

Article 154

Periodic Review of the International Seabed Authority

Additional Comments

Comments to the Article 154 Interim Report

Thanks to the Staff Association for providing an opportunity to staff members to actually read related documents and be able to make comments that hopefully will contribute to the better functioning of the Secretariat.

When Mr Odunton sent an email on July 18 with a proposed document containing the 'Comments by the Secretariat', it caught me by surprise as I had not been kept abreast of the whole review exercise (no more than making arrangements for lunch and coffee breaks). Also, there was a general meeting with the consultants and I unfortunately did not participate, so I was not aware of what had been said there. Further, there was no formal or informal communication after the visit from the Consultants encouraging general service staff to discuss or express opinions about the work of the Secretariat.

Today I looked at the questionnaire with every intention to complete it, but to be honest I have not enough knowledge of the work intended for the Secretariat to actually comment on its performance. Personally, I don't think that any General Service staff is in a position to provide substantial comments at the level that the Interim Report requires through this questionnaire. I say this for the simple reason that very few people, if any, in the general service level 1) is aware of key information regarding the substantial work of the Authority and its organs; 2) has actually being instructed to read or has taken the initiative to read selected text from the Convention and the Implementing Agreement to learn about the work of the organization; 3) has received proper orientation upon joining the organization (or receiving updates) regarding the work of the Authority and the functions of the Secretariat; 4) has participated in any workshops or seminars that could provide substantial information about the work of the Authority; 5) is encourage to read the documents issued during the Conference; 6) is invited to a post-conference meeting to receive information about the most important decisions reached at the Conference. Basically, as general service staff we are not informed and we are not invited to express our opinions.

Reading the "Performance by the Secretariat" section of the Interim Report, has allowed me to get a good insight about what are perceived as successes and challenges for the Authority by the different bodies and personal input. I found it very informative and clearly written. The different points of the external review are easy to understand and they are well supported with information. It was interesting to read comments in item 5 about attendance. I believe that to fulfil the responsibility for servicing the meetings of the organs of the Authority, we can contribute to a better participation by making of Jamaica a must go destination by 1) improving negotiations with the host government (as indicated in the report) 2) revise year to year the logistics as to seek improvement (detach from "it is always done this way"); 3) making further efforts to include more information and facilities available to our delegates. Perhaps, we are to be reminded that it is thanks to the Member countries that we do have a job and that our responsibility is to make their work and visit to Jamaica both productive and enjoyable.

As per the internal review, I think it is assertive in its comments regarding issues like the workload, communication within the Secretariat and the information on the management of the budget. It goes without saying that any lack of vision, planning, management strategy, or communication policy at the top level of the organization will inevitably be reflected in the work of the general service staff. We are asked to learn our functions as stated in a job description, but we are not encouraged to see the Big Picture of the relevant and critical role of the Authority at the international level or see our individual jobs within the context of the general goals and functions of the organization. The result of this is an obvious lack of team effort. As far as I see, we have not been taught or asked to 1) work together; 2) understand or care about the work of the other departments; 3) bear in mind the fact that we are ONE organization with ONE purpose.

At some point motivation is also commented on the review. I think is worth mentioning that the limited possibilities of professional advancement within the organization for general service staff may affect motivation and willingness to go beyond the minimum requirements of the job, especially after ten years doing the same work as it is the case for some. If an strict process of performance evaluation and revision of responsibilities were done at least once every two years, it would allow for post re-classifications to suit the needs of the organization and maybe serve as a tool to consider promotion within the organization before hiring people from outside. In my view, this would increase motivation from general service staff to improve performance. Also, evaluating the flow of work within the different units of the organization would help solve the workload issue and facilitate the identification of the additional posts/functions required.

The Staff Association is asking for feedback to complement the Comments by the Secretariat but I believe that, for the reasons indicated above, I cannot make substantial comments at this time for that purpose. But I welcome the idea of us being more involved in the work of the Secretariat. I believe that what would greatly contribute to the work of the general service (as well as professional staff) of the Secretariat is that, sooner than later, the Review of Art 154 serves to substantiate a clear vision/way forward for the Authority (which is basically the main reason for the Review). Once there is a clear strategy on how to improve performance and communication within the Secretariat, the information then can be passed on to all staff members, using appropriate channels and every medium possible (memos, informal meetings, seminar, etc.), with clear action plans and expectations, and including follow up meetings to review progress. There is always room for improvement but things will not get better unless there is a genuine willingness to go deep into the issues that require attention.

We are all interesting, capable and unique pieces of a puzzle currently scattered all over the table! It is my belief that if we are shown the whole picture, we might just quickly learn how to fit together.

Thanks again for the opportunity to express my personal views.

Comments on the Article 154 Interim Report

Performance of the Secretariat

8.1 External Secretariat review

8.1.1 Structure and efficiency

It is noted that a significant number of respondents agreed that the Secretariat efficiently provided support to the organs of the Authority. In the draft Exploitation Code, new teams or bodies are suggested to be set up to meet challenges resulted from the potential exploitation of the mineral resources in the Area. Anyway, even at the current exploration phase, an Inspectorate might also be necessary to supervise the exploration and environmental work conducted by contractors against their plans of work programme. More efforts should be done by the Secretariat on preparation of technical papers, improvement in timing of notifications, record of decisions made by organs of the Authority and a strategic approach to data handing.

8.1.2 Funding

The Secretariat should take note of the call for a reorganization to streamline its operations and focus the resources where most needed.

As for Recommendation 20, “Discussions should be held with the member States with a view to increasing financial support for the Secretariat”. Actually, such discussions have been held every year during the meetings of the Council and Assembly. If the budget item is reasonable and practical, there seems no difficulty to get the approval of the Council and Assembly. Therefore, preparation of the budget should be improved in a more persuasive way, in particular keeping in mind of the priorities and required resources for the next 3-5 year work programme and long-term development of the activities in the Area.

8.1.3 Functions

Recommendation 21 should be welcomed. The Secretariat needs additional staff covering expertise particularly in mining law, data management and public communication. More attentions should be paid to the difficulties in recruiting or maintaining specialist professional staff. More resources should be allocated to the capacity-building of the staff members.

The role of the New York Office should be enhanced to forge better connections to the work of the United Nations. Professional staff members should be given more opportunities to attend international workshops and seminars, particularly of legal and technical nature. Further improvements to the website of the Authority are required to meet the needs of potential stakeholders.

As for functions of the Enterprise, Recommendation 22 could be accepted, particularly the Director-General should be appointed. The studies requested by the Council should be completed in a timely manner and the operation of the Enterprise could be kept on the agenda of the Authority.

8.2 Internal Secretariat review

8.2.1 Secretariat workload

The increasing workload of the Secretariat should be further analyzed and where appropriate, shared as reasonably as possible between staff members or by recruiting additional staff, such as a dedicated training officer as suggested in Recommendation 23.

8.2.2 Communication within the Secretariat

The Secretariat should make more efforts to promote internal communication and transparency, and for this purpose, Recommendation 24 could be considered.

8.2.3 Management of budgets in the Secretariat

In this respect, the Financial Regulations of the Authority have been or should be followed, including regulation 10 on internal control. In this respect, Recommendation 25 seems to be a technical management problem, which could be deleted from the report or be changed to identify some requirements on better prepared budget.



No. 2016/134

The Permanent Mission of Australia to the United Nations presents its compliments to the International Seabed Authority and has the honour to refer to Note No. 205/16 of 15 August 2016 regarding the Interim Report of the Periodic Review of the International Seabed Authority pursuant to Article 154 of the United Nations Convention on the Law of the Sea (UNCLOS), and notes the opportunity to provide written observations on the interim report in accordance with ISBA22/A/11.

The Permanent Mission of Australia to the United Nations has the further honour to submit Australia's response as an attachment to this Note.

The Permanent Mission of Australia to the United Nations avails itself of this opportunity to renew to the International Seabed Authority the assurances of its highest consideration.



NEW YORK
14 October 2016

Comments by the Government of Australia on the Interim Report of the Periodic Review of the International Seabed Authority (ISA) pursuant to Article 154 of the United Nations Convention on the Law of the Sea (UNCLOS)

October 2016

Introduction

1. Australia has considered and welcomes the interim report by Seascope Consultants Limited, dated 15 May 2016, which was tabled during the 22nd session of the International Seabed Authority (ISA) and pursuant to article 154 of the United Nations Convention on the Law of the Sea (UNCLOS).
2. Australia has also considered the comments on the interim report by the Review Committee, the Legal and Technical Commission (LTC), the Finance Committee and the Secretariat, the oral report by the Chair of the Review Committee and the deliberations of the Assembly under agenda item 9 of the 22nd Session of the ISA in July 2016.
3. Australia welcomes this further opportunity to submit written observations on the interim report.

Comments on the interim review report

4. This review of the Authority's operations, pursuant to Article 154 of UNCLOS, is urgently needed. While the ISA has performed well, its working methods and processes need to be optimised, to assist in the Authority's overall efficiency and effectiveness.
5. This is particularly so at a time when the Authority and its subsidiary bodies are facing a mounting workload, and the move towards exploitation of the deep seabed.
6. The interim report provides some useful recommendations for ensuring that the Authority will be "fit for purpose" for the next phase of its work. Some of these recommendations can, and should, be put into practice in the short term while others are longer term improvements.
7. To assist States Parties in considering the value and timing of implementation, Australia would encourage the reviewers to include some prioritisation of the recommendations in the revised interim report.
8. The timing and resourcing needs for adoption of various recommendations will need to be carefully considered, as part of the ISA's forward planning. Any recommendations with financial implications or requiring legal or technical expertise should not be adopted without prior consideration by the Finance Committee or LTC respectively.

The regime for exploration and exploitation of seabed minerals in the Area

9. Australia places a high priority on the LTC's agreed work on exploitation regulations. We echo the comments by the Review Committee and reiterate that while work continues in developing the draft mining regulations, we also need to devote considerable attention to developing the accompanying environmental regulations. One cannot proceed without the other.
10. Australia takes this opportunity to continue to urge the ISA to proceed with caution, based on science, in managing the mineral resources of the Area while ensuring that the marine environment is protected from any harmful effects which may arise from mining exploration and exploitation.
11. We would welcome some consideration in the final report as to how institutional improvements in the ISA could be taken up concurrently with the development of the mining code – and be mutually supportive of that work.

