UiT The Arctic University of Norway

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The interaction between the BBNJ Agreement and the ISA regulatory regime

A case study on the EIA and ABMT

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List of Abbreviations

ABMT: Area-Based Management Tools

ABNJ: Areas Beyond National Jurisdiction

APEI: Areas of Particular Environmental Interest

CCZ: Clarion-Clipperton Zone

COP: Conference of the Parties

CHM: Common Heritage of the Mankind

CHM: Clearing House Mechanism

DSM: Deep Seabed Mining

EIA: Environmental Impact Assessment

EMP: Environmental Management Plan

IRZ: Impact Reference Zones

ISA: International Seabed Authority

MPA: Marine Protected Area

PRZ: Preservation Reference Zones

REMP: Regional Environmental Management Plan

UNCLOS: United Nations Convention on the Law of the Sea

VME: Vulnerable Marine Ecosystems

CHAPTER 1: INTRODUCTION

1.1. Background

In the tireless human drive to extract resources from the Earth, a new potential threat to the health of the oceans might be found in the near future: Deep Seabed Mining (DSM). Deep seabed mining (DSM) is the process of retrieving mineral deposits from the deep seabed. The deep seabed is the seabed at ocean depths greater than 200m and covers about two-thirds of the total seafloor.[1]

Indeed, the International Seabed Authority (ISA) is working on its Draft regulations on exploitation[2] which will dictate whether and how countries could mine the deep seabed in Areas Beyond National Jurisdiction (ABNJ). There is a growing concern about the potential impacts of the commercial exploitation phase, especially with regards the environmental aspect thereof. Studies have shown that mining below 200 meters can cause harmful noise, vibration, sediment plumes and light pollution.[3] Despite this, there is increasing interest in the mineral deposits of the seabed. This is said to be due to depleting terrestrial deposits of metals such as copper, nickel, aluminum, manganese, zinc, lithium and cobalt.[4] Demand for these metals is also increasing to produce technologies like smartphones, wind turbines, solar panels and batteries. Thus, one of the real interests behind deep seabed mining is to boost the energy transition.[5]

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[1] International Union for Conservation of Nature, "Deep-sea mining" https://www.iucn.org/resources/issues-brief/deep-sea-mining.

[2] Draft regulations on exploitation of Mineral resources in the Area, ISBA/29/C/CRP.1 16 February 2024.

[3] Filho W.L., Abubakar Rimi, I. g, et al. "Deep Seabed Mining: A Note on Some Potentials and Risks to the Sustainable Mineral Extraction from the Oceans", *Journal of Marine Science and Engineering,* p. 11 and 12, Oceana, "Deep-sea Mining" https://oceana.org/deepseamining/, Sharma, R., "Environmental Issues of Deep-Sea Mining", (2015), *Elsevier*, p. 205; Miller A. K., Thompson F., K., Johnston P., Santillo, D., "An overview of Seabed Mining Including the Current State of Development, Environmental Impacts, and Knowledge Gaps", (2018), *Frontiers in Marine Science,* p. 11 and 12.

[4] International Union for Conservation of Nature, "Deep-sea mining" (May 2022), https://www.iucn.org/resources/issues-brief/deep-sea-mining.

[5] Greenpeace, "EV batteries, the clean energy revolution and deep-sea mining" (14 May 2001), https://www.greenpeace.org/aotearoa/story/ev-batteries-the-clean-energy-revolution-and-deep-sea-mining/, World Resources Institute, "What We Know About Deep-sea Mining — And What We Don't (February 23, 2024**),** https://www.wri.org/insights/deep-sea-mining-explained.

After 20 years of negotiations, on 19th of June 2023, the approval of the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ Agreement) took place. Following the formal adoption of the BBNJ Agreement, a pivotal consideration will be its relationship with relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies.[6] Indeed, the BBNJ Agreement will mandate states to bolster international collaboration and advance its objectives within other global organizations.[7] One such institution is the International Seabed Authority (ISA), which regulates, controls, and manages seabed mineral mining on the international seabed while also having the obligation to protect the marine environment from harmful effects of mining.[8]

The relationship of the BBNJ Agreement with the ISA regulatory framework will be crucial in addressing environmental concerns related to DSM. The incorporation of these new perspectives brought by the BBNJ Agreement, into the ISA regulation prompts questions about its coherence with the existing legal regime. It raises concerns about which framework will ultimately prevail. Additionally, there is inquiry into whether the BBNJ Agreement might undermine the regulatory framework established by the global institution of the ISA. Consequently, this analysis will evaluate two primary tools for biodiversity protection in both regulatory regimes and how could they interact, namely: Area Based Management Tools (ABMT) and the Environmental Impact Assessment (EIA).

1.2. Purpose and research question

This thesis seeks to elucidate the relationship between the BBNJ Agreement and the Area regime while offering recommendations on how to apply these two regimes cohesively to DSM.

Analyzing the interaction between these legal frameworks enables the formulation of a strategy or approach that prevents inconsistencies or the undermining of one legal regime by another. Additionally, it facilitates the enhancement of the protection level provided by the ISA regime through the influence of the BBNJ agreement.

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[6] Art. 5.2 of the BBNJ Agreement

[7] Ibid.

[8] Arts. 145 and 157 of the United Nations Convention on the law of the sea, 16th November 1994.

The bulk of the research aims at giving a description and understanding of the relationship between the ISA regulatory regime and the BBNJ Agreement concerning two particular aspects: ABMTs and EIA. Through a critical examination of the ISA's regulatory framework in comparison with the standards outlined in the BBNJ Agreement, this study endeavors to illuminate the potential for the BBNJ to enhance environmental protection standards within the Draft on exploitation for the deep seabed.

Furthermore, the other purpose of this thesis is that, within the existent body of literature explaining the relationship between the BBNJ Agreement and the regime for the Area, this thesis aims to be a further contribution to scholarly debate.

The central research question for this thesis:

- *How will the BBNJ interact with the regulatory regime established by the ISA connected to deep seabed mining without undermining it, specifically in relation to EIAs and ABMTs?*
    1. What does the obligation of 'not undermining other instruments and bodies', enshrined in the BBNJ Agreement, entail for the mandate of the ISA and the protection of marine biodiversity from seabed mining?
    2. How do the rules for EIAs and ABMTs in the BBNJ Agreement compare to those under negotiation from the ISA?
    3. How can coherence between the BBNJ Agreement and the regulations of the ISA be achieved?

1.3. Methodology

The thesis follows a doctrinal legal methodology.[9] It interprets, describes and systematizes the relevant provisions from the BBNJ Agreement, the UNCLOS regime for the Area, and ISA's seabed mining regulation.

Moreover, a normative research approach is employed: the thesis goes beyond mere legal systematization and also evaluates the potential relationship between the ISA regulatory regime

[9] Smits, J. M., "What is legal doctrine? On the Aims and Methods of Legal Research", September 2015, *Maastricht European Private Law Institute*, p. 5.

and the BBNJ Agreement.[10] Thus, this evaluation consists of a critical assessment of the regulation pertaining to the ISA's regime in contrast to the BBNJ regulation, considering relevant legal provisions for the EIA and the ABMT from both legal regimes. As part of this normative research, the provisions for the interpretation of treaties included in the Vienna Convention on the Law of Treaties (VCLT) provide the basis for interpreting the legal provisions of the BBNJ Agreement, the ISA regulatory regime, and UNCLOS.

In exploring the interaction between the ISA's regulatory regime and the BBNJ Agreement, the thesis aligns with the notion of regime interaction as defined by *Young,* which involves addressing the intricate issues stemming from the fragmentation and diversification of international law[11] Consequently, the evaluation of the relationship between the ISA regulatory regime and the BBNJ introduces added complexity due to its implications for future regime interaction. An inherent ambiguity in this research arises from the fact that the BBNJ has yet to enter into force, and the ISA's regulatory regime is still under negotiation. Consequently, this analysis is somewhat speculative and deals with various scenarios of the future interaction between these two legal systems.

In accordance with the research methodology outlined by Trevisanut, Giannopoulos, and Holst, which posits a three-fold approach to regime interaction encompassing institutional, formal, and substantive dimensions,[12] this thesis incorporates said approach in the following manner. The first two dimensions of this three-fold approach are represented, particularly, in chapters 2 and 5 of this thesis, for the purpose of assessing the institutional relationship between the BBNJ Agreement and the ISA's regulatory regime. The third dimension, the substantive one, will be

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[10] Taekema, S. "Relative Autonomy, A Characterisation of the Discipline of Law", 3 April 2010, p. 3. Available at SSRN: https://ssrn.com/abstract=1579992 or http://dx.doi.org/10.2139/ssrn.1579992.

[11] Young MA, *Regime interaction in international law: facing fragmentation* (Cambridge University Press 2012) ch 1, p. 2.

[12] Trevisanut S, Giannopoulos N and Holst RR, *Regime interaction in ocean governance: problems, theories, and methods* (Publications on Ocean Development, Volume: 91, Brill Nijhoff 2020) ch 8, p. 223.

more directed towards the analysis of the norms included within both regulatory regimes, specifically the ABMT and the EIA set of norms.

My research is also supplemented by some scientific sources explaining the impacts of deep seabed mining on the deep seabed and in the interconnected oceans in general, the lack of certainty on the implications of deep seabed and the recognition of the high valuable ecosystems that inhabit in the deep seabed.

1.4. Use of sources

The basis for identifying the sources of international law is article 38 of the Statutes of the International Court of Justice.[13] The sources listed in this provision provide the main methodological focus of this thesis. Thus, international conventions are one of the principal sources analyzed in this thesis. Standing out, the BBNJ Agreement, UNCLOS and the ISA regulatory regime.

Scope and structure of the thesis

The thesis concentrates on the relationship between the ISA regulatory regime and the BBNJ Agreement with a specific focus for the EIA and ABMT rules.

The issues touched upon by the BBNJ Agreement and the ISA's regulatory regime go far beyond EIA and ABMT. Nevertheless, the scope of the thesis is primarily limited to their respective EIS and ABMT regimes in the Area, since this is the area where their mandates could overlap in the near future. Apart from this, the thesis also sheds light on the institutional characteristics and cooperation mechanisms for achieving a balance between the BBNJ and the ISA's regulatory regime. Important to mention is that the other two elements of the BBNJ 'package', namely: the Marine Genetic Resources and the Capacity Building and technology transfer, are out of the scope of this thesis. As for the ISA's regulatory regime for deep seabed mining, its regulation within national jurisdiction is not discussed. Within the ISA regulatory regime, the analysis followed in this thesis is based on the Exploration Regulations and the Draft regulations on exploitation of Mineral resources in the Area.[14]

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[13] Statute of the International Court of Justice (adopted 26 June 1945, in force 24 October 1945) USTS 993.

[14] Decision of the Assembly of the International Seabed Authority regarding the amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, 25 July 2013, ISBA/19/A/9, Decision of the Assembly of the International Seabed Authority relating to the regulations on prospecting and exploration for

Moreover, even though mining in a given area may mean that the ISA will have to cooperate with other bodies such as RFMOs, IMO, OSPAR, etc. This thesis does not examine in any detail how the ISA cooperates/works individually with these bodies. The focus of the thesis is at a more general level on the interaction between BBNJ Agreement and ISA. However, it cannot be denied that, to deliver results within BBNJ Agreement/effective discharge of ISA's mandate to protect and preserve the marine environment, the ISA will have to cooperate and coordinate with other relevant IFBs.

Additionally, the structure of the thesis is as it follows. After the introduction, Chapter 2 provides a brief overview of the BBNJ Regime and the Regime for the Area and the institutional arrangements therein as the primary regimes dealing with the protection and preservation of the marine environment and biodiversity in the Area.

Chapter 3 examines the regulatory framework for EIA in both, the ISA regulatory regime and the BBNJ Agreement. The main objective is to render a systematic explanation of the ISA's set of norms and the level of protection granted to the ecosystems in the deep seabed and to present its main gaps and shortcomings in contrast with the BBNJ provisions for the EIA. This explanation serves as an example of the ways in which the BBNJ could interact with the ISA's regime towards a more coherent and comprehensive approach in the regulation of the EIA.

Chapter 4 aims at discussing the rules connected with the ABMT in both legal regimes, the ISA and the BBNJ Agreement, with the objective of explaining how these two legal systems engage in the protection of the marine environment in the Area. This is done by looking at the types of ABMTs implemented by each regulatory regime, followed by an examination of its strengths and shortcomings.

In Chapter 5, the thesis explores the possible ways in which the interaction between the ISA legal framework and the BBNJ Agreement concerning DSM could occur. Specifically, it examines the provisions for "not undermine" for the EIA and ABMTs regulations in the BBNJ Agreement and how these could fit with the ISA regulatory regime.

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polymetallic sulphides in the Area, 15 November 2010, ISBA/16/A/12/Rev.1 and Decision of the Assembly of the International Seabed Authority relating to the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, 22 October 2012, ISBA/18/A/1 and the Draft regulations on exploitation of Mineral resources in the Area, ISBA/29/C/CRP.1 16 February 2024.

The thesis ends with concluding remarks on chapter 6, on the linkages between the ISA's regulatory regime and the BBNJ Agreement in the DSM concern. The conclusion seeks to demonstrate how these two distinct legal systems can collaborate to establish a unified and comprehensive framework for safeguarding ecosystems in the deep seabed and minimize the impacts of deep seabed mining on the Area.

CHAPTER 2: THE JURISDICTIONAL DYNAMICS SURROUNDING THE PROTECTION OF THE MARINE ENVIRONMENT FROM DEEP SEABED MINING

2.1. Introduction to the basics of deep seabed mining

The large set of activities that encompass the term referred to as DSM are not governed by one universal framework. On the contrary, numerous legal instruments play a role and it is important to maintain a clear overview.[15] DSM can take place both in the Area and in the continental shelf, but the focus of this thesis is only connected to DSM in the Area.[16]

UNCLOS sets out the overarching regime for DSM. Within the Area, these operations are subject to the relevant treaty provisions and a comprehensive set of international regulations adopted by the ISA. The fundamental rules are spread across part XI and annexes III and IV of the UNCLOS and the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (1994 Implementation Agreement), while more detailed and specific rules are to be included in the so-called Mining Code. Indeed, for the Mining Code, the Exploration Regulations have already entered into force, whereas the Exploitation Regulations are yet under negotiation. Moreover, a new legal instrument, approved on 19th June 2023, will also be governing the regulatory regime of the Area, the BBNJ Agreement, particularly with regard to its conservation and sustainable use of the marine environment. This will be the case only if the BBNJ Agreement reaches the number of ratifications necessary to enter into force.[17] Up to this date, there is only five signatories of the BBNJ Agreement, which are: Chile, Belize, Palau, Monaco and Seychelles.

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[15] Willaert, K., *Regulating Deep Sea Mining A Myryad of Legal Frameworks*, Springer, 2021, p. 1.

[16] Art. 1(1) of UNCLOS: the Area means the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction.

[17] In accordance with art. 68(1) of the BBNJ Agreement, "This Agreement shall enter into force 120 days after the date of deposit of the sixtieth instrument of ratification, approval, acceptance or accession".

2.2. Environmental governance of deep seabed mining in the Area

The mineral resources of the Area are the Common Heritage of the Mankind (CHM)[18] and the UNCLOS establishes the ISA, as the organization through which States Parties to the UNCLOS are to organize and control exploration for, and exploitation of, the mineral resources of the Area.[19]

The ISA is an autonomous international organization made up of 169 member States (168 member states + the European Union), which was established through UNCLOS and the 1994 Implementation Agreement. Through the ISA, States collectively determine the access to the mineral resources of the Area and any activities in connection with mineral exploration and commercial exploitation that will take place there.[20] Thus, the ISA has the exclusive mandate to manage the Area and the minerals it contains for the benefit of humankind on the basis of the principles set out in UNCLOS and the 1994 Agreement.[21] Accordingly, the ISA has a mandate in relation to DSM which encompasses three main aspects: First, the ISA is in charge of managing the mineral resources of the Area for the benefit of the mankind, second elaborates the rules for DSM, and third protecting the marine environment.

However, one limitation that the regulation for the Area presents is that the rules, regulations and procedures applicable for DSM, apply exclusively to these activities taking place in the Area, which does not include the water column because that follows a different legal regime. Namely, the water column is part of the common oceans which is the high seas, and is not governed or protected by the ISA. Even though the effects of DSM are not limited to the Area, but to the water column of the High Seas as well, which could affect the entire marine ecosystems due to its interconnection.[22]

To continue, the mineral resources located in the Area can only be prospected, explored and exploited according to the rules laid down by the UNCLOS, as amended by the 1994 Implementation Agreement, and the regulations adopted by the ISA. Prospecting does not

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[18] Arts. 1(1), 133 and 136 UNCLOS.

