Public participation in the context of deep sea mining: Luxury or legal obligation?

Klaas Willaert

Department of European, Public and International Law – Faculty of Law and Criminology – Ghent University, Belgium

ARTICLE INFO

Keywords:
- Law of the sea
- Deep seabed
- Seabed mining
- Transparency
- Public participation
- Access to justice

ABSTRACT

Beyond the boundaries of national jurisdiction, the ocean floor and its minerals are governed by a comprehensive international regime, which determines by whom and under what conditions these natural resources can be prospected, explored and exploited. The main principles are set out in the United Nations Convention on the Law of the Sea and the 1994 Implementation Agreement, while more detailed rules are included in specific regulations of the International Seabed Authority (ISA). The ISA has issued rules for the first phases of deep sea mining activities (prospecting and exploration), but has yet to adopt exploitation regulations. A draft version is however being developed and provides a good indication of the current state of play. With regard to transparency and public participation, significant improvements can be identified, but considering the influence of NGOs and their crucial role as watchdogs, the power of third-party stakeholders can still be deemed fairly limited. This article analyzes the existing principles and available options regarding transparency, public participation and access to justice in all phases of deep sea mining activities, identifies the main weaknesses and suggests possible corrections, all the while assessing whether such provisions should be considered a luxury or rather the implementation of an enforceable legal obligation.

1. Introduction

The gradual depletion of land resources and the increasing demand for base metals such as nickel, copper and cobalt have led to great interest from governments and commercial entities in the deep seabed. Beyond the boundaries of national jurisdiction, which extend to the outer limits of the continental shelf, the seabed and subsoil comprise the ‘Area’ (preamble and art. 134 LOSC, 1982). The Area and its mineral resources are designated as ‘common heritage of mankind’ and are governed by a comprehensive international regime, which determines by whom and under what conditions these natural resources can be prospected, explored and exploited (arts. 136–137 LOSC, 1982). The main principles are set out in part XI and Annexes III and IV of the United Nations Convention on the Law of the Sea, as amended by the 1994 Implementation Agreement, and are further elaborated by detailed regulations of the International Seabed Authority (ISA), which is tasked to manage the Area and its natural resources (art. 157 (1) LOSC, 1982).

Deep sea mining activities are situated in a delicate field of tension between the demands of commercial exploitation on the one hand and marine environmental protection on the other, as the Area constitutes one of the few places on our planet where human interference has so far been minimal, and in which valuable ecosystems and interesting organisms are located. Deep sea mining will more than likely affect the marine environment and biodiversity of the deep seabed in an irreparable manner, but after years of preparation and with the start of commercial mining looming, exploitation regulations still have to be adopted. Though all activities on the deep seabed should in principle serve the interests of mankind as a whole (art. 140 LOSC, 1982) and the objective of effective protection of the marine environment is prominently listed in the Law of the Sea Convention (art. 145 LOSC, 1982), little attention seems to be paid to transparency, public participation and access to justice for third-party stakeholders. Based on a critical analysis of relevant treaty provisions and regulations, this article examines the options on the international level in all phases of deep sea mining activities (prospecting, exploration and exploitation), detecting the main weaknesses and flaws and suggesting possible corrections, meanwhile assessing whether such provisions should be considered a luxury or rather the implementation of an enforceable legal obligation.
2. International legal framework

2.1. In general

The Law of the Sea Convention provides that mineral resources located in or on the deep seabed can only be acquired in accordance with the rules laid down by international law (art. 137 LOSC, 1982). States and commercial entities must apply to the International Seabed Authority to carry out activities in the Area and when a plan of work is approved, this takes the form of a contract. It should, however, be noted that companies and natural persons wishing to pursue activities in the Area must be sponsored by a state (art. 153 (2) (b) LOSC, 1982; art. 4 (1) and (3) Annex III LOSC, 1982). This state bears the responsibility to ensure that the companies or persons they are sponsoring act in accordance with the terms of their contract and their obligations under the Law of the Sea Convention, although it is stressed that there can be no state liability if the state has adopted legislation and has taken measures which are, within the framework of its legal order, reasonably appropriate to secure effective compliance by persons under its jurisdiction (art. 139 LOSC, 1982; art. 4 (4) Annex III LOSC, 1982; ITLOS Advisory Opinion, 2011). The rules and principles of the Law of the Sea Convention and the 1994 Implementation Agreement are further developed in the ‘Mining Code’, as the comprehensive set of rules, regulations and procedures issued by the International Seabed Authority to regulate prospecting, exploration and exploitation of deep seabed resources is often referred to. The ISA has already produced rules for the first phases of mining activities (prospecting and exploration) in the Area, divided into separate sets of regulations for three distinct categories of resources (Exploration Regulations PMN, 2013; Exploration Regulations PMS, 2010; Exploration Regulations FMC, 2012), but has yet to adopt exploitation regulations, although a comprehensive draft has been developed (Draft Exploitation Regulations, 2019).

