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**Intergovernmental
Oceanographic
Commission**

How IOC can support the Clearing-House Mechanism of the BBNJ Agreement

Ward APPELTANS

Marine Biodiversity Programme Specialist
of the Intergovernmental Oceanographic
Commission (IOC) of UNESCO

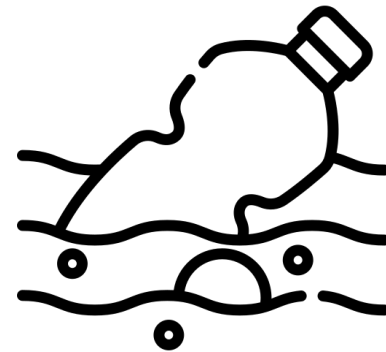
25 June 2025, IOC-A33, Paris, France

The Ocean Under Threat: Facing A Triple Crisis

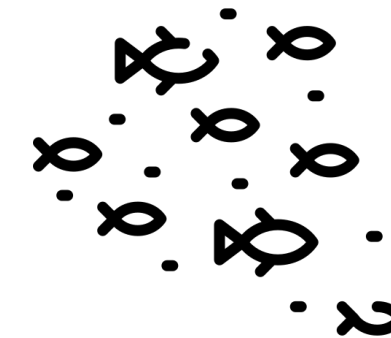
Our Ocean faces unprecedented challenges, often referred to as a **triple crisis**



A **climate crisis**, bringing warming, acidification, and deoxygenation that radically impact marine ecosystems.

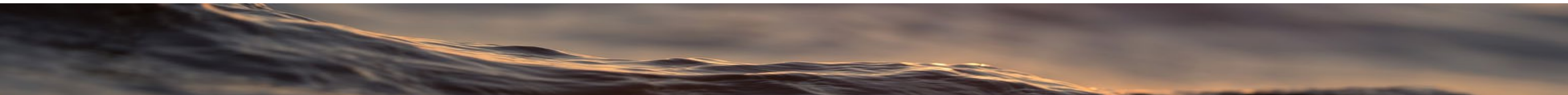


A **pollution crisis**, with littering, plastics, chemicals, excess nutrients, and intense marine traffic changing the balance of the Ocean.



A **biodiversity crisis**, driven by destructive resource extraction, climate change, and pollution, leading to habitat loss, mass species mortalities and ecosystem disruption.

Addressing this triple crisis requires unified, coordinated global action

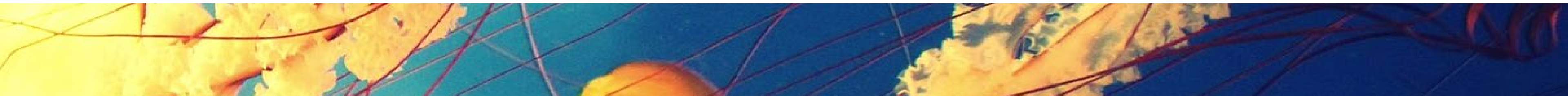


The BBNJ Agreement: A Collective Answer towards Global Ocean Governance

A historic step adopted in June 2023 after two decades of efforts

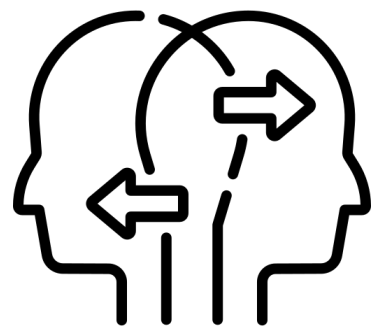
The BBNJ Agreement ensures the **coordinated, long-term conservation and sustainable use of marine biological diversity in Areas Beyond National Jurisdiction (ABNJ)**, commonly referred to as the “high seas.” It provides Parties with a **framework to cooperate on marine biodiversity governance.**

The BBNJ Agreement is organized in four pillars: **Marine Genetic Resources (MGR)** including benefit sharing; **Area-Based Management Tools (ABMTs)** including marine protected areas; **Environmental Impact Assessments (EIAs)**; and **Capacity Building and the Transfer of Marine Technology (CBTMT)**