[19] Art. 1(3) UNCLOS.

[20] Art. 15(1) UNCLOS.

[21] Arts. 140 and 145 of UNCLOS.

[22] The interconnected nature of the ocean and the need to consider the problems of the shared ocean space as a whole are reflected in the Preamble of the UNCLOS.

require the formal approval of the ISA, it can be conducted after a notification to the ISA of the approximate area in which these activities will take place.[23] However, exploration (which implies exclusive rights to search for mineral deposits in a particular zone and also encompasses thorough analysis of the resources, testing of the recovery systems and technical, economic and environmental studies related to their future extraction)[24] and exploitation (the actual recovery of mineral resources for commercial purposes)[25] do require explicit permission. In order to be allowed to conduct exploration or exploitation activities in the Area, states and commercial entities need to apply to the ISA, and when a plan of work is approved, this takes the form of a contract.

Beyond the exclusive and autonomous regulatory power of the ISA for DSM, lies the BBNJ Agreement, which can be a thrust for developing and enhancing the environmental standards in the Area. The BBNJ Agreement, conceived as the legal instrument for the conservation and sustainable use of ABNJ,[26] including the Area has been specifically designed for, *inter alia*, the purpose of filling the gaps of the current regulatory regime.[27]

As stated before, the ISA is presently developing the legal framework for DSM in the form of its 'Mining Code', an umbrella term for all ISA rules, regulations, and procedures. The Mining

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[23] Decision of the Council of the International Seabed Authority relating to amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters. ISBA/19/C/17, 22 July 2013. Article 1(3)(e). "" Prospecting" means the search for deposits of polymetallic nodules in the Area, including estimation of the composition, sizes and distributions of deposits of polymetallic nodules and their economic values, without any exclusive rights".

[24] Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, ISBA/19/C/17, 22 July 2013. Articles 1(3)(b) and 24(1).

[25] Ibid., Article 1(3)(a).

[26] The scope of application of the BBNJ Agreement is the Areas Beyond National Jurisdiction by virtue of art. 3 of the BBNJ Agreement. In connection with art. 1.2 of the BBNJ Agreement, ABNJ means the high seas and the Area.

[27] Harvard University, "BBNJ Treaty Marine Genetic Resources of Areas Beyond National Jurisdiction" Background information on Ocean Governance and the BBNJ Treaty, https://bbnj-mgr.fas.harvard.edu/background-information-ocean-gevernance.

Code sets out, *inter alia*, the obligations for the protection and preservation of the marine environment of contractors and the ISA.

Key amongst these responsibilities is the obligation to protect the marine environment, as set out in articles 145, 192, and 194 of UNCLOS and reflected in the Exploration Regulations.[28] The implementation of this obligation requires finding agreement about the level of environmental harm that is acceptable and that which is not.

2.3. The BBNJ Agreement

The BBNJ Agreement is an implementing agreement to UNCLOS. An implementing agreement aims at filling gaps in implementation of a legal instrument.[29] Thus, the general objective in art. 2 of the BBNJ Agreement refers to "an effective implementation of the relevant provisions of the Convention…". This purpose can also be regarded in article 27, referent to the objectives of the EIA regulation in the BBNJ Agreement, that is, namely: "Operationalize the provisions of the Convention on environmental impact assessment..." Thus, the regulation of the BBNJ Agreement departs from the basis of UNCLOS and the regulatory regime established under the regulatory powers of the ISA. An implementing agreement can also create institutional arrangements (e.g., Conference of the Parties, Secretariat, etc.). Once adopted, the countries that sign and ratify the treaty (the States Parties thereof) will be responsible for implementing the obligations at the national level once the agreement enters into force and according to the requirements of the agreement.[30]

The overall objective of the BBNJ Agreement is to ensure the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, for the present and in the long term, through effective implementation of the relevant provisions of UNCLOS and further international cooperation and coordination.[31] The focus of the objective is oriented towards

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[28] Regulation 5 and Regulation 31, ISBA/19/C/17, 22 July 2013, Regulation 33 Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11; Regulation 33 regulations on prospecting and exploration for polymetallic sulphides in the Area.

[29] Harvard University, "BBNJ Treaty Marine Genetic Resources of Areas Beyond National Jurisdiction" Background information on Ocean Governance and the BBNJ Treaty, https://bbnj-mgr.fas.harvard.edu/background-information-ocean-gevernance.

[30] Ibid.

[31] Art. 2 of the BBNJ Agreement.

marine environmental protection, considering the intergenerational equity principle, but also emphasizing the relevance of the other international bodies for cooperation and coordination in the efforts for achieving this conservation and sustainable use of biological diversity in ABNJ. Therefrom, the question posed here is how to achieve the objective of the BBNJ Agreement without undermining the existing regulations of the ISA concerning marine environmental protection in the Area, while facilitating coordination and cooperation between both regulatory frameworks.

In addition, the next question is how the institutional framework of BBNJ will interact with other organizations that already apply their standards for ABMTs, including Marine Protected Areas (MPAs) or Environmental Impact Assessments (EIAs) in ABNJ. Particularly, the ISA with its regulatory regime for DSM, for which there is the Explorations Regulations in place and the Draft Regulations Exploitation addressing environmental impacts of this activity in the Area.

2.4. The relationship between the BBNJ agreement and the ISA regulatory framework

One of the central challenges of the BBNJ Agreement is how it will fit into the vast existing institutional and regulatory puzzle that constitutes international ocean governance. Particularly, for the sake of this thesis, with the regulatory regime established under the ISA for DSM in the Area.

The BBNJ Agreement addresses the conservation and sustainable use of biodiversity in ABNJ, including the Area. Thus, if not interpreted correctly, there could be an overlap between this regulatory regime and the ISA institutional framework for DSM and the protection of the marine environment in the Area. Accordingly, how is this relationship with the existing body of international law, including the global, regional and sectoral bodies articulated in the BBNJ Agreement?

In response to the previous question, the BBNJ Agreement deals specifically with the relationship between the BBNJ Agreement and relevant instruments and frameworks and relevant global, regional an sectoral bodies.[32] Hence, art. 5 reads as it follows: “This Agreement shall be interpreted and applied in a manner that does not undermine relevant legal instruments

[32] Art. 5 of the BBNJ.

and frameworks and relevant global, regional, subregional and sectoral bodies and that promotes coherence and coordination with those instruments, frameworks and bodies."

Certainly, Article 5 of the BBNJ Agreement, which outlines the obligation not to undermine pertinent global entities, seems to pave the way for an interpretation that seeks to prevent normative conflicts. In doing so, the first step is to try to find a harmonious interpretation of both legal instruments; both, the ISA regulatory regime and the BBNJ Agreement. It is uncertain what the commitment no to undermine means or whether it will maintain its broad perspective or adopt a narrow interpretation. Certainly, the "not undermine" proviso is a very ambiguous one.[33] However, there at least two main and different ways to understand the term "not to undermine", which could lead to remarkably distinct effects.

The first approach, which is regarded as the *expansive* understanding of "undermine", explained by Scanlon, Z.[34] "requires any new instrument to "not undermine" the authority or mandate of existing bodies, and to "not undermine" the measures in existing instruments but necessarily leaving their mandates untouched." This approach leads to an interpretation of "not undermining" where the BBNJ Agreement respects and does not push for or influence changes in existing bodies, including the ISA. It is a very restrictive interpretation of "not undermining," granting very little influence on the BBNJ Agreement.

The second approach, namely, the *narrow* understanding of the word "undermine" in words of the author Scanlon, Z.[35] "would require a new instrument to not undermine the *effectiveness* or *objectives* of existing frameworks and bodies, which could include improving the implementation or effectiveness of existing instruments." This interpretation of the word "undermine" would allow for the BBNJ Agreement to, for example, standardize the rules concerning the EIA process in ABNJ as long as the idea is based on improving or strengthening, and not undermining, the objectives of the existing legal framework. Hence, following this

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[33] McDorman, T., "A Few Words on the "Cross-Cutting Issue"—The Relationship between a BBNJ Convention and Existing, Relevant Instruments and Frameworks and Relevant Global, Regional and Sectoral Bodies". (2021), In *Marine Biodiversity of Areas beyond National Jurisdiction*, p. 284, Scanlon, Z. "The art of "not undermining": possibilities within existing architecture to improve environmental protections in areas beyond national jurisdiction." (2018), *ICES Journal of Marine Science*, *75*(1), p. 405; The wire, "A new treaty can create a more human ocean", https://thewire.in/world/ocean-governance-bbnj-agreement-marine-areas.

[34] Scanlon, Z. (2018), p. 406.

[35] Ibid., page 407.

interpretation, the BBNJ Agreement would be upgrading the protection given by the ISA legal system to the ecosystems in the Area. Namely, not to leave the ISA mandates untouched, but to improve its effectiveness in terms of protection to the marine environment and raise the standards included thereof.

Following with the interpretation of "not undermining", Article 31(1) of the Vienna Convention establishes the general rule of interpretation of a treaty by looking at the "ordinary meaning". The Oxford English Dictionary indicates that to undermine something is to make something weaker or less effective. This definition puts forward the narrow approach discussed above. Thus, this understanding of "undermine" in relation to the BBNJ and the ISA regulatory regimes paves the way for an interpretation which could be the way forward to ensure that the protection standards of ISA regulations are enhanced by the effect of the BBNJ Agreement without affecting their effectiveness and efficiency. The BBNJ would act as a reinforcement for the measures regarding the protection of marine ecosystems in the Area, without making the ISA legal regime weaker or less effective. Indeed, the BBNJ could be the tool for strengthening the ISA regulatory regime, the legal complement that enhances the level of protection given to the biodiversity in the Area.
Nevertheless, there is no apparent agreement on what the correct interpretation for the term is "undermine", because from the ordinary meaning of the words, many different perspectives result according to the subject to which it is applied, and according to one's perspective. Therefore, under these circumstances, the ordinary meaning, following the VCLT, does not result very insightful.[36]

To sum up, for the case of EIAs and ABMTs rules, the possible interaction and how could the "undermine" clause work or be interpreted in the relationship between the BBNJ Agreement and the ISA regulatory regime is going to be studied and explained from a closer point of view in chapter 5.

[36] Ibid.

CHAPTER 3: THE REGULATION FOR EIA UNDER THE ISA REGULATORY REGIME AND THE BBNJ AGREEMENT

3.1. Introduction to EIA in the Area

The Voluntary Guidelines of the Convention on Biological Diversity define EIA as "a process of evaluating the likely environmental impacts of a proposed project or development taking into account inter-related socio-economic, cultural and human health impacts, both beneficial and adverse".[37]

UNCLOS does not specifically refer to the term "EIA", but instead it establishes a broadly equivalent obligation applicable to the marine environment, including ABNJ. UNCLOS sets an indirect obligation for EIA under art. 206 which determines that when "States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment…" UNCLOS however, only establishes the point of departure for the EIA regulation, but *inter alia*, is the ISA that is developing the normative skeleton that will be applicable for EIA in the Area, which has to be combined with the international standards of EIA, specifically, the provisions from BBNJ Agreement, which should be considered as the minimum standard for EIA regulation in the drafting of the Mining Code.[38]

Indeed, EIA is an essential mechanism for the ISA. Through EIA, the ISA and its member states can be supplied with an indication of the likely environmental consequences and effects on their actions and operationalize several key obligations, such as the precautionary approach.[39] Nevertheless, the process for DSM in ABNJ is not yet fully developed, and hence there is still time to implement some changes in the regulation and its key provisions. Some authors discussed that the "EIAs have often only had a moderate effect" explaining that they took the

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[37] Voluntary Guidelines on biodiversity-inclusive impact assessment, 5, Annex to Decision VIII/28 on Impact Assessment of the Convention on Biological Diversity (CBD) 8th Conference of the Parties (COP).

[38] Articles 8, 29 and 38 of the BBNJ Agreement regulate this obligation referred to other IFBs, including the ISA, for which, Parties will be required, once the BBNJ Agreement is formally adopted, to enhance international cooperation and promote the BBNJ Agreement's objectives within other international bodies, including the ISA.

[39] M. Durden, J., et al., "Environmental Impact Assessment process for deep-sea mining in 'the Area", (2018), Vol.87, *Elsevier,* p. 194.

form of a proposal rather than substantive changes or clear obligations.[40] Accordingly, explained by Jennifer M. Durden et al.,[41] the EIA process should enable the ISA to ensure that uniform and consistently high environmental standards are applied to all contractors. However, the legal instruments requiring states and contractors to undertake EIA are still incomplete (for the exploitation phase only, nor for the exploration phase) notably lacking a global detailed legally binding requirement and mechanisms for supervision, compliance, and enforcement.[42]

Even though the EIA process for exploitation is still under development, there are three main characteristics which are present in every EIA for DSM: uncertainty, precautionary approach and adaptive management.

First, a high degree of uncertainty exists in all aspects of the environmental management of DSM projects. The limited knowledge of the functioning of the deep-sea environment is a characteristic and at the same time, a challenge, for the whole EIA process. The structure and function of such ecosystems is not deeply understood. In connection with this uncertainty, there is also limited knowledge of the actual nature and extent of mining impacts, since is an activity that has not taken place before, in such an unknown and difficult environment, there is not a clear picture of the actual nature and extent of mining impacts, given the long-term effects, both at spatial and time scale of the potential mining operations.[43] Therefore, as illustrated by Malcom R. Clark et al., from the outset, the EIA preparation and the development of environmental management plans are almost by definition, arising and operating in what these authors called, a 'knowledge-poor situation, with many gaps in information for risk assessment, and high uncertainty'.[44]

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[40] Ibid.

[41] M. Durden, J., et al., "Environmental Impact Assessment process for deep-sea mining in 'the Area", (2018), Vol.87, *Elsevier,* pages 195 and 196.

[42] The lack of a global detailed legally binding requirement and the undeveloped EIA regulation is exclusively in relation to the exploitation phase. Under the exploration phase there is already a regulation in place, the Exploration Regulations.

[43] Clark, M., et al., "Environmental Impact Assessments for deep-sea mining: Can we improve their future effectiveness (2020), *Elsevier,* pages 1 and 2.

[44] Ibid.

However, two key concepts have been identified to address this uncertainty: the precautionary approach and adaptive management.[45]

Although the precautionary approach[46] is not mentioned in UNCLOS, it has been gradually integrated into the international legal framework. *Inter alia*, the ISA has expressly incorporated precaution into the Mining Code, in the Exploration Regulations and in the Draft regulations on exploitation of Mineral resources in the Area.[47] Moreover, the International Tribunal for the Law of the Sea (ITLOS), in its Advisory Opinion on Responsibilities and Obligations of Sponsoring States[48] stated that the precautionary approach is part of the due diligence obligation of Sponsoring States which requires them to take all appropriate measures to prevent damage that might result from the activities of contractors that they sponsor.

The BBNJ Agreement has also included the precautionary approach in some of its provisions. More specifically, the precautionary approach is included within the BBNJ Agreement as one of the guiding principles for States in the achievement of the objectives of the BBNJ Agreement[49], but also for adoption of ABMT, including MPA. Therefore, the figure of the precautionary approach has an important presence in the BBNJ Agreement. However, the precautionary approach is very relevant to the EIA. The EIA embodies the precautionary approach, and this should be applied at all stages of the EIA process,[50] with the purpose of ensuring an adequate environmental protection through the taking of early action in response to the threats arising from DSM to the marine environment.

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[45] M. Durden, J., et al., (2018), p. 195.

[46] The BBNJ Agreement states 'precautionary principle or precautionary approach, as appropiate' but throughout the thesis, it is only used the term 'precautionary approach'. The ISA's exploitation regulations may also follow the BBNJ Agreement in this (current version alludes to both terminologies but is not guaranteed) and the ISA's exploration regulations refer expressly to the precautionary approach.

[47] Nodules Exploration Regulations, regulation 31(2); Sulphides and Crusts Exploration Regulations, regulation 33(2), Draft regulations on exploitation of mineral resources in the Area, ISBA/29/C/CRP.1, 18-29 March 2024, Regulation 2.4(b), Regulation 13.7, and Regulation 44.

[48] ITLOS, Advisory Opinion of 1 February 2011, "Responsibilities and obligations of states sponsoring persons and entities with respect to activities in the area", paragraph 131.

[49] Article 7 of the BBNJ Agreement.

[50] M. Durden, J., et al., (2018), p. 195.

