Report of the CODE PROJECT

Summaries of Stakeholder Submissions on the ISA Draft Exploitation Regulations

8 February 2018

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Introduction

The International Seabed Authority (ISA) took major steps at its Annual Session in August 2017 to advance the development of a Seabed Mining Code. It was agreed that the ISA Council would convene twice a year in order to meet an ambitious timetable under which the ISA could approve exploitation regulations by 2019.

The first step in that process had been taken by the ISA Secretary General. Shortly before the 23rd Annual Session, he submitted a document entitled "Draft regulations on exploitation of mineral resources in the Area" a first attempt to write the rules to cover all aspects of ISA exploitation contracts: environmental, financial, and administrative. Secretary General Lodge also prepared a list of specific questions on the Draft and invited answers to those questions from ISA Member States and stakeholders.

Fifty-five comments were received. Nineteen were from Member States, of which 10 were from sponsoring States. Twelve contractors submitted comments. Twenty-four additional stakeholder comments were received, including 18 from organizations and 6 from individuals. The number of comments was the largest in recent memory. Most submissions addressed the Secretary General's questions, but also went on to comment on a broad range of topics pertinent to the development of a final text. The ISA has prepared a "Briefing note on the submissions to the draft regulations on exploitation of mineral resources in the Area" that further describes the submissions received.

The number and variety of stakeholder submissions prompted members of the Code Project to try to summarize these responses and key issues raised therein. The idea was to produce a tool that would aid Council members in their deliberations in Kingston. In so doing, the Code Project contributors were faced with the challenge of compressing comments without losing too much of their breadth and depth.

That challenge was met, I believe, by the international scientific and legal experts who constitute the Code Project. For this report, 12 contributors from 6 countries were involved. They are: David Billett; Duncan Currie; Andrew Friedman; Andrey Gebruk; Leonardus Gerber; Kristina Gjerde; Renee Grogan; Daniel Jones; Laleta Davis Mattis; Stephen Roady; Winnie Roberts; and Philip Weaver. Because of the far-flung character of the enterprise, papers may vary in style and presentation. And no summaries, however artful, can substitute for the fully developed papers submitted to the Secretary General. They can be found here.

The Pew Charitable Trusts contributed financial and logistical support to the enterprise. It was a privilege to do so. But the credit for this and other Code Project contributions belong to our international teammates. We and they look forward to the next installment.

Conn Nugent
Director, Seabed Mining Project, The Pew Charitable Trusts

7 February 2018

Acronyms and Abbreviations

CIMA	China Institute for Marine Affairs
COMRA	China Ocean Mineral Resources R&D Association
CPDOD	Center for Polar and Deep Ocean Development
DNVGL	DNV GL AS
DSCC	Deep Sea Conservation Coalition
DSMA	DeepSea Mining Alliance
DORD	Deep Ocean Resources Development
DOSI	Deep Ocean Stewardship Initiative
EMEPC	Estrutura de Missão para a Extensão da Plataforma Continental
GSR	Global Sea Mineral Resources NV
IAPG	International Association for Promoting Geoethics
IASS	Institute for Advanced Sustainability Studies
ICPC	International Cable Protection Committee
IFREMER	Institut français de recherche pour l'exploitation de la mer
IOM	Interoceanmetal Joint Organization
IMO	International Maritime Organization
ISA	International Seabed Authority
JOGMEC	Japan Oil, Gas & Metals National Corporation
Marawa	Marawa Research & Exploration Ltd
MERGeR	Marine Ecological Resilience and Geological Resources
MiningImpact	Mining Impact Project
Minmetals	China Minmetals Corporation
OMS	Ocean Mineral Singapore
OPT	L'Office des Postes et Télécommunications of French Polynesia
SCCN	Southern Cross Cable Network
TOML	Tonga Offshore Mining Limited
UK	United Kingdom
UKSR	UK Seabed Resources Ltd

Responses to Questions from the ISA Secretary General Regarding the Draft Exploitation Regulations (ISBA/23/C/12)

This section presents a synthesis of responses to the Secretary General's list of questions regarding the draft regulations. Reference is made to the original submissions, which are available here.

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?**

China and CPDOD write that the Convention, its Annexes and the Implementing Agreement, together with advisory opinions from the Seabed Disputes Chamber, have clearly spelled out the responsibilities and obligations of States, sponsoring persons, and entities with respect to activities in the Area. China suggests that the basic elements of the responsibilities of sponsoring States should be included in the regulations. Draft regulation 91, for example, should be more specific about the sponsoring State's obligation of securing compliance and direct obligation from the contractor. COMRA suggests that regulations include reference to the obligations of the Authority as well as to its powers, e.g., in working with other users of the seafloor and other international organizations to avoid jurisdictional conflicts. Singapore suggests that it is not necessary to prescribe the role of the sponsoring state in detail, as long as this role complies with UNCLOS.

Some respondents point out that a sponsoring State has a "due diligence" responsibility and cannot be held responsible for any damage caused by a contractor if the sponsoring State has taken all necessary and appropriate measures to secure the contractor's compliance with its rules in the Area (see China, France, Japan). Japan further indicates that the sponsoring State must use its own laws and policies to secure contractor compliance. MERGeR suggests that the sponsoring State should be held liable for environmental harm caused by their contractors.

Tonga suggests that the roles of the Authority and the sponsoring State in securing compliance should be clarified, and that the Authority should have the primary role for enforcement, with the assistance of Sponsoring States (see also Algeria on behalf of the African Group, New Zealand, Singapore). Algeria on behalf of the African Group suggests that this might involve coordination of information sharing, monitoring, and enforcement, with a view to ensuring effective, proportionate combined regulation that avoids duplication of efforts.

Some respondents suggest that the regulations should include more details of the role of sponsoring States beyond securing compliance(see DNVGL, MERGeR, MiningImpact), including how they will collaborate with the ISA on data sharing, monitoring oversight, and sharing of benefits (see DOSI). Other respondents recommend that the sponsoring State should be obliged to ensure that the contractor makes all environmental information freely available (see MERGeR, MiningImpact). MiningImpact also suggests that the sponsoring State require its contractors to facilitate an independent assessment of environmental impacts.

The UK advises strengthening regulations regarding the transfer of part or all of the contractor's rights and obligations, such that the sponsoring State is obliged approve any such transfer. The UK also suggests that any change of control of the contractor should be accompanied by the approval of the sponsoring State – in addition to the Secretary-General – and that both should be informed of any incident (draft regulation 40), any notifiable event (draft regulation 41), and any instruction issued by an Inspector under draft regulation 87(3). DSCC and the Code Project also recommend clarification of the obligations of the sponsoring State in any assignment of responsibilities.

Japan suggests that the sponsoring State should be permitted to participate in inspections. The Code Project notes that sponsoring States may need to carry out independent inspections and audits to fulfil their due diligence obligations. IASS suggests that the sponsoring State play a central role in securing compliance of contractors during test mining.

New Zealand notes that the draft regulations give the Authority's inspectors power to issue instructions to contractors as a result of an inspection, but do not give explicit power to the Authority to require a contractor to amend or suspend its operations, e.g., in the event of adverse effects on the environment. New Zealand suggests that the Authority should consider imposing monetary penalties for such breaches of the regulations or conditions of the exploitation contract, or for failing to respond to a written instruction from an Authority inspector. Alternatively, New Zealand suggests, the sponsoring State could be obliged to set monetary penalties and/or enforcement orders or abatement notices for non-compliance by its contractor. Australia advises that sponsoring States should be responsible for ensuring exploitation is undertaken in a safe and environmentally responsible manner and that breaches of environmental regulations should result in monetary penalties. DSCC suggests that performance guarantee bonds could provide a mechanism to ensure compliance, but questions whether bond obligations should be between the Contractor and the sponsoring State or between the Contractor and the Authority. DSCC also suggests that a separate liability regime needs to be developed, possibly in the form of a Liability Trust Fund or Sustainability Fund.

