TEMPLATE FOR SUBMISSION OF TEXTUAL PROPOSALS DURING THE 29TH SESSION: COUNCIL - PART II

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group: IWG Environment

2. **Name(s) of Delegation(s) making the proposal**:

   This joint restructuring text proposal was co-led by **the Kingdom of the Netherlands and the United Kingdom,** with drafting assistance and support from the Germany, Ireland, Norway, International Marine Minerals Society, and the Pew Charitable Trusts. All parties mentioned support this joint restructuring text proposal.

3. **Please indicate the relevant provision to which the textual proposal refers.**

   Part IV Section II, Annex IV

4. **Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.**

   Please see rationale and addendums submitted.

5. **Please indicate the rationale for the proposal**

   A. Summary

   This joint text proposal focuses on the restructuring and allocation of EIA provisions to their appropriate locations across the Regulations, Annexes, Standards and Guidelines (the Mining Code), based on criteria agreed by the proponents of this proposal in its earlier submission (submitted Dec 2023). No changes to substance occurred. The rationale is to increase usability of the EIA provisions for all parties, and allow Council discussions to focus on substantive content moving forward. This joint text proposal was co-led by **the Kingdom of the Netherlands and the United Kingdom**, with drafting assistance from Germany, International Marine Minerals Society, Ireland, Norway and the Pew Charitable Trusts ('drafting group'). This drafting group met virtually three times and worked on sections in between these meetings to prepare this joint text proposal. The group reached out to parties who indicated their interest on the Council floor or via email contact to the co-leads. Interested parties were given the opportunity to review the outcomes in a final draft and indicate their support for this proposal.

   It is important to note that Council has already considered and welcomed the December 2023 joint restructuring proposal during the March 2024 Council session. At that session Council requestedthat the proponents continue the work to implement the restructuring proposed in order for Council to consider in July. The preparation of this joint text proposal has focused in this intersessional period (March-July 2024) on a) updating the previous proposal to align with the new consolidated text (March 2024), b) moving the detailed content from Part IV, Section II to Annex IV and aligning with content the proponents consider should be retained in Annex IV and presenting a streamlined Annex IV, and c) considering the way forward for moving detailed content from the Annexes to the Standards and Guidelines to provide Council with some options to consider.

   The proponents recommend for Council to consider:

a) This joint text proposal in the thematic session 'EIA/EIS' Wednesday 24th July 2024, and
b) How to merge and align the reallocated content of the EIA Regulations, Annexes, Standards and Guidelines in light of the outcomes of the discussion on Standards and Guidelines, as proposed by the President for the Council session in July 2024 in his briefing note.

B. Previous work Council has considered:

This work has followed a three step-approach:

28th Session ISA Council:

1) devising a logical order to the EIA regulations (starting with IWG EIA restructure report (DE/NO co-leads)[1], IWG Environment facilitator redrafting[1] and then the UK-led joint text proposal[2]),
2) agreeing on the placement hierarchy criteria, and applying such criteria to propose reallocation of provisions[2],

Part I 29th Session ISA Council:

3) Using the agreed placement hierarchy criteria, the group proposed movement of many elements in Part IV, Section II and Annex IV to a more appropriate location in the Mining Code[2]. This was discussed during ISA Council Part I 29th Session (March 2024). Council welcomed the proposal, and agreed that the proponents of the text proposal should work in the next intersessional period to implement the restructuring work and present it to Council at Part II 29th Session (July 2024).

A full description of the previous work prior to this submission can be found here.

C. Current work for Council to Consider:

During this intersessional period (March-July 2024), the preparation of this joint text proposal has focussed on:

1. **Updating the previous proposal to align with the new consolidated text** (ISBA/29/C/CRP.1 March 2024).

   This work is contained in addendum III of this document. Since the proponents submitted their text proposal (Dec 2023), a new consolidated text of the draft regulations was received. The proponents have therefore transferred their previous text proposal onto the new consolidated text to ensure Council can consider this proposal in light of the latest text. The drafting group followed the same process as for the previous submission, using the placement hierarchy criteria to decide the appropriate location in the Mining Code.

   Recommendation for Council discussion: We recommend Council considers this text proposal, and in particular, as a useful tool Addendum III, alongside the consolidated text when discussing the EIA regulations and Annexes so delegations may make any specific comments about the proposed restructure during the EIA/EIS thematic session.

