DSCC Submission on the International Seabed Authority Draft Regulations on Exploitation of Mineral Resources in the Area

Response to Questions Posed by the ISA Secretary General Regarding Draft Exploitation Regulations – August 2017 (ISBA/23/C/12)

To: consultation@isa.org.jm

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The following is submitted by the Deep Sea Conservation Coalition (DSCC), a coalition of over 70 NGOs which are concerned about conservation of the deep sea.

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We consent to publication of our submission and details.

This is a comment on the draft regulations ISBA/23/LTC/CRP.3 and responds to the Secretariat Note ISBA/23/C/12 of 10 August, 2017. It includes a response to the questions that could usefully be addressed at this stage by the Council and by other stakeholders posed in that Note.

According to the UN's First World Ocean Assessment in 2016, the deep sea constitutes the largest source of species and ecosystem diversity on Earth. There is strong evidence that the richness and diversity of organisms in the deep sea exceeds all other known biomes and supports the diverse ecosystem processes and functions necessary for the Earth's natural systems to function.

Given the ecological importance of the deep sea and in light of the 2030 Sustainable Development Goals, the DSCC considers that the international approach to the production and consumption of mineral resources should be one of sustainability, reuse, improved product design and recycling of materials, in preference to exploiting new sources of minerals, including in the deep-sea.

If deep-sea mining is permitted to occur, it should not take place until appropriate and effective regulations for exploration and exploitation are in place to ensure that the full range of marine habitats, biodiversity and ecosystem functions are adequately and effectively protected, including through a network of marine protected areas and reserves.

DSCC is concerned that the current draft regulations fall far short of what is needed to protect the marine environment.

The regulations and their framework must be robust and include:

- clear conservation and management objectives;
- transparent and enforceable procedures including access to information, public participation, and review procedures;
- requirements based on the precautionary and ecosystem approaches and the polluter pays principle;
- publicly available, comprehensive, prior environmental impact assessments based on extensive, high quality environmental baseline information, and independent review procedures.

They should also ensure that significant adverse impacts on vulnerable marine ecosystems (VMEs) and ecologically or biologically significant areas (EBSAs) are prevented and that other serious harm to the marine environment does not occur. Protected areas must be established to achieve agreed objectives and cumulative impacts from mining and other activities and sectors must be also assessed and considered.

The development and adoption of any deep-sea mining exploration and exploitation regulations must be transparent and participatory and any mining activities permitted thereafter must respect the common heritage of humankind and ensure real benefits to society as a whole. Mechanisms for liability and redress must be established, and research and other initiatives to promote conservation and sustainable management must be implemented. Management must be effective, accountable, and transparent with ongoing monitoring, compliance, enforcement and transparent review procedures.

DSCC opposes seabed mining before these issues have been adequately addressed.

With respect to procedure: it is essential that going forward, the process of redrafting and incorporating comments on the regulations is transparent. In the Assembly Decision on the Article 154 Review (ISBA/23/A/13), the Assembly affirmed that non-confidential information, such as that relating to the protection and preservation of the marine environment, should be shared widely and be readily accessible; encouraged the Legal and Technical Commission to hold more open meetings in order to allow for greater transparency in its work; emphasized the importance of the sharing and accessing of environmental data; and encouraged the LTC to continue its practice of setting up working groups dealing with particular areas of expertise and giving consideration to establishing a working group dealing with environmental issues. This decision underlines the importance to the Assembly of transparency, good environmental procedures and the sharing of environmental data.

General questions:

1. **Do the draft regulations follow a logical structure and flow?**

   The draft regulations would benefit from following a hierarchy, with regional environmental management plans (REMPs) included in the regulations, followed by integration of REMPs into the regulations. Moreover, there should be provision for REMPs to be actively managed and regularly reviewed to prevent significant adverse effects on vulnerable marine species and ecosystems (both benthic and pelagic), ensure that regional cumulative impact assessments are done on a regular basis and establish other necessary measures including through, though not limited to, establishing APEIs. Recommendations should be reconfigured as binding standards to be approved by Council. It should be made clear that all requisite documents are part of the Plan of Work and annexed thereto. A process for amending Plans of Work as well as parts thereof, such as Environmental Management and Monitoring Plans (EMMPs), needs to be included. Procedures for scientific review, public comment, revision and hearings as necessary should be designed, including providing for access to the information relevant to such participation processes. A standing Environmental Committee to carry out these processes, prior to review by the Legal and Technical Commission (LTC), needs to be in place to enable the necessary procedures to be carried out and for the outcome to be examined by the LTC and the Council as appropriate. It should incorporate the functions of facilitating public comment and any necessary hearings before applications are considered by the LTC.

