the IOC Project Office for IODE (agreement expiring 31/12/2021)

23 The Committee recalled that during the 26th Session of the IOC Committee on International Oceanographic Data and Information Exchange and Scientific Conference, Tokyo, Japan, 18–22 February 2019 it was decided to review the IODE Project Office activities. This review was requested by IOC/IODE, recalling that the MoU signed in 2017 is due to expire on 1 December 2021, and also recalling that Article IV of that MoU states:

“a review of the performance of the UNESCO/IOC Project Office for IODE shall be organized once, and prior to the expiry of this Memorandum of Understanding. The evaluation shall be submitted for approval to the IODE Committee that oversees the Project Office activities. The IODE Committee may, as it deems necessary, recommend the renewal or extension of this agreement and will submit this Recommendation to the next available Session of the IOC Assembly or Executive Council”.

24 The objectives of the review were to: (i) evaluate the IODE Project Office activities; and (ii) propose or not the renewal of the current MoU between IOC and the Flanders Marine Institute (VLIZ). The review was carried out by Mr Loic Petit de la Villéon (France) and Mr Adam Leadbetter (Ireland) free of charge to IODE.

25 The overall recommendation of the reviewers was to renew the MoU between IOC and the Flanders Marine Institute on the hosting of the IOC Project Office for IODE, Ostend, Belgium. The Committee expressed its great appreciation to the Government of Flanders (Kingdom of Belgium) and the Flanders Marine Institute (VLIZ) for the long-term support provided to the IOC Project Office for IODE, stressing that the Office has been crucial for the continuing growth and success of the IODE Programme and IOC in general.

26 The Committee thanked the reviewers for their excellent work which they performed pro bono.

27 The Committee requested the Government of Flanders to continue its support and invited other Member States to complement the support to allow further development of the IODE, its activities, products and services.

28 The Committee adopted [Recommendation IODE-XXVI.6.5](#): The UNESCO/IOC Project Office for IODE in Ostend, Belgium.

(First) international ocean data conference (November 2021)

29 The Committee recalled that because of the COVID-19 pandemic that started in February/March 2020 it was decided to organize the “(First) International Ocean Data Conference” in Sopot, Poland either on 15–19 November 2021 or 22–26 November 2021. This event was

initially considered as a postponed IODE Scientific Conference (as was organized prior to the past few IODE sessions) but it was realized that this event could be the first of a series of biannual major conferences on ocean data and information, contributing also to the Ocean Decade. As it was yet unclear whether it would be possible to organize the event as fully face-to-face or mixed with online options were left open. The target would be to reach a few hundred participants (mixed face-to-face/online).

- 30 The IODE Committee agreed on the following list of topics for the Conference:
- (i) The Global Ocean Data Ecosystem: status and way forward
 - (ii) Data system networking and interoperability technology and methodology: status report
 - (iii) Identifying data and information user needs at the national level
 - (iv) Joining multi-sectoral data: experiences and required action
 - (v) Best practices in data and information management
 - (vi) Global data sharing: changes in data sharing policies
 - (vii) The IOC Ocean InfoHub: experiences and next steps
 - (viii) The future of global databases: what's next for WOD, OBIS,
 - (ix) Data products and services: new developments
 - (x) The small island dilemma: collecting, managing, sharing and using data with minimum resources
 - (xi) Including indigenous and citizen science data into the global data ecosystem
 - (xii) IODE 60th anniversary

31 The Committee established a Planning Committee, a Scientific Committee and Local Organizing Committee. The Committee thanked the Government of Poland for its kind offer to host the Conference in Sopot. The Committee urged all Member States, IODE NODCs, ADUs, AIUs and other interested experts to actively participate in the Conference by coming to Sopot or by participating online.

32 The Committee noted that the audience of the Conference will not be limited to the IODE community but wishes to welcome other communities taking into account the ambitions of the Ocean Decade. The Committee noted that the Conference will not focus on technical aspects of data and information exchange (as is the case for e.g., IMDIS) but on a wider range of topics as listed above. The Committee considered the need to change the name of the Conference as "First" does not apply very well. It was recommended to consider 'International Ocean Decade Data Conference' or a title that relates to the Ocean Decade statement "The Data We Need for the Ocean We Want". The Committee requested the Co-Chairs to discuss the revised title with the Decade Coordination Unit.

