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## COMMENTARY ON

### “Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154”

#### Interim Report by Seascope Consultants, 15 May 2016

This document is submitted by the Deep-sea Minerals Working Group (WG) of the Deep-Ocean Stewardship Initiative (DOSI). DOSI is a union of experts crossing disciplines, sectors and countries that was formed to provide expert input and to develop new ideas for sustainable use and management of deep-ocean resources. Endorsement by the DOSI Executive Committee, DOSI Advisory Board and the Deep-sea Minerals WG members who provided the comments within this document is presented at the end. More information on DOSI is available at <http://dosi-project.org/> and on the Deep-sea Minerals WG at <http://dosi-project.org/working-groups/minerals>. The DOSI Deep-sea Minerals WG consent to making this submission public.

#### **Recommendations from the DOSI Deep-sea Minerals WG:**

From the comments of the working group members, several recommendations emerged that underlie or complement the specific commentary offered in the pages below:

- 1) Serious consideration should be given to the development of a Strategic Plan, as it could set out how the Authority will address environmental protection measures, including regional (strategic) Environmental Management Plans, environmental baseline requirements, and mechanisms for monitoring contractors' activities and enforcing contractors' obligations.
- 2) Given the responsibilities of sponsoring States it is important to confirm that these States are fully aware of all the environmental obligations they have taken on and that they have the appropriate procedures in place to implement them.
- 3) Contractors (and their sponsoring States) may be liable for environmental damage if they fail to exercise due diligence. Therefore, a transparent financial regime needs to be in place that provides for coverage for any potential costs or fines in relation to breach of contract and any other financial liabilities, and for compensation for environmental harm.

- 4) Given the overarching relevance of the Common Heritage of Humankind principle to the International Seabed Authority (ISA), this principle should be fully reflected in all aspects of the regulation going forward, including the sharing of environmental and safety data.
- 5) Given the increase in environmental and safety data collected by Contractors that is expected to occur with exploitation, there needs to be continued consideration of how best to archive and make these data widely accessible. Particular consideration should be given to the standardisation of data collection and reporting.
- 6) The need for greater transparency permeates many of the recommendations in the Interim Report. The ISA should consider developing a comprehensive access to information policy addressing transparency and confidentiality. This should include reconsideration of what constitutes confidential data and establishing procedures through which confidential data and information may be released over time (embargo). Reviewing confidentiality issues should facilitate more extensive data sharing.
- 7) In addition to scientific research undertaken at the behest of Contractors, there is an urgent need for the ISA, Member States and Contractors to support and promote additional independent scientific research. Additional research is particularly required to understand the impact of potential exploitation, so that adequate protection and conservation measures can be developed.
- 8) Areas of Particular Environmental Interest (APEIs) should to be established and bestowed long-term designation in areas of seabed of interest to deep-sea mining, prior to the issuance of further exploration or future exploitation contracts.
- 9) All existing exploration, and future exploitation, contracts should be monitored independently to assess whether there have been any environmental impacts. This could be achieved through the establishment of an Inspectorate. Such a body could also monitor Contractor compliance in relation to their Plans of Work and the Regulations.
- 10) Given the issues raised in relation to the Legal and Technical Commission (LTC), the Review should address workload, structure, processes, transparency and external participation. Creation of additional supportive committees, such as an Environmental Committee and Scientific Committee or subcommittees within the LTC, should be given strong consideration.
- 11) Given the issues relating to the Secretariat workload and current structure, consideration should be given to creating new additional posts, beyond those approved at the 22<sup>nd</sup> session of the Authority. These could include a Data Manager and Communications Officer, alongside establishing additional divisions such as the Environmental Division and a Legal and Technical Division. How these divisions would interact with additional committees or subcommittees with the LTC should also be considered.
- 12) Although some progress has been made in recent times, the Authority should seriously consider how to engage more fully with the scientific community and relevant deep-sea science projects and initiatives. Such engagement will increase transparency, accountability and allow for stakeholder expertise to be incorporated

into decision-making. DOSI (and the International network for the scientific investigation of the deep-sea ecosystems (INDEEP)) is well-positioned to facilitate further engagement with the scientific community and other stakeholders, and offers its wholehearted support in this matter.