2. **Moving the detailed content from Part IV, Section II to Annex IV and merging with content the proponents agree should be retained in Annex IV to present a streamlined Annex IV**

[1] 28th Council Session 2023
[2] Last EIA/EIS joint text proposal on restructure submitted Dec 2023, discussed Part I 29th Council Session March 2024 Intersessional-Outcomes.pdf (isa.org.jm)

for Council to consider.

This work is contained in Addendums I & II of this document. Addendum I shows the full streamlined text proposal for Annex IV, including content to be deleted from Annex IV and moved to Standards and Guidelines. Addendum II shows the transfer, alignment and merging process undertaken to move the content of the EIA regulations to Annex IV, and how content across Annex IV has been merged with regulation content to make a high-level list of requirements for Annex IV. **This work only focuses on restructuring of the EIA regulations, no changes to substance occurred.**

Recommendation for Council discussion (1): The proponents recommend Council considers this work in the EIA/EIS thematic session on 24 July and whether they agree to it being included in the next version of the consolidated text.

Recommendation for Council discussion (2): The proponents recommend that Annex IV is not an exact 'template' to follow, but rather a list of requirements to include in an Environmental Impact Statement. If a template is wished for by Council (which the proponents see value in), the proponents recommend that such a template is better placed in either a Standard or a Guideline[3], and can be informed by the content of Annex IV. The proponents consider the template for an EIS may need to be updated in the future in light of new information and best-practice advancement. Placing the template in a Standard or Guideline will enable such updates to be made more easily than in Annex IV to the regulations. This is also in line with the placement hierarchy criteria. Furthermore, providing a list of requirements instead of referencing a prescribed format is also the approach taken in Annexes for the other environmental plans (Annex VII Environmental Management and Monitoring Plan and Annex VIII Closure Plan).

Therefore, the proponents have identified questions for Council to consider:

- Do Council consider Annex IV should be reworded to be a list of requirements instead of in its current section by section formatting structure (as recommended by proponents)? For example, the section on Executive Summary would change from:

Executive summary One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers.

To

Provide an executive summary. One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers.

- Do Council consider the template should be recommendatory or prescriptive? This should inform whether it should be added to the EIS Standard or Guideline.
- Do Council consider overarching paragraphs the way forward for this Annex IV, or where appropriate, lists introduced (see Section 3 Annex IV in the table in Addendum II of this document for an example).
- Additional specific questions for Council consideration regarding Annex IV structure are included in the addendums to this proposal (notably Annex IV sections 3.10, 3.11 and 10 quin).

[3] It should be noted that proponents did not reach consensus on whether the template should be in a Standard or a Guideline.

3. **Considering the way forward for moving detailed content from the Annexes to the Standards and Guidelines to provide Council with some options to consider.**

The President in the briefing note has asked delegations to consider the continued work on the Standards and Guidelines, referring to the matrix prepared for the third part of the 28th Session. The proponents of this joint text proposal agree with this. In that respect, the group tried to move the more detailed content (yellow and grey highlight in below Addendums) to their exact appropriate locations in the Standards and Guidelines on the EIA & EIS, but this task was too challenging as Council have not yet discussed the way forward with the Standards and Guidelines.

For example, the group reached consensus that the current EIS Guideline should be separated into a Standard and a Guideline(also raised by others at Council), taking into account the work done by this group of restructuring the EIA regulations and Annex IV, and the placement hierarchy criteria. Therefore, the group realised the work to split the EIS Guideline into a Standard and Guideline needs to be undertaken before the work to allocate detailed content from the EIA regulations and annexes into their relevant locations in the EIA & EIS Standards and Guidelines, but is beyond the scope of this text proposal.

The proponents suggest that this is a future task for another interested party to undertake, using the placement hierarchy criteria, after there has been a wider discussion (as proposed in the Presidents briefing note) on the next steps for Standards and Guidelines in general. In the content of EIA/EIS, we suggest this general discussion could include discussion on:

1) the hierarchy criteria presented by this group and whether they may be applied beyond the EIA/EIS,

2) an updated list of Standards and Guidelines now envisioned by the consolidated text, how they should be prioritized and the working methods for updating/drafting them e.g. making Standards and Guidelines from the existing draft EIA Guideline.

3) how the ISA Secretariat might contribute to this work. There was a brief discussion amongst the proponents with differing views on the nature of the task (e.g. administrative or not). The drafting group is happy to share the preliminary work already performed by the drafting group with whoever undertakes this task.