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?**

Several respondents (e.g., Belgium, Germany, New Zealand, OMS, DOSI, MERGeR) note that the definitions of "contract area" and "mining area" need clarification. Verlaan asks what happens to the "contract area" when "mining areas" have been approved. OMS and MERGeR recommend that the Authority should define the objective and scope of both the "contract area" and the "mining area". One option could be that the rest of the "contract area" is no longer controlled by the contractor (UK, DNVGL). Another option could be for the contractor to retain control of the entire "contract area" under the existing contract or under a separate, new exploration contract (France, NORI). A third option could be that the contractor retains the whole area with mixed mining and non-mining parts, potentially adding new mining areas over time (UKSR, COMRA).

Some respondents (see New Zealand, MiningImpact, DSCC, DOSI) note that contractors will need to establish Preservation Reference Zones (PRZs) far enough away from the mined areas to be free from impacts, and that these zones will need to be monitored by the contractor. Other respondents (IFREMER, Tonga, UK, Code Project) point out that a contractor will need to monitor and manage environmental effects across its entire impact zone, whether or not it lies within either its mining or contract area. Walkowski suggests that the entire contract area be subject to non-deterioration obligations and monitored accordingly. Germany notes that the drift of a plume produced by exploitation activities may cause impacts in the contract area of another contractor and that the mining area may therefore need to be a minimum distance away from the boundary of other contract areas.

TOML suggests that allowing mining areas anywhere within the contract area would provide the contractor with flexibility in relation to technology development, environmental information and metals markets. Another option would be that the contract area be defined to include only the mining areas and PRZs once mining areas are approved (see Germany, New Zealand). Other respondents note that the regulations should more clearly articulate a contractor's rights within its contract area, including any portions that fall outside the mining area (see China, COMRA, DORD, Nunes).

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?**

Many respondents raise the need for greater clarity of definitions for key terms (e.g., supplementary plans; and pre-feasibility and feasibility studies, and the difference between them (see Algeria on behalf of the African Group, China, Korea, UK, COMRA, DSMA, GSR, IFREMER, OMS, UKSR, Verlaan, Nunes). The legal status of such terms may also need to be clarified (see IASS). Nunes suggests that the prefeasibility study could be part of exploration duties while the feasibility study should be part of exploitation. The UK notes that the prefeasibility study could become the final report of the exploration period, but that in any case the Council needs to clarify these key terms. NORI suggests that the prefeasibility study should remain confidential and that the transition from pre-feasibility to feasibility should not require ISA approval.

There were a number of comments regarding the status of certain documents and it is suggested (Algeria on behalf of the African Group, IFREMER, Code Project, DSCC, IASS, Walkowski) that all specified documents that constitute part of the ISA decision making process (those listed in draft regulations 4.3, 9 and 27) should be included in the Plan of Work, either within the text itself or as Annexes. China suggests that such Annexes should be scientific, reasonable and feasible in industrial applications. COMRA points out it is not yet clear whether or not the Feasibility Study, Revised EMMP and other such documents are part of the Plan of Work. The UK calls for clarification on how the Plan of Work could be amended after contract signature in view of new technological developments or environmental findings. GSR suggests that any significant changes would need to be reviewed by the LTC and approved by Council. GSR also requests a definition of non-significant changes to the Plan of Work (see also Algeria on behalf of the African Group). Australia suggests that the Plan of Work be accompanied by a plan to respond to environmental incidents. TOML observes that the Plan of Work may need to be amended annually or biennially and should respond to market conditions, noting that restrictions on production rates would not be helpful.

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?**

Notable divergences of opinion inform discussions on this topic. Much hinges on respondents' views on the question of how much environmental information can be said to hold commercial value (see GSR). Japan questions why the current definition needs to be changed. Some respondents (see NORI) recommend that a list of non-confidential data should be drawn up. OMS suggests confidentiality should be extended to any set of data from which commercial information can be produced. COMRA recommends that protections should be extended to all data, including non-confidential data, for a defined period (e.g., four years) in order to respect the rights of the data provider. DORD suggests that confidential data remain confidential for the duration of the contract. Others recommend that the current presumption should be reversed and that all information should be considered public unless determined to be confidential (e.g., Belgium, Jamaica, Code Project, Nunes). Many advise that the ISA should establish a prescribed list of confidential information and/or clear criteria and procedures for determining confidentiality (see Algeria on behalf of the African Group, Australia, Belgium, Jamaica, New Zealand, Singapore, Tonga, Code Project, DNVGL, DOSI, DSMA, IASS, MiningImpact, UKSR, Walkowski). Others (see UK, GSR, UKSR) maintain that ISA rules on confidentiality should apply to all contractors at all times. The UK also suggests that, in order to ensure consistent standards across contractors, national laws should not be used to determine confidentiality; an ISA standard is required. NORI advises that a contractor should have the right to disclose its own information even if that information has been determined to be confidential by the ISA.

Several respondents suggest that all environmental information and data should be publically available irrespective of their potential commercial relevance (see France, DOSI, MiningImpact). Others (see Germany, DSCC) argue that environmental information should be presumed non-confidential except where specific exemptions have been agreed. COMRA suggests that information remain privileged for a fixed period of four years to protect the rights of the data provider. IASS points out that data gathered during mining tests could contain significant environmental information that may not be made available under existing regulations.

Algeria on behalf of the African Group questions how the ISA Council and Member States can carry out their oversight responsibilities and assess the extent to which benefits to humankind are realized and optimum revenues obtained if they do not have access to Plans of Work and so long as the Secretary General is required to keep confidential all information provided to the ISA in the course of administering Part VII (annual fees, royalties, monetary penalties, etc.).

Data security is a concern for some respondents. UKSR, OMS, and others advise that the new ISA information management system must ensure the security of confidential information.

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?**

Many respondents advised that a review mechanism would be useful, but also agree that this should be a first step and that the seabed disputes chamber should remain the ultimate arbiter of disputes (see China, Germany, Code Project, DSCC, DSMA, OMS, CPDOD, UKSR). Verlaan suggests that all categories of disagreement except legal disputes would be best settled by such a chamber. Specific categories of dispute that were suggested for potential review by an administrative review mechanism include: exploitation boundary lines; standards of acceptable discharge of obligations; and disagreements on the appropriate calculation of financial obligations (UKSR). The UK suggests that the Council should decide which dispute areas could best be addressed by an administrative review mechanism.

China, the UK and UKSR recommend that the parties to a dispute should try to agree whether such an administrative review mechanism would be sufficient or whether escalation to the seabed disputes chamber would be preferable. Others (see Japan and IASS) advise that the seabed dispute chamber should be used exclusively. GSR advises that existing processes are adequate and that the seabed disputes chamber should remain as final decision maker (see also DNVGL). Many advise caution and seek further information as to how a given dispute-resolution process would work (China, Germany, Singapore, Tonga, CPDOD).

NORI suggests that a panel of experts should be used only for fact finding and providing opinions for further consideration by the Authority. COMRA believes decisions should be reached in consultations or negotiations with the contractor. DSCC suggests the availability of non-binding dispute resolutions in some cases (as suggested in the Aarhus and Espoo Conventions), and that any such dispute-resolution mechanism should be transparent and non-confidential (see also Germany and MiningImpact). Germany and DSCC raise the question of what parties (in addition to the ISA and the contractor in question) would have access to such a review mechanism. Other respondents (France, DOSI, MiningImpact) focus on the need for expert opinion in areas of disagreement on environmental issues.

For the appointment of experts, some respondents (the UK in particular) recommend existing arbitration processes should be adopted by the ISA rather than having to invent new ones. Verlaan suggests using the Permanent Court of Arbitration or the International Centre for Settlement of Investment Disputes. Japan and UKSR suggest that existing UNCITRAL arbitration rules be adapted for use within the ISA. MiningImpact advises that a limit of three experts may be unnecessarily restrictive for complex matters involving different disciplines. Germany raises the possibility of a "standing panel" of experts. GSR suggests using the list of experts administered by the International Tribunal for the Law of the Sea. The IMO offers to share its mechanisms for involving international independent substantive experts.

