

Report

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

Overview

The twenty-seventh session of the Council (Part III) was held in Kingston, Jamaica from 31 October to 11 November 2022. DOSI participated in person and was supported by a team of experts who participated online.

Items on the agenda of this ISA Council session with particular relevance for DOSI included:

- A draft North Mid-Atlantic Regional Environmental Management Plan proposed by the ISA's Legal and Technical Commission for adoption.
- A draft standardised procedure and template for future development of Regional Environmental Management Plans, proposed by the ISA's Legal and Technical Commission for adoption.
- A proposal (by Germany) to establish expert working groups to develop specific scientific environmental thresholds as binding standards for deep-sea mining operators via an intersessional expert group.
- A report from the ISA's Legal and Technical Commission on the environmental impact statement submitted by an ISA contractor (NORI) for a nodule collector and riser pipe test in the Clarion Clipperton Zone.
- Draft regulations on inspections, which included discussion on environmental monitoring.
- Draft regulations on an environmental compensation fund, also contractors' closure plans, which included discussions on potential restoration or off-setting for environmental harm in the deep ocean.
- Draft regulations on environmental management, which included discussion about the contents requirements of environmental impact assessment / statements, and the need for scientifically-informed criteria on contractors' design of impact and preservation reference zones.
- Review of the ISA's regulatory road-map, which included discussion of the available scientific evidence base to support management decisions around deep-sea mining.

Further, this session was particularly relevant as the ISA edges closer to the 2-year deadline (July 2023).

DOSI Minerals WG experts participating in person

Diva Amon (DOSI)

Bobbi-Jo Dobush (The Ocean Foundation)

Matt Gianni (Deep-Sea Conservation Coalition)

Hannah Lily (The Pew Charitable Trusts)

Ellen Pape (Belgium)

Pradeep Singh (IUCN)

DOSI Minerals WG experts supporting virtually

Catherine Blanchard
Laisa Branco
Sabine Christiansen
Stephen Cody
Julie Huber
Aline Jaeckel
Lisa Levin
Anna Metaxas
Tina Molodtsova
Beth Orcutt
Samantha Robb
Verena Tunnicliffe
Jesse van der Grient

DOSI Actions

1. Information sheets and Policy briefs

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

- a) [*Scientific Knowledge is Currently Insufficient for Effective Environmental Management of Deep-Seabed Mining*](#)

2. Interventions and textual proposals

DOSI actively intervened in the discussions by delivering a total of 19 interventions (Annex I), including to ensure high environmental standards and the reflection of independent and robust science.

The interventions delivered can be found on the ISA website as well as below. <https://isa.org.jm/node/20798/session/council#block-media-2>

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

- The intervention proposing a new Annex on Impact Reference Zones and Preservation Reference Zones was supported by the UK, Russia, Germany, Costa Rica, France, Spain, Canada and NZ.
- Additionally, we received many thanks from a variety of State delegations for our on-topic interventions.
- Canada gave compliments: "...all been very strong interventions and Diva has done a great job as well."

3. Attendance at side events

DOSI attended the only two side events during the first week of session. These were hosted by The Metals Company's subsidiary, Nauru Ocean Resources Inc (NORI), and were:

- 1) Designing an Ecosystem-Based Environmental Monitoring and Management Plan for Deep-Sea Nodule Collection - November 1st, 2022
- 2) NORI Collector Test Updates - November 2nd, 2022

DOSI asked pertinent questions during the Q&A at both events.

4. Formal and informal meetings

Formal meetings were held with Trinidad & Tobago and Costa Rica each. Several informal meetings were held with various State delegations and Observers (Deep Sea Conservation Coalition, Greenpeace, Pew Charitable Trust, AIDA, Oceans North, The Ocean Foundation) to discuss the course of the negotiations, share ideas, and coordinate interventions.

5. Press

Diva Amon was interviewed by Danica Coto of Associated Press via telephone on 27th October 2022.

Gallery

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



ANNEX I. Interventions

COUNCIL

Item 11: Draft regulations on exploitation of mineral resources in the Area

Part XI: Regulations 96 to 105

3rd Meeting of the Informal Working Group on Inspection, Compliance and Enforcement

Draft Regulation 96

Inspections: general

Delivered on 31.10.2022

Thank you, Madame Facilitator,

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

With regard to **DR 96 Para 5 (b bis)** which details the provision of reasonable facilities, including where appropriate, food and accommodation, to Inspectors, DOSI would 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 96 Para 5g** 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, and where unfortunately harassment, bullying, and discrimination are rife, which may especially be the case for inspectors. We also recommend that the ISA require contractors to have in place appropriate practical measures to safeguard the wellbeing of all persons on vessels, including non-crew and non-employees, such as inspectors and trainees.

