

Report

DOSI participation in the second Council meeting and Assembly of the 27th session of the ISA

Overview

The twenty-seventh session of the Council (Part II) and the Assembly was held in Kingston, Jamaica from 18 July to 5 August (Council: 18-29 July; Assembly: 1-5 August). DOSI participated in person, and a team of experts assisted and participated online.

DOSI Minerals WG members participating in person

Patricia Esquete (Co-lead)
Beth Orcutt
Diva Amon

DOSI Actions

1. Information sheets and Policy briefs

DOSI prepared, printed, and distributed copies of the documents:

- a) [*The Purpose and Requirements of Environmental Impact Statements: A case study of the NORI prototype collector test*](#)
- b) [*What Does the Deep Ocean Do For You?*](#)
- c) [*The Ongoing Science Needed for Robust Deep-Sea Mining Regulations*](#)
- d) [*The Necessity of Traditional Knowledge for Management of Seabed Mining*](#)

2. Interventions and textual proposals

DOSI actively intervened in the discussions by delivering a total of 19 interventions (Annex I). Additionally, DOSI submitted a total of 15 written proposals for the Draft Regulations, based on DOSI interventions during the meeting of the Informal Working Group for Marine Environment on the protection and preservation of the marine environment.

The interventions delivered and textual proposals can be found on the ISA website.

<https://isa.org.jm/node/20798/session/council#block-media-2>

Our work was mentioned in interventions or had our interventions supported by:

- The UK supported an intervention by DOSI on the need for safe working spaces on Wed 20th July.
- Chile specifically referred to DOSI's calls for more science given our limited understanding of the deep ocean in an intervention on Thursday 21st July.

3. Informal meetings

Several informal meetings were held with delegations from countries (i. e., Argentina, Canada, Chile, Costa Rica, Fiji, Germany, Mexico, the Netherlands, Spain, Tonga, Trinidad & Tobago) and observers (Deep Sea Conservation Coalition, Greenpeace, Pew Charitable Trust, AIDA, Earthworks, Ocean watch) to discuss the course of the negotiations, share ideas, and coordinate interventions. DOSI also met with Noemie Wouters, the new ISA Marine Scientific Research Coordination Officer, to explore synergies and potential areas for future collaboration.

4. Press

Patricia Esquete was interviewed by Emilio Godoy, an independent journalist at the Courtleigh Hotel on 1st August 2022.

Diva Amon was interviewed by Elizabeth Alberts of Mongabay via telephone on 19th July 2022.

Diva Amon was interviewed by Daniel Ackerman of Gimlet Media's How To Save A Planet and NPR at the Courtleigh Hotel on 27th July 2022

Gallery

(source: <https://www.flickr.com/photos/isbahq/>)

Up Left: Patricia Esquete (DOSI) and Constanza Figueroa (Chile).

Up Right: Diva Amon (DOSI) Delivering an intervention.

Middle left: Diva Amon (DOSI) delivering an intervention

Middle right: Beth Orcutt (Chile) delivering an intervention

Down right: Patricia Esquete (DOSI), Pradeep Singh (IUCN) and delegate (Italy)



ANNEX I. Interventions

COUNCIL

ITEM 7: ISBA/27/C/28 - Status of contracts for exploration and related matters, including information on the periodic review of the implementation of approved plans of work for exploration (Delivered on 18.07.2022)

DOSI would like to support the intervention by the Pew Charitable Trusts and would appreciate that the environmental and thus non-confidential information of yearly reports of contractors and the periodic review would be publically available and that information about findings or outcomes from that process are shared.

ITEM 11 - DRAFT REGULATIONS ON EXPLOITATION OF MINERAL RESOURCES IN THE AREA
Briefing Note - Fifth Meeting of the OEWG of the Council on the financial terms of a contract under article 13, paragraph 1 of Annex III to the UNCLOS and under section 8 of the Annex to the Agreement relating to the implementation of Part XI of the UNCLOS of 10 December 1982
(Delivered on 18.07.2022)

Thank you Mr Facilitator. Firstly, The Deep-Ocean Stewardship Initiative wishes to thank the many States who intervened regarding the streaming of the informal sessions. DOSI is a network of over 2000 experts - given the limited in-person participation for Observers who are only allowed one delegate present, we will now be able to once again consult our network in real-time. In the interest of transparency and inclusion to benefit all, we strongly request that the ISA Web TV be streamed for the remainder of the Session.

In regard to the financial terms, DOSI also wishes to raise concern about the lack of incorporation of environmental costs. The ISA should not be deterred by the fact that it may be a difficult task to estimate environmental costs, such as for impact assessment, monitoring and remediation, as well as the value of environmental damage from lost ecosystem functions. The ISA is, and will continue to be, faced with many difficult tasks in managing deep-sea mining, but must take on those tasks nonetheless, with diligent attention, applying appropriate resources, listening to relevant stakeholders, and with precaution as a priority, in order to deliver on its mandate to ensure activities in the Area are conducted for the overall benefit of humankind. Critical ecosystem services that could be impaired by mining include the sequestration of carbon, regeneration of nutrients that permit ocean productivity, fisheries, and biodiversity that has possible biomedical benefits. Ecosystem services directly contribute to human well-being; activities that degrade and damage them result in direct losses for humanity, and these costs should not be borne by society. Environmental costs, including potential losses - for example of the benefits provided via ecosystem services - must inform conversations around royalty regimes, environmental performance guarantees, and every other financial topics discussed at the ISA.

Second, like Costa Rica, the Africa Group, and other State and Observer delegations, DOSI wishes to add our disappointment at the disregard for this issue, which was discussed by many of those in the room during the first part of the 27th Session, as well as in previous sessions. In fact, DOSI raised this concern in 2018, which calls into question the transparency of incorporating stakeholder's views into this process thus far. We wish to suggest an open process that all stakeholders can feed into to strengthen the outputs.

Thank you

ITEM 12: ISBA/27/C/27 - IMPLEMENTATION OF THE DECISION OF THE COUNCIL IN 2021 RELATING TO THE REPORTS OF THE CHAIR OF THE LEGAL AND TECHNICAL COMMISSION (Delivered on 18.07.2022)

Thank you mr president.