Adaptive management has been suggested as a tool to alter a DSM project with the aim to address uncertainties. Defined by Durden Jones et al.[51] as deliberate process of learning by doing to improve management over time and should be applied by both mining companies and regulatory bodies. Active adaptive management applies when management objectives are designed to reduce uncertainty (i.e., learning by doing), and passive adaptive management applies when the reduction of uncertainty is not specified as an objective (i.e., learning while doing).[52] Active adaptative management could be an important element of the Environmental Management and Monitoring Plan (EMMP)[53] to address and account uncertainties that cannot be sufficiently reduced in EIA. Therefore, the uncertainties and possible risks that could not be reached by EIA, could be accounted in the EMMP, working together these two different mechanisms in the application of the precautionary approach. Surprisingly, the BBNJ Agreement has not integrated the concept of adaptive management in its provisions. In this case, the BBNJ Agreement has not included adaptive management within its standards for environmental protection even though the precautionary principle is stated as one of the guiding principles of the BBNJ Agreement.

These three elements that have been analyzed here (uncertainty, precautionary approach and the adaptive management), are an integral part of the EIA concerning DSM, they allow managers and regulators to find a flexible way in response to a changing knowledge environment such as the deep seabed.

To further grasp the functioning of the EIA for the Area, it's essential to examine the broader regulatory context. Therefore, one aspect to examine regarding the EIA involves understanding

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[51] Durden, J., "Existing environmental management approaches relevant to deep-sea mining." (2018), Mar *Policy* **103**, p. 172.

[52] Hyman, J., A Stewart, R., Sahin, O., "Adaptive management of deep-seabed mining projects: A systems approach.", *Integrated Environmental Assessment and Management*, *18*(3), p. 675.

[53] "The purpose of an EMMP is to manage and confirm that observed Environmental Impacts and Environmental Effects are consistent with predicted Environmental Effects from the Environmental Impact Assessment and does not breach any of the rules, regulations and procedures of the Authority, including the applicable Standards on environmental objectives, [the quantitative environmental thresholds] and [the Standards on] [requirements] for the Exploitation activities." Regulation 50 of the Draft on Exploitation of Mineral Resources in the Area ISBA/29/C/CRP.1.

how the ISA regulatory framework will interact with the BBNJ Agreement. Hey E. assesses examples of regime interaction between regimes that have compatible functional goals or share a common interest, and explains that even in this case, the interactions have not been straight and easy. Two main aspects that need to be considered when analyzing the interaction between two regimes: *how* an activity is regulated and *who* participates in that specific context for deciding. Consequently, due to the different social understandings of EIA in both regulatory regimes, the BBNJ Agreement and the ISA regulatory regime, the way in which these regimes frame and approach the issue to be regulated will also vary, considering their different stories and the vision of the world the actors involved therein.[54] Certainly, for the EIA regulation within the BBNJ Agreement, the standards are to be developed by the Scientific and Technical Body (STB) following the wording of art. 38. Whereas under the ISA regulatory regime, by virtue of Regulation 94 read in connection with Regulation 45 of the Draft Exploitation Regulations, is the Legal Technical Commission (LTC) of the ISA, the institution in charge of the development of standards, in conjunction with the Council. The focus for EIA and the matters that shall be considered differ markedly, but this will be further assessed in the next section.

To enhance comprehension of the interaction between these two regimes in connection to the EIA regulation, the following section undertakes an evaluation of the primary elements for the two regulatory regimes concerning EIA. Considering two dimensions to this issue: an institutional and a substantive dimension. The objective is to provide readers with a clearer understanding of the provisions that may pose greater challenges for integration and comprehension, as well as to identify the similarities facilitating a more seamless interaction between the two. Additionally, a more detailed and concise exposition on how these two regimes will interact and the way its synergies are going to work can be found in Chapter 5.

[54] Hey, E., *Regime interaction in ocean governance: problems, theories, and methods* (Publications on Ocean Development, Volume: 91, Brill Nijhoff (2020) ch 4, p. 94.

3.2. EIA under the ISA regulatory regime

3.2.1. The competence for establishment of EIAs in the Area

The obligation to prevent deleterious effects on the marine environment is articulated in art. 192 of UNCLOS, and also under section V of Part XII of the UNCLOS. For the ISA, the general obligation to protect the marine environment is in art. 145 of UNCLOS, for which the adverse effects of DSM will undoubtedly have to be prevented through, *inter alia*, an EIA process. To fulfil the obligation to ensure an "effective protection" required by art. 145 of UNCLOS, any decision would thus legitimately need to be well informed.[55]

The obligation to conduct EIAs prior to the conduct of certain DSM activities in the Area was clarified in an Advisory Opinion delivered by the Seabed Dispute Chamber of the International Tribunal for the Law of the Sea in 2011.[56] To support its findings relating to environmental impact assessments for DSM activities, the Chamber relied on an earlier decision by the International Court of Justice (ICJ) in the Pulp Mills on the River Uruguay case, in which the ICJ observed that conducting prior EIAs may be considered as a requirement under general international law where there is a risk that the proposed activity may have significant adverse impacts in a transboundary context.[57] Even though the Seabed Disputes Chamber stated that a prior undertaking of an EIA for certain DSM activities should be considered an obligation, the specific content and substance of that obligation was not further elaborated on by the Court. Moreover, the Seabed Disputes Chamber established that the failure to ensure that a satisfactory EIA process has been undertaken, under international law, entails a liability for the sponsoring state.[58]

For its part, the ISA has developed a set of regulations that establish an EIA process for mining activities in the Area. Although the Mining Code is under development, it is possible to describe

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[55] Lallier, L. E., & Maes, F. "Environmental impact assessment procedure for deep seabed mining in the area: Independent expert review and public participation." (2016), *Marine Policy*, *70,* p. 214.

[56] ITLOS, Advisory Opinion of 1 February 2011, "Responsibilities and obligations of states sponsoring persons and entities with respect to activities in the area".

[57] International Court of Justice, Argentina v. Uruguay, *Pulp Mills Case,* 20th of April 2010, paragraph 205.

[58] ITLOS (2011), para. 110 and art. 139 of UNCLOS.

the current EIA process in the exploration regulations and its anticipated continuation into the exploitation phase.

EIA is a central element of the pre-approval environmental management process for DS, activities in the Area. Among the three organs referent to the ISA (The Assembly, the Council and the Secretariat)[59], there is the subsidiary organ of the Council: The Legal Technical Commission (LTC).[60] However the lack of decision-making power of the LTC, this organ makes recommendation to the Council which are crucial for the implementation of both the legislative and the executive powers of the ISA. Within its wide range of functions, the LTC has the obligation to prepare assessments of the environmental implications of activities in the Area.[61]

Typically, DSM activities, consists of a set of various stages, which broadly vary from prospecting, exploration, and exploitation. Lothian, S.[62] explained that the environmental implications relating to the assessment of environmental impacts, tend to differ across the various stages, thus it is necessary to differentiate between the applicable ISA requirements for the EIA process. Thus, the next two sections analyze two of the stages tan conform the DSM activity, namely, the exploration and the exploitation phase, for which its main distinction relies on the nature of the activities that take place in each of these phases.

3.2.2. EIA in the exploration phase

The set of three regulations that make up the Exploration Regulations (*Nodules Exploration Regulations, Sulphides Exploration Regulations, and Crusts Exploration Regulations)* contain similar provisions and mandates, except for some aspects that present different characteristics connected to the type of deposit. Therein, these regulations require State Parties to apply to the ISA for the approval of a plan of work before they can receive the exclusive right of 15 years duration to explore the specific area.

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[59] Art. 158 of UNCLOS.

[60] Art. 163(1)(b) of UNCLOS.

[61] Art. 165.2(d) of UNCLOS.

[62] Lothian, S, "The BBNJ Agreement: Through the Prism of Deep- Sea Vulnerable Marine Ecosystems", (2023), *Ocean Development and International Law*, *54*(4), p. 24.

The application for the exploration contract, apart from considering the financial and technical capabilities of the applicant,[63] it also obliges the applicant to submit for approval a proposed exploration program, including oceanographic and environmental baseline studies to enable an assessment of potential environmental impacts within their first 5-year plan of work.[64] Moreover, within the area of protection of the marine environment in Part V of the Exploration Regulations, the regulation goes even further and states that if activities would have serious or harmful effects on vulnerable marine ecosystems, such activities are to be managed to prevent such effects or not authorized to proceed.[65]

In both cases, the regulation is written in a very opened way which leaves to the discretion of the applicant and the LTC, the decision of what exactly is to be included in the assessment of the potential environmental impacts. Which are the aspects to be considered in this EIA? Neither there is an explanation in these Regulations of what can be understood under the wording of "to ensure *effective protection* for the marine environment from *serious harmful effects* on vulnerable marine ecosystems". There is no definition of effective protection that has been developed. It's clear that these Regulations seek to impose certain limits that restrict the rights of the applicant in the exploration area, however, they are written in a very ambiguous way which gives the freedom and the discretion to the applicants and the LTC, to interpret these provisions in the way that best suits them. Thus, the LTC would be based in its decisions in subjective, instead of objective criteria. Some guidance in this aspect could be found in the references made to the precautionary approach, or the consideration of due regard to the principles, policies and objectives provided for in Part XI and annex III of the Convention. However, this approach would certainly not be enough in the way towards a clear and precise regulation that unequivocally protects the marine environment from the exploration in the deep

[63] Regulation 12 Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, ISBA/19/C/17.

[64] Regulation 18 Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, ISBA/19/C/17.

[65] Regulation 31 Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, ISBA/19/C/17.

seabed, especially considering the essential aspect of EIA for this part. It is yet unclear which documents must be presented with the EIA by the applicants.

It is important to consider that the content of the Exploration Regulation might not be very detailed. Therefore, the ISA needs to further operationalize them through a set of standards, recommendations, and guidelines. Including every single detail in the Exploration Regulations could result in a very intricate, complex, and lengthy text. Additionally, if all these protection standards were included in a binding regulation, it would be extremely difficult to amend. In contrast, non-binding standards and guidelines can be easily adjusted as necessary as the ISA gains more knowledge. This would allow for a more dynamic approach to the ISA regulations, which can be further operationalized as knowledge and experience in DSM increase.

However, these aspects have been partially addressed in the Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area.[66] The latter, differences between activities that shall undergo an EIA during exploration, and those activities that do not require to undertake an EIA and submit an EIS.[67] Indeed, within the Recommendations, for those activities requiring an EIA, there are many specifications about what information and measures needs to be provided by the contractor for the EIA (e.g.: mineral collection technique, depth of penetration in the sediment or rock, running gear with contacts the seabed...), or the observations and measurements to be made after undertaking an activity that requires an EIA during exploration. Another progress included in these Recommendations is that for those activities requiring an EIA during exploration is that the EIA should consider the impacts not only in the deep seabed, but also on the water column. Thus, the EIA should address not only the areas directly affected by DSM, but also the "wider region impacted by seabed-disturbance plumes the discharge plume and any materials that may be released by transporting the minerals to the ocean surface, which will depend on the technology used."[68] DSM is an activity with very extended effects, that sometimes goes even further than the deep seabed, but also affects the benthic and pelagic

[66] Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area, ISBA/25/LTC/6/Rev.3. 4 August 2023.

[67] Ibid, pages 9 and 10.

[68] Ibid, Regulation 36.

environment, and these Recommendations represent a big step towards a better regulation that considers the indirect impacts of DSM.[69]

Coming back to the Exploration Regulations, another aspect important to assess connected to the EIA rules, is the timing of this tool, because an EIA is only submitted *after* the contractor has been granted exclusive exploration rights for a particular area for 15 years. Therefore, could the ISA require the contractor to amend its exploration programme based on the lack of environmental protection or the high risks proved by the EIA?[70] A better proposal would require the EIA to be carried out *before* the contract has been granted, to ensure that the EIA has some practical effect and can achieve its purpose of providing information to the ISA prior to issue a contract so the project's impacts on the environment and people can be properly assessed.[71] The Recommendations state that the EIA has to be submitted by the contractor "no later than one year in advance of the activity taking place." [72] Nonetheless, the Recommendations merely serve as guidance for the contractor and are not binding regulations. For the best outcome of an EIA and the protection of the marine environment, the ISA should incorporate this provision into its Exploration Regulations.

3.2.3. Assessment of environmental impacts which may arise from the exploitation phase of DSM activities in the Area

The phase that follows the exploration, is the exploitation phase, where contractors would be allowed to extract the mineral resources from deep seabed and sell them. The Council of the ISA is currently negotiating a set of regulations that would govern future exploitation activities. Namely, the Draft regulations on exploitation of Mineral Resources in the Area.[73] Therein, Part IV governates the area of Protection and Preservation of the Marine Environment, including in

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[69] For a more comprehensive understanding of the importance of the study of indirect impacts of DSM: Clark, M. et al. (2020), Marine *Policy*, *114,* p. 5.

[70] Jaeckel, A, (2017), p. 241.

[71] International Institute for Sustainable Development (IISD), "EIA: What? Why? When?" https://www.iisd.org/learning/eia/eia-essentials/what-why-when/.

[72] Regulation 34, ISBA/25/LTC/6/Rev.3. 4 August 2023.

[73] Draft regulations on exploitation of Mineral resources in the Area ISBA/29/C/CRP.1. 16 February 2024.

its Section 2, the Environmental Impact Assessment Process, which is the focus for the section of this chapter.

Exploitation contracts are concluded for a period of 30 years[74] and entail, apart from the application fee and annual premiums, the payment of fees for the mined resources according to a royalty system.[75] For the application and approval procedure of a plan of work for exploitation, among the different documents that must be presented by the contractor, there is the Environmental Impact Statement (EIS). This document, wraps the results of three different documents which are very relevant for the protection of the marine environment[76]: The results of the EIA, an Environmental Management and Monitoring Plan (EMMP)[77] and a Closure Plan.[78] Followed by that, the LTC reviews and examine these documents in light of the comments made by stakeholders and other possible comments, considering art. 145 of UNCLOS.[79] In the case that the LTC considers that the discussed plans do not provide adequate protection for the marine environment, the applicant will be informed and is offered a chance to rectify this, followed by a new assessment by the LTC.[80]

However, the focus for the next section is based only on one of the documents necessary to present for the EIS, that is, the EIA. The other two documents (the EMMP, and the Closure Plan), are not further assessed in this thesis.

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[74] Regulation 20.1 Draft regulations on exploitation of Mineral resources in the Area, ISBA/29/C/CRP.1. 16 February 2024.

[75] Ibid, Part VIII.

[76] Ibid, Regulation 48.

[77] This document, which should be concluded based on the EIA, aims to manage, and confirm that Environmental Effects meet the environmental quality objectives and standards for the mining operation. Incorporates how mitigation measures will be implemented, how their effectiveness will be monitored, and which adjustments may be made. Regulation 50 of the Draft Regulation on Exploitation (ISBA/29/C/CRP.1.).

[78] This document explains the responsibilities of the contractor in monitoring the environmental impact after completion of the activities with the purpose, *inter alia,* of ensuring that the marine environment is effectively protected during closure or any temporary suspension of Exploitation activities. Regulation 59 of the Draft regulations on exploitation of Mineral resources in the Area (ISBA/29/C/CRP.1.)

[79] Regulation 13 Draft regulations on exploitation of Mineral resources in the Area, ISBA/29/C/CRP.1.

[80] Regulation 15, Draft regulations on exploitation of Mineral resources in the Area, ISBA/29/C/CRP.1.

The EIA process

The EIA process is regulated not only on the Draft Regulations on Exploitation, but also on the Draft standard and guidelines for the environmental impact assessment process.[81] Important to note is that the Draft regulations on Exploitation, contrary to the Exploration Regulations, introduces one exclusive set of rules for all categories of mineral resources.

The purpose of the EIA, following Regulation 46 of the Draft Regulations on Exploitation is "to identify and inform the Authority's assessment of an application of a Plan of Work...and predict and evaluate the potential Environmental Impacts, effects and risks anticipated from the proposed activities on the marine environment and identify necessary measures to Mitigate or manage such effects and risks, to enable the Authority to assess the potential adverse Environmental Effects and risks...".

The Draft Regulations on Exploitation requires the undertaking of an EIA and the submission of the subsequent EIS, for an application for the approval of a plan of work for exploitation. In contrast with the Exploration Regulations, where the undertaking of an EIA prior to the exploration activity was only included within the Recommendations, for the exploitation phase, the EIA must be carried out *prior* to the exploitation phase and is planned for this regulation to be covered under legally binding regulations, not only in the form of guidelines or soft law.[82]

The EIA process follows certain key steps. The first usual step for EIA, that is screening,[83] "is not required for applications for approval of a Plan of Work for exploitation, as all applicants are required to undertake an EIA and submit an EIS."[84] Thus, the EIA process for exploitation normally begins with the scoping, which involves appropriate specialists, stakeholder

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[81] Draft standard and guidelines for the environmental impact assessment process, ISBA/27/C/4, 31 January 2022.