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?**

This question prompted a diversity of opinion though most respondents say they require more information on operational details. Some are generally supportive (see NORI, OMS, UKSR), but with the caveat that more information is needed. One question raised is how such a transfer would affect the relationship with the sponsoring State (see OMS, Tonga, UKSR), especially if the financial institution is located in another state (see Argentina, Tonga, UK, UKSR, GSR, NORI). Would the sponsoring State need to concur with the transfer? How would a transfer affect the obligations of the sponsoring State? If the financial institution is located in another State, would the contractor require a second sponsoring State?

The UK suggests that approval could be made by the Authority while Tonga recommends that both the sponsoring State and the Authority should be informed of any application to use the contract as security. Others advise that the approval of just the Secretary General would be insufficient; France suggests that approval should also be required by the Council. Australia recommends the ISA should establish a formula or set of criteria to consider in evaluating such proposals.

Other States (e.g., Australia) raise concerns about the use of an ISA exploration contract as security; France advises that an ISA contract is not the property of the operator and New Zealand urges that the regulation be reconsidered due to lack of adequate safeguards. DOSI and IASS point out that the use of a government contract as security is generally not allowed for in the issuance of government licenses.

Other stakeholders raise additional questions about the implications of such a transfer. The Code Project notes that if a contract is pledged or mortgaged, it could imply that its obligations, as well as its rights, are assigned, which would have implications for enforcement, liability and obligations throughout the whole production chain, including post-closure monitoring. Would the granting of security limit the control of the Authority in assessing whether the lender would be an acceptable alternative owner and operator of the contract (see DSCC, IASS)? Would the new lender possess appropriate technical and financial capabilities (see New Zealand, Tonga, DOSI)? Some respondents suggest that the contract be reviewed and amended if it is to be used as security to ensure that obligations and duties will be met by the assignee (see Tonga, DSCC, Code Project) while GSR advises that contracts should not be amended in such circumstances. DSMA advises safeguards could be provided through compulsory insurance and special liability funds.

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?

Many respondents regard the concept of Interested Persons as straightforward, advising the term should include any person or entity with an interest in the resources of the Area as the Common Heritage of Mankind (Algeria on behalf of the African Group, Argentina, Australia, Netherlands, New Zealand, Singapore, UK, Code Project, DOSI, DSCC, GSR, IASS, MERGeR, MiningImpact, OMS, UKSR, Verlaan, Walkowski). GSR and Verlaan suggest that all persons making a submission to the ISA should identify themselves and include their credentials. Several respondents suggested changing the term Interested Persons to "stakeholders" and that stakeholder status should be open to all (see OMS, South Africa, Tonga, Code Project, DSCC). Other parties use both terms interchangeably.

Some respondents caution that the Authority may find it difficult to define Interested Persons if the term was "narrowly defined (see New Zealand, Walkowski, Nunes) and that a limited definition may contravene the Espoo Convention of 1991, to which many ISA State Parties adhere (Brager). Limiting those who might wish to make comments could lead to a loss of good ideas or critical information (see New Zealand, GSR, Verlaan).

To provide some level of consistency across international regimes MERGeR and IASS suggest that the term Interested Persons be interpreted in the same manner as the term "public concerned" is defined under Article 2(5) of the 1998 Aarhus Convention.

Those with differing views include COMRA, who suggest that "Interested Persons" should be restricted to individuals with working experience in mining or environmental-related industries. Japan recommends that the term "Interested Persons" should be defined only after thorough discussions in the LTC and Council. NORI and DSMA advise that the term should not be defined too broadly, but should be limited to those natural or juridical persons that are directly affected by ISA-approved exploitation activities.

Algeria on behalf of the African Group questions why Interested Persons should be restricted to commenting on a contractor's Environmental Impact Statement (EIS), EMMP, and Closure Plan and seeks clarity on whether or not the LTC is required to respond to comments. The Code Project suggests allowing outside scrutiny of Plans of Work and contractor performance.

A number of respondents note the importance of public consultations and recommend that the ISA develop guidance on when and how public consultations should be conducted (see Japan, New Zealand, Singapore, UK, DORD, GSR). However, there were differing views on who should conduct such consultations. NORI and the UK recommend that contractors should be responsible for organizing consultations. Others suggest that the ISA itself should manage public consultations (Belgium, DORD, MERGeR, MiningImpact). The UK and New Zealand suggest that the contractor and ISA should agree during the Environmental Scoping process upon a list of stakeholders who should be consulted.

The Netherlands note that many States have public involvement procedures in place for activities with environmental impacts and that sponsoring States should be involved in the consultation process. New Zealand suggests that sponsoring States be required to undertake some form of appraisal of the documents prior to publishing in order to ensure they meet the information requirements set out in the regulations. DOSI proposes that a sponsoring State should also carry out public consultation before seeking an application for exploitation. NORI recommends that sponsoring States should be free to determine their own role and level of involvement in public participation.

Verlaan suggests a single round of public consultation for each Plan of Work rather than the two rounds suggested in the ISA's draft regulations. TOML cautions that the role of the Authority in managing public comment on all environmental documents will present stiff challenges.

Environmental Management, Standards and Objectives

Questions related to the environment were not included in the Secretariat's questions on the draft regulations. Nevertheless, a majority of respondents touched on environmental matters in their comments, both in terms of preventing and managing environmental impacts within contract areas and in fulfilling the ISA's larger mandate under UNCLOS to protect and preserve the marine environment from the harmful effects that may arise from activities in the Area. This document attempts to capture the key points raised under the topics of 1) environmental management and planning, and 2) environmental objectives, standards, and thresholds. The full submissions can be found here.

Regional environmental planning

Many States (Algeria on behalf of the African Group, Belgium, Germany, the Netherlands, New Zealand, South Africa, Tonga, UK) and a number of other stakeholders (Code Project, DOSI, DSCC) note the importance of incorporating Regional Environmental Management Plans (REMPs) into the draft regulations. Several of these respondents (Germany, New Zealand, South Africa, Code Project, DSCC, IASS) further suggest that strategic and regional environmental assessments should be conducted to guide the development of REMPs. The Netherlands specifically calls for REMPs to be established as a prerequisite for mining, while New Zealand advises that REMPs are needed to establish a top-down process and regional context for individual, site-level Environmental Impact Assessments (EIAs), with strategic and regional environmental risk assessments feeding into EIAs, Environmental Monitoring and Management Plans (EMMPs) and Closure Plans. The Netherlands and Belgium note that REMPs should include an evaluation of cumulative environmental impacts. GSR, however, questions the Council's authority to declare no-mining areas through REMPs.

New Zealand identifies other aspects of environmental management (e.g., monitoring of APEIs) that should be considered, but may lie outside of the current regulations. Brager notes that the quantification of cumulative impacts may be the ultimate challenge for protection of the marine environment and that cumulative impact assessment should be carried out by the Authority rather than individual contractors.

The UK suggests that the regulations should include explicit links between the specific environmental obligations in the regulations and contracts and the Authority's broader environmental policy and REMPs, but that the details of how the Authority will develop and implement REMPs should not be included in the exploitation regulations. The UK offers several examples of how regional environmental planning works in the UK, including Strategic Environmental Assessments (SEAs), which provide a systematic decision support process to ensure environmental and sustainability aspects are considered.

In view of the technical expertise needed to adequately review REMPs, EIAs, EMMPs, environmental monitoring reports, and the like, several respondents (Australia, France, Germany, New Zealand, DSCC, and MiningImpact) suggest utilizing outside expertise on either an *ad hoc* or standing committee basis. In reference to the Environmental Scoping Report, India notes that independent expert review would not be needed since all reports would be assessed by ISA experts.

Several respondents touch on the management of environmental impacts within and beyond contract areas. Algeria on behalf of the African Group observes that Preservation Reference Zones (PRZs) and Impact Reference Zones (IRZs) are not given prominence in the draft regulations and should be part of the EIS template. The UK suggests they be included in the scoping report (Annex IV). The UK, Tonga, and IFREMER further note that EIAs should cover the entire impact area, whether it falls within the contract area or not. EMEPC advises that where there are multiple mining areas in an application, the regulations may need to stipulate a minimum distance between mining areas before additional separate environmental submissions are required and Australia notes that contiguous mining areas might be easier to manage. GSR and Korea seek more clarification on this issue and SCCN notes that awarding contracts for large contiguous areas could impair the installation of new submarine cables and pipelines on particular service routes.