III Activities of Contractors - In regard to PARA 16: As noted by Belgium, recent environmental impact assessments conducted during the exploration phase have been grossly unfit for purpose, including limited environmental baseline information and stakeholder consultation. The Deep-Ocean Stewardship Initiative, like others, also looks forward to engaging with the working group being established to review the EIA procedure.

IV Developments Regarding REMPs

With regard to PARA 17: DOSI congratulates the Authority on the revised draft plan for the regional environmental management plan for the area of the northern Mid-Atlantic Ridge. DOSI experts are thankful to have been able to contribute to this process, and acknowledge that much of the discussed science is reflected in this REMP. However, we note that this draft REMP still needs further significant improvement in order to be effective for its purpose. Main gaps include the determination of necessary data to be provided for the REMP and the location and manner for their access by all stakeholders, as well as the assignment of responsibility for providing the data. Definitions of management measures such as buffer zones for Sites/Areas in need of protection, thresholds, benthic and pelagic indicator species, cumulative impacts and scenario forecasting are very much still needed but are currently lacking. Further, the concept of networks of protected sites, and associated criteria for the design, has not yet been even considered in the REMP. Our detailed scientific assessment and commentary on the nMAR REMP is available online. Further collaboration with stakeholders will be necessary to fill the current gaps. DOSI is ready to assist the ISA in accessing global scientific collective expertise.

With regard to PARA 18: While DOSI applauds the Authority undertaking the development of a standardized approach and a general template for the development and review of regional environmental management plans, we suggest that this is duplicative given the delegations of Germany, the Netherlands, and Costa Rica made similar submissions in ISBA/C/26/6 and ISBA/C/26/7, that were drafted via inclusive and transparent processes.

V Data Management Strategy

PARAS 19, 20, 21, 23: The Deep-Ocean Stewardship Initiative applauds the Authority on the progress made on data management, including via updated reporting templates for Contractors' geological and environmental and metadata. We hope these reporting templates will be made available to all stakeholders in a timely fashion and query how this will interact with the ISA's environmental database, DeepData. We further note the secretariat is continuing its scientific work and interpretation from DeepData, with the assistance of experts from developing countries, under the Africa Deep Seabed Resources project. DOSI would therefore also be grateful for an update on any improvements to DeepData given it was launched since 2019 but still has limited

functionality. As mentioned by Costa Rica, the database is only useful if the data is accessible and usable for management decisions. The accessibility of data collected by contractors in the Area is essential for independent and regional analyses that will guide REMPs, so we hope for quick resolution to these matters, including a data quality control system, the integration of this platform with global observing efforts and adoption of best practices, interoperability, and accessibility. Publication of the ISA's data management strategy would be an important step in helping relevant stakeholders understand how the ISA is approaching these essential issues. Likewise, DOSI proposes that an organ of scientific expertise should oversee the regular efforts to synthesize contractor data sets and evaluate impact assessment at a regional scale mentioned in this document.

Thank you, Mr. President.

ITEM 11 - DRAFT REGULATIONS ON EXPLOITATION OF MINERAL RESOURCES IN THE AREA

Briefing Note - Second Meeting of the Informal Working Group on the Inspection, Compliance and Enforcement (Delivered on 20.07.2022)

Intervention I

As this is the first time The Deep-Ocean Stewardship Initiative takes the floor during this working group, we thank you Madame Facilitator for the progress made on this important text.

DOSI would like to support the addition of **DR 96 Para 5 (b bis)** which details the provision of reasonable facilities, including where appropriate, food and accommodation, to Inspectors. We would also like to support the addition of an express reference regarding the provision for safe and inclusive working environments of inspectors while on board. We acknowledge the reference to intimidation under **DR Para 96(5)(g)**, but would suggest rephrasing to expressly link these questions to the overarching physical and psychological well-being of inspectors. Most of these mineral-related activities will require participants, including inspectors, to spend continuous weeks to months on ships at sea, often great distances from the nearest landmass and manifesting in inevitable isolation. Unfortunately, harassment, bullying, and discrimination are rife during work at sea generally, and this may especially be the case for inspectors.

Related to this matter, DOSI commends ISA's commitment to empowering women in marine scientific research, but, drawing from DOSI experts' own experiences of spending time on offshore campaigns, we note that such commitments need not only be vocalised, but also be operationalised. The ISA can play a leadership role in this regard. That should include highlighting relevant principles about equity, inclusivity and safety in the Regulations. We would also recommend that the ISA require contractors to have in place appropriate practical measures to safeguard the wellbeing of all persons on their vessels, including non-crew and non-employees, such as inspectors and trainees. We believe these aspects need significant bolstering in the Regulations as currently drafted. DOSI has written a peer-reviewed scientific paper detailing this matter and containing recommendations for rectification, which we would be happy to share with States, the Secretariat, and beyond.

With regard to **DR 96 Para 5f**, DOSI recommends that there be a requirement for real-time data reporting for environmental monitoring of all Contractors as standard practice, rather than specifically authorized on a case-by-case basis. As such, we propose to delete the words "where required by the Secretary-General" as real-time monitoring would always be required.

Thank you Madame facilitator.

(Intervention II)

Thank you for giving us the floor, Madame facilitator,

With regard to **DR 102 Para 2**, the Deep-Ocean Stewardship Initiative recommends amendments to the text that facilitate the real-time INDEPENDENT monitoring of information on mining activities, environmental data, and positions of all mining vessels at all times. These data should be available to all stakeholders in real time. This will facilitate analysis of the monitoring, enhancing the transparency of this industry in environments remote from human interactions, and should be undertaken by well-resourced, knowledgeable, and independent individuals. We also wish to note that currently an EU contribution of 14 Million € is foreseen within the HORIZON program to fund a project on a monitoring and supervision system for deep-sea mineral exploration and exploitation activities from 2023 to 2027. This includes support for the development of systems and technologies to continuously monitor the baseline as well as any impacts arising from mining activities. Real-time deep-sea monitoring technology is now in rapid development and could be fully operational within the next decade. Additionally, while we appreciate the concerns of the distinguished delegate from Nauru, DOSI is pleased to report that streaming is possible at all times, so the ISA should not hesitate to require continual data reporting as standard procedure. We support reliance upon this important mechanism in the Regulations, as one of the tools that can be used by and inform the independent inspectorate.