### **DOSI Minerals Working Group response**

Pursuant to Article 154 of the United Convention of the Law of the Sea (UNCLOS), a general and systematic review of how the international regime of the Area has operated is mandated every five years. The 2016 Interim Report discussed here is the first review to occur since the Convention came into force. We congratulate the Consultants on the detailed assessment that the Interim Report offers regarding the performance of the ISA, its organs and subsidiary organs. The report is comprehensive, well-structured, with clear recommendations and is, in light of the move from exploration towards commercial exploitation, very timely. We also congratulate the ISA on its achievements to date, particularly regarding the management of prospecting and exploration for minerals within the Area. Following the call by the ISA for comment on the Interim Report (ISBA/22/A/11), the DOSI Deep-sea Minerals WG would like to take the opportunity to provide expert opinion on the Interim Report's Review of the ISA.

### **Comments on Methodology**

- Direct quotes and reference to comments from Respondents: It is not often clear how many of the Respondents agree with the expressed views, with phrases such as 'widely raised' (p79) being rather ambiguous. The issues raised by these comments are highly relevant and should be retained for further discussion; however consideration should be given as to how to clarify the weight of opinion in the final Report.
- Low overall response to questionnaires and interviews: The Consultants made every effort to solicit responses, including having the questionnaire translated into the six official languages of the UN. However, only 74 responses were received from the 385 questionnaires issued and 40 interviews conducted from the original 144 invitations.
- Geographical bias in response: Despite the efforts made by the Consultants to be inclusive, more than 50% of the responses occur from the 'Western Europe and other' category. As a result, it is somewhat unclear how representative the views expressed in the Report may be. It could be useful to provide a similar breakdown of geographic representation for the comments provided on the Interim Report; it may be possible that this second stage of commentary helps to address the geographical bias in the initial responses.

**Comments on Recommendations**

- *Recommendation 1:* A study on the adequacy of sponsoring States legislation to control entities with whom they enter into contracts for exploration, would be highly beneficial; adequate regulation of mining entities is essential if environmentally responsible mining practices are to be enforced.
- *Recommendation 2:* Reviewing the quality and consistency of data gathered is an important issue and the Authority will need to determine how contractor data, in particular environmental baseline data, are assembled and made available. The methodology necessary for data collection and provision to stakeholders should be carefully considered (in consultation with the scientific community) as the Authority develops Regulations for exploitation.
- *Recommendation 7:* Consigning the review of annual Contractors' reports to an independent regulatory body would aid in the Authority's move to greater transparency and accountability, particularly within the Legal and Technical Commission, which currently reviews Contractors' reports.
- *Recommendation 9:* Increasing the levels of access to external expertise by both the LTC and Secretariat would enhance the Authority's ability to ensure the protection and preservation of the marine environment. We support the Authority's move to bolster the scientific capacity of the Secretariat through the establishment of a Scientific Affairs Officer within Secretariat in the 2017 – 2018 ISA Budget. We welcome the three new LTC members who are expert marine biologists, but we would also strongly support the inclusion of further marine biologists, deep-sea experts and environmental scientists on the LTC. The potential need for additional marine biologists and environmental scientists within other organs and subsidiary organs of the Authority should also be considered.
- *Recommendation 10:* Whilst we strongly encourage the Authority to increase its internal scientific and environmental technical capacity, we acknowledge that it is unrealistic to expect all levels of relevant expertise to be housed within the Authority committee structure. Therefore, we would support the development of protocols for the Authority to increase its interactions with external experts and stakeholders, including the scientific community. Actively engaging with the scientific community is an opportunity for the Authority to increase transparency, accountability and stakeholder participation, to broaden knowledge and influence research agendas. The scientific community can also provide additional expertise, particularly regarding independent review of contractor-collected data, which may help to alleviate some of the pressure on the LTC. DOSI is well-positioned to facilitate further engagement with the scientific community and offers its wholehearted support in delivering Recommendation 10.
- *Recommendation 11:* This recommendation requires clarification. Whilst the development of marine technology is generally undertaken by the Contractor, under UNCLOS article 266, States are expected to cooperate to promote the development of marine technology, and under UNCLOS article 144, the Authority and States Parties have an obligation to promote transfer of technology to developing States. As currently

