

IOC WG on BBNJ First Meeting

15 December 2025

13.00-15.00 CET

WELCOME FROM THE IOC EXECUTIVE SECRETARY

VIDAR HELGESEN







- 1. Welcome by IOC Executive Secretary
- 2. Introduction of the Objectives of the IOC WG-BBNJ, Membership, and Working methods and timeline for WG meetings
- 3. BBNJ State of play and overview of the process from a science perspective
- 4. Overview Session on IOC/Decade potential contributions across 5 dimensions
 - Ocean data and Observation
 - Capacity Development
 - Regional coordination (role of IOC RSBs)
 - Ocean Decade focus on BBNJ/deep sea aspects
 - Clearing House mechanism
- 5. Overall discussion on the work of the WG, ie focus and timeline of next sessions (In Depth Session on individual topics)
- 6. Closure

IOC WG Terms of Reference

The IOC Working Group on BBNJ is established to provide scientific and technical advice on matters related to the implementation of the BBNJ Agreement within the IOC mandate, and in particular:

- (i) Develop recommendations for IOC's potential role in the operationalization of BBNJ e.g., for area-based management tools; EIAs; capacity-building and the transfer of marine technology; and marine genetic resources, including the fair and equitable sharing of benefits;
- (ii) Identify, in cooperation with the Division for Ocean Affairs and the Law of the Sea of the Office of legal Affairs of the United Nations acting as secretariat for the BBNJ Agreement, and promote IOC's role and contributions towards the establishment and operation of the future BBNJ Clearing-House Mechanism;
- (iii) Review and analyze scientific, technical, and capacity development aspects of the BBNJ Agreement relevant to the IOC;
- (iv) Identify needs and modalities to be delivered though IOC mechanisms to support Member States, particularly developing countries, in capacity development initiatives relevant to BBNJ implementation, in cooperation with the Division for Ocean Affairs and the Law of the Sea of the Office of legal Affairs of the United Nations acting as secretariat for the BBNJ Agreement.
- (v) Propose strategies and mechanisms for enhancing data sharing and cooperation across national and regional institutions, including though IOC Regional Subsidiary Bodies.
- (vi) Propose mechanisms for cooperation between IOC and BBNJ Agreement



MEMBERSHIP, CHAIRING AND METHODS OF WORK

Unesco
Intergovernmental
Oceanographic
Commission

The WG shall be composed of experts nominated by IOC Member States, taking into account regional representation and relevant expertise (e.g., marine science, international law, capacity development, data management), as well as representatives from relevant IOC Programmes and Subsidiary Bodies.

The WG will be chaired by an IOC Officers (Vice-Chair) to be identified by IOC Chairperson.

The WG shall conduct its work through virtual means and will work in English.

A short report will be prepared after each meeting and shared with WG Members for review. Meetings will also be recorded.

The WG will report will provide a progress report on its findings at the 59th Session of the IOC Executive Council in 2026 and at the 34th session of the IOC Assembly in 2027. (2 years mandate)

Membership of the WG-BBNJ (based on CL nominations)

26 Experts nominated by IOC MS

Group I : **7 experts** (Canada, Germany, Ireland, Norway, Spain, Türkiye, UK)

Group II: 2 experts (Russian Federation, Ukraine)

Group III: 5 experts (Argentina, Brazil, Chile, Colombia, Mexico)

Group IV: 7 experts (Bangladesh, PR China, Japan, Rep. Korea,

Sri Lanka, Vietnam)

Group V: **5 experts** (Djibouti, Mauritania, Morocco, Kuwait, Senegal)

Nomination from IOC Subsidiary bodies/joint programmes: GEBCO, WESTPAC, IOCAFRICA, GOOS, OBIS, IODE



Schedule of meetings

2025

WG-BBNJ # 1: Introduction/kick off - 15 December 2025

2026

WG-BBNJ #2: In Depth focus - 20 February 2026

3rd BBNJ Preparatory Commission (23 March – 2 April)

WG-BBNJ # 3 : In Depth focus - April 2026 (tbc)

WG-BBNJ Reporting to IOC Executive Council (29 June- 4 July)

WG-BBNJ # 4 : In Depth focus – August/Sept 2026 (tbc)

1st Conference of Parties (second half 2026, tbc)

WG-BBNJ #5: In Depth focus – Nov/December 2026 (tbc)

2027

2 Meetings of WG-BBNJ in 1st half of the year

WG-BBNJ Reporting to 34th IOC Assembly and decision to continue/adapt/terminate the WG

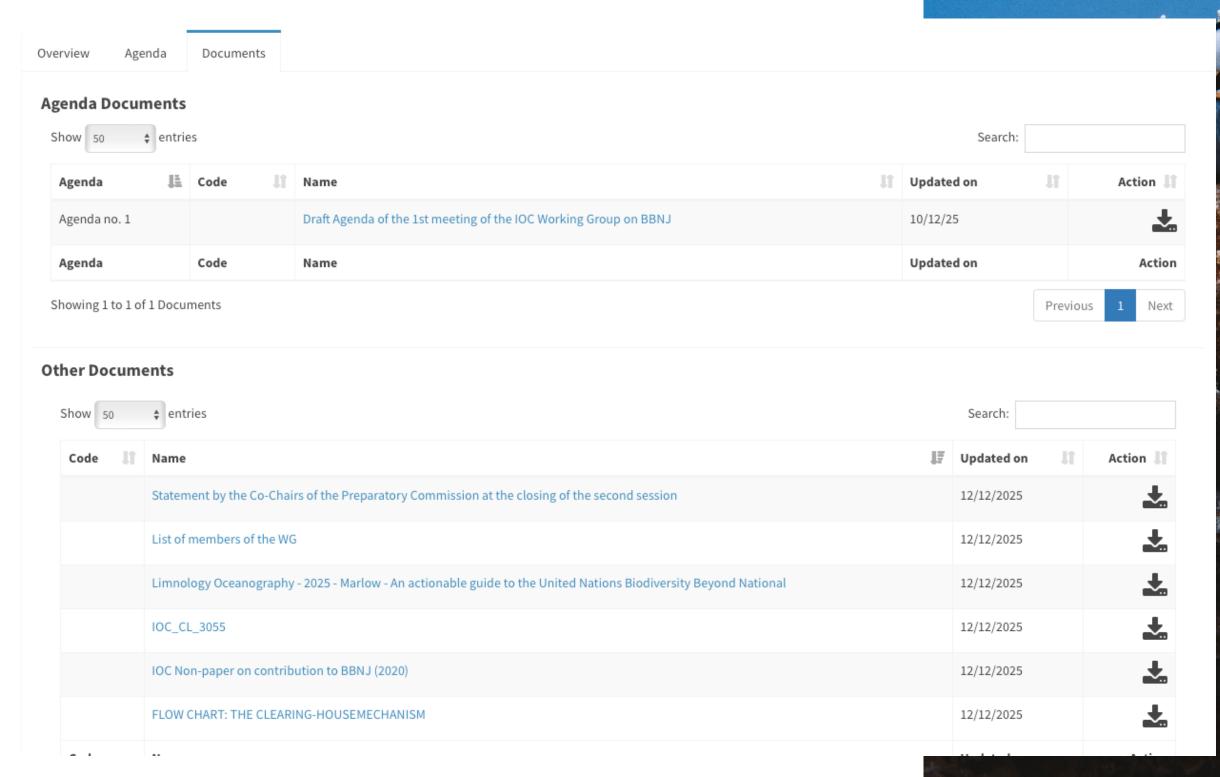
The WG may also establish Task Groups to address specific issues. These will meet online at their own convenience/schedule



Documentation

All documents are posted on Ocean Expert

| IOC Working Group on Biodiversity Beyond National Jurisdiction |
|---|
| Other |
| 09 December 2025 - 30 June 2027 |
| France |
| Organiser(s) & Staff Organiser |
| Mr. Julian BARBIÈRE |
| Participation By invitation only. |





BBNJ – State of play and overview of the process from a science perspective

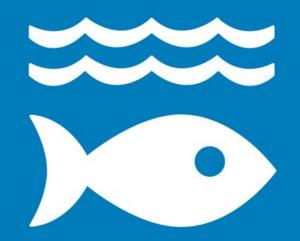
Presentation by Charlotte Salpin, Senior Legal Officer
UN Division of Legal Affairs and Law of the Sea (UN/DOALOS)

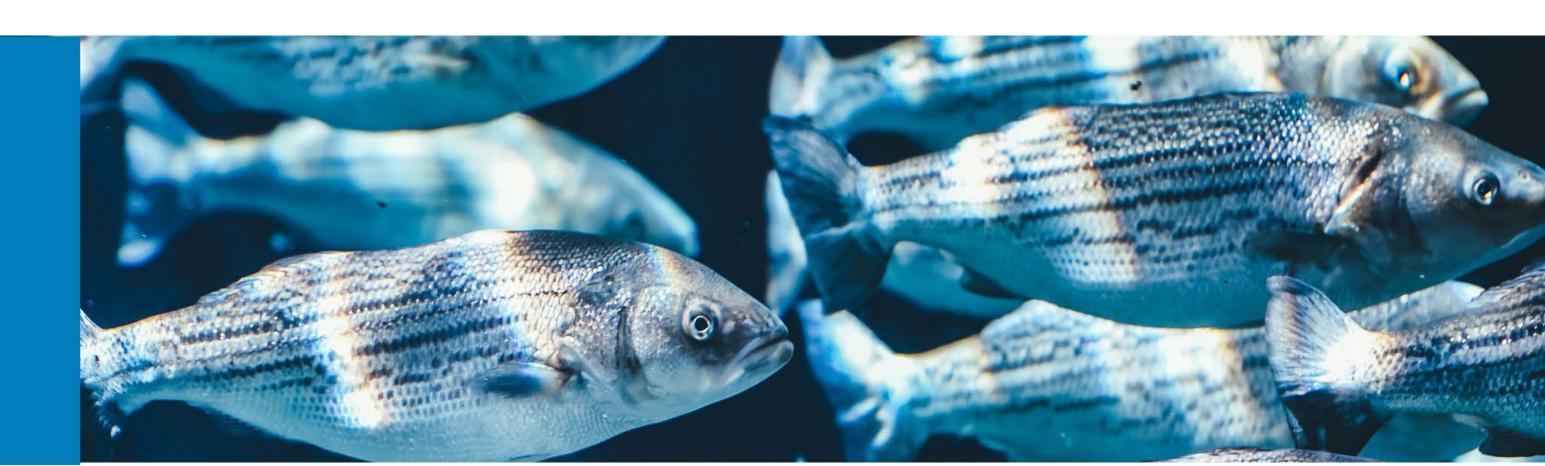




Q & A

14 LIFE BELOW WATER





4. Overview Session on IOC/Decade potential contributions across 5 dimensions (presentation + Q/A)

- 1/ Ocean data and Observation
- 2/ Capacity Development
- 3/ Regional coordination (role of IOC RSBs)
- 4/ Decade focus on BBNJ/deep sea aspects
- 5/ Clearing House mechanism