We also support The Pew Charitable Trusts and Costa Rica with regard to **DR 96 Para 5f** and the deletion of words “where required by the Secretary-General/Inspectorate” as real-time monitoring would always be required.

Thank you, Madame facilitator.

Draft Regulation 102

Vessel notification, electronic monitoring, and data reporting

Delivered on 01.11.2022

Madame Facilitator,

In the interests of efficiency, I am making this intervention on behalf of two observers, the Deep-Ocean Stewardship Initiative and the Pew Charitable Trusts.

On behalf of our delegations, I would first like to extend our condolences to India and the Republic of Korea on the terrible recent events.

With regard to **DR 102 Para 2**, it is unclear what the definition of 'mining vessels' is. DOSI and the Pew Charitable Trusts consider 'Installations, vessels and mining collectors involved in Exploitation activities' a more comprehensive formulation. This will include, for example, vessels at the mining site from which autonomous vehicles or monitoring equipment are deployed by the Contractor, but which are not the vessels receiving the mined ore.

We support the comments by the UK on the conflation of two issues and recommend splitting paragraphs on vessel positions and environmental monitoring. We also support the comments from Sierra Leone on behalf of the African Group and Belgium and suggest a separate subparagraph to require Contractors' vessels to be fitted with a satellite tracking system - the Automatic Identification System required by IMO. A clear statement of requirement would cover all vessels engaged in mining activities. This is separate from an electronic monitoring system designed to provide data about the mining activities.

We also recommend 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, and thus remove the text 'where technically feasible'. As evidenced from the monitoring of the nodule collector test carried out in the Belgian and German contract areas in the Clarion-Clipperton Zone in 2021, such independent monitoring is technically feasible. These data should be available to the Inspectorate and all stakeholders in real time. This will facilitate analysis of the monitoring data and enhance the transparency of this industry in remote environments.

Finally, we support the comments by Costa Rica suggesting **DR 102 Para 2.bis** be expanded to include other impacts of deep-seabed mining such as, but not limited to, chemical emissions, introduction of other pollutants, and light.

Thank you, Madame Facilitator.

Draft Regulation 103
Compliance notice, suspension and termination of exploitation contract
Delivered on 01.11.2022

Thank you, Madame Facilitator,

Regarding **DR 103 Para 5**, the Deep-Ocean Stewardship Initiative suggests that more specificity is added to the number of warnings that can be given. The current reading of '*one or more*' warnings is unclear and could suggest that an unlimited number of warnings can be given to a Contractor that fails to comply with the Inspectorate compliance notices.

Many thanks.

Item 11: Draft regulations on exploitation of mineral resources in the Area

Parts IV and VI and related Annexes

3rd Meeting of the Informal Working Group on the Protection and Preservation of the Marine Environment: Facilitator's Briefing Note. Negotiations on the Facilitator's revised text: resumed reading.

**Draft Regulation 56
Funding of the Environmental Compensation Fund
Delivered on 01.11.2022**

Thank you, Madame Facilitator,

As this is the first time the Deep-Ocean Stewardship Initiative takes the floor during this working group, please allow us to thank and congratulate you on the intersessional progress made on this important document.

We would like to support the inclusion of the polluter-pays principle for the Fund and suggest adding a definition of this principle in the Annex of the Exploitation Regulations (ISBA/25/C/WP.1 Appendix 1, Schedule 1).

To respond to the distinguished representative of France, DOSI wishes to urge caution in applying on-land analogies to the deep ocean. "Out of kind" measures as an option for compensation cannot replicate biodiversity and ecosystem services lost through mining of the deep seabed and thus cannot be considered true offsets.

Many thanks, Madame Facilitator

**Draft Regulation 59
Closure Plan
Delivered on 01.11.2022**

Thank you, Madame Facilitator,

DOSI would like to suggest more clarity and specificity be added to DR 59. Specifically, a clarification is needed on what constitutes 'temporary suspension of mining activities' that would invoke these requirements.

Further, DR 59 Para 2(a) should define what specific studies are requested to inform the closure. Do these studies refer to impact studies, monitoring studies, or other types of studies?