phrased, Recommendation 11 does not acknowledge the Authority's role in marine technology development. Whilst the Authority has monitored technology to a degree as described in the Contractors' annual reports, there does not appear to be a mechanism for the development and transfer of marine technology. Developing agreed environmental performance standards for technology may not be straight forward, considering the uncertainties surrounding the environmental impacts of deep-sea mining. Engagement with stakeholders, including the scientific community, would be highly beneficial when developing these performance standards. It may be necessary to consign determining these standards to a Scientific or Environmental committee as conceptualised in the Review.

- *Recommendation 12:* Engaging in an emerging discussion about transparency, including the determination of confidential data, would be highly beneficial to the Authority and Stakeholders. We strongly support the steps the Authority is taking to address confidentiality, including commissioning 'Discussion Paper 2: Data and Information Management Considerations Arising Under the Proposed New Exploitation Regulations', and the development of Regulation 46 within the 'Draft Regulations and Standard Contract Terms on Exploitation for Mineral Resources in the Area'. Greater transparency and consideration of which data are truly 'confidential' would facilitate the sharing of environmental data, which would greatly enhance the development of environmental baselines. Data-sharing is also important, as scientific knowledge should constitute a part of the Common Heritage of Mankind. We would encourage the Authority to consider establishing a public register of environmental baseline data, safety data, contract applications, EIAs, licencing decisions and annual reports (p79).
- *Recommendation 16:* Producing a record of decisions taken at each Council session with a timetable for them to be carried out would facilitate the Authority's move towards greater transparency, accountability, and could further engage stakeholders.
- *Recommendation 17:* Making the work of the LTC more transparent is an important consideration; opening up the LTC meetings more frequently, in particular to Observers, would increase both transparency and stakeholder engagement. DOSI welcomed the second open LTC session during the 22<sup>nd</sup> ISA Assembly; however, we would encourage that such open meetings be pre-determined in the LTC's agenda, to allow for wider planned external participation.
- *Recommendation 19:* Establishing an Inspectorate, as envisaged in UNCLOS, would enable the work of contractors to be effectively and independently monitored, including adhering to any environmental regulations that may be issued by the Authority. The Inspectorate could also be involved with reviewing environmental impact assessments (EIAs) to ensure compliance with specific requirements.
- *Recommendation 21:* A review of required skills and available staff expertise within the Secretariat would be exceedingly timely, considering the advent of exploitation. In the effort to share environmental and safety data, a Data Manager would be beneficial, whilst a move towards greater transparency would be aided by a

Communications Officer. Progress has already been made on data management by the inclusion of a Data Analyst and Data Entry Assistant within the Secretariat in the 2017 – 2018 ISA Budget. Any further review of expertise within the Secretariat should consider the Review's suggestion of establishing an Environmental Division and a Legal and Technical Division within the Secretariat. Future reviews of required skills could be aided by stakeholder engagement, including the scientific community; DOSI would be willing to offer assistance in such a review.