2.2. Prospecting and exploration

Prospecting and exploration must be clearly distinguished from each other, although the linguistic boundary between the two concepts is rather vague. The specific regulations of the ISA on prospecting and exploration in the Area provide some clarity: prospecting involves the search for minerals and an estimate of their shape, size, value and distribution, whereas exploration goes further than that and includes thorough analysis of the resources, testing of the recovery systems and technical, economic and environmental studies related to their future extraction (art. 1 Exploration Regulations PMN, 2013). Prospecting does not require the approval of the ISA and can be conducted following a notification to the ISA of the approximate area in which these activities will take place, in addition to a written undertaking that the prospector will comply with the Law of the Sea Convention and the rules of the ISA (art. 2 (1) Annex III LOSC, 1982; arts. 2 (1) and 3–4 Exploration Regulations PMN, 2013). Simultaneous prospecting by multiple prospectors in the same area is possible, but prospecting does not imply the grant of exclusive rights to mineral resources, although a reasonable quantity of minerals can be recovered for testing purposes (art. 2 (2) Annex III LOSC, 1982; art. 2 (4) and (6) Exploration Regulations PMN, 2013). Exploration, on the other hand, is a different story: it can only take place after an application has been approved, and an exploration contract creates exclusive rights to explore for minerals for a defined period in a particular zone (art. 3 Annex III LOSC, 1982; arts. 24–26 Exploration Regulations PMN, 2013).

The environmental obligations relating to prospecting are broadly formulated: each prospector must take necessary measures to prevent and reduce pollution and other hazards to the marine environment as far as reasonably possible, and should always apply the precautionary approach (arts. 2 (2) and 5 (1) Exploration Regulations PMN, 2013). Prospectors shall also cooperate with the ISA in the establishment and implementation of monitoring programmes regarding the potential impact of exploration and exploitation activities on the marine environment, and they must submit an annual report to the ISA (arts. 5 (2) and 6 Exploration Regulations PMN, 2013). The content of the annual report is considered confidential, but information relating to the protection and preservation of the marine environment constitutes an exception, as the prospector can only request that such data is not disclosed for a maximum of three years (art. 7 Exploration Regulations PMN, 2013). However, despite the prescribed public character of environmental information, there are no public participation procedures or legal remedies available, which raises doubts about the value of this provision.

Other rules apply during the exploration phase: exploration contracts can only cover a limited area (art. 25 (1) Exploration Regulations PMN, 2013; art. 12 (1)–(2) Exploration Regulations PMS, 2010; art. 12 (1)–(2) Exploration Regulations FMC, 2012) for an extendable period of 15 years (s 1 (9) Annex Implementation Agreement, 1994). During this period, the contractor must gradually return parts to the ISA, ending with a fraction of the initially assigned area where exploitation activities can eventually be developed (art. 25 Exploration Regulations PMN, 2013). Fees need to be paid (art. 13 (2) Annex III LOSC, 1982; art. 19 Exploration Regulations PMN, 2013) and, in comparison to prospecting, there are stricter obligations to protect the environment: each application should include a description of the proposed scientific research with a view to estimating the likely effects of the exploration activities on the marine environment and biodiversity, 2 a preliminary assessment of the possible environmental impacts and a list of proposed measures for the prevention, reduction and control of pollution and other hazards to the marine environment (art. 18(b)-(d) Exploration Regulations PMN, 2013). The Legal and Technical Commission will determine whether the proposed plan of work provides for effective protection of the marine environment and biodiversity (art. 21 Exploration Regulations PMN, 2013). The precautionary approach again plays a crucial role and the Commission shall make sure that appropriate procedures are in place to assess, on the basis of the best available scientific and technical information, whether this requirement is met. 3 If the Legal and Technical Commission is of the opinion that an application does not comply with the regulations, the applicant will be informed and has an opportunity to amend the application (art. 21 (8) Exploration Regulations PMN, 2013).