   As we observed with respect to DR 19, the issue of testing of collection systems and equipment prior to application for a Plan of Work needs to be addressed.

2. **Are the intended purpose and requirements of the regulatory provisions presented in a clear, concise, and unambiguous manner?**

   Clear objectives should be specified consistent with the obligations in Article 145 and Part XII of UNCLOS to ensure effective protection of the marine environment and to ensure that activities in the Area shall be carried out for the benefit of all mankind.

   In the current draft, the need to ensure such protection under Part IV is included only as one of six bullet points under DR 17, rather than being a clear obligation. Conservation objectives consistent with the obligations in Article 145 and Part XII of UNCLOS should be specified as the clear purpose to which Part IV should be directed, and the other bullet points under DR 17 should be contributions to the conservation objectives.

   In this regard, as was raised by the DSCC at the side event during the 23rd Session of the ISA, recent correspondence published in Nature Geoscience concludes that biodiversity losses from deep-sea mining are unavoidable and possibly irrevocable, offsets from

biodiversity loss caused by seabed mining are scientifically meaningless in the deep-sea, and that the International Seabed Authority must recognize this risk to inform discussions about whether deep-seabed mining should proceed, and if so, what standards and safeguards need to be put into place to minimize biodiversity loss (van Dover et al., 2017, Nature Geoscience). This is one of the key issues that needs to be addressed in the regulations.

3. Is the content and terminology used and adopted in the draft regulations consistent and compatible with the provisions of UNCLOS and the 1994 Agreement?

Some terminology needs to be amended.

Rules etc: Both UNCLOS and the 1994 Agreement refer to "rules, regulations, and procedures of the Authority" (e.g. UNCLOS art 137) whereas the current draft regulations use the term "Rules of the Authority", defined as 'the Convention, the Agreement, the contract, these Regulations, the Recommendations and other rules, regulations and procedures of the Authority as may be adopted from time to time'. It is confusing to include recommendations as Rules, and we suggest calling them standards. Terminology would then need to be changed to make it clear that they must be, rather than should be, followed by Contractors.

Effective protection and serious harm: The definition of 'serious harm' provided in the draft regulations is in need of amendment, to be replaced by a science-based definition and which does not rely on the circular criterion as being 'acceptable'. Clearly serious harm can never be acceptable. The aim should be to avoid significant adverse effects, and to implement best available science and the precautionary principle.

Closed areas: It needs to be made clear that some areas will be closed to mining: either as part of an REMP, as is the case with the Areas of Particular Environmental Interest (APEIs) in the Clarion Clipperton Zone, or as part of the EMMP, where areas will need to be protected for reasons such as endemism, rare species, vulnerability or connectivity. There should be no mining on Ecologically or Biologically Sensitive Areas (EBSAs) or designated marine protected areas (MPAs) and there should be no significant adverse impacts on vulnerable marine ecosystems (VMEs).

Criteria: Draft Regulation 7 is a key provision, as it provides for the overall criteria to be applied. The criteria should seek to assess whether the application meets the requirements of effective protection under Article 145, including the requirement to ensure effective protection for the marine environment from harmful effects, as well as the requirements of Article 192, the obligation to protect and preserve the marine environment, and Article 194.5, the obligation to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.

4. **Do the draft regulations provide for a stable, coherent, and time-bound framework to facilitate regulatory certainty for contractors to make the necessary commercial decisions in relation to exploitation activities?**

   Some timelines need to be reviewed. Draft Regulation 5(2) needs to be revisited as it may not be feasible for the Commission to consider the application at its next meeting, and as public consultation provisions may not have concluded by the next meeting. In general, a minimum period to 60 days would be more realistic for an international process. There should also be provision for extension of periods.

5. **Is an appropriate balance achieved between the content of the regulations and that of the contract?**

   The duration and contents of the contract must not be such that flexibility to adapt over time in an information and knowledge poor environment is compromised.

   There must be the ability to amend contracts, regulations and standards (currently called recommendations) as circumstances require, and flexibility to amend the same where there is new information on environmental impacts or the overall state of the environment of the area (including information on cumulative impacts).

