LEGAL AND INSTITUTIONAL CHALLENGES OF THE TRANSITION TO THE EXPLOITATION PHASE OF MINERAL RESOURCES IN THE 'AREA'

M. Esther Salamanca-Aguado*
Associate Professor of Public International Law
University of Valladolid, Spain
(Email: mariaesther.salamanca@uva.es)

Abstract

After thirty years of functioning, the International Seabed Authority faces the most important moment in its history: the conclusion of the elaboration of the Mining Code which regulates the exploitation activities in the Area. The Area and its resources are the common heritage of humankind, and the Authority has the mandate of administering its resources for the benefit of humanity. In view of the announcement that an application for a Plan of Work for exploitation will soon be submitted, this chapter analyses the legal and institutional aspects of the Exploitation Regulations still under negotiation. As well as the possible consequences of the Legal and Technical Commission and the Council having to decide on such a request in the absence of a legal regime guaranteeing the equitable exploitation of the mineral resources and the effective protection of the marine environment.

Keywords: Law of the Sea Convention - Implementation Agreement - Common Heritage of Mankind - International Seabed Authority - Deep-sea mining - Mining Code - Environmental Regional Management Plans.

1. INTRODUCTION

Deep-sea mining in the Area[1] are governed by Part XI of the United Nations Convention on the Law of the Sea (hereinafter "Convention"),[2] the 1994 Implementing Agreement (hereinafter "Agreement")[3] and the rules, regulations, and procedures (Regulations) adopted by the International Seabed Authority (hereinafter "Authority"). The Authority is the organization through which States Parties to the Convention organize and control

* The present chapter is being published as part of a research project funded by the Spanish Ministry of Science and Innovation: "Hacia un nuevo marco jurídico para las inversiones socialmente responsables y sostenibles: respuestas desde el Derecho internacional y de la Unión Europea" *(Towards a new legal framework for socially responsible and sustainable investment: responses from international and EU law)* (Ref. PID2023-149020NB-I00).

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

[2] United Nations Convention on the Law of the Sea (Montego Bay, 10 December 1982, in force 16 November 1994) 1833 *UNTS* 3 ("UNCLOS").

[3] Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (New York, 28 July 1994, in force 28 July 1996) 1836 *UNTS* 3 ("1994 Agreement").

activities in the Area, particularly with a view to administering its resources.[4] The foundation of Part XI and the Agreement rests on the principle that "the Area and its resources are the common heritage of mankind".[5] According to this principle "[a]ll rights in the resources of the Area are vested in mankind as a whole on whose behalf the Authority shall act".[6]

The common heritage principle was outlined in the 1970s and 1980s in an international context very different from that of today.[7] But looking back, it can be considered a prophetic notion, in the sense that encompasses some elements that has become of fundamental importance in current international ocean governance (i. e. the sustainable use of natural resources, the protection of biodiversity, the international social justice or the intergenerational equity). Indeed, the common heritage principle has been described as "a progressive development of the notion of international community", as it is "the most obvious expression of community interests in the ocean" aiming "to promote equity, including intergenerational equity, which is alien to the notion of international community".[8]

Among its initial functions, the Authority has concentrated on the adoption of Regulations necessary for the conduct of activities in the Area "as they progress".[9] This evolutionary approach requires the organs of the Authority the continuous examination of factors that condition the progress of activities as the scientific knowledge becomes available, as well as the development of marine technology relating to the protection and preservation of the marine environment and other aspects of the commercial deep-sea mining.[10] It is therefore foreseen that Exploitation Regulations, including those relating to the protection and preservation of the marine environment, will be developed in due

[4] UNCLOS, art. 157; 1994 Agreement, Annex, Section 1, paragraph 1.
[5] UNCLOS, Article 136. See R. Wolfrum "Common Heritage of Mankind", *Max Planck Encyclopedias of International Law,* November 2009.
[6] UNCLOS, Article 137 (2).
[7] The negotiations of Part XI of the Convention at the Third United Nations Conference on the Law of the Sea (1973-1982) took place within the framework of the so-called New International Economic Order (NIEO). The concept of the common heritage of mankind became part of an overall development strategy; it became an indispensable element of the NIEO ideology and a symbol of its realization. See M. Bennouna, "Le fond des mers: De l'heritage commun á la querelle des hériteirs", *R.I.R.I*., 1976, nº 5-6, pp. 121-140; J. Dupuy, "Le fond de mers, héritage commun de l`humanité et le développement ", *Pays en voie de développement et transformation du droit international*, Coloque d'Aix-enProvence*,* Pedone, París, 1974; A. C. Kiss, "La notion de patrimoine commun de l`humanitè", *R. des C*., vol 175, 1982-II, pp. 113-119.
[8] R. Wolfrum, "Solidarity and Community Interests: Driving Forces for the Interpretation and Development of International Law", *Collected Courses of The Hague Academy of International Law - Recueil des cours*, Volume: 416, 2021, at. 60.
[9] 1994 Agreement, Annex, Section 1 (5) (f).
[10] *Ibid*., Section 1 (5) (d) (i) (h).

course.[11] According to the Agreement, the Council may elaborate and adopt such regulations at the request of a State whose national intends to apply for approval of a plan of work for exploitation. [12] Thus, in July 2011, the delegation of Fiji made a statement, supported by other delegations, requesting the Council to take up the formulation of the regulations governing the exploitation of deep-sea minerals in the Area.[13] A determining factor was that the first contracts for polymetallic nodules exploration in the Area were due to expire in 2016.[14]

The development of the Exploitation Regulations by the Authority has been carried out from the outset in a context of great uncertainty.[15] The still insufficient knowledge about the environmental impact of the exploitation activities raises the fundamental question of how to interpret and apply the precautionary approach.[16] The knowledge on the diversity and abundances of species, the composition of ecosystems, and how the habitats within the deep-sea environment interrelate and interact with each other is still limited. Although it seems clear that, in the context of deep-sea mining, commercial-scale operations will disturb, damage or remove structural elements of ecosystems, cause biodiversity loss and impact ecosystem services.[17]

---

[11] *Ibid.,* Section 1 (5) (k).
[12] *Ibid*., Section 1 (15) (a).
[13] *Statement to the Council by the delegation of Fiji*, doc. ISBA/17/C/22, 22 July 2011. The main factors determining a renewed interest in the potential for commercial exploitation of deep seabed minerals, that justified the transition to exploitation were: (a) a dramatic increase in the demand for metals due to the continued growth of the world's population and economy, as well as the technological transformation from fossil to renewable energy sources and the emergence of e-mobility; (b) an equally dramatic rise in metal prices; (c) the high profitability of mining sector companies; (d) a decline in the tonnage and grade of known land-based nickel, copper and cobalt sulphide deposits; (e) the intention of resource-poor countries to secure their supply of raw materials and reduce their dependence on quasi-monopolists of certain metals; and, (f) technological advances in deep-sea mining and processing. See *Towards the development of a regulatory framework for polymetallic nodule exploitation in the Area. Note by the Secretary,* doc. ISBA/19/C/5, para. 1. See also the complete report published as Technical Study: No. 11 (2013).
[14] Doc. ISBA/19/C/5, par. 4. The exploration contracts are approved for a period of 15 years. After this period, the contractor shall apply for a plan of work for exploitation unless the contractor has already done so or has obtained an extension for the plan of work for exploration. Such extensions shall be approved "if the contractor has made efforts in good faith to comply with the requirements of the plan of work but for reasons beyond the contractor's control has been unable to complete the necessary preparatory work for proceeding to the exploitation stage or if the prevailing economic circumstances do not justify proceeding to the exploitation stage", 1994 Agreement, Annex, Section 1 (9). See *Procedures and criteria for the extension of an approved plan of work for exploration pursuant to section 1, paragraph 9, of the annex to the Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982*, doc. ISBA/21/LTC/WP.1.
[15]This is evident from the *Workplan for the formulation of regulations for the exploitation of polymetallic nodules in the Area* (ISBA/18/C/4, 25 April 2012).
[16] See ISA Discussion Paper No. 5, *The Implementation of the Precautionary Approach by the International Seabed Authority*, March 2017.
[17] See H. J. Niner (*et al*), "Deep-sea mining with no net loss of biodiversity—an impossible aim", *Frontiers in Marine Science,* 5, 53 (2018). See also D. J. Amon, and H. Lily, "Challenges to the sustainability of deep-seabed mining", *Nature Sustainability* 3, 784–794 (2020); L. A., Levin, (*et al*), "Defining "serious

In this chapter, I will focus exclusively on the regulatory function of the Authority from a legal point of view, trying to analyse the conceptual topics of the draft Exploitation Regulations still under negotiations.[18] As a premise it should be noted, that in fulfilling its regulatory mandate, the Authority must respect the integrity of the general framework of the Convention (*package deal*) and to take into account other norms of international law applicable to the Area, mainly the BBNJ Agreement.[19] This normative dispersion creates a complicated matrix of rules of different legal status that must be identified and clarified.

2. PRIMARY LAW.

2.1. Relationship between the Agreement and Part XI of the Convention.

The goal of the Agreement was to adapt the legal regime applicable to the Area and its resources to the political and economic changes, including market-oriented approaches preserving the special legal status of the resources of the Area and the principles governing activities in the Area. Despite its designation (*implementing Agreement*) it was considered an instrument of amendment of the Part XI and its annexes.[20]

The relationship between the Convention and the Agreement is regulated by articles 1 and 2 of the Agreement. Under article 1, the States Parties undertake to implement Part XI in accordance with the Agreement. Under article 2, paragraph 1, the provisions of the Agreement and Part XI "shall be interpreted and applied together as a single instrument"

---

harm" to the marine environment in the context of deep-seabed mining", *Marine Policy* 74, 245–259 (2016); J. M. A. Van der Grient and J. C. Drazen, "Potential spatial intersection between high-seas fisheries and deep-sea mining in international waters", *Marine Policy* 129 (2021); C. L. Van Dover, (*et al*), "Biodiversity loss from deep-sea mining", *Nature Geoscience,* 10, 464–465 (2017).

[18] About the law-making process of the Exploitation Regulations see M. E. Salamanca-Aguado, "The Development of the Deep Seabed Mining Regime by the International Seabed Authority: From Exploration to Exploitation", *in European Society of International Law Paper, Working Paper,* 2022/11 available at: https://cadmus.eui.eu/bitstream/handle/1814/74561/WP_AEL_2022_11.pdf?sequence=1&isAllowed=y (accessed 29 November 2024).

[19] 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) was adopted on 19 June 2023 by the Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction.

