DOSI
DEEP-OCEAN STEWARDSHIP INITIATIVE

INFORMATION SHEET

AUGUST 2025

How to engage and contribute to the implementation of the BBNJ Agreement as a marine scientist

Key messages

- Scientists have the opportunity to play a key role in the implementation of the BBNJ Agreement.
- Through Parts II, III and IV of the Agreement, scientists are positioned as key bridges between a broader continuum spanning policy, industry and conservation outcomes.
- The Agreement offers scientists a standardised, multilateral framework for facilitated access, utilisation and benefit sharing of marine genetic resources (MGR) in areas beyond national jurisdiction (ABNJ).
- It has the potential to enhance equitable representation in marine science research, such as fostering collaborations and opportunities to join existing research cruises and obtain existing collections of MGR for multiple research applications.
- It also offers enhanced centralised access to data and scientific information via the Clearing House Mechanism (CHM). Participation in BBNJ-aligned research enhances international collaboration, funding eligibility, and scientific visibility.
- The Agreement recognises that bioprospecting is anchored in biodiversity science but can culminate in commercial research and development (R&D). To this end, scientists are the first point of contact in the MGR pipeline, unlocking knowledge, innovation and feeding conservation baselines.
- With the Agreement providing for scientific and technical participation in various subsidiary bodies, scientists have a key role in designing data standards and ethical protocols, and helping to shape the form and procedures of the Agreement's Scientific and Technical Body (STB).

Recommendation Summary

The Agreement offers an entry point for scientists to shape conservation priorities and the development of science-based baselines, thresholds, and impact assessments. Scientists can support implementation of the BBNJ Agreement by:

- Directly engaging with their country's BBNJ operationalising team, their funders, and their organisations to inform drafting of domestic legislation.
- Providing expertise required to identify potential areas in specific need of protection from human impacts in ABNJ.