The Deep-Ocean Stewardship Initiative also agrees with Costa Rica's comment that **DR 102 Para 2.bis** be expanded to include other impacts of deep-seabed mining such as, but not limited to, chemical emissions, and introduction of other pollutants, light, as well as sound.

Thank you Madame facilitator.

ITEM 11 - DRAFT REGULATIONS ON EXPLOITATION OF MINERAL RESOURCES IN THE AREA

Agenda item 11 - ISBA/27/C/30 - Draft regulations on exploitation of mineral resources in the Area Normative environmental thresholds for deep-seabed mining; Submitted by the delegation of Germany

Delivered on 21.07.2022

Madame Facilitator,

As this is the first time, the Deep-Ocean Stewardship Initiative has been given the floor during this Working Group, please allow us to thank and congratulate you on the intersessional progress made on this important document.

The Deep-Ocean Stewardship Initiative welcomes and fully supports Germany's submission on the urgent need for the development of normative environmental thresholds, and is very glad to see the positive reception by so many States and Observers. This will be key for warning the Authority BEFORE any serious harm occurs, and equally importantly, allows the Authority to adopt effective and necessary measures to ensure the effective protection of the marine environment from the harmful effects of mining activities.

Environmental thresholds should be grounded in comprehensive scientific research, including good environmental baseline data, much of which still has to be collected and analyzed. The more comprehensive the baseline data, the more confidence we can have in the thresholds. In the absence of widespread and robust baseline data, thresholds will need to include a precautionary buffer.

DOSI welcomes and fully supports the inclusive nature of text in the submission that speaks to the suggested procedure for developing thresholds. DOSI, with its large global network of deep-sea experts, stands ready to support the proposed working group.

Thank you Madame Facilitator

Intervention on DR44

Delivered on 21.07.2022

Madame Facilitator,

With regard to Draft Regulation 44, DOSI has three points we would like to raise.

First, with regard to Para 1, we support the many States who have flagged that the general obligations currently refers only to direct mining impacts, but not to indirect and cumulative impacts. Direct mining impacts include the destruction and removal of the seafloor along with their unique fauna, while indirect impacts include, for example, the plumes created from seafloor disturbance and the return of sediment-laden wastewater, contaminant release, changes to water properties, increases in noise and light. For this reason, we suggest the inclusion of the wording “or indirectly or cumulative”.

Second, with regard to Para 1 a (iv), in support of Costa Rica and others’ interventions, DOSI also suggests the deletion of “relevant” before the term environmental data, as all environmental data is relevant and should be made publicly available and easily accessible online.

Finally, with regard to DR44 Para 1 c, DOSI wishes to query the newly added text “interference with ecological balance” as raised by Italy and others. We understand that this term derives from UNCLOS, however we would suggest the inclusion of a more commonly used scientific term, perhaps related to loss of ecosystem functions and services. Alternatively, if “interference with ecological balance” is the chosen term, it should be defined using common scientific terms including ecosystem functions and services, for example.

Finally, Madame Facilitator, we hoped you could provide some clarification on the deadline for the submission of comments via the template.

Thank you Madame Facilitator.

Intervention on Regulation 44bis -- Regional Environmental Management Plans, Delivered 22 July 2022

Thank you Madame Facilitator.

The Deep-Ocean Stewardship Initiative also supports the inclusion of Alt1 of Regulation 44bis. A REMP should be in place before any Plan of Work is considered. As reported in a recent scientific peer-reviewed paper, regions where exploration contracts exist are still sorely lacking in environmental data to guide effective decision-making. As such, there should be no time limit placed on the development of REMPs, as the collection and analysis of necessary data to inform REMPs should not be rushed.

Thank you Madame Facilitator.

ITEM 15: REPORT OF THE FINANCE COMMITTEE (ISBA/27/C/36-ISBA/27/A/8)

Delivered on 21.07.2022

Good morning and many thanks for giving us the floor, Mr president, as well as for the report of the finance committee, Mr. Chairman,

The Deep-Ocean Stewardship Initiative is heartened to hear of these new plans to promote and facilitate marine-scientific research, as well as capacity development through establishment of a Partnership Fund. However, we wish to seek clarification. Will there be an opportunity for consultation on the newly proposed Fund? We support Costa Rica in asking how this fund will be governed? How will the ISA, in practice, interact with scientists and promote and encourage the conduct of marine scientific research in the Area for the benefit of humankind as a whole? How will the relevant funds be allocated to the five listed items? We would very much appreciate more information in due course and would gladly welcome the opportunity to contribute.

Many thanks Mr President and Mr Chairman.

Intervention on Reg 45 Development of Environmental Standards and Guidelines, Delivered 22 July 2022

Thank you, Madame Facilitator.

With regard to Draft Regulation 45 on environmental standards and guidelines, the Deep-Ocean Stewardship Initiative has four points we would like to raise.

First, for Para 1. We suggest replacing points a-f with the language of the currently developed Standards and Guidelines points a-g.

Second, in Para 1(a), we also support the inclusion of indicators and also recommend including thresholds, as proposed by others. DOSI also wishes to support Germany's and China's suggestion that the term "ecological balance of the marine environment" be defined or amended to a more commonly used scientific term, perhaps related to loss of ecosystem functions and services.

Third, in Para 1(c), DOSI supports the re-inclusion of "Mitigation measures." We note that 'Mitigation' is a defined term, so that term should be used consistently.

Finally, DOSI also fully supports the addition of Para 2.

Thank you, Madame Facilitator.

Intervention on reg 46bis - Environmental Impact Assessment

Delivered 22 July 2022

Thank you Madame Facilitator.