Conclusion:

With this current joint text proposal, the proponents consider the work on the restructuring of the EIA/EIS regulations as completed for Council to consider, and that discussions can move to the substance of the EIA/EIS regulations. The Netherlands and the United Kingdom will therefore not continue to co-lead the work on this topic. The group suggests that next Council session, the Council consider how to continue the work on moving the EIA/EIS content to the Standards and Guidelines, and consider in the round with the wider conversation on Standards and Guidelines as proposed to be discussed by the presidents briefing note

Addendum I: Final restructuring proposal for Annex IV.

Green highlight – this proposal recommends should be in Annex IV
Yellow highlight – this proposal recommends should be in Standards *(only included in this document where required for understand flow of draft text)*
Tracked changes (Word function) – tracked changes as appear in consolidated text (March 2024)
Orange text – this proposals recommendations for merging content of regulations and Annex IV.
Blue italics – notes from the proponents

Note: below is same content as column 3 in the table in Addendum II below, but presented in a full page content for ease of reading.

Annex IV

Environmental Impact Statement

1. Preparation of an Environmental Impact Statement

The Environmental Impact Statement prepared under these Regulations and the present Annex shall, [but not limited to, entail the following elements]:

(a) Be prepared in clear language and in an official language of the Authority together with an English-language version, where applicable;

(b) Provide information [] in accordance with the Regulations, and taking into account the applicable Regional Environmental Management Plan, Standards and Guidelines, corresponding to the scale and potential magnitude of the activities, to assess the likely Environmental Effects of the proposed activities. Such effects shall be discussed in proportion to their significance. Where an applicant or Contractor considers an Environmental Effect to be of no significance, there should be sufficient information to substantiate such conclusion, or a brief discussion as to why further research is not warranted; and

(c) Include a non-technical summary of the main conclusions and information provided to facilitate understanding of the nature of the activity by Stakeholders.

[]

2. Template for Environmental Impact Statement

The required contents and recommended format for an Environmental Impact Statement is outlined below. It is intended to provide the International Seabed Authority, its member States and other stakeholders with unambiguous documentation of the potential Environmental Effects based on the Best Available Scientific Evidence, Best Environmental Practices, and Best Available Techniques, and Good Industry Practice on which the Authority can base its decision, and any subsequent approval that may be granted. Further detail for each section is provided following the overview.

This document is a template and does not provide details of methodology or thresholds that may be resource- and site-specific. These methodologies and thresholds may also change over time in according to, for example, development of new technologies, new scientific data or new knowledge, and will be developed as Standards and Guidelines to support the regulations.

Executive summary

One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers.

1. Introduction

The purpose of the Introduction section is to set the scene for the Environmental Impact Assessment. This section should contain enough detail for a reader to form an overall impression of the proposed project and how it has developed and understand how the Environmental Impact Assessment is structured. As this section mainly provides a 'roadmap' to more detailed material in the Environmental Impact Assessment, it may be relatively short.

2. Policy, legal and administrative context

Provide information on the relevant policies, legislation, agreements, Standards and Guidelines that are applicable to the proposed Exploitation activities .

3. Description of the proposed project

Provide details of the proposed project and the area of influence of the project or impact area, including relevant diagrams and drawings. It is understood that most projects will likely involve the recovery of minerals from the Area, with the concentrating process(es) occurring on land within a national jurisdiction (outside the jurisdiction of the Authority). While this section should provide a description of the entire project, including offshore and land-based components, the Environmental Impact Statement should focus on those activities occurring within the Authority's jurisdiction (e.g., activities related to the recovery of the minerals from the Area up to the point of trans-shipment).

Details of the proposed project should include the location and associated activities, mineral resources, project components (which includes project scale, mining equipment, transport and materials handling and on-site-processing), commissioning, construction and operating standards (which includes design codes, health and safety and workforce description), decommissioning and closure, other alternatives considered, environmental management measures to Mitigate impact and a development timetable.

ALT: Details of the proposed project should include:

- The location and associated activities
- Mineral resources
- Project components including project scale, mining equipment, transport and materials handling and on-site-processing
- Commissioning including construction, operating standards, design codes, health and safety, and workforce description
- Decommissioning and closure
- Environmental management measures to mitigate impact
- A development timetable
- Other alternatives considered,.