Strategic planning

12. Clearly prioritised deliverables are required for an effective Authority. The LTC in particular must be adequately resourced to deliver on its work plan.
13. The Council is well placed within the ISA to highlight the issues which should be taken forward over the coming year and make specific requests of the LTC and Secretariat (**Recommendation 16**). Australia supports the strategic decisions taken by the Council for the past three years, including most recently ISBA/22/C/28. Such decisions improve the coherence of work across the Authority, and enhance the cooperation between the organs of the Authority. We particularly welcome paragraph 16 of ISBA/22/C/28 which requests the Secretary-General to update the Council on implementation of the work program, and requests that such an update should be placed on the Council's agenda as a standing item.
14. Australia is supportive of the proposal (in **Recommendation 31**) to develop a strategic plan to guide the Authority's activities, with budgeting decisions based on agreed priorities. The first strategic plan should reinforce the existing priority on exploitation regulations and scale up work on environmental management.
15. We suggest that the Secretary-General could prepare an initial high-level document, with the LTC, the Finance Committee and the Secretariat invited to comment. A first draft could be considered and refined by the Council. The initial draft should consider how the strategic plan could guide budgeting decisions, according to a programme of work (**Recommendation 32**).
16. A timetable for implementation, and review, of the strategic plan would be beneficial.

Capacity and enhanced working methods

17. To support a strong strategic approach to the ISA's work, we can see the need to improve the human capacity and working methods of all organs and subsidiary organs of the Authority.

18. Australia supports proposals to reinforce skills and experience in the Secretariat to support the ISA's strategic priorities (**Recommendations 37 and 38**). We think increasing the level of environmental expertise in the Authority, especially in the LTC and the Secretariat (as proposed in **Recommendation 9**), is necessary to support crucial work on the protection and management of the marine environment. Australia places a high priority on such work by the Authority, and we encourage the Authority to consider a range of methods to improve its capacity to meet the environmental challenges of the work ahead.
19. In the nomination of LTC members, we support a strong focus on appropriate expertise, greater continuity, a focused remit and alternative modes of working (**Recommendations 26, 27, and 28**).
20. In order to keep up with growing workload and data capacity needs, the storage, use, analysis and communication of data and information needs to be reviewed and addressed with urgency (**Recommendation 49**).
21. We support revisiting the structure and timing of the work of the Authority's main organs (as described in **Recommendation 44**) to encourage greater participation, and to enable the LTC to work most effectively (**Recommendations 26, 27, and 28**).

Transparency

22. Australia would welcome a list of decisions of the Council with a timetable for addressing them (**Recommendation 16**). This would enhance transparency and ensure that issues are not forgotten.
23. Increasing LTC transparency (as proposed in **Recommendation 17**) would provide opportunities for experts and stakeholders to input to ongoing work, in a way that benefits all. Nevertheless, the Authority must carefully consider and discharge its obligations for treating commercially confidential matters. To this end, Australia also looks forward to the timely preparation of the stakeholder consultation and participation strategy by the Secretariat, as noted in the LTC's summary report during the 22nd session of the ISA.

Communications

24. A dedicated communications strategy (**Recommendation 40**) would also improve transparency and levels of engagement. The details of all workshops should be clearly published on the ISA website in advance. Past decisions of the Authority should be listed by title as well as reference number.

Advisory opinions

25. While Australia supports the Authority seeking guidance as appropriate, careful consideration would be required within the Authority before seeking an advisory opinion on issues relevant to questions of law from the Seabed Disputes Chamber (as proposed in **Recommendation 33**).

Next steps

26. Australia looks forward to the delivery of the draft final report by 15 April 2017.

**Written observations from China on the interim report of
the Periodic Review of the International Seabed Authority
pursuant to UNCLOS Article 154**

3. Future contracts should be prescriptive with standard terms and conditions and detailed plans of work that set clear objectives, which can be monitored and enforced.

Given that all the three Exploration Regulations for different mineral resources already include standard clauses for exploration contract with detailed contents and clear objectives, it seems unnecessary to make this recommendation, which could be removed.

4. Clarification of the definition of 'developing State' as applied by the Authority would be helpful to satisfy Articles 148 and 150.

Pursuant to the provisions of UNCLOS, the Authority does not have the mandate to define the term of “developing state”. In addition, this issue is beyond the scope of the terms of reference of the Review Process. The Review Committee also doubts that the Review Process would be the appropriate forum to elaborate such a definition. This recommendation is proposed to be deleted.

5. Carry out the study of relevant issues relating to the operation of the Enterprise requested in 2013 by Council of the Secretary-General, including the failure to reappoint a new Director-General and extend any such study to include an analysis of operation of the reserved area.

The Enterprise has not yet been established. At present, the conditions of its establishment are not available. It's premature to touch upon the issue of appointing the Director-General of the Enterprise.

Nevertheless, it is desirable to put in place an *ad hoc* Director-General of the Enterprise. In accordance with the Exploration Regulations, if a developing state or any entity sponsored by it wishes to apply for approval of a plan of work for exploration in the reserved area, the issue of whether the Enterprise intends to carry out activities in the same area will arise. Appointing an *ad hoc* Director-General of the Enterprise entrusted to answer the above mentioned inquiry will facilitate a timely feedback given by the Authority to the applicant.

6. An independent review of enforcement and oversight capabilities of the Authority is needed to inform the setting up of an independent regulatory body (Inspectorate) .

The current regime of the Authority has effectively discharged the function of inspection over the seabed activities. Periodic Review itself reflects the very nature of supervision function. There is no need to set up an independent regulatory body.

Pursuant to Article 3 of Section 1 of the Annex to the 1994 Agreement, *the setting up and the functioning of the organs and subsidiary bodies of the Authority shall be based on an evolutionary approach, taking into account the functional needs of the organs and subsidiary concerned in order that they may discharge effectively their respective responsibilities at various stages of the development of activities in the Area.* Therefore, prior to the commercialization of seabed exploitation, the setting up and

functioning of the organs of the Authority should stick to the principle of cost-effective and evolutionary approach.

7. The system of reviewing annual reports and approved plans of work made by contractors should be reviewed in the context of LTC workload and the feasibility of alternatives considered, such as requiring alternate short and long reports in alternate years, with 50% of contractors producing short reports each year. Consideration should be given to maximum report length or page limits for annual reports. The review of contractors' reports could be assigned to an independent regulatory body.

Requiring the contractors to deliver alternate short and long reports in alternate year will be conducive to reduce the workload of LTC, to improve the efficiency of its work. In this regard, this recommendation warrants further exploration.

In accordance with the Regulations, LTC is the competent organ to review the contractors' report. it is not appropriate to set up another independent regulatory body.

8. Consideration should be given to establishing the Economic Planning Commission sufficiently ahead of the advent of commercial seabed mining and/or identifying economic issues of common concern that require further study.

Pursuant to Article 4 of Section 1 of the Annex to the 1994 Agreement, *the early function of the Authority upon entry into force of the Convention shall be carried out by the Assembly, the Council, the Secretariat, the Legal and Technical Commission and the Finance Committee. 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. This clear provision shall be abide by.

9. The levels of expertise in both the LTC and the Secretariat required to incorporate applicable standards for the protection and preservation of the marine environment should be increased as appropriate.

The work of the Authority with respect to the protection of marine environment should be recognized. The three Exploration Regulations have separate part for *the protection and preservation of the marine environment*. LTC has issued *Recommendations in its guidance of contractors for the assessment of the possible environment impacts arising from the exploration for marine minerals in the Area*. The Council has established *the environmental management plans*. Furthermore, the Authority has also held series of workshops on environmental protection. The above-mentioned activities reflect the great importance attached to the environmental protection by the Authority. It is recommended to improve the professional level of both the LTC and the Secretariat in a comprehensive manner, including in the fields of mineral exploitation and environmental protection.

10. Consider how to seriously engage with the scientific community and relevant deep-sea science projects and initiatives.

The Authority has done very well in this aspect.

11. Whilst the onus to develop relevant marine technology should rest with the contractors the Authority should accelerate the specification of agreed performance standards.

The relevant technology is developing. It is too early to draw up standards at this stage.

12. The Authority should be proactive in an emerging discussion about transparency, including a review of the confidentiality clause in contractors' contracts, and should consider revising the Regulations regarding confidentiality.

Issues relating to confidentiality are stipulated in the provisions of UNCLOS, 1994 Agreement, Exploration Regulations and etc. These provisions should be followed and respected. International common standards and practices may serve as necessary reference as regards how to implement the relevant confidentiality provisions and enhance the transparency of the operation of the Authority.

14. Consider extending the period of office for the President of the Assembly to two or three years.

Paragraph 4 of Article 159 of UNCLOS stipulates that *at the beginning of each regular session, it shall elect its President and such other officers as may be required*. Therefore, we are not in favor of the idea to extend the period of office for the President of the Assembly.

15. Consider options to improve quorum of the Assembly, including the option of meeting biennially or at a

different location.

In accordance with Article 159 of UNCLOS, *the Assembly shall meet in regular annual sessions. Sessions shall take place at the seat of the Authority unless otherwise decided by the Assembly.*

17. Consider making the work of LTC more transparent, limiting closed sessions to commercial inconfidence matters only.

In conformity with the confidentiality rules, LTC could be encouraged to enhance its transparency by having more open sessions.

18. As the workload increases, the Council should consider meeting twice per year. This should recognise the value of synergy between LTC and the Council (as well as the value of opportunities for non-members of the Council to observe and make interventions concerning the Council's business) and therefore relate any additional meetings of the Council to appropriate meetings of LTC.

It is recommended to increase the working efficiency of the Council rather than the number of sessions.

19. Consider the establishment of an independent regulatory body or inspectorate.

Please check the comments for Recommendation 6.

20. Discussions should be held with the member States

with a view to increasing financial support for the Secretariat. This could include allowing the Authority to ring fence the additional fees levied on contractors, with the aim of employing more professional staff to administer their increasing workload rather than offsetting member States' contributions.

The Secretariat should rationally plan and allocate its fund, respect the budget adopted by the Assembly and respect the validity of the exploration contracts signed with contractors.

21. A review of required skills and available staff expertise should be carried out for current and future predicted activities. Any identified skills gaps should lead to the creation of new posts for which funding should be sought through the normal channels or fees imposed on the contractors. Forward planning should identify additional new skills and further posts that will be required. Secondments should also be investigated. The GESAMP model of consultative scientific advice would also be worth investigating.

Please check the comments for Recommendation 20.

22. A consultation process on how the Secretariat should perform the functions of the Enterprise going forward should be encouraged with all Member States, including appointment of a Director General.

Please check the comments for Recommendation 5.

26. States Parties nominating experts for LTC should be informed by a strategic plan for the Authority that identifies a roadmap of when key activities will be undertaken and highlights expertise priorities. It may also be appropriate to review membership rules to maintain an appropriate expertise mix.

In respect of the composition of LTC, it is recommended to strengthen the qualification examination for the LTC candidates, to ensure that they possess appropriate qualifications specified in Paragraph 1 of Article 165 of UNCLOS. Attendance rates and contributions should be evaluated properly for LTC members seeking for reelection.