The unique challenges in the implementation of the BBNJ Agreement

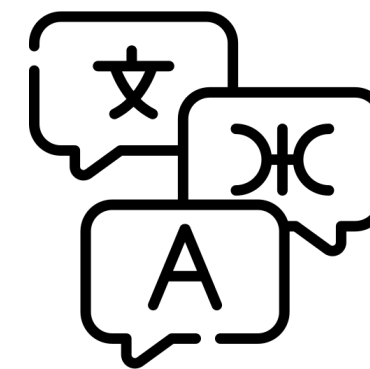
Due to its unique scope and ambition, the implementation of the BBNJ Agreement presents a range of complex tasks to Parties and stakeholders.



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



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

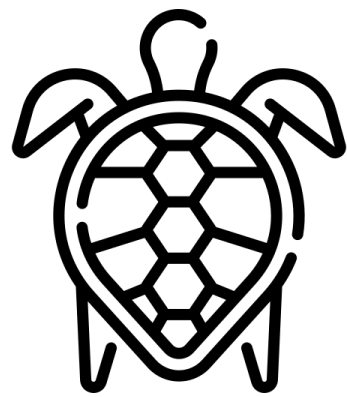


How can we **build inclusive, coherent governance that aligns the BBNJ Agreement with existing frameworks** and gives all countries a meaningful voice

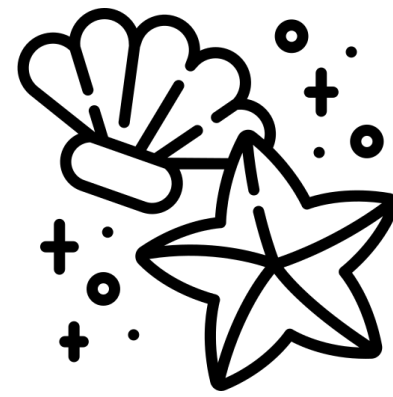


A science- and data-first approach to support the implementation of the BBNJ Agreement

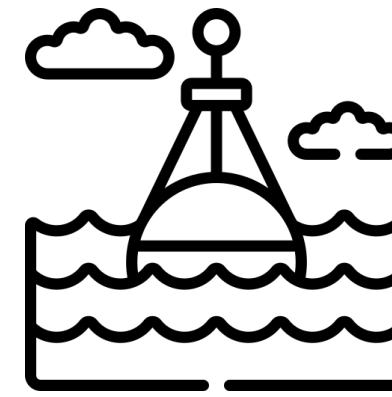
The BBNJ Agreement explicitly underscores the importance of using the best available science and scientific information to support its implementation.



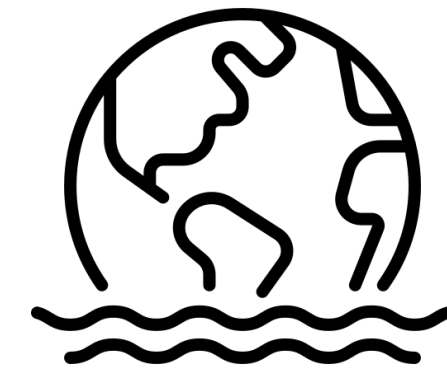
Science helps us understand the Ocean and its accelerating changes.



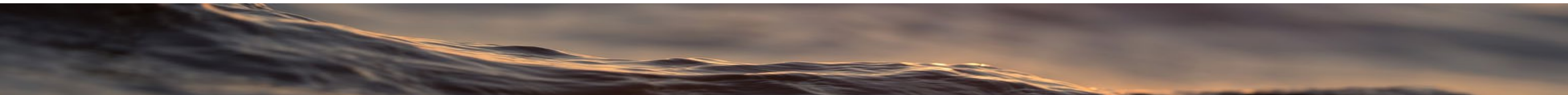
Open science enables informed and transparent decision-making.



Scientific data is collective, verified, and interoperable.