With regard to DR 46bis, the Deep-Ocean Stewardship Initiative have very specific comments which we will submit via the template in due course, but would like to share some key parts here:

First, DOSI also suggests the addition of "and a scoping report" to DR 46bis Para 2a so that the scoping process is documented and can be consulted upon by stakeholders. DOSI further

suggests a definition of scoping process and report, as well as the minimum requirements for this, either within 46bis Para 2a or as a new regulation or as an Annex.

Second, we suggest adding a sentence to DR 46bis Para 2a on the assessment of the available environmental baseline data and their compliance with the relevant Standards, as without robust and standardized environmental baseline data all follow up steps won't be effective.

Third, DOSI suggests the Regulations should be checked through for consistency around the use of the terminology of avoid, minimize, and remediate, following the mitigation hierarchy. We note that 'Mitigation' is a defined term, so that term should be used consistently. Related, we note confusion on the way that 'Mitigation' is defined in the Schedule of Terms in the draft Regulations. The first 3 parts of the definition reflect the familiar 'avoid, minimize, remediate' hierarchy used in environmental management. But the 4th part speaks to "*Reducing or eliminating the impact over time through preservation and maintenance operations during the life of the mining activity*", which is not so familiar. It would be helpful to understand better what is meant by that sub-paragraph (d) in the defined term for 'Mitigation' in the Schedule to the Regulations, or perhaps to delete it.

Fourth, we have a comment regarding the possibility of off-setting the environmental harm caused by deep-sea mining in the Area with activities in other ecosystems in other parts of the ocean. Like Costa Rica, we recommend that focus shall be on the first two steps of the mitigation hierarchy: first, avoid and second, minimize. We remind the council that, according to current scientific evidence, restoration or remediation - the third step in the mitigation hierarchy - and offsetting - the 4th step in the mitigation hierarchy - are not viable options. There have been to date no restoration experiments carried out in deep-sea ecosystems under mineral exploration, and experiments from comparable deep-sea ecosystems point to very slow and very incomplete recovery. Long-term multi-decadal-scale research is needed to prove or disprove that restoration is possible in the deep sea. Additionally, "Out of kind" measures, an option for compensation currently proposed, cannot replicate biodiversity and ecosystem services lost through mining of the deep seabed and thus cannot be considered true offsets.

Fifth, we suggest to add text at 46bis Para 4 on the need of qualified, independent and competent environmental impact assessment practitioners and scientific experts to carry out the EIS

Finally, we suggest adding points in Para 4 on the identification of scientific knowledge gaps or data uncertainties and the necessity of stakeholder involvement, as raised by Germany.

Many thanks Madame Facilitator.

Regulation 48 Intervention - Environmental Management and Monitoring Plan (delivered 25 July 2022)

Thank you Madame Facilitator.

DOSI welcomes the modifications of the facilitators text for draft regulation 48. However, we would like to draw your attention to our observation that DR 48 and Annex VII need better alignment, as some elements have differing descriptions between the two sections.

DOSI strongly supports the inclusion of DR 48 para 3ter to define a minimum time for independent monitoring, in addition to the contractor's own monitoring. DOSI recommends that the actual period should not be fixed to 7 years, as this seems arbitrary in the absence of scientific knowledge. Rather, we recommend that the time be defined based on the ecological

characteristics and consequent recovery times of the ecological communities in the contract area.

DOSI recommends four additional inclusions in this draft regulation concerning an EMMP. First, the draft regulation should reference the defined process for identifying and selecting independent experts to review the EMMP.

Second, this draft regulation should cross-reference the requirement for the EMMP to describe a plan for compliance required in DR 51 and a plan for periodic review required in DR 52. We would like to stress the importance of independent auditing for these components. DR 48 should also cross-reference DR 53, highlighting that the EMMP needs to include details about when the Emergency Response and Contingency Plan will be triggered.

Third, DOSI recommends an addition to DR 48 to require an EMMP to include details of the entities involved in monitoring, including their organizational structure and contact details.

Finally, and perhaps most importantly, we again stress that the EMMP needs to describe the plan for making real-time environmental data available from independent monitoring. As scientists, we agree with the concerns raised by Chile regarding the appropriateness and limited functionality of DeepData. As experts, including scientists, we too struggle to access environmental data collected by contractors in the Area, which is essential for independent and regional analyses that will guide REMPs and other management decisions. There is a responsibility under UNCLOS to publish environmental data in a transparent, understandable, and usable way, as we raised last week. We hope for quick resolution to these matters, including a data quality control system, the integration of this platform with global observing efforts, and adoption of the FAIR principles of findable, accessible, interoperable, and reusable.

To end, the EMMP should describe the process for dealing with stakeholder concerns, and the plan for the Contractor informing stakeholders of monitoring results.

Thank you Madame Facilitator.

Regulation 48bis - Test mining (delivered 25 July 2022)

Thank you Madame Facilitator.

The Deep-Ocean Stewardship Initiative supports the new text suggested by Germany on test mining, given the high uncertainties with regard to how any future mining technology may function, and the currently sparse environmental baseline data in the deep sea. We caution, however, that long-term impacts of mining and cumulative impacts by multiple operations and non-mining related stressors will not be apparent on test-mining timescales. This includes the re-generation of nodules, the abundance of nodule-dependent biomass, and the recovery of natural sediment habitats - among other currently unknown impacts. We thus believe that test mining should be subject to EIA, EIS, and subsequent long term monitoring plans, as suggested by the German proposal. We would also like to stress the importance of an adequate stakeholder consultation process for the EIS, to ensure transparency and effectiveness of the process.

Thank you Madame Facilitator.

Regulation 50 - Restriction on Mining Discharges (delivered 25 July 2022)

Thank you Madame Facilitator.

DOSI welcomes the suggestions made in regulation 50. We would first like to seek clarification on the definition of Mining Discharge. Does it include plumes produced by the mining-vehicle on the seafloor *and* dewatering plumes from ships? We suggest that this be added/explained further, perhaps in the schedule on the use of terms.