28. Consideration should be given to restricting and re-focusing the remit of LTC. Alternative ways of working (e.g. more frequent meetings) should be considered as part of this exercise as well as the practicality of creating sub-committees, working groups or other Commissions and the setting up of an independent Inspectorate or enforcement body that could relieve the LTC of part of its work relating to regulation and enforcement.

We support the LTC in creating sub-commissions and working groups to improve its working efficiency. But we object to set up independent inspectorate or other enforcement bodies to interfere in the mandate of LTC.

31. The Secretary-General (with support from 'Friends of the S-G' e.g. Presidents of both the Assembly and the Council) should present an initial draft Strategic Plan to the Council as soon as possible. The Council could then refine a first draft.

The Secretariat should strengthen the studies of current global metal markets and deep-sea mining prospects, develop a working strategy in a scientific, reasonable and objective manner, to avoid eagerness for quick results.

33. As part of the Plan the Council should seek advisory opinions to address higher-level legal

issues that the Authority must come to some conclusion about on going forward (developing States definition, monopolization, common heritage, effective control, dominant position).

We are not in favor of this recommendation. On one hand, the clarification of the definition of “developing state” exceeds the terms of reference of the Review Process. On the other hand, the questions of monopolization and effective control could be resolved through consultations among states parties. All of these issues are not simply legal matters in nature, which should be addressed in specific cases rather than to seek abstract advisory opinions.

34. Attention should be given to the formation of a regulatory body or Inspectorate.

Please check the comments for Recommendation 6.

35. The Council should consider the timeliness of establishing the Economic Planning Commission as a subsidiary organ independent of the LTC.

Please check the comments for Recommendation 8.

36. Solutions to reduce the workload and possibly the mandate of the LTC need investigation.

The mandate of LTC is clearly stipulated in UNCLOS and the 1994 Agreement as well as the Exploration Regulations, which should not be derogated. We are supportive of reducing the workload of LTC.

45. The Authority should also review its interpretation arrangements including, for example, those established by other international organisations such as the Food and Agriculture Organisation.

While following the cost-effective principle, all six working languages of the UN should be provided in order to facilitate the work of the Authority. Some important working documents should be translated into all six versions. Only English version is not desirable.

46. The Authority should develop a policy on transparency and conflicts of interest and should consider revising the Regulations to set standards for confidentiality.

As to the issue of transparency, LTC has pointed out in its comments that this issue is actually due to the obstructed communication of information, rather than the defect of transparency of the Authority.

Regarding the conflicts of interest, relative rules of LTC and Financial Committee have stipulated on the impartiality of members of LTC and Finance Committee. It seems unnecessary to issue new policies about the conflicts of interest. Finance Committee has also indicated in its comments that there does not exist such problem within the Committee.

We prefer not to revise the Regulations for setting up new standards on confidentiality.

47. Non confidential information should be shared widely and should be readily accessible.

It is suggested to share the information with reference to the international common standards and practices based on the existing confidentiality provisions.

48. Transparency in the LTC needs to be addressed with urgency, and consideration should be given to opening up the LTC meetings more often.

Please check the comments for Recommendation 17.

Comments on the Interim Report of the Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154

Wu Hui, Zhang Dan^{*}

Comments on Recommendation 1: In accordance with the United Nations Convention on the Law of the Sea (UNCLOS), entities who enter into the Area for exploration and exploitation activities need to meet two requirements: first, they must either be nationals of the contracting States, or under effective control of their nationals; and secondly, they must be sponsored by the State parties. The Advisory Opinion on the Responsibilities and Obligations of State Sponsoring Persons and Entities with respect to activities in the Area, adopted by the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (hereinafter referred to as the Advisory Opinion), states that the Sponsoring States, in fulfillment of its obligation to ensure compliance, should enact laws and regulations and take administrative measures. At the same time, the Advisory Opinion also emphasizes that the scope and extent of these legal, regulatory and administrative measures depend on the legal regime of the sponsoring State. It is true that, in the context of the Convention, the legal, regulatory and administrative measures of the sponsoring State in the protection of the marine environment can not be less stringent than the rules and measures adopted by the Authority and can not be less effective than international rules, regulations and procedures. It is clear that the International Seabed Authority(ISA)'s research and evaluation of the legislative content of the

^{*} Dr. Wu Hui is Vice President and Professor of the University of International Relations in China. The author may be contacted at wuhuini@uir.cn/Address: University of International Relations, 12 Poshangcun, Haidian District, Beijing, China, 100091. Mr. Zhang Dan is Associate Researcher of China Institute for Marine Affairs (CIMA). The author may be contacted at: zhangdan@cima.gov.cn/Address: China Institute for Marine Affairs (CIMA), 3 Maguanyingjiayuan, Fengtai District, Beijing, China, 100161.

sponsoring States, including if they have brought the sponsored entities under fully control, is inappropriate and without the basis of international law. ISA has no right to make a substantive assessment of the legislation of sovereign States.

Comments on Recommendation 4: Effective participation of developing countries in activities in the Area and sharing of the benefits obtained from activities in the Area is an important aspect of the principle of common heritage of mankind. However, confirmation and clarification of the definition of developing countries is an extremely complex issue. Given the workload and the actual situation of ISA, it is obviously unrealistic to carry out this work. The authority of ISA can not be guaranteed even if it puts forward a clear standard for developing countries. With regard to the standards of a developing country, reference should be made to relevant international practice, in particular the practice of the relevant bodies of the United Nations.

Comments on Recommendation 6: Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (the "1994 Implementation Agreement") provides that: " The setting up and the functioning of the organs and subsidiary bodies of the Authority shall be based on an evolutionary approach, taking into account the functional needs of the organs and subsidiary bodies concerned in order that they may discharge effectively their respective responsibilities at various stages of the development of activities in the Area. " At present, activities in the Area are mainly exploration. The Legal and Technical Commission (LTC) has achieved effective supervision over the exploration activities in the Area through reviewing the 15-year exploration plan (including the plan of activities for the next five years), reviewing the annual report

of the contractors and reviewing the implementation of the exploration plan periodically. It should be said that the existing mechanisms and working models of ISA have effectively fulfilled the monitoring and management of the exploration activities in the Area. Therefore, the establishment of a regulatory body and the establishment of inspectors to inspect activities in the Area are not necessary in the exploration phase.

Comments on Recommendation 7: In order to increase the efficiency and transparency of the review of the contractor's annual report, it is necessary and acceptable to make appropriate reform of the modalities of review of the LTC and the annual report form of the contractor. It is important to note that the Convention expressly authorizes LTC to monitor activities in the Area at the request of the Council. The function of the LTC to review the annual report of the contractor is therefore clear. As an organ of the Council, LTC performs its functions and reviews the contractor's report, which itself is independent and does not require the establishment of a new regulatory body. The establishment of any new body would require a clear mandate of the Convention, and must be consistent with the provisions of the Convention.

Comments on Recommendation 8: The 1994 Implementation Agreement clearly states that "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.." At the same time, the 1994 Implementation Agreement also requires that " the setting up and the functioning of the organs and subsidiary bodies of the Authority shall be based on an evolutionary approach, ... in order that they may discharge effectively

their respective responsibilities at various stages of the development of activities in the Area.". At present, the timing of commercial exploitation of resources is not yet clear. The establishment of the Economic Planning Commission and the related preparatory work should follow the "evolutionary principle" and should not be rushed.

Comments on Recommendation 12: The Convention provides in principle the confidentiality and exclusivity of information and data submitted or transferred to the Authority by the contractor. The three exploration regulations adopted by the Authority have further refined the confidentiality of data and information and procedures to ensure confidentiality. In the case of environmental data and information, the regulations of the Authority specifically provide that 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 confidential. The Authority's Regulations also provide for a system of periodic review of confidentiality, that is, ten years after the date of submission of confidential data and information to the Authority or the expiration of the contract for exploration, whichever is the later, and every five years thereafter, the Secretary-General and the contractor shall review such data and information to determine whether they should remain confidential. It should be noted that the above provisions of the Regulations of the Authority are in full conformity with the provisions of the Convention and are in full conformity with internationally recognized commercial practices. It is essential to encourage contractors to further share environmental data, but there is no need to amend the provisions of the regulations relating to confidentiality.

Comments on Recommendation 15: Article 159 of the Convention specifies the time and place for the convening of the Assembly. " The Assembly shall meet in regular annual sessions and in such special sessions as may be decided by the Assembly, or convened by the Secretary-General at the request of the Council or of a majority of the members of the Authority ", " Sessions shall take place at the seat of the Authority unless otherwise decided by the Assembly" . Therefore, we must adhere to the provisions of the Convention, and convening of annual meetings and the choice of holding meetings in other places would require the Assembly to decide otherwise.

Comments on Recommendation 17: As a body of the Council, that the LTC convenes closed-door meetings is in conformity with general international practice. The Rules of Procedure of the Legal and Technical Commission adopted by the Council expressly provide that "meetings of the Committee shall be held in private unless the Committee decides otherwise. The Commission shall take into account the desirability of holding open meetings when issues of general interest to members of the Authority, which do not involve the discussion of confidential information, are being discussed." The LTC should be encouraged to consider actively whether to hold public meetings on specific issues, based on the quality and efficiency of the work of the Commission. In addition, clear procedural rules should be established to ensure that members of the Authority participating in open sessions of the LTC will not impede the work of the LTC.

Comments on Recommendation 19: In accordance with the 1994 Agreement on Implementation, " The setting up and the functioning of the organs and subsidiary

bodies of the Authority shall be based on an evolutionary approach, ...in order that they may discharge effectively their respective responsibilities at various stages of the development of activities in the Area." At present, the activities in the Area are mainly exploration, and the LTC has effectively supervised the exploration activities in the Area. Therefore, there is no need to establish a regulatory body or inspectorate at present.

Comments on Recommendation 28: The functions of the LTC are expressly authorized by the Convention. In order to improve the efficiency of the work of the LTC and relieve its workload, it is useful to make appropriate changes to the specific working methods of the LTC, such as convening meetings more frequently, setting up subcommittees and working groups. However, it is important to emphasize that the change in the way the LTC works is not intended to alter the functions of the LTC. In accordance with the Convention, the review of exploration plans, the monitoring of activities in the Area and the development of appropriate rules, regulations and procedures are important functions of the LTC, and any changes in the way of work of the LTC should not derogate its functions and competencies authorized by the Convention that it should perform.

Comments on Recommendation 33: The development of strategic planning by the Authority is of great importance in defining priorities for the future mission of the Authority and ensuring the implementation of the priorities. The development and implementation of the relevant strategic plan by the Authority should not increase the additional burden on contractors. In accordance with the Convention, "the Seabed Disputes Chamber shall give advisory opinions at the request of the Assembly or the Council on legal questions arising within the scope of their

activities." That the Authority asks the Seabed Disputes Chamber to request for an advisory opinion on a particular legal issue must be expressly authorized by the Assembly or the Council and should therefore not be included in the strategic plan.

