18 December 2017

Mr. Michael W. Lodge

Secretary-General

International Seabed Authority

Dear Mr. Lodge,

We would like to express our sincere gratitude for the Authority's continuous efforts on

development of the draft Regulations on Exploitation of Mineral Resources in the Area (hereinafter

referred as "the draft Exploitation Regulation") and we wish a successful surmount of the future

challenges that may arise during the process of its development.

We understand that the draft Exploitation Regulations are to provide an outline of

regulations to be undertaken for exploitation of mineral resources in the Area and further details shall

be regulated by guidelines or something similar to enable applicants/contractors to implement its

exploitation activities in the Area. For commercialization of deep seabed mining, we expect that the

Authority takes into consideration of opinions from relevant companies during the process of

guidelines development.

Development of deep seabed resources still contains a number of uncertainties, such as

marine environment and its economics, and it is understandable that not everything can be regulated

in detail at this moment. As we are a contractor for the polymetallic nodules, please find enclosed our

comments to the draft Exploitation Regulations at this stage from a polymetallic nodules development

point of view.

Thank you very much in advance for your time and kind consideration for this regard.

Yours sincerely,

Kazuaki Shimada

President

DORD's Comments on the draft Regulation on Exploitation of Mineral Resources in the Area

1. Overall

1) Applicant before Signing an Exploitation Contract

• Is our understanding correct that an applicant shall, until signing an exploitation contract with the Authority, prepare all documents related with application for approval of a Plan of Work for Exploitation, such as conducting an EIA, within a period of an exploration contract with the Authority?

2) Securing Maritime Safety in the High Seas: Responsibilities of Contractors and Obligation of the Authority

• Exclusive rights to explore for and exploit the mineral resources its activities in the Area are extremely important rights for a Contractor to ensure stability and safety of its mining operation. The Authority has a responsibility of securing maritime safety of Contractors by cooperating with other international organizations and such description shall be included as reasonable efforts of the Authority in the Exploitation Regulations.

3) Clarification of Basis for the Fees to be Paid to the Authority by Contractors and its Actual Expenditure

- Deepsea mining industry has both economic and technical difficulties and prospects of its commercialization are still not clear. It is recommended to establish some measurements to create incentives and reduce risks to an advanced Contractor for realization and promoting commercialization of the industry.
- There are a number of payments required for an applicant or a contractor, such as Performance Guarantee (DR9), Annual Fixed Fee (DR 49), Royalty (DR50), Administrative Fees (DR83) and so on. When fixing price for each payment, consideration shall be given to, not only securing economy of the project, but also excessive amount of payment, and effectiveness of incentives and risk reduction.
- Therefore, it is recommended that the basis for calculation of the fees to be paid by Contractors shall be clarified and actual expenditures of administrative fees shall be disclosed.

4) A Preference and a Priority for Application for Approval of a Plan of Work for Exploitation

- It is positively welcomed from a Contractor's point of view that, for an application for approval of a plan of work for Exploitation, the regulations regarding a preference and a priority of an applicant who is a contractor for exploration or who uses the information obtained under the exploration contract have been added (DR2-6, DR6-2, and DR10-3-b).
- It is recommended to regulate procedures and rules for transfer of a preference and a priority to avoid confusion in a later stage.

5) Reduction of Work Load by Simplification of Administrative Process

• As shown in the Appendices of the Draft Exploitation Regulations, there are a quite number of documents required to be submitted by an applicant for approval of a Plan of Work for Exploitation. Moreover, there are other documents, such as an annual report (DR37), royalty return (DR58) and so on. As items to be included in these reports are broad and in detail, It is recommended to consider necessity of contents of each submission and simplify each content to reduce work load of a Contractor.

2. Comments for each Draft Regulation

Part I Introduction

■ DR 1 Use of Terms and Scope

The freedom and right to conduct marine scientific research in the Area are respected under the
Convention. However, causing under interference to the mining activity area is a serious problem
for the Contractor to ensure stability and safety of its operation. It is necessary to develop a
mechanism that gives reasonable regard toward deep seabed mining development.