If the Commission decides that the application adheres to ISA regulations, it recommends approval of the plan of work by the Council, but such recommendation cannot be issued if the area concerned is disapproved for exploitation by the Council because of substantial evidence indicating a risk of serious harm to the marine environment (art. 21 (5) and (6) (c) Exploration Regulations PMN, 2013). In principle, the

---

1 In principle, the International Seabed Authority can also develop its own mining activities through the Enterprise, but this organ has not yet been created. The powers that are conferred on the Enterprise will initially be exercised by the ISA Secretariat and the Enterprise shall conduct its initial deep seabed mining operations through joint ventures (arts. 153(2)–(3) and 170 LOSC, 1982; art. 3(1) and (5) Annex III LOSC, 1982; art. 1 Annex IV LOSC, 1982; s 1(6) and s 2 Annex Implementation Agreement, 1994).

2 Contractors are obliged to gather sufficient data in order to establish environmental baselines, constituting an adequate reference framework to map the possible effects of their activities on the marine environment of the deep seabed through permanent monitoring. An annual report on the implementation and results of the monitoring programme must be submitted to the ISA (art. 32 Exploration Regulations PMN, 2013).

3 Irrespective of the consideration of plans of work, all parties involved are also urged to cooperate with a view to develop monitoring programmes, evaluating the impacts of deep sea mining on the marine environment on the basis of ‘impact reference zones’ and ‘preservation reference zones’ (art. 31 Exploration Regulations PMN, 2013).
Council will follow recommendations of the Legal and Technical Commission, unless a two-thirds majority of its members present and voting (including a majority of members in each of the chambers of the Council) decides not to approve a proposed plan of work (s 3 (11) Annex Implementation Agreement, 1994; art. 22 Exploration Regulations PMN, 2013). It is striking, however, that the Council can approve a plan of work despite a negative advice from the Commission, diminishing the importance of the assessment by this organ. Moreover, this procedure does not offer third-party stakeholders the option to assert any rights, and once a contract between the applicant and the ISA is concluded, this cannot be challenged. It is true that the Law of the Sea Convention provides for appeal options through the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea for disputes between a contractor and the ISA or between the ISA and an applicant who had its application refused, but there is no possibility for third parties to challenge the approval of a plan of work or an existing contract (art. 187 LOSC, 1982).

2.3. Exploitation

With regard to the exploitation of the mineral resources of the deep seabed, there are at present no approved regulations issued by the ISA, but the most recent draft provides a good indication of the current state of play. The Draft Exploitation Regulations build on the rules regarding prospecting and exploration, as the eligible applicants and the requirement of a sponsoring state remain the same (arts. 5–6 Draft Exploitation Regulations, 2019), but exploitation contracts are concluded for an initial period of 30 years (art. 20 Draft Exploitation Regulations, 2019) and entail, apart from the application fee and annual premiums (arts. 84–87 Draft Exploitation Regulations, 2019), the payment of fees for the mined resources (arts. 64–73 and Appendix IV Draft Exploitation Regulations, 2019). The precautionary approach is reaffirmed, and scientific evidence, transparency and responsibility also play an important role (art. 44 Draft Exploitation Regulations, 2019). Before the commencement of actual production activities, the contractor shall furthermore deposit an Environmental Performance Guarantee to the ISA to cover, inter alia, the costs of monitoring environmental impacts after the mineral exploitation activities have ceased, without in any way limiting the liability of the contractor (art. 26 Draft Exploitation Regulations, 2019).

Apart from that, the International Seabed Authority intends to create an Environmental Compensation Fund, which is financed by fees and penalties paid to the ISA and is designed to cover the costs of preventive and restorative measures in the absence of liability of a contractor or sponsoring state (arts. 54–56 Draft Exploitation Regulations, 2019).