Overview Session on IOC/Decade potential contributions across 5 dimensions (presentation + Q/A)

1/ Ocean data and Observation

Audrey Darnaude, Co-chair, GOOS Biology and ecology Panel, Co-Chair

and

Katherine Tattersall, Co-chair, OBIS Steering Group

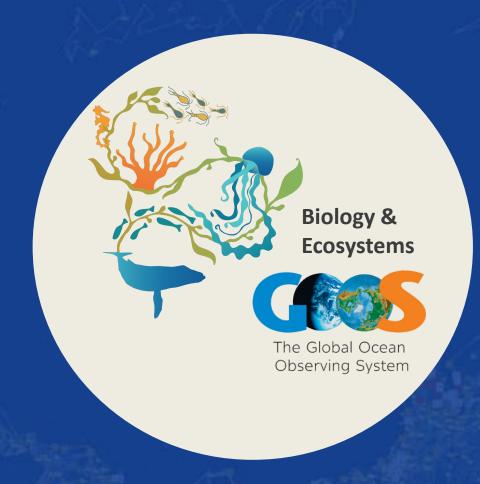


Overview Session on IOC/Decade potential contributions across 5 dimensions



1st Meeting (online)
Monday 15 December 2025

1- Ocean data and observation

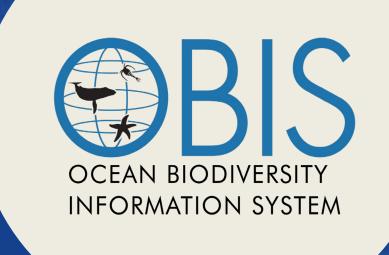


Audrey Darnaude

Co-Chair of GOOS Biology & Ecosystem Panel

&

Katherine Tattersall Co-Chair of OBIS Steering Group



The Global Ocean Observing System (GOOS)

<u>Since 1991</u>: **leading the development of a truly global ocean observing system** by supporting international, regional and national ocean observing programmes, governments, UN agencies, research organisations and individual scientists...



... to help them better **answer societal needs** at all scales, by improving and facilitating the collection, interoperability, integration and sharing of key ocean data worldwide.

GOOS Essential Ocean Variables (EOVs) framework

Aim = make it easier to measure and compare ocean state from all corners of the world

EOVs = the minimum set of ocean variables to:

- assess ocean state and variability for important global ocean phenomena
- provide essential data for applications that support societal benefit.

EOVs focus on three main delivery areas:



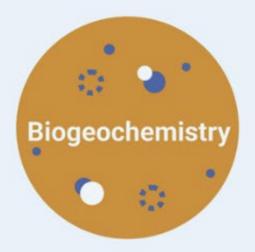




EOVs are grouped by discipline and are overseen by three GOOS expert panels:







EOVs can be described by three key elements:



Basic measurements for estimating the main EOV (e.g., counting marine turtles)



Additional measurements
offering context (e.g., measuring
water temperature for
understanding environmental
conditions affecting turtles)

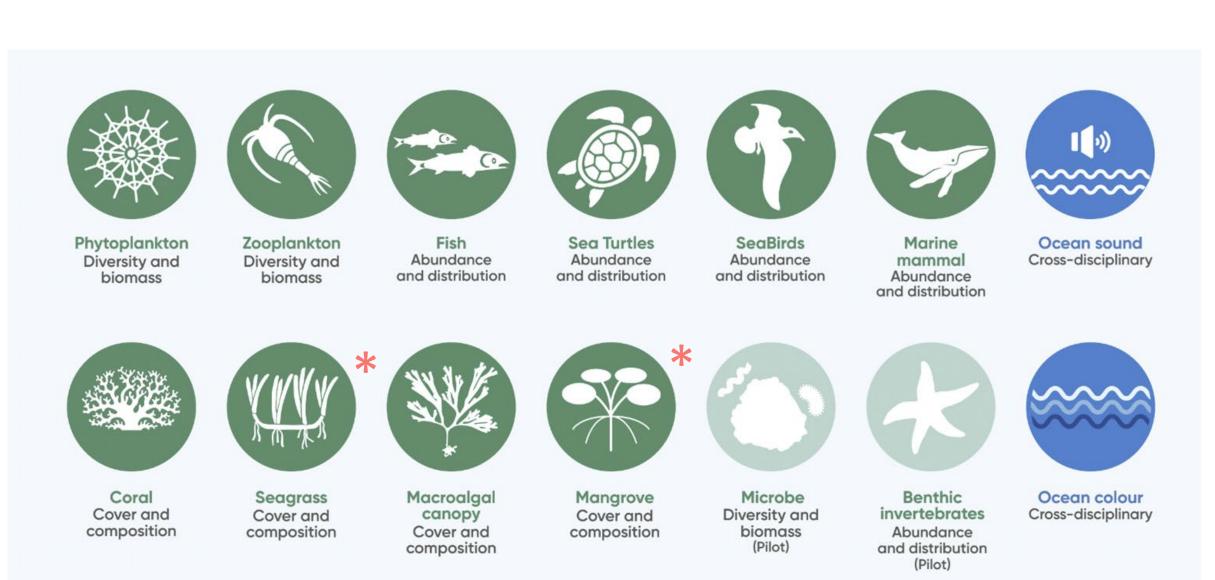


Outputs calculated from the sub-variables and other relevant information (e.g., visible changes in turtle population using turtle count and water condition)

Biology and Ecosystems EOVs

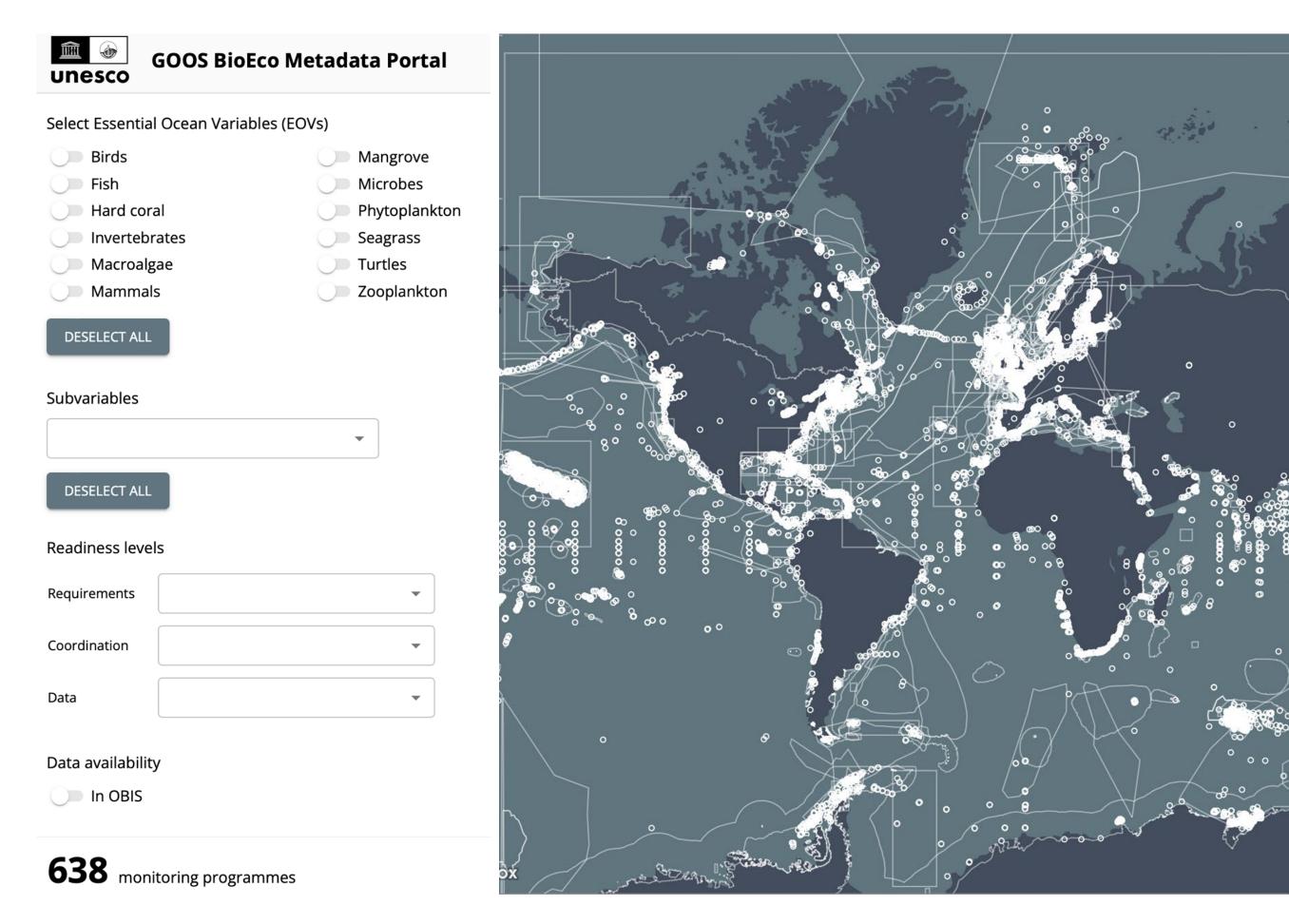
BioEco EOVs are the minimum set of ocean variables for biology and ecosystems identified to help understand and forecast marine life.

They provide a framework for coordinating and standardizing marine biodiversity observations, to maximize data interoperability and access at the global scale.