Other issues

33 The Committee, noting the restructuring of WMO, recommended that further discussions on the former JCOMM/IODE Global Data Assembly Centre (GDACs) would be needed with the Joint WMO-IOC Collaborative Board (JCB) and requested Dr Sergey Belov, IODE Co-Chair, to start those discussions.

34 The Committee, noting the abolishment of JCOMM, decided to abolish the Expert Team on Data Management Practices and invited IOC to discuss with WMO through the Joint WMO-IOC Collaborative Board (JCB) the form of future collaborations on data and information management and ocean best practices aspects via joint projects, and other forms. (action by Dr Sergey Belov, IODE Co-Chair).

35 Taking into account their response to the IODE reporting survey 2019–2020 (<https://surveys.iode.org/2019-2020-nodc-and-adu/>), the Committee invited Estonia (Tallinn University of Technology); (ii) Finland (Finnish Meteorological Institute); (iii) Portugal (Instituto Hidrografico); and (iv) Trinidad and Tobago (Institute of Marine Affairs) to join the IODE network as NODC or ADU.

36 Through [Decision IODE-XXVI.8.2](#), the Committee established the joint IODE/IAMSLIC AquaDocs project. AquaDocs will be a comprehensive and subject domain-specific e-repository providing high visibility to content and authors, covering ocean, freshwater, brackish and what is now starting to be called urban water within the coastal zone. It will be curated (including advanced quality control) by skilled marine and freshwater information professionals and will complement commercial journals and bibliographic databases/repositories by focusing on grey literature. The repository will grow with content from the existing and expanding community of contributors and future FAO-ASFA Trust Fund projects.

IODE workplan and budget for 2021–2022

37 Regarding IODE staffing, the Committee expressed its concern over the considerable dependency on extra-budgetary funding for IODE staffing. The Committee, while noting the difficulty to establish new regular positions within IOC and the similar needs of other programmes within IOC, both old and new, called on the Executive Secretary to consider the long-term sustainability of the IODE programme when preparing the IOC staffing plan for the next biennia. The Committee called on Member States to consider seconding, either at the IOC Project Office for IODE, in Ostend, Belgium or in-kind (working from their usual place of work) to strengthen the IODE Secretariat.

38 The Committee thanked the Government of Flanders (Kingdom of Belgium) for continuing to provide three full-time staff members to the IOC Project Office for IODE and invited the Government of Flanders to continue this support.

39 The Committee welcomed the approval of the three proposals by the Flanders-UNESCO Trust Fund for Science (2020–2022) (IOC Ocean InfoHub, OceanTeacher Global Academy Phase II, and Pacific Islands Marine bioinvasions Alert Network) and thanked the Government of Flanders for the support. In addition, it thanked the Government of Norway for its support to three new projects focusing on Africa that are closely related to the IOC Ocean InfoHub.

40 The Committee noted with appreciation the in-kind support provided by all IODE NODCs, ADUs and AIUs, through their individual and joint activities, to the sharing and exchange of data and information, and suggested that these should also be considered when calculating IODE revenue. The Committee recommended that the value of IODE's activities through its NODCs, ADUs, AIUs, experts and projects be recognized and possibly expressed in monetary and societal value and requested the IODE Management Group to study this issue.

41 The Committee expressed its deep concern about the continued decline in UNESCO Regular Programme funds made available to IODE.

42 The Committee stated that the current amount available will bring IODE at a critical level unable to implement its workplan and maintain the global network of data and information centres built over the past six decades.

43 The Committee noted with great concern that the budget has now reached a level that no longer allows capacity development at the regional level through the regional Ocean Data and Information Networks (ODINs) which will seriously impact on the equitable participation of the concerned Member States in IODE as well as in data and information management activities contributing to the Ocean Decade.

44 The Committee adopted **Recommendation IODE-XXVI. 8.3** (IODE Work Plan and Budget for 2021-2022) attached as Annex II.