6. **Are there any specific observations relating to the exploration regulations or regime that would be helpful for the Authority to consider in advancing the exploitation framework?**

   Public access is needed to environmental data and metadata collected during exploration and throughout the exploitation phase, and Commission comments on all Environmental Scoping Reports and other elements of a Plan of Work.

   The procedures on environmental performance (Draft Regulation 24) and review of activities (Draft Regulation 47) should be formalized to include more formal, independent review of Contractor compliance, and independent expert review, and should enable the Commission or the Council to say that additional changes are necessary.

   Review of the Environmental Impact Statement in Draft Regulation 20 should include provision for independent scientific assessment, including assessing cumulative impacts, revision following public comment and assessment and comments and review procedures.

   This should be carried out by a separate Committee, either under Council, LTC or Secretariat, prior to consideration of the LTC. It is inappropriate to leave reconsideration of the EIS, EMMP and CP to the Applicant. Leaving that to the LTC Consideration is likely to mean inadequate response to independent scientific and public assessment and comment.

Under Draft Regulation 21, consideration by the LTC of Plans of Work should be more open to consideration. Compliance with criteria in Draft Regulations 7(3) and 7(4) is important but also important is a general assessment that effective protection for the marine environment from harmful effects consistent with Article 145 of the Convention. Such a general review should not only be of the EIS, EMMP and CP but all the documents that should comprise the Contract of Work, including, for example, Financing Plan and Emergency Response and Contingency Plan as well as liability and bond (performance guarantee) matters.

Specific Questions:

1. ***Role of sponsoring States*: draft regulation 91 provides a number of instances in which such States are required to secure the compliance of a contractor. What additional obligations, if any, should be placed on sponsoring States to secure compliance by contractors that they have sponsored?**

   Performance guarantees (DR 9) must be of a sufficient size to ensure compliance. There may be a legal question whether the performance guarantee (bond) should be between the Contractor and Sponsoring State, or the Authority (as DR 9 suggests). The roles of bonds, to ensure compliance, and liability, to insure against events, must not be confused. A liability regime must be developed before approving any exploitation applications. The Regulations do not include provisions on the Liability Trust Fund or the Sustainability Fund. These need to be in place. There seems to be some lack of clarity about the roles of Sponsoring States vs the Authority. This is particularly important in the case of assignment, for instance (see DR 14).

2. ***Contract area*: for areas within a contract area not identified as mining areas, what due diligence obligations should be placed on a contractor as regards continued exploration activities? Such obligations could include a programme of activities covering environmental, technical, economic studies or reporting obligations (activities and undertakings similar to those under an exploration contract). Are the concepts and definitions of "contract area" and "mining area" clearly presented in the draft regulations?**

   It is important that environmental management plans can incorporate protected areas within claims, in addition to Preservation Reference Zones and Impact Reference Zones. Definitions of Impact Reference Zones should ensure all impacts are included, as recommended by scientists at the International Seabed Authority Workshop on the Design of Impact Reference Zones and Preservation Reference Zones, in Berlin, 27-29 September 2017. Depending on scientific recommendations and information and advice received during

the EIA process, it is necessary to ensure that certain areas, such as particularly vulnerable, endemic or rare species or ecosystems, are not subject to either mining or effects from mining at any time, and are monitored ensure their continued protection Reporting, and where necessary follow-up action where monitoring shows unacceptable impacts in or beyond mined areas all need to be comprehensively addressed.

3. ***Plan of Work*: there appears to be confusion over the nature of the "plan of work" and its relevant content. To some degree this is the result of the use of terminology from the 1970s and 1980s in the Convention. Some guidance is needed as to what information should be contained in the plan of work, what should be considered supplementary plans and what should be annexed to an exploitation contract, as opposed to what documentation should be treated as informational only for the purposes of an application for a plan of work. Similarly, the application for the approval of a plan of work anticipates the delivery of a pre-feasibility study: have contractors planned for this? Is there a clear understanding of the transition from pre-feasibility to feasibility?**

   The documents listed in Draft Regulation 4.3 should be annexed to the Plan of Work or otherwise included: EIS, Financing Plan, Emergency Response and Contingency Plan, Health, Safety and Maritime Security Plan, Training Plan, Feasibility Study or mining plan, Environmental Management and Monitoring Plan, and Closure Plan.

