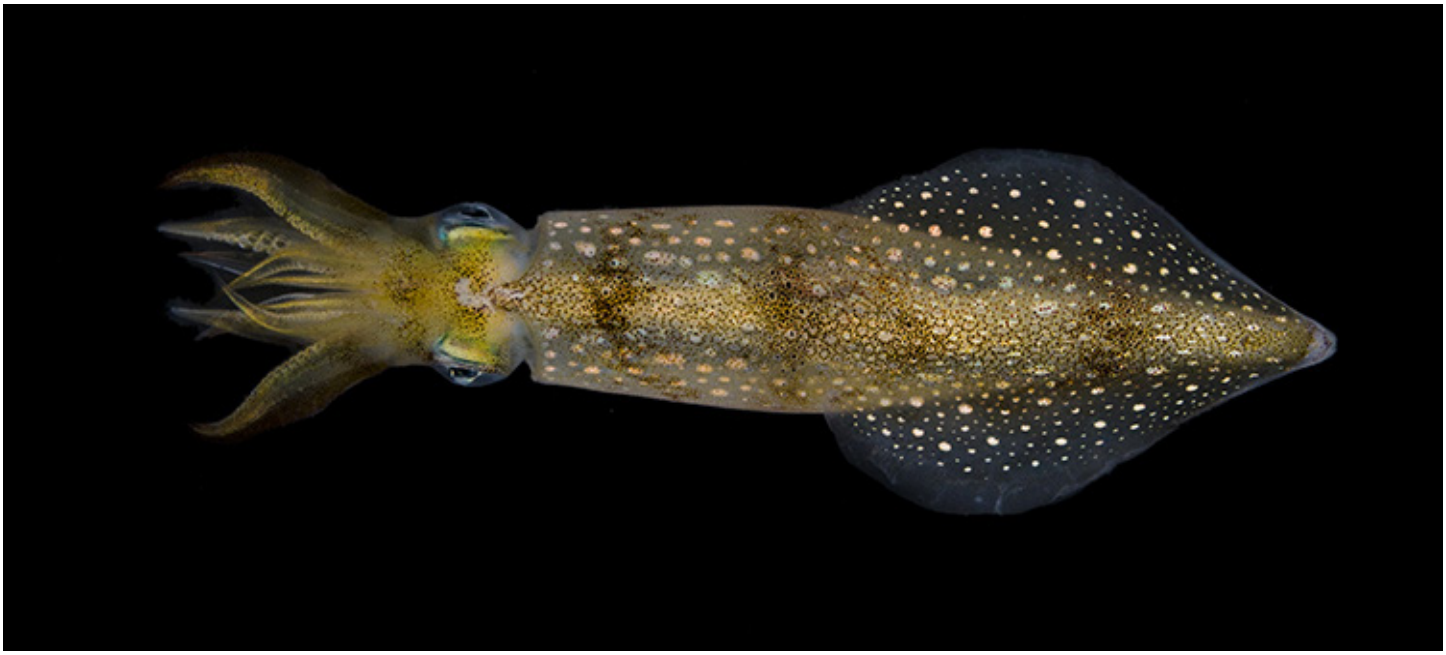

An Atlantic longfin squid swims in the darkness of the deep sea. A group of eminent legal experts has concluded that there should be a moratorium on mining in these depths because of gaps in scientific knowledge and regulations regarding this nascent industry. *Tom Kleindinst*

Seabed Mining Moratorium Is Legally Required by U.N. Treaty, Legal Experts Find

A pause to mining activity is consistent with the U.N. Law of the Sea

Overview

A healthy deep ocean is essential for the well-being of both humans and the environment. It serves as a carbon sink, storing large amount of human-generated carbon dioxide, and is home to a vast array of unique and diverse species, many of which have yet to be identified. Currently, it is one of the few places on Earth largely free from human pressure, but that could soon change with the commencement of a new extractive industry known as deep-seabed mining (DSM).

In international waters, the International Seabed Authority (ISA) governs DSM, as required by the United Nations Convention on the Law of the Sea (UNCLOS), regulating any mining activities and overseeing the effective protection of the marine environment from harmful effects. The ISA is also tasked with ensuring that DSM in the deep sea is undertaken in accordance with the common heritage of humankind principle, including equitable sharing of financial benefits.

Thus far, the ISA has created and adopted regulations to govern exploration, awarded 31 exploration contracts and is in the process of negotiating exploitation regulations that would govern any future commercial mining activities.

However, in 2021, the Republic of Nauru notified the ISA of its intent to sponsor a DSM application by a private mining company, triggering a time-limited provision in UNCLOS that requires the ISA to either complete development of the regulations to enable DSM in two years or consider mining proposals without internationally agreed-upon regulations in place. As a result, the prospects of DSM commencing soon—in the absence of sufficiently precautionary regulations—has become a distinct reality.

Since the triggering of this provision, more than 20 member States of the ISA have publicly called for a moratorium, precautionary pause or complete ban on DSM in the international seabed, with a growing number of countries indicating that they will not approve of any mining without a completed and adopted regulatory framework. Proponents of DSM, on the other hand, have questioned the very legality of such a pause or moratorium and whether it is consistent with UNCLOS.