Date and Place of the Next Session

45 No Member States came forward at the Committee meeting offering to host IODE-XXVII in 2023. The Committee invited Member States to consider hosting the next session.

46 The Committee urged Member States from developing regions to more actively participate in sessions of the Committee as well as in IODE working groups and other subsidiary bodies in order to improve the geographic balance within IODE. Similarly, the Committee urged Member States to consider gender balance when nominating experts for IODE related activities, groups and nominations.

Election of the Co-chairs

47 The Committee re-elected Dr Sergey Belov (Russian Federation) and Mr Taco de Bruin (The Netherlands) as IODE Co-chairs for the next inter-sessional period.

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Adoption of Decisions, Recommendations and Summary Report

48 The Committee adopted 5 decisions:

Decision IODE-XXVI.4.1.2: IODE Ocean Data and Information Networks (ODINs)

Decision IODE-XXVI.6.1.2: Revision of the Terms of Reference of the Partnership Centre for the IODE Ocean Data Portal

Decision IODE-XXVI.6.2: IODE Contributions to the UN Decade of Ocean Science for Sustainable Development (2021–2030) and Establishment of an IODE Inter-Sessional Working Group

Decision IODE-XXVI.6.3: Establishment of an Inter-Sessional Working Group to Revise the IOC Strategic Plan for Oceanographic Data and Information Management

Decision IODE-XXVI.8.2: Establishment of the Aquadocs Project

49 The Committee adopted 4 recommendations:

Recommendation IODE-XXVI.6.1.1: Establishment of the IOC Ocean Data and Information System Project (ODIS)

Recommendation IODE-XXVI.6.4: Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019)

Recommendation IODE-XXVI.6.5: The UNESCO/IOC Project Office for IODE in Ostend, Belgium

Recommendation IODE-XXVI.8.3: IODE Workplan and Budget for 2021–2022

50 The text of all above decisions and recommendations is available at the "[IODE-XXVI 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 (2019-2021)**
 - 3.1 PROGRESS REPORT ON THE IODE-XXV WORK PLAN AND IODE-XXV RECOMMENDATIONS AND DECISIONS
 - 3.2 STATUS OF THE IODE NETWORK
 - 3.2.1 Reporting summary of NODCs, ADUs and AIUs**
 - 3.2.2 Review of NODC health status within the IODE network**
 - 3.2.3 Possible actions to expand the network**
 - 3.3 PROGRESS REPORTS OF GLOBAL 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
- 4. IODE CAPACITY DEVELOPMENT**
 - 4.1 CONTRIBUTIONS OF IODE TOWARDS THE IMPLEMENTATION OF THE IOC CAPACITY DEVELOPMENT STRATEGY
 - 4.1.1 IODE OceanTeacher Global Academy project: Phase 2**
 - 4.1.2 Future of the ODINs**
- 5. COMMUNICATION AND OUTREACH**
- 6. THE FUTURE OF IODE**

- 6.1 FURTHER DEVELOPMENT OF ODIS
 - 6.1.1 Establishment of the IODE ODIS Project**
 - 6.1.2 Establishment of the IODE Partnership Centre for ODIS**
- 6.2 IODE CONTRIBUTION TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT
- 6.3 IOC STRATEGIC PLAN FOR DATA AND INFORMATION MANAGEMENT (2022-2026)
- 6.4 REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY
- 6.5 PERFORMANCE REVIEW OF THE IOC PROJECT OFFICE FOR IODE (agreement expiring 31/12/2021)
- 7. INTRODUCTION TO WORK PLAN AND BUDGET (FINANCIAL RESOURCES 2019-2021)**
 - 7.1 UNESCO REGULAR PROGRAMME FINANCIAL RESOURCES REMAINING FOR 2020-2021
 - 7.2 UNESCO REGULAR PROGRAMME FINANCIAL RESOURCES EXPECTED FOR THE BIENNIUM 2022-2023
 - 7.3 IODE HUMAN RESOURCES (CURRENT AND REQUIRED)
 - 7.4 CONFIRMED EXTRA-BUDGETARY FINANCIAL RESOURCES
- 8. PROPOSED WORK PLAN FOR THE NEXT INTER-SESSIONAL PERIOD (2021-2022)**
 - 8.1 FIRST INTERNATIONAL OCEAN DATA CONFERENCE (November 2021)
 - 8.2 NEW INITIATIVES
 - 8.3 WORK PLAN AND BUDGET 2021-2022
- 9. ANY OTHER BUSINESS**
- 10. DATE AND PLACE OF THE NEXT SESSION (IODE-XVII, 2023)**
- 11. ELECTION OF THE CO-CHAIRS**
- 12. IODE ACHIEVEMENT AWARDS 2021 (virtual ceremony)**
- 13. ADOPTION OF DECISIONS, RECOMMENDATIONS AND SUMMARY REPORT**
- 14. CLOSURE**