   In addition, the insurance policies (Draft Regulation 27), and Performance Guarantee (Draft Regulation 9), should be included, whether as part of a financing Plan or in an additional document. The list in Annex X (Contract) may need to be updated accordingly. None of the above documents should be considered as information only: if they are contributing to the consideration of the application, they should be part of the Plan of Work.

4. ***Confidential information*: this has been defined under draft regulation 75. There continue to be diverging views among stakeholders as to the nature of "confidential information", with some stakeholders considering the provisions too broad and others too narrow. It is proposed that a list that is as exhaustive as possible be drawn up identifying non-confidential information. Do the Council and other stakeholders have any other observations or comments in connection with confidential information or confidentiality under the regulations?**

   Information should be presumed non-confidential except where specific exemptions for non-environmental proprietary information can be demonstrated. This would be assisted by drawing up a comprehensive list of information that should be considered non-confidential in a non-exhaustive list. The wording of Article 46.3 of the first working draft of the 'Regulations and Standard Contract Terms on Exploitation for Mineral Resources in the Area for consideration by the Members of the Authority and all stakeholders' (July 2016)

should be added to Draft Regulation 75; there should be an explicit presumption that any information regarding the Exploitation Contract, its schedules and annexes or the activities taken under the Exploitation Contract is public, other than Confidential Information.

The proposed procedure in Draft Regulation 75(3) should be redrafted to allow objection by the Secretary-General at any time (rather than within 30 days) and to include a presumption of non-confidentiality. The inclusion of confidential information under the dispute resolution procedure of DR 92 is helpful, but is likely to be only resorted to *in extremis*, so an administrative procedure to assess confidential information is necessary.

5. ***Administrative review mechanism*: as highlighted in Discussion Paper No. 1, there may be circumstances in which, in the interests of cost and speed, an administrative review mechanism could be preferable before proceeding to dispute settlement under Part XI, section 5, of the Convention. This could be of particular relevance for technical disputes and determination by an expert or panel of experts. What categories of disputes (in terms of subject matter) should be subject to such a mechanism? How should experts be appointed? Should any expert determination be final and binding? Should any expert determination be subject to review by, for example, the Seabed Disputes Chamber?**

   An accessible and cost-effective administrative review mechanism should be provided for. A process accessible to stakeholders and the Authority, as well as Contractors, to resolve disputes short of a formal dispute resolution mechanism, would be a useful mechanism to improve governance and compliance. Whether it is binding depends on the process and its application. From the point of view of efficiency, as a principle, decisions should be binding, and if necessary reviewable, at last resort, by the Seabed Disputes Chamber. But there may be also be scope for Aarhus or Espoo-type non-binding dispute resolution mechanisms. All dispute resolution mechanisms must be transparent. Arbitration is commonly closed and confidential, and this would be entirely inappropriate in the area which is the Common Heritage of Mankind.

6. ***Use of exploitation contract as security*: draft regulation 15 provides that an interest under an exploitation contract may be pledged or mortgaged for the purpose of obtaining financing for exploitation activities with the prior written consent of the Secretary-General. While this regulation has generally been welcomed by investors, what additional safeguards or issues, if any, should the Commission consider?**

   If a contract is pledged or mortgaged, that has implications for enforcement, liability and obligations from mine operation through to mine closure and post-closure monitoring. It is important that in case of assignment of rights and duties, there is the possibility for prior review and, if necessary, modification of the contract, as well as refusal of assignment. For

instance, DR 7 properly requires an assurance of financial and technical capability: such assurance must also apply to assignees. Financial bonds and insurance must of course remain in place and valid with respect to any assignee.

7. ***Interested persons and public comment*: for the purposes of any public comment process under the draft regulations, the definition of "interested persons" has been questioned as being too narrow. How should the Authority interpret the term "interested persons"? What is the role and responsibility of sponsoring States in relation to public involvement? To what degree and extent should the Authority be engaged in a public consultation process?**

   The Area and its resources are the common heritage of mankind. To classify "interested persons" narrowly is to erode this principle. The term stakeholder is used throughout the international community and is the appropriate term and should be used instead of interested persons. Stakeholders should be open-ended due to the Area being both beyond national jurisdictions and due to its status as the common heritage of mankind. Stakeholders should be defined simply as "persons having an interest or concern of any kind in the Area". These would of course include accredited observers. The Authority should not be an advocate of seabed mining, but should be an impartial secretariat to invite and consider views across the spectrum through engaging in a public consultation process.

