Workshop Report

Protecting deep seabed ecosystems under the future Agreement on the Conservation and Sustainable Use of BBNJ and by the ISA – Perspectives of Government, Civil Society, Stakeholders, and Law and Science

Online workshop, 13-15 December 2021

Organized by the Netherlands Institute for the Law of the Sea (NILOS), the Utrecht Centre for Water, Oceans and Sustainability Law (UCWOSL) of Utrecht University, and the Netherlands Ministry of Foreign Affairs in collaboration with The Royal Netherlands Institute for Sea Research (NIOZ)

Report prepared by
Catherine Blanchard
Malou Estier
Erik Molenaar
Alex Oude Elferink

Introduction to the workshop

Areas beyond national jurisdiction (ABNJ) represent, in legal terms, a new frontier for the development of the law of the sea. This development has been very dynamic in recent years. Following more than 15 years of exploration for deep-seabed minerals by approximately 31 contractors, the International Seabed Authority (ISA) is now in the last stages of developing a regulatory framework for exploitation activities. Once adopted, which the ISA plans to do before mid-2023, these rules will complete the Mining Code, the comprehensive set of rules, regulations and procedures to regulate all mineral-related activities in the international seabed area. The Mining Code also aims to provide the necessary framework to ensure the effective protection of the marine environment from harmful effects from deep-seabed related activities.

In parallel, the international community has been involved, for almost two decades, in developing an international legally binding instrument on the conservation and sustainable use of marine biodiversity beyond national jurisdiction (BBNJ process). This process was triggered by the recognition of the interconnectedness between the components of the ocean, at the biological, ecological and governance levels, as well as the necessity for a strengthened cooperative and coordinated approach to its management in ABNJ. A provision in the draft BBNJ Agreement stipulates that it shall "not undermine relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies" (hereinafter: 'not-undermine clause') and thereby underlines the interest in understanding the overlaps and complementarities between the new instrument and existing institutions like the ISA.

It is against this backdrop that the workshop "Protecting deep seabed ecosystems under the future Agreement on the Conservation and Sustainable Use of BBNJ and by the ISA – Perspectives of Government, Civil Society, Stakeholders, and Law and Science" was organized. Considering the nature of the discussed topic, which triggers a necessary collaboration not only between research disciplines but also between different stakeholders, the workshop created a forum for discussion for decision-makers, academics, NGO representatives, scientists and representatives from industry. Speakers looked at the interactions between the ISA and the BBNJ process in relation to the protection of deep seabed ecosystems, with a focus on the role of marine protected areas (MPAs) and other area-based managements tools (ABMTs).

The workshop was the third event resulting from a collaboration between NILOS/UCWOSL and the Netherlands Ministry of Foreign Affairs to develop meetings that would have both an academic and practical significance. One previous event considered the institutional architecture of the future BBNJ Agreement, and another considered how the Agreement should factor in the rights and interests of coastal States and the linkages between ABNJ and areas within national jurisdiction. NIOZ, for its part, became a collaborator in the workshop, through the involvement of NILOS/UCWOSL and NIOZ researchers in the joint Utrecht University-NIOZ project "Protecting deep seabed hydrothermal vent fields through ABMTs". The program of the workshop, as well as the link to most presentations can be found here.

Overview of the sessions

The workshop comprised 5 sessions. Each session contained 3-4 presentations from invited speakers, followed by a plenary discussion. While the first two sessions aimed to give general perspectives on the ISA and the BBNJ process and their interactions, the last three sessions zoomed-in on more specific ABMT-related issues.

Session 1 – The ISA and the future Agreement on the Conservation and Sustainable Use of BBNJ

Moderator: Alex Oude Elferink (NILOS and UCWOSL)

Panelists: Wini Broadbelt (Ministry of Infrastructure and Water Management of the Netherlands); Thembile Joyini (Department of International Relations and Cooperation of South Africa); and Pradeep Singh (University of Bremen)

The first session of the workshop provided a general overview of both the BBNJ process and the functioning of the ISA through presentations from State representatives and researchers in policy and law.

