



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

#15 Delivered on 02.11.2022 by Diva Amon

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.