Commentary on Recommendation 34: In accordance with the Convention, the Council may " establish appropriate mechanisms for directing and supervising a staff of inspectors who shall inspect activities in the Area to determine whether this Part, the rules, regulations and procedures of the Authority, and the terms and conditions of any contract with the Authority are being complied with" .However, the establishment of such body and personnel must be guided by the " evolutionary approach" established by the 1994 Implementing Agreement, and the competences of relevant body and personnel must be subject to the provisions of the Convention. There is no real need to establish such body and personnel until resources in the Area are available for commercial development.

Comments on Recommendation 35: In accordance with the 1994 Agreement on Implementation, The early functions of the Authority upon entry into force of the Convention shall be carried out by the Assembly, the Council, the Secretariat, the Legal and Technical Commission and the Finance Committee. 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". At present, the timing of the commercial development of the resources in the Area is not yet clear and it is difficult to determine when the first development workplan has been approved, therefore, the time of establishment of an independent Economic Planning Committee is not yet ripe.

Comments on Recommendation 36: It is necessary to make appropriate changes to the work of the LTC so as to relief and mitigate the workload of the LTC with the significant increase in the workload of the LTC in recent years. However, changes in the way of work of the LTC should take into account, in particular, the opinions of members of the Commission, and should not derogate the quality of the work of the LTC. The mandate of the LTC is clearly empowered by the Convention and no change should harm the competence of the LTC.

Comments on Recommendation 42: The Convention provides that "the Assembly shall meet in regular annual sessions and in such special sessions as may be decided by the Assembly, or convened by the Secretary-General at the request of the Council or of a majority of the members of the Authority", "sessions shall take place at the seat of the Authority unless otherwise decided by the Assembly". We must adhere to the provisions of the Convention. The convening of annual meetings and the choice for holding meetings in other places require the Assembly to decide otherwise.

Comments on Recommendation 46: The Regulations of the Authority provide for the confidentiality of data and information and the procedures for ensuring confidentiality, which are in full conformity with the Convention and are in full conformity with internationally accepted commercial practices. To protect the environment in the Area, the Authority and contractors could be encouraged to further liberalize environmental data. It is not necessary to amend the provisions of the Regulations relating to confidentiality.

Comments on Recommendation 47: The Convention and the regulations of

the Authority provide for the confidentiality of data and information and the procedures for ensuring confidentiality and do not impose an obligation to enforce disclosure of non-confidential data and information. The disclosure and sharing of non-confidential data and information should be solicited widely from contractors and agencies of the Authority, based on internationally recognized commercial practices. The disclosure and sharing of non-confidential data and information shall be subject to strict procedures and avoidance of damage to the interests of the Contractor.

Comments on Recommendation 48: With regards the transparency of the work of the LTC, as stated by the Commission in its comments on this interim report (ISBA / 22 / A / CRP.3 (3)): "Some members of the Commission consider that there is misunderstanding between transparency and lack of information ". The work of the LTC is in line with general international practice. Its problems are not so much a matter of transparency, but rather of communication of information. The LTC is entitled to hold private meetings in accordance with its Rules of Procedure. The decision of the LTC to hold an open meeting would require careful consideration of the confidentiality of the relevant information, make clear the scope of the participants of the public meeting and establish clear procedural rules so as to ensure that the work of the LTC was not unduly disturbed.



**Comments on
Periodic Review of the International Seabed Authority Pursuant to UNCLOS Article 154
Interim Report**

15 October 2016

The following are written observations by the Deep Sea Conservation Coalition (DSCC) on the Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154 Interim report, pursuant to the invitation of the Assembly.¹

Transparency

We welcome the suggestions on transparency including the following recommendations. Transparency must be mainstreamed into the functioning and processes of the Authority. All subsidiary bodies should in principle be open to observers, observer engagement should be permitted and encouraged and documents under consideration by all bodies should be accessible, subject only to clearly defined exceptions of commercial confidentiality. As was noted in the Interim Report, due to lack of transparency, it is not possible to assess how well the Authority was monitoring compliance to ensure that contractors fully comply with their responsibilities. At the same time, environmental data should be released, with a presumption that data is to be released, with only clearly defined exceptions for commercially confidential information. Rules and procedures on data confidentiality need to be developed urgently.

Recommendation 12. The Authority should be proactive in an emerging discussion about transparency, including a review of the confidentiality clause in contractors' contracts, and should consider revising the Regulations regarding confidentiality.

Recommendation 17. Consider making the work of LTC more transparent, limiting closed sessions to commercial in-confidence matters only.

Recommendation 46. The Authority should develop a policy on transparency and conflicts of interest and should consider revising the Regulations to set standards for confidentiality.

Recommendation 47. Non confidential information should be shared widely and should be readily accessible

Recommendation 48. Transparency in the LTC needs to be addressed with urgency, and consideration should be given to opening up the LTC meetings more often.

¹ Decision of the Assembly regarding the interim report of the first periodic review of the international regime of the Area pursuant to article 154 of the United Nations Convention on the Law of the Sea, ISBA/22/A/11 (21 July 2016). https://www.isa.org.jm/sites/default/files/files/documents/isba-22a-11_1.pdf.

Structure/Performance of Subsidiary Organs

The following recommendations raise important issues:

Recommendation 6. An independent review of enforcement and oversight capabilities of the Authority is needed to inform the setting up of an independent regulatory body (Inspectorate).

Recommendation 19. Consider the establishment of an independent regulatory body or inspectorate.

Recommendation 26. ...It may also be appropriate to review membership rules [of the LTC] to maintain an appropriate expertise mix.

Recommendation 28. Consideration should be given to restricting and re-focusing the remit of LTC. Alternative ways of working (e.g. more frequent meetings) should be considered as part of this exercise as well as the practicality of creating sub-committees, working groups or other Commissions and the setting up of an independent Inspectorate or enforcement body that could relieve the LTC of part of its work relating to regulation and enforcement.

Recommendation 34. Attention should be given to the formation of a regulatory body or Inspectorate.

Recommendation 36. Solutions to reduce the workload and possibly the mandate of the LTC need investigation.

Recommendation 37. The Secretariat should be re-organised to properly reflect strategic priorities and any new structure determined by the Council. An Environmental Division as well as a Legal Division and a Technical Division could be envisaged.

As the ISA develops exploitation regulations, it is critical that high-level attention be given to the structure and functioning of the ISA and its organs. In particular, **there is a clear need for a Scientific and/or Environmental Committee. We support the observation in the Interim Report noting that “some Observers and Others suggested the Assembly should establish a Scientific Committee and an Environmental Committee in parallel with the development of the rules, regulations and procedures relating to exploitation in the Area.** These committees would be able to deal specifically with: 1) the regulation, monitoring and control of the environmental impacts of seabed mining, and 2) wider marine scientific issues. Some Observers and Others also pointed out the need for a compliance committee to be set up in the future to monitor exploitation activities. The establishment of such additional committees is an additional cost but could bring the benefit of reducing the LTC's workload.”

The Article 154 Review is a timely and opportune moment to engage in this discussion. Specifically, procedures for review of environmental impact assessments, hearings, obtaining independent scientific advice, and formulation of environmental management plans, as well as ongoing monitoring and review, enforcement and compliance all need to be put into place. Management of scientific research, commissioning of research when needed, and review of scientific issues will all be needed. Scientific Committees and Compliance Committees are standard in all regional fisheries management organizations, for instance.

In this regard we agree with the Comments by the Review Committee in paragraph 14 of ISBA/22/A/CRP.3(2):

“The Review Committee therefore is of the opinion that the establishment of additional committees dealing with specific aspects, such as environment, might be useful in order to generate higher interest in the work of the Assembly.”

In addition, as was noted in the Interim Report, there should be no conflating the roles of a licensing body and a regulatory body.

Science and Data

Good science, scientific information and data are crucial for environmental management. The following recommendations are important for this reason. Ongoing workshops, including those to develop regional environmental management plans, strategic environmental assessments, strategic environmental management plans and the conduct of environmental impact assessments, all depend on good science, good data and effective data management and sharing. A budget should be established for such workshops. We support the following recommendations in this regard:

Recommendation 2. Whilst contractors have been provided with a standard reporting template as of 2014 attention should be given to internal policies and procedures to enforce its use and review the quality and consistency of data gathered.

Recommendation 10. Consider how to seriously engage with the scientific community and relevant deep-sea science projects and initiatives.

Recommendation 49. Investment is needed in better data management and data sharing mechanisms.



International Seabed Authority
14-20 Port Royal Street
Kingston
JAMAICA

RE: ISA Article 154 Review: Interim Report, 15 May 2016

14th October 2016

Dear Sir/Madam,

In response to the Decision of the Assembly regarding the Interim Report of the ISA Article 154 Review (ISBA/22/A/11), as a recognised Observer to the ISA, the Deep Ocean Stewardship Initiative (DOSI) would like to submit the enclosed Commentary on the Interim Report of the Review.

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, <https://dosi-project.org>. This Commentary is provided by members of the DOSI Deep-sea Minerals Working Group and endorsed by members of the DOSI Executive Committee and Advisory Board. We consent to making the enclosed Commentary public.

We hope that the ISA will take our Commentary into consideration during the process of producing the Final Report of the 154 Review. Please contact either of us if we can be of further assistance.

Yours faithfully,

Dr Rachel E. Boschen
Prof Verena Tunnicliffe, CRC, FRSC, Lead of DOSI Deep-Sea Minerals Working Group
Department of Biology, University of Victoria
Victoria, B.C. CANADA



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 22nd 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 22nd 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 Gjerde¹, International Union for Conservation of Nature, USA

DOSI Advisory Board;

- Verena Tunnicliffe, University of Victoria, CANADA (DOSI Deep-sea Minerals WG Lead)
- Jeff Ardron², 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
- Craig Smith, University of Hawaii, USA
- Paul Tyler, University of Southampton, UK

¹ IUCN provided input into the Article 154 Survey

² J. Ardron provided input into the Article 154 Survey



Federal Ministry for Economic Affairs and Energy • D-11019 Berlin • Germany

To the
Chairperson of the Article 154 Review
Committee, Ambassador Helmut Türk
To the
Secretariat of International Seabed Authority,
Kingston, Jamaica

SWITCHBOARD +49 30 18615 0
FAX +49 30 18615 7010
INTERNET www.bmwi.de
PREPARED BY ORR Küper
TEL +49 30 18615 6383
FAX
E-MAIL buero-vb2@bmwi.bund.de
FILE No.
DATE Berlin, 14 October 2016

SUBJECT Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154-
Comments by Germany to the Interim Report presented 15 May 2016

With regard to decision ISBA/22/A/11 and the comments and deliberations made on the Interim Report during the 22nd Session of the Assembly, Germany would like to thank for the opportunity to provide further comments and observations on the Interim Report and the review process. Germany conveys the following comments and remarks in addition to the response to the Article 154 questionnaire transmitted in February 2016:

1. Methodology of the review process and the survey

Germany shares the concerns expressed in both the comments of the Chair of the Legal and Technical Commission (LTC) (ISBA/22/C/CRP.1) and the Finance Committee (FC) (ISBA/22/A/7) on the Interim Report regarding the methodology of the survey undertaken. The Interim Report seems in some parts to be based on rather few responses to the questionnaire. In the light of the importance of the review process it seems essential to base assessments and recommendations on a representative base of data and comments. Germany therefore welcomes the opportunity for State Parties and stakeholders to further comment on the report. Germany trusts that the conclusions of the Final Report will be taken only on the basis of representative findings. The Final Report should in addition explain in a transparent manner the data basis and the reasoning for its recommendations and conclusions.