Other Issues

The following is a detailed discussion of draft articles and includes some key issues, even though they fall outside the specific questions asked.

DR 7.4, DR 19 and DR 23 (on the Ongoing Obligations of Contractors towards the Marine Environment) are inadequate for ensuring compliance with the Authority's, the sponsoring States' and contractors' obligations to ensure effective protection, avoid serious harm, and to act in the best interests of humankind as a whole. With respect to DR 23, it should be made clear that if reasonable and practical mitigation measures are insufficient to achieve effective protection of the marine environment and protection and preservation of rare and fragile ecosystems and the habitat of depleted, threatened or endangered species, **then the Plan of Work must not be approved**.

If a Plan of Work is approved, and after work commences it is shown that assumptions with respect to harm to the marine environment were underestimated, then there must be **mechanisms to amend and when necessary suspend or cease operations to protect the marine environment**.

DR 24: Environmental Performance. **Provisions are inadequat**e. The proposed review of the Environmental Management and Monitoring plan only focuses on Contractor compliance, not the

effectiveness of the EMMP itself. Also, there should be a more formal review of Contractor compliance, not reliant on the ability of the Contractor to select an "independent assessor".

DR 47 on the Review of activities under a Plan of Work for Exploitation does not, but should, provide for independent expert review of the effectiveness of the plan or enable public review and comment. DR 47 also lacks provision to enable the Commission or the Council to say that additional changes are necessary.

DR 10: The Commission's reasons to disapprove an application in DR 10 should not be limited to

DR 7(1) and 7(4): any non-compliance with the Regulations should be a ground for refusal, and there should be a residual discretion. In addition, the Term of the contract should be discretionary and consideration not limited to the expected economic life (DR 13). Likewise, there should be a discretion related to extensions: consideration may have taken place some 30 years earlier.

Article 17 of Annex III provides that the total duration of exploitation should also be short enough to give the Authority an opportunity to amend the terms and conditions of the plan of work at the time it considers renewal in accordance with rules, regulations and procedures which it has adopted subsequent to approving the plan of work. This suggests a term of shorter than 30 years.

Any contract should be able to be amended through a review clause to take account of new environmental information that would require amending the contract to ensure effective protection of the marine environment.

DR 14: Some mechanism should ensure effective control by sponsoring States. At the very least, an application should detail legislation, regulations, contracts and other evidence of effective control.

Change of sponsoring State needs further discussion and consideration. At the very least, there should be residual discretion to refuse a change. Likewise, there should be residual discretion to refuse an assignment (DR 15) and a reference to DR 16 lest an undesirable or unapproved entity conducts mining following assignment. DR 16 likewise needs to include an expanded list of considerations relating to assignment, including other liability considerations (such as insurance) and there should be the ability to refuse assignment for any reason.

The provision in DR 43 (Where the Secretary-General is not satisfied that, following a change of control, the Contractor will continue to be able to meet its obligations under the exploitation contract, the Authority may modify the contract in accordance with the Regulations; or Suspend or terminate the contract in accordance with its terms.) should be included.

DR 17: Access to data and information and public consultation should not only be encouraged but should be required. In addition, Article 145 should be more closely reflected, including, for instance, the protection and conservation of the natural resources of the Area and the prevention of damage to the flora and fauna of the marine environment. This should include a greater emphasis

on, and operationalization of, the precautionary principle, the ecosystem approach and closer cooperation between the Authority, contractors, and sponsoring States.

DR17 should provide that a Plan of Work shall not be approved in the absence of an REMP for the relevant region.

DR 18: The DSCC supports the provisions requiring an Environmental Scoping Report be made public and that a period for public comment be provided for.

DR 19: It needs to be made clear that an EIA needs to be carried out prior to any activities carried out in the Area, whether or not an application for a Plan of Work is made. The preliminary assessments and monitoring plans required under Recommendations ISBA/19/LTC/8 (Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area) should be supplemented by a clear requirement to conduct an EIA prior to testing and evaluating the impacts of mining equipment and practices in the Area, including that such testing should be required prior to applying for an exploitation license. It is clear in paragraph 19 of Recommendations ISBA/19/LTC/8 that prior environmental assessment is required for "Testing of collection systems and equipment", but it is now time to also establish this requirement in the exploitation Regulations. Moreover, testing equipment for environmental impact before mining commences should be required, including evaluation and ground truthing of models for example on plume dispersal. The outcome of such test should form an essential part of an EIA submitted as part of an application for a Plan of Work for exploitation. Otherwise any Plan of Work would be approved in the absence of reliable indication on environmental impacts.