[20] M. E. Salamanca Aguado, *La Zona Internacional de los Fondos Marinos. Patrimonio Común de la Humanidad,* Dykinson, 2003, p. 131; D. H. Anderson, "Efforts to Ensure Universal Participation in the United Nations Convention on the Law of the Sea", *International and Comparative Law Quarterly,* vol. 42, part 3, July 1993, 886-893; M. Wood, "A Historical Perspective. The Evolution of the International Seabed Authority, in M.H. Nordquist/A. Ascencio-Herrera, *The International Seabed Authority. A Twenty-Five Year Journey*, Leiden, 2022, at 56.

and "in the event of any inconsistency between the Agreement and Part XI, the provisions of the Agreement shall prevail". It mainly affects to relevant provisions of Section 4 of Part XI concerning institutional aspects of the Authority, provisions relating to the Enterprise and the economic assistance to land-mining developing states.

The Agreement requires that certain provisions of Part XI and related Annexes "shall not apply". The non-applicability rule affects those categories of provisions considered to be contrary to free market principles, such as: (i) the obligations of States Parties to fund one mine site of the Enterprise and to finance any of the operations in any mine site of the Enterprise or under its joint-venture arrangements;[21] (ii) the obligation of contractors to transfer technology to the Authority;[22] (iii) the production policies.[23] It also relates to key aspects of the executive body of the Authority, such as: (i) the composition of the Council;[24] (ii) the decision-making on questions on substance;[25] (iii) and the procedure to approve plans of work in accordance with article 6 of Annex III.[26] Furthermore, it affects to provisions relating to the Review Conference[27] which has been replaced by a Periodic Review of the matters referred to in article 155, paragraph 1, of the Convention. In all these cases the provisions declared not applicable were replaced by principles to be developed by the Authority through appropriate Regulations.[28]

2.2. Implementation of the "two years rule" in the transition to exploitation phase.

After decades of harmonious implementation of the Convention and the Agreement as a single instrument, the interpretation of a specific provision of the annex to the Agreement is generating significant discrepancies between member states of the Council.[29]

[21] UNCLOS, Annex IV, Article 11 (3).
[22] UNCLOS, Annex III, Article 5.
[23] UNCLOS, Article 151 (1) to (7) and (9); article 162 (2) (q); article 165, (2 (n); article 6 (5); Annex III, article 7.
[24] UNCLOS, Article 161 (1).
[25] UNCLOS, Article 161 (8) (b) and (c).
[26] UNCLOS, Article 162, (2) (j).
[27] UNCLOS, Article 155 (1) (3) (4).
[28] "The Authority shall elaborate and adopt, in accordance with article 162, paragraph 2(o)(ii), of the Convention, rules, regulations and procedures based on the principles contained in sections 2, 5, 6, 7 and 8 of this Annex, as well as any additional rules, regulations and procedures necessary to facilitate the approval of plans of work for exploration or exploitation", 1994 Agreement, Annex, Section 1 (15).
[29] During the twenty-seventh session, part III, the Council decided "to establish an informal intersessional dialogue to facilitate further discussion on the possible scenarios foreseen in section 1, paragraph 15, of the annex to the Agreement and on any other pertinent legal considerations with a view to exploring commonalities in possible approaches and legal interpretations for the Council to consider in this respect" (doc. ISBA/27/C/45). The documents presented by member states and other stakeholders are available at https://www.isa.org.jm/session-28-council-part_1/ (accessed 29 November 2024).

According to section 1, paragraph 15, subparagraph (b) of the annex to the Agreement if a request is made by a State whose national intends to apply for approval of a plan of work for exploitation, "the Council shall, in accordance with article 162, paragraph 2 (o) of the Convention, complete the adoption of the Exploitation Regulations within two years of the request".[30] Subparagraph (c) adds that if the Council has not completed the elaboration of the rules, regulations and procedures relating to exploitation within the prescribed time and an application for approval of a plan of work for exploitation is pending, "it shall none the less consider and provisionally approve such plan of work".[31]

In June 2021, the Republic of Nauru, the sponsoring State of Nauru Ocean Resources Inc (NORI), invocated that provision.[32] After the deadline expired without success (by July 2023) the Council decided to intend to continue the elaboration of the Exploitation Regulations with a view to their adoption during the thirtieth session of the Authority, that is by July 2025.[33] Moreover, the Council requested the Secretary-General to inform members of the Council, within three business days of the receipt of an application for a plan of work for exploitation by the secretariat in the absence of Exploitation Regulations. The Council also decided that "if an application for a plan of work for exploitation is submitted before the Council has completed the Exploitation Regulations, to continue at its next meeting and prior to the Commission finalizing its review, its consideration of the understanding and application of paragraph 15 with a view to reaching, as a matter of priority, a common understanding and accordingly reaching a decision, including the possible issuance of guidelines or directives, without prejudice to the mandate of the Commission".[34] This Council decision presupposes that the application will be reviewed by the Commission and that the Council will take a decision based on its recommendation, in accordance with article 153, paragraph 3, of the Convention.

On 12 November 2024, the Republic of Nauru, in its capacity as NORI's state sponsor, requested to introduce an item to the March 2025 Council Agenda regarding the

---

[30] In July 2011, the delegation of Fiji, made a statement, supported by other delegations, requesting the Council to take up the formulation of the Exploitation Regulations (doc. ISBA/17/C/22).
[31] This is a highly controversial clause that was introduced to prevent a deadlock in the Council, since the Regulations must be approved by consensus, which refers to 'the absence of any formal objection". UNCLOS, article 161 (8) (d) (e); 1994 Agreement, Annex, Section 3 (5).
[32] *Letter dated 30 June 2021 from the President of the Council of the International Seabed Authority addressed to the members of the Council*, 1 July 2021 (doc. ISBA/26/C/38, Annex I).
[33] Council Decision of 21 July 2023 (doc. ISBA/28/C/24). This compromise decision was reached after lengthy and complicated negotiations, due to the inability of delegations to reach a consensus on the legal interpretation of paragraph 15, Section 1 of the annex to the Agreement.
[34] Council Decision of 21 July 2023 (doc. ISBA/28/C/25).

"Process for Consideration of Applications for Plans of Work for Exploitation in the absence of Adopted Exploitation Regulations"; and communicated that NORI's application for a Plan of Work for Exploitation will be ready to be submitted to the Authority on 27 June, 2025 for the Authority's consideration and approval pursuant to paragraph 15 (c), Section 1 of the Annex to the Agreement.[35] The first comment to be made is that according to subparagraph (c) the Council is obliged to consider the application but may not approve it.

According section 3, paragraph 11, of the annex to the Agreement, there are three possible scenarios: (i) the Council shall approve a recommendation by the Commission for approval of a plan of work unless by a two-thirds majority of its members present and voting, including a majority of members present and voting in each of the chambers (consumers, investors, producers), the Council decides to disapprove a plan of work; (ii) if the Council does not take a decision on a recommendation for approval of a plan of work within a prescribed period, the recommendation shall be deemed to have been approved by the Council at the end of that period;[36] (iii) if the Commission recommends the disapproval of a plan of work or does not make a recommendation, the Council may nevertheless approve the plan of work in accordance with its rules of procedure for decision-making on questions of substance; that is, by a two-thirds majority of members present and voting, provided that such decisions are not opposed by a majority in any one of the chambers. Therefore, the decision-making in the Council to provisionally approve the plan of work changes depending on whether there is a favourable recommendation of the Commission or not.

That brings us to the main question, which legal regime will be applied by the Commission in reviewing an application for provisional approval of a plan of work for exploitation in the absence of Exploitation Regulations. According to subparagraph (c), the Commission's review and the Council's decision could be based on "the provisions of the Convention and any rules, regulations and procedures that the Council may have adopted provisionally", or "on the basis of the norms contained in the Convention and the

[35] *Note verbale no. 719/2024*, 12 November 2024. Nauru also believes it appropriate and efficient for the Council to not further delay its obligation to consider these matters and agree on a process consistent with the Convention and the Agreement, according to which the Application will be considered and approved in the absence of the adoption of the Exploitation Regulations at its next meeting". Nauru also affirms that the Authority's direct breach of its treaty obligations potentially prejudices Nauru's rights as a sponsoring State and prevents Nauru and its sponsored entity, NORI, from benefiting from certainty that such Regulations would provide.

[36] The prescribed period shall normally be 60 days unless the Council decides to provide for a longer period. 1994 Agreement, Annex, Section 1 (15) (c).

terms and principles contained in this Annex as well as the principle of non-discrimination among contractors". This is a very unfortunate wording that does not clarify the issue.

The first option is quite unlikely due to the complexity of the package of Regulations being negotiated (including the first phase of Standards and Guidelines) and the lack of consensus on certain conceptual aspects of the system of exploitation and the production policy (the financial model, the inspection mechanism, the benefit sharing, the economic assistance to affected developing land-based producers and the environmental regulations). Moreover, this possibility could be contrary to the principle of non-discrimination provided for in the same subparagraph (c). The second option is also undesirable because it is insufficient. As mentioned above, much of the detailed legal regime in Part XI (primary law) was amended and replaced by principles that require normative development (secondary law). In any case, the Council could adopt guidelines or directives to guide the Commission in the exercise of its functions of reviewing the application, according with article 153, paragraph 9, without influencing politically its decision.

Lastly, if the Council decides to approve provisionally a plan of work for exploitation in absence of the Exploitation Regulations, the Council should decide about the legal consequences of such provisional approval and the procedure by which the Commission shall review and potentially recommend the approval of the plan of work according to the Exploitation Regulations once adopted. In my view, article 137, paragraph 2 of the Convention does not allow the alienation of the minerals recovered from the Area until the Authority -representing the humanity as holder of the common heritage- fulfils its mandate to regulate these activities to ensure the equitable exploitation of these resources for the benefit of mankind as a whole (article 140) and the effective protection of the marine environment (article 145).[37] This means that the Council cannot in any case authorise the conclusion of a contract between the Authority and the applicant

[37] Under article 137, paragraph 2 of the Convention, all rights in the resources of the Area are vested in mankind as a whole on whose behalf the Authority shall act. These resources are not subject to alienation, but the minerals recovered from the Area *may only be alienated in accordance with Part XI and the rules, regulations and procedures of the Authority* (stress added). See M. E. Salamanca-Aguado, "The "Two Years Rule" and the Common Heritage of Mankind", *EJIL Talk,* March 12, 2024 [available at https://www.ejiltalk.org/the-two-years-rule-and-the-common-heritage-of-mankind/ (accessed 29 November 2024).

according to article 3 (3), Annex III,[38] until the Exploitation Regulations are adopted and provisionally apply pending approval by the Assembly.[39]

In any case, if there is no consensus among members States regarding the legal interpretation of subparagraph (c), rumors about the need to request an Advisory Opinion from the Seabed Disputes Chamber are increasing.[40]

3. SECONDARY LAW: THE MINING CODE

The Exploration Regulations form part of the "Mining Code",[41] together with Recommendations adopted by the Commission for the guidance of contractors, including those for the assessment of the possible environmental impacts arising from exploration activities, including the test mining or testing components activities.[42] The Mining Code needs to be supplemented by the adoption of Exploitation Regulations[43] together with the appropriate Standards and Guidelines.[44] In the following sections I will analyse the main controversial substantive and institutional aspects which are delaying the finalisation of the Exploitation Regulations and its adoption by the Council.