STREET ADDRESS Scharnhorststraße 34 - 37
10115 Berlin
U6 UNDERGROUND LINE Station: Naturkundemuseum
S-BAHN SURFACE LINE Berlin Hauptbahnhof
Tram Invalidenpark

In general, Germany would hope that the Final Report is enriched by own expertise of consultants on management, structural and organizational aspects of international organizations instead of relying on external surveys alone.

2. Strategic planning and future vision of the Authority

Germany strongly welcomes the general recommendation in chapter 11. of the Interim Report that more strategic planning is needed by the Authority in order to be able to adequately tackle the various future issues and tasks. Strategic planning should in future be interlinked with the Authority's budgetary planning. In Germany's view this is a central finding and should be elaborated on in more detail in the Final Report. In general the review report should more focus on some core issues of the Authority.

3. Timing of Finance Committee meetings

Germany fully supports the comments made by the FC on the timing and scheduling of the FC meeting. In the light of the aim to ensure cost effectiveness of the organs and sub organs of the Authority the current timing and duration of the FC meetings are considered fit for purpose. It seems rather impractical and expensive for the FC to meet before and throughout the entire duration of the session of the Authority. The successful work of the FC in the past shows that amendments of the timing of the FC meeting are not necessary.

4. Impartiality of Finance Committee members

Germany shares the view expressed in the FC's comments that the FC membership does not raise conflicts of interest with the participation in other organs of the Authority. Since Member States provide the bulk of the funding of the Authority it seems appropriate and consistent that they should be in a position to scrutinize the way the funds are managed and make recommendations on how spending should be prioritized.

5. Conclusions and recommendations of the final report

Germany expects that any conclusions or recommendations of the Final Report of the Article 154 review that would – in the framework of the Convention and the 1994 Agreement - lead to changes in the structure of the Authority, its organs or procedures are discussed thoroughly in the Authority's competent organs as well as with the relevant stakeholders. Decisions recommended by the Final Report have to be dealt with in the competent organs of the Authority, particularly in the Council. The proper decision making procedures – including scrutiny by the

Finance Committee for any decisions with financial implications – have to be applied to any implementation of recommendations in the Final Report.



MINISTRY OF FOREIGN AFFAIRS AND FOREIGN TRADE

TELEPHONE:
(876) 926 4416-8
(876) 926 4220-8
Facsimile:
(876) 929 6733

21 DOMINICA DRIVE
P.O. BOX 624
KINGSTON 5
JAMAICA

Ref. No.: 7/703/1

14th October 2016

Mr. Nii Odunton
Secretary-General
International Seabed Authority
14-20 Port Royal Street
Kingston

Dear Mr. Odunton,

**Comments and Observations: Periodic Review of the
International Seabed Authority (ISA) pursuant to the
United Nations Law of the Sea (UNCLOS) Article 154**

I write on behalf of the Government of Jamaica, to convey our appreciation for the first interim report of the Periodic Review of the International Seabed Authority pursuant to Article 154 of the UN Convention on the Law of the Sea (UNCLOS). We also wish to acknowledge the work done by the Consultants, Seascope Consultants Limited, in preparing the interim report of the Review. As the host country to the Authority, Jamaica welcomed the opportunity given to participate in the review process.

General Comments

As a general comment on the process, Jamaica takes note of the fact that Article 154 calls for a general and systematic review every five years, of the manner in which the international regime of the Area, established under the UNCLOS Convention, has operated in practice. We, therefore, welcome this first Review and believe that its conduct is being done at a most opportune time, when the Authority is considering extension of exploration contracts and the formulation of mining regulations.

In that regard, we believe that this Review should set the standard for future reviews. Also, we are of the view that the methodology and the reporting format should be in conformity with the Terms of Reference (TORs) established for the quinquennial reviews. In keeping with the foregoing, we strongly recommend that the Review and its subsequent report should focus on the broader macro issues, as stated in the TOR. **It is,**

therefore, Jamaica's considered opinion that the performance of the Secretariat and the Secretary-General are inconsistent with the terms of reference and should be dealt with in a separate internal assessment process.

However, we wish to state that Jamaica would not agree to the establishment of any Independent body if it is established outside of the Seat of the Authority.

In light of the aforementioned comments, it is essential that the Authority begin to examine proposals for improving the process for future reviews. One such proposal that we wish to highlight for the consideration of the membership is the need for the Assembly to suggest areas of emphasis for future reviews. Once agreed by the membership, the requisite personnel undertaking the Review should adhere to and abide by these terms.

Another area that we would wish to highlight is that related to the methodology used to undertake the Review. This is of grave concern to Jamaica. It will be recalled that there was limited participation in the survey¹ and the interviews². Notwithstanding, the report in many instances still drew conclusions from a single point of contact, which undoubtedly calls into question the rigor of the process. It is our considered view that this methodology could be seen as compromising the credibility, validity and objectivity of the Report.

Recommendations Supported by Jamaica

Notwithstanding the above, Jamaica finds many of the recommendations in the report worthy of our support, and is willing to work with the Authority to ensure that these recommendations are implemented. I refer specifically to recommendations **1, 2, 3, 9, 10, 11, 12, 14, 16, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 44, 46, 47, 48, 49** and **50**.

Recommendations Supported (in principle and/or with modifications) by Jamaica

We find however, that the following seven **(7)** recommendations can be supported in principle with modifications: **5, 6, 8, 13, 17, 18** and **45**.

¹ Periodic Review of the ISA ... Interim Report 15th May 2016 (Section 3 – methodology). Seascapes Consultants Ltd

² Periodic Review of the ISA. Interim report 15th May 2016 Section (Section 3 – Interview Survey). Seascapes Consultants Ltd.

In respect of Recommendation **no. 6**, Jamaica would have no difficulty with the conduct of an independent review of enforcement and oversight capabilities of the Authority to inform the setting up of an independent regulatory body (inspectorate).

Note is taken of the fact that Recommendation **No. 8** calls for consideration to be given to the establishment of the Economic Planning Commission sufficiently ahead of the advent of commercial seabed mining and/or identifying economic issues of common concern that require further study. **Jamaica agrees with this recommendation with the emphasis on "sufficiently ahead"**

Recommendation **No. 13** states that the Authority should consider setting up a Standing Committee between the Secretary-General and the host government with a structured meeting schedule. As host country, Jamaica supports a structured interface with the Authority. In doing so, we recommend that the Authority examines best practices/approaches in other international organisations on host country relations. In addition, Jamaica is willing to commence working immediately with the Secretariat on establishing the Committee.

In respect to Recommendation **No. 14**, we will consider extending the Presidency of the Assembly for two (2) years instead of three (3).

On Recommendation **No. 17**, we can support open sessions of the LTC, with the caveat that the Commission has the discretion to convene closed meetings as deemed appropriate for open and frank discussions based on the nature of the issues being addressed.

Jamaica cannot support recommendation **No. 45** as currently worded. We propose instead the following: ***The Authority should also review its interpretation arrangements to make them more efficient and cost effective, as well as take into account the recent Decisions on Conference Services adopted at the 22nd Session of the ISA.***

Recommendations which cannot be supported by Jamaica

After careful consideration, Jamaica cannot support the following **ten (10)** recommendations: Nos. **4, 7, 15, 19, 25, 25, 39, 41, 42** and **43**. These deal with, among other things, matters pertaining to the possibility of holding meetings of the Authority and

Mr. Nii Odunton

14th October 2016

Page 4

its subsidiary bodies outside of Jamaica - Recommendations **15, 19, 41** refer – and what appears to be the micro management of the Secretariat – Recommendations **24** and **39**.

In respect of Recommendation **No. 7**, Jamaica believes that the Annual Report of the Secretary-General and the Executive Summary are adequate. As such, there is no need for an alternate reporting system.

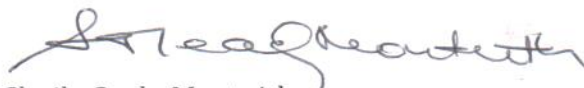
Conclusion

I wish to reiterate the Government of Jamaica's concurrence with the holding of the Review and the very useful recommendations put forward by the Consultants. We hope that the review process will provide the catalyst needed to ensure that, as per the Convention, quinquennial reviews become a part of the standard operating practice of the Authority.

The Government of Jamaica looks forward to the final Report and reiterates its commitment to work with the Secretariat to ensure that the International Seabed Authority is given the support needed to effectively carry out its mandate.

Please accept our very best wishes.

Sincerely,



Sheila Sealy Monteith
Permanent Secretary (Acting)



Jamaica

NCB Towers, North Tower, 6th Floor, 2 Oxford Road, Kingston 5

ISA 026/16

The Embassy of Japan in Jamaica presents its compliments to the International Seabed Authority (ISA) and, with reference to the decision of the Assembly (ISBA/22/A/11) dated 21 July 2016, has the honour to state that the Government of Japan appreciates the work by the Review Committee on periodic review of the international regime of the Area pursuant to Article 154 of the United Nations Convention on the Law of the Sea (UNCLOS).

The Embassy of Japan has further the honour to submit to the Authority the attached comments of the Government of Japan on the interim report entitled “Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154.”

The Embassy of Japan to the ISA avails itself of this opportunity to renew to the ISA the assurances of its highest consideration.

Kingston, 11th October 2016

The International Seabed Authority
14 – 20 Port Royal Street
Kingston
Jamaica



Attachment: Comments by the Government of Japan

Comments by the Government of Japan

October 11, 2016

Comments of the Government of Japan on the interim report of the periodic review of the international regime of the Area pursuant to Article 154 of the United Nations Convention on the Law of the Sea

Japan welcomes and highly appreciates the work of the review committee on periodic review of the international regime of the Area pursuant to Article 154 of the United Nations Convention on the Law of the Sea.