[82] Draft regulations on exploitation of Mineral resources in the Area, Regulation 13, ISBA/29/C/CRP.1 and Draft standard and guidelines for the environmental impact assessment process, Regulation 8(a) of ISBA/27/C/4.

[83] "*Screening* is the first stage of the EIA process which results in a key EIA decision, namely to either conduct the assessment (based on the likely significant impacts) or not conduct it (in the anticipated absence of such impacts)." International Institute for Sustainable Development (IISD), "The 7 steps to an EIA" https://www.iisd.org/learning/eia/eia-7-steps/step-1-screening/.

[84] Draft standard and guidelines for the environmental impact assessment process, regulation 12 ISBA/27/C/4.

consultation, and environmental risk assessment.[85] The next step is the EIA, which includes the "assessment of baseline data collected during exploration activities and the results of studies that were identified during the scoping process."[86] The next steps of the EIA include mitigation, EIA reporting, EIS, Review, Decision-Making and Monitoring and EIA audit steps. In any case, the focus for this chapter and this section is the EIA.

The obligation to undertake an EIA for the applicant includes to assess: "(a) The intensity or severity of the impact at the specific site being affected; (b) The spatial extent of the impact relative to the availability of the habitat type affected; (c) The sensitivity/vulnerability of the ecosystem to the impact; (d) The ability of an ecosystem to recover from harm, and the rate of such recovery (e) The extent to which ecosystem functions may be altered by the impact."[87] Already this regulation is very much more detailed in comparison with the last version, and it would be stating binding obligations that specify what is expected from the EIA in the exploitation phase. Nevertheless, even though some progresses have been made, there is still room for improvement in some concerns. Within these concerns, it stands out one of the more important parts that has to be completed in undertaking the EIA: the stakeholder consultation. The obligation to undertake a consultation with States and Stakeholders in undertaking the EIA is stated in Regulation 47.2, and article 47 bis 5. Regulation 2.4(f) considers effective stakeholder involvement and public participation as one of the principles that shall guide the application of the Draft Exploitation Regulations.

Stakeholder participation in the EIA process is a crucial aspect of the EIA process and the DSM activity in general. The ISA in its dual mission of regulating and controlling activities in the Area and the protection of the marine environment, must ensure that mining leads to benefits for humankind as a whole.[88] This last purpose could be achieved through an effective implementation of the public participation (PP) in the EIA. PP has been identified by some

[85] Ibid, regulation 8(b).

[86] Ibid, regulation 8(C)

[87] Draft regulations on exploitation of Mineral resources in the Area, Regulation 47 ISBA/29/C/CRP.1 16 February 2024.

[88] UNCLOS, art. 140.

authors as an essential component of a transparent environmental management.[89] Following some of the criteria for evaluating PP proposed by Ardron, J., Lily, H., and Jaeckel A.,[90] (namely, the representativity and the proactive, early, and full engagement) this section analyses some of the shortcomings that the current PP rules present.

For the first criterion, the *representativity*, is important that the DSM decisions taken by ISA involve not only the interests of certain stakeholders, but broaden its horizons, since the Area and its resources are the CHM. Thus, the ISA should consider the interests of not only the interests of certain scientists, or the companies involved in DSM, but also the interests of all humans, both current and future.[91] Even though it could be argued that the ISA's State membership itself adequately represents the global population; after all, most States are represented. However, not all States are ISA members (e.g.: U.S.). The ISA has in total 168 Members (168 Member States + the EU), but only 36 States have voting power in the ISA's decision-making organ, the Council.[92]

One solution for enhancing participation would be the ISA technical workshops, which offer an opportunity to provide valuable external input. However, these workshops are not opened to everyone, and the tendency again seem to decline in favor of contractors and their consultants.[93]

The second criterion to assess is the *proactive, early, and full engagement*. As explained before, the participation in the technical workshops is limited to contractors and governments, therefore, lacking a representation of the entire humankind. Therefore, a suggestion would be to include for example: NGOs, proponents of other human activities occurring in the same space (tourism, shipping, or cables) or the public. Indeed, it would be impossible to include all individual or organization possible, however, the international organizations are expected to facilitate a broader participation. The Draft Exploitation Regulations seem to develop and contribute to how PP is predicted to contribute to future decision-making processes in the ISA. There is indeed a more developed and enhanced level of participation for stakeholders in

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[89] Clark, M., et al., (2020), p. 198.

[90] Ardron J., Lily, H., Jaeckel, A., "Research Handbook on International Marine Environmental Law, Chapter 16, "Public participation in the governance of deep-seabed mining in the Area", (2023), *Elgar Online.*

[91] Ibid, page 372.

[92] 1994 Implementing Agreement, Annex, s. 3(15).

[93] Ardron J., Lily, H., Jaeckel, A., (2023), p. 372.

Regulation 93 bis, which seems to be directed towards a more opened and participatory decision-making process. Nevertheless, explained by Ardron, J., Lily, H., and Jaeckel A, [94] for this aspect of proactive, early, and full engagement there is no such obligation for contractors, States or ISA members to proactively identify and communicate with other group's interests beyond States.

Overall, the ISA regulatory regime for DSM in the Area connected to the EIA process still needs to go under a strong revision of the regulation and address the flaws here discussed. Thus, the BBNJ Agreement could help the ISA regulator to improve and enhance these standards related to the EIA.

3. EIA IN ABNJ UNDER THE BBNJ AGREEMENT

The EIA process is regulated in the BBNJ Agreement under Part IV. The objective of this Part is, *inter alia,* to "Operationalize the provisions of the Convention on environmental impact assessment for areas beyond national jurisdiction by establishing processes, thresholds and other requirements for conducting and reporting assessments by Parties."[95] As describes by Lothian, S., "one of the objectives of the BBNJ Agreement is to operationalize the existing UNCLOS provisions by establishing processes, thresholds and other requirements for conducting EIAs in ABNJ and reporting results, including the consideration of cumulative impacts."[96]

3.1. Obligation to conduct EIAs

Parties have the obligation to ensure that the potential impacts on the marine environment of planned activities under their jurisdiction or control that take place in ABNJ are assessed *before* they are authorized.[97] The BBNJ Agreement clearly requires an EIA before an activity is authorized, ensuring that the proposals for the DSM plan are understood properly before decisions are made. If the Environmental Impact Assessment (EIA) were conducted after the

[94] Ardron J., Lily, H., Jaeckel, A., (2023), p. 375.

[95] Art. 27 of the BBNJ Agreement.

[96] Lothian, S, (2023), p. 23.

[97] Art. 28 of the BBNJ Agreement.

Deep Seabed Mining (DSM) had been authorized, the efficacy of the EIA in predicting and preventing harmful effects would significantly diminish. This is because the damage would have already commenced, and protective measures could only be implemented once harm to the marine environment is evident. In the worst-case scenario, if the EIA determines that the DSM project should not proceed due to irreversible damage, the project would already be underway.

Pursuant to art. 28 (2) of the BBNJ Agreement, when a Party with jurisdiction or control over a planned activity determines that the activity may cause *substantial pollution of or significant and harmful changes to the marine environment* in ABNJ, the Party shall ensure that an EIA is conducted in accordance with the BBNJ Agreement. Explained by Sarah Lothian[98], this obligation finds its base or reliance on the two ambiguous thresholds of art. 206 of UNCLOS. Namely, the "substantial pollution of" and a "significant and harmful change to the marine environment." Following the line of UNCLOS, the BBNJ Agreement has left this threshold unelaborated and open to interpretation. However, there is room for the Scientific and Technical Body (STB) to develop more objective specifications and guidelines for these ambiguous concepts. [99]

3.2. Thresholds and factors for conducting an EIA

By virtue of art. 30, "when a planned activity may have more than a minor or transitory effect on the marine environment, or the effects of the activity are unknown or poorly understood, the Party with jurisdiction or control of the activity shall conduct a screening of the activity." In other words, the threshold criteria to trigger the screening of activity is when a planned activity has more than a minor or transitory effects on the marine environment. From this provision, it can be deduced that EIAs are not obligatory when Parties have determined that the planned activity encompass a "minor or transitory effects." This regulation faces an ambiguous wording which do not provide a clear answer of what should be understood as "minor or transitory effect". This term was used to avoid the ambiguous meaning of the term "significant" used in art. 206 of UNCLOS.[100] However, it is arguably how could the term provide greater clarity than

[98] Lothian, S., (2023), p. 24.

[99] Art. 38 of the BBNJ Agreement.

[100] Art. 206 of UNCLOS sets the obligation to conduct an EIA in all maritime zones.

the term "significant."[101] Following the general rule of interpretation of the VCLT in art. 31, "minor" under the Oxford Dictionary is defined as "relatively small or unimportant; not regarded as being among the most notable of a specified group of persons or things..." and the word "transitory" is defined as "not lasting; temporary; brief, fleeting." Nevertheless, this threshold is assessed on a case-by-case basis, thus, the ordinary interpretation gives us a satisfactory understanding in terms of what the threshold entails.

The other circumstance that triggers a screening is that the effects of the EIA are *unknown or poorly understood.* Consequently, due to the lack of extended knowledge of the habitats in the Area and its ecosystems and its interconnection, in most cases, the effect of DSM will be considered as "unknown or poorly understood" and thus will trigger the screening process.

Furthermore, according to art. 38 of the BBNJ Agreement, the STB may also develop standards and Guidelines for consideration and adoption by the COP, including an indicative non-exhaustive list of activities that directly require (or not) an EIA.

3.3. Process for EIAs

The entire process for the undertaking of an EIA is, by virtue of art. 31 of the BBNJ Agreement, as it follows:

1. Screening**:** where Parties determine whether an EIA is required in respect of a planned activity under its jurisdiction.
2. Scoping: Important to mention is that for the scoping phase, Parties shall ensure that key environmental, economic, social, cultural, and human health impacts, including cumulative impacts, are identified with the purpose of its inclusion in the EIA.
3. Impact assessment and evaluation
4. Prevention, mitigation, and management of potential adverse effects
5. Public notification and consultation
6. Preparation and publication of an EIA report

[101] Tanaka, Y., "Reflections on the Environmental Impact Assessment in the BBNJ Agreement: Its Implications for the Conservation of Biological Diversity in the Marine Arctic beyond National Jurisdiction." (2024) *Ocean Development and International Law*, p. 15.

For the public notification and consultation phase, the BBNJ Agreement has included many novelties. *Inter alia,* the BBNJ Treaty identifies a wide range of stakeholders for EIAs: Indigenous Peoples and local communities with relevant traditional knowledge, relevant global, regional, subregional, and sectoral bodies, civil society, the scientific community, and the public.[102]

The decision-making process is set out in art. 34 of the BBNJ Agreement, and it is the Party responsibility under whose jurisdiction or control a planned activity fall, to determine if the activity may proceed. Decision documents shall be made public, through the Clearing-House Mechanism.

Considering the monitoring and review phase, Parties must use the best available science and scientific information and, where available, the relevant traditional knowledge of Indigenous Peoples and local communities, keep under surveillance the impacts of any activities in ABNJ that they permit or in which they engage to determine whether these activities are likely to pollute or have adverse impacts on the marine environment. Moreover, each Party must monitor the environmental and any associated impacts, such as economic, social, cultural and human health impacts, of an authorized activity in accordance with the conditions set out in the approval of the activity.[103]

3.4. Concluding remarks

The EIA regulation ABNJ, including the Area, has experienced recently some changes and improvements in terms of a more developed set of rules, specifications of when an EIA is needed, clarification of the contents of the obligation to conduct an EIA and ensuring transparency and public participation of the EIA.

However, both regulatory regimes, the BBNJ Agreement and the ISA regulatory regime are addressing the same concern, the EIA in the ABNJ, including the Area. Thus, an essential issue that arises here concerns the harmonization of EIAs under these two regulatory regimes.

The Area, as the CHM requires a framework for EIA that is cooperative, transparent, and accountable. Therefore, is important to promote collaboration between the BBNJ Agreement and the ISA regulatory regime. Even though, in some cases, the standards of protection are

[102] Art. 32.3 of the BBNJ Agreement.

[103] Arts. 35, 36 and 37 of the BBNJ Agreement.

higher in the BBNJ Agreement for the EIA process. For example, the BBNJ Agreement requires an EIA before an activity is authorized (Arts. 28.(1)), while the ISA currently requires an EIA once exploration work has already been authorized. However, for the future exploitation phase, the ISA will require an EIA before issuing a mining contract.

The other big difference regarded among these two regulatory regimes is that the BBNJ Agreement clearly requires a screening phase by virtue of art. 30.1, whereas under the ISA regulatory regime, no screening phase is required, which could pose a problem for EIAs conducted during an exploitation contract, because the process for EIA would result less complete and accurate. Nevertheless, the reader should expect a more extended discussions of the higher thresholds of protection of the marine environment in Chapter 5.

The ideal solution would be for the ISA to adapt and continue improving its regulations for EIA towards a more coherent and synergized approach of the two regulatory regimes here studied.

CHAPTER 4: ABMTS UNDER THE ISA REGULATORY REGIME AND UNDER THE BBNJ AGREEMENT

4.1. Introduction to ABMT

Continuing from the evaluation of the EIA regulation aimed at safeguarding the marine environment, this chapter redirects attention to another vital aspect of international regulation for the conservation of marine biodiversity: Area Based Management Tools (ABMTs). Both EIAs and ABMTs are two regulatory tools included in the 'package' of the BBNJ Agreement for the conservation and sustainable use of marine biological diversity in ABNJ. Particularly important for DSM and its yet unknown consequences on the marine environment, the use of not only EIA, but also ABMT is a crucial step towards the achievement of a sustainable use and conservation of the marine environment.

Moreover, mirroring Chapter 3, the purpose of this chapter is to systematize the key aspects and points referred to ABMT in the two regulatory regimes, the ISA regulatory regime and the BBNJ Agreement. With the purpose of providing a basis for chapter 5 where the focus is on the assessment of how these regulatory regimes could interact, what are the principal similarities and differences, and how the latter could be overcame or approached.

ABMT under the BBNJ Agreement is defined as "a tool, including a marine protected area, for a geographically defined area through which one or several sectors or activities are managed

with the aim of achieving particular conservation and sustainable use objectives in accordance with this Agreement".[104]

Explained by the High Seas Alliance[105], there is a wide variety of ABTMs, and they range from single-sector tools that manage only one type of activity to multi-sector tools that more comprehensively manage a wide breadth of activities. Indeed, there are five different types of ABMT: Areas of Particular Ecological Interest (APEIs), PSSAs (Particular Sensitive Areas), VMEs (Vulnerable Marine Ecosystems), EBSA (Ecologically or Biologically Significant Areas). Each of these ABMTs can be differentiated by the institution in charge of its designation, their roles and objectives. However, the focus here is on the two ABMTs directly established by the ISA regulatory regime and the BBNJ Agreement. Hence, APEIs are established by the ISA, and MPAs are established, *inter alia*, by the BBNJ Agreement.

These two regimes, with their own set of regulations, will have to find a path where both regulations can walk together without stepping into the other, and respecting the limits of each other. Namely, the establishment of ABMTs by the COP under the BBNJ Agreement, has to follow a consultation process on relevant bodies of legal instruments. Therefore, since the ISA has already in place some ABMT, particularly the REMP for the Clarion Clipperton Zone[106], consultations will need to be held with the ISA when a proposed ABMT involved the international seabed or the water column near ISA mining sites.[107] Important to remark in this sense is that for the deep seabed, the ISA will retain the competence to establish ABMTs, with the COP being able to take decisions on measures compatible with those of the ISA or being able to make recommendations.[108] Moreover, another key aspect in the interaction between

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[104] Art. 1(1) of the BBNJ Agreement.

[105] High Seas Alliance, "Area Based Management Tools (ABMTs) BRIEFING #2: How do MPAs and other ABMTs differ?", https://highseasalliance.org/resources/hsa-briefs-on-key-bbnj-treaty-issues/.

[106] The ISA has established and implemented the REMP for the CCZ and is also in the process of developing REMPs for the Mid-Atlantic Ridge and Northwest Pacific and Indian Oceans, https://www.isa.org.jm/protection-of-the-marine-environment/regional-environmental-management-plans/.

[107] Art. 21.2(b) of the BBNJ Agreement.

[108] Art. 22 of the BBNJ Agreement.

these two regulatory regimes is that when an MPA is proposed for the High Seas suprajacent to the Area: does this MPA has the potential to affect DSM activities ongoing in the Area?

Nevertheless, the first step to follow is to systematically explain the key points and regulatory aspects of both regulatory regimes and from there, assess and explain the way in which these two could interact and work together towards a more comprehensive and less fragmented regulation for the protection of the deep seabed marine environment. This last step of the assessment connected with the interaction of the two regulatory regimes is included in chapter 5 of the thesis.