First, speakers discussed the status of ABNJ and the gaps in the United Nations Convention on the Law of the Sea (UNCLOS) in that regard. They pointed to the need for coordination and coherence between activities, instruments and processes in ABNJ, which were the main motivations that triggered the start of the BBNJ process. Speakers also gave a historical account of the different phases of the BBNJ process, from its inception in the early 2000s until now, what has been achieved so far, as well as different positions and interests put forward by States. Furthermore, speakers addressed specific issues within the BBNJ process that have yet to gather a convergence of views, notably the practical implications and political narrative behind the use of the not undermine-clause, as well as the place of bioprospecting for marine genetic resources (MGRs) under UNCLOS, its relationship with marine scientific research, and the interaction between exploitation and equity.

Second, speakers provided an overview of the ISA, its mandate, structure and organs, the current developments under its auspices, its general environmental responsibilities, as well as the various responsibilities of contractors and States.

These overviews then allowed reflecting on the relationship between the BBNJ process and the ISA, and potential impacts that the BBNJ process could have on the (environmental responsibilities of the) ISA. These include ‘political’ pressure on the ISA to implement its environmental obligations more adequately, as well as a potentially better coordination between sectoral and regional bodies. All speakers raised the need for coherence.

During the plenary discussion, participants raised, among other things, questions linked to the impact that a strengthened environmental performance of the ISA could have on benefits and their equitable sharing (i.e. whether increased costs triggered by more stringent environmental requirements could reduce the profits available for equitable sharing); the meaning of 'exploration for peaceful purposes' and its implications for science; as well as the necessary balance between the negotiation of a new instrument and the need not to erode UNCLOS.

Session 2 – The role of civil society, stakeholders and science in the protection of deep seabed ecosystems: perspectives on the BBNJ process, the future Agreement on the Conservation and Sustainable Use of BBNJ and the ISA

Moderator: Catherine Blanchard (NIOZ, NILOS and UCWOSL)

Panelists: Anna Metaxas (Dalhousie University); Laurens de Jonge (Royal IHC); and Duncan Currie (Deep Sea Conservation Coalition)

The second session zoomed in on the perspectives of different stakeholders on the BBNJ process and the ISA. The presenters included a scientist, a representative from the industry and an NGO representative.

All speakers raised the issue of connectivity, which acted as a guiding theme throughout the session, but from different perspectives. There is first ecological connectivity, where the connections between the seabed and the superjacent waters play a major role in the life of many species and both constitute part of their habitats. This therefore underscores concerns on the probable effects of deep-sea mining on mid-water ecosystems. A second form of connectivity exists between deep-seabed minerals and our daily life, as well as the necessity of minerals for our transition towards a green economy. Finally, there is connectivity between ecosystem services and human rights.

Yet, major challenges create obstacles to 'operationalize' the protection or safeguarding of these different forms of connectivity. The seabed is currently managed in two-dimensional areas, while the oceans should be managed in three-dimensional (3D) spaces including both the seabed and its superjacent waters. Further, engaging in deep-seabed activities is extremely challenging in terms of depth, time, costs, sustainability and legal aspects (regulations and insurance, which are very often complicated and difficult for key stakeholders (e.g. governments and companies) to understand and use correctly). The question of public participation and transparency is often regarded as a challenge. Discrepancies between the 'place' of transparency in the BBNJ process, where transparency is often more advanced, and at the ISA, where confidentiality is much more common, are also difficult to reconcile. More

transparency is also necessary from the industry, but it needs to be balanced with the protection of strategic interests (economic interests and also States' interests).

During the plenary discussion, participants raised several questions linked to whether there is a real necessity to engage in deep-sea mining at all, considering the complexity to actually go at sea and perform the activities. However, as the global demand of minerals remains, exploitation seems inevitable, unless a major change in industrial demand for minerals occurs. Further, the discussions addressed the challenges that can arise from the complexity of the terminology and concepts used, which makes it difficult to increase public awareness. Speakers and participants also deplored the fact that the ISA's development of the regime for deep seabed mining and the BBNJ process are developing on separate tracks. This is somewhat incoherent as we are talking about the same biodiversity and the same States negotiating in both fora. The plenary finally discussed the importance of baseline information to figure out what we should permit and how we should regulate activities in the ocean.