IASS suggests that the ISA's regional governance policy should be developed in agreement with other UN processes such as the negotiations for an "International legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction" and through coordination with other international organizations.

Objectives and standards

Why does the ISA need environmental objectives / standards?

The importance of setting clear environmental objectives, standards and thresholds was noted explicitly by Algeria on behalf of the African Group, Belgium, Germany, Jamaica, Japan, New Zealand, South Africa, UK, Code Project, DOSI, DORD, GSR, and IFREMER, and implicitly by many other respondents. Respondents variously note that clear environmental standards are vital tools in ensuring the protection and preservation of the marine environment, increasing regulatory certainty, and promoting transparency.

The UK notes that establishing environmental standards is critical to ensuring that applicants and contractors have a clear understanding of their obligations and ensuring consistency across applicants and contractors. DOSI similarly asserts the importance of environmental standards, while noting the importance of a regulatory regime nimble enough to respond promptly to developments in both marine science and technology.

Working groups and outside expertise could be used to help set environmental objectives and standards. Australia recommends the ISA create a working group to consider definitions of key terms such as "harm" and "serious harm" and conduct an independent study of established approaches to these concepts at international and national levels. Germany, in recommending increased engagement of State Parties, suggests dedicated Council working groups for specific thematic fields. DOSI advises that an independent environmental committee of scientists could develop standardized environmental protocols for the methods and spatial and temporal scales of environmental investigations.

What environmental objectives / standards are needed?

DOSI and GSR point out that UNCLOS sets out high level environmental objectives that can guide the setting of more specific objectives. However, the latest Draft Exploitation Regulations do not include these more detailed environmental objectives and environmental standards (see Algeria on behalf of the African Group, Jamaica, Germany, South Africa, Code Project, DOSI, IASS, MiningImpact, and Brager). Much of the detail presented in ISA Technical Study 17 and the February 2017 Environmental Regulations Discussion Paper has not yet been worked into the draft regulations (Jamaica, Germany, DOSI).

Although not asked specifically, some respondents offer suggestions on what should be included in the environmental objectives. Germany recommends that the essential aim of the environmental objectives and standards should be to preserve marine biodiversity on all relevant levels; Mexico emphasizes the need to protect biodiversity, including migratory species; and South Africa emphasizes protection of the marine environment and its living resources and sustainable exploitation, and notes a need to address issues such as ecotoxicology and the impacts of noise on marine life.

A number of respondents request that the ISA clarify key terms and standards. Jamaica notes the importance of defining levels of "acceptable" harm while others recommend the ISA reconsider the definition of serious harm (Algeria on behalf of the African Group, Australia, South Africa, Tonga, Code Project, OMS). Several respondents advise the ISA to more clearly define the precautionary approach and how it will be applied to deep sea mining activities (Australia, New Zealand, DOSI, GSR, Seas at Risk), with several noting particular support for a precautionary approach (France, Norway, DOSI, DSCC, Seas at Risk). Japan advises that a precautionary approach should not take precedence over the use of best available scientific evidence. The UK recommends that the ISA define "Good Industry Practice" (GIP) for deep sea mining and Australia further suggests the ISA define, publish, and be consistent in its application of Best Environmental Practice (BEP) and GIP.

Several respondents suggest that ISA definitions of BEP and environmental standards should be developed taking into consideration relevant standards from other organizations and scientific data (Algeria on behalf of the African Group, Australia, China, Japan, Netherlands, Tonga, COMRA, DORD, IFREMER, NORI). This should include "Good Industry Practice" in other industries, including extractive industries (UK, Norway).

The Netherlands observes that the draft regulations lack a provision explicitly regulating mining discharges, while a number of other States and Contractors note a need to further consider issues relating to mining discharges (see Germany, Mexico, Norway, DORD, JOGMEC). The IMO makes several recommendations relating to objectives that should be set relating to water discharges from mining and transportation vessels.

Some respondents recommend that standards should also be developed for and applied to mining technologies, with the Netherlands and Germany advising that mining equipment should be assessed in relation to its impact on the marine environment.

What is the appropriate legal status of ISA environmental objectives / standards?

There are differences of opinion on whether environmental objectives, standards, and thresholds should be established through the ISA's Regulations or through "Recommendations" and whether they should be legally binding. Some respondents note the value of establishing such standards through legally binding Recommendations or Guidance that can be updated as new information becomes available, yet will be applied and enforced equally across all contractors to provide regulatory certainty and a level playing field (Algeria on behalf of the African Group, Belgium, UK, Code Project, DOSI, IFREMER). Other respondents do not address the question directly, but comment instead on the broader question of whether ISA "Recommendations" (such as those on environmental standards) should be binding and mandatory. GSR, NORI, and Marawa suggest that Recommendations should not be legally binding. NORI and Marawa both advise that a regulatory system including legally binding Recommendations that could be changed by the LTC would result in an unstable regulatory regime and hinder investment. In this context, several contractors further suggest the ISA should not be able to change the terms of contracts without mutual consent of the parties (DORD, GSR, NORI, Marawa).

How will environmental performance / standards be monitored?

Norway notes that, once environmental (and health and safety) standards are established, it will be important for the ISA to ensure contractors have the capacity to meet these standards and that the LTC will need the expertise to make such determinations.

France, Germany, and DOSI recommend that the draft regulations require contractors to provide details in their EMMP of how environmental monitoring will be accomplished. Belgium also recommends that the regulations specify monitoring requirements. DOSI notes that standardized protocols to measure abiotic and biotic environmental variables are missing and further recommends setting temporal and spatial scales of monitoring activities. Germany, South Africa and DOSI emphasize the need for an independent review of monitoring programs and the IMO notes that it has experience engaging independent experts that may be useful to the ISA.

There are a diversity of views on the appropriate frequency of environmental performance reviews and the appropriate time-frame for post-closure monitoring. Australia recommends that environmental performance reviews be conducted more frequently than suggested in the draft regulations in light of the current uncertainty on the potential environmental impacts of exploitation in the Area. MiningImpact also recommends frequent monitoring and suggests that mining should only proceed if contractors can demonstrate that impacts are within the approved limits. GSR suggests that continuous environmental monitoring is impractical. On post-closure monitoring, the UK suggests that ten years might be too short, noting that in the UK, industries leaving an impact on the marine environment are expected to monitor in perpetuity. In contrast, JOGMEC recommended the post-closure monitoring period should be clearly defined and not unduly long.

Financial Matters

Part VII of the draft regulations, relating to financial terms, is still at the conceptual stage of development. As such, it is expected that further discussion on financial matters, including the nature and liability of royalties, incentives, funds and bonds, as well as the nature of the payment model and mechanism itself, will form the basis of a separate consultation exercise during 2018. Accordingly, most stakeholders deferred from commenting in detail on these topics.

Nevertheless, many stakeholders submitted initial views that can be grouped into three broad categories: 1) the payment regime in general; 2) the use of contracts as security, and 3) other financial matters. The use of contracts as security is addressed in the synthesis of responses to the ISA's Question #6. A summary of comments in the other two categories is set out below.

1. PAYMENT REGIME IN GENERAL

It is generally acknowledged that the financial terms are a "work in progress" (Algeria on behalf of the African Group, China, Singapore, UK, Code Project, COMRA, DOSI, IASS) with some reserving comment until further clarity is available (OMS, UKSR). Nevertheless, a number of stakeholders emphasize that deep seabed mining is a commercial activity and that ISA regulations should consider market needs, commercial principles (in addition to legal and environmental considerations), and payment stability (Australia, China, COMRA, Minmetals, NORI). In that context, COMRA and Minmetals suggest that the current global metal finance market does not appear to support the conclusion that mineral resources in the Area can proceed to commercial development within the next few years.

Algeria on behalf of the African Group, COMRA, DOSI, and UKSR note that a range of views has been raised relating to the development of a payment mechanism (including its components, structure and format) during external workshops. Some express concern that the approach outlined in the Singapore workshop may not sufficiently address the broad range of financial implications that the Authority will need to consider prior to entering the exploitation phase (Algeria on behalf of the African Group, DOSI), whilst some contractors cautiously support the model (OMS). Others remark that the term "system of payments" and the system of review related to contractor payments are unclear (Algeria on behalf of the African Group).