Part II Application for Approval of Plans of Work for Exploitation in the form of Contracts

■ DR 2 Qualified Applicants and DR 6 General

• According to Annex III, Article 10, of the Convention, as well as Regulation 24.2 of the Exploration Regulations for Polymetallic Nodules, it is regulated that an operator/contractor "who has an approved plan of work for exploration only shall have a preference and a priority among applicants for a plan of work for exploitation of the same area and resources." Draft Regulations 2-6 and 6-2 indicate a presence of a preference and a priority for application of an approval of a Plan of Work for Exploitation. However, it does not indicate an effective term of such right.

Is our understanding correct if an exploration contract expires before obtaining an approval of a Plan of Work for exploitation, will the exploration contract be extended, and the Contractor

- continues to obtain a preference and a priority?
- It is recommended to include clear procedures and rules for data provision and transfer of rights when a preference and a priority is transferred to other companies.

■ DR 7 Assessment of Applicants

- According to DR7-6, it is stated that "at any stage prior to making its recommendation to the Council, the Commission may request the applicant to amend or modify its application." If such request to amend or modify its application involves additional environmental impact studies or some other work that may require significant amount of time and work, it may seriously affect the applicant's application schedule. Thus, it is requested that the Commission shall consider that their request may largely affect the applicant's application schedule, and it is recommended to establish some rules for procedures for making a request to amend or modify application documents.
- What does "insurance products" mean, as stated in this draft Exploitation Regulations, i.e. "necessary access to insurance products"? Please clarify.

■ DR 9 Performance Guarantee

• The purpose of a Performance Guarantee shall be defined more in detail and the amount or value shall be set at the minimum. There should be flexibility for setting the amount or value, such as deduction of amount when the Sponsoring State guarantees the performance of the Contractor that it sponsors.

■ DR 10 Commission's Recommendation for the Approval of a Plan of Work

• In this draft regulation, the Draft Regulations 10-2 and 10-3 state the cases when the Commission does not recommend an approval of a proposed Plan of Work. Does "Another qualified entity" stated in DR10-3 (b) include a former Contractor whose exploitation contract with the Authority has been expired, as well as a party that has succeeded to a preference and a priority in the Area? We would like to ask clarification in this regard.

Part III Exploitation Contracts

■ DR 13 The Exploitation Contract

It is positively welcomed from a Contractor's point of view that the maximum initial term of an
exploitation contract has been extended to 30 years from previously proposed 20 years. When an
exploitation contract is renewed, it shall not necessarily require some procedures for a new
contract, e.g. conducting an environmental impact assessment, and shall not wrongfully affect

the Contractor's rights that have been obtained in a previous contract with the Authority.

Part IV Environmental Matters

(1) Overall

1) Protection of the Marine Environment by the Authority

• Process for cooperation and coordination between the Authority and other international organizations, such as the Food and Agriculture Organization (FAO) that has been playing a major role for establishment of marine protected areas, as well as coordination between the Authority and Contractors, shall be defined. Please clarify what shall be done by when as a Contractor for this regard.

2) Environmental Studies

• If a Contractor, who has an approved Plan of Work for Exploration, needs to implement environmental studies during the exploration contract period for preparation of an application for approval of a Plan of Work for Exploitation, there is an urgent need for enhancement of the ISA environmental guidelines by the Authority, e.g. standards for water quality in the targeted area etc.

3) Public Consultations

 In addition to disclosure of environment-related documents on the Authority's website for comments during a process of application, is an applicant/contractor required to conduct public consultation with stakeholders also? It is desirable that public consultations are solely conducted by the Authority with full support by an applicant/contractor to avoid confusion.

(2) Comments for each Draft Regulation

■ DR 17 General Principles

According to paragraph (e), it is stated that "effective public consultation shall be encouraged."
 Does this mean that an applicant should plan and implement public consultation(s) by him/herself? To simplify information dissemination and collection of comments, it is proposed that public consultations are solely implemented by the Authority with full support from an applicant.

■ DR 19 Environmental Impact Statement

• It is encouraged to clearly state in environmental guidelines the "internationally recognized standards" that will be referred for conducting an environmental impact assessment.