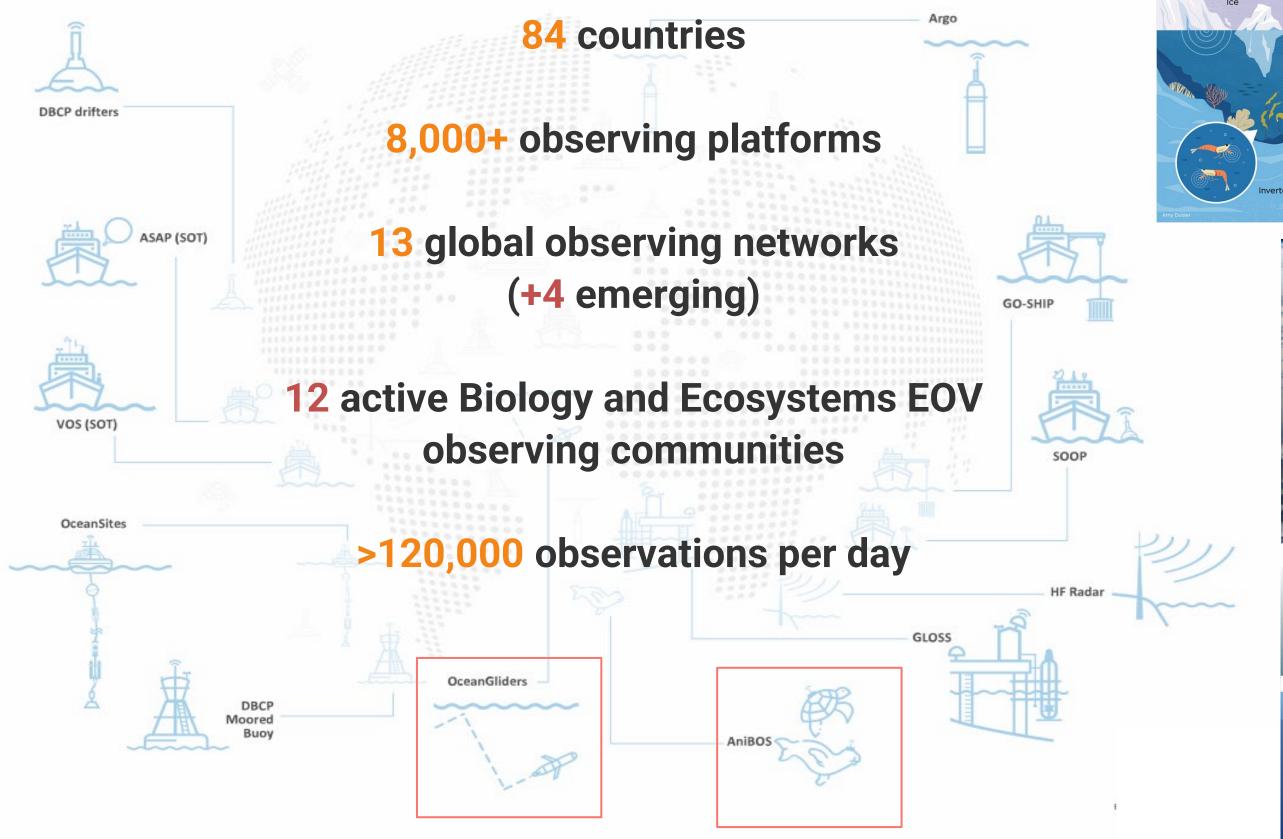
* Do not apply to the high seas & deep ocean

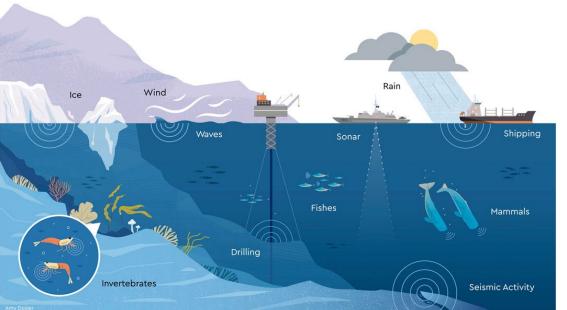
BioEco EOVs' coverage



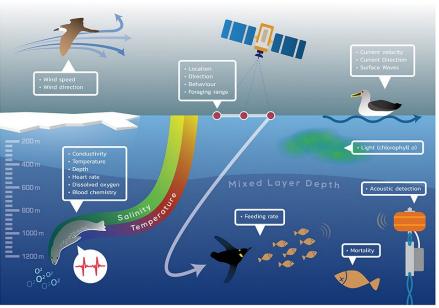
© Mapbox © Op

GOOS observations

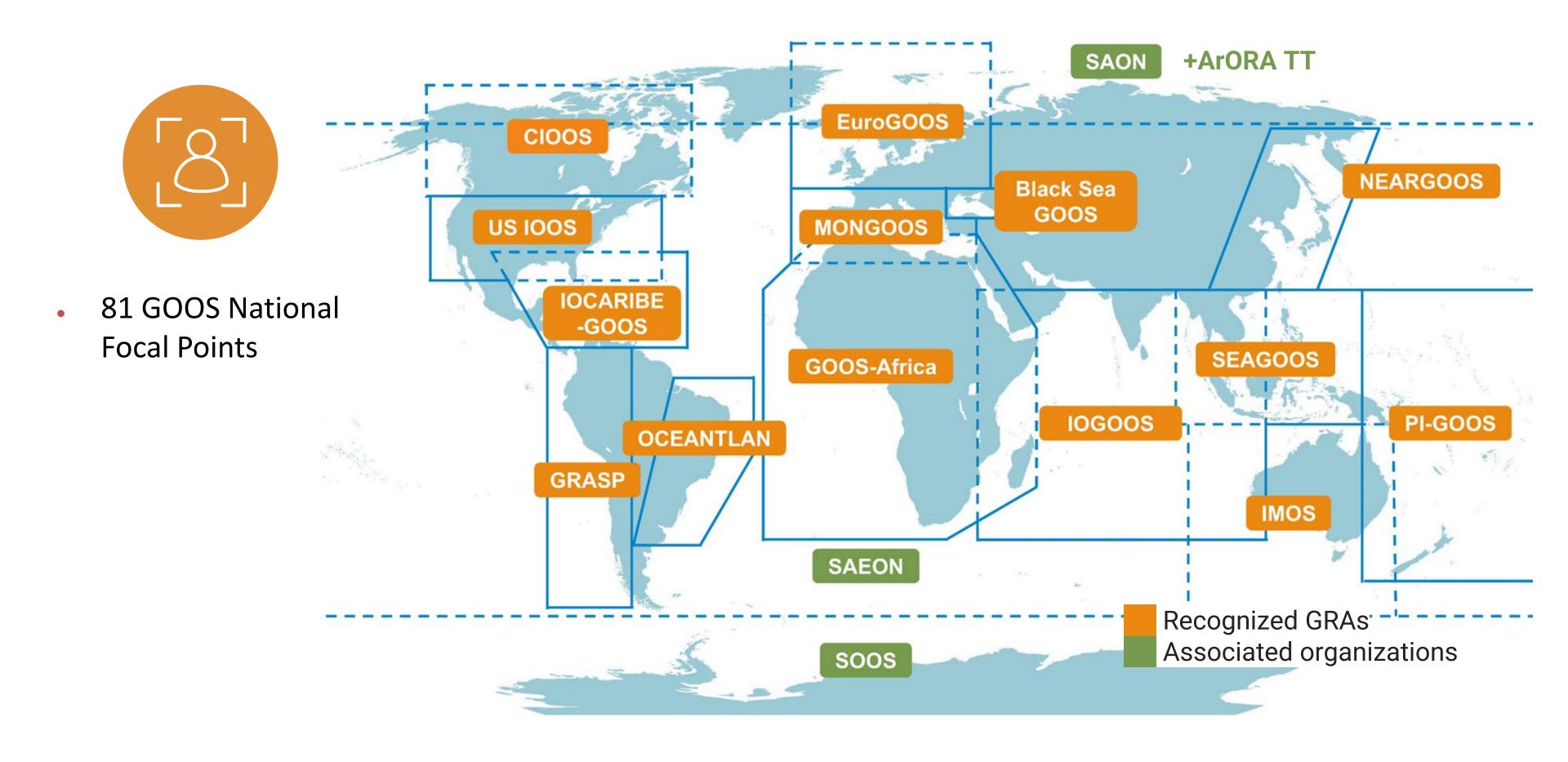




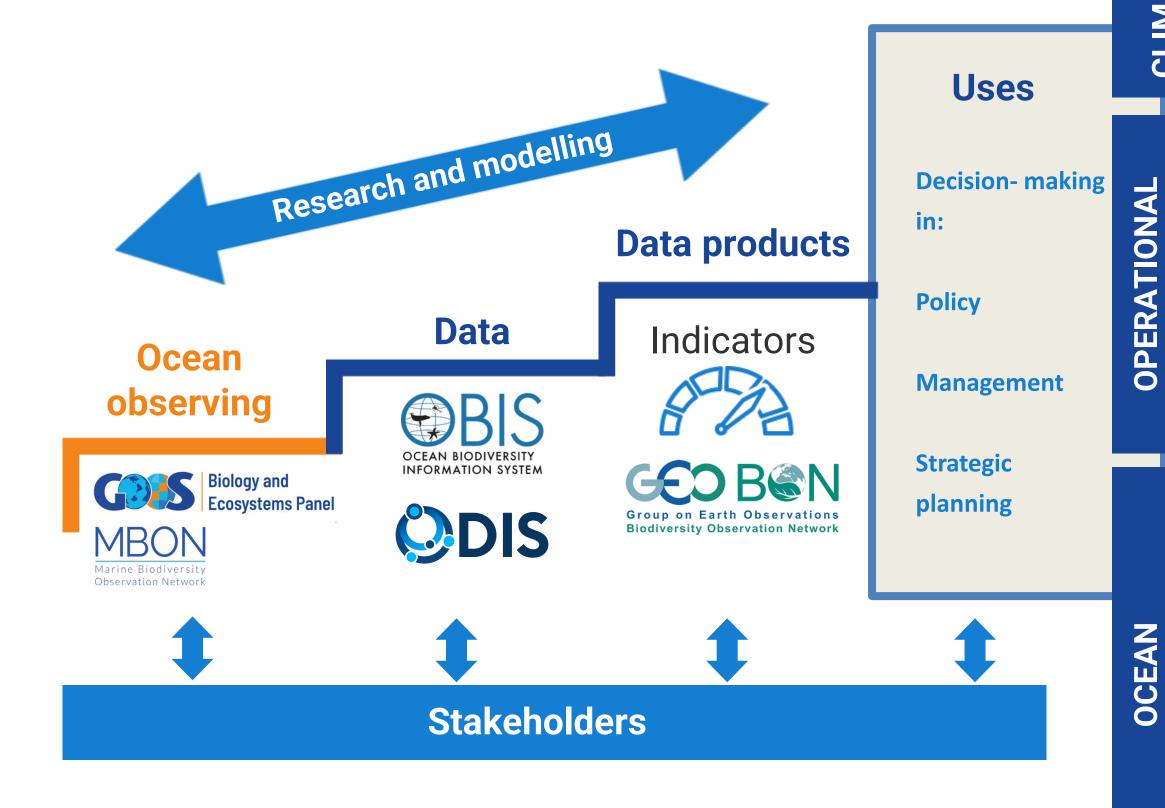




GOOS Regional Alliances and National Focal Points



From observations to impact



CLIMATE

SERVICES

HEALTH

United Nations Climate Change

Paris Agreement



FOR DISASTER RISK REDUCTION 2015-2030

Disaster Risk Reduction



Weather forecasting and hazard warnings



Safety at sea, optimised routing, energy optimisation



Convention on Biological Diversity

30x30, Global Biodiversity Framework



Plastics Treaty



Biodiversity Beyond National Jurisdiction





SDG14 / Sustainable Ocean Management

OBIS is a global open-access platform for marine life data and a global community

We provide highquality data you can trust.



OBIS is a programme component of the International Oceanographic Data and Information Programme (IODE) of the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

OBIS integrates open, FAIR, standardised, quality-controlled marine biodiversity data from multiple sources into a single platform.