We further would like to note that the current financial model assumes transport of dry minerals to shore, and thus, a significant dewatering plume mining-discharge at sea, as discussed during the Working group last Tuesday. We note that the impact of dewatering plume mining discharges has not been researched to date, but negative impacts and harmful effects to the environment from toxic on-board mining waste are likely. **We therefore want to stress the importance of having binding Standards for mining discharge that have stringent thresholds, so that no harm to the environment may occur.** This may also be linked to any technological requirements or standards, such as the depth where any mining discharge may be released, or any future on-board technologies that would eliminate any toxic and sediment loaded return-plumes. We therefore suggest clarifying paragraph 1a to specify that the Standard includes normative thresholds.

Regarding paragraph 2 and 2(bis), we note that these paragraphs accept the possibility that 'Serious Harm' could occur to the marine environment, as a result of the contractor's action. We appreciate this is included to cover emergency situations only. However, we see that this definition of emergency includes protection of property, such as mining machinery. DOSI believes this deserves a robust discussion of whether Serious Harm to the marine environment - that is the Common Heritage of Humankind - in order to protect the vessel or the installation should ever be permitted.

Further, given the severity of the consequences of a discharge, we believe that a significant evidential burden should be placed upon the contractor to demonstrate the necessity of the emergency discharge. Paragraph 2(bis) requires monitoring and mitigation of the harmful effects caused by that unpermitted discharge. DOSI suggests that the possibility of further steps should be included here, for example the contractor should be required to cover the costs of compensation or clean-up, in line with the polluter pays principle. In addition, punitive measures may be applied, such as monetary penalties or imposition of tighter compliance controls by the ISA, where contractor wrong-doing is identified. As currently drafted, an unpermitted mining discharge which causes serious harm to the environment is described in Draft Regulation 50 paragraph (3) as a 'notifiable event'. The draft regulation describes that a notifiable event is reported, but does not trigger any further action. This does not seem an appropriate response to any emergency event, let alone one that causes serious harm to the marine environment - a standard of harm that is expressly prohibited by UNCLOS.

Thank you Madame Facilitator.

Regulation 51 - Compliance with Environmental Management and Monitoring Plan (delivered 25 July 2022)

Thank you Madame Facilitator.

The Deep Ocean Stewardship Initiative recommends modification of DR 51 Para c to cross-reference the specific sections of the regulations regarding the ongoing evaluation of the EMMP, improving clarity.

DOSI welcomes the inclusion of "continuous" in reference to monitoring frequency in DR 51 Para a. We again make a recommendation that monitoring data should be made available in

real time to all stakeholders, in addition to the annual report, to facilitate independent analyses of the data and enhance transparency of this industry. We also encourage the determination of a specific time frame over which the monitoring should continue, that is based on the ecological characteristics and consequent recovery times of the ecological communities in the contract area.

Regarding DR 51 Para c topic of maintaining the currency and adequacy of the EMMP, we remind our colleagues that deep-seabed mining impacts will occur in combination with climate change impacts. Therefore climate change impacts should be taken into consideration throughout monitoring of compliance with an EMMP.

Thank you Madame Facilitator.

Regulation 52

Review of the performance assessments of the Environmental Management and Monitoring Plan (delivered 25 July 2022)

Thank you Madame Facilitator.

For DR 52 Para 1, the Deep Ocean Stewardship Initiative suggests that the “competent and independent” auditor needs to be hired by the Commission and paid by the contractor, not hired by Contractor. In our opinion, an auditor hired by the contractor presents a potential conflict of interest, as raised by Spain, and creates dependency as the auditor is hired and paid by the contractor.

For Para 2, DOSI supports a more frequent review of at least every two years as written, and preferably annually, as recommended by France. We would like to emphasize the scarcity of the current knowledge on the temporal variability of deep sea ecosystems, which warrants more frequent review for adaptive management, as raised by Chile and the US delegations.

As recommended by Costa Rica and Chile, DOSI suggests the addition of a section 3bis that specifies that the report should be published, that stakeholder comments should be invited, and that stakeholder comments and a contractor’s response to the stakeholders comments should be published. All of these should also be presented to the Commission for review.

Regarding Para 4, DOSI believes that review of performance assessment reports will be highly technical. In the spirit of the submission ISBA/26/C/6 from GER and NL, co-sponsored by Costa Rica, that suggests that an expert committee shall develop and review a REMP and then report to the LTC, we similarly suggest that such an expert committee could assess the EMMP of contractors that fall within a specific REMP. Alternatively, a sentence should be added to Para 4 to clarify “If the Commission does not possess sufficient expertise amongst its members, it shall consult independent experts to review the performance assessment.” As deep-sea environmental scientists, we know how time-intensive proper review of environmental documents is and how many different expertises are required. DOSI is ready to assist the ISA in accessing global scientific collective expertise that could assist with these tasks.

Thank you Madame Facilitator.

Regulation 55

Purpose of the Environmental Compensation Fund (delivered 25 July 2022)

Thank you Madame Facilitator.

The Deep Ocean Stewardship Initiative is unclear about the specifics of the Environmental Compensation Fund, and would like to request further information be conveyed on this matter. DOSI supports the suggestions of several others and recommends that the fund's purpose should extend to include the areas of the marine environment of coastal states, as impacts and damage from mining may occur beyond the Area. For example, this could include impacts from far reaching noise, the travel of mining discharge plumes, altered animal behavior patterns such as breeding, nursing and migration, or any consequences on stability of ecosystems due to biodiversity loss, change in species abundances, or interruptions to the food chain. Further, we suggest adding “ecologically” as a qualifier to the “technically and economically” feasibility of restoration or rehabilitation. DOSI again reminds the Council that there is currently no scientific evidence that restoration or rehabilitation of the deep sea or the water column is possible.

Thank you.

Item 14: Report of Chair of LTC ISBA/C/16/Add.1 released 25 July 2022

(Delivered on 26.07.2022)

Thank you Mr President,

The Deep-Ocean Stewardship Initiative, like so many delegations before us, thanks the LTC for this important report as well as the substantial amount of work undertaken in the last few weeks as well as intersessionally.