Referring to DR 59 Para 2(f), DOSI wishes to remind the Council that, according to current scientific evidence, restoration - 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 long-term large-scale 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. Further, if we assume very conservative restoration costs of abyssal

seafloor habitats similar to those of coastal ecosystems, restoration of just 10% of 500,000 km² of abyssal seafloor would cost US\$50 billion and would probably still be inadequate to prevent substantial species extinctions. Multi-decadal-scale research is needed to prove or disprove that restoration is possible in the deep sea. Additionally, if restoration or remediation is deemed to be possible, independent experts will be needed to define what restoration or rehabilitation criteria or standards are rather than the Contractor, which could represent a conflict of interest, as suggested in DR 59 Para 2(f).

Further, we suggest 'guidelines' should be capitalized throughout (Guidelines).

Thank you, Madame Facilitator.

Draft Regulation 60
Final Closure Plan
Delivered on 01.11.2022

Thank you, Madame Facilitator,

In the interests of efficiency, I am making this intervention on behalf of three observers, the Deep-Ocean Stewardship Initiative, the Pew Charitable Trusts, and the Ocean Foundation. Regarding DR60 Para 4, DOSI appreciates the Commission requiring the Contractor to make amendments to the final Closure Plan as a condition for approval of the plan. However, we query what action, if any, will be taken if the Closure Plan does not meet what is required.

We also suggest that DR60 needs two additional points. First, as stated by several States, revised Closure Plans need to be made public. This allows stakeholders to provide comments to inform the LTC and Council before the Closure Plan is finally approved. We note that closure may take place several decades after the draft Closure Plan was originally considered, with consultation, at application stage. To this effect, the Closure Plan presented 24 months before the end of Commercial Production should be subject to the stakeholder review mechanism under DR 11. And to be clear, we consider publication on the ISA website to be necessary, but not sufficient. Thus, we look forward to the additions offered by Germany on the process.

Second, Closure Plans should require approval by the Council. The current DR60 Para 8 only requires the Council to **consider** the report by the LTC in relation to the Closure Plan but not to **approve** it or require amendments.

Many thanks, Madame Facilitator.

Annex III bis
Scoping Report
Delivered on 01.11.2022

Thank you, Madame Facilitator,

The Deep-Ocean Stewardship Initiative welcomes and firmly supports the inclusion of this Annex.

We agree with UK that it would be helpful to see more detail in the body of the regulations about when the Scoping Report should be submitted (which we understand is prior to the EIA commencing), and the way that the Scoping Report will be reviewed by the ISA and offered for consultation to stakeholders.

Two further minor comments: With regard to (g)(i and ii), we suggest pluralising 'environmental consequence' as there may be multiple from each impact. With regard to (g)(iii), we suggest amending to 'independent experts'.

Many thanks, Madame Facilitator.

**Annex IV Environmental Impact Statement
Comments on Facilitator note and opening two paragraphs
Delivered on 02.11.2022**

Thank you, Madame Facilitator and good morning,

The Deep-Ocean Stewardship Initiative welcomes many of the proposed revisions to Annex IV and will make some brief overarching comments.

Regarding your Facilitator note to not include expected recovery rates as part of evaluation of anticipated impacts, DOSI recommends that this exclusion be reconsidered. Understanding the rate that an ecosystem is expected to return to an original state is a key component of environmental impact assessment, as some impacts may be short term while others may have much longer timescales.

Second, we would like to thank Germany for raising the importance of agreeing environmental threshold standards. DOSI's network of scientific experts stands ready to assist in this important process of developing environmental threshold standards.

Last, in support of Costa Rica, we suggest the addition of a fourth point (d) that the EIS should be peer reviewed by competent independent experts, before submission and include a description of the experts, their qualifications, and the results of their review and how their review was addressed by the Contractor.

Many thanks, Madame Facilitator.

**Annex IV Environmental Impact Statement
Section 3
Delivered on 02.11.2022**

Thank you, Madame Facilitator,

Once again, we support many of the suggestions throughout the text of Section 3. DOSI advises that new subsections should be added to *define the methodology* used by the contractor to generate a description of the marine environment, including the collection of environmental baseline data, and assess potential impacts. Methods are a key component of the Proposed Project and crucial for stakeholders to evaluate if the Environmental Impact Statement is rigorous. While the Environmental Impact Statement (EIS) template does request methodology descriptions elsewhere, after summary of results, it would be more consistent with standard practice to include methodology as a standalone section of the Proposed Project before describing results. In addition, DOSI recommends that this new methodology section would also benefit from requiring Contractors to include an evaluation of the effectiveness of mitigation measures proposed.