First, the Government of Japan would like to point out that, in reality, the contractors will not start to conduct exploitation in the near future in light of the technical and economic difficulties in exploiting mineral resources in the Area. Taking this into account, careful consideration should be given to the timing of the establishment of the mechanisms and organs, such as the Enterprise, an independent regulatory body (Inspector) and the Economic Planning Commission with due consideration to the reality of the activities by the contractors.

Second, the idea of restricting and re-focusing the remit of the Legal and Technical Commission (hereinafter referred to as the “LTC”) should be discussed carefully, with due attention to the report on the ideal size of the LTC requested by the Council to the Secretary-General at the 22nd session of the ISA.

Third, all recommendations that may have financial implications should undergo thorough considerations by the Finance Committee as well as the LTC and the Council before they are brought before the Assembly. Japan has a position that zero nominal growth (ZNG) should be applied to the regular budgets of international organizations including ISA. This is not intended to freeze the activities of the ISA to the same level permanently. On the contrary, with this principle in mind, the ISA is encouraged to examine alternatives to achieve mandated activities in a more cost-effective manner and to be creative in searching ways to revitalize itself.

In conclusion, Japan agrees that the elaboration of a long-term master plan based on a clear strategic overview of the tasks of the ISA should be led by the Assembly. Japan looks forward to the final report and would like to contribute to its consideration at the 23rd Session of the ISA.

14 October, 2016

snavoti@isa.org.jm

Re: Comments on the Interim Report of the Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154

Nauru Ocean Resources Inc. (NORI) appreciates the opportunity to submit written comments on the 15 May, 2016 Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154 Interim Report. NORI completed the initial questionnaire distributed to stakeholders and will confine our comments to the interim report and some of the key recommendations.

Firstly, we would like to acknowledge the work to date by the International Seabed Authority (ISA) in promoting and regulating exploration in the Area. For a new industry with large costs and complex technological requirements associated with it, providing regulatory certainty is a requirement for generating interest and investment.

We would also like to acknowledge the integral role the Secretariat and Legal and Technical Committee have played in supporting and furthering the work of the ISA with limited resources.

Notwithstanding the significant progress that has been made in developing the regulatory and legal framework for exploration, the pace with which the exploitation code is being developed is concerning to us and others in the industry. Industry requires certainty and currently, the approval process for the exploitation code does not appear to have certainty. Without certainty, investment will not occur, further delaying when the ISA and mankind will be able to benefit from the minerals within the Area.

NORI believes that the ISA needs to prioritize the approval of the exploitation code and confirm the key milestones and associated timelines so that the exploitation code can be adopted at the earliest possible time.

The next phase of polymetallic nodule exploration (in situ component testing and larger scale processing trials) will likely not occur until the exploitation regulations are finalised, and until it is certain that those regulations are commercially viable. Indeed, it is the lack of certainty around the exploitation code that is currently preventing some of the Contractors from taking the next major step of carrying out component tests, installing oceanic equipment for long-term environmental studies or trial mining. The next phase of conducting such in situ collector tests in the CCZ represents a significant ramp up in expenditure and committing to such a large investment while there is still the regulatory uncertainty is unlikely to happen.

Once a commercially viable exploitation code is adopted, this certainty would support increased investment from current Contractors and attract new interest and investment. This will in turn lead to the first commercial operation in the Area and allow mankind to benefit from the minerals in the Area.

As such, NORI believes that the ISA must adopt a commercially viable exploitation code, and must dedicate the resources necessary to achieve this as quickly as possible.

NORI is supportive of the recommendation that the Secretary General with support from the Presidents of the Assembly and the Council develop a strategic plan as soon as possible. A strategic plan would confirm the ISA's priorities so that a work plan, timeline and budget can be put into place to achieve them. Another benefit of developing a strategic plan is the ability for the ISA to communicate clearly what its priorities are and how it will achieve them; providing certainty for industry which is currently lacking. NORI stresses that the development of a strategic plan must be done expeditiously and quickly deliver a plan that can be actioned.

NORI acknowledges the increasing workload and burden on the Legal and Technical Committee (LTC) as the number of Contractors increases and as the industry advances towards exploitation. NORI wishes to acknowledge the integral role of the LTC in the ISA and would be supportive of the ISA providing the LTC with additional resources to complete its work but would suggest that the LTC be the body which offers up recommendations to the Council as to how it could be more effective and what assistance it requires.

To reiterate our key point, NORI believes that the ISA must dedicate its limited resources to the most pressing priority, which is the development and approval of the exploitation code. The development and approval of the exploitation code has been slow and cautious but it is now time to dedicate the time and resources to complete it.

In addition to NORI's general comments above, NORI provides the following responses to some of the report's key recommendations:

Recommendation 1: A study on the adequacy of sponsoring States legislation to control entities with whom they enter into contracts for exploration, drawing on the Seabed Disputes Chamber Advisory Opinion, should be commissioned.

Whilst such a study may be worthwhile, the focus at this point in time must be on finalizing the ISA's exploitation code, rather than reviewing sponsoring State legislation. NORI also notes that the sponsoring State legislation will likely need to make reference to the ISA Exploitation Code, and as such, NORI sees little point in reviewing sponsoring States legislation until after the ISA Exploitation Code has been finalized.

Recommendation 3: Future contracts should be prescriptive with standard terms and conditions and detailed plans of work that set clear objectives, which can be monitored and enforced

A Contractors' plan of work must be left to the Contractor to determine, it should not be prescribed by the ISA. The ISA is the regulatory body, and should not be trying to prescribe what should be included in a plan of work, which will vary from Contractor to Contractor depending upon their specific mineral deposit and differing technologies. Contractors' will need to be given scope to develop and change their mining plan, production rates and expenditures. Such commercial decisions must be left to the Contractor to determine, and should not be prescribed by the ISA. Importantly, should the Contractor need to change its plan of work (e.g. in order to respond to market conditions) the Contractor should be able to make such changes immediately without having to obtain approval from the ISA. With the early stage of the seafloor mining industry, the Authority must be careful to not be overly prescriptive for the plans of work. Industry will require flexibility as they progress their projects in this new industry and regulatory prescription when it comes to the plan of work could reduce the commercial viability and attractiveness of projects.

Recommendation 5: Carry out the study of relevant issues relating to the operation of the Enterprise requested in 2013 by Council of the Secretary-General, including the failure to reappoint a new Director-General and extend any such study to include an analysis of operation of the reserved area system.

NORI believes that the focus should be on finalizing the exploitation code. With respect to the Enterprise, if a contractor wishes to carry out a joint venture with the Enterprise, then this should be agreed upon at the time of applying for an exploration license. It would not be fair to a Contractor who has invested money during the exploration phase to then be told that they need to partner with the Enterprise. That is a decision that needs to be made by the Enterprise at the time of the exploration contract being granted. If the Enterprise has not elected to carry out a joint venture at the time of the exploration contract being granted, then the Enterprise should not have any rights to such a joint venture at the time of the exploitation application, as this could significantly impact the viability of the project for that Contractor.

Recommendation 6: An independent review of enforcement and oversight capabilities of the Authority is needed to inform the setting up of an independent regulatory body (Inspectorate).

NORI does not support establishing another independent regulatory body. The ISA is an independent body and NORI believes that the ISA can provide the regulatory and enforcement functions required. If the LTC is struggling to meet all of its current commitments in this area, additional resources should be added or a new division within the Secretariat should be considered.

Recommendation 7: The system of reviewing annual reports and approved plans of work made by Contractors should be reviewed in the context of LTC workload and the feasibility of alternatives considered, such as requiring alternate short and long reports in alternate years, with 50% of contractors producing short reports each year. Consideration should be given to maximum report length or page limits for annual reports. The review of Contractors' reports could be assigned to an independent regulatory body.

NORI would be supportive of easing the burden on the LTC.

Recommendation 8: Consideration should be given to establishing the Economic Planning Commission sufficiently ahead of the advent of commercial seabed mining and/or identifying economic issues of common concern that require further study.

NORI would suggest that the focus of the Economic Planning Commission should be broader than identifying economic issues of common concern and should also include the study and identification of global social, environmental and economic benefits resulting from seafloor mining. This will allow society to become educated on the process and the benefits of seafloor mining.

Recommendation 9: The levels of expertise in both the LTC and the Secretariat required to incorporate applicable standards for the protection and preservation of the marine environment should be increased as appropriate.

NORI is supportive of increasing the levels of expertise at the LTC and Secretariat regarding the protection and preservation of the marine environment. However, it is important that such expertise is balanced with industry experience, particularly with respect to technical and commercial matters.

Recommendation 10: Consider how to seriously engage with the scientific community and relevant deep-sea science projects and initiatives

Establishing a budget for seminars and workshops on environmental issues would be beneficial so long as the workshops are designed to produce outcomes and recommendations that can be used by the ISA. This approach has proven successful in building knowledge and establishing best practices.

NORI does not believe that a scientific committee to encourage and supervise marine scientific research is the best use of resources. There is a risk that the focus could shift to “pure science” instead of maintaining focus on what scientific work is required for EIAs. NORI acknowledges that a balance may be needed between what scientists want vs what industry needs.

With respect to the suggestion for independent research NORI would recommend that the ISA encourage Contractors to work with independent scientific researchers to deliver EIA studies, which is what we intend to do.

Recommendation 11: Whilst the onus to develop relevant marine technology should rest with the contractors the Authority should accelerate the specification of agreed performance standards

Prescriptive performance standards may be impractical to meet. Flexibility, rather than prescription is needed, particularly given the early stage of this industry. The ISA is the regulatory body, and should not prescribe what technology should be adopted or used, which will vary from Contractor to Contractor.

Recommendation 12: The Authority should be proactive in an emerging discussion about transparency, including a review of the confidentiality clause in contractors’ contracts, and should consider revising the Regulations regarding confidentiality.

The confidentiality clauses should reflect what is standard industry practice for mineral exploration and exploitation. This is necessary in order to protect the significant investments being made by Contractors, and their commercially sensitive information. NORI would be hesitant to move away from the type of confidentiality clause that is typically found in similar commercial endeavors.

Recommendation 15: Consider options to improve quorum of the Assembly, including the option of meeting biennially or at a different location.

NORI would support considering initiatives that would increase participation at the Assembly and ensure there is quorum. Ensuring there is quorum is important to avoid the possibility that decisions could be undermined due to a lack of quorum.

Recommendation 16: The Council should consider producing a record of decisions taken at each

session with a timetable for them to be carried out.

NORI is supportive of this recommendation. This would lead to increased transparency and accountability.