The Environmental Risk Assessment should be subject to criteria which the ISA should publish.

This Regulation concerns the crucial issue of the Environmental Impact Assessment (EIA). As such, additional procedures should be provided such as publication and the ability of the Commission to require further investigations and assessments prior to preparation of the Environmental Impact Statement (EIS). Risk assessments also need to comply with ISA criteria.

DR 20: This should include provision for independent scientific assessment, revision following public comment and assessment and comments and review procedures.

It seems preferable that this is carried out by a separate Committee, either under Council, LTC or Secretariat, prior to consideration of the LTC. It is inappropriate to leave reconsideration of the EIS, EMMP and CP to the Applicant. Leaving that to the LTC Consideration is likely to mean inadequate response to independent scientific and public assessment and comment.

DR 21: Consideration by the LTC should be more open. Compliance with criteria in DR 7(3) and 7(4) is important but also important is a general assessment that effective protection for the marine environment from harmful effects consistently with Article 145 of the Convention.

Further, review should not only be of the EIS, EMMP and CP but all the documents that should comprise the Contract of Work, including, for example, Financing Plan and Emergency Response and Contingency Plan as well as liability matters.

In DR 21, or elsewhere but relating to DR 21, there should be an accessible and transparent Review Procedure.

DR 22: The EMMP and other documents comprising the Plan of Work should be laid down by the Commission and approved by the Council as part of the Plan of Work. Likewise, revisions following public comment should be by the Commission, not the contractor.

DR 23: There should be provision for monitoring by the Authority. Also there should be requirements to report Incidents, report monitoring data and to follow directions from the Authority.

The requirement for contractors to 'reduce the risk of incidents to as low as reasonably practicable' leaves considerable freedom of interpretation: instead, the Regulations should require that contractors shall take all practicable steps to prevent incidents'. Similarly, a requirement to 'minimize resulting harm' is contextual and open to interpretation: the focus must be on prevention of pollution. Further, stating that no mining discharges may be made unless they are expressly permitted does not provide for the level of protection required for the marine environment, as it appears to provide for unlimited case-by-case derogations

DR 24: **It should be explicit that a Review by the Commission is necessary, on the basis of and in addition to the information provided by the contractor and/or an independent assessment. The Commission's review should be made public.**

DR 25: The Closure Plan should be referenced as part of the Final Closure Plan.

DR 26: Regional organizations should be referenced and other issues such as "damage to fishing activities" should also be included.

DR 27: The Authority should be able to set insurance quantum and terms.

DR 30: This provision requiring rates of production is inappropriate. There are many reasons production may or should be curtailed, including environmental and reduced need for the metals due to recycling, re-use or demand.

DR 31: The information to be collected by the electronic monitoring system should not be proscribed.

DR 33: There is no reason to require optimum recovery of minerals or to order an increase in production.

DR 39: There should be powers for the Authority to prescribe financial reporting mechanisms and procedures.

DR 43: Change in control should be defined: for instance: by a new person or entity gaining 50% voting power in the case of a corporation with shares, or by a change in directorships of greater than 50% in the case of a trust or other entity without shareholding.

DR 47: A review should also be able to result in the Authority (as well as the Contractor) proposing a change in the Plan of Work, and as observed under DR10, any Plan of Work should be able to be amended for reasons related to the protection of the marine environment. The review clause would benefit from a dispute resolution provision.

DR 74: Environmental and safety information should be excluded from confidentiality.

DR 75: (c) economic prejudice should not trump environmental information being released. Nor should academic reasons be used to keep data confidential.

A presumption should be made that data and information is to be released unless it is confidential information, and a procedure available to assess confidentiality. Data related to the marine environment, not just data relating to the protection and preservation of the marine environment, should be released.