3.1. Substantive aspects.

[38] According to Annex III "[t]itle to minerals shall pass upon recovery in accordance with the Convention" (article 1). "Every approved plan of work shall: (a) be in conformity with this Convention and the rules, regulations and procedures of the Authority"; (c) confers on the operator the exclusive right to exploit the specified categories of resources in the area covered by the plan of work [article 3 (4) (c)].

[39] UNCLOS, art. 160 (2) (f); art. 162 (2) (o).

[40] UNCLOS, article 191.

[41] Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, adopted on 13 July 2000 which were later updated and adopted on 25 July 2013 (doc. ISBA/19/C/17 and doc. ISBA/19/A/9); Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area, adopted on 7 May 2010 (doc. ISBA/16/A/12/Rev.1) and Regulations on Prospecting and Exploration for Cobalt-Rich Crusts, adopted on 27 July 2012 (doc. ISBA/18/A/11).

[42] Doc. ISBA/25/LTC/6/Rev.3.

[43] *Draft regulations on exploitation of Mineral resources in the Area. Revised Consolidated Text,* doc. ISBA/30/C/CRP.1, 29 November 2014. A Consolidated text was provided for the twenty-ninth session, on 16 February 2024 (doc. ISBA/29/C/CRP.1). A reading was conducted during the first and second part of the twenty-ninth session. Based on the negotiations during the first and the second part of the twenty-ninth session and the written proposals submitted during this period, this Revised Consolidated Text has been prepared by the President of the Council of the twenty-ninth session. About working modalities see Explanatory note, *ibid.*

[44] The draft Exploitation Regulations require the adoption of certain Standards and Guidelines to support their implementation. The Standards will be legally binding on contractors and the Authority, whereas the Guidelines will be recommendatory in nature. During the 25th session, the Council requested that the Legal and Technical Commission (Commission) undertake work on standards and guidelines as a matter of priority, noting the proposed process and schedule for the development of standards and guidelines contained in doc. ISBA/25/C/19/Add. The phase 1 draft standards and guidelines were shared for stakeholder consultations in 2020 and 2021, and provisionally adopted in 2022 (doc. ISBA/27/C/3 to C/12). They will be further revised to bring them into line with the final version of the Exploitation Regulation, including binding environmental threshold values (doc. ISBA/27/C/L.4).

3.1.1. Equitable exploitation of the resources in the Area

Part XI and the Agreement envisages an equitable system of exploitation of resources in the Area composed of four interrelated elements: (i) the parallel system; (ii) the effective participation of developing States in exploitation activities; (iii) the protection of developing land-based producer States; (iv) a mechanism for the equitable sharing of financial and other economic benefits. If one of these elements is missing in practice, it should be concluded that the principle of the common heritage is not being effectively implemented. The Consolidated Text does not expressly state that the exploitation regime must be equitable, but this requirement is implicit in the principle of common heritage as the exploitation in the Area shall be carried out for the benefit of humankind as a whole, taking into particular consideration the interests and needs of developing States" (DR 2). DR 4 alt (a) expressly mentions intergenerational equity, as a progressive development of the Convention, since it was not included in Section 2 (Principles governing the Area). The equitable nature of the exploitation regime must be maintained and cannot be amended, as well as the legal status of the area and its resources.[45]

3.2.1.1. The parallel system

Once established that the Area and its resources are the common heritage of mankind, drafters of Part XI faced the question of who should exploit the minerals and under what system. The developed countries took the view that the resources should be commercially exploited by States or mining companies sponsored by them and that an international authority should grant licenses to those entities (*liberal approach*). The developing countries objected to this view and that the most appropriate way to benefit from the common heritage was for the international community to establish a public enterprise to mine the Area (*community-based approach*). The solution found was the "parallel system" included in article 153, paragraph 2 of the Convention.[46] However, in the

[45] Section 4 of the Agreement stated that "notwithstanding the provisions of article 314, paragraph 2, of the Convention, the Assembly, on the recommendation of the Council, may undertake at any time a review of the matters referred to in article 155, paragraph 1, of the Convention". Additionally, specifies that "amendments relating to this Agreement and Part XI shall be subject to the procedures contained in articles 314, 315 and 316 of the Convention, provided that the principles, regime and other terms referred to in article 155, paragraph 2, of the Convention shall be maintained and the rights referred to in paragraph 5 of that article shall not be affected".

[46] Activities in the Area shall be carried out as prescribed in paragraph 3: (a) by the Enterprise, and (b) in association with the Authority by States Parties, or state enterprises or natural or juridical persons which

exploration phase, only States Parties or state enterprises or legal persons sponsored by them have issued contracts with the Authority.[47] The institutional branch –the Enterprise– has not been operationalized.

Part II of the Consolidated Text develops and specifies the requirements, conditions and assurances that the applicant must fulfil for the proposed Plan of Work to be approved in the form of contract. Mostly, the qualified applicant must prove that he has the necessary financial, technical and operational capability to carry out the proposed Plan of Work (DR5). Applicant has also to present a "certificate of sponsorship" issued by the State of which it is a national or by whose nationals it is "effectively controlled" (DR6). This requirement ("effective control") is still under discussion.[48] Article 153, paragraph 2 of the Convention does not explain what is required specifically for the relationship to qualify as "effective control". Exploration Regulations require an applicant only to disclose principal place of business or domicile and, if applicable, place of registration of the applicant ("regulatory control").[49] This is a relevant issue because according to article 139 of the Convention, States Parties have the "responsibility to ensure" that activities in the Area carried out by States Parties, or state enterprises or natural or juridical persons which possess the nationality of States Parties or are effectively controlled by them or their nationals, shall be carried out in conformity with Part XI, the Agreement and the Regulations of the Authority. This "responsibility to ensure" was the subject of the ITLOS Advisory Opinion of 2011.[50] The Seabed Chamber cautions against the spread of sponsoring States "of convenience".[51] Some members of the Council consider that in the

possess the nationality of States Parties or are effectively controlled by them or their nationals, when sponsored by such States, or any group of the foregoing which meets the requirements provided in this Part and in Annex III.

[47] As of November 2024, the Authority has entered into 31 exploration contracts with 22 entities in five marine regional areas.

[48] The "effective control" has been discussed in the context of the Informal Working Group on Institutional Matters, under the facilitation of Ambassador Georgina Guillén-Grillo (Costa Rica) and Mr. Salvador Vega Telias (Chile). See *Briefing paper on conceptual topics related to the Informal Working Group on Institutional Matters in the ISA's Exploitation Regulations.*

[49] Doc. ISBA/19/C/17, 22 July 2013, Regulation 10.

[50] "The purpose of requiring the sponsorship of applicants for contracts for the exploration and exploitation of the resources of the Area is to achieve the result that the obligations set out in the Convention, a treaty under international law which binds only States Parties thereto, are complied with by entities that are subjects of domestic legal systems." ITLOS, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011.

[51] *Ibid*., para. 159.

exploitation phase an "effective economic control mechanism" is also needed to ensure compliance.[52]

Lastly, each applicant, including the Enterprise, shall, as part of its application, provide a written undertaking to the Authority that it will accept as enforceable during all stages of the process chain and comply with its obligations, accept control by the Authority of activities in the Area and provide the Authority with a written substantiated assurance that its obligations under its contract will be fulfilled in good faith (DR7). Part III of the Consolidated Text describes the rights and obligations of the Contractors under the exploitation contracts, *inter alia*, the right to exploit in exclusivity the Mining Area (DR 18) and the obligation to carry out exploitation activities in accordance with Good Industry Practice, Best Available Scientific Information and Best Environmental Practices, using appropriately qualified and adequately supervised personnel and shall continually identify and implement solutions that reflect the most up-to-date Best Available Scientific Information and Best Available Techniques (DR 18 bis). A Contractor shall lodge an Environmental Performance Guarantee in favour of the Authority and no later than the commencement date of Commercial Production in the Mining Area (DR 26). It shall, within 90 Days of the end of each Calendar Year, submit an annual report to the Secretary-General regarding its activities in the Contract Area and reporting on compliance with the terms of the Exploitation Contract (DR 38). Other topics relating to the production policy, insurance obligations and the suspension or finalization of the exploitation contract are under discussion.

3.2.1.2. Effective participation of developing States in activities in the Area

Article 148 of the Convention provides that the effective participation of developing States in activities in the Area shall be promoted with due regard to their special interests and needs and, in particular, to the special need of landlocked and geographically disadvantaged developing States to overcome obstacles arising from their unfavorable

[52] Legal Liability Working Group questioned reliance on 'regulatory control' as test for 'effective control', querying whether an 'economic control' test would be more appropriate. See, Rojas and Phillips (2019), "Effective Control and Deep Seabed Mining: Towards a Definition", Liability Issues for Deep Seabed Mining Series, available at: https://www.cigionline.org/publications/eSective-control-and-deep-seabed-mining-toward-definition-1/ (accessed 29 November 2024).

location, including remoteness from the Area and difficulty of access to and from the Area. It is also one of the objectives of the general policy of activities in the Area.[53]

The legal regime of "reserved areas"[54] is a key component of the system of exploration and exploitation to ensure that developing countries can access to mineral resources in the Area. Every application for a plan of work for exploration made by a developed State must cover a total area sufficiently large and of enough estimated commercial value to allow two mining operations. The areas proposed do not need to be a single contiguous area. Nevertheless, the applicant is required to divide the total area into two parts of equal estimated commercial value and provide survey data and information to substantiate the estimated values. According to the Agreement a contractor which has contributed a particular area to the Authority as a reserved area has the right of first refusal to enter into a joint-venture arrangement with the Enterprise for exploration and exploitation of that area. If the Enterprise does not submit an application for a plan of work for activities in respect of such a reserved area within 15 years of the commencement of its functions independent of the Secretariat of the Authority or within 15 years of the date on which that area is reserved for the Authority, whichever is the later, the contractor which contributed the area shall be entitled to apply for a plan of work for that area provided it offers in good faith to include the Enterprise as a joint-venture partner.[55]

In the case of polymetallic sulphides and cobalt-rich crusts a different system applies. In view of the difficulty encountered by applicants in collecting sufficient survey data to identify two sites of equal estimated commercial value, the Council decided to give applicants the option to either contribute a reserved area, or to offer a future equity interest in a joint venture with the Enterprise. So far, all applicants for exploration for polymetallic sulphides have chosen the latter option and there are no reserved areas. In the case of cobalt-rich crusts, only one out of five contractors – the Russian Federation – took the option to contribute a reserved area. Currently, some developing countries are sponsoring exploration activities of polymetallic nodules in "reserved areas" of the

[53] UNCLOS, Article 150 (c).
[54] UNCLOS, Annex III, articles 8 and 9 of Annex III as amended by the relevant provisions of the Agreement.
[55] 1994 Agreement, Annex, Section 2 (5).