A number of stakeholders further suggest that the regulations should specify how the Authority is going to give effect to the principle of the Common Heritage of Mankind (CHM), and more particularly, how fair and equitable benefit sharing will be realized (Algeria on behalf of the African Group, China, Germany, Mexico, Tonga, DOSI, IASS, Minmetals). Algeria on behalf of the African Group further notes that, as current regulations do not include a rate for the royalty, it is difficult to evaluate whether the proposed payment regime will sufficiently compensate mankind. Algeria on behalf of the African Group also suggests the ISA consider a sovereign wealth fund model, similar to that used by Norway.

Contractors also deem such clarity crucial; NORI advises that an ISA financial regime should provide investors and contractors with certainty and transparency for all costs, including costs associated with any benefit-sharing arrangements under the common heritage regime and with any environmental safeguards. OMS suggests it would be inappropriate, due to potential subjectivity, to include subjective statements such as "…manage the Resources in a way that promotes further investment and *contributes to the long-term development of the common heritage of mankind*" in a legal contract.

NORI suggests that moving more financial and commercial terms into the contract would provide increased certainty for both contractors and the Authority.

2. OTHER FINANCIAL MATTERS

2.1. Definition of financial terms

In order to avoid confusion and ambiguity, some stakeholders urge the Authority to prioritize the definition and consistent use of financial-related terms, particularly "commercial production", "performance guarantee", "relevant mineral", "monetary value", "financial capability", "resource", and "reserves" (UK, South Korea, DNVGL, DSMA, NORI, OMS). South Africa submits that the definition of "financial provision" should be expanded to include the insurance, bank guarantee, trust fund or cash that applicants for an environmental authorization must provide in terms of draft regulation 4(3).

2.2. Resource areas and annual fees (general)

Some stakeholders emphasize that the different characteristics associated with each resource (i.e., nodules, sulphides, and crusts) will require different exploitation conditions, such as acreage fees and annual fees (China, COMRA, CPDOD). Several stakeholders further observe that failing to differentiate fees across resource types will result in severely unequal circumstances since, for example, nodules are widely dispersed whilst sulphide mining areas may be much smaller (UK, COMRA, DORD, DOSI). China and CPDOD question whether addressing all resources under a single set of exploitation regulations is appropriate or whether the ISA should draft separate exploitation regulations for each resource type as was done under the exploration regime.

Various views were raised regarding annual fees. India and some contractors (COMRA, DORD) consider it inappropriate to set a single acreage fee for all resource and claim types given the differences across resources. Others advocate for small annual fees (Japan, JOGMEC, TOML). DOSI suggests that an annual fee based on total size of a contract area could be an incentive to focus on small, high quality sites. Regarding annual fees, Mexico explicitly favors the payment of a fee over the production of minerals, fixing a variable payment rate calculated in accordance with international prices to allow contractors to better weather price variations due to the cyclical nature of global metal prices. Proposed alternatives include calculating fees based on the *volume* of deposits rather than contract area (DOSI); excluding non-mining areas (e.g., PRZ, IRZ) from area calculations; and the establishment of mitigation measures to reduce annual rates associated with a larger mining area (DORD). It was also proposed that the annual payment elements need to be clarified (Tonga), possibly in a separate Annex (DORD).

2.3. Mandatory production rates

Several contractors (COMRA, Marawa, NORI, UK) express concern with the proposed requirement to maintain a set production rate, with the UK noting this may not promote commercial viability or environmental sustainability. COMRA submits that a contractor's production rates, as well as changes to its production rate, are commercial decisions that should not be dictated by a regulatory body. COMRA further notes that the proposed approach would contrast to that of terrestrial mining, where production is not only permitted to be scaled down or suspended where necessary, but mining entities may be granted tax exemptions during economic downturns. The UK and COMRA request that the Authority invite further discussion on the issue and take such risks into consideration when developing the regulations and associated contract clauses.

2.4. Royalty payments

There are a diversity of views on the suitability, form, and scope of royalty payments. Algeria on behalf of the African Group remarks that the correlation between ore production/exploitation and royalty calculation is ambiguous. Some contractors suggest that commercial decisions about exploitation will be highly sensitive to royalty rates, with DORD and JOGMEC suggesting that royalty rates should be considered provisional pending answers to unsolved questions regarding technical, environmental and market challenges. DORD further suggests that there should be financial incentives for first contractors in light of their increased risks; that the royalty rate for the First Period of Commercial Production should be set to the minimum rate to reduce economic risks and enable an early recovery of investment; and that royalty rates could be reviewed and revised once costs for activities such as test mining and environmental management are better known. TOML suggests that royalties be capped for a period sufficient to allow a contractor to repay risk rated debts accrued to develop the project. In contrast, Algeria on behalf of the African Group questions the comparability of the proposed financial regime with existing royalty/taxation regimes for terrestrial mining – while terrestrial mining regimes commonly include royalties, ring-fenced profit taxes, additional profits taxes, and sometimes state equity participation in order to optimize revenue collection, the ISA's draft regulations appear silent on any potential payments beyond royalty payments. Algeria on behalf of the African Group suggests that the royalty rate for seabed mining may have to be relatively high to provide the same overall rate of payment as compared to terrestrial mining. Japan requests more information on the comparability with terrestrial mining regimes. DORD suggests the royalty return period of a half-year is a burden to contractors, as information to be submitted as evidence could potentially be omitted if an *ad valorem* method was utilized as a calculation method. TOML advises that a royalty in terms of the actual minerals produced would best serve to recover the resource rent value of exploitation.

Algeria on behalf of the African Group, China, and COMRA note that while the 1994 Agreement allows a royalty system to be considered independently *or* in combination with profit distribution, Part VII of the draft regulations merely provides that contractors will be subject to the payment of a royalty.

DOSI expresses concern regarding the use of royalties to finance certain administrative functions, including the investigation of areas of particular environmental interest (APEIs). DOSI submits that since seabed mining will inevitably modify the environment on a geological time-scale, a percentage of royalties should be used as financial compensation for ecosystem service losses.

2.5. Financial competency/standing of potential Contractors and Sponsoring States

A number of stakeholders submit that, given the scale, complexity and nature of challenges that will be faced by contractors, the financial competency of contractors should be an important consideration in application review and approval (Australia, Norway, Japan, New Zealand, DOSI, EMEPC, IASS). Only entities of at least investment grade (or equivalent financial strength) should be deemed capable to assume and deliver on the wide range of obligations that will arise. As such, consideration should be given to the including confirmation of the applicant's investment grade credit rating (or proposed mechanisms to achieve equivalent status) in the listed requirements (Australia, Belgium, Norway, DOSI, IASS).

Some stakeholders recommend that the burden of proof should be on the contractor to demonstrate that it can ensure effective protection of the environment against serious harm and the applicant should demonstrate its financial capacity to meet this requirement (Algeria on behalf of the African Group, Australia, South Africa, DOSI). DOSI raises the question of whether the ability of sponsoring States to meet financial or administrative challenges related to supervising performance of sponsored Contractors should be considered as a factor in Plan of Work approvals.

2.6. Funding for post-closure/decommissioning and environmental remedial actions

Several stakeholders consider it imperative to ensure funding is available for costs associated with closure, decommissioning equipment, and/or environmental rehabilitation (Algeria on behalf of the African Group, New Zealand, South Africa, JOGMEC, MiningImpact). DSCC suggests that, once mining commences, it should be mandatory for contractors to establish a dedicated fund to provide for costs associated with decommissioning, post-mining monitoring, and closure. Such a requirement could form part of the "Performance Guarantee" and could be connected to the resources the contractors "shall maintain" for Emergency Responses and Contingency Plans (Norway, MiningImpact). DORD reserves comment until closure plans and associated requirements are clarified in later versions of the draft guidelines. Korea questions the need to require environmental liability insurance for ten years post-closure and JOGMEC suggests that the closure and post-closure period should be short.