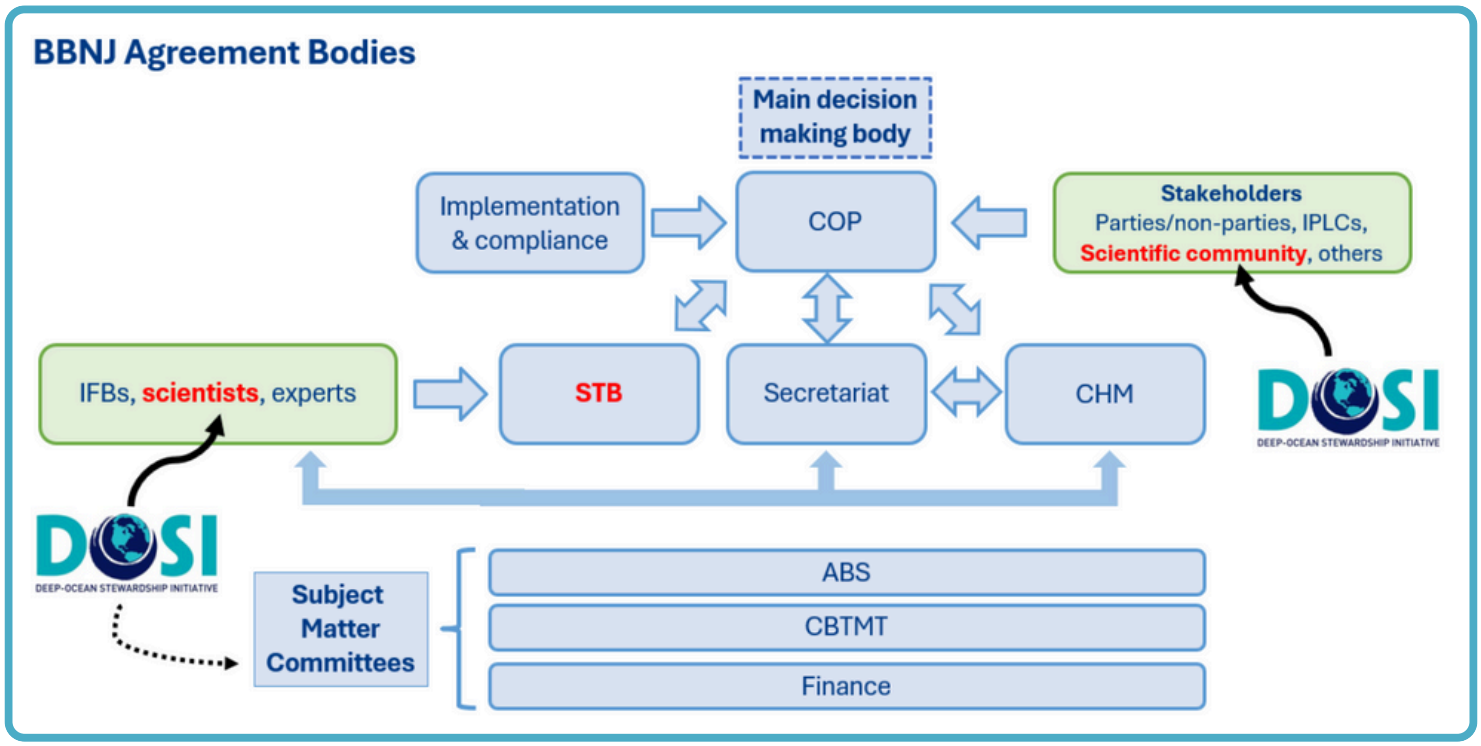

Figure 1: *Recommendation for scientific engagement with the BBNJ Agreement (COP, Conference of the Parties; STB, Scientific and Technical Body; CHM, Clearing House Mechanism; IFB, institutions, frameworks, and bodies (such as IPBES and IPCC panels); IP&LC, Indigenous Peoples and Local Communities; ABS, Access and Benefit Sharing; CBTMT, Capacity Building and the Transfer of Marine Technology).*

Background of current policy

- The BBNJ Agreement fills governance gaps for MGR of ABNJ not addressed under UNCLOS and its other implementation agreements, nor covered by the bilateral access-and-benefit-sharing model of the Convention on Biological Diversity's Nagoya Protocol.
- The BBNJ agreement establishes a Scientific and Technical Body (STB), where marine scientists, among experts of other fields and Indigenous Peoples and Local Communities (IP&LCs), will play a key role in supporting implementation.
- Article 12 of the BBNJ Agreement introduces a requirement of notification to a central authority for research and activities involving MGR and Digital Sequence Information (DSI) on MGR, which will directly affect scientific workflows. In this regard, notification will be applied before a research expedition (i.e., subject matter of research, geographical areas, etc.) and post-collection, such as production of a cruise report, or DSI/MGR database.

- The BBNJ Agreement calls for engagement with the scientific community, including numerous consultations for area-based management tools (ABMT) (e.g., Articles 19.2, 21.1) and Environmental Impact Assessments (EIAs) (e.g., Article 32.3). ABMTs include a range of measures—from sector-specific regulations such as those for fishing or shipping, to integrated approaches like Marine Protected Areas (MPAs) and Marine Spatial Planning (MSP).
- Furthermore, the Agreement emphasises capacity building, technology transfer, findable, accessible, interoperable and reusable (FAIR) principles, best available science, transparency and open collaboration, aligning with scientific values of transparency and equity. The BBNJ Agreement elevates science equity to a legal requirement, whilst providing tools which enable and incentivise developing states to close the gap.

Scientific opportunities

- Access to marine resources in ABNJ under a standardised, multilateral system to allow for better coordination globally when accessing MGR or associated DSI of MGR. Additionally, the BBNJ Agreement may improve access to less-studied marine areas and underutilised genetic resources, due to better coordination, while opening a new direction for innovation.
- Participation in Capacity Building and the Transfer of Marine Technology (CBTMT) activities, such as global research cruises, with provisions for equitable inclusion of scientists from developing states. Such activities include participation in training and global research cruises, access to resources, equipment, and technology. Capacity building involves skills, training, and institutional development, while technology transfer focuses on the sharing of tools and systems.
- Opportunity to inform the design of infrastructure, such as the CHM and Standardised Batch Identifier (SBI), through early and sustained engagement and provision of feedback. This infrastructure enables linking of samples and data working towards data harmonisation, which is crucial to ensure benefit sharing.
- Engaging as a scientist in the STB: Scientists in the STB play a significant role in the implementation of ABMTs (Part III of the Agreement), including MPAs. STB scientists are also tasked with developing standards and/or guidelines for EIAs under BBNJ, and play a role in the EIA process before activities are authorized – by commenting on, evaluating and considering EIA reports, evaluating potential impacts of planned activities, reviewing a State's decisions on whether an EIA is needed, and after activities were authorized – by considering and evaluating the monitoring reports of authorized activities, notifying of their impacts and addressing a Party's concern about an already authorized activity.
- Support for open science, including DSI sharing and collaborative research networks.