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



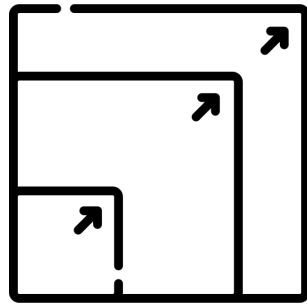
Tracks to Advance Ocean Science in Support of BBNJ

What needs to happen globally to match the BBNJ needs with the best available science.



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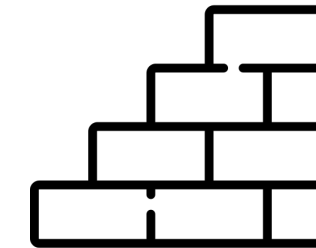
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**Strengthen and
Expand** Ocean
Knowledge in BBNJ

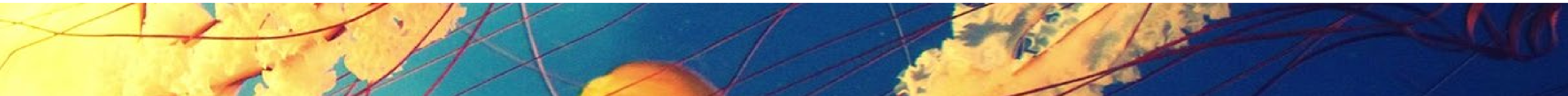


Enhance
Data Sustainability,
Accessibility and
Interoperability



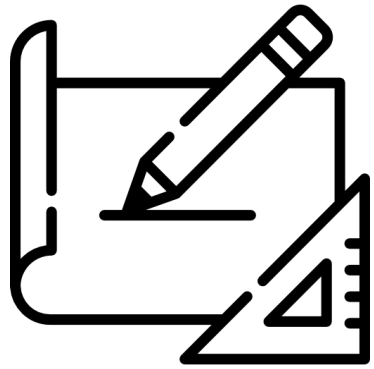
Build
Inclusive Capacity
and Equitable Access to
Technology & Information

The BBNJ CHM: A Digital Backbone Enabling Frictionless Data Flows, delivering BBNJ-related information - a dynamic enabler of cooperation, capacity, and conservation

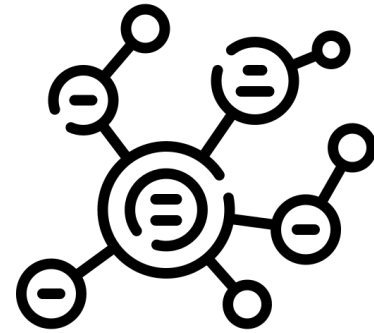


IOC's Expertise Supporting the Clearing-House Mechanism of the BBNJ Agreement

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.



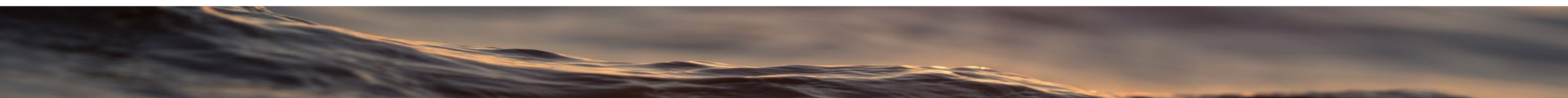
IOC has extensive expertise in designing, operating, and interconnecting data and information systems. The existing and operational IOC's CHM can serve as a blueprint for the BBNJ CHM.



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).