Regarding Section 3.1 on Project Area, DOSI agrees with Costa Rica's recommendations that the location information should be expanded to include the framing of the Contract area in a broader context. This could, include the identification of nearby Coastal States or States that may be affected by mining activities, other marine users of the project area, and other nearby protected areas. Including this information in the EIS is important to identify stakeholders and potential sources of cumulative impacts.

Thank you, Madame Facilitator.

Annex IV Environmental Impact Statement
Section 4
Delivered on 02.11.2022

Thank you, Madame Facilitator.

Again, we agree with the majority of the changes made - many thanks.

In agreement with the UK and Australia, the Deep-Ocean Stewardship Initiative recommends that the description of the existing oceanographic environment should not be limited to just the impact area, as indicated in the opening paragraph and throughout this section, but should also include the preservation reference zones and regional context. We support the recommendation that environmental baseline data for the impact reference zones, located in the impact area, and preservation reference Zones should be collected and presented here; the environment in both types of Zones will need to be monitored before, during and after mining activities to be able to assess deep-seabed mining impacts.

With regard to 4.6 - Physical oceanographic setting, we would like to see additional inclusion of climate change projections.

Many thanks, Madame Facilitator.

Annex IV Environmental Impact Statement

Section 5

Delivered on 02.11.2022

Thank you, Madame Facilitator.

As with our feedback on Section 4, the Deep-Ocean Stewardship Initiative recommends that guidance in Section 5 should require description of the biological environment within the impact area AND preservation reference zones.

Regarding Sections 5.4.1-5.4.3 defining three zones – surface, midwater, and benthic – for the provision of information on the biological environment, DOSI recommends replacing these zones with a reference to the recommended sampling regimes found in the relevant Standards and Guidelines and Regional Environmental Management Plans, as this will enable easier assessment of the Environmental Impact Statement.

With respect to the last sentence of 5.4.4, we note that spatial variability studies are available for some nodule zones and for hydrothermal vents. There are also some underway on temporal variability for vent and seamount ecosystems. Temporal and spatial baselines in the Clarion-Clipperton Zone are vital for understanding decadal scale variability and thus, we recommend the retention of this description.

Thank you, Madame Facilitator.

Annex IV Environmental Impact Statement

Section 7

Delivered on 02.11.2022

Thank you, Madame Facilitator.

The Deep-Ocean Stewardship Initiative suggests caution in providing leading - but non-comprehensive - suggestions of what should be included in Assessment of Impacts. In Para 7.2, there are three examples of “major types of potential impacts”, one of which, habitat removal, is not an oceanographic parameter. Yet other key impacts, such as release of reactive toxic compounds or CO₂ release from the water pumped to the surface, are not included. Perhaps a reference to the relevant Standards and Guidelines for more complete lists is more appropriate with these stated examples only for illustrative rather than exhaustive purposes.

Further, the Facilitator’s note on Pg 27 invites further input on the words “toxic elements”. In general, the release of reactive compounds from overturned sediments or crushed rock is anticipated at the seafloor and possibly in ore transport. Exposure of buried material can release heavy metals such as mercury or cadmium or reduced molecules such as hydrogen sulphide. All are known toxins to living organisms. In addition, chemical substances may be released from associated Installations and vessels which may potentially be toxic to the biota in the water column and/or at the seabed. Toxicity is defined with guides for measurement in the Draft Guidelines for Establishment of Baseline Environmental Data, and we suggest these be revisited.

Many thanks.

Annex IV Environmental Impact Statement

Section 8

Delivered on 02.11.2022

Thank you, Madame Facilitator.

As with our feedback on Section 7, the Deep-Ocean Stewardship Initiative recommends that listed examples in Para 8.2 are not comprehensive, with loss of connectivity and of vulnerable species not included. Again, we suggest a reference to the relevant Standards and Guidelines for more complete lists is more appropriate with these stated examples only for illustrative purposes.

Many thanks.

Annex IV Environmental Impact Statement

Section 9

Delivered on 02.11.2022

Thank you, Madame Facilitator.

The Deep-Ocean Stewardship Initiative strongly supports the inclusion of a new point in 9.2.1, which will facilitate the reporting of potential impacts on ecosystem services such as impacts on fisheries or carbon sequestration.

Many thanks.

Proposition for New Annex on IRZ/PRZ

Delivered on 02.11.2022

Thank you, Madame Facilitator,

The Deep-Ocean Stewardship Initiative comment pertains to the addition of a new Annex that sets out design criteria for Impact Reference Zones (IRZs) and Preservation Reference Zones (PRZs), which we hope you will indulge us on.