DOSI has a number of concerns, and wishes to begin with paras 4-6 of subsection B of section II. DOSI wishes to congratulate the ISA on the 31 training placements provided for the benefit of candidates from developing States. We recognise the importance of addressing disparities in capacities to undertake open-ocean, deep-ocean, and high-seas scientific research. However, DOSI wishes to caution the ISA that treating these training placements as successful outcomes purely based on the ‘number of participants’ and their ‘country of origin’, regardless of the reality of their experience, is, in fact, tokenism. Instead, we urge the ISA, as we did last week, to put in place an integrated framework to support inclusion and safety for underrepresented groups and to consider participants’ wellbeing during these training placements, whether at sea or on shore.

With regard to Section II subsection D paragraphs 19 to 22, DOSI echoes the concerns of many States with regard to non-compliance by contractors. We query what specific actions, if any, can be taken to promote compliance regarding environmental baseline studies and reporting requirements. DOSI also, once again, requests access to this environmental data and will be grateful for an update on any improvements to DeepData given it was launched since 2019 but is still limited in functionality. The accessibility of data collected by contractors in the Area is essential for independent and regional analyses, so we hope for quick resolution to these matters, including a data quality control system, the integration of this platform with global observing efforts and adoption of best practices, interoperability, and accessibility.

With regard to Section VI, we note a working group, set up by the LTC, worked intersessionally to review the ‘recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area’. We note that the review was specifically to reflect the importance of stakeholder consultation. However, to our knowledge, there appears to have been no stakeholder consultation on this

revision by the LTC. It is unfortunate that the LTC keeps revising this important guidance document without giving any opportunity for external feedback. Indeed, a newly published paper in the journal Environmental Impact Assessment Review journal [with several DOSI members as co-authors] highlights various flaws in this current process. We also heard similar concerns expressed by many delegations during the informal Council discussion about test-mining just yesterday.

This is also relevant to the points covered in the LTC Chair's report, Section VII, paras 42-47 relating to the Environmental Impact Statement submitted to the ISA by contractor NORI for testing of a prototype polymetallic nodule collector in the NORI-D contract area. DOSI welcomes the increase in our understanding of the environment

via their EIS. However, DOSI regrets that no additional consultation period was held after NORI substantially revised their original EIS.

Further, while DOSI appreciates the decision of the LTC to request a more substantive environmental management and monitoring plan for NORI's collector test before continuing its consideration, we would like to express further significant concerns beyond this particular shortcoming. DOSI undertook a scientific review of the revised EIS, focusing on the biological information, with key points available in our new information sheet which is available in each negotiation room. To summarise, the EIS is still inadequate for its purpose to be able to anticipate, avoid or minimise the harmful environmental effects of mining activities, and to protect and conserve the marine environment. The quantity, quality and uncertainty of the presented information continue to impede the proper assessment of the associated risks.

Finally, we note the report states "The results of the review by the Commission were sent to NORI on 15 July, with a 30-day period for their response". We note the earlier intervention by Nauru that the LTC will receive additional information on the monitoring programme by the end of this week. DOSI therefore would like to seek clarification on how and when the LTC will review this new information when it is not scheduled to meet for the next few months. Moreover, we would like to ask if there will be consultation based on this new information. This is important because, if otherwise, it would be easy for contractors to circumvent the EIA process by submitting a substandard EIS at first, and subsequently submitting a revised EIS or additional information to the LTC, that is then not open to consultation. We note the urgency of decisions on this matter as planning of ship operations for NORI's mining test appear to be underway with the test scheduled to take place, we hear, at the end of August.

DOSI is seeking clarification on what the next steps are in the EIS process. It is our understanding that the LTC does NOT formally have powers to approve or reject an EIS, and the Council is not involved in this decision-making process. This is problematic and not in line with best practice. In order for an EIS to function as an important environmental management tool, the regulator should have the power to reject an EIS and the regulatory framework needs to clearly specify this. We would welcome information about next steps for NORI's EIS.

Thank you Chair.

IWG on Institutional matters. DR3(e) Delivered on 27/07/2022

Muchas gracias, señoras facilitadoras,

Pido la palabra porque se ha planteado la pregunta de si es relevante tener en cuenta la escala regional a la hora de evaluar y analizar los impactos en el medio marino. Como especialista

puedo decir que de hecho lo es, como también es importante tener en cuenta otras escalas. No obstante, no soy especialista en legislación y por lo tanto no sabría decir si la escala regional está implícita en “el medio marino” y por tanto no sería necesario.

Muchas Gracias

[English]

Thank you very much, Madam facilitators,

I ask for the floor because the question has been raised as to whether it is relevant to take into account the regional scale when evaluating and analysing the impacts on the marine environment. As a specialist I can say that in fact it is, as it is also important to take into account other scales. However, I am not a specialist in legislation and therefore I would not be able to say if the regional scale is implicit in “the marine environment” and therefore it would not be necessary.

Thank you very much

DRAFT DECISION OF THE COUNCIL OF THE INTERNATIONAL SEABED AUTHORITY RELATED TO THE COMMISSIONING BY THE SECRETARIAT OF TWO STUDIES ON THE INTERNALIZATION OF ENVIRONMENTAL COSTS OF EXPLOITATION ACTIVITIES IN THE AREA INTO THE PRODUCTION COSTS OF MINERALS FROM THE AREA - ISBA/27/C/CRP.2

JOINT PROPOSAL SUBMITTED BY COSTA RICA AND GERMANY (Delivered on 28.07.2022)

Thank you Mr President

The Deep-Ocean Stewardship Initiative would like to thank Costa Rica and Germany for the submission of this proposal requesting two studies on environmental costs and values, as well as incentivisation of good contractor behaviour, related to exploitation activities in the Area, which we wholeheartedly support.

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At this point, we would like to remind the Council of the numerous essential and valuable ecosystem functions and services that the ocean, including the deep ocean, provides to all of humankind. These include, but are not limited to:

- climate regulation - (via methane and CO2 sequestration);
- regeneration of nutrients that permit ocean productivity;
- fish and shellfish for food;
- waste absorption (via metabolic activity of various biological organisms);
- genetic resources with a potential for pharmaceutical, industrial, and/or biomaterial benefits;
- and cultural value including historical archives, plus educational, scientific, entertainment, emotional, stewardship and existence value for people worldwide.

