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Towards Transparent Governance of Deep Seabed Mining

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The deep sea is the largest and least understood ecosystem on Earth. The seafloor could soon become a new site of mineral exploitation. But deep seabed mining could inflict significant harm to this largely unknown ocean environment.

The International Seabed Authority (ISA), mandated by the United Nations Convention on the Law of the Sea (UNCLOS), is currently developing a regulatory framework for the exploitation of minerals from the deep seabed beyond national jurisdiction, known legally as *the Area*. The ISA is required to balance commercial interests with its obligations to ensure the protection and preservation of the marine environment. The Area and its mineral resources have been declared the *Common Heritage of Mankind* and must be used for the benefit of mankind as a whole.[1] Therefore, the operations of the ISA are worthy of public scrutiny.

With the transition from mineral exploration to exploitation, the transparency of the ISA's activities has come under criticism from member states, the scientific community, and non-governmental organisations. Stakeholders have called on the ISA to address policy deficits in relation to: data management and access to data and information; the systematic integration of scientific advice; two-way communication with stakeholders and the public; the active involvement of observers and member states in the development of rules and regulations; and the regular reporting on the activities of contractors and their compliance with ISA rules and regulations.

Better transparency will facilitate the development of regulations that protect the marine environment effectively and ensure their proper implementation, monitoring, and review. Institutional and procedural adjustments within the ISA will be needed to ensure that improved transparency will lead to improved accountability.

- **Message 1:**
  Adopt an open information and data policy.
  The ISA should implement a presumption of public accessibility of all information relating to the regulation of deep seabed mining and the protection of the marine environment and safety.

- **Message 2:**
  Ensure the active involvement of all interested stakeholders.
  The ISA should develop a mechanism that enables the engagement with and participation of stakeholders in decision-making, consistent with the principle of the Common Heritage of Mankind.

- **Message 3:**
  Establish an environmental advisory body.
  The ISA should establish a new organ to provide advice on matters of the environment.

1. Why transparency matters

Access to information, public participation, and accountability of decision-making are widely accepted components of good governance. Among the Sustainable Development Goals adopted by the UN General Assembly in 2015, Goal 16 emphasises the need for accountable and transparent institutions.

In addition, there is a legally binding international instrument, the 1998 Aarhus Convention and related Protocol, which deals *per se* with the right of individuals and civil society to have access to environmental information, participation in decision-making in environmental matters, and justice in environmental matters. Its national implementation by states also contributed to multilateral environmental agreements changing their interactions with civil society stakeholders, industry, non-contracting parties, and the public.

The elements of transparency, access to data and justice, and effective public participation, are particularly relevant for untested activities with potentially harmful consequences. In the case of deep seabed mining, the lack of knowledge and the complexity of problems and resulting uncertainties make it difficult to assess and weigh the environmental and economic risks of specific projects. Within this context, transparency is essential for the implementation of the precautionary principle as it reveals the extent to which decisions are informed by scientific knowledge, uncertainties, and subjective considerations. Moreover, public participation is crucial to determine the level of environmental harm that is deemed acceptable.

Engaging with stakeholders can generate substantial benefits provided public dialogue is initiated at a stage when options are still open and a transparent and interactive governance framework ensures that due account is taken of the outcome of the dialogue.[2] The benefits include enhanced legitimacy and the facilitation of public acceptance; improved quality of decision-making by increasing the information and perspectives available; enhanced accountability of decision-making through public scrutiny; and assisting small and developing states in building their capacity to participate effectively.

Transparency challenges for the ISA

The fair and effective management of deep seabed mineral resources for the benefit of mankind, including future generations, is a matter of public interest. Transparent governance frameworks and public access to data can aid in the identification and mitigation of biases in information used by the ISA. This is particularly pertinent as the environmental baseline data and resulting environmental standards for deep seabed mineral exploitation will be based primarily on data collected by mining contractors.

The ISA faces two main challenges with respect to the increasing demands for greater transparency and accountability of its operations:

(1) Although UNCLOS declares the deep seabed and its resources to be the Common Heritage of Mankind, it does not include specific provisions for stakeholder participation. In addition, UNCLOS requires that the ISA maintains the confidentiality of certain data and information, hindering full transparency and openness. The Convention specifies, however, that data required for the protection of the environment and safety should be made available to the public. It has been left to the ISA to develop detailed rules and procedures to determine which categories of data are to be made publicly available and how stakeholders can be engaged in the decision-making process.

(2) The current lack of public access to environmental data gathered by contractors in the course of exploration is a major impediment to the efforts of the ISA and scientists to establish appropriate regional environmental baselines. Indeed, until last year contractors collecting data were not even required to meet specific data standards.[3] As yet, a comprehensive report summarising the available published information from science and prior mining experiments has not been compiled. Likewise, no summary of contractors' activities to date has been provided.

In order to ensure the protection and preservation of the marine environment, and the establishment of effective regulations, such information will need to be made available prior to the approval of the first plan of work for exploitation.

