The 2nd International Ocean Data Conference (IODC-II) – Background & Sessions

IODC-II preceding 27th session of the IODE Committee (20–21 March 2023)

Goal: Implement the commitments and main recommendations identified at IODC-I and look forward, taking into account the Ocean Decade.

Number of Participants: 456 (160 on-site and 296 online) [https://oceandataconference.org](https://oceandataconference.org).

Sessions

- **Session 1**: Importance of investing in systematic data integration services, providing APIs, and using controlled vocabularies to achieve harmonized and FAIR data. Highlighted the need for collaboration across communities with different technological maturity levels and keeping licensing as open as possible.

- **Session 2**: Focus 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.
IODE 27th Session – Participants and Key Issues

Participants: 112 from 38 IOC Member States and 16 organizations [https://oceanexpert.org/event/3615](https://oceanexpert.org/event/3615)

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.

We invite all of Member States to participate actively the 28th Session in 2025, and beyond.

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
2 Member States (Panama, Portugal) established a National Oceanographic Data Center (NODC).

7 organizations successfully applied for Associate Data Unit (ADU) status; one (1) applied for accreditation (South Africa MIMS).

1 Associate Information Unit (AIU) application was received from the SEAFDEC Aquaculture Department (SEAFDEC/AQD) (Philippines) in 2021 and approved, bringing the total number of AIUs to 6.

3 applications for (re)accreditation have been reviewed and recommended by the SG-QMF and the following NODCs / ADUs have received accreditation:

- South African Marine Information Management System (MIMS) has been awarded the status of Accredited IODE ADU;
- Marine Institute, Ireland has been re-accredited and maintains the status of Accredited IODE NODC; and
- Norwegian Marine Data Centre (NMD) has been awarded the status of Accredited IODE NODC.

This brings the total numbers to 10 accredited NODCs and 2 accredited ADUs.

From Projects to Programme vision:

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.

For this reason, the Committee had decided to designate IODE activities as **Programme Components, Programme Activities and Projects**.

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”.

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.
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).

NEW IOC Strategic Plan for Ocean Data and Information Management (2023-2029)

Vision:
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.

Objectives:

1. 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;

2. 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);

3. 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.
Ocean Data and Information System (ODIS) Project Progress:

- **ODIS** project had been proposed by IODE-XXVI and formally approved by the 31st Session of the IOC Assembly 2021.

- **ODIS** had gone hand in hand with the implementation of the Ocean InfoHub Project and the IOC Ocean Data and Information System Catalogue of Sources Project (ODISCat) which had been established by IODE-XXV in 2019.

- **ODISCat** 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 as a Decade Action. 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.
IODE 27th Session - Cooperation with IOC Programmes and other Organizations

- HAIS, GO$_2$NE, SDG 14.3.1 data portal, GOOS BioEco portal, various training courses in OTGA, and plans are underway with GO$_2$DAT.

- 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.

- IODE has successfully submitted 6 Decade Actions and in addition, 4 Decade Actions were submitted in cooperation with IODE.

- 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.

**Strengthening ties:**

Government of Flanders continue hosting the IOC Project Office for IODE as well as its considerable financial and in-kind contributions and support. **New agreement** between UNESCO/IOC and the Government of Flanders (Kingdom of Belgium) through the Flanders Marine Institute (VLIZ) **had been signed 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. The Committee also **thanked the Norwegian Agency for Development Cooperation (NORAD) for its extra-budgetary funding support for OBIS and OIH/ODIS.**
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.

The Committee 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.
Recommendations

- Invite Member States (MS) to endorse the IOC strategic plan for data and information management (2023-2029) as given in document IOC-32/3.4.2.Doc(1).
- Strongly encourages Member States (MS) to establish IODE NODCs, ADUs or Associate Information Units AIUs.
- Recommended to enter online data and information services into ODISCat, contribute to OIH/ODIS by establishing nodes, and support OTGA RTC/STC.
- Invite MS to use and contribute to OBIS through regional alliance or network with the existing OBIS nodes and maybe establish new OBIS nodes.
- Invite MS and Ocean Decade to use AquaDocs (https://www.aquadocs.org) and OceanExpert (https://oceanexpert.org/) as a repository for documents/publications and global Ocean Experts directory, respectively.
THANK YOU

p.pissierssens@unesco.org
paula.sierra@invemar.org.co
Lotta.Fyrberg@smhi.se