- It would be necessary to clarify how environmental standards will be established, i.e. setting
 common standards throughout certain area, setting specific standards based on the environmental
 baseline study conducted at each contract area, or any other method.
- The standards, such as water quality standards, wastewater discharge standards, etc., that are
 necessary for conducting environmental impact assessment, as well as for establishing
 environmental monitoring plan and environmental management plan, shall be established based
 on scientific evidence.
- It is important to clarify how thresholds will be set and how frequent such thresholds will be reviewed and updated.

■ DR 21 Publication and Review of Environmental Impact Statement1

- It is stated on the paragraph 3 that the "Commission may recommend amendments or modifications to the EMMP and CP as a condition for approval of the Plan of Work." Is there any possibility that the Commission may recommend amendments or modifications to an EIS prior to approval of the Plan of Work when reviewing environmental documents (EIS, EMMP and CP)? If there could be request by the Commission for amendments or modifications to an EIS prior to approval of the Plan of Work, time required for such revision period may need to be considered when setting expected date of approval.
- According to the paragraph 4, it is stated that the "report of the Commission on the EIS, EMMP and CP, and any amendments or modifications recommended by the Commissions, shall be published on the Authority's website." It is understood that the EIS approved by the Council will also be published on the Authority's website. If so, confidentiality obligation by the Contractor shall be respected.

■ DR 22 Revised Environmental Management and Monitoring Plan and Closure Plan

• According to the paragraph 5, the "Secretary-General shall publish the approved plans on the Authority's website." How long will these plans be published on the Authority's website?

■ DR 23 Ongoing Obligations of Contractors towards the Marine Environment

Discharge standards and methods shall be indicated in the guidelines to be developed later.

■ DR 25 Final Closure Plan and Post-Closure Monitoring

• It is requested that monitoring period, items to be monitored and monitoring points and frequency

after post-closure will be clearly established by the Authority.

Post-Closure monitoring required to the Contractor shall be established by the Authority in a
practicable manner (its cost, monitoring items, monitoring area, etc.) as it may affect its project
cost significantly.

Part V Obligations of the Contractor

■ DR 30 Commercial Production

• It is understood that a Mining Plan is developed as a part of a Feasibility Study (ref: Annex II 2(d)). Is it required to prepare a separate Mining Plan? It is also stated in the administrative fees in Appendix II as "approval of a revised mining plan". Need clarification.

■ DR 31 Electric Monitoring System

• It is understood that an electric monitoring system to be equipped with mining vessels and mining collectors are the ones that record the date, time and position of all mining activities. Is such system envisaged as an Automatic Identification System (AIS) that is currently being used, or some system similar to an AIS? Please clarify.

■ DR 39 Books, Records and Samples

• It is understandable that there is a need to integrate accounting standards. However, not all companies have implemented and utilize IFRS. If IFRS is to be implemented by all companies, it should be implemented systematically as implementation of new accounting standards may significantly affect companies, such as extra administrative burdens and increased costs incurred by such implementation.

It is therefore recommended to change the phrase "consistent with International Financial Reporting Standards" to "consistent with internationally accepted accounting principles" as stated in Annex IV, Section 9, of Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area. Same change shall be applied to other relevant parts of the draft Exploitation Regulations, such as Draft Regulation 64, Annex, etc.

■ DR 44 Other Resource Categories

• It is required by this Draft Regulation that the "Contractor shall notify the Secretary-General if it finds Resources in the Area other than the resource category to which the exploitation contract relates, within 30 days of its find." Though a separate application is required for other resource category by this Draft Regulation, it is proposed that a preference and a priority are given to the Contractor for the development of the other resource category found in the Area.

Part VI Review and Modification of a Plan of Work for Exploitation

■ DR 46 Modification of a Plan of Work for Exploitation

• It is important for a Contractor to be able to conduct its mining operation at liberty to achieve its economic targets, and this would enable a Contractor to receive optimized economy and the investment capital to be recovered. It is therefore necessary to clarify what kind of modification of a Plan of Work requires discussion with the Secretary-General.