As the draft regulations do not currently include an environmental liability trust fund or seabed sustainability fund, some stakeholders suggest that contractors should be required to deposit a bond to cover at least a proportion of costs associated with remedial action should environmental harm occur (Algeria on behalf of the African Group, MERGeR, MiningImpact). The Netherlands suggests that, if environmental remediation should not prove possible, financial compensation would be a logical alternative. New Zealand, UK, MiningImpact consider it critical to specify the conditions under which closure and/or remedial action funds would be released along with their financial volume, nature, and scope.

2.7. Funding of inspections and other administrative costs

Various stakeholders recommend that the source of financing for the inspectorate function of the Authority should be clarified (Germany, DORD, DOSI). DORD notes that there is a discrepancy between draft regulation 85(4)(h) (which assigns inspection expenses to the contractor) and draft regulation 65(2) (which allocates such responsibility to the Authority). IOM remarks that it is usual practice that a contractor should *not* assume any expenses of an inspection since it might create possible conflict of interests. DOSI suggests that a percentage of royalties could be allocated towards financing remote supervision of contractors and site visits by inspectors. Japan and JOGMEC advocate for the implementation of electronic monitoring systems and ad hoc inspectors rather than establishing a full-

time Inspectorate to avoid excessive/unnecessary financial burden on contractors and the Authority (Japan; JOGMEC).

2.8. Transfer of Rights and Obligations

The UK notes that policy questions may arise when a contractor enters into a relationship with an entity that is not under the jurisdiction of the contractor's sponsoring State and that there needs to be clarity as to how, and by whom, consent to such an arrangement is to be given. Korea raises the question of whether the transfer of rights could lead to monopolization in the Area, whilst other stakeholders note that contractors with exploration rights may wish to transfer their rights to other entities (UK, IOM) – all of which may need further consideration in the regulations. IOM specifically suggests that additional provisions be included that address such a possibility, i.e., transferring rights for exploration following successful exploration, but prior to an application for exploitation.

2.9. Incentives and Penalties

A number of stakeholders are of the opinion that the current draft regulations 1) provide little incentive to encourage development, and 2) offer few measures to reduce the risks associated with the largely unknown economic and technical difficulties associated with the industry (China, COMRA, DORD, JOGMEC). Suggestions for financial incentives include an exemption of fees for the *first* contractor, the deduction of values associated with Performance Guarantees when the sponsoring State guarantees the performance of the contractor, an "exemption of payments" should a particular operation cease or be suspended, an annual rate set at a *minimum* for the first 10 years after execution of the exploitation regulations (DORD), and an exemption of annual fees on application (UK). In contrast, several States question the apparent presumption, contained in the draft regulations, for a need to incentivize first-movers to apply for exploitation by means of an initial lower burden of taxation (Algeria on behalf of the African Group, Australia, DOSI).

Several stakeholders express concern that the draft regulations appear to only encompass penalties for unpaid royalties (Algeria on behalf of the African Group, Australia, New Zealand, South Africa, Code Project, DOSI). In related comments, other stakeholders suggest an elaboration on the monetary penalties included in Annex III (Algeria on behalf of the African Group, Australia, Code Project, DOSI), such as including failures for non-compliance with contractual requirements, e.g. Environmental and Management Monitoring Plans, as well as for environmental damage in accordance with the polluter-pays principle (Algeria on behalf of the African Group, Australia, DOSI). South Africa suggests that, in the event of a contractor failing to take remedial actions for environmental harm or damage, the Authority ought to be able to use a portion of or the entire financial guarantee to manage or remediate the environmental harm or damage. Consequent to such remediation, a contractor should not be allowed to continue with exploitation activities until it replenishes the exhausted funds (South Africa).

2.10. Accounting standards and corruption

Japan and DORD stress that not all companies utilize the *International Financial Reporting Standards* (IFRS), and recommend that the phrase "…consistent with International Financial Reporting Standards…" be amended to "…consistent with internationally accepted accounting principles…". Jamaica suggests that provisions relating to corruption and anti-bribery could be more rigorous.

2.11. Confidentiality of payments

DOSI expresses concern regarding the confidentially of information related to the administration and management of Part VII, e.g., fees paid by contractors. As the system of payment may be revised by agreement between the Authority and the contractor, DOSI advocates that transparency should be guaranteed and that information regarding annual rates be considered non-confidential. Algeria on behalf of the African Group questions how oversight of financial payments can be assured when this information in confidential.

Public Consultation and the Definition of Interested Persons

Stakeholder comments on transparency, public consultation, and the definition of Interested Persons are summarized below; additional information is provided in the synthesis of responses to the ISA's Question #7. Links to the original submissions are available here.

Public Consultation – who should be included?

The draft regulations currently limit opportunities for public consultation to "Interested Persons". Many stakeholders comment on the scope of this term, with several recommending the ISA adopt a broader consultative process. Algeria on behalf of the African Group notes that since the ISA's mandate is to act on behalf of mankind as a whole, the widest possible public consultation mechanisms should be employed. The Netherlands, Singapore, Code Project, DOSI, DSCC, Nunes similarly suggest that since the Area is the common heritage of mankind, all persons can be considered Interested Persons. DSCC advises that to ensure mining activities provide benefits to society as a whole, the ISA's regulatory processes must be transparent, participatory, enforceable, and subject to review. Singapore, bearing in mind the principle of the common heritage of mankind, notes that the pool of Interested Persons may be bigger than what is currently envisaged and that interests of different stakeholders should be considered. The Netherlands suggests broad-based consultations are both necessary and important and that the modalities of public consultation in specific comment processes need to be clarified.

One contractor (UKSR) notes that transparent and open ISA regulatory processes are a crucial component of a sound, credible regulatory framework. The Code Project observes that the draft regulations could be strengthened by including more rigorous public and scientific review processes and by including independent experts in both approval and performance reviews. DOSI notes that, as a general matter, greater transparency and public collaboration can improve public perception of the organization's operations. DOSI further observes that the draft regulations offer very limited – and reduced – opportunities for Interested Persons to engage and that contractors should be obliged to respond to comments on the EIS. Seas at Risk advises that open and transparent governance is the key to ensuring the protection of the deep sea.

Australia recommends that all who have an interest should have the right to comment on a proposed Plan of Work. Germany, however, notes that a balance must be found between the effective execution of the application and license processes and public participation. UKSR and the Code Project note that there are a range of administrative measures the ISA could take to manage engagement from a broad range of parties.

New Zealand notes that the draft regulations are unclear on how and when the Authority would determine which comments are from Interested Persons and how it would treat comments from entities that fall outside the definition of Interested Persons.

Definition of Interested Persons

Many States suggest the term Interested Persons should be interpreted broadly (Algeria on behalf of the African Group, Argentina, Australia, France, Germany, New Zealand), with several advising that the current definition is too narrow (Australia, Germany, New Zealand). The UK suggests that the current definition is sufficiently broad and that similar terms have been given a very broad interpretation in UK courts. Several States note it would be difficult for the ISA to ascertain whether a person is directly affected by mining activities or has relevant information or expertise (New Zealand, Singapore, South Africa); the IASS accordingly recommends this should not be a requirement. Several commenters recommend use of the term "stakeholder" instead of "interested persons" in order to ensure a broad scope (South Africa, Tonga, Code Project, DSCC).

Two contractors (TOML, UKSR) advise that the current definition of Interested Persons is generally acceptable. NORI suggests the current definition is too broad; OMS recommends that stakeholders be defined as "persons having an interest of any kind in the Area"; COMRA and DSMA advise that the term should be limited to those working in mining or environmental-related industries. DSCC and IASS recommend the ISA use the Aarhus definition and Brager suggests that a narrow definition of Interested Persons may contravene the Espoo Convention of 1991 to which many ISA State Parties adhere.

China notes that the term Interested Persons is new terminology and the ISA will need to consider whether its use is consistent with the Convention, its Annexes and the Implementing Agreement. Japan suggests the LTC and Council should discuss the definition of Interested Persons in 2018-2019 after having heard the opinions of contractors.

Public Consultation – how and when should it be conducted?