Clarion-Clipperton Fracture Zone (Nauru, Tonga, Kiribati, Singapore, Cook Islands, India and China).[56]

The "reserved areas" has not a special regimen of exploitation in the Consolidated Text, except that "where an application concerns a Reserved Area, the Enterprise shall be given an opportunity to decide whether it intends to carry out activities in the area in accordance with Article 9 of Annex III to the Convention" [DR 10 (5)]. And that the Commission shall not recommend approval of a proposed Plan of Work for exploitation "if a Reserved Area or an area designated by the Council to be a Reserved Area, except in the case of eligible applications under these Regulations made in respect of a Reserved Area" [DR 15 (2) (v)]. It is a priority of the recently appointed Interim Director General of the Enterprise to undertake actions leading to comprehensive data evaluation on reserved areas. These actions would include assessing the quality and adequacy of environmental baseline data within the reserved areas, pinpointing any gaps and evaluating their suitability for conducting environmental impact assessments, as well as scrutinizing existing data concerning mineral resources such as nodules, sulphides and crusts, delving into their abundance, distribution and economic viability within the designated regions.[57]

Likewise, to facilitate the participation of developing countries in the activities in the Area, the Contractor shall conduct and carry out the training of personnel of the Authority and developing States on an ongoing basis in accordance with the approved Training Plan commitment the Exploitation Contract (DR 37). Moreover, within the general duty to cooperate and exchange of information, member States, Members States, Sponsoring States, Contractors, and the Enterprise shall, in cooperation with the Authority, cooperate with a view to developing incentive mechanisms, including market-based instruments, to support transfer of technology and capacity building of developing States [DR (vi)].

[56] See information available at https://www.isa.org.jm/exploration-contracts/reserved-areas/ (accessed 29 November 2024).
[57] Doc. ISBA/29/A/6 ISBA/29/C/12, para 19.

3.2.1.3. Protection of developing land-based producer States

In order to achieve the objective of protecting developing States from adverse effects on their economies or export earnings resulting from a reduction in the price or volume of exports of a mineral, to the extent that such reduction is caused by activities in the Area, objective foreseen in article 150 (h) of the Convention, the system of exploitation was corrected in the original regimen of Part XI by establishing two preventive mechanisms: intervention in commodity markets and imposition of limits on production, and a compensatory system. The Agreement eliminated the preventive mechanisms so that the market will regulate production and take care of balancing supply and demand. In conclusion, instead of protecting developing land-based producer states, they will be financially compensated through an economic assistance fund under Article 151 (10) of the Convention.

According to section 7 of the annex of the Agreement the Authority shall establish an economic assistance fund from a portion of the funds of the Authority which exceeds those necessary to cover the administrative expenses of the Authority. The amount set aside for this purpose shall be determined by the Council from time to time, upon the recommendation of the Finance Committee. Only funds from payments received from contractors, including the Enterprise, and voluntary contributions shall be used for the establishment of the economic assistance fund. The Authority shall provide assistance from the fund to affected developing land-based producer states, where appropriate, in cooperation with existing global or regional development institutions which have the infrastructure and expertise to carry out such assistance programmes. The extent and period of such assistance shall be determined on a case-by-case basis.

A preliminary assessment of the impact of activities in the Area on developing land-based producers considers three scenarios for the development of deep-sea mining:[58] minimum (two contractors), base (six contractors) and maximum (twelve contractors). All scenarios imply that the first contractor starts production in 2027 and the second in 2030, and the remaining contractors (subject to their involvement) will join the process in 2031–2033. It is also assumed that the maximum aggregate production level of six or

[58] See *Study of the potential impact of polymetallic nodules production in the Area on the economies of developing land-based producers of those metals which are likely to be most seriously affected*, ISA Technical Study no. 32, para. 797 – 801.

twelve contractors may be reached in 2035. The analysis of the development of the situation on the markets of the metals under consideration in the period up to 2035 shows that in the case of commissioning of all the projects for the development of new deposits of copper, nickel, cobalt, and manganese with the minimum projected growth rates of consumption (they are individual for each metal), deficits on the markets of copper and manganese will not appear, and on the markets of nickel and cobalt they will appear only after 2029. At the maximum consumption growth rate, deficit on the nickel market will appear in the next two years, on the cobalt and manganese ore markets after 2025, and on the copper market only after 2030. Provided that a deficit in the copper, nickel, and cobalt markets is formed, regardless of the consumption growth scenario under review, it will exceed the potential production of these metals even by twelve contractors. In the case of manganese ores, the maximum number of contractors should not exceed six.[59] The report also concludes that "identifying the full list of countries which may truly be most seriously affected by seabed production will be possible only after the actual start of deep-sea mining".[60] And that "the decrease in prices will result in aggravation of competition between operations of all types (including contractors). This may result in the closure of the least cost-effective land-based mining operations or their transition to variable-capacity functioning, which may have a cascade of negative consequences, not only economic but also social and political. At the same time, it is possible that the decline in prices will reach a level at which deep-sea mining will be on the verge of profitability or will become completely unprofitable".[61]

The Consolidated text hardly addresses this issue. DR 3 (g) states that in order to assist the Authority in carrying out its policy and duties under section 7 of the Annex to the Agreement, Contractors and members of the Authority shall enable access to non-confidential information, upon the request by the Secretary-General or the Council, upon the request of the Economic Planning Commission, or other appropriate organs of the Authority to facilitate the Authority's preparation of studies on the potential impact of Exploitation in the Area on the economies of developing land- based producers of those Minerals which are likely to be most seriously affected. The content of any such studies

[59] *Study of the potential impact of polymetallic nodules production in the Area on the economies of developing land-based producers of those metals which are likely to be most seriously affected*, ISA Technical Study no. 32, para. 797 - 801.
[60] *Ibid.*, para. 800.
[61] *Ibid.*

shall be in accordance with specific terms of reference and applicable any relevant Standards and taking into consideration account of Guidelines. DR 63 (Incentives) indicates that the Council shall ensure that, as a result of the financial Incentives provided to Contractors, Contractors are not subsidized so as to be given an artificial competitive advantage with respect to other Contractors and/or land-based miners.

3.2.1.4. Equitable benefit-sharing

The Authority has the mandate to develop a mechanism for the equitable sharing of financial and other economic benefits derived from activities in the Area. This is a shared competence between the Council and the Assembly, upon recommendation of the Finance Committee.[62] It is assumed that commercial production will provide the Authority with sufficient income to be able to distribute financial benefits. For this purpose, in adopting Regulations concerning the financial terms of a contract and in negotiating those financial terms, the Authority shall be guided by the objective to ensure optimum revenues for the Authority from the proceeds of commercial production as well as to attract investments and technology.[63] The model of the system of payments is still under negotiations in the Open-Ended Working Group on the Financial Terms of a Contract (Part VII of the Consolidated Text). However, it should be noted that the funds which remain after payment of administrative expenses of the Authority could be also used to compensate developing States in accordance with article 151, paragraph 10.[64] The Authority could also consider the repayment of Member State contributions before any distribution of net revenue.[65]

As regards the determination of the criteria on the basis of which the distribution of financial benefits should be made, the solution finally provided for in article 140 (2) is to leave it to the Authority to provide for their distribution through an appropriate

[62] Under article 162 (2) (o) (i) of the Convention the Council shall recommend to the Assembly the rules, regulations and procedures on the equitable sharing of financial and other economic benefits derived from activities in the Area. The Assembly shall consider and approve such rules. If the Assembly does not approve the recommendations of the Council, the Assembly shall return them to the Council for reconsideration in the light of the views expressed by the Assembly (Article 160 (2) (f) (i)). The Agreement further provides that decisions of the Assembly and the Council on the matter of the rules, regulations and procedures on the equitable sharing of benefits are to take into account recommendations of the Finance Committee (FC). 1994 Agreement, Annex, Section 9 (7) (f).
[63] 1994 Agreement, Annex III, article 13 (1) (a) (b).
[64] UNCLOS, article 173 (2).
[65] *Equitable Sharing of Financial and other Economic Benefits from Deep-Seabed Mining*, ISA Technical Study 31, p. 25.

mechanism, on a non-discriminatory basis in accordance with article 160 (2) (f) (i). The distribution shall be made "taking into account the interests and needs of developing States and peoples who have not attained full independence or other self-government". This last subparagraph determines that the beneficiaries are not only the States Parties, but also the peoples of those States that are not parties to the Convention and those that have not yet become independent States. There is no clear idea of how to apply this distribution criterion. One way to understand this provision might be to infer from it some preference within the overall distributional hierarchy for States parties that have relevant non- self-governing territories, or indigenous peoples. Even then, however, it is difficult to see how the Authority could, practically, ensure that benefits are directed to the qualified beneficiaries. So far, the Committee has identified three alternative formulae for the fair and equitable allocation of a given sum of royalties available for distribution. All three allocation formulae are based upon Aristotle's equity principle and are weighted by a social distribution weight (arising out of a social welfare function) to incorporate progressivity in terms of income into the equitable distribution.[66]

Furthermore, in July 2023, the Committee considered a draft proposal of the Secretary-General for the establishment of a global fund to support global public goals as an alternative or adjunct to the direct distribution of monetary benefits.[67] The rationale behind the proposal of establishing a Common Heritage Fund is to pay for or execute projects and initiatives that will create and maintain inherent value for generations to come. The objective of the Fund would be to invest in capacity development, knowledge and competence related to the ocean with a view to enhancing the contributions of the Authority to the implementation of the 2030 Agenda for Sustainable Development and the achievement of the Sustainable Development Goals, in particular Goal 14. The Fund would be aimed at funding research into the environmental value of the ocean, scaling up the network and capacity on ocean data and science, stablishing and running regional training centres, funding research into best available techniques and best practices for the protection of the marine environment or contributing to the implementation of the action plan of the Authority in support of the United Nations Decade of Ocean Science for Sustainable Development. With respect to the development of competencies, the

[66] *Equitable sharing of financial and other economic benefits from deep-seabed mining. Supplementary Report Prepared for the Finance Committee of the International Seabed Authority*, May 2020, at 3.
[67] Doc. ISBA/28/FC/4, 2023.

objective of the Common Heritage Fund could also be to develop tools for inclusion, to bring a large number of participants up to the highest level of knowledge and competence and to create the conditions for retaining and using these competencies locally.[68]

There are other non-monetary benefits that flow from the international regime for the Area that are derived from article 150 of the Convention (Policies relating to activities in the Area) as the increased availability of minerals to ensure supplies of strategic metals or the promotion of just and stable prices remunerative to producers and fair to consumers for minerals derived both from the Area and from other sources, and the promotion of long-term equilibrium between supply and demand. But, without doubt, the main non-monetary benefits are the capacity-building for developing States, the increased knowledge of the marine environment and deep seabed, including the increased scientific knowledge made available through the Authority as a result of exploration activities, as well as international cooperation in marine science and the results of marine scientific research in the Area carried out pursuant to articles 143 and 144 of the Convention, as well as the increased availability of marine technology.