■ DR 47 Review of Activities under a Plan of Work for Exploitation

• The Plan of Work for Exploitation will be prepared based on a long-term perspective of 30 years or so, different from the Plan of Work for Exploration. Therefore, it does not seem practicable to review the activities under a Plan of Work at intervals of not greater than five years as stated in this Draft Regulation. Moreover, the results of such review may require modification to the Plan of Work, which may significantly affect the project's economy. It is thus proposed that such review shall be undertaken when there is necessity to do so due to improved knowledge or technology with a prior consent of the Contractor. Even if there are any modifications to the Plan of Work after such review, the vested rights of the Contractor shall be kept.

Part VII Financial Terms of an Exploitation Contract

■ DR 49 Annual Fixed Fee

• Calculation of the annual fixed fee, i.e. multiplying the total size of the Contract Area in square kilo meters identified in an exploitation contract by an annual rate per square kilo meter, is not a fair method for polymetallic nodule mining as its Contract Area is way much larger than other resource categories and it requires a vast sum of money. It is requested to consider exclusion of non-mining area, such as reference zones (PRZ, IRZ, etc.), from the total size of the Contract Area, as well as to establish mitigation measures to reduce annual rate in accordance with a larger size of mining area. Moreover, a deep-sea mining activity is deemed to have risk of suspension from operation after commercial production, much higher than a land mining operation. To reduce economical risk at the early stage of its operation, it would be necessary to set an annual rate at minimum for the first 10 years after execution of the Exploitation Regulations and to set an incentive of payment exemption during cessation of the operation.

■ DRs 51-54 Definitions, Valuation of Mineral-Bearing Ore, Royalty Rate, Calculation of Royalty Payable

• It is anticipated that adoption of an ad-valorem method, which is the sum of the production volume multiplied by a fixed rate, for calculation of the royalty payable will give fairness and perspicuity for exploitation of mineral resources in the Area. Applicable Royalty Rate is split into

the First Period of Commercial Production and the Second Period of Commercial Production. It is recommended that the Applicable Royalty Rate of the First Period of Commercial Production shall be set to the minimum rate to reduce economic risks of the project, as well as to enable an early recovery of investment fund.

- It is recommended to consider economics of the projects and incentive efficiency when deciding numerical values. In addition, it is encouraged to take measures for project incentives, such as an exemption of fees, for the first contractor as the first contractor has more risks than the other contractors since deep seabed mining is an unexplored frontier.
- Numerical values for Royalty Rate and other rates shall be revised with proper values when costs
 for some particular activities, such as test mining, and environmental monitoring and
 management, become available as a test mining has not ever been conducted and many
 environmental challenges are still yet to be solved.

■ DR 57 Royalty Return Period and DR 61 Information to be Submitted

A royalty return period is a half-year return period, which is a burden to a contractor. If an advalorem method is selected for a calculation method, information to be submitted as an evidence could be omitted.

■ DR 64 Proper Books and Records to be Kept

• It is requested to set the number of years required for the Contractor to keep these books and records after its operation (or after the closure).

■ DR 72 Review of System of Payments and DR 73 Review of Rates of Payment

• It is understandable that a Royalty Rate shall be regulated in this Exploitation Regulations. However, considering unsolved questions towards technical and environmental challenges, as well as market changes, the rate can only be provisional at this stage. Thus, it is proposed to add a regulation that requires review of rates to establish more practical rates when the first project is applied to the Authority for an approval of its Plan of Work for Exploitation.

Part VIII Information Gathering and Handling

■ DR 75 Confidentiality of Information

We appreciate that the period of confidential information has been changed from 5 years to 10 years. However, the exploitation contract is expected to be 30 years or even longer and confidential information shall be basically handled as confidential throughout the contract period.

As regulated in Regulation 36.4 of Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, confidential data and information shall be reviewed by the Secretary-General and the Contractor to determine whether they should remain confidential ten years after the date of submission of confidential data and information to the Authority, as well as every five years thereafter, and this point shall be clearly stated in the draft Exploitation Regulations.