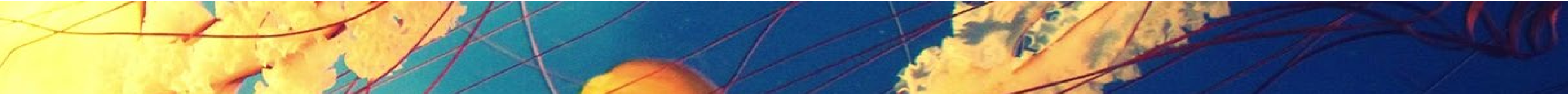
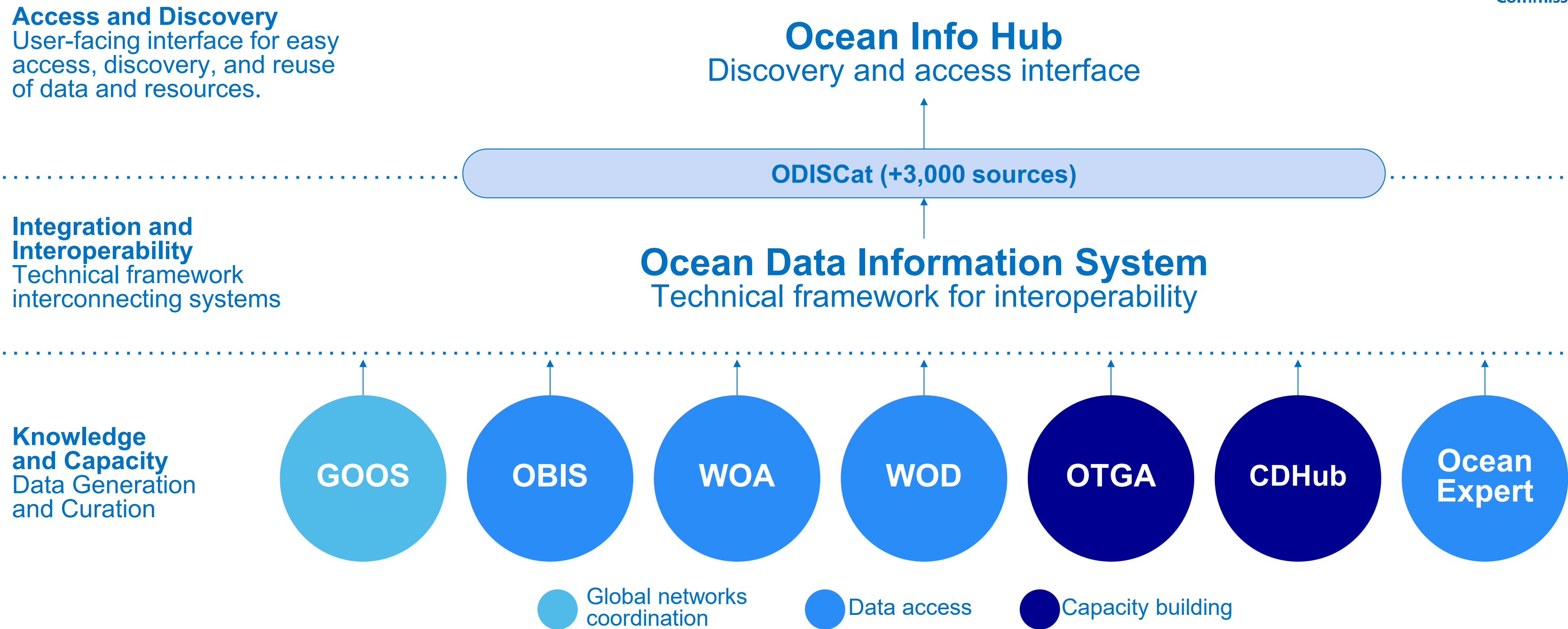


IOC is ready to partner with BBNJ stakeholders to implement an inclusive, data-driven CHM, leveraging its existing initiatives and mobilizing assessment tools such as the Global Ocean Science Report (GOSR).