- *Recommendation 26:* Providing States Parties nominating experts for the LTC with a strategic plan for the Authority highlighting expertise priorities would be useful to help ensure an appropriate range of expertise is retained within the LTC.
- *Recommendation 28:* The practicality of creating sub-committees/other commissions and setting up an independent Inspectorate should be strongly considered. We would particularly support establishing additional groups (e.g. Scientific and/or Environmental Committees) within the LTC, with experts in specific fields to help reduce the technical workload of the LTC. External contractors could also assist with this technical work, as could greater engagement with the scientific community. Each of these proposed measures would increase stakeholder participation, and by distancing the technical work of the LTC from confidential contractor information, have the potential to increase data-sharing and general transparency.
- *Recommendation 34:* As per Recommendations 6, 19 and 28, we agree that attention should be given to the formulation of a regulatory body or Inspectorate.
- *Recommendation 36:* As per Recommendations 19, 28 & 34, we agree that the Authority should consider solutions to address the workload of the LTC.
- *Recommendation 37:* As per Recommendation 21, we agree that the structure of the Secretariat should be reviewed, in particular the inclusion of an Environmental Division and a Legal and Technical Division. How these two new divisions would interact with, and complement, the proposed Environmental and Scientific Committees within the LTC should be considered.
- *Recommendation 40:* Employing a dedicated Communications Officer within the Secretariat would aid moves towards greater transparency. It would also help to disseminate information more broadly on deep-sea mining and on the role the Authority plays in regulating mining impacts and enforcing environmental protection measures. Open communication, particularly with stakeholders and the public, will become increasingly important as exploitation succeeds exploration. The 2017 – 2018 ISA Budget does not currently provide for this post but we acknowledge the Authority's consideration of the issue through commissioning 'Discussion Paper 3: Developing a Communications and Engagement Strategy for the International Seabed Authority to Ensure Active Stakeholder Participation in the Development of a Minerals Exploitation Code'.
- *Recommendation 44:* Alternative hosting arrangements, in order to facilitate further stakeholder participation, should be encouraged. In particular, the use of video-conferencing and other technology could

allow participants to engage remotely with the sessions in cases where travel support is limited. Such measures would also have the advantage of increasing transparency.

- *Recommendation 46:* As per Recommendation 12, we support the development of a policy on transparency and re-consideration of confidentiality.
- *Recommendation 47:* As per Recommendations 12 & 46, we agree that non-confidential information should be shared widely and be readily accessible.
- *Recommendation 48:* As per Recommendation 17, we agree that measures to increase the transparency of the LTC should be considered.
- *Recommendation 49:* As per Recommendation 21, we agree that investment is needed to support further data management and data-sharing mechanisms.
- *Recommendation 50:* Transparency should also be considered during the development the benefit sharing regime and finance provisions within the Regulations for Exploitation.

Overlap between the Recommendations: whilst the recommendations are on the whole concise and informative, a good number are also overlapping (e.g. 12, 46 & 47). These could be refined either to reduce the number of overall recommendations or to provide space for insertion of alternative suggestions not covered by the current list.

#### **Additional comments**

- Establishment of Regulations for Exploitation: The Authority has made considerable efforts to set the legal rights and responsibility for exploration; however Regulations now need to be established for exploitation in a timely manner. DOSI submitted a response to the May 2014 ISA Stakeholder Survey, offered comment on ‘Developing a Regulatory Framework for Mineral Exploitation in the Area’ (ISBA/Cons/2015/1) in May 2015, and will provide a commentary on the ‘Working Draft Regulation and Standard Contract Terms on Exploitation for Mineral Resources in the Area’ by the November 2016 deadline. DOSI is very willing to be engaged in any future stakeholder consultation regarding the development of these Regulations, in particular the Environmental Regulations.
- Scientific research within the Area: We strongly agree with the suggestion for the Authority to directly sponsor scientific research and to actively encourage independent scientific research and independent scientific review of data (p21 & p57 Table 8.1, section h).
- Mechanisms to refuse licences for exploitation: Developing mechanisms by which to refuse licences for exploitation where substantial evidence indicates the risk of serious harm to the marine environment merits serious consideration (p48, Table 7.1, section x). The success of such a mechanism would depend on the Authority’s ability to define and detect the risk of serious harm. DOSI members have published a paper on

this subject; Levin *et al.* (2016) ‘Defining “serious harm” to the marine environment in the context of deep-seabed mining’. *Marine Policy*, 74, 245-259.

