DOSI
DEEP-OCEAN STEWARDSHIP INITIATIVE

POLICY BRIEF
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The Deep Ocean and BBNJ: Important Points for IGC-5

Why does the deep ocean matter in BBNJ Negotiations?

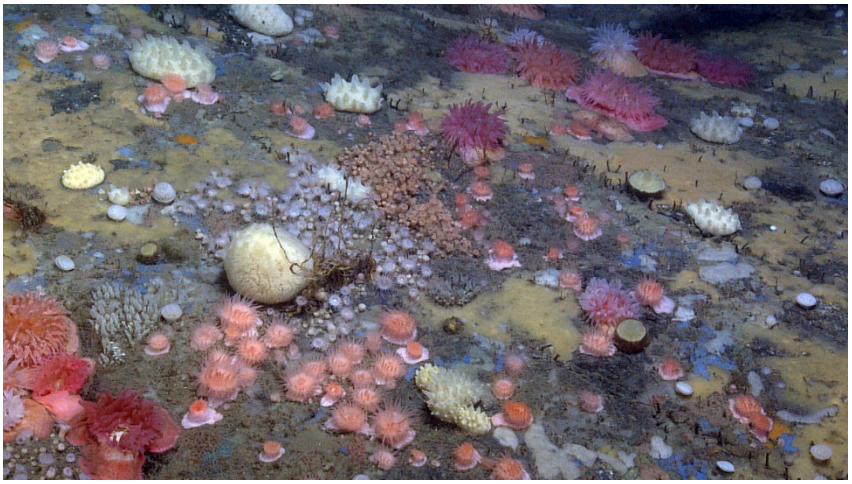
The deep ocean is critically important to global biodiversity. Consisting of the entire ocean below 200 meters, it provides **over 95 percent of the space used by life on Earth.** This means that the deep ocean includes almost all of the marine areas beyond national jurisdiction (ABNJ) whose biological diversity the BBNJ instrument aims to conserve. As the world's largest and oldest environment, the deep ocean also provides critical services that keep the rest of the planet healthy. Despite this importance, **the value and unique policy needs of the deep ocean are often overlooked.** The Deep Ocean Stewardship Initiative (DOSI) is a global network of experts created to support effective decision-making for the deep ocean by connecting scientists and policymakers. This communication from DOSI members **outlines key opportunities to address the deep ocean in the BBNJ treaty.** We include links to policy briefs and papers for further reading and offer to **support delegates with any questions** on the latest deep-ocean science.

(1) Capacity-Building and Transfer of Marine Technology

The advanced technology and training needed to study the dark, high-pressure environment of the deep ocean can be prohibitively expensive for all but the wealthiest states and research institutions. Deep ocean exploration efforts are often compared to space programs due to their difficulty. This inaccessibility is a problem for conserving BBNJ and prevents most countries benefiting from discoveries. As rules are finalized, deciding how to build international capacity for deep-ocean research will be important. Suggestions for how this might be done have been offered in papers such as Harden-Davies *et al.* (2022) and Harden-Davies & Snelgrove (2020) written by DOSI experts.

(2) Marine Genetic Resources and Benefit Sharing

The global ocean is home to 2.2 million species of marine animals and up to a trillion different types of microorganisms, many of which are found in the deep ocean. This massive diversity of species supplies genetic material that has environmental, economic, and societal benefits. BBNJ negotiations offer a unique opportunity to create a clear legal framework, in coordination with the Convention on Biological Diversity, so that policy can keep pace with rapid scientific developments. Points that deserve special consideration include intellectual property, traceability, digital sequence information, and accessing and sharing benefits.



Examples of thriving deep-sea biodiversity adapted to the food-limited, transparent waters of the deep ocean. *Credit: Anna Metaxas, Martha Nizinski and ROPOS*

(3) Area-based Management Tools

ABMTs are commonly recognized as important tools for conserving both shallow and deep-ocean biodiversity, but the specific circumstances of the deep ocean require special consideration. Compared to shallow environments, deep- ocean ecosystems are harder to monitor and to adapt management strategies for if something goes wrong. This has led to calls for extra caution when using ABMTs in the deep ocean. The rules that emerge from these negotiations will need to consider how ABMTs that include the deep ocean can be designed to account for the different spatial management needs of diverse deep-ocean habitats, human uses such as fishing and mining that are subject to different regulations, connectivity between separate zones and regions of the ocean, and the effects of ongoing climate change on forward- looking conservation planning. As international consensus can be hard to reach on ABMT decisions, a clear process to determine when to rely on a "two-thirds majority" is also needed.

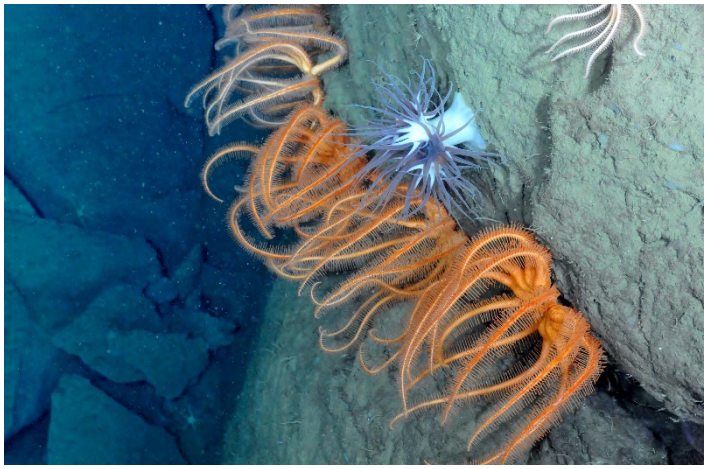
(4) Environmental Impact Assessments

As with area-based management, EIAs are more difficult to design for the deep ocean due to its size and inaccessibility. Species there tend to evolve, mature, and reproduce slowly, with some living thousands of years. This increases their vulnerability to direct and indirect human harm, which makes it especially important to use the best available deep-ocean science to inform the development of EIAs and other management tools in ABNJ. Specific factors to consider when planning rules for EIAs include the environmental impacts of climate change and deoxygenation, which can add to more direct pressures on deep-ocean habitats like fishing or mining. At the massive scale of ABNJ, effective rules for Strategic Environmental Assessments (SEAs) will also be critical.

(5) Cross-Cutting Issues

As research continues, experts will learn more about deep-ocean biodiversity. To support the future of the BBNJ Agreement, negotiators should consider where and when scientific input can be most helpful in updating the Agreement's implementation strategy. Institutional arrangements should encourage experts to study and report on topics important to UN goals, as the Challenger 150 Programme does now. Negotiators should also consider how this information can be stored and shared effectively and equitably.

As a network of ocean scientists, DOSI is pleased to support BBNJ delegates with any and all deep-ocean information needs. For more background on deep-ocean biodiversity, we encourage you to read our policy briefs on deep-sea fundamentals and sustaining biodiversity beyond national jurisdiction. If your delegation requires expert input on any deep-ocean questions during IGC-5, please email us at DOSIcomms@gmail.com or ask a member. We will be happy to connect you with DOSI scientists ready to offer their support.



Deep-ocean creatures extend into the current to catch a meal.
Credit: Anna Metaxas, Martha Nizinski and ROPOS

This communication was prepared by for IGC-4 by Brandon Gertz, DOSI Communications and Network Development Lead, on behalf of the DOSI Core Team. This version has been updated for the resumed IGC-5.

Read more DOSI policy briefs:
https://www.dosi-project.org/resources/dosi-policy-briefs/

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