3.2.2. Effective protection of the marine environment.

The provisions of the Convention and the Agreement concerning the protection of the marine environment from the effects arising from activities in the Area are sparse, providing a general legal framework which the Authority has a duty to develop through its regulatory functions.[69] In the following sections we will, first, stablish the general framework provide for in the Convention and the Agreement, and, second, we will focus on the main instruments and tools the Authority is using to fulfill its mandate "to ensure effective protection for the marine environment".[70] It should be added that "effective protection of marine environment" requires not only robust Environmental Regulations, Standards and Guidelines but also an adequate inspection and control mechanism in cases of serious damage to the marine environment, as well as access to compensation for damages to the commons and to affected third parties (i.e. coastal States, other affected States).[71]

[68] Doc. ISBA/28/A/4-ISBA/28/C/13, 2023.
[69] 1994 Agreement, Section 1, (5) (g), (k).
[70] UNCLOS, Article 145.
[71] DR 4, DR 93 ter and DR 93 quarter of the Consolidate Text are under discussion in the intersessional working group on Coastal States.

3.2.2.1. General framework

The protection and preservation of the marine environment is one of the goals to be achieved by the Convention to which Part XII is dedicated. The "marine environment" is defined in the Exploration Regulations including "the physical, chemical, geological and biological components, conditions and factors which interact and determine the productivity, state, condition and quality of the marine ecosystem, the waters of the seas and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof".[72] ITLOS considers this definition "the practice of the States Parties to the Convention and of the Authority in this respect".[73]

Article 192 of the Convention contains the general obligation of States "to protect and preserve the marine environment". This provision is, at the same time, a statement of principle upon which the legal order for the protection and preservation of the marine environment under the Convention is based.[74] This "general obligation" has a broad scope, encompassing any type of harm or threat to the marine environment and extends both to "protection" of the marine environment from future damage and "preservation" in the sense of maintaining or improving its present condition.[75] Article 192 thus entails the *positive obligation* to take active measures to protect and preserve the marine environment, and by logical implication, entails the *negative obligation* not to degrade the marine environment.[76] The open-ended nature of the obligation means that it can be invoked to combat any form of degradation of the marine environment, including climate change impacts, such as ocean warming and sea level rise, and ocean acidification.[77]

Article 209, paragraph 1 provides that international rules, regulations and procedures shall be established to prevent, reduce and control pollution of the marine environment arising from activities in the Area and that such regulations shall be reviewed at appropriate intervals. More specifically, article 145 of the Convention contains a general obligation to adopt necessary measures to ensure effective protection for the marine environment from "harmful effects" which may arise from activities in the Area. This provision also attributes the Authority a very broad environmental competence,

[72] Doc. ISBA/19/C/17, Regulation 1 (3) (c).
[73] *ITLOS Advisory Opinion on Climate Change and International Law*, 21 May 2024, para. 170.
[74] *Ibid*, para. 184.
[75] *Ibid*, para. 385.
[76] *Ibid*.
[77] *Ibid.* para. 388.

including a mandate to establish appropriate Regulations to prevent, reduce and control pollution of the marine environment, as well as to protect and conserve the natural resources of the Area and prevent damage to marine flora and fauna (biodiversity).[78]

The Convention also includes some detailed provisions to prevent "serious harm" to the marine environment. In those cases, the Council, taking into account the recommendation of the Commission, shall issue "emergency orders", which may include orders for the suspension or adjustment of operations.[79] Furthermore, the Commission shall make recommendations to the Council to disapprove areas for exploitation by contractors or the Enterprise in cases where substantial evidence indicates the risk of serious harm to the marine environment.[80] "Serious harm" means any effect from activities in the Area on the marine environment "which represents a significant adverse change in the marine environment" determined according to the Regulations adopted by the Authority "on the basis of internationally recognized standards and practices".[81]

The Agreement reaffirms the importance of the Convention for the protection and preservation of the marine environment and states that in the exploration phase the Authority would give priority to the adoption of Regulations incorporating applicable standards to the protection and preservation of the marine environment and the acquisition of scientific knowledge and monitoring of the development of marine technology relating to the protection and preservation of the marine environment.[82] Furthermore, requires that an application for approval of a plan of work shall be accompanied by an assessment of the potential environmental impacts of the proposed activities (EIA) and by a description of a programme for oceanographic and baseline environmental studies in accordance with Regulations adopted by the Authority.[83] These requirements represent a considerable step forward in relation to the Convention's regime.[84]

[78] UNCLOS, Annex III, Art. 17 (1) (b) (xii).
[79] UNCLOS, article 162 (2) (w) and article 165 (2) (k).
[80] UNCLOS, Article 165 (2) (l).
[81] Doc. ISBA/19/C/17, Regulation 1 (3) (f).
[82] 1994 Agreement, Annex, Section 1 (5) (g) (i).
[83] 1994 Agreement, Annex, Section 1 (7).
[84] Article 206 includes the obligation of States to assess the environmental effects of the activities carried out, however, several conditions mitigated the scope of the obligation, only in the case that they "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" and "as far as practicable".

3.2.2.2. Environmental Regulations for Exploration.

Under Exploration Regulations, the Authority shall establish and keep under periodic review Environmental Regulations to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area.[85] To this end, the Authority and sponsoring States shall apply a precautionary approach, as reflected in principle 15 of the Rio Declaration, and best environmental practices, following the recommendations of the Commission at this regard.[86] The Commission shall make recommendations to implement these two obligations and shall develop and implement procedures for determining, on the basis of the best available scientific and technical information, including information provided by contractors, whether proposed exploration activities in the Area would have serious harmful effects on vulnerable marine ecosystems and ensure that, if it is determined that certain proposed exploration activities would have serious harmful effects on vulnerable marine ecosystems, those activities are managed to prevent such effects or not authorized to proceed.[87]

Contractors assumes some environmental obligations during the exploration phase: (i) shall take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment "as far as reasonably possible", applying a precautionary approach and best environmental practices;[88] (ii) shall cooperate with the Authority and the sponsoring State or States in the establishment and implementation of programmes for monitoring and evaluating the impacts of deep seabed mining on the marine environment, which can include, when required by the Council, proposals for areas to be set aside and used exclusively as "impact reference zones" and "preservation reference zones";[89] (iii) shall gather oceanographic and environmental baseline data and shall establish baselines, taking into account any recommendations issued by the Commission, against which to assess the likely effects of its programme of exploration activities on the marine environment and a programme to monitor on such effects;[90] (iv) shall report annually in writing to the Secretary-General on the implementation and

[85] Doc. ISBA/19/C/17, Regulation 31 (1).
[86] *Ibid*., para. 2.
[87] *Ibid.*, para. 3 and para. 4.
[88] *Ibid*., para. 5.
[89] *Ibid*., para. 6. "Impact reference zones" 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. "Preservation reference zones" means 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.
[90] Doc. ISBA/19/C/17, Regulation 32 (1).

results of the monitoring programme and shall submit data and information, taking into account any recommendations issued by the Commission;[91]shall promptly report to the Secretary-General in writing, using the most effective means, any incident which have caused, are causing or pose a threat of serious harm to the marine environment. In these cases, the Council may issue emergency orders, which may include orders for the suspension or adjustment of operations, as may be reasonably necessary to prevent, contain and minimize serious harm or the threat of serious harm to the marine environment arising out of activities in the Area.[92]

3.2.2.3. Recommendations for the guidance of contractors

The Commission may from time-to-time issue recommendations of a technical or administrative nature for the guidance of contractors to assist them in the implementation of the Exploration Regulations. These recommendations are not-binding, but they are an essential part of the exploration regime, especially in the transition phase.

According to Environmental Regulations, every plan of work for exploration shall take into consideration the following phases of environmental studies: (a) Environmental baseline studies; (b) Monitoring to ensure that no serious harm is caused to the marine environment from activities during prospecting and exploration; (c) Monitoring during and after testing of mining components. The "Recommendations for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area", published in 2023, helps contractors to implement their obligations and establish the environmental and procedural requirements for the *test-mining*.[93]

Recommendation III reminds contractors the importance to obtain sufficient information from the exploration area to document the natural conditions that exist prior to test-mining or testing of mining components to gain insight into natural processes. For this purpose, the best available technology and methodology for sampling should be used in establishing baseline data for environmental impact assessments. The Recommendation list the environmental data that the contractor shall collect for the purpose of establishing baseline conditions of physical oceanography, chemical

[91] *Ibid*., Regulation 32 (2).
[92] *Ibid*., Regulation 33 (1).
[93] Doc. ISBA/25/LTC/6/Rev.3. These Recommendations are reviewed at intervals of no more than five years taking into account the progress of science and technology.

oceanography and geological, biological and other parameters that characterize the environments likely to be impacted by exploration and possible test-mining or testing of mining components activities. Assessed and interpreted results of the monitoring shall be periodically reported to the Authority together with the raw data in accordance with the recommendations for the guidance of contractors on the content, format and structure of annual reports using the appropriate contractor's reporting template.[94] All data relating to the protection and preservation of the marine environment, other than equipment design data should be transmitted to the Secretary-General to be freely available for scientific analysis and research within four years of the completion of a cruise, subject to confidentiality requirements as contained in the relevant regulations. This procedure does not preclude the obligation to report and transmit the data to the Authority. The contractor should transmit to the Secretary-General any other non-confidential data in its possession which could be relevant for the purpose of the protection and preservation of the marine environment.

Recommendation IV deals with data collection and reporting. It is recommended that collection and analytical techniques follow best practices. An inventory of the data holdings from each contractor should be accessible on the website of the Authority. This recommendation is complemented by Recommendation V dealing with cooperative research and recommendations to close gaps in knowledge. Cooperative research can facilitate the establishment of baselines of natural variability on the basis of geological, biological and other environmental records acquired in selected areas at a range of scales from sites within a licence area to broad regional areas. Contractors should work with each other, with the Authority and with national and international scientific research agencies on cooperative research programmes to maximize the assessment of environmental impact and minimize the cost of these assessments.

Recommendation VI deals with environmental impact assessment (EIA) during exploration. Certain activities have no potential for causing serious harm to the marine environment and therefore do not require EIA. Such activities are listed. With regard to activities that do require EIA, a monitoring programme is needed before, during and after a specific activity to determine the effects of the activity on the biological activities, including the recolonization of the disturbed areas. It also describes the content of the EIS

[94] Doc. ISBA/21/LTC/15.

including the stakeholders consulted and the description of the process by which they were identified. The EIS, together with the information concerning the stakeholder consultation carried out by the contractor, will be made available on the website of the contractor and through the website of the Authority. The environmental studies to be conducted during exploration will include the monitoring of environmental parameters to provide an environmental baseline. This baseline should enable results from monitoring to establish that there is no serious harm from any activities being conducted on the seabed, in mid-water and in the upper water column.