SUSTAINABLE DEVELOPMENT GOAL 16: PROMOTE JUST, PEACEFUL AND INCLUSIVE SOCIETIES

Targets as defined in the 2030 Agenda for Sustainable Development:[4]

(16.6) *Develop effective, accountable and transparent institutions at all levels*
(16.7) *Ensure responsive, inclusive, participatory and representative decision-making at all levels*
(16.8) *Broaden and strengthen the participation of developing countries in the institutions of global governance*
(16.10) *Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements*

2. Adopt an open information and data policy


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The potential transition from mineral exploration to exploitation requires reconsideration of the ISA's transparency. Public and stakeholder interest will undoubtedly increase further with the commencement of test mining and the submission of the first applications for the exploitation of seabed minerals. The environmental and financial aspects of a future regulatory framework will need to be finalised by this time, and should be done so through a process with broad public participation, including access to relevant data and information.

The UN Convention on the Law of the Sea provides for the confidential handling of certain data and information. Article 168(8) refers explicitly to the ISA's obligation to maintain the confidentiality of industrial secret(s), proprietary data, and other information, but does not further identify the nature or scope of this information.[5] A significant constraint to this obligation is made in Article 14(2) of Annex III to the Convention: "*Data and information that is necessary for the formulation by the Authority of rules, regulations and procedures concerning protection and preservation of the marine environment and safety, other than proprietary equipment design data, shall not be deemed proprietary.*"[6]

The ISA's obligation to ensure the confidentiality of data and information has thus far been interpreted in the broadest possible sense: fifteen years after the signing of the first exploration contracts, very little of the data and information gathered by contractors for environmental baseline studies has been made publicly available. Thus, independent compliance checks and the establishment of regional baselines have not been possible. The ISA's central data repository has not been updated for many years and an environmental database has yet to be established. This proprietary approach, which emerged during mineral exploration, is simply inadequate to the task of managing the *exploitation* of resources that are the Common Heritage of Mankind.

We suggest that the ISA should implement a presumption of public accessibility of data and information. This would require that public access be granted to all documents, data, and meetings held, collected, or convened by the ISA, and that individual exemptions to this rule be justified on the basis of clearly defined policies.

THREE STEPS TO GREATER TRANSPARENCY

- **Implement a presumption of transparency.**
  Public access should generally be granted to all documents, data, and meetings held, collected, or convened by the ISA. Exemptions to this rule should be outlined in clearly defined policies, including when such data may be later released.

- **Establish criteria for material that is to be held confidential.**
  Adopt criteria for identifying potentially confidential material. An advisory opinion from the Seabed Disputes Chamber would be recommendable in order to clarify the scope and extent of confidentiality under UNCLOS Annex III Article 14(2) and the ISA's duties in respect of it.

- **Create a publicly accessible database of environmental and safety information.**
  This database should contain all relevant information held by the Secretariat.

3. Ensure the active involvement of all interested stakeholders

The principle of the Common Heritage of Mankind requires that the entitlement of present and future generations to a healthy marine environment be safeguarded.[7] Increasing the engagement and participation of stakeholders, including the scientific community and the general public, in environmental decision-making will increase the likelihood of achieving these goals.

An independent, interim review of the performance of the ISA observes that the lack of transparency around its decision-making *"undermines confidence in the ability of the [ISA] to ensure that activities are carried out in accordance with the Common Heritage of Mankind principle."*[8] The *"lack of a stakeholder engagement framework"* was identified as one of the reasons why currently, the Authority was *"not yet fulfilling its obligations to ensure that activities in the Area are carried out for the benefit of mankind".*[9]

Against this background, we suggest that a structured mechanism be developed to cater for more effective stakeholder engagement and public participation at all levels of environmental decision-making within the ISA.

THREE STEPS TO GREATER TRANSPARENCY

- **Create a mechanism for stakeholder engagement and public participation.** The ISA should agree on a stakeholder engagement strategy that determines the type, level, and extent of participation in decision-making processes within a framework of responsive actions, as foreseen under the Aarhus Convention. Decisions should not be taken unless input from stakeholders has been properly taken into account.

- **Develop opportunities and avenues for engagement and participation.** The public should be provided with opportunities to engage in early-stage discussions concerning matters of the environment and safety. Public input should be subsequently reported upon with explanations concerning whether and how it was taken on.

- **Improve the Secretariat's engagement capacities.** The Secretariat should improve the quality of its interactions with stakeholders and the general public through appropriate measures, including the establishment of a dedicated communications department.[10]

4. Establish an environmental advisory body

Overcoming the current lack of transparency in the work of the ISA will necessitate institutional changes. The Legal and Technical Commission (LTC)[11] of the ISA currently holds significant powers, but conducts its operations behind closed doors. Stakeholders have raised concerns over unmanageable workloads, conflicts of interests, a lack of expertise relating to environmental issues, and a lack of effective compliance control.[12] This situation will become more acute when exploitation starts.