Session 3 – ABMTs and MPAs and their relationship

Moderator: Erik Molenaar (NILOS and UCWOSL)

Panelists: Elisabetta Menini (Duke University); Catherine Blanchard (NIOZ, NILOS and UCWOSL) and Lise Klunder (NIOZ); and Malou van Kempen (WWF Netherlands)

The third session of the workshop focused on the role of ABMTs and MPAs in the protection and management of deep-sea ecosystems, as well as their shortcomings. Speakers included researchers in marine biology, international law of the sea, management and policy, as well as an NGO representative.

Speakers first discussed hydrothermal vent protection. Most existing initiatives are found in areas within national jurisdiction, except for the Antarctic Treaty region. Although existing ABMTs for protecting vents are at present mainly targeting specific sectoral activities, the use of existing criteria suggested by experts during workshops for the development of a regional environmental management plan (REMP) for the Area of the Northern Mid-Atlantic Ridge (e.g. the 2019 Evora workshop and 2020 virtual workshop) present the possibility of synergies for regional and global actors. Another option for vent protection could be to include them in the International Union for the Conservation of Nature (IUCN) red list of ecosystems. It would allow for global recognition of their value. The protection of vents is crucial because of their ecological importance. Yet, there is a lot we do not know about the impact of mining (e.g. plumes) on vents. Most of the living species on vents are sedentary species, but they also move elsewhere at other stages of their lives (larvae) and are transported in the water column. This means we need to think in terms of 3D connectivity. The existing ABMTs of the ISA consist

of areas of particular environmental interest (APEIs) and reference zones. The current legal framework does not seem to exclude 3D protection from deep seabed activities. Yet, many questions remain unanswered with regards to the legal nature of existing tools and their practical application. Speakers further highlighted the fact that ABMTs might also not be the appropriate tools in all situations. For example, static ABMTs are not adequate to protect migratory species. For these reasons some entities and individuals have been supporting the proposal for a moratorium on deep-sea mining until we know more about its impact not only on the deep seabed, but also beyond. Supporters of the moratorium claim that this would be the only true way of applying the precautionary approach.

During the plenary discussion, speakers and participants reiterated the importance of having decision-making based on facts and science, as well as the importance of also including traditional knowledge in our understanding of the situation. Participants further raised the possibility of starting the discussion from another perspective: instead of starting from the institutions and/or tools we have, we should look at what needs to be protected, and what the conservation and protection goals should be. By starting from the same goals across processes (ISA and BBNJ), we could then apply tools to protection needs in a more holistic fashion. Speakers raised the point that, although very desirable from an ecological point of view, the current fragmented legal framework would make this very complicated, and a paradigm shift might be necessary. The existing patchwork framework should, however, not be taken for granted, as proposals to improve cooperation and coordination across entities are already discussed within the BBNJ process. It was moreover argued that allowing international organizations to become parties to the BBNJ Agreement could help cooperation and coordination. Finally, challenges linked to the collection and accessibility of data were raised. Ways to overcome these could include the envisaged clearing-house mechanism under the BBNJ Agreement and the development of the deep-data initiative under the ISA.

Session 4 – The EBSA process and the ISA

Moderator: Erik Molenaar (NILOS and UCWOSL)

Panelists: Daniela Diz (Heriot Watt University); Kristina Gjerde (IUCN Global Marine and Polar Programme); and Patrick Halpin (Duke University)

This session focused on one specific process linked to ABMTs, namely Ecologically and Biologically Significant Areas (EBSAs), and more specifically their recognition in the context of the ISA and deep-seabed related activities. Speakers provided input from both environmental sciences and legal/policy perspectives.