The Pew Charitable Trusts commissioned an independent legal opinion written by four eminent international law experts—King's Counsel Professor Zachary Douglas, former Attorney General of Samoa Taulapapa Brenda Heather-La tu, and Matrix Chambers barristers Toby Fisher and Jessica Jones—on this issue of consistency of a moratorium or precautionary pause on DSM in areas beyond national jurisdiction with States' obligations under UNCLOS. The lawyers concluded that deferring the commencement of DSM—through the adoption of a moratorium, precautionary pause or similar action—not only is consistent with UNCLOS but actually is required by international law, for three primary reasons: the current lack of science, the lack of a DSM regulatory framework, and the ISA's limited institutional capacity for governance and oversight. Pew agrees with this assessment. What follows is a summary of the opinion and the evidence that led to this conclusion.

Status of current best available scientific information

In the 1970s, when countries were drafting UNCLOS, the prevailing consensus was that the deep sea lacked significant signs of life, but scientists now know that this is far from the truth. More recent discoveries reveal that the deep sea not only is home to an incredible abundance of rare and unique species but also supports complex ecosystems and critical ecological processes.

Yet, even in the most well-studied regions of the deep sea—including those with exploration contracts—significant gaps persist in our understanding of this environment and the species it supports. For example, in the Clarion-Clipperton Zone, the world's largest deep-sea mineral exploration frontier, scientists estimate between 88% and 92% of benthic species remain undescribed and thousands more remain undiscovered.

While scientists generally understand the likely impacts of DSM, in the absence of sufficient information it is not possible to ascertain with any certainty how intense, far ranging or long lasting the environmental effects will be. This in turn prevents the ISA from identifying adequate thresholds to avoid risks of causing significant harm to the marine environment.

Regulatory framework of seabed mining

Fundamental to UNCLOS, member States bear an obligation for the protection and preservation of the marine environment. Thus, the adoption of rules, regulations and procedures (RRPs) by the ISA, as well as the establishment of the necessary institutional structures to apply and enforce them, is necessary before mining can take place.

The ISA has been working to elaborate the draft RRPs, but significant gaps remain. For instance, the RRPs do not offer any clear guidance on how environmental obligations set forth in UNCLOS will be applied or realized. Critical issues remain unaddressed, including these questions: What levels of environmental harm would be considered permissible when conducting DSM activities? How will these levels of environmental harm be

translated into clear criteria (such as thresholds) that are based on best available science and be applied to ISA decision-making processes? And how will the ISA assess liability and penalties if environmental harm occurs beyond acceptable thresholds?

In addition, key elements that would ensure the equitable sharing of benefits of DSM are not in place. Regulations setting out the royalties that companies need to make to the ISA in exchange for mining are still under negotiation. Meanwhile, key entities of the ISA—such as the Enterprise (an independent body intended to carry out mining on behalf of all States) and the Economic Planning Commission (which will advise the ISA on compensation for lost income to developing countries with terrestrial mining interests)—are intended to contribute to the delivery of equitable sharing of the benefits of DSM but have yet to be operationalized. Without resolution of these matters, DSM risks providing benefits to a small number of countries and private interests while failing to deliver on UNCLOS's obligation of delivering benefits to humankind as a whole.

Inadequate governance and lack of oversight in the ISA

Also underpinning the need for deferral or moratorium are concerns about the capacity of the ISA to operate as a regulator, even if regulations have been adopted. The ISA currently has no existing systems or structures through which to conduct monitoring and inspection of DSM and no environmental compliance strategy. Its administrative body, the Secretariat, is under-resourced and has no supervisory capacity or mandate. Meanwhile, the ISA's key advisory body, the Legal and Technical Commission (LTC), is not adequately resourced to conduct oversight of multiple applications for plans of work, with which it is tasked. Its members are unpaid, generally have substantial external obligations and have limited time to dedicate to the growing LTC work. Countries and civil society have raised further concerns about the availability of scientific expertise within the LTC.

While the LTC has reported that several contractors have violated the terms of their exploration contracts, the ISA's Council has taken no enforcement or disciplinary action. It is not clear how the LTC and ISA more generally would effectively monitor and enforce compliance with exploitation contracts over large areas that are thousands of miles offshore. In addition, the ISA has not established an inspectorate as it continues to debate how this entity will be positioned in the overall structure of the ISA. At present, and in the absence of any ISA inspectorate, the only means of monitoring compliance is contractor self-reporting.

Conclusion

Parties to UNCLOS must defer any exploitation activities until they can be carried out without risk of significant harm to the marine environment. There is no hierarchy of obligations in UNCLOS whereby any obligation to facilitate the extraction of seabed minerals for the benefit of humankind requires mining to proceed regardless of the environmental impacts. States must interpret and discharge each obligation set forth in UNCLOS in a manner that ensures compliance with the whole. If that means the deferral of exploitation activities to ensure that significant harm isn't caused to the marine environment, then a moratorium not only is consistent with UNCLOS but is required by it.

The full legal opinion can be read on pew.org/moratorium-legal-op.

This fact sheet was updated on July 18, 2023, to reflect an increased number of countries calling for a moratorium or precautionary pause.

For more information, please visit: pewtrusts.org/seabed

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