3.10. Summary of Scoping results, including of the risk assessment process

Provide a brief overview of the results of the scoping exercise including with regard to the sufficiency of the scientific baseline data collected during exploration [or through other means] to support a robust Environmental Impact Assessment.

Note: the proponents question whether sections 3.10 and 3.11 are appropriate as subsections of section 3 'description of the proposed project'. We ask whether Council considers Sections 3.10 & 3.11 below are subsections of Section 3 'Description of the proposed project' or rather standalone sections elsewhere in Annex IV, or subsections to be addressed in sections 4, 4 & 6 of Annex IV?

3.11. Methodology for Description of the Marine Environment and Assessment of Impacts and Environmental Effects

Provide [A description of] Methodologies, [for collecting and analyzing baseline and 'test mining' data and assessing the potential environmental impact and Environmental Effects from the proposed operations and alternatives considered,]

[Methodological approaches should be consistent with established community standards. In the case that novel sampling techniques, new technology, or sampling designs are employed, particularly detailed methodology and justification should be provided in this section.]

Note: the proponents question whether sections 3.10 and 3.11 are appropriate as subsections of section 3 'description of the proposed project'. We ask whether Council considers Sections 3.10 & 3.11 below are subsections of Section 3 'Description of the proposed project' or rather standalone sections elsewhere in Annex IV, or subsections to be addressed in sections 4, 4 & 6 of Annex IV?

4. Description of the existing [oceanographic,] physiochemical and geological environment

Give a detailed account of [] the oceanographic (physical, chemical and geological) and meteorological (including air quality) [environmental] conditions and implications of climate change on such conditions as a regional overview, at each mining site, [the expected total] and Impact Area as well as [the Impact and Preservation] Reference Zones [(PRZs)], which should include information from a thorough literature review as well as from on-site studies in accordance with the Regulations and applicable Standard and taking into consideration Guidelines to be specified. The Guidelines on baseline data collection as updated from time to time by the Commission, shall guide the drafting of this section by providiIg information on the minimum amount of detail required for an acceptable baseline description. The account will provide the baseline description of the oceanographic conditions, including physical, chemical and geological oceanographic setting, including its spatial and temporal variability and temporal trends [], against which impacts will be measured and assessed. The detIil in this secIion is based on the prior Environmental Risk Assessment carried out in accordance with the respective Standard and taking into consideration Guidelines, that will have identified the main impacts, and thus the priority elements that need to be considered and assessed in the Environmental Impact Assessment.

5. Description of the existing biological environment

Give a detailed account of knowledge of the existing biological environment, including biological properties, biological communities' composition and structure and ecosystems including their functions that could be impacted by proposed activities as a regional overview, in the proposed mining sites and Impact Areas, and the designated [Impact and] Preservation Reference Zones , including information from a thorough literature review and baseline data collected from on-site campaigns, in accordance with the Regulations and applicable Standards and taking into consideration Guidelines.

6. Description of the existing human activities, socioeconomic and sociocultural environment

This section should describe the socioeconomic and sociocultural environment aspects and potential impacts of the project on existing human activities and planned uses of the area for which information is publicly available. This may include consideration of the scale of effects (such as the creation of jobs and estimates of the risk of Environmental Impacts), extent of duration of impacts in time and space, intensity or severity of social impacts and an assessment of whether impacts are likely to be cumulative. It is important to consider the social equity or distribution of impacts across different populations: in other words, which groups are likely to be affected in which ways.

7. Assessment of impacts on the physical, chemical and geological environment and proposed Mitigation

Provide a detailed description and evaluation of potential impacts and Environmental Effects [including Cumulative Environmental Effects] of the operation [which could degrade the current status and functioning of] components of the physical chemical and geological environment identified in section 4 including the proposed environmental management measures to mitigate impacts and a summary of residual effects, [and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction].This should consider the entire lifespan of the project, i.e. construction/development (pre-commissioning) of the mine site, operational and Decommissioning phases, and following Closure of the site. The potential for accidental events and natural hazards. The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 and respective Standard and Guideline for Environmental Impact Assessment (chapter III Scoping, D).