Speakers first gave an introduction to the EBSA process in the framework of the Convention on Biological Diversity (CBD). They explained the importance of the CBD in providing scientific support in ocean-related matters and the relationship between the CBD and UNCLOS. Yet, the EBSA process does not come with management measures; what the process can do is to inform States and/or international organizations of management measures that could be undertaken because of the protection required by EBSA status, i.e. they can inform the subsequent establishment of ABMTs or MPAs. One necessity within both the CBD and the ISA is to develop and implement network level criteria. EBSAs and ISA sites in need of protection (SINPs) have been focusing on specific sites/areas, and have different approaches: EBSAs describe but do not manage, and all ecosystems (within and beyond national jurisdiction) can be considered for designation, while SINPs intend to achieve protective management, but only target the sea floor in ABNJ. The challenge is to see how we go from a 'site to site' approach to a network approach.

Speakers further presented the case study of the Lost City hydrothermal vent field to illustrate that the ISA is implementing similar criteria as the EBSA process, but does not recognize them officially. Although the Lost City was recognized as an EBSA because of its aesthetic beauty and universal value, these 'non-use values' were not taken into consideration by the ISA, who granted an exploration contract to Poland in that area. This example shows that, although the ISA has the obligation to protect the marine environment from harmful effects of deep seabed mining, there is no clear understanding of what this entails. One way to remedy these discrepancies would be to ensure 'polycentric' governance. This could be facilitated by the BBNJ Agreement, which would require different organizations to cooperate and coordinate their actions. The somewhat circumscribed nature of the relevant text in the current draft of the BBNJ Agreement, however, risks contributing to solidifying existing problems.

During the plenary discussion, synergies between the CBD and other instruments/organizations, more specifically the Convention on Migratory Species (CMS) and the Northwest Atlantic Fisheries Organization (NAFO), were discussed. A question on the 2-year rule triggered by Nauru under the 1994 Deep Seabed Mining Implementing Agreement also highlighted the big 'push and pull' within the ISA, where the outside community is trying to slow down mining, while some States are trying to accelerate this instead. Yet, some speakers were of the view that we should not worry too much in terms of actual mining starting, considering that applications might not be approved. What we should ensure, however, is that the process as such is transparent. The network approach to protection and management was then discussed, and it was mentioned that no institution looks at area-wide management problems: the CBD says it cannot do actual management, while the ISA says it can only address deep seabed mining activities. Each have limited mandates and responsibilities, and this is why they focus only on some aspects of the environmental protection. It was finally suggested that an advisory opinion by the International Tribunal for the Law of the Sea could help delineate the obligations of the ISA and explain what the environmental obligations actually entail.

Session 5 – The work on REMPs and APEIs in the framework of the ISA, with a focus on the work on the Clarion-Clipperton Zone and Mid-Atlantic Ridge from a comparative perspective

Moderator: Alex Oude Elferink (NILOS and UCWOSL)

Panelists: Sabine Gollner (NIOZ); Harald Ginzky (German Environment Agency); Samantha Smith (Global Sea Mineral Resources); and Matthew Gianni (Deep Sea Conservation Coalition).

The fifth and last session of the workshop discussed the development of REMPs, by comparing the work done with the Clarion-Clipperton Zone (CCZ) REMP to the REMP currently under development for the Mid-Atlantic Ridge. Speakers gave scientific perspectives, views from policy-making, as well as input from the industry and civil society.

Speakers first gave an overview of the CCZ REMP and the current APEIs in the region. Biodiversity in the CCZ is not uniform, and most of it is still unknown. And this is not only a question of knowing *what* exists, but also knowing *where* and *how* species live. This is why, when there is high spatial and temporal variability, it is important to improve our scientific models to measure the true mining impact. There is no single indicator species for impact in the CCZ, and this is why it is really difficult to come to scientific conclusions. The aspect of time (4^{th} dimension) is also of relevance to understand how long it takes for species or a habitat to be restored. The dimension of time impacts our ability to predict our management measures. Facing these uncertainties, what we need is baseline data, to know what species are present, where, and how they are connected, what their ecosystem functions are, etc. We need better modelling and monitoring, and we need someone who is responsible for gathering all of these information.