Key questions to be answered while moving towards implementation

- What can scientists do to be ready to comply with requirements set by the BBNJ Agreement when it comes into force?
- What steps can lead to improving the dialogue between policymakers and scientists to provide more clarity for all?
- Who will be responsible for notification? Specifically, notification of what, to whom and by when?
- Will there be additional administrative burdens through the implementation of BBNJ in national regulations?
- Which body will be responsible for ensuring that the BBNJ Agreement is followed during research expeditions?
- How will the BBNJ obligations on scientists fit in with already existing obligations to other relevant policy frameworks (e.g., Nagoya Protocol, Convention on Biological Diversity DSI decisions)?
- What would be needed for scientific collaboration among STBs of different organisations?

Recommendations: How scientists can maximise interaction with BBNJ for optimal implementation

- **SHAPE THE SYSTEM EARLY:** Join advisory panels, working groups, and consultations to influence how treaty infrastructures like the SBI and CHM are designed. Share lessons learned from cruise planning, including procedures for cruise reports with policymakers. Share best practices of data standardisation, which can support interoperability among databases and support cooperation between STBs of different organisations. Engage with national governments to see how research might benefit from implementation of BBNJ or to develop research priorities that align with BBNJ requirements. Early and sustained involvement ensures these systems reflect real research workflows.
- **BOOST VISIBILITY AND COLLABORATION – AND LEAVE NO ONE BEHIND:** Use BBNJ-aligned research to access international collaborations, including multi-state research cruises and capacity-building programs. These opportunities can expand networks and enhance visibility and publication impact. A first approach would be to reach an agreement with Indigenous Peoples to ensure access to, and use of, their traditional knowledge is on mutually agreed terms. Regional or global sharing of their knowledge without their agreement would not be consistent with the BBNJ.
- **LEVERAGE FUNDING AND RECOGNITION:** Aligning with BBNJ principles (e.g., transparency, benefit-sharing, equity) can strengthen grant applications and institutional Environmental, Social, and Governance (ESG) alignment, especially with funders prioritising sustainability and global equity. **Equitable institutional scientific engagement and compliance with BBNJ could become a prerequisite for venture funding, innovation funding or biotech market entry, and scientists are decision-shapers in this regard.**
- **PREPARE FOR BBNJ COMPLIANCE REQUIREMENTS:** Begin familiarisation with BBNJ research requisites, such as notification and benefit-sharing. This reduces the future administrative burden and ensures readiness when the Agreement enters into force. By adopting best practices in benefit-sharing and compliance, scientists can continue to position themselves as leaders in ethical and sustainable marine research and support the current trajectory of global scientific policy. **Work together with policymakers or policy experts to determine national regulations and streamline compliance.**
- **ADVISE/ADVOCATE TO IMPROVE MGR AND DSI ON MGR LEGAL FRAMEWORKS:** From the standpoint of the user, the terms of use and benefit-sharing trigger points for the four UN fora (CBD, WHO, FAO, and BBNJ) should be harmonised to allow users to access and use data with little transactional costs. It is the viewpoint of the authors that the rules recently adopted by the World Intellectual Property Organisation (WIPO) to guarantee transparency on the origin and nature of genetic resources should be taken into account for BBNJ implementation, to the extent possible under the Agreement text.
- **FOSTER CAPACITY BUILDING AND TECHNOLOGY TRANSFER:** There is an urgency to support needs assessments as stipulated under Part V, especially in developing states, to ensure that scientists are engaged and policymakers account for a diverse range of scientific capacities. Addressing limitations faced by developing states and IP&LCs in accessing and utilising MGR requires the transfer of marine technology to level the playing field. In this regard, the recommendation would be to also consider how ongoing and current research activities can include CBTMT opportunities. Further, formalised North-South political dialogues on science equity and engagement could provide a predictable exchange platform to complement the STB.

This Information Sheet was borne from the *Implementing the New UN BBNJ Ocean Treaty* workshop, held in July 2025, which was co-sponsored by the University of Aberdeen, the London School of Economics' Oceans Biodiversity Collective, EU Projects BlueRemediomics, HOTBIO and MARBLES, and DOSI.

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About DOSI

The Deep-Ocean Stewardship Initiative is a global network of experts that integrate science, technology, policy, law and economics to advise on ecosystem-based management of resource use in the deep ocean and strategies to maintain the integrity of deep-ocean ecosystems within and beyond national jurisdiction.

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