Singapore and the UK suggest the ISA should develop guidelines outlining how public consultation should be conducted, with the UK noting that consultation should be mandatory and not just "encouraged". Japan recommends that the ISA develop guidelines on whether or not to hold consultations and the manner in which they should be held, and further advises that the ISA should establish a fixed format for comments to facilitate their effective and efficient consideration. Japan also recommends that the regulations should clearly state that comments by Interested Persons should be based on scientific evidence.

The Netherlands notes the modalities of public consultation should be determined for each specific comment process, as should the Authority's involvement in these processes.

Some States suggest that public participation should not be restricted to the scoping and EIA process, but should be extended to the application process as a whole (Germany, New Zealand). Germany recommends the public should have the opportunity to comment on all documents submitted by an applicant, except for confidential information. Algeria on behalf of the African Group similarly recommends there should be more opportunities for public consultation, including opportunities to comment on contractor reports and proposed amendments to applications and contracts.

New Zealand advises that the ISA's regulatory regime should provide for public input at appropriate points in the process, maintain a public record of information, appoint independent decision-makers and experts, and set out the matters a decision-maker must take into account. South Africa notes the importance of allowing ISA stakeholders to provide input before decisions are made.

Several stakeholders observe that the draft regulations are unclear on how public comments should be addressed by contractors, the LTC, Authority, and/or sponsoring States. The UK recommends that the LTC should give "due regard" to public comments and provide feedback on how their input was considered. Australia suggests that responses to comments should be made publicly available. DOSI and DSCC recommend that LTC meetings should be open and DOSI recommends that the LTC should be required to address public comments. Several stakeholders suggest the consultation and application timelines need further consideration (see South Africa, DOSI, NORI).

The IASS recommends several actions to increase transparency, including a requirement that all submissions be published on the ISA website; that all submitters' affiliations be posted; that the ISA establish a body to deal with public inquiries and concerns; and that community submissions should specify how community agreement was obtained.

Public Consultation – who should manage it?

There are various views on who should conduct public consultations. Belgium advises that consultations should be inclusive, but that the ISA rather than sponsoring States should manage the consultations. Singapore notes that the regulations suggest a role for the Authority, but that the question of whether sponsoring States need to be involved will depend on the consultation processes developed. The UK suggests the burden of ensuring appropriate consultation should lie with the contractor; that a set of stakeholders should be identified and agreed between the applicant and the Authority during the Environmental Scoping Report and EIA process; and that the applicant should produce a strategy for engaging with interested parties. Many States have public consultation processes in place (e.g., the Netherlands, New Zealand), but it is not clear how such processes will intersect with ISA processes.

DORD suggests public consultations should be conducted by the Authority with support from the Contractor, while NORI suggests that sponsoring States should be able to determine their role and level of involvement and the Authority does not need to participate. MERGeR recommends the sponsoring State should fund consultations while MiningImpact advises consultations be managed by the ISA.

China and CIMA suggest the Authority should be responsible for coordinating discussions between contractors and submarine cable organizations. Australia, ICPC, OPT, SCCN all note the importance of ensuring mining activities don't unduly interfere with the right to install and maintain submarine cables and request more clarity on notification and consultation procedures; the standards for "due regard", "due diligence", and "reasonable regard"; and related matters.

Confidential Information

This topic is covered in the summary of responses to the ISA's Specific Question #7.

Contract Review, Revision, and Enforcement

A summary of stakeholder comments related to the review, approval, and renewal of contracts, and to monitoring, enforcement and inspection is presented below. Links to the original submissions are available here.

CONTRACT REVIEW AND APPROVAL PROCESS

1. Preliminary requirements (baseline data, scoping report, etc.)

- There is general support for including an environmental management and monitoring plan (EMMP), emergency response plan and a closure plan as annexures to the EIA (Australia, UK); several respondents suggest additional plans be annexed to the Plan of Work (DSCC, NORI);
- Some stakeholders express concern with the concept of additional supplementary documents (such as financing plan and insurance) (DSCC), indicating that these need to be clearly listed to ensure all Contractors provide the same plans (GSR, Verlaan);
- There is general support for the preparation of an environmental scoping document (New Zealand, Norway, DSCC, NORI);
- However, NORI and Marawa note that the draft regulations suggest the Scoping Report will be submitted under the Exploitation Code, which means that scoping documents (and studies in support of an EIA) cannot be started until the Code is approved, which may impact some Contractors' current schedules. NORI and Marawa accordingly recommend a scoping report not be required under the exploitation regulations;
- The UK recommends the environmental impact assessment (EIA) include different scenarios or options assessed;
- The UK indicates that APEIs in the vicinity of the contract area should be included in the EIA;
- Many respondents (Australia, New Zealand, UK, DOSI, DSCC) note that stakeholder engagement in the EIA process should be made mandatory, not merely recommended;
- The UK and New Zealand recommend guidance on the definition of an 'ecosystem approach' in the context of an EIA; NORI requests guidance on the goal of maintaining 'ecological integrity'
- It is noted by some respondents that a risk assessment process is required (New Zealand, Norway, NORI), but also that risk assessment is notoriously subjective and therefore careful description of the risk assessment process should be provided (Norway, DSCC);
- Some stakeholders indicate a preference for test mining to be a required element of the EIA (Germany, New Zealand, DSCC);
- New Zealand indicates that where models are used to predict impacts, there needs to be full disclosure about the methodology, inputs and assumptions underlying the model;
- DOSI highlights the need to consider climate change and greenhouse gas emissions in the EIA;
- Mexico advises that comprehensive baseline studies should be compiled for each region where an exploitation application is foreseen.

2. Review criteria

- New Zealand and DOSI recommend that the Secretariat conduct a preliminary review of the EIA and other documents to ensure these are considered 'complete' prior to making them available for public comment;
- Several stakeholders indicate the need for environmental performance objectives against which they could measure the impacts and management strategies described in the EIA (Netherlands, DOSI). They suggest these performance objectives might be referred to in the Regional Environmental Management Plans (REMPs) and/or used to link REMPs in a binding manner to the Exploitation Regulations (Germany, DOSI, DSCC);
- Germany indicates there is a lack of clarity in the structure and assignment of roles in the Plan of Work review and approval process;
- DOSI provides a potential draft structure/process chart;
- There are diverse views on whether LTC Recommendations should be binding, with some respondents indicating these should be non-binding to allow for the evolution of best practice (UK, GSR, NORI) while maintaining regulatory certainty, while other respondents recommend they be binding (Germany, DOSI, DSCC). However, all seem to agree that it needs to be clear which of these is the case, to ensure consistency across contractors in the manner in which the Recommendations are implemented and enforced;
- Some respondents indicate the definition of "Good Industry Practice" remains subjective (Australia, Germany, New Zealand, UK, DOSI, NORI), as does the definition of "serious environmental harm" (Germany, DOSI, NORI) and that clearer standards are required;
- Germany observes there is a lack of clarity on which aspects of transportation (of ore) are included in the scope of the ISA's assessment; NORI indicates the same lack of clarity exists regarding the processing of ore onshore or offshore (i.e. outside the Area, or within the Area);

3. Role of LTC, Council and Potential Specialised Committees

- Numerous stakeholders acknowledge that specialised technical committees or experts may be required to review EIAs particularly if the expertise to assess EIAs does not sit within the LTC or if the Secretariat is not sufficiently resourced (Australia, Germany, New Zealand, UK, DOSI, DSCC, GSR, IAPG, Verlaan); however, most also acknowledge that it remains unclear how technical experts would be identified. Several reiterate the need to focus on technical expertise as a first priority (GSR, DOSI, DSCC, Verlaan).
- GSR suggests making use of a list of experts administered by ITLOS;
- Germany recommends making use of Council working groups (made up of specific expertise areas) to assist the LTC with its workload;
- NORI, and UKSR advise that expert panels should not have decision-making authority;
- Australia requests more clarity on the different roles of the Secretary-General, the LTC and the Council in the ISA approval process;
- The UK expresses concern that there does not appear to be a provision for the Secretariat to request an updated/amended EIA before the LTC's recommendations on the draft are submitted to the Council;
- Some stakeholders (New Zealand, UK, Code Project DOSI, DSCC) indicate it would be preferable for the LTC to have a clear mandate to reject documents that are of insufficient quality or that do not include modifications or updates requested by the Secretariat or the LTC;
- DOSI is concerned that the Council has relatively little exposure to the application process;

- Algeria on behalf of the African Group notes the primacy of States in ISA decision-making and oversight;
- DORD questions whether the Council is empowered to request amendments to an EIS prior to approval of a Plan of Work, noting that any such request could affect the approval timeline.