The application and approval procedure of a plan of work for exploitation also proves to be more extensive and thorough: among other documents, a detailed Environmental Impact Statement, an Environmental Management and Monitoring Plan and a Closure Plan must be prepared and submitted (art. 7 (3) (d) and (h)-(i) Draft Exploitation Regulations, 2019). These environmental plans are published on the ISA website and all comments made by stakeholders are presented to the applicant, who has the opportunity to modify the plans (art. 11 Draft Exploitation Regulations, 2019). As part of the comprehensive review of an application, the Legal and Technical Commission shall examine the application in light of the comments made by stakeholders and the responses from the applicant, and consider whether the plans provide for the effective protection of the marine environment in accordance with article 145 of the Law of the Sea Convention and the precautionary approach (arts. 11 (3)–(5) and 13 (4) (e) Draft Exploitation Regulations, 2019). The report of the Legal and Technical Commission, including any suggested modifications or amendments to the application, is also published on the ISA website and the entire file is transferred to the Council. If the Legal and Technical Commission is of the opinion that the application does not provide adequate protection for the marine environment, the applicant will be informed and is offered a chance to rectify this, followed by a new assessment by the Legal and Technical Commission (art. 15 (4)–(5) Draft Exploitation Regulations, 2019). The final decision is taken by the Council on the basis of the same decision-making process that applies to exploration contracts: a positive recommendation from the Legal and Technical Commission can be overturned by a two-thirds majority and a negative advice does not necessarily preclude the approval of a plan of work by the Council (art. 16 Draft Exploitation Regulations, 2019; s 3 (11) Annex Implementation Agreement, 1994). With regard to transparency and public participation, improvements can thus be noted (it is also explicitly stated that information and data regarding the protection of the marine environment cannot be considered classified), but the power of third-party stakeholders remains fairly limited.

3. Weaknesses and flaws

The international rules establish a certain level of protection for the marine environment, yet it can be questioned whether this is sufficient. The existing prospecting and exploration regulations do not include any public participation procedures, and despite improvements in terms of transparency and public participation in the current Draft Exploitation Regulations and in the recent practice of the ISA, the power of third-party stakeholders remains limited: there is no certainty that the Legal and Technical Commission will value third-party comments accordingly, and a recommendation by the Commission that a plan of work should not be approved, which was possibly inspired by the public consultation process, can be disregarded by the Council. Moreover, the decision of the Council cannot be challenged by third parties. There is, after all, no option for an appeal, as the Seabed Disputes Chamber of the

---

4 This statement is the end product of a series of activities that identify, predict and evaluate the effects of the proposed mining operations, including a risk assessment, an impact analysis and a search for mitigating measures (art. 47 and Annex Draft Exploitation Regulations, 2019).

5 This document, which should be drawn up on the basis of the environmental impact assessment and in accordance with the regional environmental management plans, determines how mitigating measures will be implemented, how their effectiveness will be monitored and which adjustments may be made. During the exploitation activities, the contractor shall report on the environmental impact in accordance with this document and the plan itself is also subject to performance assessments, the results of which are submitted to the ISA and evaluated in public reports (arts. 48, 51–52 and Annex VII Draft Exploitation Regulations, 2019).

6 This document inter alia explains the responsibilities of the contractor in monitoring the environmental impact after completion of the activities (art. 59 Draft Exploitation Regulations, 2019).

7 A stakeholder is broadly defined as a natural or juristic person or an association of persons with an interest of any kind in, or who may be affected by, the proposed or existing exploitation activities under a plan of work in the Area, or who has relevant information or expertise (Schedule 1 Draft Exploitation Regulations, 2019).

8 Although there is an exception, this goes a lot further than the prospecting and exploration regulations, which only indicate that information necessary to develop regulations regarding the protection of the marine environment cannot be qualified as confidential, but specify nothing about the classified or public nature of such data within other contexts (art. 89(3) (f) Draft Exploitation Regulations, 2019; art. 36(2) Exploration Regulations PMN, 2013).

9 In order to implement its data management strategy, the ISA launched DeepData, an online, publicly accessible database collecting environmental data and biodiversity information garnered through exploration activities in the Area; the general public is frequently consulted while developing regulations and related instruments; and efforts are made to disseminate more information regarding the content of contracts and annual reports through the introduction of specific templates (ISA LTC Report, 2019; p. 4 and 7; Comments Draft Exploitation Regulations, 2019; Summary ISA Council 25/2, 2019, p. 17–18; ISA DeepData, 2020).
International Tribunal for the Law of the Sea has no jurisdiction to handle cases regarding exploration or exploitation activities that are brought before the court by a natural person or a juridical person who is not directly involved in those activities. This means that environmental organizations are unable to contest an approval of possibly harmful activities in the Area before an international judge (art. 187 LOSC, 1982; art. 37 Annex VI LOSC, 1982). The ambition of more transparency, which is also expressed by the rule that information regarding marine environmental protection cannot be considered classified (art. 89 (3) (f) Draft Exploitation Regulations, 2019; art. 36 (2) Exploration Regulations PMN, 2013), is furthermore impeded by the inability of third-party stakeholders to file a complaint when irregularities are revealed.