OBIS is a global open-access platform for marine life data and a global community

OBIS in numbers

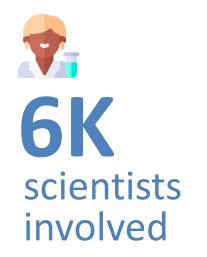














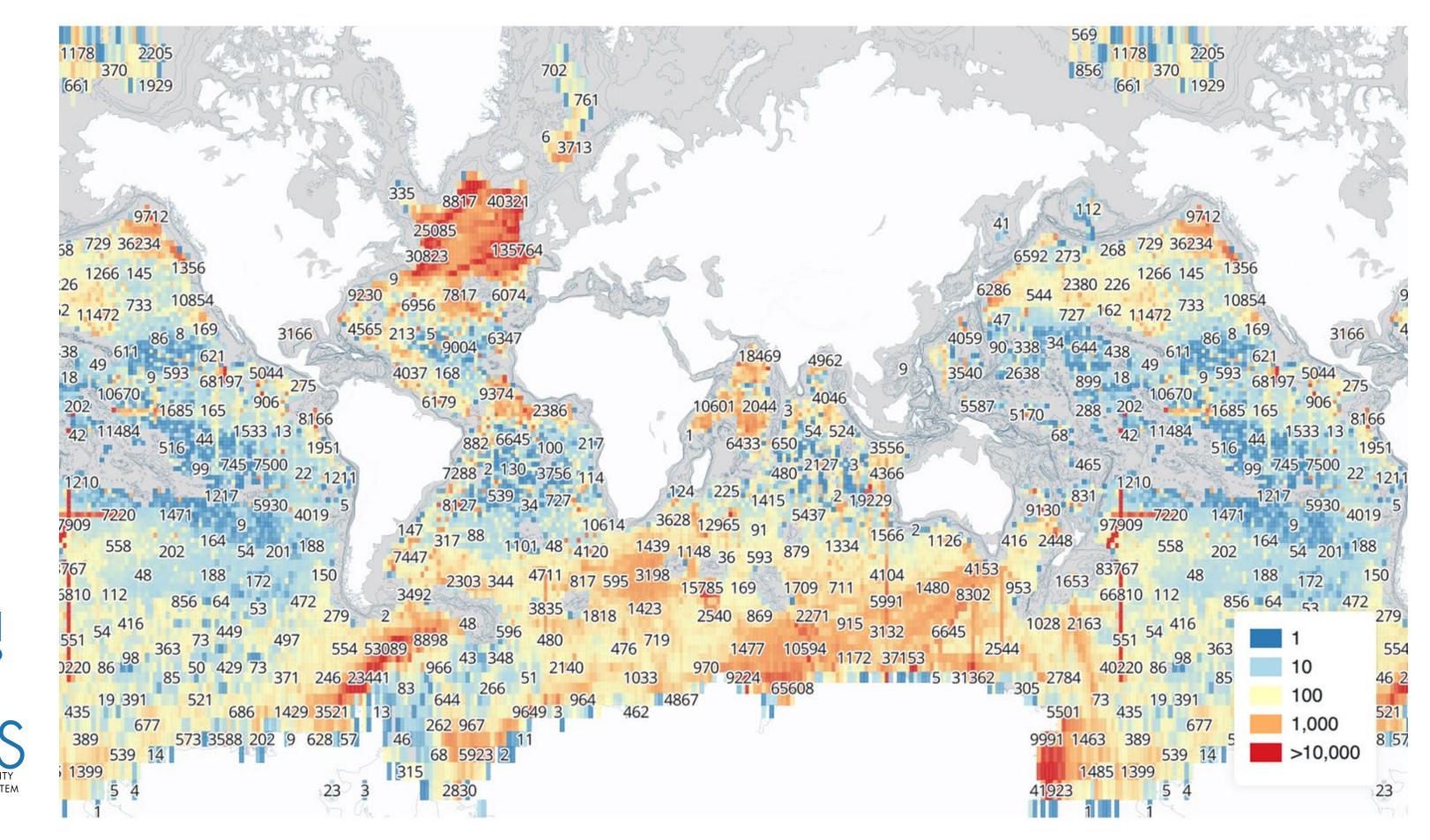




OBIS is a global open-access platform for marine life data and a global community



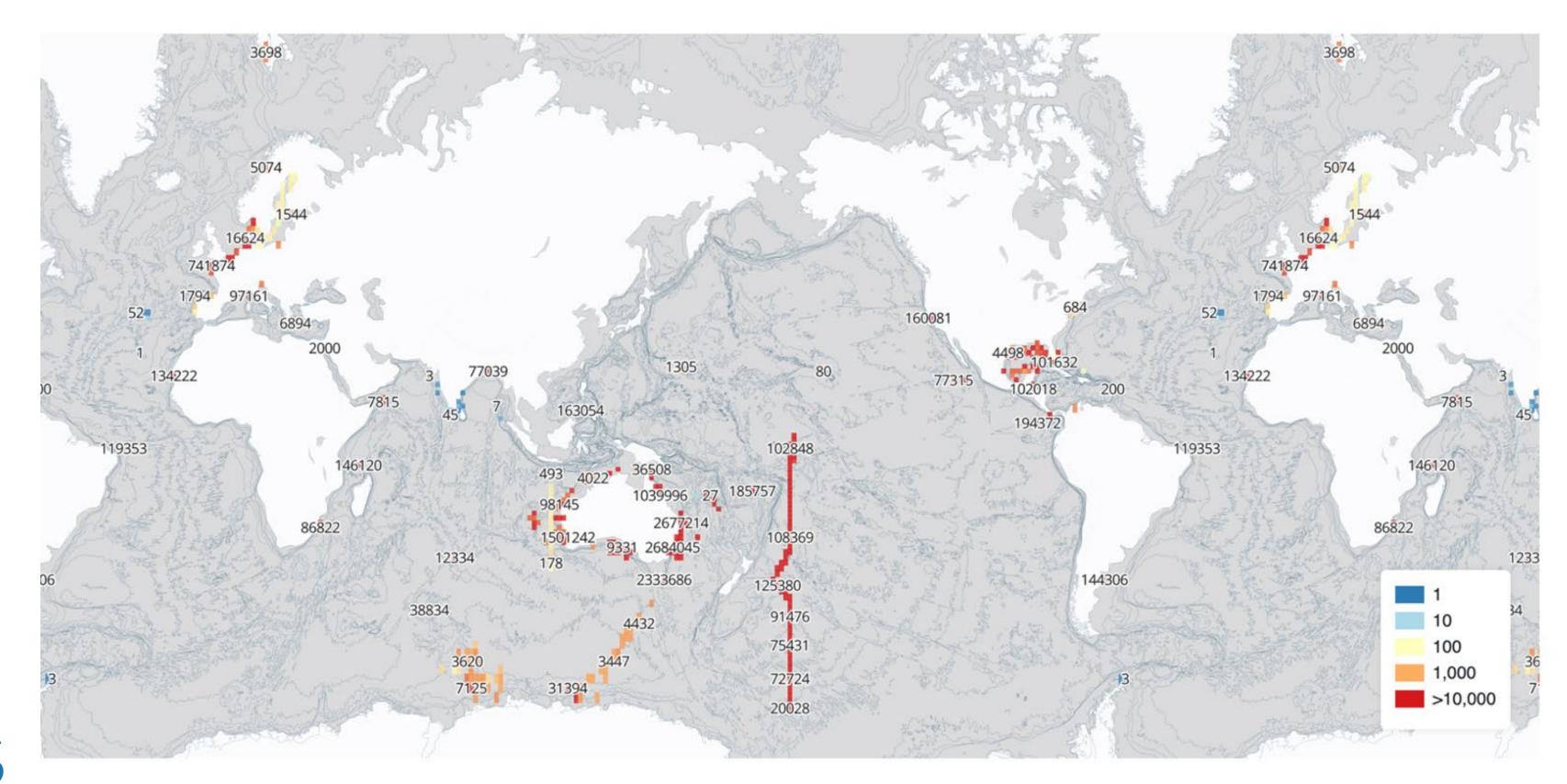
12 million biodiversity records from ABNJ







27 million barcode sequences



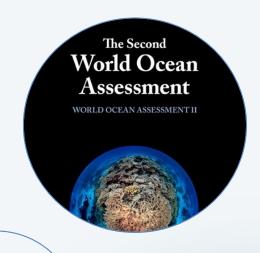




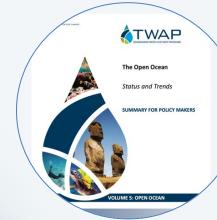
OBIS data supports

crucial global & regional ocean assessments to enable science-based decision making















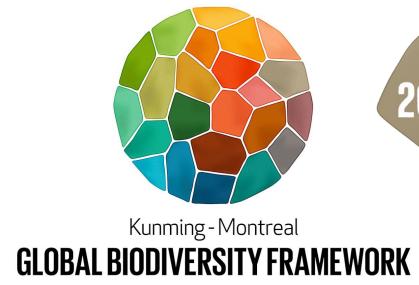






Partnering for a better Ocean









OBIS is listed in the complementary indicators for KMGBF Targets 20 and 21.



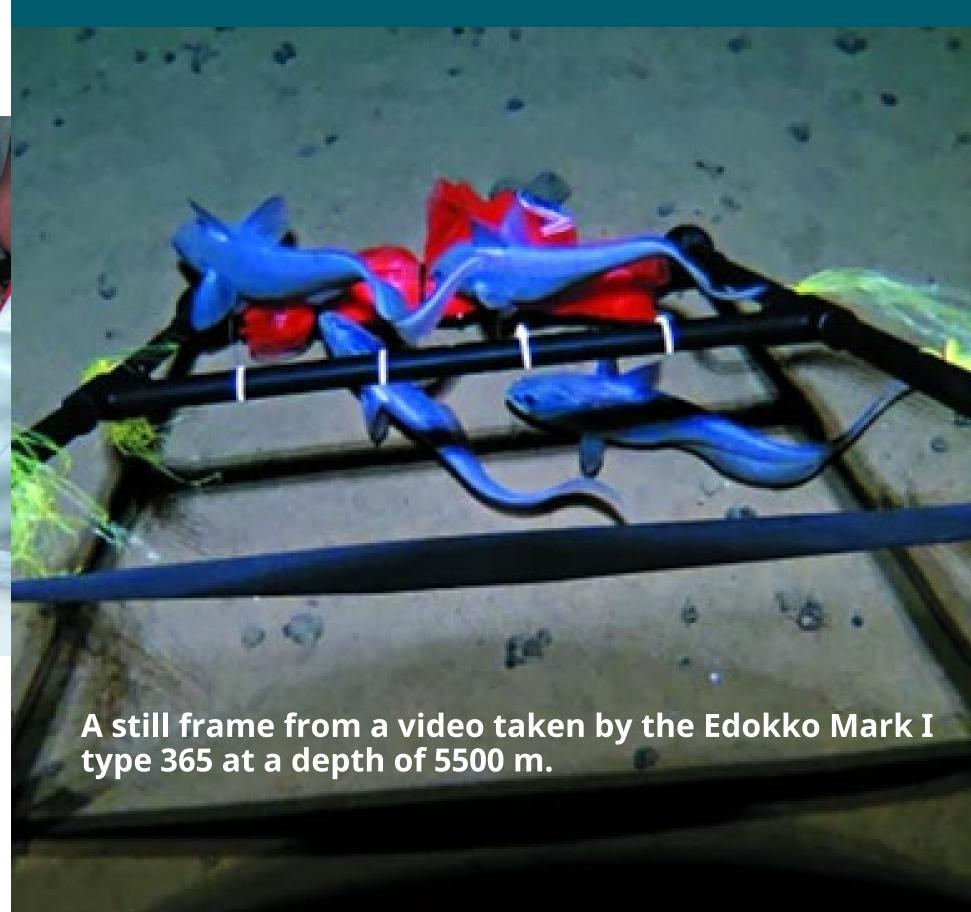
CBD COP16 recognized OBIS, GOOS and ODIS as the ocean components of a Global Biodiversity Observing System as part of the monitoring framework of the GBF.