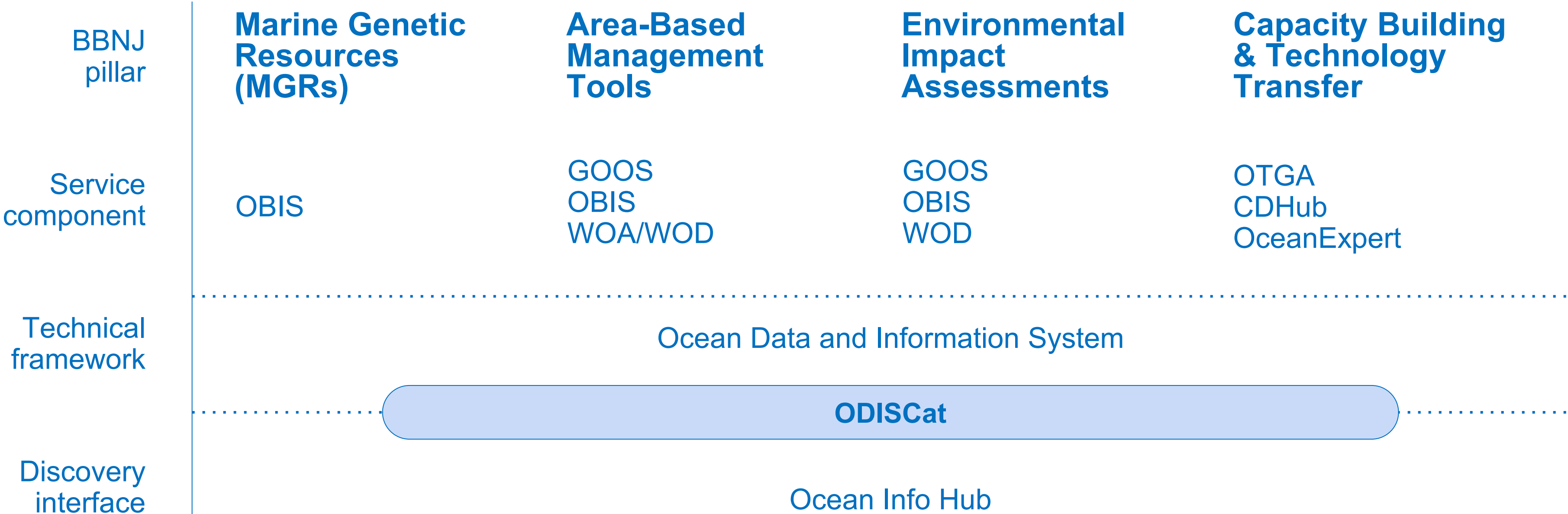


Overview of the IOC's Clearing-House Mechanism

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



Supporting BBNJ Pillar 1: Marine genetic resources, including the fair and equitable sharing of benefits



Ocean Biodiversity Information System

Provides globally accessible marine biodiversity data (FAIR), supports access & benefit-sharing.

