

Deep Sea Dialogues

20th July 2025

Kingston, Jamaica



Introduction

The *Deep Sea Dialogues* was convened on Sunday 20th of July 2025, in the sidelines of the 30th Session of the International Seabed Authority (ISA) in Kingston, Jamaica. The event was co-organized by the International Union for Conservation of Nature (IUCN), Dona Bertarelli Philanthropy, and the Oceano Azul Foundation.

This inaugural dialogue brought together scientists, legal and economic experts, policymakers, and civil society to consider critical questions concerning the future of the deep seabed in a neutral, inclusive, and non-negotiation setting. It marks the beginning of an ongoing conversation on how to ensure that any decisions related to deep sea activities are grounded in robust science, sound economics, and principled governance.

The timing of this dialogue was especially important. As the ISA stands at a pivotal moment in shaping the future of deep seabed mining, participants emphasized that decisions must be transparent, equitable, environmentally sound, and aligned with international law. The dialogues sought to provide clarity on the options ahead and the choices that must be confronted by the international community, with a shared understanding that the future of the deep sea implicates both present obligations and intergenerational responsibilities.

The event was organized around three sessions (Session I on Science; Session II on Economics; Session III on Governance) and was followed by an open floor¹.

This event was run under Chatham House Rule. The report presents high level summaries of key messages and discussion points from the event but does not reflect the opinions of or endorsement from any of the speakers or participants.

The key messages and reflections from the event, reproduced below, were reported back to Assembly on 23rd July as part of the official programme which represents a positive step towards greater participation of all stakeholders to ISA proceedings.

I. Session I (Science): How can scientific knowledge inform our decision making?

Rapporteur: Dr. Diva Amon

The session was organized around four presentations, which delved into:

- The importance of the deep sea and its various ecosystems.
- The potential impacts from deep-seabed mining activities, and the deep sea's potential for recovery and restoration.
- The use of frameworks and tools to assess, manage and monitor these impacts.

The key messages included:

- The deep sea is home to near pristine ecosystems & substantial biodiversity. This includes abyssal plains, hydrothermal vents and seamounts.
- While there is now more scientific knowledge than we have ever had before about the deep sea, it remains mostly unknown & poorly understood.
- We do, however, understand that the deep sea plays a critical role in the functioning of the planet.
- In all three ecosystems under consideration for deep-seabed mining, much of the fauna is reliant on the minerals, which would be physically removed should deep-seabed mining activities go ahead.

¹ Agenda available at: [FINAL Open Deep Sea Dialogue Programme.pdf](#)

- The impacts from deep-seabed mining activities will depend on the ecosystem and technology used. The recovery potential of each ecosystem varies, but it is known that some of the deep-seabed mining impacts will result in permanent damage.
- Robust science is essential for informed decision-making on deep-seabed mining and the ISA provides a critical platform for this.
- Approaches and tools such as ecosystem-based management frameworks and species assessment can provide management direction, should the decision be taken to move ahead with exploitation. Well-designed monitoring programs that integrate with assessments of cumulative impacts will be key to ensuring that uncertainties are resolved and that operations never move beyond agreed limits for harm.

Based on the presentations and discussions, the following recommendations emerged:

- The strengthening of the *deep-sea science to policy* interface is considered a key priority for the ISA.
- A discussion to define and agree on environmental goals and objectives is needed. This can help to take stock on where the knowledge gaps are and identify priorities for marine scientific research, to support the science-to-policy interface. At the same time, there needs to be some policy-to-science direction from ISA, that would help inform scientific research to close such gaps. Undertaking this process can help to ensure that the currently limited resources for marine scientific research programmes are utilized efficiently.
- It was suggested that as deep-seabed mining is not the only industry operating in deep-sea environments, it may be helpful to examine how other industries are managed and seek learnings.

II. Session II (Economics): What do the numbers tell us?

Rapporteur: Dr. Rashid Sumaila

The session was organized around two presentations, looking into:

- Payment regime and the benefit-sharing mechanism;
- Economic risks, net costs and trade-offs.

The key messages included:

- From the financial perspective:
 - The sharing of financial and economic benefits is an obligation captured in UNCLOS, Article 140;
 - If the payment regime includes a) royalty, b) transfer profit share and c) equalisation measures at reasonable rates, it would:
 - Ensure minimum revenue for the ISA;
 - Result in rates of payment similar to land-based mining;
 - Broadly speaking conform to common/best practice in extractive industry taxation.
 - However, some uncertainties remain on whether:
 - it would provide adequate compensation for land-based miners;
 - it would provide adequate compensation for environmental damage;
 - it can ensure total benefits outweigh the costs;
 - it fairly compensates humankind.
 - Such goals may go beyond what a payment regime can reasonably be expected to achieve;
 - The payment regime can be a reasonable one, but not a panacea nor a guarantee that DSM is a good thing.