Recommendation 17: Consider making the work of LTC more transparent, limiting closed sessions to commercial in-confidence matters only.

Currently, the LTC makes its decisions public at the Council meeting. NORI is comfortable with the LTC's current approach and its responsiveness to requests to date.

Recommendation 18: As the workload increases, the Council should consider meeting twice per year. This should recognise the value of synergy between LTC and the Council (as well as the value of opportunities for non-members of the Council to observe and make interventions concerning the Council's business) and therefore relate any additional meetings of the Council to appropriate meetings of LTC.

NORI is supportive of this recommendation. The increasing workload and number of issues that need to be progressed in a timely manner as we move into the exploitation phase would benefit from more frequent meetings of the Council. A corresponding increase in LTC meetings may also need to be explored to ensure priorities continue to advance.

Recommendation 19: Consider the establishment of an independent regulatory body or inspectorate.

NORI believes that the regulatory functions can be established within the ISA, potentially as a division of the Secretariat. The LTC is the appropriate body to research this and make a recommendation to the Council after consulting with key stakeholders.

Recommendation 20: Discussions should be held with the member States with a view to increasing financial support for the Secretariat. This could include allowing the Authority to ring fence the additional fees levied on contractors, with the aim of employing more professional staff to administer their increasing workload rather than offsetting member States' contributions.

NORI supports the concept of increasing the financial support for the Secretariat if there is a clearly defined need. Increases in funding must be justified by outlining the priorities, timelines and required resources. This can be used as the justification for new funds and can be used to ensure accountability for any new funds or support for the Secretariat. At this stage it would not be appropriate to increase the fees levied on Contractors, given the recent implementation of an annual payment.

Recommendation 21: A review of required skills and available staff expertise should be carried out for current and future predicted activities. Any identified skills gaps should lead to the creation of new posts for which funding should be sought through the normal channels or fees imposed on the contractors. Forward planning should identify additional new skills and further posts that will be required. Secondments should also be investigated. The GESAMP model of consultative scientific advice would also be worth investigating.

NORI is supportive of reviewing the required skills and available staff with the current and future needs of the Authority but would not be supportive in principle of increasing or adding fees to Contractors to pay for increasing staffing costs, given the recent implementation of an annual payment which has already been a significant increase over the previous payment. Rather, member State's contributions should be considered if additional funds are required. Contractors are not generating any revenue and until the exploitation code is in place, they will not be able to generate any revenue so all new fees levied on Contractors, reduces the funding available to be used in advancing projects. If justification could be shown that demonstrated additional fees would reduce the time needed to adopt the exploitation code, then NORI would be willing to discuss additional fees. It is important to note that once Contractors are harvesting minerals from the seafloor, the ISA will begin to receive royalty payments which can be used for staffing. The longer the exploitation regulations take to implement, the longer the ISA will be dependent on member States and Contractor fees.

Recommendation 23: Examine ways of reducing the burden on the Secretariat such as by adjusting the reporting requirements on contractors (see Section 4) and making additional appointments such as a dedicated training officer.

NORI is supportive in principle of looking at opportunities to reduce the burden on the Secretariat but would suggest that the ISA's priorities, timelines and resources required should be reviewed to determine what additional resources are required. An emphasis on the approval of the exploitation code should be prioritized by the Authority and resources should be allocated accordingly.

Recommendation 28: Consideration should be given to restricting and re-focusing the remit of LTC. Alternative ways of working (e.g. more frequent meetings) should be considered as part of this exercise as well as the practicality of creating sub-committees, working groups or other Commissions and the setting up of an independent inspectorate or enforcement body that could relieve the LTC of part of its work relating to regulation and enforcement (see Recommendation 19).

NORI is supportive of examining options to improve the operation of the LTC. The LTC's current workload coupled with the increasing demands being placed on it as the Authority moves towards exploitation appear to be unsustainable. Without increasing resources or exploring other options to assist the LTC with the workload it will likely become a bottle neck for approvals within the Authority.

Recommendation 31: The Secretary-General (with support from 'Friends of the S-G' e.g. Presidents of both the Assembly and the Council) should present an initial draft Strategic Plan to the Council as soon as possible. The Council could then refine a first draft.

NORI is supportive but would caution against a long administrative process that will distract and take limited resources away from existing and approved priorities such as the approval of the exploitation code. A strategic plan will be useful to confirm the ISA's priorities and to develop work plans, timelines and budgets so that they can be achieved. NORI would stress that the development of a strategic plan must be done expeditiously and deliver a plan that can be actioned.

Recommendation 32: Rather than adopting a budget which then drives the work programme, the Strategic Plan should determine a Programme of Work and the Authority should then agree how to finance the work.

NORI is supportive of the ISA's priorities determining how its resources and budget is allocated.

Recommendation 33: As part of the Plan the Council should seek advisory opinions to address higher-level legal issues that the Authority must come to some conclusion about on going forward (developing States definition, monopolization, common heritage, effective control, dominant position).

The strategic plan should identify the priority issues that need action and the ISA should focus on these issues. The ISA does not have the resources to pursue all the issues therefore, it must prioritize the most important. NORI believes the ISA's focus should be on finalizing the exploitation code with its limited resources. Unless the exploitation code is adopted soon investment will go elsewhere.

Recommendation 34: Attention should be given to the formation of a regulatory body or Inspectorate.

NORI believes that the regulatory functions can be established within the ISA, potentially as a division of the Secretariat. The LTC is the appropriate body to research this and make a recommendation to the Council after consulting with key stakeholders.

Recommendation 36: Solutions to reduce the workload and possibly the mandate of the LTC need investigation.

NORI is supportive of ensuring the LTC has the resources required to carry out its functions and believes the LTC should remain focused on its key priorities.

Recommendation 37: The Secretariat should be re-organised to properly reflect strategic priorities and any new structure determined by the Council. An Environmental Division as well as a Legal Division and a Technical Division could be envisaged.

NORI is supportive of the recommendation if the Secretariat as structured today cannot achieve the ISA's priorities. With limited resources it is important that the Secretariat focus on the agreed to priorities, in particular the finalization of a commercially viable exploitation code.

Recommendation 38: Subject to development of a strategic plan and confirmation of future priorities by the Council, and allocation of appropriate resources, restructure and strengthen the Secretariat skill base.

NORI is supportive of ensuring the Secretariat is resourced to deliver on the ISA's priorities.

Recommendation 40: Implement a communications strategy and employ a dedicated communications professional to enhance visibility and outreach.

NORI is supportive of this in principle and believes that as the industry moves towards

exploitation continued stakeholder outreach and engagement will be required. NORI would strongly support a communications initiative that educates society on the benefits of seafloor mining and, in particular, the importance of metals to global social and economic development.

Recommendation 44: The President of the Assembly, President of the Council and the Secretary-General should work with the Government of Jamaica to resolve hosting issues. Possible options include:

- 1) varying technical meeting locations
- 2) varying timings of meetings
- 3) use of video conferencing

NORI is supportive of examining these issues as part of the process to increase the efficiency of decision making whilst, decreasing costs and increasing participation.

Recommendation 46: The Authority should develop a policy on transparency and conflicts of interest and should consider revising the Regulations to set standards for confidentiality.

NORI is supportive in principle but any changes to current regulations must consider the input of Contractors and confidentiality clauses must be discussed with Contractors to ensure that commercial interests are upheld. The confidentiality clauses should reflect what is standard industry practice for mineral exploration and exploitation. This is necessary in order to protect the significant investments being made by Contractors, and their commercially sensitive information. NORI would be hesitant to move away from the type of confidentiality clause that is typically found for similar commercial endeavors.

Recommendation 47: Non-confidential information should be shared widely and should be readily accessible.

It will be important to define “Non-confidential information” in such a way that does not impact a Contractor’s legitimate concerns regarding the confidentiality of its commercially sensitive information.

Recommendation 48: Transparency in the LTC needs to be addressed with urgency, and consideration should be given to opening up the LTC meetings more often.

Currently, the LTC makes its decisions public at the Council meeting. NORI is comfortable with the LTC’s current approach and its responsiveness to requests to date.

Recommendation 49: Investment is needed in better data management and data sharing mechanisms.

NORI is supportive of this recommendation.

Recommendation 50: Attention should be given to transparency as the finance provisions in the regulations and the benefits sharing regime are developed, which will have an impact on the ability of the Authority to act on behalf of mankind with special consideration for the needs of developing States.

NORI is supportive of this in principle and trusts that transparency will be discussed during the development of the exploitation code.

Comments of the Pew Charitable Trusts Seabed Mining Project

Regarding the Interim Report on Article 154 and the International Seabed Authority

10 October 2016

Recommendation #10: Consider how to seriously engage with the scientific community and relevant deep-sea science and initiatives. The ISA has a commendable record of sponsoring scientific workshops and cooperating with external partners – the Pew Charitable Trusts among them – in developing an information base pertinent to deep sea governance. Much more is needed. More sponsored research; more publications; more workshops. But the language of Recommendation #10 goes further. It calls upon the ISA to “seriously engage” with scientists, their work, and their “initiatives.” In effect, the recommendation says that the ISA should be obliged to ensure that science and scientists inform policy making at each step along the way. That would be most welcome.

Recommendation #9: The levels of expertise in both the LTC and the Secretariat required to incorporate applicable standards for the protection and preservation of the marine environment should be increased as appropriate. The serious engagement with scientists contemplated in Recommendation #10 will be difficult to achieve without significant increases in ISA institutional capacity.

Recommendation #3: Future contracts should be prescriptive with standard terms and conditions and detailed plans of work that set clear objectives, which can be monitored and enforced. We regard this recommendation as the keystone for effective ISA operations. Comprehensive and precautionary environmental regulations - for both the entire Area and for its various regions – are much needed, and the elaboration of those regulations should be the ISA’s highest near-term priority. But in the final analysis, it is the contract that will operationalize regulations. And it is the performance of obligations recorded in the contract that the ISA must “monitor and enforce.” Hence the development of a high-level ISA monitoring/enforcement capability must be a high priority. Other welcome recommendations –

Recommendation #2 (ISA capacity to review contractor data), **Recommendations #6, #19, and #34** (consideration of an Inspectorate), and **Recommendation #21** (ISA staff-building) – may be considered key items of an overall ISA capacity-building check-list. A wise Mining Code is essential, but so too are unambiguous contracts and capable contract enforcement.

Recommendation #12: The Authority should be proactive in an emerging discussion about transparency, including a review of the confidentiality clause in contractors’ contracts, and should consider revising the Regulations regarding confidentiality. [Similar pro-transparency language in **Recommendations #17, #29, #39, #47, #48 and #50.**] ISA confidentiality should be restricted to a minimum. The language of the July 2016 Working Draft of ISA exploitation regulations recommends a presumption of public disclosure, and the Pew Trusts support the formal codification of that presumption.