In the interest of brevity, we will refer to IRZs and PRZs for the remainder of our intervention. These reference zones are crucial environmental management tools and are **the best way** to directly measure the environmental impacts of seabed mining on the ecosystems. Unfortunately, an ISA-led workshop on the design guidelines for IRZs and PRZs held in 2017 ran out of time to reach agreement on many of the necessary aspects. It is therefore impossible at

this stage to build the required environmental baselines in these Reference Zones during exploration work to ensure that they are fit for purpose. This guidance needs to be developed further in order to ensure harmonization across the different actors who will be mandated to identify, design and establish these zones.

Building on the Technical Study no. 21 and the work done at the 2017 workshop (on the Design of IRZs and PRZs in Deep Sea Mining Contract Areas), the new Annex could specify, for example, that Reference Zones should be located within a contract area, and that additional IRZs outside of the direct mining area will need to be established for the monitoring of impacts of sediment plumes. This is in addition to IRZs located in the direct mining area.

Also, the corresponding PRZs must be protected from any mining impact, including during the post-closure period. For PRZs, the Annex should also specify that species composition, habitat types, ecosystem services, and occurrence of mineral resources in the PRZ must be comparable to that of the impacted zone. The number of PRZs should be adequate to allow appropriate statistical analyses. This number will depend on the natural variation in environmental and ecological parameters and can only be determined through baseline data collection. The new Annex should specify the types and frequency of baseline and monitoring studies on the seafloor, in the water column, and above the ocean in the area of ship operations. Finally, the Annex should specify that a PRZ needs a buffer zone similar to the buffers around Areas of Particular Environmental Interest. Importantly, where contract areas are made up of several small, fragmented areas, the Annex should specify that **each** would require a separate PRZ. Given all these factors, PRZs need to be considered very early on in the process. DOSI's community of scientific experts stands ready to assist the Council in determining the design criteria for Impact and PRZ for this new Annex if considered.

Thank you, Madame Facilitator.

Item 14: Report of the Chair of the Legal and Technical Commission on the work of the Commission at the second part of its twenty-seventh session (ISBA/27/C/16/Add.1)

Draft standardized procedure for the development, review, and approval of Regional Environmental Management Plans (REMPs): ISBA/27/C/37

Delivered on 03.11.2022

Many thanks, Mr. President, and good afternoon,

The Deep-Ocean Stewardship Initiative thanks the LTC for providing the Draft Standardized Procedure for the Development, Review, and Approval of Regional Environmental Management Plans (REMPs). Overall, DOSI strongly believes the intended purpose of the REMP Guidance has not yet been met. The guidance in ISBA/27/C/37 does not provide a standardized approach for REMPs in the form of a template with minimum requirements, which was the recommendation of ISBA/26/C/7.

DOSI strongly cautions that the REMP guidance should not be adopted until the points raised in the 2020 proposals of Germany, Netherlands and Costa Rica have been considered and either incorporated into the REMP Guidance or elsewhere, or a justification for their exclusion

provided. We support the suggestions to re-examine the approach and drafting as proposed by Germany, Netherlands, Costa Rica, Italy, Trinidad and Tobago and others. DOSI also further seeks clarification on the procedure that would ensure that existing REMP are aligned with the template.

DOSI also has concerns about the process for stakeholder engagement related to the REMP process, in particular, around the process and criteria by which experts are invited to participate in the REMP process. Like several delegations including the UK, Belgium, France, and others, we caution that the 45-day period for stakeholder consultation is too short. Deep-sea scientific experts are often at sea for extended periods of time without reliable internet access. We propose a minimum 90-day stakeholder consultation period as more appropriate to enable full stakeholder engagement. DOSI also proposes the addition of reference to a process for stakeholder mapping and outreach to ensure inclusion of experts and relevant stakeholders.

DOSI will provide detailed written feedback on ISBA/27/C/37 to highlight areas of discrepancy between it and the recommendations of ISBA/26/C/6 and ISBA/26/C/7, and stands ready to support efforts.

Thank you, Mr. President.

Draft Regional Environmental Management Plan for the Area of the Northern Mid-Atlantic Ridge: ISBA/27/C/38
Delivered on 03.11.2022

Many thanks, Mr. President

DOSI congratulates the LTC on the revised draft plan for the regional environmental management plan (REMP) for the area of the northern Mid-Atlantic Ridge (nMAR). DOSI experts appreciate that they have been able to contribute to this process and acknowledge that much of the discussed science is reflected in this REMP. However, DOSI has several observations on the draft that we hope the Council will consider.