Speakers then addressed the standardization of the content of REMPs through the presentation of a proposal made by Germany and the Netherlands, in collaboration with Costa Rica to the ISA in 2020. Such a standardization would ensure region-specific consideration, not only project-specific. It would ensure looking at cumulative effects and potential conflicts with other legitimate uses and it could give more stability to contractors, who would know what they would be facing. REMPs are mentioned in the strategic plan of the ISA, but many questions remain: is there an obligation to have adopted REMPs before exploitation may take place? What is the legal force of REMPs? Are they binding for the approval of exploitation projects? Much remains uncertain because there is no real new development on the matter within the ISA's Legal and Technical Commission (LTC) or Secretariat.

The different stages undertaken by contractors when conducting environmental impact assessments (EIAs) were then discussed. The involvement of contractors in establishing

reference zones is also important; yet contractors often find it difficult to see whether reference zones are really representative of the totality of an area. Contractors also face other questions when conducting the different stages of EIAs, e.g. do they need to preserve all connections, or only some? Different minerals and different regions require different management strategies and different techniques: how can these be accommodated? What is certain, however, is that more data is needed, as well as more data sharing, and we need to keep an open mind until we clearly know what is possible.

In the plenary discussion, speakers and participants first discussed the notion of harm: we know there will be harm, and we can wonder whether it is acceptable from a legal point of view. However, it all comes down to a balance: if the benefits are bigger than the impacts, then yes it is legally justifiable, some loss is legally acceptable. The question is how much loss we are ready to accept. Considering that mining will happen, what we need to do is to shift our perspective from what we are willing to preserve to what we are willing to loose. The plenary further discussed the fact that baseline collection varies a lot depending on contractors. Some contractors might be doing a good job, but this may not be the case for others. Stricter standards are necessary in this respect.

Takeaway messages[1]

Five elements drew particular attention and triggered discussion across the different sessions of the workshop.

1) **The importance of more and better** *science*

The importance of more and better science cannot be underestimated. This is especially the case in the context of deep seabed mining because the role that science plays in making policy decisions is prominent. Most speakers called for a deeper and more comprehensive understanding of the deep seabed, and many arguments raised the need for more and better scientific knowledge. Questions related to the importance of sharing data and information were also put forward.

2) **The need to better understand and factor in** *connectivity*

Speakers and participants underlined the importance of connectivity, both at the ecological/biological level, but also at the level of governance and institutions. The debate suggested that our current governance framework is unable to protect and safeguard connectivity (in a 3D and/or 4D perspective). The need to ensure connectivity exists at different levels: connectivity between sectors, between management zones, between species, between seabed and water-column, etc.

3) **A** *moratorium* **as a precautionary measure**

Considering the ample media and political attention given to the proposal for a moratorium on deep seabed mining in the past year, it is a topical issue when discussing deep seabed mining and the protection of the marine environment. It represents, for those who support it, a way to ensure that sufficient information and data is gathered before mining actually takes place. There is still, however, quite a lot of uncertainty regarding what can or could happen with the proposed moratorium. It is a topic that deserves further attention in the short term.

4) **Improve** *transparency*

Speakers and participants raised multiple times the problem of a lack of transparency within the ISA and the necessity for more inclusivity. This was particularly raised in the context of the lack of access to contractors' exploration data as well as to the content of contracts. The need for more transparency seemed particularly important for the speakers representing the civil society and the scientific community.

[1] These Takeaway messages have been prepared by the organizers and do not necessarily reflect the views of any of the participants at the workshop.

5) An effective *BBNJ Agreement*

As the BBNJ Intergovernmental Conference is preparing its last planned meeting, workshop participants reiterated the importance of an effective BBNJ Agreement for improving the coordination and cooperation between frameworks and sectoral organisations. We are missing a holistic approach to conservation. The BBNJ Agreement should fill this gap, while respecting UNCLOS' rights and obligations. The BBNJ Agreement could and should be used to establish the working 'polycentric systems framework' to implement the necessary ocean-wide and cross-sectoral organization.