Recommendation #31: The Secretary General... should present an initial draft Strategic Plan to the Council as soon as possible. The formulation of a Strategic Plan enjoys broad support, and its drafting will likely begin in 2017. Pew's experience with other strategic plans for other international organizations prompts a friendly caution, however: care must be taken so that Strategic Plan elaborations do not consume disproportionate amounts of institutional time and resources.

We are grateful for the opportunity to participate in the Article 154 review process, and look forward to working with the ISA and its constituents during this important formative period.

Conn Nugent

Director, Pew Charitable Trusts Seabed Mining Project

**SUBMISSION OF THE UNITED KINGDOM GOVERNMENT IN RESPONSE TO
THE INTERIM REPORT OF THE PERIODIC REVIEW OF THE INTERNATIONAL
SEABED AUTHORITY PURSUANT TO ARTICLE 154**

Introduction

1. The UK would like to commend the Review Committee and the authors of the Interim Report for the work done to date on this important topic. We are grateful for this opportunity to respond to the Interim Report.
2. As the UK provided detailed comments in response to the questionnaire circulated by the Review Committee in early 2016, we have limited our comments to the recommendations made in the Interim Report.

Comments

3. As a general point, it would be helpful to States Parties in their consideration of the final report of the Article 154 Review if recommendations could be ranked by the Review Panel in order of priority and/or grouped according to matters that can and should be implemented by the Authority in the short term and matters that require further consideration and/or are linked to preparation for the commencement of deep sea mining. The interim report has 50 recommendations, some of which are interlinked or overlapping and it would be helpful to have the Review Committee's views on the priority to be assigned to various recommendations.
4. Following on from the comment above, we consider that it is critical in producing the final report the Review Committee takes in to consideration the work being done to develop the draft mining Regulations. The move from exploration to exploitation will have a significant impact on the work of the Authority, and it is critical in the development of the mining Regulations that the right institutional framework and governance procedures are put in place. We do not, of course, expect the Final Report to have answers to all of the issues that will need to be addressed before deep sea mining commences. Given, however, the critical link between the institutional design, governance mechanisms and the design of the Regulations, it would be of great assistance to stakeholders if the analysis of views received and the recommendations made by the Committee could be framed in that context.
5. The Interim Report includes recommendations both to take forward work on establishing the Enterprise and the Economic Commission, both of which have yet to be constituted, but also on possible reconsideration of the role and/or constitution of the LTC and the development of sub-committees etc. There are also recommendations on the possible establishment of an inspectorate, and the LTC Report containing the first draft of the mining regulations raises the question of the establishment of a mining directorate.

As stated above, it would be helpful if the Review Committee's recommendations in respect of these matters could be framed in the context of the development of the mining Regulations. We are also conscious that the provisions of UNCLOS set out the roles and duties of the various organs of the Authority, and it would again be helpful if recommendations for institutional change or development in the Final Report could reflect how such proposals fit within the framework established by UNCLOS.

6. One of the key themes that emerge from the interim Report, and from subsequent discussion at the Annual Session of the Authority in July 2016, is the importance of increased transparency in the work of the Authority. Transparency is a critical component of good governance, and we believe that its importance will only grow as we move towards deep sea mining. Transparency and good governance does not, however, mean that all information must be publically accessible or that a Regulatory body cannot hold closed meetings. We consider that an important factor in ensuring confidence in decision making by a Regulatory body is that there is transparency and stakeholder engagement in the development of the criteria and standards to be adopted and applied by that body, even where the decision making itself may take place in private. It would be helpful if, in the Final Report, the Review Committee could consider how, in its view, transparency can be promoted in the work of the Authority.
7. In our view, the issues we have highlighted above need to be considered with a view to the long term development of the Authority to meet the challenge of deep sea bed mining. The Interim Report does, however, make a number of recommendations that we consider can be taken forward in the short term to improve the effectiveness of the Authority as we work towards deep sea mining. We endorse the call for the Secretary-General to present an initial draft strategic plan to the Council for endorsement as soon as possible. We consider that a strategic plan is key to enable the Authority to move to a position where it has the appropriate institutional and governance structure to enable deep sea mining to start whilst ensuring that it is able to continue with its current work in the meantime. The provision of a strategic plan will also better enable the Secretariat to demonstrate needs for greater resources and how those resources will be deployed to meet the agreed objectives of the Authority. We also agree that consideration should be given to moving the timing of the meeting of the Finance Committee so that it can respond to matters raised during the Meeting which have financial implications. The provision of a strategic plan will also assist the Finance Committee in its work in ensuring that appropriate resources are devoted to meeting the agreed objectives of the Authority. Comprehensive strategic planning and budgetary procedures will assist Member States to make any necessary increases to the budget of the Authority as it plans for the introduction of deep sea mining.
8. The United Kingdom thanks the Review Committee for its continued work on the Periodic Review and we look forward to receiving the final Report and recommendations of the Committee.

13 October 2016

WWF comments on the interim report of the Article 154 review

Introduction

In view of the the discussion at the ISA 22 Assembly our comments on the interim report of the article 154 review as requested by this organ are set out as below. We believe that the review must provide sufficient impetus for changes in the working structure of the Authority in order to provide the support and decision making functions to deliver fully a fit for purpose mining code that will meet the remit of the ISA, not only to protect the marine environment but also regarding the CHM.

Recommendation 1: A study on the adequacy of sponsoring States legislation to control entities with whom they enter into contracts for exploration, drawing on the Seabed Disputes Chamber Advisory Opinion, should be commissioned.

The recommended study should generate a standardised list of criteria that are needed regarding the determination of effective control, these should go beyond resource assessment and not exclude environmental issues. A sponsoring state should be able to demonstrate such effective control through tools such as prior EIA/EIS Risk assessment, strict liability and potentially providing an overarching statement accepting responsibility and demonstrating control.

Recommendation 3: Future contracts should be prescriptive with standard terms and conditions and detailed plans of work that set clear objectives, which can be monitored and enforced

As the contract provides the mechanism for operationalization, it is of paramount importance that the standard terms and conditions are prescriptive in particular regarding environmental risk and mitigation of such risk. Additionally levels of penalty for breach of contract must also be prescriptive as must liability for environmental damage to ensure not only the protection of the environment but also to ensure the contractor has the capability of undertaking the POW linked to the contract and will not default, hence in this case an up-front system of bonds may also be useful. This may also aid in taking account of the common heritage of mankind rather than investor interests.

Recommendation 34. Attention should be given to the formation of a regulatory body or Inspectorate

Recommendation 6. An independent review of enforcement and oversight capabilities of the Authority is needed to inform the setting up of an independent regulatory body (Inspectorate).

Additionally at present regarding exploration contracts there is a reliance on contractors 'self-policing' because the ISA doesn't have capacity to do so and no evidence of monitoring of impacts of activities due to lack of transparency/accountability. This must not be transposed into exploitation, highlighting the need for a monitoring and enforcement entity, which functions independently plus the need for a compliance committee to be set up in the future to monitor exploitation activities.

Recommendation 10. Consider how to seriously engage with the scientific community and relevant deep-sea science projects and initiatives.

Recommendation 49. Investment is needed in better data management and data sharing mechanisms.

The importance of good quality comparable, transparent baseline environmental data (in particular standardised taxonomic nomenclature) is paramount at all levels of decision making from EIA to policy direction and without this precaution would dictate little or no level of activity. Hence considering the amount of data required and the scale of geography this is paramount. The inclusion of the scientific community in scientific/environmental committees, including the use of consultative scientific advice through existing models such as GESAMP must be considered strongly. Research must be better resourced, this may be aided with potential sustainability/ liability funds as the development of the exploitation regulations continue but again they must be formulated and administered correctly. This along with a potential inspectorate/monitoring, compliance body will all require paradigm shifts in organisational structure and the resourcing of the Authority and its data management and sharing capability.

In view of this the Authority should promote independent scientific research to support and expand contractor data and analysis, this is essential regarding having enough information/data on which to make plausible scientifically based decisions in particular regarding protecting the marine environment. Management of scientific research, review of scientific issues by Scientific Committees and Compliance Committees are the norm for example in the London Convention/Protocol.

If such data and decision making capability is available it would inform marine environmental protection at an early stage and allow for example APEIs to be permanently designated and put into place before exploration contracts are agreed.

In this respect it is also of paramount importance that the development of regional environmental management plans, strategic environmental assessments, strategic environmental management plans and environmental impact assessment continues. The development of such tools will be greatly enhanced by the provision/funding of good quality independent science, which can be shared, analysed, managed effectively and complement contractor data.

Additionally if the above is administered correctly then the Authority could provide invaluable information/data and could be de facto more involved with the UNGA PrepCom/BBNJ process.

Recommendation 46. The Authority should develop a policy on transparency and conflicts of interest and should consider revising the Regulations to set standards for confidentiality.

This would help alleviate the potential undue influence of sponsoring states with representatives on all three bodies - LTC, Council and Assembly.

Recommendation 28. Consideration should be given to restricting and re-focusing the remit of LTC. Alternative ways of working (e.g. more frequent meetings) should be considered as part of this exercise as well as the practicality of creating sub-committees, working groups or other Commissions and the setting up of an independent Inspectorate or enforcement body that could relieve the LTC of part of its work relating to regulation and enforcement.

Recommendation 36. Solutions to reduce the workload and possibly the mandate of the LTC need investigation.

Assembly should play a more dynamic role in driving the agenda of the Council especially regarding the structure and functioning of the Authority. We are pleased to see the leading role the Assembly has begun to play in the Article 154 review and believe this momentum should be used to drive real change. Hence we see utility in the suggestions that the Assembly should establish a Scientific Committee and an Environmental Committee in parallel as the exploitation regulations are developed coupled with a wide range of expertise (including marine ecology/biology/environmental expertise) within these committees and LTC would not only reduce the workload and reliance on the LTC but aid in better informed decision making from inputs from a wider range of disciplines.

Recommendation 37. The Secretariat should be re-organised to properly reflect strategic priorities and any new structure determined by the Council. An Environmental Division as well as a Legal Division and a Technical Division could be envisaged.

Given the changes suggested in our commentary against other recommendations regarding the structure and function of the Authority it would seem appropriate to begin to act upon Recommendation 37 as above without delay. Also considering other comments regarding the Secretariat for example the needs to act on Council/Assembly decisions in a strategic and timely manner, we also believe that the low hanging fruit of a publicly available list of decisions with a timetable for delivery/progress/responsibility could also be produced by ISA23.

Finally as the exact nature, role and operationalisation of the Enterprise in connection with exploitation activities remains for consideration, we believe specific references regarding function within new or existing structures may be premature at present.