OBIS Japan: A watchful eye on the deep-sea environment

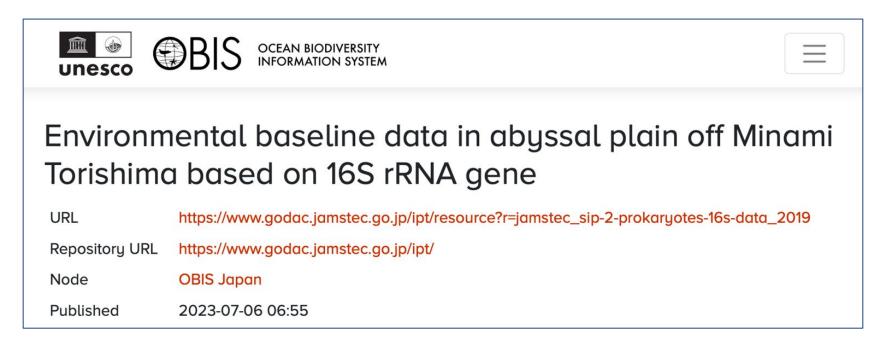
Edokko Mark I type 365, is a freel, lander-type observatory.

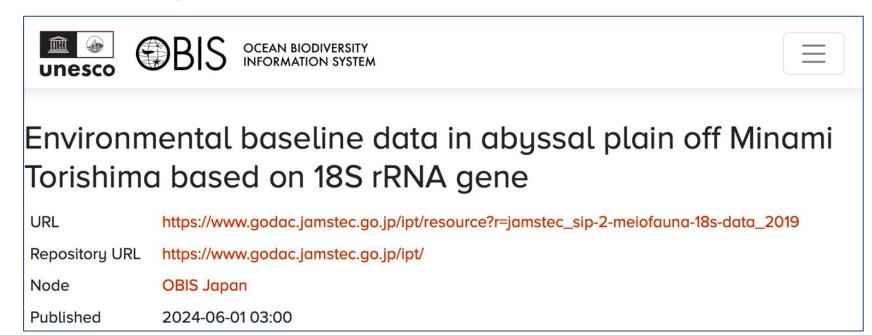
It drops to the seabed via its own weight, captures video and can stay on the seabed for 12 months at a time.

https://www.nature.com/articles/d42473-020-00526-w

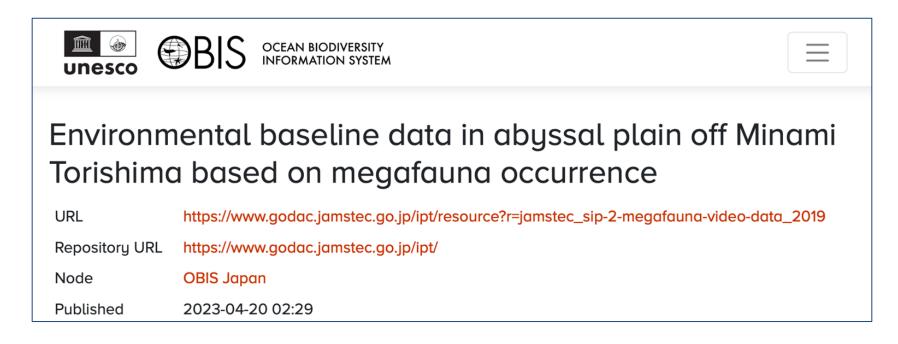


OBIS Japan: eDNA metabarcoding datasets





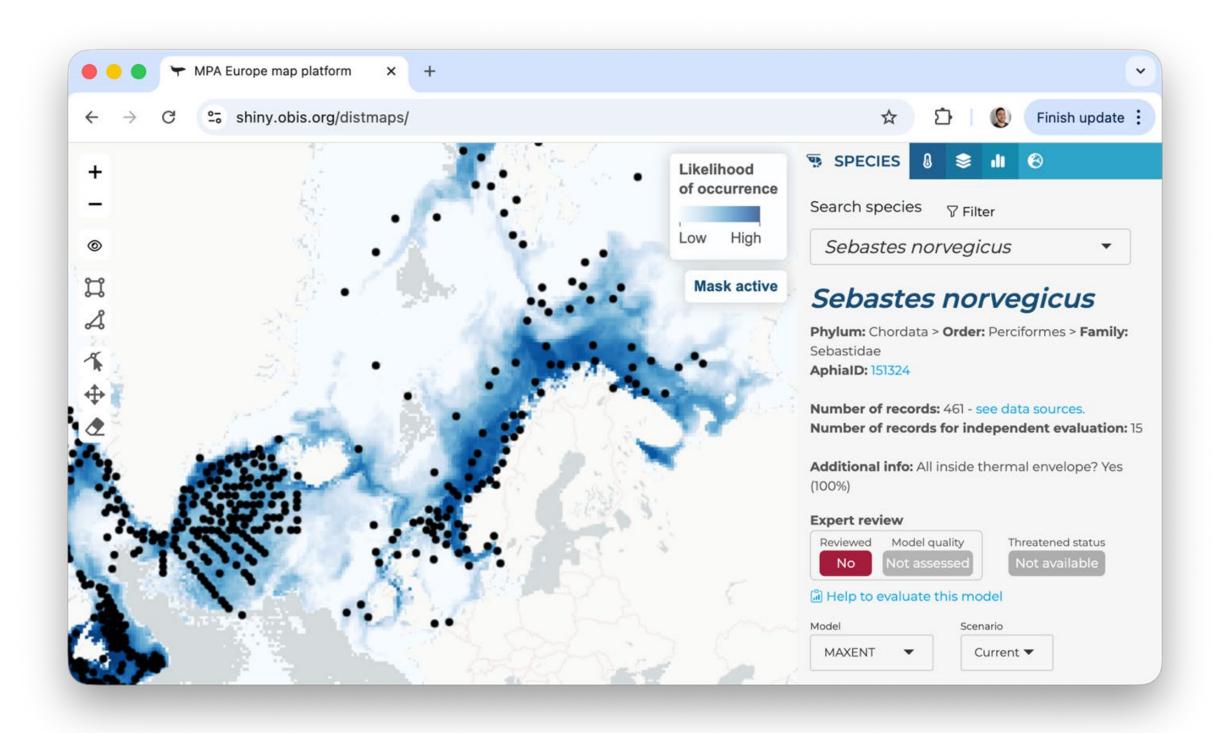
Video footage: baited trap



Sediment core



OBIS: Area-based Management Tools Species range maps to support marine spatial planning



Predictions are available for different climate scenarios (for the years 2050 and 2100), enabling climate-smart planning.

Openly available at shiny.obis.org/distmaps

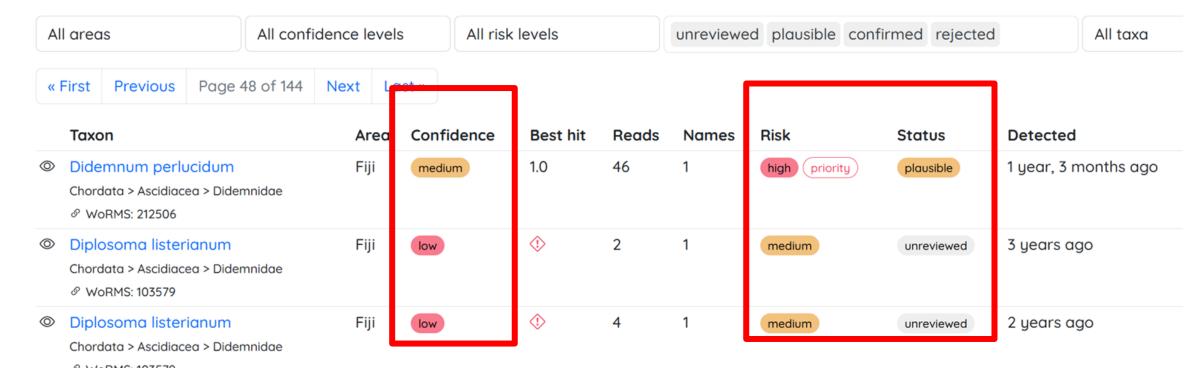
OBIS: delivering data infrastructure for Marine Genetic Resources



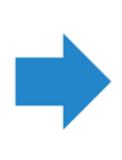
Invasive species
decision tool& alert
system
portal.pacman.obis.org