4.2. ABMTs under the ISA regulatory regime

Although the ISA does not explicitly mention MPAs, nor ABTMs, it does provide for the protection of the Area from seabed mining activities in different ways.[109] Indeed, *inter alia,* it is using Regional Environmental Management Plans (REMPs), that the ISA gets to assess, manage, and protect marine ecosystems on a regional scale from DSM. However, is important to remark the fact that REMPs are an ABMT[110] with the legal status of a policy tool that, *inter alia,* as exposed in the ISA's Strategic Plan for the period 2019-2023 "provides the relevant organs of the ISA, as well as contractors and the sponsoring States, with proactive area-based and other management tools to support informed decision-making processes that balance resource development with conservation".[111]

Hence, the ISA, following the obligation to ensure marine environmental protection in art. 145 of UNCLOS, adopted in 2012, the Environmental Management Plan for the Clarion-Clipperton Zone (EMP-CCZ). The Clarion-Clipperton zone is located in the eastern central Pacific and is approximately six million km2 in size and has a particularly big amount of polymetallic

[109] There is not a definition within the ISA regulatory regime for ABMTs, or MPAs.

[110] Discussion paper "DEVELOPMENT OF REGIONAL ENVIRONMENTAL MANAGEMENT PLANS BY THE INTERNATIONAL SEABED AUTHORITY AND THEIR LEGAL STATUS" 01/2024, p. 6, https://www.isa.org.jm/wp-content/uploads/2024/03/DP_Development_of_REMPs_by_ISA.pdf.

[111] Decision of the Assembly of the International Seabed Authority relating to the strategic plan of the Authority for the period 2019−2023 ISBA/24/A/10 and the ISA's website about REMPs https://www.isa.org.jm/protection-of-the-marine-environment/regional-environmental-management-plans/.

nodules, attracting the attention of contractors in this area.[112] Thus, 15 contracts to explore for nodules in this area have been concluded by the ISA. Therefore, the impacts from DSM that this area could suffer are almost incalculable.

The EMP-CCZ is the first of its kind,[113] is a document setting out a spatial management plan for the region.[114] The vision of the ISA for the EMP-CCZ is to "facilitate mining while minimizing, as far as practically possible the impact of seabed mining activities, and preserving and conserving marine biodiversity and ecosystem structure and function in the Clarion-Clipperton Zone."[115] In other words, the vision of the ISA is to achieve a sustainable exploitation of the CCZ that conserves the unique biodiversity contained in this area. The EMP-CCZ designates operational objectives differentiating among 1. The entire CCZ, 2. Areas assigned to Contractors 3. The APEIs.[116]

4.2.1. Legal basis for the adoption of the EMP-CCZ and its legal status

The EMP-CCZ represents the first REMP adopted by the ISA. REMPs are not mentioned in UNCLOS nor in the 1994 Implementation Agreement. However, for the approval of the EMP-CCZ, the ISA referred to arts. 145 and 162 as the legal basis for its decisions.[117] Art. 162(1) allows for the adoption of "specific policies" only on "questions" or "matters" within the competence of the ISA. This provision alone does not allow for the adoption of REMP. However, art. 162(1) read in conjunction with art. 145, which refers to the obligation to adopt appropriate rules, regulations and procedures (RRP) for the prevention, reduction and control of pollution. It is clear from the opened wording of this article, that RRP are not necessarily the

[112] Paragraph 14 of the Environmental Management Plan for the Clarion- Clipperton Zone, ISBA/17/LTC/7.

[113] Ardito, G., Andreone, G., & Rovere, M. "Overlapping and fragmentation in the protection and conservation of the marine environment in areas beyond national jurisdiction." (2023), *Frontiers in Marine Science*, *9*., p. 8.

[114] Jaeckel, A. L. *The International Seabed Authority and the Precautionary Principle: Balancing Deep Seabed Mineral Mining and Marine Environmental Protection* (2017), (1st ed., Vol. 83). BRILL.p. 202.

[115] Environmental Management Plan for the Clarion- Clipperton Zone, Paragraph 32 of the EMP-CCZ, ISBA/17/LTC/7.

[116] Ibid, Paragraph 37-39, ISBA/17/LTC/7.

[117] ISA. 2012. Decision of the Council relating to an environmental management plan for the Clarion-Clipperton Zone (ISBA/18/C/22), p. 1.

only categories recognized as "necessary measures". Accordingly, in adopting the REMP for the CCZ, the Council also relied on Article 145, recognizing that REMPs are "necessary measures" for the purposes of Article 145. Therefrom, the "specific policies" adopted by virtue of art.162(1) of UNCLOS, do not have the same legal status as the RRP.

Accordingly, REMP are not RRPS and do not a legal binding status.[118] Despite the REMP not being legally binding, this does not prevent the ISA from giving effect to them. What's more, "REMPs serve as proactive area-based management tools, balancing resource development with conservation."[119]

4.2.2. APEIs in the EMP-CCZ

The EMP-CCZ designates nine APEIs that are closed to mining activities[120] but opened to scientific research.[121] The APEIs, analyzed by Aline Jaeckel[122], spatially restrict mining activities in the CCZ, and as such, APEIs are a form of ABMT which aims to protect biodiversity and ecosystem structure[123].

Nevertheless, the restriction on exploration or exploitation of the mineral resources in APEIs is limited in time since these are not permanently protected areas. Therefore, the chances for some of such sites to be opened to mining activities in the future are high.[124]

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[118] ISA website, Discussion paper on "DEVELOPMENT OF REGIONAL ENVIRONMENTAL MANAGEMENT PLANS BY THE INTERNATIONAL SEABED AUTHORITY AND THEIR LEGAL STATUS" 01/2024, pages 1 and 8, https://www.isa.org.jm/wp-content/uploads/2024/03/DP_Development_of_REMPs_by_ISA.pdf.

[119] ISA. 2018. Preliminary strategy for the development of regional environmental management plans for the Area: Report of the SecretaryGeneral (ISBA/24/C/3), para. 5.

[120] Environmental Management Plan for the Clarion- Clipperton Zone, Para. 39 ISBA/17/LTC/7. 13 July 2011.

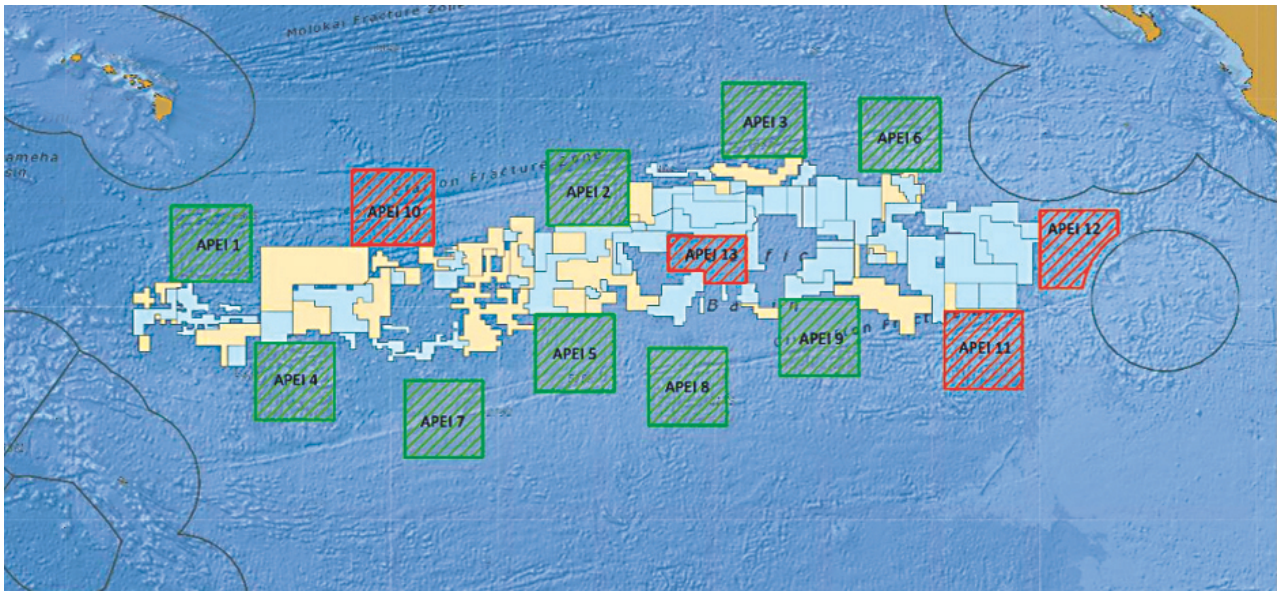
[121] Based on the recommendations given by the LTC to the Council, the latter adopted a decision (ISBA/26/C/58) in December 2021, approving the establishment of four additional APEIs in the CCZ to enhance the effectiveness of the overall APEI network.

[122] Jaeckel, A. L, (2017), p. 203.

[123] Environmental Management Plan for the Clarion- Clipperton Zone, Para. 39 ISBA/17/LTC/7.

[124] Christiansen, S., Durussel, C., Guilhon, M., Singh, P., & Unger, S., "Towards an Ecosystem Approach to Management in Areas Beyond National Jurisdiction: REMPs for Deep Seabed Mining and the Proposed BBNJ Instrument", (2022), *Frontiers in Marine Science*, *9*, p. 8.

In the establishment of the APEIs, the ISA, has applied its powers by virtue of art. 145 as well as arts. 165(2)(e) and 162 UNCLOS with the purpose to restrict mining activities in specific locations for environmental reasons. Nonetheless, the scope of protection is limited to environmental considerations from DSM. While ecosystems in the no-mining areas are protected from seabed mining activities, they could nevertheless be adversely impacted by other ocean activities out of the scope of the competence of the ISA. Such as bottom trawling fishing or waste dumping. Nonetheless, the problem does not exclusively affect DSM. The fragmentation of governance in ABNJ, both in terms of spatial and sectoral dimensions, contributes to this challenging scenario.[125]



[126] Map of the EMP-CCZ with its 13 APEIs.

Although, recognized by the ISA that the establishment of the EMP-CCZ gives effect to the precautionary approach,[127] by preventing and minimizing the impacts from the DSM activities,

[125] Jaeckel, A. L, (2017), p. 210.

[126] Map of the EMP-CCZ which identifies the network of 13 APEI that are entirely protected from deep seabed mining. The areas in yellow represent the areas reserved for the authority, and the color blue refers to the area under contract with the auhority. https://www.isa.org.jm/protection-of-the-marine-environment/regional-environmental-management-plans/ccz/.

[127] Decision of the Council relating to an environmental management plan for the Clarion-Clipperton Zone ISBA/18/C/22 (n. 49), 26 July 2012.

the EMP-CZZ was adopted *after* the conclusion of numerous contracts of exploration, and as result, the location of the APEIs had to be changed. As previously discussed in Chapter 3, the precautionary approach necessitates implementing robust protective measures at an early stage, prior to the commencement of activities. Priority should be given to establishing protective measures before initiating any activities. Nevertheless, it cannot be denied the importance of the EMP-CCZ as a step taken by the ISA in giving effect to its environmental obligations.

Despite this, for the other REMPs that are under development for areas such as the one for the northern MidAtlantic Ridge and the one for the Northwest Pacific and Indian Oceans, the ISA has taken a different approach and is developing the REMPs *ahead* of DSM activities.[128]

Buffer zones in APEIs

The size of each APEI in the EMP-CCZ is 200x200 km[129], an area large enough to preserve regional biodiversity. Even so, the ISA regulation has decided to go further regarding measures for protecting the marine environment and has established a buffer zone. A protective measure from the sediment plumes produced by DSM was provided by establishing a buffer zone contiguous to the APEI area, of 100x100km. Thus, the ISA has established an ecological buffer to minimize environmental harm in the absence of scientific certainty.

Thus, the dimensions of each full APEI in the CCZ, (including the 200 x 200 km core area surrounded by a 100 km buffer zone) should be 400 x 400 km. This size is predicted to protect APEIs from the dangerous impacts of the dispersion of sediment plumes. Nevertheless, these limits were established based on not very extended research and a lack of certainty about the impacts of DSM on a large spatial and temporal scale.

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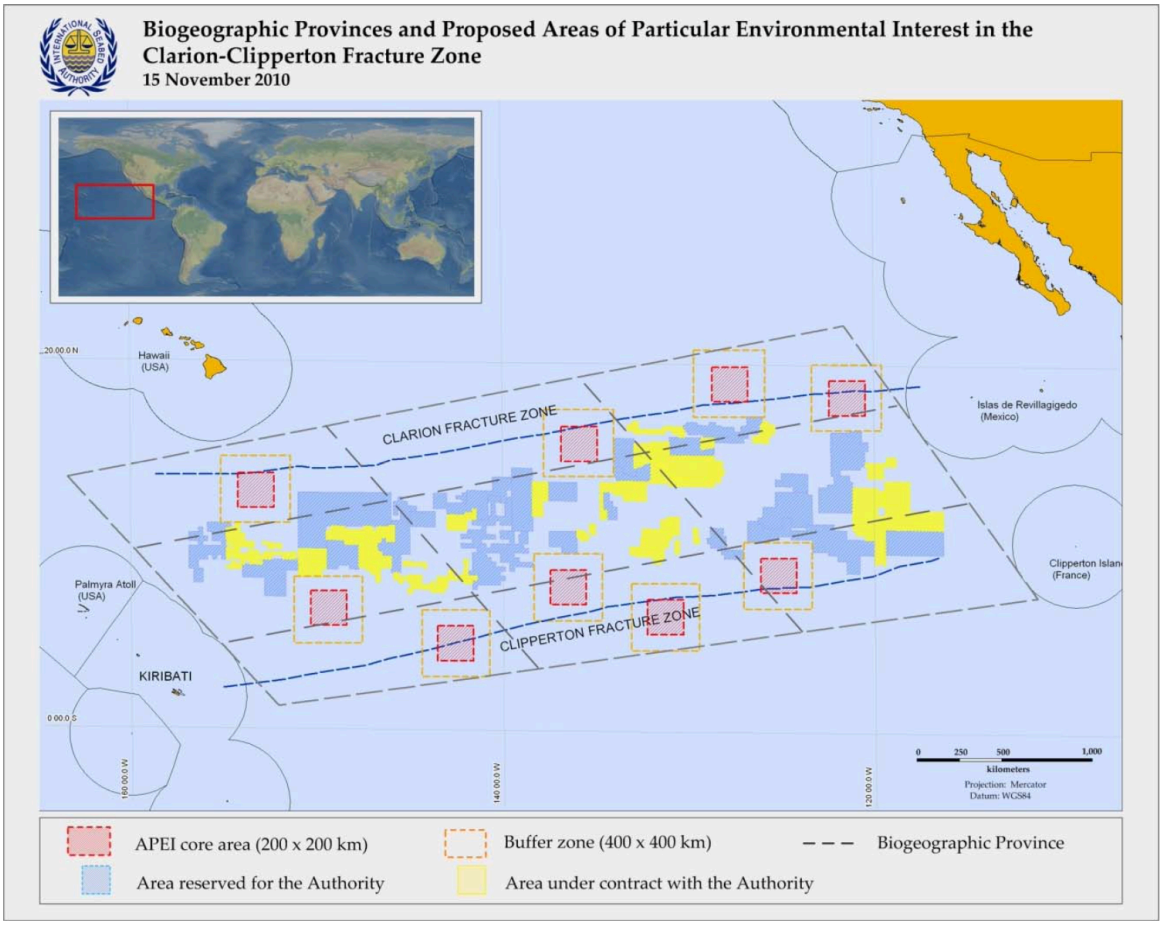
[128] Both areas for which the other two REMPs are under development, are home to a variety of unique marine species. Particularly, "The Mid-Atlantic Ridge is a 10,000-mile underwater mountain chain running north-south from Iceland nearly to Antarctica, characterized by hydrothermal vents that spew superheated, mineral-rich water from beneath the ocean floor. The towers formed from these minerals could be among the first targets for seabed mining". Pew, "ISA Must Improve Regional Plans—and Processes—to Protect Ocean Life" (April 15, 2021) https://www.pewtrusts.org/en/about/news-room/opinion/2021/04/15/isa-must-improve-regional-plans-and-processes-to-protect-ocean-life.

[129] Environmental Management Plan for the Clarion- Clipperton Zone, Paragraph 25 ISBA/17/LTC/7.



[130] Map of the EMP-CCZ with the APEIs and its buffer zones.