Since all exploration and exploitation activities by non-state actors in the Area require a certificate of sponsorship (art. 153 (2) (b) LOSC, 1982; art. 4 (1) and (3) Annex III LOSC, 1982), one could try to launch an administrative appeal against the national decision granting a certificate of sponsorship, but this procedure is not an obvious option and, in case the certificate of sponsorship would be annulled, the contractor can still seek a new sponsoring state within the allotted time to avoid termination of the contract (art. 29 Exploration Regulations PMN, 2013; art. 21 Draft Exploitation Regulations, 2019). Furthermore, given the fact that the sponsoring state could be strategically chosen from the beginning, issues which are suspiciously similar to the ones related to the phenomenon of flags of convenience in shipping do not seem far off: depending on the content of the national legislation on deep sea mining and how strictly it is enforced, private enterprises can choose to register their principal place of business in a certain state and apply for sponsorship there (Willaert, 2020a). Moreover, the discussed possibility of an administrative appeal on the national level will be absent in case exploration or exploitation activities in the Area are performed by member states or the Enterprise, as no certificate of sponsorship is required in these situations.

Finally, an overarching problem that transcends the different rules and measures issued by the ISA, is the lack of transparency in the functioning of the Legal and Technical Commission, which – given its broad range of work and the decisive nature of its actions and recommendations (art. 165 (2) LOSC, 1982) – is often viewed as the de facto decision-making body (Periodic Review ISA, 2016, p. 61 and 67). The meetings of the LTC are normally held in private, with open meetings and participation of observers being rare exceptions to the rule (Rule 6 RoP LTC, 2012). Everyone shall agree that an organ which carries out important responsibilities should not be without adequate scrutiny or oversight, especially when the increased politicization of this expert committee has been a popular topic of discussion (Willaert, 2020b). Although there has been a growing dialogue between the Council and the Legal and Technical Commission in the past years (e.g. ISA Council Decision, 2018), the lack of record of diverging views, technical detail and nuance in the reports to the Council has been criticized.

4. Possible solutions

Possible solutions for the above-mentioned issues are not hard to find. It is clear that the proposed public participation procedure, which is embedded in the review process of a plan of work for exploitation, should also be applied to applications relating to exploration, as there are significant risks of environmental damage associated with exploration activities as well. Revised versions of the prospecting and exploitation regulations should thus be adopted, but this should not stop the ISA from introducing further improvements. As concisely explained, it is extremely important to inject more transparency in the functioning of the Legal and Technical Commission: by simply shifting the rules in favor of open meetings and only turning to closed meetings when confidential or sensitive information of contractors is discussed, the necessary trust in the functioning of this organ can be restored and maintained. Also, the enhanced transparency provided by the Draft Exploitation Regulations and online public database DeepData should be accompanied by clear procedures to submit remarks and objections whenever troubling information is encountered, as the added value of more openness is questionable when there are no options for third-party stakeholders to act on it. Therefore, apart from the public participation procedure as an element of the review process of an application, options need to be introduced to submit comments and complaints after the approval of a plan of work, as an aspect of the monitoring process during the mining activities. Such additional safeguards would already go a long way, but it can be argued that public participation alone is not sufficient. As demonstrated within the context of the Draft Exploitation Regulations, valid arguments regarding marine environmental protection cannot rule out the approval of a debatable plan of work, so an appeal option for third-party stakeholders is recommended, if only in certain circumstances.10