- From an economic perspective:
 - Some key insights from the literature and studies include:
 - There are currently limited economic data and analyses, and most of them are not peer-reviewed.
 - Different stakeholders are likely to see different costs and benefits.
 - For instance, private actors seeking to commence DSM imminently suggest economic viability, but their models and assumptions are being challenged.
 - When comparing DSM vs. a non-DSM scenario, researchers involved in one research project found that the potential risk increased across several indicators, including sea life, coastal vulnerability, profit from other blue economy activities, and therefore blue economy jobs.
 - Preliminary indications from a few recent and ongoing research projects seem to suggest that the net overall benefit from DSM under current scenarios would be minimal or negative.

The discussions that ensued led to the following concluding messages:

- On benefit sharing based on the common heritage of humankind, it is important to adopt a level of pragmatism (based on current models appearing to show that the monetary benefits which would eventually reach Member States are not likely to be significant).
- There is a need for further socio-economic data gathering and research to inform decision-making and to fully understand the burdens and trade-offs involved, versus any potential benefits to be derived from DSM.

III. Session III (Governance): What is at stake for international law making?

Rapporteur: Pradeep Singh

The session was organized as a facilitated discussion, providing historical insights and legal explanations to deep seabed mining negotiations.

Key messages included:

- At the forefront of UNCLOS negotiations and the establishment of the ISA, it was agreed that unilateral mining activities should be prohibited in favour of collective governance. Moreover, it was understood that at any potential wealth generation from mining activities must not come at the expense of the environment and place undue burdens on society, leading States to declare the Area as Common Heritage of Humankind. As activities in the Area shall be carried out for the benefit of humankind as a whole, it is a necessity for states to keep revisiting these foundational parameters of the ISA in light of contemporary scientific knowledge, economic conditions, and normative developments.
- There is a strong focus on the needs and special interests of developing countries, such as the creation of reserved areas. It is important to ensure such privileges are not overlooked.
- In terms of ongoing negotiations, it was explained that draft regulations have to be adopted by Council members by consensus. It was clarified that the benefit-sharing regulations are subject to a different adoption procedure than the exploitation regulations. The Convention foresees a prominent role for the Assembly in adopting the benefit-sharing regulations.
- It was clarified that UNCLOS was receptive to other rules of international law and should not be applied in isolation. The need for systemic integration of international law, as well as general interpretation of the Vienna Convention on Law of Treaties, was stressed.
- On unilateral action, it was stressed that it was less relevant for UNCLOS parties or ISA whether such unilateral action is lawful or unlawful because obligations of Member States

and of the ISA are the same in either case, as captured in Article 137 of UNCLOS which states that “No state shall exercise sovereign rights over the Area.” In addition, no claim over minerals outside the ISA regime should be recognized, requiring States Parties to reject the receipt of minerals exploited in the Area unilaterally.

Based on discussion, the following recommendations emerged:

- It is important to recall and understand the historical context of how UNCLOS was formed and how we got to today. The underlying rationale and grounds that formed the basis of the ISA remains solid to this date, despite recent attempts to challenge multilateralism. However, international law has evolved over the last 50 years, and the ISA should take into account such legal and normative developments including the precautionary principle.
- Being the sole international regulator over activities in the Area, Member States should reaffirm their commitment to the ISA and take steps to shape itself as a credible and responsible regulator over activities in the Area and to deliver for the benefit of humankind.

Open Floor and Closing Reflections

A range of stakeholders intervened during the open floor session, raising concerns about indigenous inclusion, legal accountability, and cultural dimensions of ocean governance. Notably, indigenous perspectives were recognized as historically marginalized in UNCLOS negotiations, and calls were made to redress this imbalance moving forward.

Ambassador Olivier Poivre d’Arvor underscored the geopolitical and environmental urgency, echoing calls for a precautionary pause and reminding delegates of President Macron’s message: “The abyss is not for sale.”

In closing remarks, President Surangel Whipps Jr. of Palau reflected on the dialogue through the Pacific tradition of *Talanoa*—a process of inclusive, participatory, and transparent dialogue. He emphasized that choosing a moratorium or a precautionary pause is not a delay, but a disciplined and respectful approach to governance, allowing space for informed, just, and lasting decisions.

Leticia Carvalho, Secretary-General of the ISA, closed the day by reaffirming that consensus at the ISA cannot be achieved without inclusive dialogue and all interests having a seat at the table.

Conclusion

The first *Deep Sea Dialogues* offered a timely, respectful, and multi-disciplinary space for reflection, convergence, and constructive challenge. It reaffirmed that decisions on the future of the deep seabed must be made:

- **With science** – acknowledging uncertainty, precaution, and the need for stronger data and research frameworks;
- **With economic realism** – ensuring that benefit-sharing mechanisms are just, transparent, and do not incentivize unsustainable extraction;
- **With sound governance** – rooted in international law, public interest, inclusivity, transparency, and intergenerational equity.

This dialogue is a foundation on which to continue building an informed, inclusive, and resilient path forward—one that ensures that the legacy we leave behind is one of stewardship, not depletion.

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