ANNEX II

Recommendation IODE-XXVI.8.3

IODE WORKPLAN AND BUDGET FOR 2021–2022

The IOC Committee on International Oceanographic Data and Information Exchange,

Having reviewed its programme implementation requirements for the period 2021–2022,

Being aware of the continuing financial crisis faced by UNESCO and its IOC,

Noting with concern the continued and substantial decline in UNESCO Regular Programme funds available to IODE which will bring IODE at a critical level unable to (i) implement its work plan and maintain the global network of data and information centres built over the past 6 decades, and (ii) provide capacity development at the regional level through the regional Ocean Data and Information Networks (ODINs), which will seriously impact on the equitable participation of the concerned Member States in IODE as well as in data and information management activities contributing to the Ocean Decade,

Re-emphasizing the importance of high-quality oceanographic data and information, products and services for scientific, observation and ocean-based disaster warning and mitigation programmes of the Commission, for Member States, the private sector and other users,

Noting the growing collaboration with, and contribution to other IOC Programmes and activities, demonstrated by joint development of products and services as well as capacity development activities,

Recognizing the call on IODE to contribute to the United Nations Decade of Ocean Science for Sustainable Development,

Expressing great appreciation to the Government of Flanders (Kingdom of Belgium) for hosting and supporting the IOC Project Office for IODE and for its continuing and increasing financial support to IODE as well as to other donors and Member States who are providing financial and in-kind support for IODE,

Appreciating and calling on Member States to continue (i) the in-kind support for the IODE Programme through establishing and maintaining IODE National Oceanographic Data Centres, Associate Data Units (including OBIS nodes), Associate Information Units, provision of experts; (ii) the provision of valuable ocean data and information products and services, and (iii) the provision of financial and other in-kind contributions to IODE,

Requests the IODE Co-Chairs to bring to the attention of the next Session of the IOC Assembly, the IODE Programme and Budget for the period 2021–2022, as attached in the Annex to this Recommendation.

Annex A to Recommendation IODE-XXVI.8.3

(all amounts expressed in US Dollars)	UNESCO Regular Programme		Other confirmed funding sources	
	2021	2022	2021	2022
<u>IODE projects</u>				
Global Ocean Surface Underway Data Project (GOSUD) (no request)	0	0		
Global Oceanographic Data Archaeology and Rescue Project (GODAR)				
GODAR data digitation, Contract, meeting	7,500	5,250		
Global Temperature and Salinity Profile Programme (GTSP)				
steering group meeting and user group workshop	0	14,000		
International Coastal Atlas Network project (ICAN)				
ICAN SG meeting, Raseborg, Finland (late 2021)	15,000	0		
ICAN workshop, Raseborg, Finland (late 2021)	4,000	0		
ICAN expert travel	0	7,000		
International Quality Controlled Database project (IQuOD)				
IQuOD workshop, online	0	0		
AWS cloud computing to host the expert quality control tool	0	0	3,000	3,000
Ocean Best Practices System (OBPS) (shared with GOOS 50/50)				
SG Annual Meeting (virtual 2021, f2f 2022) (was 6000)	0	0	0	6,000
OBPS Operating Expenses (repository hosting and IT support, Development of interface and functionality, Integration of new developments)	20,000	14,000		
Advocacy Material	0	0	3,000	3,000
Repository Certification (IODE cost)	0	0	1,500	1,000
AWS expenses			2,200	2,300