Finally, Recommendations VI deals with tests of mining components or test-mining to determine the environmental implications of deep-sea mining. The contractor will submit to the Authority a plan for such testing, including the details for monitoring the environment, at least one year before testing begins. A plan for testing of mining components or test-mining shall include provision for monitoring of those areas impacted by the contractor's activities which have the potential to cause serious environmental harm, even if such areas fall outside the proposed test site. The programme will include, to the maximum extent practicable, specification of those activities or events that could cause suspension or modification of the tests owing to serious harm, including if the specified activities or events cannot be adequately mitigated. The programme will also authorize refinement of the test plan prior to testing and at other appropriate times, if refinement is necessary. The plan will include strategies to ensure that sampling is based on sound statistical methods, that equipment and methods are scientifically acceptable, that the personnel who are planning, collecting and analysing data are well qualified and that the resultant data are submitted to the Authority in accordance with specified formats.

3.2.2.4. Environmental Regional Management Plans (REMPs)

The Regional Environmental Management Plans (REMPs) are area-based management tools to ensure the effective protection of the marine environment mainly for the conservation of the biodiversity of the Area.[95] Scientists claim that deep-sea mining will irretrievably cause a loss of biodiversity in the mining areas and that its significance for marine ecosystems is unknown. The challenge is to determine what environmental management measures the Authority should take to avoid, minimize and remedy the

[95] *Strategic Plan of the Authority for 2019-2023*, para. 14 (doc. ISBA/24/A/10).

environmental impact on the surrounding regions. The majority of State Members of the Council have expressed the view that no plan of work for exploitation should be approved unless there is a REMP for the regional area in which the mining site is located. Therefore, the Consolidated Text requires that the Environmental Impact Statement, the Environmental Management and Monitoring Plan and the contractor's Closure Plan are in accordance with the relevant REMP.[96]

From a technical-legal point of view, the issues that have arisen in the establishment of REMPs, as they are not originally foreseen in the Convention or in the Agreement, are those related to their nature, whether they will be environmental policy instruments or legally binding, their drafting procedure, their minimum requirements and contents, and their relationship with other legal instruments (regulations, standards and guidelines).

In 2020, the Council recognised the need for a standardized approach for the development, approval and review of REMPs in the Area[97] and considered two proposals on a "procedure for the development, approval and review" of REMPs[98] and on a "template with minimum requirements".[99] The Council requested the Commission, in consultation with the Finance Committee, if necessary, to further develop the "Guidance to facilitate the development of regional environmental management plans" prepared by the Secretary in 2019, "taking into account, as appropriate", the above-mentioned proposals, with a view to recommending to the Council a standardized approach, including a template with indicative elements. In 2022, the Commission presented its recommendations to the Council.[100] In the absence of consensus, the Council requested the Commission to further review the draft in light of specific considerations raised. It also invited stakeholders to submit written comments on the draft by January 2023. In July 2024, the Commission presented a "Draft revised standardized procedure and templete" and the recommendations on technical guidance to support their practical

[96] In 2012, the Council adopted the first Environmental Management Plan for the Clarion - Clipperton Fracture Zone (doc. ISBA/18/C/22) prepared on the recommendation of the Commission (doc. ISBA/17/LTC/7). This was a response to the United Nations General Assembly Resolution 63/11 of 12 February 2009 on Oceans and the Law of the Sea calling for "action to protect biodiversity beyond national jurisdiction". It includes the designation of 13 areas of particular environmental interest (APEIs) that are excluded from exploration activities. In total, the network of APEIs represents 1.97 million km^2 of protected seabed. The Authority is in the process of developing REMPs for the Mid-Atlantic Ridge and Northwest Pacific and Indian Oceans.
[97] Doc. ISBA/26/C/10.
[98] Doc. ISBA/26/C/6.
[99] Doc. ISBA/26/C/7.
[100] Doc. ISBA/27/C/37.

implementation.[101] After deliberations, the Council invited member States and observers to provide additional comments for the Commission's consideration and requested the Commission to submit the revised documents with the rationale for its decisions to the Council before the first part in 2025.[102]

3.2.2.4. *Environmental Regulations for Exploitation.*

The Authority's environmental policy will be completed with the environmental Exploitation Regulations, its Annexes[103] and the Standards and Guidelines once reviewed and adopted.[104] Part IV of the Consolidated Text formulates the general environmental obligations in more detail than Articles 192 and 145 of the Convention, identifying the actors responsible for the protection of the marine environment as well as the guiding principles and approaches "as applicable in their respective areas of competence" (DR 44).[105] These environmental principles and approaches did not exist at the time of the drafting of the Convention and the Agreement, such as an ecosystem-based approach, the best available techniques and best environmental practices, the scientific-based approach in decision-making or the polluter pays principle. The Commission shall make

[101] Doc. ISBA/29/C/10.
[102] Doc. ISBA/29/C/24.
[103] See Annex III bis (Scoping Report), Annex IV (Environmental Impact Statement), Annex V (Emergency Response and Contingency Plan), Annex VII (Environmental Management and Monitoring Plan), Annex VIII (Closure Plan).
[104] Draft standard and guidelines for the environmental impact assessment process (doc. ISBA/27/C/4); Draft guidelines for the preparation of environmental impact statements (doc. ISBA/27/C/5); Draft guidelines for the preparation of Environmental Management and Monitoring Plans (doc. ISBA/27/C/6); Draft guidelines for the preparation of Environmental Management and Monitoring Plans (doc. ISBA/27/C/6/Corr.1); Draft standard and guidelines on the development and application of environmental management systems (doc. ISBA/27/C/7); Draft guidelines on the tools and techniques for hazard identification and risk assessments (doc. ISBA/27/C/8); Draft standard and guidelines on the form and calculation of an Environmental Performance Guarantee (doc. ISBA/27/C/10); Draft guidelines for the establishment of baseline environmental data (doc. ISBA/27/C/11); Draft standard and guidelines for the preparation and implementation of emergency response and contingency plans (doc. ISBA/27/C/12). In 2022 the Council decided that "binding environmental threshold values will be developed to define substantially what is required to ensure effective protection of the marine environment pursuant to article 145 of the Convention and to set measurable requirements with regard to the maximum level of harm from activities in the Area that can be considered acceptable", and that "these threshold values should be developed as binding standards and, as far as feasible, within phase 1 of the ongoing development of standards and guidelines" (doc. ISBA/27/C/L.4). The Council also created an intersessional expert group on toxicity, turbidity and settling of resuspended sediments and underwater noise and light pollutions.
[105] "The Authority, Sponsoring States, the Enterprise, Contractors, flag [port States] [and the States of registry of or having authority over installations, structures, robots, and other devices] [where they are members of the Authority] shall take necessary measures to ensure effective Protection of the Marine Environment from harmful effects which may arise [directly or indirectly] from Exploitation in the Area, in accordance with Regulations as well as applicable Standards and taking into consideration Guidelines referred to in Regulation 45 and the relevant Regional Environmental Management Plan and to this end shall, as applicable in their respective areas of competence" (paragraph 1). We keep the brackets around the elements not yet agreed upon.

recommendations to the Council on the implementation of these obligations as required. The Consolidated Text also includes a regulation according to with the Commission shall not consider an application for a Plan of Work for exploitation if a REMP does not exist for the particular area and type of resource concerned (DR 44 bis).

The structure of the Section 2 (Environmental Impact Assessment Process) and Section 3 (Environmental Management and Monitoring) are still under negotiation and the wording of most of the draft regulations is still very confusing. Essentially, an applicant or Contractor shall carry out an Environmental Impact Assessment (EIA) on the potential impacts on the Marine Environment of the proposed operations and activities based on relevant environmental baseline data and on the best available scientific information (DR 46). The EIA will include an Environmental Risk Assessment, will provide for Stakeholder consultation and will consider the results from Test Mining (*ibid*.). The Environmental Impact Statement shall document and report the results of the Environmental Impact Assessment carried out (DR 48). Furthermore, an applicant or Contractor shall undertake scoping and prepare and submit to the Secretary-General a Scoping Report (DR 47 bis).

Once the Plan of Work is approved by the Council and the contract is signed, the Contractor shall monitor and manage the environmental impacts/effects and risks of its activities on the Marine Environment, in accordance with the Environmental Management and Monitoring Plan and the Closure Plan (DR 49 and DR 50). The Environmental Management and Monitoring Plan will include a detailed Environmental Management System for the purpose of monitoring and continuously improving its environmental performance (DR 50 ter). The Contractor shall report annually in writing to the Secretary-General on the implementation and results of the Environmental Management and Monitoring Plan as part of the annual report (DR 50bis). Other contractors's environmental obligations are: (i) to take necessary measures to prevent, reduce and control pollution and other hazards, including marine litter and underwater noise, resulting from its activities in the Area (DR 53 bis); (ii) and do not dispose, dump or discharge into the Marine Environment any Mining Discharge, except where such disposal, dumping or discharge is permitted according to the Regulations (DR 53 ter).

Some conceptual topics under discussion are: (i) the regulations on the Environmental Compensation Fund, including procedures for the Fund and the modalities

of operation;[106] (ii) the proposal of a new regulation on test-mining imposing an obligation on the contractor to provide evidence by data of "field experiments" that an effective protection of the marine environment is ensured when applying the envisaged technique;[107] (iii) the regulations on the Environmental Impact Assessment (EIA) and the Environmental Impact Statement (EIS);[108] (iv) the regulations on the Regional Environmental Management Plans (REMPs).

3.2. Institutional aspects.

The Agreement introduced an evolutionary approach in the setting up and the functioning of the organs and subsidiary bodies of the Authority, considering their functional needs in order that they may discharge effectively their respective responsibilities at various stages of the development of activities in the Area. Additionally, all organs and subsidiary bodies established under the Convention and the Agreement were to be cost-effective.[109] The approval of the first plan of work for exploitation demands the operationalization of the organs and subsidiary bodies established by the Convention but suspended by the Agreement (i. e. the Enterprise and the Economic Planning Commission) as well as the establishment of other bodies to complete the institutional set-up of the Authority (i. e. the Inspectorate, the Compliance Committee). The Authority's institutional weakness to be able to organize and control exploitation activities in the Area is precisely one of the criticisms voiced by those who oppose the start of the exploitation phase.

3.2.1. The operationalization of the Enterprise.

In accordance with article 170 of the Convention, the Enterprise is the organ of the Authority that shall carry out activities in the Area directly, pursuant to article 153, paragraph 2 (a), as well as the transporting, processing and marketing of minerals recovered from the Area. It is the institutional branch of the parallel system of exploitation. Although the Enterprise is to act in accordance with the general policies of

[106] See ISA Technical Study no. 27. *Study on an Environmental Compensation Fund for Activities in the Area*
[107] This topic is discussed in the Intersessional Working Group on Test Mining. The outcome reports and related documents can be accessed via the Authority's website.
[108] This topic is discussed in the Intersessional Working Group related to streamlining the structure of the EIA provisions. The outcome reports and related documents can be accessed via the Authority's website.
[109] 1994 Agreement, Section 1 (2) (3).

the Assembly and the directives of the Council, it is to enjoy autonomy in the conduct of its operations.[110] According to this legal framework, the Enterprise has a *sui generis* status as it is an international institution as well as a commercial operation entity. It also has an important social functioning at global level as it has the function to facilitate the participation of developing States in activities in the Area and it is a key element of the equitable exploitation system of the resources considered the common heritage of mankind.