4.2.3. Establishment of APEIs

APEIs are established under a REMP. However, up to the date, there is not a standardized approach for the development of REMP, for which APEIs are based upon. Thus, the Legal and Technical Commission (LTC) is developing a standardized approach to facilitate the development, implementation and review of REMPs in the Area. In 2022, the Legal and Technical Commission presented a Guidance to facilitate the development of REMP.[131] However, there is not yet a regulation in place that establishes the common approach for establishing REMPs and therefore its APEIs. Member States appear to agree that REMPs are

[130] Map of the EMP-CCZ representing the APEIs and its subsequent buffer zones. In orange, surrounding the APEIs, is the buffer zone, Environmental Management Plan for the Clarion- Clipperton Zone, ISBA/17/LTC/7, p. 17.

[131] Guidance to facilitate the development of regional environmental management plans, ISBA/27/C/37, 10 August 2022.

essential management tools for the ISA, but they still need reach an agreement on the requirements for their content, or on the issue of their status within the ISA's legal framework.[132]

In this sense, the influence of the BBNJ Agreement with the standards for establishing ABMTs, and the transparency in its designation, as well as its promotion of collaboration with others could be a role model for the ISA regulatory regime.

4.2.4. Measures pertaining to Vulnerable Marine Ecosystems

Vulnerable Marine Ecosystems (VMEs)[133] represent a key category of marine biodiversity. The trio consisting of seamounts, the chemo-synthetic ecosystem of hydrothermal vents, and the biotic communities of cold-water corals is commonly used to refer to the term VMEs.

Lothian, S. explains that:

> "Owing to their unique biological and physical composition, VMEs are "magnets" for a catalogue of anthropogenic activities and uses, including, but not limited to, deep-seabed mining, fishing, scientific discovery, and the bioprospecting of marine genetic resources. Their fragile nature makes them particularly sensitive to anthropo-genic disturbance from the overutilization of marine living resources, the use of destructive fishing practices, the introduction of alien invasive species, marine pollution, and climate-driven impacts".[134]

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[132] The legal status of the REMPS is further assessed in Chapter 5. Pew Charitable Trusts, "Giving legal effect to REMPS". https://www.isa.org.jm/wp-content/uploads/2023/10/Giving-Legal-Effect-to-REMPs_Pew-Charitable-Trusts.pdf.

[133] There is no universal definition of VME, but the United nations Secretary General, *Oceans and the Law of the Sea, Report of the Secretary General*, Un Doc. a/58/65 (3 march 2003) [172] defined VMEs as: one that is particularly susceptible to disruption, to damage or even to destruction due to its physical characteristics, the activities and interactions of the organisms therein and the impacts they suffer from human activities and the surrounding environment. While some ecosystems may be fairly resilient and recover quickly from external shocks, others may be fragile and collapse at either slight or repeated stress.

[134] Lothian, S., (2023), p. 2.

Nevertheless, despite its importance, the current international legal framework lacks an institution empowered to comprehensively and integrally address the protection of deep-sea VMEs and their associated biological resources. Conversely, there is only in place a miscellany of global, regional and sectoral bodies, including the ISA, that have adopted measures for VMEs.

Within the ISA regulatory regime, under the Exploration Regulations, it is recognized that VMEs, may require special management.[135] Moreover, the LTC has the obligation to develop and implement procedures for determining whether proposed exploration activities in the Area would have serious effects on VME. If this is the case, the LTC must ensure "those activities are managed to prevent such effects or not authorized to proceed".[136] Thus, the ISA could have the authority to establish MPAs for these areas and the LTC could decide to prohibit mining, and indeed, exploration work, around VME.[137]

Nonetheless, despite the high relevance that these ecosystems present from a wide range of aspects, and that this obligation has been incorporated into the Exploration Regulations, the LTC has not taken action yet on the matter. The LTC has remained inactive in terms of regulating or taking the step to implement regulatory measures for the protection of VMEs. What's more, the ISA has granted exploration contracts to explore for nodules and for polymetallic sulphides associated to areas containing VMEs.[138]

In conclusion, the ISA has not fulfilled its obligation to protect VMEs. Despite including measures for their protection within its regulatory regime, the LTC has not taken the required steps to implement effective measures prohibiting mining in these areas and the surrounding zones of VMEs. And this situation raises the following question: how could effective protective

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[135] *Sulphides* and *Crusts Exploration Regulations*, regulation 33(3). The *Nodules Exploration Regulations* have been updated in 2013 to integrate this and other provisions, see *Nodules Exploration Regulations*, regulation 31(4)

[136] *Nodules Exploration Regulations*, regulation 31(4); *Sulphides* and *Crusts Exploration Regulations*, regulation 33(4).

[137] Jaeckel, A. L, (2017), p. 216.

[138] Ibid.

measures towards VMEs be applied once a 15 year exploration contract has been concluded? In other words, the damage would already be done, and the objective would then not be to prevent the damage, but to repair it. And can VMEs really be repaired?

4.2.5. Impact Reference Zones and Preservation Reference Zones

Another spatial management measure relevant to the ISA, included both in the Exploration Regulations and within the EMP-CCZ, is the establishment of both Preservation Reference Zones (PRZ) and Impact Reference Zones (IRZ). With the aim of evaluating the environmental impacts of DSM, the ISA sets the obligation for contractors to cooperate with the ISA in the establishment and implementation of programmes that monitor and evaluate the possible impacts of DSM. Thus, PRZ are "areas in which no mining shall occur to ensure representative and stable biota of the seabed in order to assess any changes in the biodiversity of the marine environment". The IRZ " means areas to be used for assessing the effect of activities in the Area on the marine environment and which are representative of the environmental characteristics of the Area".[139] Through the monitoring of both areas, the ISA and contractors can obtain valuable information on any changes that might be observed within an IRZ which are caused by DSM or other factors.

However, lack of guidance for the implementation of the reference zones within the ISA regulatory regime.[140] There is no specification of where should they be located, what types of habitats must they include, what should be their size? It seems logical that PRZ should be located far away from any DSM activities, and they should be large enough for the studies to be representative of an area of the marine environment.

4.2.6. Stakeholder involvement

The degree to which stakeholders are engaged in the process of the REMP is crucial for a better implementation thereof. The moment where the stakeholder involvement occurs is also

[139] Environmental Management Plan for the Clarion- Clipperton Zone, ISBA/17/LTC/7, para. 43 and 41 and Decision of the Council of the International Seabed Authority relating to amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, Regulation 31.

[140] Jaeckel, A. (2017), p. 212.

essential, and this should take place early on.[141] In order to achieve a whole transparent REMP, the considerations of stakeholders while the project is still under development are necessary.

DSM exploitation will take place in an already exploited ocean, with different purposes and uses, that could be heavily affected by this activity (fisheries, laying of cables and submarine pipelines, MSR…). Explained by Sabine Christiansen et al.[142], since fisheries could be impacted by DSM, "RFMOs and other stakeholder should actively participate in the work of the ISA, including the REMP development, to ensure that their interests are protected." But not only has the role of RFMOs been devoid of active participation in the REMP process, but indigenous communities have also not been included or even mentioned their interests, throughout the entire text regarding the EMP-CCZ.

Despite the heavy importance of stakeholder involvement in the REMP process, there is no regulation of this aspect in the current EMP-CCZ or any regulation of the ISA. The rights and duties of the stakeholders are undefined and there is no foreseen regulation for stakeholder engagement.[143] Commenting will be possible only once the REMP draft is elaborated. Albeit a first draft by the ISA was sent out for stakeholder comments in Spring 2021,[144] no further regulatory developments have occurred since then. This draft needs to be improved in various concerns, inter *alia,* because the focus is directed solely towards public engagement and there is a lack of a response mechanism to stakeholder comments and suggestions.

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[141] The requirement of the *early* stakeholder engagement as is recognized by many authors: Christiansen, S., Durussel, C., Guilhon, M., Singh, P., & Unger, S. "Towards an Ecosystem Approach to Management in Areas Beyond National Jurisdiction: REMPs for Deep Seabed Mining and the Proposed BBNJ Instrument." (2022), *Frontiers in Marine Science*, *9*, p. 7. De Santo, E. M. "Implementation challenges of area-based management tools (ABMTs) for biodiversity beyond national jurisdiction (BBNJ)", (2018), *Marine Policy*, *97*, p. 41.

[142] Christiansen, S., Durussel, C., Guilhon, M., Singh, P., & Unger, S, (2022), p. 7

[143] Ibid.

[144] Draft Communications and Stakeholder Engagement Strategy.

4.3. ABMTs under the BBNJ Agreement

Continuing with the BBNJ Agreement for ABMTs in ABNJS, this legally binding agreement, it appears as the first international legally binding treaty that provides for a global legal basis for the establishment of a coherent network of MPAs in ABNJ.[145]

Before the approval of the BBNJ Agreement, MPAs would only exist at a minimum scale in ABNJ or occur at the national scale, in AWNJ. However, scientists recommend that up to 30% of the high seas should be considered as an MPA by 2030.[146] Therefrom, the BBNJ Agreement, offers a global legal basis for the adoption of MPAs in ABNJ.[147]

Moreover, the BBNJ Agreement also provided for the definition of MPA, something that has been lacking in the international legal landscape,[148] but thanks to the BBNJ Agreement, this issue has been addressed. Art. 1(9) of the BBNJ Agreement establishes that MPA "means a geographically defined marine area that is designated and managed to achieve specific long-term biological diversity conservation objectives and may allow, where appropriate, sustainable use provided it is consistent with the conservation objective."

Art. 17 of the BBNJ Agreement establishes the objectives to be achieved through the establishment of MPAs, *inter alia,* to conserve and sustainably use areas requiring protection and to establish a comprehensive system of ABMTs and ecologically representative and MPA

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[145] Albeit other instruments already existed for the designation of MPAs in ABNJ in a regional (such as the North-East Atlantic, through OSPAR and the North-East Atlantic Fisheries Commission (NEAFC)) or sectoral (shipping via the International Maritime Organization (IMO), mineral extraction via the ISA) level.

[146] Convention on Biological Diversity (CBD), Decision adopted by the conference of the parties to the convention on Biological Diversity, 15/4. Kunming-montreal Global Biodiversity Framework" 19 December 2022, cBD/cOp/Dec/15/4.

[147] De Lucia, V., "After the Dust Settles: Selected Considerations about the New Treaty on Marine Biodiversity in Areas beyond National Jurisdiction with Respect to ABMTs and MPAs." (2024), *Ocean Development and International Law*, p. 3.

[148] Definitions for MPA have been provided before by other international instruments (not necessarily in the treaty text itself, but in recommendations/decisions implementing the treaty). See, for example the case of OSPAR. In relation to OSPAR, an MPA is defined in Recommendation 2003/3 implementing Annex V of OSPAR as "an area within the maritime area for which protective, conservation, restorative or precautionary measures, consistent with international law have been instituted for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment".

networks. This article, read in conjunction the definition of art. 1(9) reflects a very ambiguous regulation, which puts everything on implementation. The measures for coordination and decision-making progress will be the pivotal point for this regulation. The wording of these articles is not very precise and defined.

4.3.1. Process for the establishment of ABTMs, including MPAs

The BBNJ Agreement follows a linear process for the establishment of MPAs, where the role of the COP is crucial for its implementation.

Important to the mention is that one of the guiding principles of the BBNJ Agreement is the ecosystem approach.[149] There is no legally binding definition for what the ecosystem approach is. However, the interconnected nature of the ocean and the need to consider the problems of the shared ocean space as whole is recognized not only on the Preamble to UNCLOS, but also in many scientific resources. [150] Viewing the ocean as a unified ecosystem is crucial. Overcoming legal and political barriers to embrace the ecosystem approach should be a primary goal in establishing ABMT. Consequently, within the BBNJ Agreement, the ecosystem approach stands as one of several guiding principles, informing the identification, review, and monitoring of areas in need of protection. Nevertheless, the regulatory dimension of the ecosystem approach ought to extend beyond being merely a guiding principle or objective to be stated. There should be a clear obligation for state parties to implement it, accompanied by more precise regulations defining the content of this obligation. [151]

Accordingly, correctly identified by Giovanni Ardito et al.[152], a gap of the BBNJ agreement relates to the disregarded ecosystem interaction between the water column and the seabed and the whole vertical division of the whole marine environment into distinct legal maritime zones.

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[149] Art. 7(f) of the BBNJ Agreement.

[150] GEF LME:LEARN, "The Large Marine Ecosystem Approach: An Engine for Achieving SDG 14." (2017) Paris, France, https://www.undp.org/sites/g/files/zskgke326/files/publications/Large_Marine_Ecosystem_Approach_22062017.pdf.

[151] ISRIM, *Measures such as Area-based Management Tools, Including Marine Protected Areas,* December 2023, https://www.youtube.com/watch?v=_tYFC_ZeZPo, and Christiansen, S., Durussel, C., Guilhon, M., Singh, P., & Unger, S, (2022), p. 3.

[152] Ardito, G., Andreone, G., & Rovere, M, (2023), page 4.

The distinction between the regulatory regimes applicable to the water column and the seabed, even though there are references to the ecosystem approach, is not overcame in the BBNJ Agreement. Particularly relevant for DSM, which its impacts will extend further than simply the Area. The plumes, sediment and noise will be transported everywhere in the sea, negatively affecting the health of the ocean in its entirety.

However, the BBNJ Agreement also brings some hope and positive regulatory aspects that could improve the international regulatory framework for the protection of the marine environment which are going to be further assessed in the next sections through the explanation of the process for establishing an MPA.

4.3.2. Proposals

The proposal is submitted by State Parties individually or collectively. Parties have the obligation to collaborate and consult "with relevant stakeholders, including States and global, regional, subregional and sectoral bodies, as well as civil society, the scientific community, the private sector, Indigenous Peoples and local communities, for the development of proposals, as set out in this Part."[153] This provision reflects a step further taken by the BBNJ Agreement, which aims to protect not only the marine environment, but also the cultural values. The visions and opinions from indigenous communities should be consulted when developing ABMTs, and their traditional knowledge is relevant in identifying areas requiring protection.[154]

4.3.3. Consultations on and assessments of proposals

The consultations on proposals submitted "shall be inclusive, transparent and open to all relevant stakeholders, including States and global, regional, subregional and sectoral bodies, as well as civil society, the scientific community, Indigenous Peoples and local communities."[155] The degree to which stakeholders are involved in the process is determinant of the transparency of the ABMT process. The BBNJ Agreement considers different groups of stakeholders that could be affected by the ABMT process with the possibility of engagement from the beginning, since the proposal has been on the table. Moreover, the specific criteria that the consultations need to follow for each of the stakeholders is divided into groups, which makes the obligation

[153] Art. 19 of the BBNJ Agreement.

[154] Art. 19 (3) of the BBNJ Agreement.

[155] Art. 21 of the BBNJ Agreement.

clearer. Indeed, there is an opportunity to promote public concern for common resources, not only for the marine living resources, but also for the minerals and precious metals that will be mined in the Area.[156]

Based on the outcome of the stakeholder consultation, the STB reviews the proposal and send its recommendations to the COP.[157]

4.3.4 Establishment of ABMTs, including MPAs

The COP has been given under art. 22.1(a) of the BBNJ Agreement the competence of taking decisions on the establishment of ABTMs, including MPAs. However, this provision must be read not in isolation, but in connection with the other paragraphs of the same article. Thus, article 22.1(b) clarifies that where there is a competent lobal, regional and sectoral bodies (IFBs), the COP is limited to only taking decisions on measures compatible with those of IFBs and recommendations. This highlights a clear connection to the obligation under the BBNJ Agreement not to undermine existing IFBs. Specifically, Article 22.2 of the BBNJ Agreement addresses this limitation, indicating that when the COP makes decisions regarding the establishment of ABMTs, it must ensure that relevant IFBs are not undermined. Accordingly, in relation to the Area, it is the ISA that has the competence to establish ABMTs, including MPAs, while the role of the COP in this case would be to decide on measures compatible with those of the ISA and recommendations for the ISA.[158] Chapter 5 further explains the relationship between the regulatory regimes of the BBNJ Agreement and the ISA regulatory regime for this specific concern of the establishment of ABMT.

This provision demonstrates the purpose of the BBNJ Agreement in achieving a high-level conservation goal, supported by a mandate for active interplay management between relevant bodies and organizing the collective multilateral work, including through ABMT. Indeed, the BBNJ Agreement text advocates for a polycentric approach where the coordination among the different institutions and stakeholders involved in the ABMT process is the golden rule.[159] In this context, the ISA's vision for the ABMT process could certainly be applicable and should

[156] De Santo, E. M. (2018), p. 41.

[157] Art. 21.7 of the BBNJ Agreement.

[158] Art. 22.1(b), (c) of the BBNJ Agreement.

[159] Christiansen, S., Durussel, C., Guilhon, M., Singh, P., & Unger, S., (2022), p. 11.

be taken into account by the COP when establishing an MPA that includes the Area, given this coordination principle.