Part IX General Provisions

■ DR 81 Duty to Cooperate and Exchange of Information

- The freedom and right to conduct marine scientific research in the Area are respected under the Convention. However, causing unlawful obstruction to the mining activity area is a serious problem for the Contractor to ensure stability and safety of its operation. It is necessary to develop a mechanism that gives reasonable considerations toward deep seabed mining development.
- The exclusive right of the contractor to explore for and exploit the resources covered by the Plan of Work is stated in Annex III, Article 3-4 (c) of the Convention, and consequently it is regulated so in Regulation 24-1 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area. Although the Section 4 of Annex X of the draft Exploitation Regulations states security of tenure and exclusivity, it is desirable that a regulation regarding the exclusive right of the contractor is added to the main body of the Exploitation Regulations as follows:

 The Contractor shall have the exclusive right to exploit an area covered by a Plan of Work for Exploitation and the Authority shall ensure that no other entity operates in the same area for other resources in a manner that might interfere with the operations of the contractor.

■ DR 82 Rights of coastal States

Rights of coastal States are important. When any coastal state has grounds for believing that any
activity in the Area by a Contractor is likely to cause serious harm or a threat of Serious Harm to
the Marine Environment, such state shall demonstrate such grounds with scientific and specific
evidence at its own cost.

Part X Administrative fees

■ DR 83 Administrative fees

• It is stated in this Draft Regulation 83-2 that if "the administrative costs incurred by the Authority in providing a specified service are less than the fixed amount, the Authority shall refund the difference to the applicant or Contractor, as the case may be." It is recommended that the basis for calculation of the administrative costs and actual results of the expenditure are provided to the Contractor.

Part XI Inspections

■ DR 85 Inspection: General

• It is stated in 4 (h) of this Draft Regulation 85 that the Contractor, its agents and employees shall provide "at the expense of the Contractor, reasonable facilities, including where appropriate, transport, food and accommodation, to Inspectors," while it is stated in 2 of this Draft Regulation 65 that any "such audit shall be undertaken at the Authority's sole cost and shall be performed by an Inspector in accordance with Part XI of these Regulations." In this Draft Regulation 85, it can be read that the inspection shall be undertaken at the Contractor's cost and this shall be reconsidered whether the Contractor is responsible for this matter.

Part XIV Review of the Authority's Regulations

■ DR 94 Review of the Authority's Regulations

- The Authority's Regulations are to be reviewed five years following the approval of these Regulations by the Assembly. It is proposed to include in the Exploitation Regulations that the Authority shall ensure that any revision of the Exploitation Regulations shall not affect the Contractor's stable operation, e.g. revision of any plans (such as environmental management plan, feasibility study, etc.) or increase of fees to be paid by the Contractor.
- It is proposed to include following sentence to the draft Exploitation Regulation:

 If revised Exploitation Regulations are to be applied by the Contractors, a prior consent of the Contractors shall be obtained.

3. Comments for Annexure

■ Annex II Pre-Feasibility Study

 Submission of a Feasibility Study is required at least 12 months prior to the proposed commencement of production in a Mining Area (DR 29). What are the difference between Feasibility Study and Pre-Feasibility Study? If there are any difference, information to be included in the Feasibility Study needs to be clarified and attached as an annex to the Exploitation Regulations.

■ Annex IV Environmental Scoping Report

- Since the project site is offshore and stakeholders are not easily identified in most cases, it is not
 practical to conduct consultations by an applicant. To avoid disruption of communication process,
 it is recommended that the Authority undertakes consultations with Interested Persons with full
 support from an applicant.
- Please provide in the Exploitation Regulations a definition of consultations as it is not clearly

stated.

■ Annex V Environmental Impact Statement Templates

Since the project site is offshore and stakeholders are not easily identified in most cases, it is not
practical to conduct consultations by an applicant. To avoid disruption of communication process,
it is recommended that the Authority undertakes consultations with Interested Persons and
relevant stakeholders with full support from an applicant.

Annex VII Environmental Management and Monitoring Plan

• It is required to include "Details of reporting requirements and timing" when submitting an environmental management and monitoring plan. Is it expected that details of reporting requirements and timing will be different for each contractor? It would be more efficient to develop a template for monitoring results and indicate what need to be reported.

■ Annex VIII Closure Plan

 We expect that requirements to be included in a closure plan will be clarified more in later guidelines.