One option to address these concerns could be to establish a new environmental body responsible for the development of regional environmental management plans, strategic assessments, environmental impact assessments, and environmental monitoring. It could also consider environmental and monitoring data and information provided by contractors or sourced from independent research for the purposes of drafting regulations, assessing applications, advising contractors, and eventually advising on compliance. The recent performance review of the ISA noted that there was strong support for the institutional separation of preparatory legislative work and compliance monitoring from the day-to-day tasks of an environmental administration.[13]

THREE STEPS TO GREATER TRANSPARENCY

- **Establish an environmental advisory body as a complement to the LTC.** This body would advise the LTC and Council on environmental aspects of licence applications. It would deal with non-confidential data and hence enable the active involvement of the science community and civil society. If established in time, it could draft the relevant environmental sections of the Mining Code.

- **Convene non-permanent panels of external experts to advise the LTC and Council.** Alternatively, external panels could be created to provide environmental advice on a needs-be basis, including the assessment of environmental elements of new applications for mining contracts, regional environmental assessments, and regional planning. Because the panels would deal with non-confidential information, their deliberations could be fully transparent.

- **Substantially strengthen the capacity of the Secretariat.** To ensure compliance with the Mining Code, the ISA Secretariat could be given the mandate for regulatory oversight over the implementation of environmental and safety regulations, including regional environmental management plans, strategic assessments, environmental impact assessments, and environmental monitoring.

5. Towards good governance for deep seabed mining

The Area, the deep seabed beyond 200 miles from the nearest coast, is one of the least explored parts of our planet. Under the UN Convention on the Law of the Sea, individual states are not permitted to claim ownership of the Area and any benefits derived from its mineral exploitation must be shared equitably. This includes economic benefits as well as the sharing of scientific knowledge and skills among differently developed parts of the world.

Implementing the Sustainable Development Goals of the UN's 2030 Agenda with respect to the oceans will require that a balance be struck between the vested interests of users, the sharing of benefits, and the preservation of the marine environment and its natural resources – for both current and future generations. With respect to deep seabed minerals, the International Seabed Authority was established under UNCLOS to manage this balance for humankind as a whole. As a consequence, scientific advisory bodies, non-governmental organisations, and the general public have a legitimate interest in the development of the governance regime for the deep seabed.

The way forward

Ensuring transparency across the ISA's operations will help build trust and accountability with respect to its regulations and decisions. An open data policy will facilitate the merging of environmental data from various sources and enable scientific review and investigation. Similarly, a dedicated public science-policy advisory process will amplify the benefits from scientific contributions. An environmental advisory body can ensure that decision-making becomes more transparent and participatory.

While a common understanding is still emerging of how transparency will be operationalised for the purpose of managing seabed mineral resources as a Common Heritage of Mankind, there is much to be optimistic about. The ISA has already made significant efforts to broaden its interactions with stakeholders by initiating the 2014 and 2015 stakeholder surveys on matters concerning the development of regulations for the exploitation of seabed minerals. In 2016, the ISA performance review committee, commenting on the interim report, recommended that the ISA adopt a policy of transparency as its default position, with confidentiality the exception.[14] In the management of our common deep seabed mineral resources, the time for increased transparency has clearly arrived and must be addressed expeditiously.

[1] UNCLOS, articles 136, 137, 153(1).

[2] UN ECE Almaty Guidelines on Promoting the Application of the Principles of the Aarhus Convention in International Forums. UN Economic and Social Council, Economic Commission of Europe, ECE/MP.PP/2005/2/Add.5 (20 June 2005).

[3] Madureira, P., Brekke, H., Cherkashov, G.A., Rovere, M. (2016), Exploration of polymetallic nodules in the Area: Reporting practices, data management and transparency. – *Marine Policy*, pp. 101–107 at p. 106.

[4] UN General Assembly Resolution A/RES/70/1, p. 25.

[5] Freehills, Herbert Smith (2016). Data and information management considerations arising under the proposed new exploitation regulations – ISA Discussion Paper No. 2, chapter 2.

[6] UNCLOS, Annex III, Art. 14 (2).

[7] Wolfrum, R. (2009), Common Heritage of Mankind. In Wolfrum, R. (ed.) – *Max Planck Encyclopedia of Public International Law.* Available at: http://www.hjpp.de/43_1983/43_1983_2_a_312_337.pdf.

[8] Johnson, D. et al (2016). *Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154 – Interim report.* Available at: https://www.isa.org.jm/files/documents/EN/22Sess/Art154/Art154_InterimRep.pdf, p. 78.

[9] Ibid., pp. 1, 24.

[10] Ibid., p. 54.

[11] Ibid., pp. 63, 78–80.

[12] Ibid., pp. 41, 61, 63–68, 78–80.

[13] Ibid., p. 75.

[14] ISA Review Committee (2016). *Periodic Review of the International Seabed Authority Pursuant to UNCLOS Article 154: Comments by the Review Committee (25 May 2016).* Available at: https://www.isa.org.jm/files/documents/EN/22Sess/Art154/RevCmte-Comments.pdf, p. 5.

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Institute for Advanced Sustainability Studies (IASS)
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Center for Marine Environmental Sciences, University of Bremen
Research at the Center for Marine Environmental Sciences (MARUM), University of Bremen has the overarching goal to achieve a better understanding of key processes in the marine environment in order to provide information for sustainable use of the ocean. The Research Center for European Environmental Law, University of Bremen focuses on legal and interdisciplinary aspects of German, European and international environmental law and regulation.

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