Invasion detection confidence & detection status

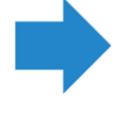
Latest alerts



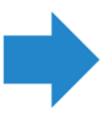












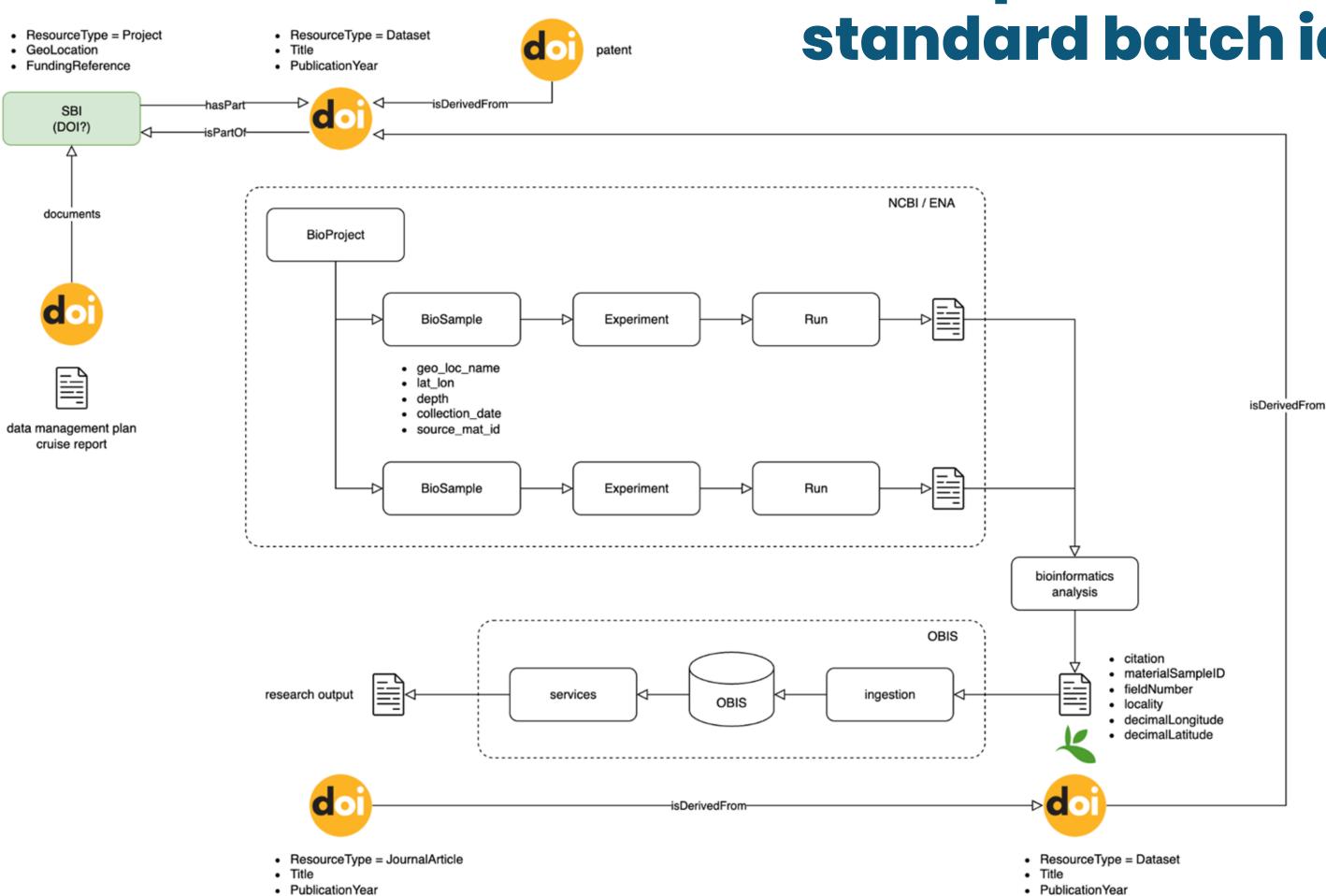


Pest species detected in monitored area



Informs decision making

Proposed model: BBNJ standard batch identifier

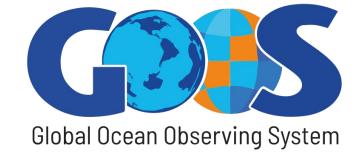


BBNJ SBI demo

SBI identifier:

https://doi.org/10.25607/sbi.in2019v03

Fetch relationships





Thank

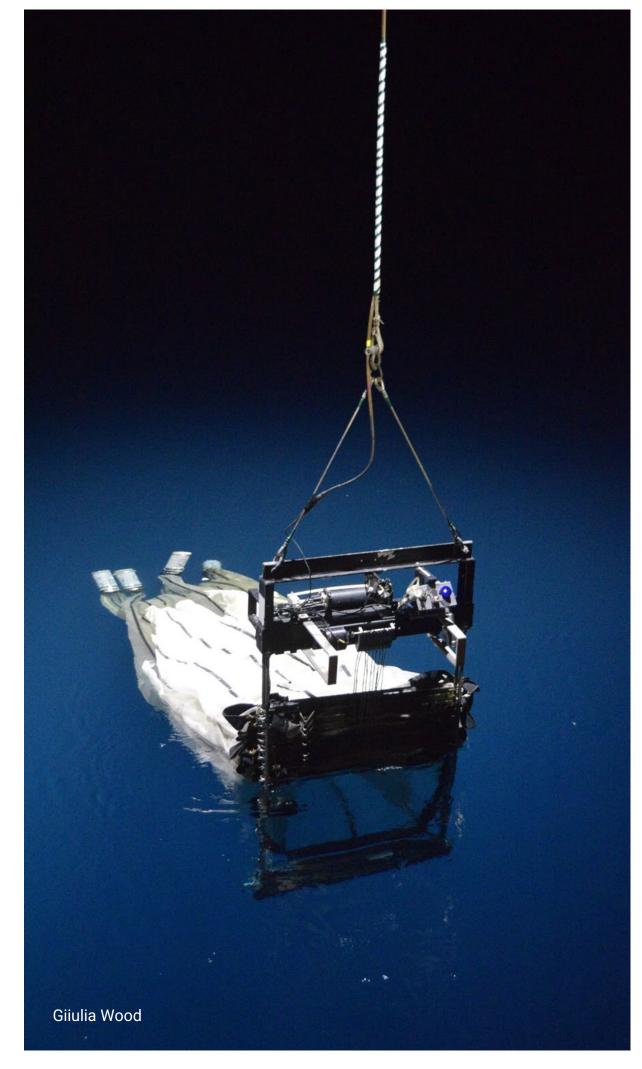
YOU goosocean.org obis.org

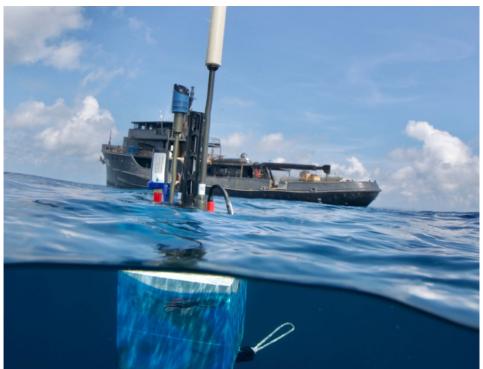
















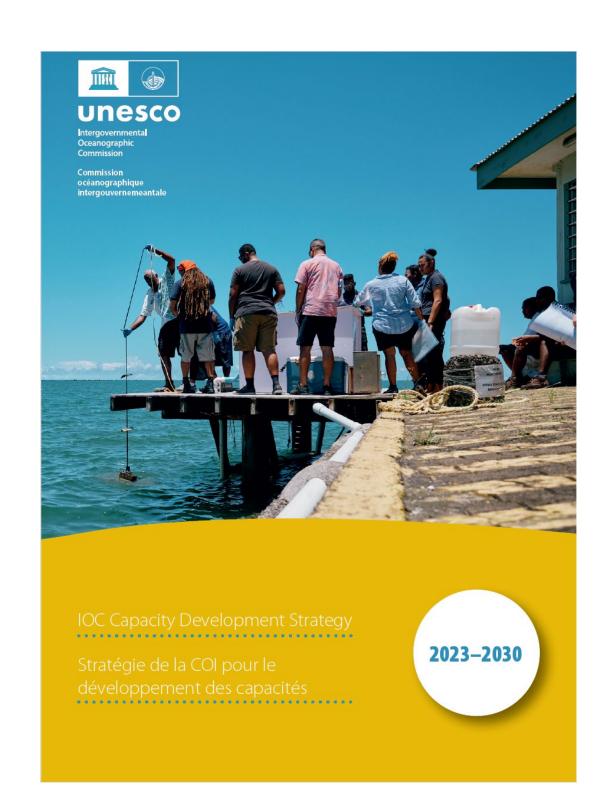
Overview Session on IOC/Decade potential contributions across 5 dimensions (presentation + Q/A)

2/ Capacity Development

Karen Evans, Head, Ocean Science/CD coordinator, IOC



IOC capacity development activities: key governing documents



Restricted Distribution

IOC/A-33/4.2.Doc(1)
Paris, 15 May 2025
Original: English



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNFSCO)

Thirty-third Session of the Assembly UNESCO, 25 June–3 July 2025

Item 4.2 of the Provisional Agenda

DRAFT IMPLEMENTATION PLAN
FOR THE IOC CAPACITY DEVELOPMENT STRATEGY 2023–2030

Summary

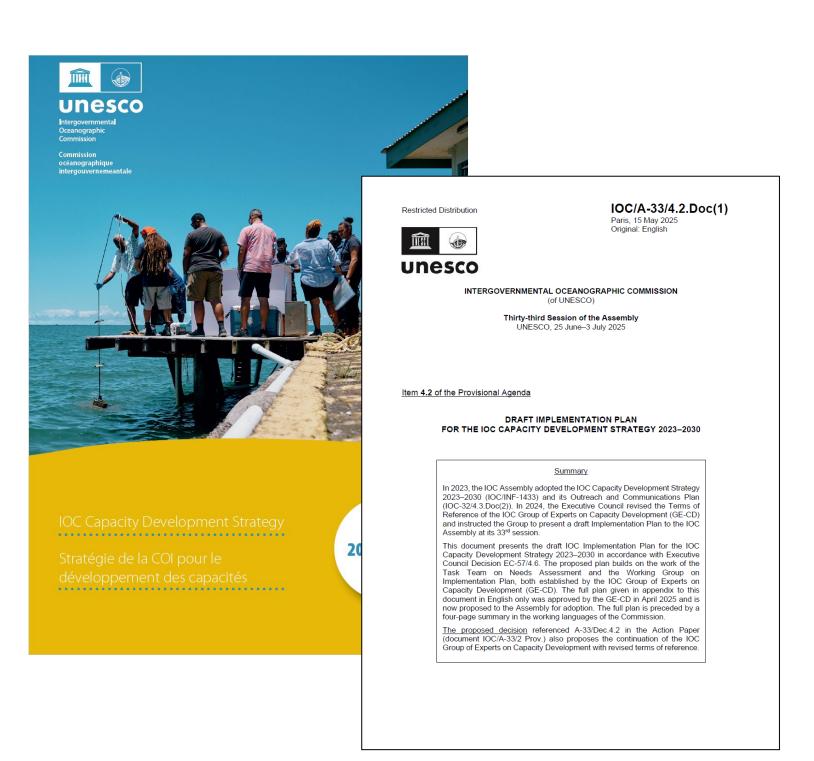
In 2023, the IOC Assembly adopted the IOC Capacity Development Strategy 2023–2030 (IOC/INF-1433) and its Outreach and Communications Plan (IOC-32/4.3.Doc(2)). In 2024, the Executive Council revised the Terms of Reference of the IOC Group of Experts on Capacity Development (GE-CD) and instructed the Group to present a draft Implementation Plan to the IOC Assembly at its 33rd session.

This document presents the draft IOC Implementation Plan for the IOC Capacity Development Strategy 2023–2030 in accordance with Executive Council Decision EC-57/4.6. The proposed plan builds on the work of the Task Team on Needs Assessment and the Working Group on Implementation Plan, both established by the IOC Group of Experts on Capacity Development (GE-CD). The full plan given in appendix to this document in English only was approved by the GE-CD in April 2025 and is now proposed to the Assembly for adoption. The full plan is preceded by a four-page summary in the working languages of the Commission.