In addition to this, it should not be forgotten that biodiversity has intrinsic value.

In our view, these are substantial benefits to all (hu)mankind that will be degraded and damaged by the scale of deep-sea mining activities proposed, and whose costs, therefore, must not be ignored or borne by society. As such, ecosystem services and natural capital should

be taken into account when evaluating the internalisation of costs associated with the environmental externalities.

We have a few concerns about the second study, on incentives for contractors exceeding their obligations proposed. The proposal states “The study shall use the production and dispersion of sediment plumes, noise emissions, and the discharge of waste water from the mining platform as examples of environmental impacts inflicted upon the Area and be premised on the assumption that contractors who exceed the requirements of the Convention,” DOSI queries whether this means that these are taken as “exceeding obligations”? In our expert opinion, it should be a minimum requirement that contractors seek to lower the environmental impact of their activities as much as possible.

We also note that light pollution and habitat loss from the destruction of the seafloor have not been included.

We also wish to underscore the importance in acknowledging that there will likely need to be additional scientific research required to further refine that valuation, as well as what actions will be most effective for contractors to improve their environmental protection practices. Finally, DOSI supports the proposed process being undertaken via a transparent open worldwide tender, with awarding by independent and credible institutions. We recommend you seek input from ecological economists, in particular - noting this is a different discipline from environmental economists.

Thank you, Mr President

ITEM 15: REPORT OF THE FINANCE COMMITTEE (ISBA/27/C/36-ISBA/27/A/8) -- Item 16: Decision of the Council on the budget of the International Seabed Authority (ISBA/27/C/L.3 ISBA/27/C/22-ISBA/27/A/3, ISBA/27/C/22/Add.1-ISBA/27/A/3/Add.1, ISBA/27/C/22/Add.1/Rev.1-ISBA/27/A/3/Add.1/Rev.1)

Delivered on 28.07.2022

Thank you Mr President,

The Deep-Ocean Stewardship Initiative would like to take this opportunity to reiterate that it is heartened to hear of the new plans to promote and facilitate marine-scientific research, as well as capacity development through establishment of a Partnership Fund. DOSI aligns itself largely with the comments of Brazil highlighting the importance of marine scientific research in the ISA's priorities, and the need to enhance deep-sea literacy globally.

As with Brazil and Costa Rica, we also wish to seek clarification with regards to the proposal to merge the Endowment Fund for Marine Scientific Research into the new International Seabed Authority Partnership Fund, with different governance and also wider objectives. As expressed last week, further information on how this fund will be operationalised for the benefit of humankind as a whole would be welcomed.

Finally, DOSI is an expert network, containing many of the legal scholars and scientific experts that Brazil spoke of. We would gladly welcome the opportunity to contribute.

Thank you very much

ASSEMBLY

Intervention: ANNUAL REPORT BY SG (delivered on 03 August 2022)

Thank you very much.

Since this is the first time the Deep-Ocean Stewardship Initiative has been given the floor during this Assembly, we would like to congratulate the president for the election, and thank the interim president for your work.

DOSI is very happy to congratulate our colleague Kirsty McQuaid on winning the SG's Award For Excellence In Deep-Sea Research.

DOSI would like to thank the Secretary-General for this detailed Report, and appreciates the progress made by the Secretariat from 2021 to 2022. Specifically, DOSI appreciates some of the progress mentioned in paragraphs 32 and 38 of the report, and the progress made on Strategic Direction 3 – Protect the marine environment, Strategic direction 4 – promote and encourage marine scientific research in the Area, reported in the Annex II. DOSI particularly welcomes initiatives involving collaborations with biodiversity platforms like the node on the Ocean Biodiversity Information System (OBIS) and letter of cooperation with World Register of Marine Species (WoRMS), and looks forward to further collaborations and involvement with the scientific community. We applaud the efforts made in the implementation of the DeepData platform; but note that, most scientists have found DeepData to be difficult to use at best, and would benefit from broader scientific cyberinfrastructure, expertise, and advice. DOSI would therefore also be grateful for an update on any improvements to DeepData given it was launched in 2019 but still has limited functionality.

DOSI encourages the Authority to actively pursue the aforementioned key strategic directions with increased conviction in the coming years.

Decision-making must always be based on robust science. At this point, DOSI wishes to note and emphasise that, despite the progress made, there is a long way to go in the quest of advancing marine scientific knowledge, and consequently, its use in ensuring the effective protection of the marine environment in the Area.

Based on current scientific understanding, deep-seabed mining will result in biodiversity loss and irreversible harm to deep-sea ecosystems, including the functions and services they provide. Scientists have just begun to understand biodiversity, ecosystem function and resilience in the deep ocean. A recent peer-reviewed scientific study showed that 60% of the scientific categories assessed for regions with mining exploration contracts were shown to have no or next to no scientific knowledge to enable evidence-based management, and only 1% had enough. Thus, the international community is currently not in a position to reliably predict the extent and severity of expected impacts from commercial mining, including the plumes, contaminant release and toxicity, noise, vibration and light, how this would affect marine life, and any direct or indirect effects on ecosystem services like climate regulation, commercially important fisheries or other ocean users. Available tools, such as scientific models that can help to predict impact, require baseline data that are not yet fully available, and small-scale *in situ* tests to verify these models' accuracies only go so far. Scientific approaches such as these take time.

The Deep-Ocean Stewardship Initiative would like to reiterate that rushing the regulations to meet a two-year goal would run counter to the precautionary principle, which requires Member States to err on the side of caution. Despite diligent work by many here in Kingston and in their respective countries, the regulations that relate to the understanding and protection of the marine environment are simply not ready. For example, the ISA has yet to agree on overarching Strategic Environmental Goals and Objectives, define 'serious harm' and associated adverse change, as well as specific criteria to operationalize, measure and monitor it, or put in place effective regional environmental management plans.