The negotiators of the Agreement maintained the Authority's operational arm, even though they considered it a "outdate relic of the past which is inconsistent with the growing acceptance of free market principles".[111] Nevertheless, the Agreement introduced important changes in its functioning to make it cost-effective and established an evolutionary approach for the step-by-step operationalization of the Enterprise based on the functional needs of the Enterprise at each step.

3.1.1.1. Interim Status of the Enterprise.

According to Section 2, paragraph 1 of the Annex to the Agreement the initial functions of the Enterprise are to be performed by the secretariat of the Authority until it begins to operate independently of the secretariat. The Secretary-General of the Authority shall appoint from within the staff of the Authority an interim Director-General to oversee the performance of these functions.[112]

During the first part of the the twenty-eighth session, in March 2023, the Council decided by consensus to adopt the recommendation of the Commission to establish the position of an interim Director General for the Enterprise "subject to the availability of the requisite funds".[113] Several factors favored the first step of the operationalization process: the advances in the development of the draft regulations on exploitation, that the holders of 11 contracts for exploration currently in place are anticipating future joint ventures with the Enterprise, and that several reserved areas are also available for joint ventures. The Council also requested the Secretary-General to submit to the Council a

[110] UNCLOS, Annex IV, article 2 (2).
[111] W. S. Sholz, "The Law of the Sea Convention and the Business Community: The Sea-Bed Mining Regime and Beyond", *G.I.E.L.R.,* vol. VII, 1995, nº 3, at 684.
[112] Doc. ISBA/23/A73, 8 February 2017, Annex.
[113] Doc. ISBA/28/C/10.

supplementary budget proposal in an amount not exceeding $641,301 for the financial period 2023–2024.[114]

However, during the second part of the the twenty-eighth session, in July 2023, the Committee decided to recommend to the Council and the Assembly that they approve a supplementary budget for the financial period 2023–2024, as a separate part of the budget, in an amount not exceeding $456,940, noting that, in accordance with the Agreement, the interim Director General would be a member of the staff of the Authority. Based on this recommendation, the Council established the position of interim Director-General of the Enterprise within the Secretariat to carry out the functions of the Enterprise contained in Section 2 of the Annex of the Agreement.[115] These functions are related to the regular analysis of world metal market conditions and metal prices, the assessment of the results of the conduct of marine scientific research and technological developments, in particular relating to the protection and preservation of the marine environment. As well as the evaluation of information and data relating to areas reserved for the Authority and the assessment of approaches to joint-venture operations. In addition, as agreed by the Council, the interim Director General represents the interests of the Enterprise with regard to the development of the regulatory regime for activities in the Area due that, according to the Agreement, the Enterprise is in most cases subject to the same obligations as contractors.[116] This is reflected in the draft regulations of the Consolidated text, in which the Enterprise has been included along with the contractors on equal terms.

3.1.1.2. Joint-ventures arrangements.

In accordance with Section 2, paragraph 2, of the Annex to the Agreement, the Enterprise shall conduct its initial deep seabed mining operations through joint ventures.[117] This idea was not new, since in the negotiations of Part XI of the Convention, joint ventures between the Enterprise and national or international companies with the necessary technical and financial capabilities were considered to be the most feasible option for the

[114] *Ibid*.
[115] Doc. ISBA/28/C/23.
[116] Doc. ISBA/29/C/12, para. 8 and 11.
[117] See G. French, "Joint Ventures for Deep Seabed Mining Operation-Comment", en R. Wolfrum, (ed) *Law of the Sea at the Crossroads: The Continuing Search for a Universally Accepted Regime,* 1995, pp. 341-342.

initial functioning of the Enterprise.[118] This formula benefits not only industrialized States but also developing States, since it gives the access to both technology and capital.

However, this is not the approach followed by the Consolidation text. Under the heading "joint arrangements" the DR 19 indicates that "[c]ontracts may provide for joint arrangements between a Contractor and the Authority through the Enterprise, in the form of joint ventures or production-sharing, as well as any other form of joint arrangement, which shall have the same protection against revision, suspension or termination as contracts with the Authority; and that "the Council shall enable the Enterprise to engage in seabed mining effectively at the same time as the entities referred to in Article 153, paragraph 2 (b), of the Convention". It is difficult to say how these provisions will be applied. It is also unclear how to apply Article 9 (2) of Annex III, which provides that "[w]hen considering such joint ventures, the Enterprise shall offer to States Parties which are developing States and their nationals the opportunity of effective participation". The Consolidate text does not contain draft regulations on the conditions under which joint venture arrangements will be concluded and how the transfer of technology will be regulated in such arrangements. DR 63 states that the Council, taking into account the recommendations of the Commission and the Economic Planning Commission, may provide [financial] incentives pursuant to Article 11 of Annex III to the Convention, to Contractors entering into joint arrangements with the Enterprise, in accordance with the applicable Standards and taking into consideration Guidelines.

3.1.1.3. Equality of treatment.

The other concerns raised by the Enterprise for industrialized states related to those provisions of the Convention that give it a competitive advantage over other operators or oblige State parties to finance its operations or contractors to transfer technology. In response to these concerns, the Enterprise no longer enjoys preferential treatment, so that it is subject to the same obligations applicable to contractors, and a plan of work for the Enterprise upon its approval shall be in the form of a contract concluded between the Authority and the Enterprise.[119] The Consolidated text requires that States or other qualified applicants in a joint arrangement with the Enterprise shall also comply with DR 6 (Certificate of sponsorship).

[118] Doc. LOS/PCN/L.5, April 1984.
[119] 1994 Agreement, Annes, Section 2, para. 4.

To minimize costs, the obligation of States Parties to fund one mine site of the Enterprise as provided for in Annex IV, article 11, paragraph 3, of the Convention shall not apply and States Parties shall be under no obligation to finance any of the operations in any mine site of the Enterprise or under its joint-venture arrangements.[120] This means that if the Enterprise ever carries out activities directly, it will have to obtain financing through the international financial market, without having any privileges over its competitors.

With respect to access to technology, the Enterprise shall seek to obtain such technology on fair and reasonable commercial terms and conditions on the open market or through joint venture arrangements. If it is unable to obtain deep seabed mining technology, the Authority may request all or any of the contractors and their respective sponsoring State or States to cooperate with it in facilitating the acquisition of deep seabed mining technology by the Enterprise or its joint venture, or by a developing State or States seeking to acquire such technology on fair and reasonable commercial terms and conditions, consistent with the effective protection of intellectual property rights. States Parties undertake to cooperate fully and effectively with the Authority for this purpose and to ensure that contractors sponsored by them also cooperate fully with the Authority.[121] The fundamental question is what should be understood by "fair and reasonable commercial terms and conditions". In addition, paragraph 8 of Article 5 of Annex III, which contained the definition of technology, was eliminated and the Consolidated text does not include a definition.

3.1.1.3. Independent functioning of the Enterprise.

The last step in the evolutionary operationalization of the Enterprise will be the decision of the Council to take up the issue of the functioning of the Enterprise independently of the Secretariat of the Authority. Under Section 2, paragraph 2, of the Annex to the Agreement there are two possible alternate triggers to the independent functioning of the Enterprise, namely: (i) receipt by the Council of an application for a joint venture operation with the Enterprise; (ii) upon the approval of a plan of work for exploitation of another entity other than the Enterprise. If joint-venture operations with the Enterprise accord with sound commercial principles, the Council shall issue a directive pursuant to

[120] *Ibid*., para. 3..
[121] 1994 Agreement, Annes, Section 5 (1).

article 170, paragraph 2, of the Convention providing for such independent functioning. The concept of "sound commercial principles" in is not explicitly defined in the Agreement nor in the Draft Exploitation Regulations. An important part of the functions of the interim Director General is to take the steps necessary to prepare for the independent operation of the Enterprise.[122] DR 5 foresees that possibility, indicating that "subject to the provisions of the Convention, the following may apply to the Authority for approval of Plans of Work: (a) The Enterprise, on its own behalf or in a joint arrangement".

3.2.2. The Economic Planning Commission.

The Economic Planning Commission is a subsidiary organ of the Council with functions related to the production policy and the protection of developing countries from adverse effects on their economies or on their export earnings resulting from a reduction in the price of an affected mineral, or in the volume of exports of that mineral, to the extent that such reduction is caused by activities in the Area, as provided in article 151 of the Convention.[123] The Commission shall exercise its functions in accordance with guidelines and directives as the Council may adopt [article 163 (9)]. According to section 1, paragraph 4 of the annex to the Agreement, the functions of the Economic Planning Commission shall be performed by the Legal and Technical Commission until such time as the Council decides otherwise or until the approval of the first plan of work for exploitation.

In September 2020, the Commission recommended the Council to consider whether the Economic Planning Commission should be operational before the approval of the first plan of work for exploitation, so as to be in a position to consider and study, in a structured and systematic way, the impacts on DLBPS, and to study the trends of and factors affecting the supply, demand and prices of materials which are derived from the Area, bearing in mind the interests of both importing and exporting countries, and in particular of the developing States among them, according to article 164, para. (2) (b).[124] In December 2021 the Council requested the secretariat to prepare a report concerning the operationalization of the Economic Planning Commission, including its financial

[122] Doc. ISBA/29/C/12, para. 12.
[123] UNCLOS, article 161 (1) (a) and article 164 (2).
[124] Doc. ISBA/26/C/12/Add.1, para. 19.

implications. The Secretariat presented its report in July 2022 and requested the Council to provide such guidance as may be necessary.[125] So far, the Council has not taken any decision on the matter, although for the African Group and GRULAC the operationalization of the EPC is a condition for the adoption of the Exploitation Regulations.

3.2.3. Inspection, Compliance and Enforcement.

Pursuit to article 150, paragraph 5 of the Convention the Authority shall have the right to take at any time any measures provided for under Part XI *to ensure compliance* with its provisions and the exercise of the functions of control and regulation assigned to it thereunder or under any contract. The Authority shall have the right *to inspect* all installations in the Area used in connection with activities in the Area. The Council, as executive organ of the Authority, has the power to supervise and coordinate the implementation of the provisions of the Part XI and the Agreement on all questions and matters within the competence of the Authority.[126] In particular, the Council exercises control over activities in the Area in accordance with article 153, paragraph 4, and the Regulations of the Authority.[127] Only the Council may take enforcement action against contractors, by imposing monetary sanctions or suspending or terminating contracts. It is also entitled to institute proceedings on behalf of the Authority before the Seabed Disputes Chamber in cases of non-compliance.[128] As a technical subsidiary body, the Commission supervises, upon the request of the Council, activities in the Area in consultation and collaboration with contractors and report to the Council.[129] The Convention also foresees the establishment by the Council of an appropriate mechanisms for directing and supervising a staff of inspectors who shall inspect activities in the Area to determine whether Part XI, Agreement, the Regulations of the Authority, and the terms and conditions of any contract with the Authority are being complied with.[130] And the

[125] Doc. ISBA/27/C/25.
[126] UNCLOS, article 162 (2) (a).
[127] UNCLOS, article 162 (2) (l).
[128] UNCLOS, article 162 (2) (s).
[129] UNCLOS, article 165 (2) (c).
[130] UNCLOS, article 162 (2) (z).