The proposed decision referenced A-33/Dec.4.2 in the Action Paper (document IOC/A-33/2 Prov.) also proposes the continuation of the IOC Group of Experts on Capacity Development with revised terms of reference.

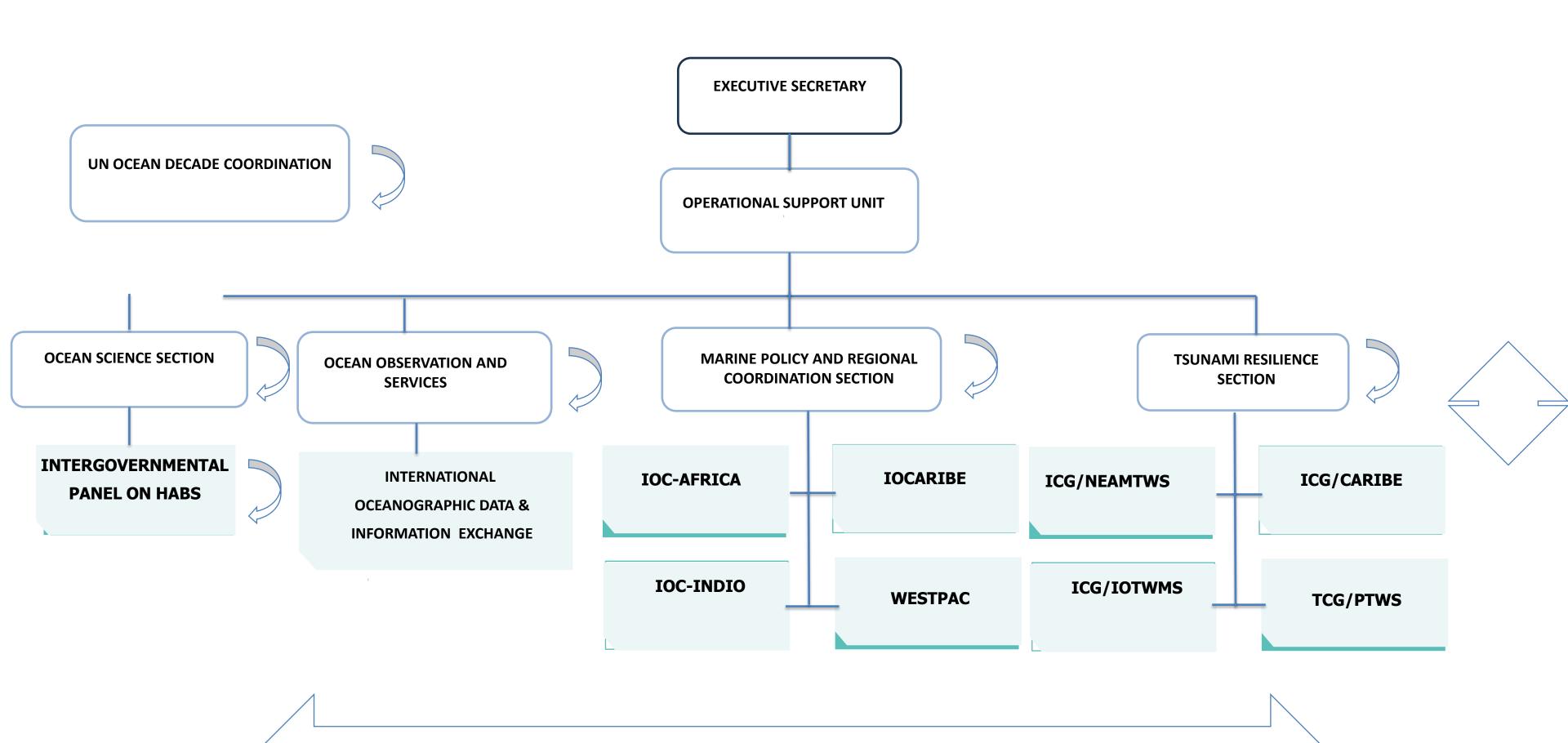
IOC Group of Experts on Capacity Development

IOC capacity development activities



- 1. Human resources developed at individual and institutional levels
- 2. Access to technology, physical infrastructure, data and information established or improved
- 3. Global, regional and sub-regional mechanisms strengthened
- 4. Development of ocean research policies to support sustainable development objectives
- 5. Visibility, awareness and understanding on the roles and values of the ocean and ocean research in relation to human wellbeing and sustainable development increased
- 6. Sustained resource mobilization reinforced

Intergovernmental Oceanographic Commission (IOC)



IOC capacity development activities

Online training

- building understanding across science, data, management, policy, governance topics
- application of tools
- how to's (e.g., use of databases, platforms)

In person hands-on training

- building targeted skills in field, laboratory, use of platforms and tools
- internships

Workshops

- building deeper understanding
- development and testing approaches
- identifying priorities for further targeting

Capacity Development platforms





ISO accredited

Matching needs with delivery

Capacity Development platforms



17 Training Centres (RTC/STCs)

+100s of partners

1000 lecturers

17 000 users e-Learning

187 countries

+50 courses yearly

4 languages EN ES PT FR

ISO-certified LMS

Automated reporting (KPIs)



Practitioners in operations and support
Decision and policymakers
Institutional managers
Technicians, advisors and consultants
Extension services
Teachers and educators
ECOPs, graduates and postgraduates

OTGA Partners

Marine and maritime organizations, research projects, capacity development initiatives, international programmes, multi-national organizations

UN agencies

OTGA communication pack





Capacity Development platforms



OTGA training courses are jointly developed and delivered by RTC/STCs and affiliated partners on demand.

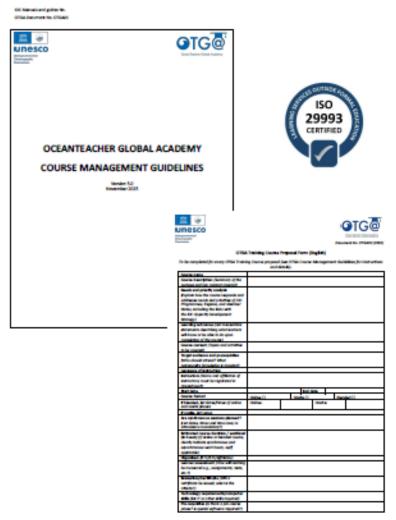
Course proposal (1)

Work plan (2)

Learning materials (3)

- Planning, development, and delivery of training
- · Coordination and management of courses and alumni.
- Shared e-Learning Platform
- Creation of learning resources and activities
- Mechanisms for connecting experts, facilitators, and centres
- Guidance on learning services procedures and standards
- Training and mentoring exchange and internships

Training
delivered
(4)
Evaluation
(5)





Overview Session on IOC/Decade potential contributions across 5 dimensions (presentation + Q/A)

3/ The role of IOC in Regional Sub-Commissions

Wenxi Zhu, Head, IOC/WESTPAC Secretariat



Overview Session on IOC/Decade potential contributions across 5 dimensions (presentation + Q/A)

4/ Ocean Decade focus on BBNJ

Alison Clausen, Decade Deputy Coordinator IOC



BBNJ in the Ocean Decade

Existing Decade Actions

- Over 20% of Decade programmes contribute directly to BBNJ
- > 100 Decade projects addressing elements of BBNJ
- Numerous cross-cutting Decade programmes address data, CD, OL or other issues relevant to BBNJ
- Detailed mapping to be carried out to identify direct entry points and support areas

Dialogue on Science & Knowledge Priorities

- Focus during 2nd half of Decade on uptake of knowledge
- Engagement via UN Oceans
- Convening of BBNJ related Decade Actions in March 2026 @ BBNJ Symposium
- Priority issue for discussion at 2027 Ocean Decade Conference via BBNJ 'Action Plan'
- Process to secure dedicated human resources to coordinate process

Capacity Development

- Collaboration between Capacity Development Facility & OTGA
- Tailored introductory course complemented by support to partner initiatives
- Ongoing needs assessment for future BBNJ related CD initiatives
- Active resource mobilisation



BBNJ in the Ocean Decade Capacity Development Facility - Achievements

Environmental DNA (eDNA)
Training for Africa and the
Adjacent Island States
Training

Date: November 2025

Location: Ghana

Partner Organization: University of Ghana; IOC Sub Commission for Africa and the Adjacent

Island States; OTGA

Beneciaries: 29 individuals from 15 African countries, supported by 5 instructors from Ghana and 1 from Kenya, with plans to replicate the course in East Africa

Objective: To equip ECOPs by providing practical, hands-on sampling fieldwork experience

Building Bridges Between Science, Policy And Society: Co-Design Of Solutions For Ocean Sustainability Workshop

Date: August 2025

Location: South Africa

Partner Organization: WIOMSA

Beneciaries: ILK holders from Africa (Kenya, Madascar and South Africa) to participate in co-design workshop as subject matter experts

Objective: Ensuring equitable stakeholder engagement by integrating Indigenous and Local Knowledge

Enhancing marine biodiversity data collection and publishing Workshop

Date: November 2025

Location: Portugal

Partner organization: Air Centre

Beneficiaries: Supported four African ECOPs to participate in MBON training and train to serve as future trainers under a Train-the-Trainees approach

Objective: Training researchers to clean, standardize, and publish marine biological data using global standards (OBIS)





Ocean Decade / OTGA e-Learning Course on the BBNJ Agreement

Course Aims and Audience:

- Comprehensive <u>background</u> on the BBNJ Agreement, its contents, aims & relevance within the current ocean governance framework
- Focus on <u>ocean science & knowledge</u>, including tools and mechanisms available
- Overview of <u>ocean observations & data</u> in Areas Beyond National Jurisdiction
- Practicable and useful to its <u>operationalization</u>, as it will outline ways how ocean professionals can play their part in the implementation of the BBNJ-Agreement and benefit from available tools
- Designed for the <u>IOC community</u>, which include ocean practitioners of different sectors who will be part of the implementation of the BBNJ-Agreement (scientists, managers, technical staff, governmental agencies, private sector, among others)

1) Introduction to the topic of marine biodiversity of areas beyond national jurisdiction:

- Natural environment of the open ocean
- Existing ocean governance framework
- Ocean science and knowledge

2) BBNJ in Practice:

- · Elements & Aims of the BBNJ agreement.
- Focus is on the technical competencies needed for the operationalization of the BBNJ agreement across all pillars

3) Going beyond the BBNJ Agreement text:

- Encouraging course participants to find their role in shaping the BBNJ process
- Ways how to strengthen cooperation and coordination in the implementation of the Agreement
- Reflections on emerging technologies
- The intrinsic value of marine biodiversity

Survey will be shared with WG members to elicit feedback on contents





Overview Session on IOC/Decade potential contributions across 5 dimensions (presentation + Q/A)

5/ IOC contributions towards the functions of a BBNJ Clearing House mechanism

Ward Appeltans, Head, OBIS, IOC



The unique challenges in the implementation of the BBNJ Agreement

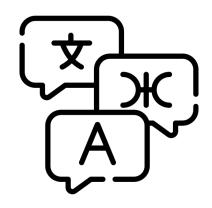
Due to its unique scope and ambition, the implementation of the BBNJ Agreement presents a range of complex tasks to Parties and stakeholders.