DOSI believes that rushing to meet the two-year rule will not allow much of the relevant scientific research currently underway to be completed, communicated, and taken into account, preventing critical scientifically informed decision making. We agree wholeheartedly with the many States who said that two years is absolutely insufficient. This is particularly the case when considering the acquisition and incorporation of the necessary scientific research to inform best environmental practices.

In short: we know there is much to be lost; what we don't know yet, is how to protect it.

The UN Decade for Ocean Science (2021-2031) offers a timely opportunity to gather resources and expertise and apply these to fill some of the deep-sea science gaps outlined above.

DOSI would like to encourage the Authority to continue to enforce the work pursuant to the Implementation of its Action Plan in support of the United Nations Decade of Ocean Science for Sustainable Development in the upcoming years. In this manner, the Authority can engage robustly in an evolving global conversation, acknowledging the complex interconnectedness of ocean, climate and biodiversity in our environment, the potential impacts on an already stressed planet, and working toward breaking down silos between global work streams.

Thank you very much

DOSI intervention – Item 19: ISBA/27/A/6 (Delivered on 03 August 2022)

Mr President,

DOSI supports the policy intent of inclusivity, transparency and participation of all stakeholders;

Nevertheless, we would like to note that industry can already be represented, as detailed by the intervention by the Deep Sea Conservation Coalition.

DOSI does not believe that it is appropriate that contractors contribute to formulating the procedures and guidelines that regulate their own activities. That is a conflict of interest, as pointed out already by other delegations, particularly as the ISA needs to ensure compliance of the very contractors that would then sit in ISA organs. Moreover, giving observer status to contractors that are states or state enterprises could effectively give these states the opportunity to have several delegations.

DOSI suggests there is a need for further study of the pros and cons of such a proposal, to understand where the contractors already have a voice, and how other international organizations address the issue to ensure science-based decision making.

Thank you

Proposal for a new Assembly agenda item: Discussion of the issues relating to the triggering of the two-year timeline Submitted by the delegation of Chile

[Spanish]

Gracias Sr Presidente

Quisiera agradecer a Chile por su propuesta, así como a los numerosos Estados que han expresado sus puntos de vista sobre la regla de los dos años, la necesidad de proteger y preservar el medio ambiente, así como el limitado conocimiento científico que existe actualmente.

Según los conocimientos científicos actuales, la minería de aguas profundas provocará la pérdida de biodiversidad y daños irreversibles a los ecosistemas de aguas profundas, incluidas las funciones y los servicios que nos brindan. Nos gustaría reiterar que la toma de decisiones que aseguren la protección efectiva del medio marino, nuestro Patrimonio común, sólo puede realizarse sobre la base de un conocimiento científico sólido. Sin embargo, los científicos apenas hemos comenzado a comprender la biodiversidad, la función de los ecosistemas y su resiliencia en las profundidades del océano. Se sabe poco sobre qué especies viven allí, cuánto tiempo viven, cuándo, con qué frecuencia y cuánto se reproducen, de qué se alimentan, y qué se alimenta de ellos. Quedan dudas sobre si el número de organismos fluctúa de una estación a otra o de un año a otro, si existen conexiones ecológicas a través del movimiento de animales entre diferentes áreas y cómo funcionan los ecosistemas. Además, la comunidad internacional no está en condiciones de predecir de manera confiable el alcance y la gravedad de los impactos esperados de la minería comercial, incluidas las plumas, la liberación y toxicidad de contaminantes, el ruido, la vibración y la luz, cómo afectaría esto a la vida marina, y cualquier efectos directos o indirectos en pesquerías comercialmente importantes u otros usos que hacemos del océano. Las herramientas que tenemos disponibles, como los modelos científicos que pueden ayudar a predecir el impacto, requieren datos de referencia. Esos datos de referencia aún no están suficientemente disponibles, y test in situ a pequeña escala para verificar la precisión de estos modelos solo llegan hasta cierto punto. Enfoques científicos como estos, para ser fiables, llevan tiempo.

DOSI quisiera reiterar que apresurar las regulaciones para cumplir con un objetivo de dos años iría en contra del principio de precaución, que requiere que los Estados miembros se inclinen por la cautela.

Apresurarse para cumplir con la regla de los dos años no permitiría que gran parte de la investigación científica relevante que se está realizando actualmente se complete, comunique y sea tenida en cuenta, lo que impedirá la toma de decisiones críticas e informadas basadas en la ciencia. Dos años no es un período suficiente para la adquisición de la base científica necesaria para informar las mejores prácticas ambientales.

Muchas gracias

[English]

Thank you Mr President,

I would like to thank Chile for their proposal, as well as the many States that have expressed their views on the two-year rule, the need to protect and preserve the environment, as well as the limited scientific knowledge that currently exists.

According to current scientific knowledge, deep-sea mining will cause biodiversity loss and irreversible damage to deep-sea ecosystems, including the functions and services they provide. We would like to reiterate that decision-making that ensures the effective protection of the marine environment, our common Heritage, can only be done on the basis of solid scientific knowledge. However, scientists have only just begun to understand biodiversity, ecosystem function and their resilience in the deep ocean. Little is known about what species live there, how long they live, when, how often and how much they reproduce, what they feed on, and what feeds on them. Questions remain about whether the number of organisms fluctuates from season to season or year to year, whether there are ecological connections between different areas, and how ecosystems function. Furthermore, the international community is not in a position to reliably predict the scope and severity of expected impacts from commercial mining, including plumes, pollutant release and toxicity, noise, vibration and light, how it would affect this to marine life, and any direct or indirect effects on commercially important fisheries or other uses we make of the ocean. The tools that we have available, such as scientific models that can help predict impact, require baseline data. Such baseline data is not yet sufficiently available, and small-scale in situ tests to verify the accuracy of these models only go so far. Scientific approaches like these, to be reliable, take time.

DOSI would like to reiterate that rushing applications to meet a two-year target would go against the precautionary principle, which requires member states to err on the side of caution.

Rushing to comply with the two-year rule would prevent much of the relevant scientific research currently underway from being completed, reported and taken into account, preventing critical and informed science-based decision-making. Two years is not a sufficient period for the acquisition of the scientific base necessary to inform best environmental practices.

Thank you very much