- Involvement in the BBNJ process: We strongly support the involvement of the Authority in the intergovernmental negotiation process to develop an international legally binding instrument under the UNCLOS on Biodiversity Beyond National Jurisdiction (p26). The DOSI WG on deep-sea genetic resources, and to a lesser degree the DOSI WG on climate, are actively involved in this process.
- Determining cumulative environmental impacts: We would encourage the Authority to establish additional bilateral agreements with other bodies to determine the potential for cumulative environmental impacts, as suggested by one of the Review Respondents (p48).
- Development of Environmental Management Plans (EMP): Whilst an EMP has been developed for the CCZ, plans have not been developed for other seabed areas. However, DOSI acknowledges that progress is being made towards development of an EMP for the Mid-Atlantic Ridge (SEMPIA) by the Authority and other stakeholders, including DOSI. We agree that EMP development for other regions would be required for the LTC to fulfil its obligations of providing recommendations to the Council on protection of the marine environment (p62, Table 9.1, section e).
- Development of an Environmental Monitoring Programme: There is an urgent need to develop the structure for an Environmental Monitoring Programme prior to exploitation. We agree that the Authority has not yet met this obligation (p62, Table 9.1, section h), however we hope that a programme will be developed in concert with the Environmental Regulations for Exploitation.
- Call for a Strategic Plan: We agree with the Review’s call for the Authority to develop a Strategic Plan (p73). This could be important in terms of setting out how the Authority will address environmental protection measures, including regional (strategic) environmental plans, environmental baseline requirements and mechanisms for monitoring contractors’ activities and enforcing contractors’ activities.
- Distribution of NGO reports within the Authority: We are concerned that the Review was unable to determine whether written reports by NGOs were distributed to States Parties, and that it was not usual for NGO reports to be included as documents for consideration by the Assembly (p56). We would seek clarification on the routes Observers can take to provide information to the Authority.
- Monitoring of marine technology: The Interim Report states that the Authority has not undertaken any significant work to monitor the development of marine technology relevant to deep-sea mining (p27) but goes on to rate the Secretariat as having a satisfactory performance (green; Table 8.1, p57) relating to the acquisition of scientific knowledge and monitoring of the development of marine technology. This would benefit from clarification within the Review.



The views in this commentary were provided by the following DOSI Deep-sea Mineral WG members;

- Rachel Boschen, University of Victoria, CANADA
- Jennifer Le, Scripps Institution of Oceanography, USA
- Torsten Thiele, Global Ocean Trust, UK
- Phillip Turner, Duke University, USA
- Yao Zhou, University of Wisconsin, USA

This commentary is endorsed by the following DOSI members: -

*DOSI Executive Committee;*

- Lisa Levin, Scripps Institute of Oceanography, USA
- Elva Escobar, Universidad Nacional Autónoma de México, MEXICO
- Maria Baker, University of Southampton, UK
- Kristina Gjerde<sup>1</sup>, International Union for Conservation of Nature, USA

*DOSI Advisory Board;*

- Verena Tunnicliffe, University of Victoria, CANADA (DOSI Deep-sea Minerals WG Lead)
- Jeff Ardron<sup>2</sup>, Commonwealth Secretariat, UK
- Erik Cordes, Temple University, USA
- Bronwen Currie, National Marine Information and Research Centre, NAMIBIA
- Eva Ramirez-Llodra, Norwegian Institute for Water Research, NORWAY
- Ashley Rowden, National Institute of Water & Atmospheric Research, NEW ZEALAND
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<sup>1</sup> IUCN provided input into the Article 154 Survey

<sup>2</sup> J. Ardron provided input into the Article 154 Survey