Ocean Biodiversity Information System (OBIS)				
1st int. data conference, Poland (November 2021) (In addition use 191 line: \$17,000)	15,000	0		
Genetic data task team workshop, Ostend			15,000	0
OBIS meetings, TBA	0	21,000		
additional (191 exb) 17000				
OceanDataPortal (no request)	0	0		
OceanExpert				
Development for OIH (contract)	20,000	0		
SG meeting, Ostend			15,000	0
Quality Management Framework project (QMF) (no request)	0	0		
World Ocean Database (WOD)				
setting up World Ocean Database Cloud (WODc) data provider upload system	30,000	0		
ODISCAT				
Consultant: Further QC and improvements	0	0		
Improvements for OIH (contract?)	20,000	0		
Steering Group meeting (timing: late 2021)	0	0	15,000	0
<u>Proposed new projects</u>				
IODE/IAMSLIC AquaDocs				
Outsourced Hosting and Maintenance (Atmire) (as from 9/2022)	0	0		21,741
Participation in meetings (includes travel support for IAMSLIC Annual Conference)	0	2,100		
Advocacy material design (logo, poster, brochure, etc.)	0	0	2,000	
Development of online guides for depositors and editors	0	0		
Ocean Data and Information System (ODIS)				
Development cost	40,000	0		

SG-ODIS meeting (2021 online. 2022 live, tickets bought in 2021)	0	14,000		
<u>Regional Activities</u>				
ODINAFRICA				
African Coastal and Marine Atlases - Contract for further development of Atlas	0	0		
African Coastal and Marine Atlases - Review meeting for Atlas Editorial board, Mombasa, Cape Town or Dakar	0	0		
Development of African node of the Ocean Data portal - meeting of ODP team with KMFRI team, Mombasa	0	0		
Development of ODINAFRICA follow-up project - 3 virtual meetings (simultaneous interpretation), face-to-face meeting for SG	0	0	17,000	0
Consultant costs (cost to be confirmed)	5,000	0		
ODINBLACKSEA				
SG meeting, in region (late 2021)	10,000	0	0	10,000
OBIS training and data mobilization event ODIN-BS/OBIS/OTGA, Oostende	0	0	0	20,000
ODINCARSA-LA				
Training (ref to OTGA RTCs plans)	0	0	18,000	18,000
OIH Regional activities. Meetings/workshops/to strengthen OIH & NODCs work and improve coordination with IODE and regional/Nat. Projects	10,000	0		10,000
ODINCINDIO (no request)	0	0		
ODINECET (no request)	0	0		
ODINWESTPAC				
Second ODINWESTPAC Advisory Group Meeting, Tianjin	10,000	0		
2021 China-Southeast Asian Countries Training Course on Marine Information Technologies, Tianjin	0	0		
ODINWESTPAC/OTGA RTC, Tianjin Training Course on ODIS (ODP topic maybe included), Tianjin	0	0		
Marine data & information collection, WESTPAC regional oceanographic &	0	0		

climatic statistical products, regional ocean reanalysis products R&D				
China-Malaysia Cooperative Research on Marine Big Data Management and Analysis	0	0		
Encourage member states to establish NODCs, ADUs, and AIUs	0	0		
FUST activities (ExB)				
OTGA	0	0		
OIH	0	0		
PacMAN				
DIPS-4-Ocean Assessments	0	0		
Other expenses				
Secretariat travel and other costs	10,000	10,000		
Courses held at PO (or in 2021: course development for online courses) - RTC Europe	0	0	47,500	80,000
Staff and consultant travel (was \$10,000)			10,000	0
Travel support expenses (\$15,000)			0	
IOC GE-CD III (was \$30,000)			0	
ISO certification cost (project office training centre)			3,000	3,000
TOTAL (USD)	216,500	87,350	152,200	178,041
Revenue UNESCO RP	185,000	76,000 ¹		
Additional revenue			168,000	178,000
Additional EB revenue				
191 residual 2020 IODE	36,992			
DEFICIT/SURPLUS	5,492	-11,350	15,800	-41

¹ provisional: dependent on decision of UNESCO