Commission shall make recommendations to the Council regarding the direction and supervision of the staff of inspectors.[131]

3.3.3.1. Process for monitoring compliance of contractors.

Under the terms of the exploration contract, the contractor is required to submit an annual report to the Secretary-General within 90 days of the end of each calendar year covering its programme of activities in the exploration area.[132] The contractor is also required to submit such additional information to supplement the report as the Secretary-General may require.[133] The contractor and the Secretary-General are also required to jointly undertake a periodic (five-year) review of the implementation of the plan of work for exploration and agree on a revised schedule. The Secretary-General shall report on the review to the Commission and to the Council.[134]

The annual review of contractors' annual reports allows the Secretary-General to monitor the execution of contractors' activities against the planned activities agreed under their respective programmes of activities.[135] Every annual report is reviewed in detail by experts from the secretariat, followed by a review by the Commission to complement the analysis undertaken. At the end of its review, the Commission prepares an evaluation report for the Secretary-General to support the Secretary- General with the duty of reporting to the Council, including on any instances of alleged non-compliance. That report is also taken into consideration in the Secretary- General's individual feedback to each contractor. While specific comments are made in respect of each contractor, the Commission also makes general comments on the overall progress of exploration and the work of contractors, which are included in its report to the Council.[136] The comments made by the Commission on the reports of individual contractors are shared with each contractor by the Secretary-General. In general, these comments are of a legal and/or technical nature or involve suggestions by the Commission on the implementation of each contractor's programme of activities. Concerns identified by the Commission in the review of annual reports do not necessarily imply a contractor's non-compliance with its contractual obligations.[137] To facilitate the implementation of their reporting obligations

[131] UNCLLOS, article 165 (2) (m).
[132] Sect. 10.1, standard clauses.
[133] Sect. 10.3, standard clauses.
[134] Doc. ISBA/19/C/17, Regulation 28.
[135] Doc. ISBA/19/C/17, Regulation 6.
[136] Doc. ISBA/29/LTC/5, para. 7.
[137] *Ibid*. para. 8.

of contractors, the Commission has adopted Recommendations for the guidance of contractors on the content, format and structure of their annual reports[138] and Recommendations for the guidance of contractors in the preparation of a five-year periodic review report for exploration contracts.[139]

As exploration activities have developed and the number of contractors has increased, the functions of supervision and inspection of the Commission with the assistance of the Secretariat have become more relevant and complex. In order to improve performance by contractors, the Commission has established Modalities for facilitating an exchange of views between contractors and members of Commission.[140] Under these modalities, a direct exchange of views between contractors and the Commission are facilitated through the Compliance Assurance and Regulatory Management Unit (CARMU) of the Secretariat, with two main objectives. First, to generate greater understanding between the Commission and contractors on the implementation of their plans of work for exploration. Second, to ensure that respective responsibilities are met and that the Council is better informed.[141]

3.3.3.2. Process for nominating cases of non-compliance.

In November 2022, the Council requested the Commission to annually name those contractors that have responded inadequately, or failed to respond, to the calls from the Council to address issues of concern identified by the Commission in relation to their contractual obligations.[142] In July 2023, the Commission considered the request by the Council and identified a number of general trends that required further consideration with regard to the performance of contractors.[143] The Commission agreed to continue its consideration of the issue, including by identifying criteria for naming contractors, once the contractors had had an opportunity to respond to the comments and questions formulated in the review of the annual reports for 2023.[144]

In July 2024 the Commission submitted to the Council for its consideration the "Criteria for assessing the responses of contractors to concerns identified by the

[138] Doc. ISBA/21/LTC/15.
[139] Doc. ISBA/29/LTC/7.
[140] Doc. ISBA/29/LTC/6,
[141] Doc. ISBA/29/LTC/6, para. 4.
[142] Doc. ISBA/27/C/44, para.7.
[143] Doc. ISBA/28/C/5/Add.1.
[144] Doc. ISBA/29/LTC/5, para. 2.

Commission in relation to their contractual obligations" with the aim of naming contractors that have responded inadequately, or failed to respond, in the next reporting period.[145] The process aims to provide legal certainty for contractors and involves three steps: Fist (Step 1), during its July meetings of Year 1, the Commission supports the review of annual reports by the Secretary-General by making observations on the contractor's fulfillment of contractual obligations in the context of the execution of their respective plans of work; Second (Step 2), the Commission during its March meeting in Year 2 will review the responses and comments received from those contractors identified during Step 1 to be at risk of non-compliance. If the Commission considers that the responses received remain non-satisfactory, the Commission will provide observations to the Secretary-General who will notify the affected contractors that they could be named in the Council at the July session of Year 2 unless they provide the required clarifications or take corrective action before that time; Third (Step 3), during its July meeting of Year 2, the Commission will consider any further clarification provided by the contractors remaining non-satisfactory at Step 2. In case the clarification provided, or actions taken are considered at this stage to remain non-satisfactory, the Commission and the Secretary-General in their respective reports to the Council may decide to report the name of the Contractor(s), and the specific deficiency identified for the Council to decide on the potential case of non-compliance as reported.

3.3.3.3. Enforcement measures.

A non-compliance of a contractor can have serious legal consequences for contractors. The Council may suspend or terminate the exploration contract, without prejudice to any other rights that the Authority may have. Any suspension or termination shall be by notice, through the Secretary-General, which shall include a statement of the reasons for taking such action. The suspension or termination shall be effective 60 days after the notice, unless the Contractor within such period disputes the Authority's right to suspend or terminate this contract in accordance with Part XI, section 5, of the Convention. If the Contractor takes such action, this contract shall only be suspended or terminated in accordance with a final binding decision of ITLOS. In the case of any violation of the contract which does not lead to the suspension or termination of the contract, the Council

[145] *Ibid*., para. 10.

may impose upon the Contractor monetary penalties proportionate to the seriousness of the violation.[146]

Likewise, if the contractor has failed to comply with the requirements of its approved plan of work for exploration within the time period specified in a written notice or notices from the Council, such preference or priority may be withdrawn, indicating which requirements have not been complied with by the contractor. The contractor shall be accorded a reasonable opportunity to be heard before the withdrawal of such preference or priority becomes final. The Council shall provide the reasons for its proposed withdrawal of preference or priority and shall consider any contractor's response. The decision of the Council shall take account of that response and shall be based on substantial evidence. A withdrawal of preference or priority shall not become effective until the contractor has been accorded a reasonable opportunity to exhaust the judicial remedies available to it pursuant to Part XI, section 5, of the Convention.[147]

3.3.3.2. The ICE Mechanism.

The inspection, compliance and enforcement procedures mentioned *supra* are not considered sufficient by members of the Council and stakeholders to ensure compliance in the exploitation phase. Part XI of the Consolidate Text contains important normative developments from an institutional point of view. First, the Council shall establish a "Compliance Committee" to assist the Council in carrying out its responsibility to exercise control over activities in the Area (DR 96). So far, there is no consensus on where to locate such a committee in the institutional structure of the Authority. While some delegations insist that it should be established within the Commission, others consider that a new subsidiary body of the Council should be established. A third "hybrid model" suggests a division of the Commission into two chambers to address the need for an independent compliance body and inspectorate reporting directly to the Council, while using existing governance structures and expertise (DR 102). Second, the Council shall establish a "roster of Inspectors" which powers and responsibilities are expressly regulated in the Regulations (DR 97). The Secretary-General shall appoint an officer with suitable qualifications to be "Chief Inspector" to undertake the day-to-day management and administration of a roster of Inspectors and inspection programme. Many other

[146] Section 21, terms of contract.
[147] Doc. ISBA/19/C/17, Regulation 24.

substantive aspects relating to inspection, compliance, enforcement and penalties are still under discussion.

4. FINAL REMARKS

Thinking about the future and prospects of humanity as a whole and not only as individuals has become a requirement of the present moment. The idea of humanity facing contemporary and future challenges together is part of contemporary philosophical, economic, and political thinking. The international forums are debating and discussing who will take charge of the future of humanity and the governance of the challenges of the climate crisis, the inequality around the world and within regions and countries. However, very few people are aware of the existence of an international organization that represents humanity and manages a common heritage for the benefit of humankind as a whole. From this perspective, functioning of the Authority can be seen as a work in progress, which, who knows, may bring new forms of multilateral diplomacy and good practices for the management of "global commons".

However, for the time being, the lack of understanding among member states of the Council and the pressure of stakeholders on how to implement the common heritage principle in the context of an environmental crisis and clean energy transition is jeopardising its effectiveness, to the point of rendering its main goal unfeasible. Protection of the marine environment is crucial, and a common goal of the international community, but it is also important to maintain the carefully crafted balance in the Convention and the Agreement to ensure that "nothing is done to unnecessarily hamper commercial seabed mining in the Area when that becomes a reality, otherwise the lofty ideals of the Common Heritage will be of benefit to no one".[148]

[148] Speech of H.E. Judge Albert Hoffmann, President of the Seabed Disputes Chamber from 2017 – 2020 available at https://www.itlos.org/en/main/press-media/statements-of-the-president-2/ (accessed 29 November 2024)

About the author:

Dr. M. E. Salamanca-Aguado is Associate Professor of Public International Law and International Relations at the University of Valladolid (Spain). She is an external legal adviser to the International Legal Office of the Spanish Ministry of Foreign Affairs, European Union and Cooperation and a member of the Spanish Delegation at the International Seabed Authority. She is also a lecturer at the International Tribunal on the Law of the Sea - Nippon Programme. Previously, Dr. Salamanca was an Assistant Professor at the University Complutense of Madrid and held research fellowships at the European University Institute (Jean Monnet Fellowship) and The Hague Academy of International Law (Centre for Studies and Research). She was a visiting scholar at the European University Institute (Law Department) and at the University of Illinois (College of Law). She was also an advisor to the OHCHR on International Solidarity and Human Rights. Dr. Salamanca has published widely in the areas of International Human Rights Law, International and European Refugee and Migration Law, Peace and Security, International Humanitarian Law, International Criminal Law and the Law of the Sea, including her monograph *La Zona internacional de los fondos marinos. Patrimonio común de la humanidad* (2003). Views and opinions expressed by the author are those of the author and do not reflect the official views or positions of the government of Spain.