4.3.5. Monitoring phase

States Parties will regularly monitor the MPA according to the monitoring and research plan. Parties must regularly report to the COP on progress made to achieve the objectives of the MPA. IFBs are strongly recommended to do the same. The STB reviews the MPA at regular intervals to ensure that the management plan and its measures are fit for purpose.[160] Nevertheless, this provision related to monitoring leaves some gaps as to it does not state the time when the monitoring should occur of the frequency, what content exactly should be submitted and controlled by the COP, or how this obligation of monitoring has to be developed, following which criteria.

Certainly, addressing this situation could be achieved through the appropriate implementation and management of the MPA regime, along with the effective exercise of control, monitoring, and evaluation, all of which could contribute to a more effective utilization of MPAs. Put differently, given the underdeveloped nature of monitoring obligations, the role of the COP and the IFB will be strengthened as they will be tasked with ensuring proper oversight to ascertain whether the intended objectives of the ABMT are being met over time.

4.4. Concluding remarks

The management and approach for ABMTs differs remarkedly in both regulatory regimes, the ISA and the BBNJ Agreement. First, the type of ABMTs that is generally referred to in the BBNJ Agreement is MPAs, whereas in the ISA regulatory regime, the ISA adopts a specific type of ABMT, namely, the APEIs. However, some similarities among the two regulatory regimes can also be drawn.

First, the role of the STB the BBNJ Agreement and the LTC in the ISA regulatory regime, can be comparable. Particularly when discussing about its functions, the designation of ABMT, and the monitoring and implementation. Nevertheless, for the public participation and consultation process, the BBNJ Agreement is also more specific and considers more groups of stakeholders,

[160] Art. 26 of the BBNJ Agreement.

especially relevant is the numerous references and inclusion of the indigenous communities among the stakeholders.

For the ABMT chosen by each specific regulatory regime, there are also differences, as the scope of protection of the marine environment and the purpose of APEIs and MPA clearly differs. APEIs under the ISA regulatory regime tend to be more of a limited area surrounded by the buffer zone and included within the REMP. However, MPAs under the BBNJ Agreement seek to implement a more comprehensive protection of the marine environment.

Nonetheless, some articles in the BBNJ Agreement shed some light about how these two regulatory regimes have to interact, namely arts. 5 and 22 for the specific issue of ABMT. For this interaction to be achieved, a synergetic institutional interplay among the COP and the ISA institutions needs to be developed (by for example incorporating necessary measures such as REMPs adopted by the ISA). The REMP at the same time could be informed by the BBNJ Agreement principles and objectives. Importantly, the REMP process should be informed by all kinds of stakeholders considered by the BBNJ Agreement and follow the public participation rules contained therein to improve the whole REMP process.

To sum up, coordination and political will among these two regulatory regimes is necessary as to unify biodiversity protection standards that enables a cooperative governance of the health of the ocean ecosystems.

CHAPTER 5: EXPLORING THE SYNERGIES BETWEEN THE ISA REGULATORY REGIME AND THE BBNJ AGREEMENT

5.1. Introduction

Chapters 3 and 4 have analyzed the regimes for EIAs and ABMTs in ABNJ of the ISA regulatory regime and the BBNJ Agreement. Chapter 5 explores the prospective institutional interactions resulting from these two regulatory regimes, examining potential synergies between them while ensuring that the BBNJ Agreement does not undermine the regulatory regime of the ISA.

Among the different IFBs governing ABNJ, the ISA has a pivotal role because of its mandate of governance in the vast area of the deep sea, called the Area.[161] The interaction between the

[161] Art. 153(1) of UNCLOS.

BBNJ Agreement and the ISA regulatory regime is needed for the first, to reach its full potential in the area of conservation of the marine environment in the Area. The ISA can effectively contribute to each of the four elements (MGRs, ABMTs, EIAs, and Capacity Building) constituting the BBNJ Agreement through a work that is oriented towards the achievement of the commonly shared objectives of the BBNJ Agreement.[162]

Stated in article 2 of the BBNJ Agreement as a general objective, to ensure the conservation of marine biological diversity in ABNJ through, *inter alia,* further international cooperation and coordination. In other words, if the purpose of ensuring the conservation and sustainable use of marine biological diversity of ABNJ wants to be achieved, the BBNJ Agreement by itself will not be capable, but instead, a cooperative and coordinated approach among the different existent IFBs with the BBNJ Agreement is the solution. The fragmented and sectoral approach has proven to not be the best strategy when seeking to protect the oceans in a more broad and comprehensive way, respecting the interconnected nature of the marine ecosystems. Therefore, it will be essential to ensure cooperation and coherence with existing ocean regimes, such as the seabed regime established under the ISA.

The not undermining clause in the BBNJ Agreement stands as one of the central regulatory point when beginning to understand the relationship of the BBNJ Agreement with the ISA regulatory regime and the other IFBs. However, as discussed before, because of the ambiguity and imprecision of this provision, it needs further clarification in the next few years. Indeed, even at the IGC5 2.0 in 2023, some delegations observed that it would be necessary to "further clarify" the meaning of the expression not to undermine "and for a common definition to be agreed upon as implementation begins." What's more, one delegate emphasized that "the sooner we clarify this 'notorious not-undermining provision' the better for the Ocean and for all of us".[163]

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[162] This was also a Statement by the Secretary-General of International Seabed Authority at the Thirty-third Meeting of States Parties to the United Nations Convention on the Law of the Sea, 12 June 2023, at www.un.org/Depts/los/meeting_states_parti es/thirtythirdmeetingstatesparties.htm.

[163] Earth negotiations Bulletin, "Summary of the Further resumed Fifth Session of the Intergovernmental conference to adopt an International legally Binding Instrument under the Un convention on the law of the Sea on

As explained by Christiansen et al., another important thing to consider is that "to be effective in guiding coherent multilateral action, a globally agreed biodiversity conservation vision and overarching goals need to be more than voluntary commitments and be enforceable. Therefore, an enforcement and compliance mechanism should be established under the BBNJ Agreement to ensure that State Parties are meeting their conservation obligations as well as any other responsibilities".[164] In other words, the BBNJ Agreement visions and objectives should advocate for a strong enforcement and compliance mechanism enshrined in a hard law approach.

Such mechanism would only apply to the State Parties to the BBNJ Agreement, and therefore States would be the ones responsible for ensuring coherent application, implementation, and compliance with measures across other instruments, including the ISA regulatory regime.

Article 5 of the BBNJ Agreement, focused on the "Relationship of the BBNJ Agreement and the Convention and relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies", sets out in paragraph 2 that the BBNJ Agreement "shall be interpreted and applied in a manner that does not undermine relevant" IFBs. Apart from the not undermining clause already discussed, this provision puts the focus and its aim not only on the not undermining, but it remarks that the BBNJ Agreement shall simultaneously be interpreted in a manner that "promotes coherence and coordination" with IFBs. Indeed, the importance of this aspect is enormous because is picturing the role of the BBNJ in addressing fragmentation in the international environmental law, precisely through fostering coherence and through taking and important coordinating role. This is one of the ways through which the question of not undermining could be addressed, via the mutual support and coordination among IFBs and between IFBs, including the ISA, and the BBNJ Agreement.[165] Thus, the ways through which a coherent interaction between the two regulatory regimes could take place, are explored in the next section.

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the conservation and Sustainable Use of marine Biodiversity of areas Beyond national Jurisdiction: 19–20 June 2023," vol 25, no. 252, 10.

[164] Christiansen, S., Durussel, C., Guilhon, M., Singh, P., & Unger, S. (2022) p. 13.

[165] De Lucia, V., (2024), p. 7.

5.2. The relationship of the BBNJ Agreement with relevant IFBs, including the ISA

The BBNJ Agreement recognizes "the need to address, in a coherent and cooperative manner, biological diversity loss and degradation of ecosystems of the ocean".[166] The question here is how will the objective be achieved if the ISA were to regulate mineral mining on an industrial scale on the Area? Although the BBNJ Agreement cannot directly establish obligations on the ISA, it does require States to "promote, as appropriate, the objectives" of the BBNJ Agreement within other governance bodies, such as the ISA.[167] Thus, here it's presented the whole challenge: DSM could directly undermine the objectives of the BBNJ Agreement. Therefore, the BBNJ Agreement cannot pose direct obligations on the ISA, but the decisions about DSM will definitely have an enormous impact on the state's ability to meet their obligations and objectives under the BBNJ Agreement.[168]

However, it remains crucial to seek a cohesive strategy that allows both regulatory frameworks to collaborate harmoniously, ensuring an integrated approach to ocean governance without compromising one another. Because even though DSM could be very harmful for the biodiversity of the oceans, the BBNJ Agreement does not set rules for mining at sea, and it will not stop DSM from beginning in the ocean on its own. It does however, set certain obligations and procedures which countries that are both parties to the BBNJ Agreement and the ISA must follow once the treaty enters into force. Parties of both treaties are obliged to promote the objectives of the BBNJ Agreement while they are participating in the ISA decision making procedure.[169] But how could coherence among these two regulatory regimes be achieved? The next section further explores this question.

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[166] BBNJ Agreement, preambular para. 3.

[167] BBNJ Agreement art. 8(2).

[168] Singh, P and Jaeckel, A., "Undermining by Mining? Deep Seabed Mining in Light of International Marine Environmental Law." (2024), *AJIL Unbound*, *118, p. 76.*

[169] High Seas Treaty, "Frequently asked questions" https://highseasalliance.org/wp content/uploads/2023/07/HIGH-SEAS-TREATY-QA.pdf.

5.3. Interaction of the BBNJ Agreement with other IFBs, including the ISA, for the EIA process

Art. 29.1 of the BBNJ Agreement addresses the interaction between the BBNJ Agreement provisions for EIA with the IFBs. This article is a complex provision, with 6 different paragraphs and deserves closer attention. Explained by Tang, J.[170] art. 29 presents the relationship of the BBNJ Agreement with relevant IFBs from four specific perspectives. First, there is the global minimum standards and/or guidelines, second, the role of the STB in relation to IFBs, third, the exemption of activities under relevant IFBs from the EIA processes under the Agreement, and fourth, the monitoring and review of activities.

Art. 29(1) obliges the Parties to the Agreement to promote the use of EIAs and the adoption and implementation of standards and/or guidelines. Nevertheless, it does not compel other regulatory regimes to integrate the EIA standards established under the BBNJ Agreement. Instead, States Parties will be obligated to "*promote* the use" of EIAs and the adoption and enforcement of standards and/or guidelines outlined in the instrument. Analyzed by Sarah Lothian[171] as a best effort obligation or *pactum de contrahendo,* wherein contractors will exert all efforts to attain the desired outcome. Thus, this provision cannot compel State Parties to achieve a specific result. Moreover, the author discusses the meaning of the wording included in this article, namely, the use of the verb "shall", which is "usually indicative of imperative duties and obligations" together with the ambiguous pledge to "promote the use". What degree of promotion must be achieved to fulfill this obligation, and how will it be monitored and enforced? This seems to prescribe a particular level of conduct and resembles more of a policy objective, allowing States significant flexibility in its implementation. Accordingly, art. 29 appears as a provision which gives a wide discretion to the States in its implementation, leaving to the States the freedom to decide in which ways they want to adopt and implement the standards and guidelines relating to EIA under the BBNJ Agreement in relevant IFBs.

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[170] Tang, J., "Form follows function: An initial evaluation of the BBNJ Agreement's achievements regarding the "not undermining" proviso", (2024), *Elsevier*, Volume 159,2024, p. 5.

[171]Lothian, S., (2023), p. 24**.**

But who is responsible for the development of these standards and/or guidelines? This is the role of the STB. The global minimum standards and/or guidelines are to be developed by the STB in collaboration with relevant IFBs.[172] Thus, in the case of the EIA in the Area, the STB would have to work hand in hand, in developing these global standards for EIA with the organ of the ISA that is in charge of preparing the assessments of the environmental implications of activities in the Area, that is, the Legal Technical Commission.[173] Moreover, it is important to note that in the development of standards and/or guidelines, the COP is responsible for bridging the STB with the relevant IFBs. This is achieved through the creation of mechanisms that facilitate collaboration and cooperation between these two entities in the development of standards and/or guidelines.[174] The global minimum standards and/or guidelines cover a wide spectrum of aspects, it varies, *inter alia,* from the thresholds for the conduct of a screening or an EIA, to the assessment of cumulative impacts in ABNJ, or the public notification and consultation process.[175]

Furthermore, the next question is what implications would have the global minimum standards and/or guidelines for the relevant IFBs,[176] including the ISA? This question is connected with the not undermine proviso assessed in Chapter 2. Tang J,[177] explains that Part IV of the BBNJ Agreement establishes what he calls a "structured framework", which is composed of a general principle and some derogations. Namely, the general principle is that the potential impacts of all planned activities must be assessed by virtue of arts. 27(b) and 28(1) of the BBNJ Agreement. The derogations consist of the institutions under which assessments are taken. Thus, following art. 29.4(b) of the BBNJ Agreement, it's not necessary to conduct an EIA provided that "the assessment already undertaken for the planned activity is *equivalent* to the one required under this Part…". The term "equivalence" is a key concept for the maintenance of the relationship with relevant IFBs. Mainly because equivalence is highly influenced or dependent of the standards and/or guidelines adopted by the COP. And, because these standards will be regularly updated, the concept of equivalence will have a dynamic nature that changes

[172] Article 38 in connection with art. 29. 3 of the BBNJ Agreement.

[173] Art. 165.2.(d) and (f) of UNCLOS.

[174] Art. 29.2 of the BBNJ Agreement.

[175] Art. 38 of the BBNJ Agreement.

[176] Tang, J., (2024), p. 5.

[177] Ibid.

over time. Therefore, the standards and/or guidelines will establish the benchmark for assessing whether the requirements of the relevant IFBs remain equivalent or not. In other words, for the decision of whether the process for EIA under the ISA regulatory regime remains equivalent or not, it will be verified against the standards and/or guidelines adopted by the COP.

On top of that, article 29.5 of the BBNJ Agreement states that when an activity has been assessed under a relevant IFB, their EIA reports should still be published through the Clearing-House Mechanism (CHM)[178] under the BBNJ Agreement. Hence, even if these activities remain under the jurisdiction of certain IFBs, they would still be subject to certain degree of monitoring and review by the BBNJ Agreement and its institutions, including the COP and the STB. Moreover, Parties must use the CHM to provide information on EIAs and allow for comments at various stages for a wide range of stakeholders (including indigenous and local communities, IFBs, civil society, the scientific community and the public). This process includes, not only the duty of notification by the Parties to the stakeholders, but also opportunities for participation, including the submission of comments.[179]

Therefore, in the face of this regulatory situation, amending the environmental standards presents a way in which the ISA's decision-making procedure could be aligned with the BBNJ Agreement. Thus, the ISA should change the environmental standards which the contractors must observe in the Exploration Regulations. That competence follows the ISA's law-making powers and mandate. Article 145 of the UNCLOS requires the ISA to "ensure effective protection for the marine environment" and art. 153(1) UNCLOS specifically provides that "the activities in the Area shall be organized, carried out and controlled by the Authority on behalf of mankind as a whole." The possibility of a flexible framework that allows the ISA to amend environmental requirements is crucial to enable the ISA to respond to the regulatory changes and be coherent with the BBNJ Agreement.

Nevertheless, coherence in the wide spectrum of environmental mandates is necessary to meet the objectives of the BBNJ Agreement and for the ISA to be more consistent with the

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[178] The Clearing-House Mechanism will be primarily "an open-access platform" and serve as a centralized platform to access, provide and disseminate information with respect to activities taking place pursuant to the provisions of the BBNJ Agreement relating to, *inter alia*, the EIAs. Art. 51 of the BBNJ Agreement.

[179] Art. 32 of the BBNJ Agrement.

international regulatory framework. Accordingly, coherence with the ABMTs is also something needed.

5.4. Interaction of the BBNJ Agreement with other relevant IFBs, including the ISA concerning ABMTs

Part III of the BBNJ Agreement begins by stating that one of the objectives of this part is to strengthening cooperation and coordination among States and relevant IFBs.[180] Therefore, one of the directions towards this regulation is oriented is to achieve a connected or coordinated regulation with the relevant IFBs, including the ISA regulatory regime.

Moreover, it is undeniable that there is a high presence of references to IFBs in Part III. Thus, these references can be found in most of the provisions included in this Part, from proposals (Article 19), consultation (21), establishment (Article 22), implementation (Article 25), to monitoring and review (Art. 26). Apart from art. 22, these provisions follow the objective mentioned in art. 17 and they are identified with a "careful balance"[181], which is consistent with the provision in art. 5(2) of the BBNJ Agreement.