How can we close critical knowledge and data gaps to support evidence-based decision-making in ABNJ?



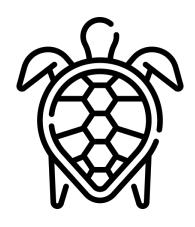
How can we ensure equitable access to capacity, technology, and knowledge for all countries, especially those with limited resources?



How can we build inclusive, coherent governance that aligns the BBNJ Agreement with existing frameworks and gives all countries a meaningful voice

A science- and data-first approach to support the implementation of the BBNJ Agreement

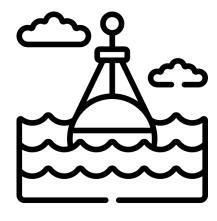
The BBNJ Agreement explicitly underscores the importance of using the **best available science and scientific information** to support its implementation.



Science helps us understand the Ocean and its accelerating changes.



Open science enables informed and transparent decision-making.



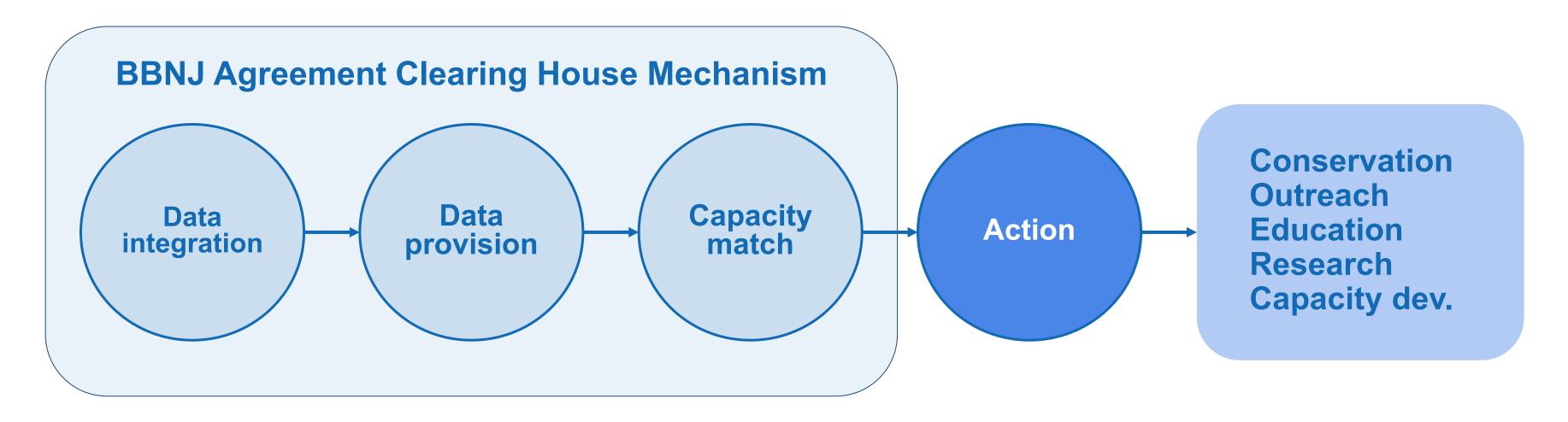
Scientific data is collective, verified, and interoperable.



Science contributes to a more inclusive implementation of the BBNJ Agreement.

The BBNJ Clearing-House Mechanism (CHM): A Digital Backbone Enabling Frictionless Data Flows

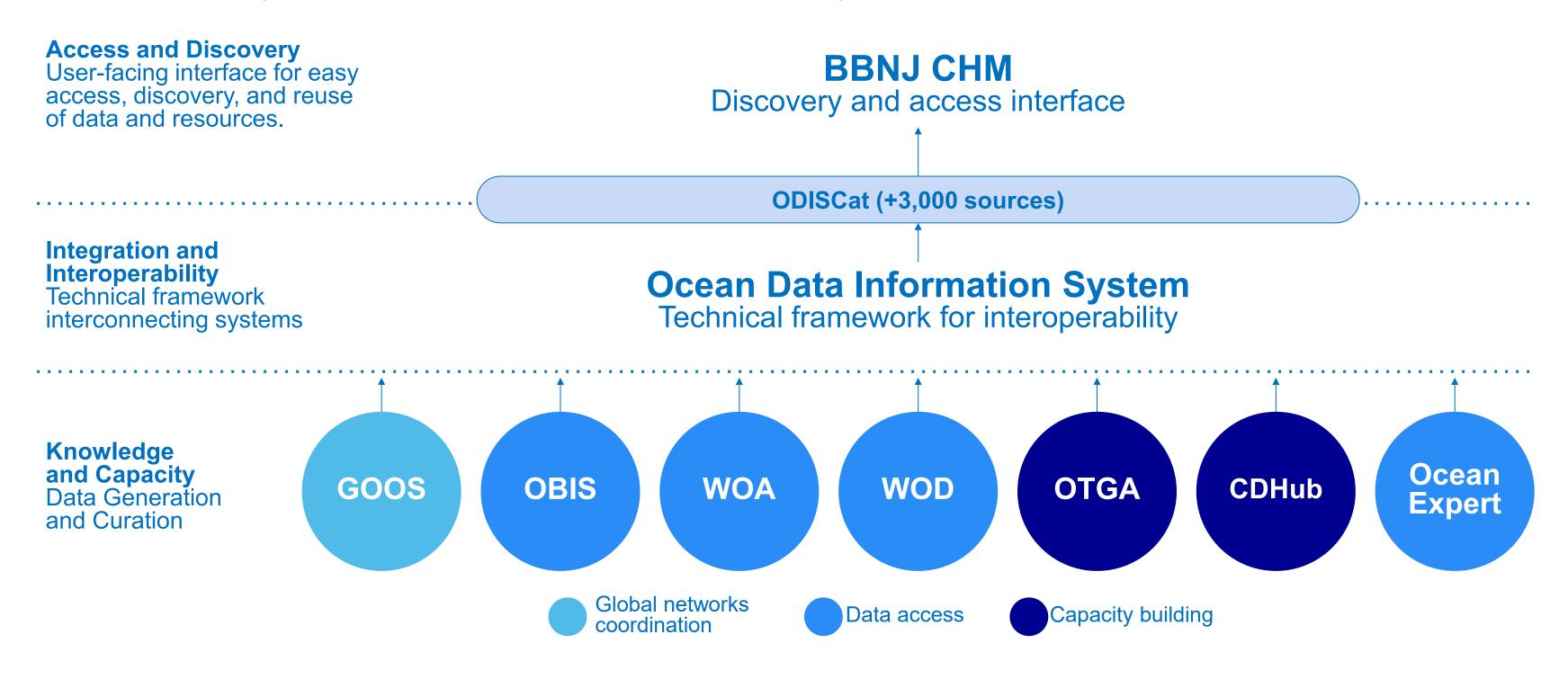
A science-based, data-first open-access platform delivering ABNJ-related information: The BBNJ CHM is a **dynamic enabler of cooperation**, **capacity**, **and conservation**



The specific modalities for its operation shall be determined by the Conference of the Parties (COP).

Overview of the IOC's Clearing-House Mechanism

The data-first IOC Clearing-House Mechanism can support the implementation of the BBNJ Agreement. It is operational, global, responsive, and built on transparency, openness and FAIRness.



How operational & scalable IOC components could support the 4 pillars of the BBNJ Agreement



| BBNJ pillar | Marine Genetic Resources (MGRs) | Area-Based Management Tools | Environmental Impact Assessments | Capacity Building & Technology Transfer |
|------------------------|---------------------------------------|-----------------------------------|--|---|
| Service component | OBIS | GOOS OBIS MSPGlobal | GOOS OBIS WOD | OTGA CDHub OceanExpert |
| Technical framework | Ocean Data and Information System | | | |
| | ODISCat | | | |
| Discovery | Ocean Info Hub | | | |

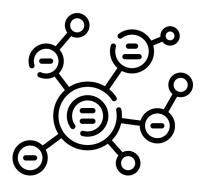
Operationalizing the Clearing-House Mechanism of the BBNJ Agreement: Strategic Priorities Ahead

Critical minimal technical functions of the Clearing House Mechanism (CHM) to support the operationalization of BBNJ



Document system:

- Upload and download functions for documents and reports
- A notification mechanism;
- Initial data security measures;
- User modalities (e.g., who can upload and download information)



Matching facility/tools for capacity building and Technology Transfer



MGR reporting

- pre-post cruisenotification system
- A mechanism to generate batch identifiers for MGRs

IOC's Expertise Supporting the Clearing-House Mechanism of the BBNJ Agreement

As the only UN body with a mandate focused entirely on marine science, services, and capacity development, IOC is uniquely positioned to support the implementation of the BBNJ Agreement.



in designing, operating, and interconnecting data and information systems.

The existing and operational IOC's CHM can serve as a blueprint for the BBNJ CHM.



IOC services are designed with equity in mind, offering free and open access and tailored support for developing states, Small Island Developing States (SIDS), and Least Developed Countries (LDCs).



IOC is ready to partner with BBNJ stakeholders to implement an inclusive, data-driven CHM, leveraging its existing initiatives and mobilizing assessment tools.

Partnering for a better Ocean

As a competent international organization, IOC will respond to requirements from UNCLOS and other international instruments.

IOC may act as a joint specialized mechanism of the organizations of the UN system that have agreed to use IOC for certain responsibilities in the fields of marine sciences and ocean services (cfr UN Ocean Decade)















5. Overall discussion on the work of the WG, ie focus and timeline of next sessions (In Depth Session on individual topics)

- What should be the focus of the next WG session (In Depth session)?
 - February 2026: CHM?
 - April 2026: Data/Obs and CD?
- What should be the outputs of these Sessions? For eg:
 - Understanding the landscape and IOC's comparative advantage in a given area
 - Understanding of capacity development needs of MS (science community, decision makers, and managers) in specific area
 - Recommendations for technical/scientific specifications to enhance IOC products, services and CD for BBNJ application, including areas in need of additional support andresources
 - Key messages to convey to IOC and UN MS engaged in the BBNJ process (incl though events)
 - Other?
- What would be the best way to prepare these WG In Depth Sessions?
 - Do we need to establish smaller Task Groups who can address these outputs and prepare the discussion with the wider WG? (eg on CD, CHM). We will need volunteers to contribute and lead these.



CLOSURE





THANK YOU SES