4. Review Process (Complementing 4b on Opportunities for Public Engagement and Review)

- Respondents noted that many states have public engagement procedures in place and ISA processes could be harmonized with, or draw on, these processes and national expertise (Netherlands, New Zealand, Norway, UKSR);
- Numerous submitters express concern at the lack of mechanisms requiring applicants to address or give regard to comments made by interested parties (New Zealand, South Africa, UK, DOSI);
- DSCC expresses the view that amendments following stakeholder engagement should be made by the LTC, not the applicant;
- Several stakeholders indicate a dissatisfaction at the number of points at which stakeholder engagement is requested (currently limited to the scoping report and the EIA) (Germany, DOSI)
- Several stakeholders recommend clear time frames be applied to steps in the EIA review process (DOSI, DSCC, GSR, NORI) (although respondents disagreed on the timeframes that should be prescribed).

CONTRACT REVISIONS AND RENEWALS

1. Contract duration and renewal

- Jamaica expresses the view that an initial term of 30 years for contracts is excessive, and that it undermines the possibility of adaptive management.
- Several stakeholders express concern that the period covered by the Closure Plan has not been adequately addressed in the contract term (New Zealand, GSR, NORI)
- Algeria on behalf of the African Group, IFREMER, and IOM note the contract renewal process is unclear;
- JOGMEC recommends the renewal process should not be onerous;
- NORI suggests the ISA replace a "renewal" process with a contract "extension" process;
- Some stakeholders indicate that contracts should be extended for a period of not more than 10 years (New Zealand) while others champion a 30 year extension (NORI);
- France recommends the maximum number of renewals be specified, noting that 30 year contracts with apparently unlimited 10 year renewals could limit adaptive management and new entrants.

2. Process for revising documents, plans, contracts

- Some stakeholders indicate more clarity is required regarding the process for reviewing plans of work and supporting documents, particularly given the proposed length of the contract and renewal periods (UK, New Zealand, DOSI, DSCC, GSR);
- Some respondents advise that a new EIA process should be undertaken for all contract renewals (UK), while others indicate there should be a process for "minor" amendments to contracts (as well as appropriate definition of what constitutes a "minor" amendment (New Zealand, GSR);

- NORI recommends that contractors should be provided the flexibility to amend their Plan of Work and that they should not be prevented from proposing amendments to Plans of Work;
- UK suggests that environmental effects, performance, and monitoring under an existing contract should be used to assess an application for renewal of the contract;
- DSCC notes that the review of the EMMP should focus not only on Contractor compliance, but also on the effectiveness of the EMMP itself.

3. Adaptive management

- The Netherlands advises adaptive management could be used to facilitate the application of new technologies;
- France and Jamaica note the proposed length of exploitation contracts could limit both the application and utility of adaptive management.

MONITORING, ENFORCEMENT AND INSPECTION

1. Role of ISA, Sponsoring States, Contractor

- Germany assumes that ISA regulations would supersede national legislation with respect to the Area in case of legal conflict, while NORI assumes the opposite, and several respondents request clarity be included in the regulations (Algeria on behalf of the African Group, China, Japan, Singapore, NORI) (particularly on the role of the ISA, Sponsoring States, Flag States and Port States) and the extent to which Sponsoring States are deemed to have taken all necessary measures to ensure compliance (Tonga);
- GSR and UKSR state that no inequalities/inequities should arise among contractors based on any differences attributable to their respective sponsoring states;
- China, CIMA, and COMRA, emphasize the importance of the rights of the contractor and that these rights should be stipulated in the draft regulations. COMRA notes that the rights of the contractor are currently stated in the exploration regulations;
- Several respondents suggest or allude to a potential provision outlining a duty to cooperate, including coordination around information sharing, monitoring and enforcement (Algeria on behalf of the African Group, UK);
- NORI indicates strong dissent with the wording allowing inspectors to "test machinery to destruction" and to "seize any machinery";
- GSR advises that mining should not be suspended if a sponsoring agreement is terminated;
- France recommends the obligations of States be consistent with the ITLOS Advisory Opinion;
- South Africa emphasizes that the ISA cannot "rubber stamp" contracts provided by contractors.

2. Independence/transparency of inspections and audits

- The UK recommends that monitoring data be made available at least to the sponsoring State in order to avoid duplicating monitoring systems;
- The UK recommends an independent review of monitoring to determine the extent, and ensure effective remediation, of incidents;
- Some parties indicate that further thought is required on the role of Inspectors and the control they have in their inspectorate processes (Norway), particularly in relation to the extent to which inspectors may impact on the safety or production rate of the vessel (NORI);

- Germany advocates for an independent, legally binding scientific monitoring strategy, to be completed by third parties, to validate Contractor monitoring. DOSI also supports independent reviews of monitoring programs;
- DOSI indicates that the reports of inspectors should not be considered confidential;
- South Africa advises that observers must be required as part of monitoring and enforcement.

3. Penalties and liability provisions

- New Zealand notes that obligations could be placed on sponsoring States to determine appropriate monetary penalties for non-compliance; others suggest the use of monetary penalties for environmental violations (South Africa, DOSI, DSCC);
- New Zealand observes that apart from the powers given to inspectors to issue instructions as a result of an inspection, there is no provision for the Authority to instruct a contractor to amend or suspend its operation in the event that adverse effects on the environment or Interested Persons arise that were not anticipated at the time the Plan of Work was approved;
- NORI advises inspectors should be required to have evidence before ordering a suspension of activities;
- DSCC stresses the difference between a performance guarantee and an insurance policy, noting that a performance guarantee ensures performance whereas insurance insures against unforeseen events;
- Japan recommends there should be clear standards on the concept of a performance guarantee, and others express concerns over the concept and scope of a performance guarantee and seek clarity (Mexico, UK, IOM);
- The Netherlands recommend an obligation on contractors to address serious harm to the marine environment by restoration or equivalent compensatory measures;
- Several stakeholders highlight the current lack of a liability fund mechanism and recommend its inclusion (Algeria on behalf of the African Group, DSCC, DSMA, IASS);
- South Africa suggests that contractors be barred from continuing with exploitation activities that cause environmental harm until they fully replenish any established liability fund used to remedy that harm;
- Several contributors request further clarity regarding the kind of insurance policies required (Japan), the term/time period of insurance policies (Korea, UK, IOM) and the requirement for common insurance conditions (IOM).

4. Post-contract monitoring and compliance (environmental and financial)

- Some respondents question the ten-year post-closure environmental monitoring period, indicating it is too short (UK, Brager) but there is broad agreement that clarity is required on the period of post-closure monitoring required (see DOSI, NORI);
- NORI recommends that the regulations should make clear that all potential contractor liability is terminated once closure plans are completed.

5. Nature of Monitoring and Reporting

- The UK and New Zealand suggest annual environmental performance reviews and reporting of monitoring outcomes and data, rather than reviews occurring in years 2, 5 and 10;

- Several stakeholders indicate that continuous monitoring may not be appropriate (GSR, NORI, Verlaan);
- Some stakeholders indicate an expectation that the requirement to monitor Impact Reference Zones and Preservation Reference Zones would be binding (New Zealand, DOSI);
- The UK indicates monitoring objectives should be set against specific milestones or thresholds;
- Several stakeholders indicate there needs to be more clarity regarding the reporting of incidents, including what constitutes a reportable incident (DSCC, NORI);
- Germany and DOSI suggest a standard set of monitoring protocols to be implemented by all Contractors;
- South Africa emphasizes the "crucial" need for Strategic Environmental Assessments and Regional Environmental Management Plans to guide both EIAs and ISA decision-making.