In order for these suggested corrections to be effectively implemented, it is very important to correctly perceive their underlying character: such changes should not only be effected because they seem fair and reasonable as an additional safeguard to protect the marine environment, but find increasing support in international law. Participation and enforcement are central issues to be considered when implementing new rules regarding the exploitation of the deep seabed. The importance thereof is only heightened by the fact that the Area and its resources are to be regarded as common heritage of mankind, reinforcing the need to put in place broad accountability provisions and effective remedies. Whereas the enforcement of the existing duties concerning environmental impact assessment in the context of deep sea mining implicates several distinct actors (being the ISA itself, the sponsoring states, the contractors and the affected coastal states), the increasingly seminal role to be played by third parties, such as environmental NGOs and concerned citizens, can no longer be ignored. In the wake of principle 10 of the 1992 Rio Declaration, it is now generally accepted that granting so-called ‘procedural environmental rights’ serves as a logical catalyst for more transparency and accountability (Principle 10 Rio Declaration, 1992). Treaties (Aarhus Convention, 1998) as well as case law (e.g. ICJ Nicaragua Judgment, 2015; ICJ Pulp Mills Judgment, 2010; ICJ Gabcikovo-Nagymaros Judgment, 1997) prescribe and promote transparency, public participation and access to justice in environmental matters and, in light of the well-established duties regarding due diligence, precaution and environmental impact assessment in the context of deep sea mining, are arguably applicable here.

Most prominent in this regard is the 1998 Aarhus Convention, adopted in the context of the United Nations Economic Commission for Europe (UNECE), which renders access to environmental information, broad public participation and effective legal review procedures mandatory in decision-making procedures regarding environmental matters (arts. 4–9 Aarhus Convention, 1998). This so-called ‘three-pillar approach’ is now also being replicated in regional conventions (e.g. Eszazu Agreement, 2018) and is to be regarded as an emerging customary duty under international law. All EU member states are bound by this treaty and, while deep sea mining is not explicitly mentioned, the Aarhus Convention requires review procedures with respect to decisions regarding activities which entail public participation under an environmental impact assessment procedure in accordance with domestic law, and this obligation also applies to decisions on other activities which may have a significant effect on the environment. Moreover, states parties are also bound to promote the principles of the Aarhus Convention within the context of international organizations in matters related to the environment and the International Seabed Authority squarely falls within the scope of this general obligation (art. 3

10 Appeal options for third-party stakeholders could for example be introduced when their comments were not taken into account by the Legal and Technical Commission or if a subsequent negative advice from the Legal and Technical Commission was not acknowledged by the Council.
Against this background, the applicable international legal framework and the regulations issued by the ISA need to be revised in light of the justified demand for more transparency and accountability. Granting environmental NGOs clear-cut participatory rights, which can be enforced before national and international review bodies, is now mandatory in view of the current international standards. If not with reference to the Aarhus Convention then at least account is to be taken of the recent state practice in the context of environmental decision-making, which clearly points towards enforceable participatory rights. Furthermore, taking into account the status of the Area and its natural resources as common heritage of mankind, every human being can be qualified as an interested party, which is why extensive public participation and adequate legal protection for third-party stakeholders appear to constitute the next logical step in the evolution of international environmental governance of the deep seabed.

5. Conclusion

Considering the influence of NGOs and their crucial role as watchdogs, the limited power of third-party stakeholders can be seen as a significant deficiency in the international legal framework governing the deep seabed. This article demonstrated that the proposed exploitation regulations display a clear evolution towards more transparency and participation, yet still provide insufficient power to third-party stakeholders who oppose the authorization of certain activities in the Area. Since the Draft Exploitation Regulations of the International Seabed Authority already contain a certain level of transparency and public participation, an important need appears to be the introduction of an appeal system for third-party stakeholders, which should prevent that their remarks and objections are not properly taken into account in the decision-making process to approve or reject a plan of work. Moreover, the increased transparency should be linked to additional participation options, enabling all stakeholders to submit remarks and objections beyond the context of application review procedures, and it is paramount to avoid further undermining of the legitimacy and credibility of the Legal and Technical Commission by changing its rules of procedure in favor of open meetings. The proposed corrections in terms of transparency, public participation and access to justice for third-party stakeholders with regard to deep sea mining may be considered excessive by some, but given the current developments in international law, the clear objective of marine environmental protection and the status of the Area and its natural resources as common heritage of mankind, these suggestions are more than reasonable. It could therefore be argued that providing these options for third-party stakeholders cannot only be seen as a recommended practice, but constitutes an actual legal obligation on the part of the ISA and the sponsoring states.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References


ITLOS Advisory Opinion, 2011. ITLOS, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area. ITLOS Reports 2011 10.