DR 80: The status of the recommendations needs clarifying. Are recommendations not to be approved by Council? If Council's authority is limited to request to the Commission that they be modified or withdrawn, this could be seen as an invalid delegation of powers from Council to the Commission. It is also not clear whether the Recommendations are binding: e.g. DR 17 suggests they 'should' be followed. In addition, there are a great number of recommendations made by the Commission to the Council: the term 'Recommendations' may therefore be confusing. We have therefore suggested that they be reconfigured as Standards.

DR 92: The review mechanism should include provisions for transparency. Accessible dispute resolution including as appropriate mediation or conciliation could also be added to ensure good governance.

Annexes

Annex I: Application for approval of a Plan of Work to obtain an exploitation contract

Evidence of effective control could usefully be added here.

Also Annex I could usefully contain a list of annexures – EIS, CP, etc.

Annex II - Pre-Feasibility Study

Reference to environmental matters, constraints etc could usefully be made here.

Annex III - Financing Plan

Financial bond and insurance information could usefully be added here.

Annex IV Environmental Scoping Report

Compliance with the latest version of any ISA template/guideline document on scoping should be required.

Annex V - Environmental Impact Statement Template

Stakeholder consultation provisions are absent.

Compliance with any updated template should be required to accommodate new information, techniques and needs.

Annex VI Emergency Response and Contingency Plan

Cumulative impacts should be listed.

Annex VII Environmental Management and Monitoring Plan

Compliance with any template including an updated template should be required, to accommodate new information, techniques and needs.

Annex VIII - Closure Plan

Compliance with any template including an updated template should be required, to accommodate new information, techniques and needs

Benthic ecology and seabed sediment surveys may be too narrow; other monitoring may be required.

Progress of recovery of ecosystems could be usefully added.

Annex IX Exploitation Contract and Schedules

Dispute resolution may be usefully added here

Annex X - Standard Clauses for exploitation contract

Section 7 – the ISA needs to retain some control over sub-contractors.

Section 8 – This section underlines the need for financial securities and insurance as well as a fund should the company not be able to fund its obligations

Section 9 – *Force majeure* – this section needs to be reviewed in light of the question as to whether the Contractor or the environment should bear loss in the case of force majeure.

Section 10 – environmental considerations should also underpin any renewal of the contract. There should be a discretion.

Section 12 – there needs to be ISA approval to any change in sponsoring State.

Section 13 – fundamental terms of the contract need to be specified.

Suspension for serious persistent and willful violations is too restrictive. Serious and unremedied violations should suffice for suspension.

Serious harm to the marine environment should be grounds for suspension.

Section 18 – whether international law is appropriate for a contract may need to be discussed.

Section 19 – alternative dispute resolution clauses could be inserted here.

Appendix 1 – Notifiable events

An incident threatening serious harm to the marine environment should be a notifiable event.

Schedule 1 - Use of terms and scope

Environmental Impact Area: this should refer to areas where effects may occur rather than where they are likely to occur.

Environmental Performance: this is relevant to reporting and review should be broader than deliverables and encompass all environmental effects

"Good Industry Practice" should be replaced with "Best industry practice" (refer UNCLOS Seabed Advisory Opinion)

Incident: Serious Harm to the Marine Environment is too high threshold. Any incident where the marine environment may be damaged as a result should be covered by the term "incident".

"Interested Person(s)": this term should be replaced by "stakeholder", which is the commonly used term. There should not be reference to direct affect, particularly in the deep sea, and concern, as well as relevant information and expertise, should qualify. Nor should there be restriction to "in the opinion of the Authority".

"Mitigate and mitigation": the way the activity is carried out should also be covered (as well as degree and magnitude).

"Performance Guarantee" should not include insurance. It is different. A performance guarantee ensures performance. Insurance insures against unforeseen events.

"Plan of Work": annexes should be specified.

"Serious harm to the marine environment": This proposed definition has two principal difficulties: the threshold should be higher than "beyond that which is negligible" and should not be defined in terms of "or which has been assessed and judged to be acceptable by the Authority".

"Serious harm to the marine environment" is a specific term used three times in the Convention and the Authority should not judge "serious harm" as acceptable. Instead, we suggest the following: "Serious harm to the marine environment' for the purposes of these Exploitation Regulations means any effect, including an indirect effect, from activities in the Area on the Marine Environment that, taking into account any Cumulative Effect, which represents a significant adverse change in the Marine Environment, to be determined according to the rules, regulations and procedures adopted by the Authority on the basis of any internationally agreed or recognized rules, standards and recommended practices and procedures."