141M
species
observations

195K
marine
species

36
Nodes
worldwide

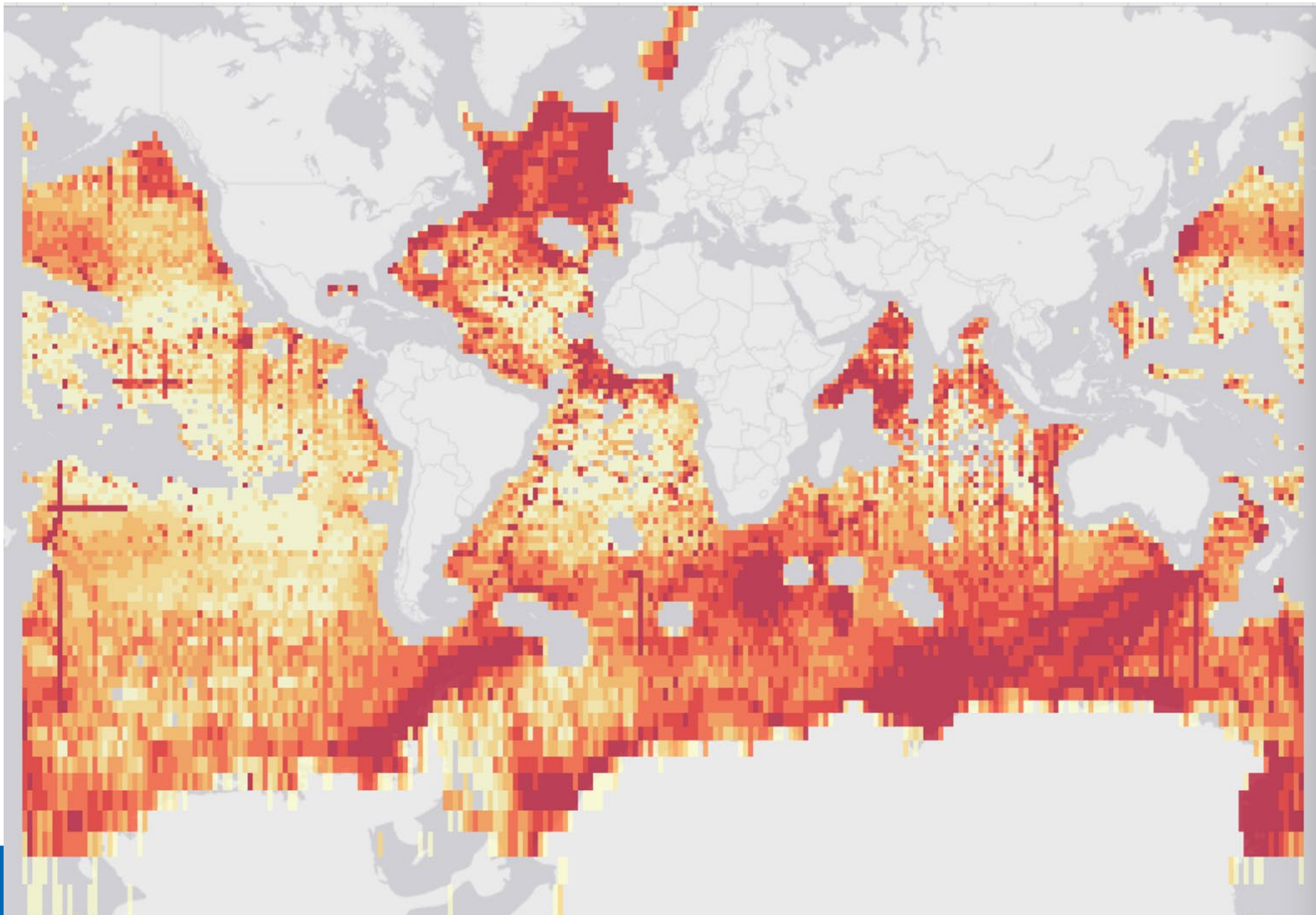
27M
DNA
sequences

6K
scientists &
data managers
involved

99
countries
engaged



BBNJ Relevance: Data repository supporting data transparency and equitable access to MGR information; helps fulfill obligations under access and benefit-sharing provisions (could provide SBIs, support monitoring and transparency). Support in data management plans.



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**In ABNJ,
OBIS has**

**+9.5 M
observations
+28,000 species
+1,300 datasets**



Supporting BBNJ Pillar 2: Area-Based Management Tools (ABMTs)



Global Ocean Observing System

Global framework for monitoring EOVs (e.g. marine mammals, turtles, seabirds) to assess ocean health and trends. Networks, observing technology, standards and best practices.



Ocean Biodiversity Information System

Baseline biodiversity data to define, assess and monitor ABMTs. Cfr support for EBSAs. 50% of the data in OBIS is within MPAs.



BBNJ Relevance: Provides the data and science to identify, manage, and evaluate ABMTs like MPAs.



Supporting BBNJ Pillar 3: Environmental Impact Assessments (EIAs)



Global Ocean Observing System

Monitors observing system supporting transparency and scientific rigor.



Ocean Biodiversity Information System

Delivers marine life baseline and trend data.

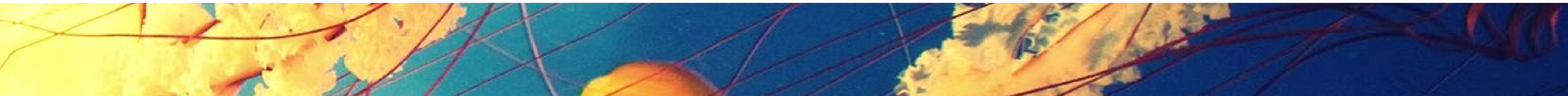


World Ocean Atlas World Ocean Database

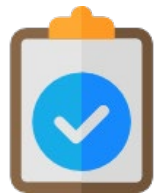
Long-term climatologies to study ecosystem functioning, and monitor cumulative impacts.