However, expanding on the concept previously explored in Chapter 2 regarding the connection between the BBNJ Agreement and other pertinent IFBs outlined in Article 5 of the BBNJ Agreement, the operationalization of the ambiguous notion of "not undermining" is delineated in Part III, specifically in Article 22.2. Thus, art. 22.2 establishes that "In taking decisions under this article, the Conference of the Parties shall respect the competences of, and not undermine, relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies". This provision is reaffirming the "not undermining" proviso and explicitly requires a double obligation for the COP, that is t*o respect the competence of,* and *to not undermine* IFBS. Explained by Vito de Lucia[182], the distinction between these two notions is rooted on the different treatment they received during the negotiations.

"Respect of" refers to an obligation to not directly trespass on the competence of relevant IFBs, as for example to establish an ABMT or MPA, in an area that is subject to the regulatory

[180] Art. 17 of the BBNJ Agreement.

[181] Tang, J. (2024), pages 2 and 3.

[182] De Lucia, V., (2024), p. 8.

competence of the IFB, such as the ISA with the Area. The meaning of not undermining is yet ambiguous and has not been defined.

However, the analysis of art. 22 should go further than its paragraph 2 and should be interpreted in connection with other paragraphs of this provision in order to obtain a broader picture of what this "not undermining" provision entails in this specific article.[183]

First, art. 22.1 (a) mandated the COP to take decisions on the establishment of ABMT, including MPA, and related measures. Moreover, art. 22. 1(b) dictates that the COP "may take decisions on measures *compatible* with those adopted by relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies, in cooperation and coordination with those instruments, frameworks and bodies." The use of the word *compatible with together* with the 'may' do not reflect a clear obligation, nor of result or of conduct. What's more, explained by Lothian, S. this article seems to assume that every establishment of ABMTs will sit successfully alongside existing measures.[184] Subparagraph c of art. 22(1) establishes that the COP has the competence to make recommendations to Parties to this Agreement and relevant IFBs where proposed measures are within the competences of the latter. At this stage, Article 22.1 suggests that the COP has the mandate to make decisions on the establishment of ABMTs. If a relevant IFB has already adopted an ABMT, the COP must respect this boundary and can only make decisions regarding ABMTs as long as they are compatible with those adopted by the IFB. This means that it is the COP that has the authority to determine whether the measures are compatible and to recommend measures in light of Article 17 of the BBNJ Agreement. Therefore, Article 22 allows the COP to influence relevant IFBs either directly by adopting compatible measures or indirectly by recommending measures.

Apparently, the ISA is taking the direction of collaboration and acceptance of the BBNJ Agreement as stated on the 5th of March 2023: "In this context, coordination, cooperation and complementarity are pivotal for the sustainable use of the ocean resources under the BBNJ

[183] Tang, J. (2024), p.4.

[184] Lothian, S. (2023) p. 22.

Agreement. To this end, ISA stands ready to work with all relevant stakeholders to implement the ambitious goals set out by the BBNJ Agreement."[185]

Furthermore, art 22(4) of the BBNJ provides that the COP may decide to develop "a mechanism" regarding existing ABMTs, including MPAs, adopted by relevant governance bodies to achieve the objectives of the ABMT regime in Part III of the instrument and to further international cooperation and coordination. The article attempts to propose a solution to the complex issue of cooperation and coordination between the COP and IFBs in establishing ABMTs. However, once again, there is a lack of clarification regarding the nature of this 'mechanism' or its practical implementation. It appears to be more of a guideline than a concrete plan. In any case, the BBNJ Agreement has forecast that the modalities for the consultation process to be undertaken with existing governance entities are to be further elaborated upon by the STB,[186] these details might sort out in the future. Art. 22 seems to leave the door opened for the future establishment of a mechanism by the COP where cooperation and coordination can be achieved with relevant IFBs, including the ISA. This mechanism could take the form of a cooperative and comprehensive approach, through which the COP develops a systematic process for identifying vulnerable, important or representative areas in collaboration with the IFB, for designing ABMTs based on common criteria, shared data and information and coordination.

The ISA has already adopted ABMTs via 13 APEIs in the EMP-CCZ and has planned other REMP that are still under development.[187] However, these habitats are likely to be one of the priority areas for the establishment of other ABTMs, including MPAs, under the BBNJ

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[185] The ISA in its official wesbite has declared to welcome the conclusion of the BBNJ Agreement. International Seabed Authority website, "ISA welcomes the conclusion of a new agreement under UNCLOS for improved coordination and cooperation in support of conservation and sustainable use of marine biological diversity in ABNJ.".
https://www.isa.org.jm/news/isa-welcomes-the-conclusion-of-a-new-agreement-under-unclos-for-improved-coordination-and-cooperation-in-support-of-conservation-and-sustainable-use-of-marine-biological-diversity-in-abnj/.

[186] Art. 21 (8) BBNJ Agreement.

[187] The ISA is in process of developing REMPs for the Mid-Atlantic Ridge and Northwest Pacific and Indian Oceans, https://www.isa.org.jm/protection-of-the-marine-environment/regional-environmental-management-plans/.

Agreement. Thus, potential challenges are raised when it comes to the implementation and operationalization of the BBNJ Agreement. However, what is clear from art. 22 is that the COP and the ISA will have to work together, with the COP respecting the ISA's power, but also with the power of influencing decisions or making recommendations in the establishment of ABMT's. This is the case of the BBNJ Agreement proposing an ABMT measure where there are ISA exploration or exploitation contracts. Two main aspects have to be considered here:

1. First, the contractual arrengements are binding between contractors and the ISA, and provide for security of tenure for contractors.[188] Thus, if the BBNJ Agreement requires a change of the terms of contract with the Contractors, this will lead to complex challenges for the ISA regarding a possible revision, suspension or termination of the contract without the agreement of the Contractor. And here, the regulation concerning the "security of tenure" seems quite strong and protective of the Contractors right.[189]
2. Second, the possible implications of an ABMT recommendation by the COP in an existing ISA ABMT could also result in some cases, in divergences among these two regulatory regimes. Especially for those aspects in which both regulatory regimes differ, such, *inter alia*, the consultation process. Under the BBNJ Agreement there is a process for consultation of indigenous peoples and local communities, whereas in the ISA regime there is nothing similar. For this concern, is nessary that a cooperative approach and adaptation of the ISA regulatory regime places an emphasis on a criteria that is oriented towards not only developing deep seabed mining, but also a regulation that protects the marine environment and the indigenous communities.

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[188] Section 2 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters. ISBA/19/C/17.

[189] It could only be addressed through art. 24 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters ISBA/19/C/17; Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11, regulation 26; regulations on prospecting and exploration for polymetallic sulphides in the Area, ISBA/16/A/12/Rev.1, Regulation 26 and Draft regulations on exploitation of Mineral resources in the Area, ISBA/29/C/CRP.1, Regulation 18.

The precise contours of how the BBNJ Agreement will relate to the ISA regarding ABMTs are rather unclear and require further definition by both institutions through arrangements and practice.

5.4. Ways to enhance coherence between the BBNJ Agreement and the ISA

Predicting how coordination might occur between both regulatory regimes is challenging, especially given the clause aimed at avoiding undermining. Nevertheless, a crucial initial step would involve establishing effective institutional arrangements for reporting, assessment, and oversight.[190] These mechanisms are essential for consistently evaluating and directing the trajectory of each regulatory regime. If one of the regimes strays from the common or shared vision, these structures can guide it back towards supporting the overarching goal.

In any case, one of the key points when assessing the relationship of the ISA regulatory regime with the BBNJ Agreement is that the BBNJ Agreement do not impose specific obligations on the ISA nor any relevant IFBs per se. Conversely, the primary responsibility lies with the States that are parties to both the ISA regulatory regime and the BBNJ Agreement. These are states obliged to fulfil their obligations arising from both instruments. Therefore, the states are going to play a key role in the implementation of the BBNJ Agreement, specifically, for promoting the interaction of latter with the ISA regulatory regime. In other words, states are still the masters of this ship.

However, coming back to the institutional arrangements, art. 22.3 of the BBNJ Agreement sheds some light on how mechanisms for cooperation and coordination between the BBNJ Agreement and the IFBs, including the ISA, could be implemented. A suggestion would be for this mechanism to provide a platform or a mean for the STB and the LTC to discuss and reach joint agreements, or generally speaking, for the scientific bodies to discuss their ideas for the establishment of ABMTs. Another mechanism for cooperation and coordination between the ISA and the BBNJ Agreement under this article could take the form of an administrative and

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[190] ““Institutional Arrangements” generally refers to the architecture of the bodies and subsidiary bodies that will carry forward the work of the BBNJ Agreement, as well as to the relative role of the BBNJ Agreement within the broader constellation of international ocean governance organizations”. Nichola A. Clark, "Institutional arrangements for the new BBNJ agreement: Moving beyond global, regional, and hybrid" (2020), *Marine Policy,* Volume 122, p. 3.

contractual arrangement where both regulatory regimes are bonded by a contractual and administrative obligation to follow the terms of the signed arrangement.

5.5. Concluding remarks

This chapter analyzed the possible future interaction and thus, ways to find coherence and cooperation among the ISA regulatory regime and the BBNJ Agreement. While keeping in mind the duty to not undermine the relevant IFBs stated in the BBNJ Agreement, this chapter has explored the different ways that could lead towards an interactive approach among these two regulatory regimes. It has been shown that the institutional model of both regulatory regimes needs to cooperate and set institutional arrangements that ensure that the ISA regulatory regime and the BBNJ Agreement are working towards the same direction, objectives and conservational purposes.

Parts III and IV of the BBNJ Agreement have adopted a similar approach. Namely, both Parts have adopted a comprehensive and self-contained approach[191] by promoting and influencing the interaction with the relevant IFBs, such as the ISA and aiming at introducing them into the world of the BBNJ Agreement. Thus, the BBNJ Agreement suggests an approach where the ISA regulatory regime considers and incorporates the criteria and purposes of the BBNJ Agreement into its regulations, if this does not interfere with the not undermine clause. However, the question remains: how will this be managed in cases where the objectives of the Agreement are not shared by the ISA?

Anyway, what is important in the regime interaction is to always respect the limit of not undermining to avoid the creation of a treaty that duplicates mandates, overlaps existing competences and therefore undermines the ISA and other bodies.

Hence, to address this issue, various mechanisms have been suggested to enhance interaction between both regulatory frameworks. These include an administrative or and contractual arrangement between the ISA and the BBNJ Agreement, or the development of a platform that allows the discussion between scientific bodies or among the LTC and the STB. While the specifics of implementation may vary for the EIA and ABTM processes, the overarching

[191] Tang, J., (2024), p.6.

concept or framework aligns with these suggestions. However, these mechanisms are still in their early stages and require further study and development for their proper implementation.

This conclusion also calls for an active political participation, where States promote the coherence among these two regulatory regimes and its institutions. Nevertheless, instead of being strongly focused on the cautious respect of the not undermining clause, emphasis should be placed on creating synergies and complementarity among these two regulatory regimes. This approach aims to ultimately reinforce a unified approach of marine governance in the conservation of marine biodiversity in ABNJ.

CHAPTER 6: CONCLUSION

The purpose of this thesis is to explore how synergies can be created among the ISA regulatory regime and the BBNJ Agreement, to achieve a coherent and comprehensive ABMT and EIA governance in the Area. The following conclusions and aspects to contribute to this endeavor have been identified:

The point of departure in the assessment of the interaction between the BBNJ Agreement and the ISA regulatory regime: the 'not undermine' clause

In the general objective of ensuring the conservation and sustainable use of the marine biological diversity of ABNJ of the BBNJ Agreement, two of the means necessary to achieve it, are: international cooperation and coordination.[192] However, for this cooperation and coordination to take place, one aspect has to be special and carefully considered in the relationship between the BBNJ Agreement and relevant IFBs, including the ISA: that is the obligation to 'not undermine' the relevant IFBs, such as the ISA.[193]

The exact meaning of the 'not undermine' is not defined. Thus, there is a lot of ambiguity surrounding this proviso and further clarification is necessary. However, is important to remark that the BBNJ Agreement does not impose any specific obligations on IFBs, including the ISA. Instead, the primary responsibility is directed towards States that are parties to both the ISA regulatory regime and the BBNJ Agreement in the case of the rules for the protection of the marine environment in the Area. Namely, the BBNJ Agreement sets forward in art. 8 that

[192] Art. 2 of the BBNJ Agreement.

[193] Art. 5 of the BBNJ Agreement.

Parties "shall endeavor to promote, as appropriate, the objectives of this Agreement when participating in decision-making under other relevant legal instruments, frameworks, or global, regional, subregional or sectoral bodies." From this provision, the BBNJ Agrement cannot directly pose direct obligation on the ISA, nor in any other Party to the BBNJ Agreement, but the decisions about DSM will have an enormous impact on the states ability to meet their obligations and objectives, as cooperation and promotion of the objectives are essential requirements for its implementation.

Interaction for the EIA process

In the assessment of the interaction between the ISA regulatory regime and the BBNJ Agreement concerning the EIA process, art. 29 of the BBNJ Agreement sheds light on how this relationship should be structured.

Accordingly, in the relationship of the BBNJ Agreement with other IFBs, including the ISA, Parties have rather a not very strong obligation in the form of a best effort obligation, to *promote the use* of EIAs and the adoption of the standards and guidelines developed under the BBNJ Agreement for this issue in ther other IFBs.[194] However, these standards and guidelines, which shall be developed by the STB in collaboration with the IFBs are going to be a key tool for connecting or creating interactions between those EIA that are undertaken by other IFBs and the BBNJ Agreement. Hence, the rule in art. 29.4.(b)(i) states that as long as the EIA is *equivalent* to the one required under the BBNJ Agreement, the EIA will be carried out under the requirements of other IFBs. From this provision, it can be concluded that the ISA and its LTC, will be responsible for the undertaking of the EIA in the Area, however, the standards for this process must be in line or equivalent with those established under the BBNJ Agreement. In some cases, such as requirements for the public participation process within the EIA under the EIA regulatory regime, these would have to be udpdated in order to be equivalent to those under the BBNJ Agreement.

Interaction for the establishment of ABMTs

The relationship of the BBNJ Agremeent with the relevant IFBs, including the ISA concerning ABMTs, is articulated in art. 22 of the BBNJ Agreement. This provision, respecting the limit

[194] Art. 29.1 of the BBNJ Agreement.

of "not undermine", provides the COP, in the establishment of ABMTs, with the possibility to make recommendations to the IFB about the adoption of relevant measures for this issue. Moreover, when there is already in place an ABMT adopted by an IFB, such as the EMP-CCZ of the ISA, the COP may take decisions on measures *compatible* with those adopted by the IFB.[195] The institution responsible for determining this compatibility is the COP by virtue of art. 17 of the BBNJ Agreement. Thus, art. 22 is the legal basis that allows the COP to influence relevant IFBs either directly by adopting compatible measures or indirectly by recommending measures. Nevertheless, is important to remark that, for the deep seabed, is the ISA that will retain the competence to establish ABMTs, with the COP being able to take decisions on measures compatible with those of the ISA or being able to make recommendations.

The role of institutional arrangements and different mechanisms in the achievement of the coherent and coordinated governnace of the oceans in ABNJ

In the promotion of coherence and coordination of the BBNJ Agreement with the IFBs, including the ISA, a essential first step involves the establishment of a combination of different institutional arrangements for reporting, assessment and oversight. Among these institutional arrangements, the BBNJ Agreement contemplates first, the COP, second, the transparency, third, the STB, and fourth, the CHM.[196] The mechanism for coherence could take the form of a contractual or administrative arrangement between the ISA and the BBNJ Agreement that binds both parts into achieving a certain result that has been previously agreed. Another mechanim could be the development of a platform that allows discussion between scientific bodies or among the LTC and STB for avoiding overlaps in the existing competences or duplicate mandates.

However, is important to remark that the ocean governance landscape is a very fragmented and complex one. Thus, the BBNJ Agreement has to cooperate and find its space among all these different institutions with a miscellany of competing interests. Within this context, the BBNJ Agreement has sucessfully established a COP, nevertheless, its decision-making powers are restricted by the obligation to consult and coordinate or respect the relevant IFBs. Yet, the BBNJ Agreement has the potential to alter the legal framework by establishing a polycentric

[195] Art. 22.1.b) of the BBNJ Agreement.

[196] Part VI of the BBNJ Agreement.

approach based on the conservation and sustainable use of the oceans. The degree to which the BBNJ Agreement can influence the ISA towards adopting greener regulations and enhancing the protection of the marine environment from DSM effects depends on how closely the ISA aligns with the objectives of the BBNJ Agreement and implements new ways of thinking and working.

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