First, and most importantly, DOSI agrees with many States who have stated that the development of the REMP for the nMAR be paused, given the lack of a standardized procedure and template, and of defined thresholds.

Second, DOSI cautions that this REMP still contains several gaps that reflect other ongoing discussions within the Council, such as (1) the *criteria* for the development of area-based management tools, (2) the *design* of area-based management zoning schemes, (3) the development of *thresholds* and their indicators and methodology, (4) the consideration of other human activities, underwater cultural heritage, and incorporation of traditional knowledge, (5) scenario forecasting from multiple mining operations, and (6) a frequent and robust process for reviewing and updating regional environmental baseline information, assessments and management measures.

Third, DOSI is concerned that the overall degree of protection afforded to unique and important hydrothermal-vent ecosystems is undermined by certain provisions in this REMP. For instance, Para 52(b) provides that contractors must monitor hydrothermal activity for interruption or

disruption to vents. However, once such a major disturbance has occurred, it cannot be reversed or mitigated. This provision should ensure that such disturbances are avoided, not just monitored.

Fourth, in several instances the phrase “through collaboration with other competent regional and international organizations and scientific communities” has been removed from the text of the revised REMP. This is particularly concerning to DOSI as only through consistent engagements with these bodies will there be accountability regarding cumulative impacts, and therefore effective environmental protection of the nMAR.

Finally, DOSI is concerned that Annex V lacks clarity on how, when, and by whom remaining knowledge gaps will be closed, and by whom and how it will be decided when knowledge gaps are sufficiently addressed. Until the knowledge gaps are closed, the nMAR REMP cannot be fit for purpose. DOSI therefore recommends not adopting the nMAR REMP before a robust strategy exists on how to transparently implement the closure of knowledge gaps. This strategy should address, *inter alia*, timelines, responsibilities, quality controls, review, and stakeholder consultations. Additionally, we will provide detailed written comments on ISBA/27/C/38.

Many thanks.

Item 11: Draft regulations on exploitation of mineral resources in the Area

Draft decision of the Council of the International Seabed Authority related to the development of binding environmental threshold values

Delivered on 03.11.2022

Many thanks, Mr. President

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 as well as observational and experimental data on mining impacts and ecosystem resilience, much of which still has to be collected and analyzed, and will take time. The more comprehensive the data, the more confidence we can have in the thresholds. In the absence of widespread and robust data, thresholds will need to include a precautionary buffer.

DOSI welcomes and fully supports the inclusive nature of the submission text and plans for the suggested procedure shared by Germany. DOSI, with its large global network of deep-sea experts, stands ready to support the proposed working group.

Many thanks.

Item 11: Draft regulations on exploitation of mineral resources in the Area

Review of progress on the road map

Delivered on 03.11.2022

Many thanks, Mr. President, and good afternoon.

We thank the numerous States who have expressed their views on the roadmap, the need to protect and preserve the environment, as well as the limited scientific knowledge that currently exists.

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. To manage this nascent industry effectively, decision-making must be based on robust science. However, scientists do not yet completely understand biodiversity, ecosystem functions and services, and resilience in the deep ocean. A recent peer-reviewed scientific study, authored by many in this very room, showed that just 1% of the scientific categories assessed for regions with mining exploration areas had enough scientific knowledge to enable evidence-based management.

The international community is currently not in a position to reliably predict the extent and severity of expected impacts from commercial mining, including plumes, contaminant release and toxicity, noise, vibration and light, how this would affect marine life, and any direct or indirect effects on commercially important fisheries or other ocean users. The continual discovery of new species, processes and ecosystem services in the areas targeted for mining make the prediction of impacts especially uncertain. Available tools, such as scientific models that can help predict environmental impacts, 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 UN Decade for Ocean Science (2021-2031) offers a timely opportunity to gather the resources and expertise required to fill some of the deep-sea science gaps outlined above.

Ultimately, the Deep-Ocean Stewardship Initiative believes that rushing to meet the two-year rule will not allow much of the necessary scientific research to be completed, communicated, and taken into account, preventing critical scientifically informed decision making. DOSI can categorically state that the acquisition of the necessary scientific research to inform best environmental practices that will underpin any future regulatory framework for exploitation will not be finalized by July 2023, nor for many years beyond that.

Thank you very much, Mr. President.