BBNJ Relevance: Fulfills the need for scientific data, transparency, needed for operational monitoring of cumulative ocean hazards (models and forecasts for early warning systems) .



Supporting BBNJ Pillar 4: Capacity Building & Technology Transfer



Biennial CD needs assessments

Maps capacity development the needs to support BBNJ topics.



OceanTeacher Global Academy

Delivers training on ocean science and BBNJ topics through 17 regional training centres worldwide.



Ocean Capacity Development Hub

Repository for Capacity Development offers



OceanExpert

Maintains expert roster, supports collaboration and managing expert networks.



BBNJ Relevance: Provides capacity to all nations to participate fully and benefit from the agreement, with direct contribution to Article 44 of BBNJ.

Supporting BBNJ Pillar 4: Capacity Building & Technology Transfer



**Ocean Data
& Information System**

User-oriented search and dialogue interface connecting to multiple “CHMs” using the ODIS technology.



Ocean Info Hub



BBNJ Relevance: BBNJ should use ODIS technology to develop their “BBNJ knowledge system”.



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



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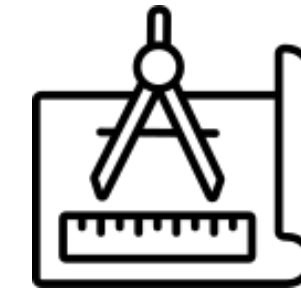
Creation by the Preparatory Commission (PrepComm) of a 50-member informal expert group to define the technical aspects of the Clearing House Mechanism (CHM) operationalization, with a focus on three areas of action:



Contributing to advancing technical discussions for the operationalization of the CHM.



Developing recommendations for consideration by the Preparatory Commission at its third session: roadmap, workplan, modalities (web platform, tech transfer, interoperability)



Providing any other technical advice related to the CHM operationalization at the request of the PrepComm.



Partnering for a better Ocean



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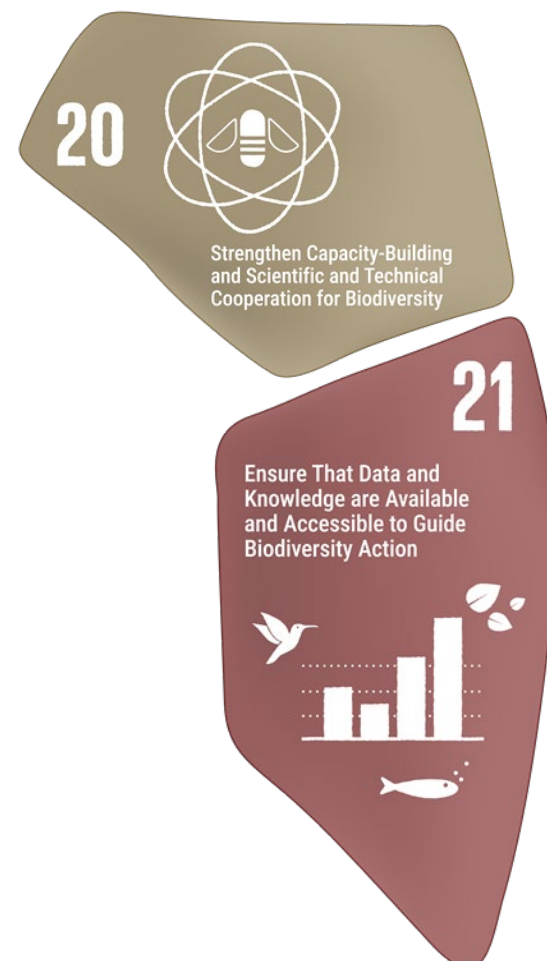


Kunming-Montreal

GLOBAL BIODIVERSITY FRAMEWORK



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.

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)





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THANK YOU