8. Assessment of impacts and Environmental Effects on the biological environment and proposed Mitigation

Provide a detailed description and evaluation of potential impacts and Environmental Effects [including Cumulative Environmental Effects] of the proposed operation, and a summary of the environmental management measures to mitigate impacts and residual effects, alt.1 [[Mitigation hierarchy measures to avoid, reduce and Mitigate the effects caused by the project], alt. 2 [Measures taken to avoid, reduce and Mitigate effects, including alternatives] [and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction] and alternatives considered in section 3.7 [which could degrade the current function of] [] the biological environment components identified in section 5 in the [Contract Area, the] mine site and the Impact Areas. Consider impacts and effects that could happen during the entire lifespan of the project i.e. construction/development (pre-commissioning), operational and Decommissioning phases and following Closure of the site. The potential for accidental events and natural hazards should be considered.

The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 , Standards and taking into consideration Guidelines for Environmental Impact Assessment Process.

Note: the alternative wordings for mitigation should be retained and revisited in light of Council's discussions on how to refer to Mitigation across the regulations.

9. Assessment of impacts on the socioeconomic and sociocultural environment and proposed Mitigation

Provide a detailed description and evaluation of potential impacts and Environmental Effects of the operation to the socioeconomic and sociocultural components identified in section 6 and a summary of the environmental management measures to mitigate impacts and residual effects. This should include projections on the potential impacts in national waters outside the Mining Area and should also consider the entire lifespan of the project i.e. construction/development (pre-commissioning), operational (including maintenance) and Decommissioning phases. A description of the benefits to humankind may be included. Attitudes towards, and perceptions of, the proposed project are among the variables that should be considered in determining the significance of impacts. The potential for accidental events [and natural hazards] should also be considered.

9bis

(k) An [description outline] of waste management,

Provide a description of proposed vessel waste management, with reference to compliance with relevant conventions, legislation and principles, and methods of cleaner production and energy balance.

*Note: the proponents have added in a new section 9bis, in light of the fact 48alt (4) (k) requires '*An [description outline] of waste management,'. *The proponents recognise that Section 10.6 and 10.7 currently sit in section 10 below, but consider that should only cover waste management with regard to '*potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes and wastewaters' *as outlined below. Section 9bis would be about all waste management, and section 10 could refer to this section but provide situation-specific detail relevant to section 10.*

10. Hazards arising from natural, accidental and discharge events

This section should outline hazards arising from natural, accidental and discharge events, for example related to extreme weather, natural hazards, accidental events, maritime safety and emergency response and their possibility/probability this includes an assessment of the impact they may have, to the mine site and Impact Area, the measures taken to prevent or respond to such an event and an assessment of the residual impact should an event occur. This should include an overview of potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes and wastewaters. Reference should be made to the ERCP.

[10 bis Assessment of Uncertainty

10 bis.1 Uncertainty Assessment

Provide a detailed description and evaluation of any uncertainties in the assessments described in section 7, 8, and 9. This uncertainty assessment shall:

~~(2)~~ ~~D~~describe the measures taken in the Environmental Impact Assessment to reduce uncertainty in its findings to as low as reasonably practicable.

10 bis.2 Addressing Significant Uncertainty

Where significant uncertainty exists despite the efforts described in 9bis.1(b), provide a detailed description of environmental monitoring and management measures for managing and reducing uncertainty during the proposed operations, to be incorporated into the Environmental Monitoring and Management Plan and describe how these will enable the applicant to ensure compliance with rules, regulations and procedures of the Authority.

10 ter Holistic cumulative impact assessment and issues to be addressed

~~10 quat Environmental management measures to avoid, reduce and Mitigate impacts~~

Note: the proponents consider this section 10 quat is covered by Section 11 so deleted here. Wording is copied as an alternation in Section 11, and should be consider in light of how Council decides how to refer to mitigation across the regulations.

10 quin Analysis of residual effects against the RRP, Standards and Guidelines of the Authority

Provide a description of any residual impacts that may remain following the application of Mitigation measures, including the expected longevity of those impacts, and outline the measures that will be taken to ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.]

Note: The proponents highlight for Council consideration whether a separate standalone section on residual effects would be necessary or whether 'residual effects' should be added to 10 ter ('cumulative impact assessment…') (noting it is already included in sections 7, 8 & 9 ("assessment of impacts on….") and section 11("Environmental management, monitoring and reporting"). If Council decides to retain the more detailed content in 10 quin, then Council should consider whether such content should also be added to any of the aforementioned sections, or instead the Standards and Guidelines. We have retained here in the annex until Council decides.

11. Environmental management, monitoring and reporting

[10 quat Environmental management measures to avoid, reduce and Mitigate impacts]

Provide sufficient information to enable the Authority to anticipate possible environmental management, monitoring and reporting requirements for an environmental approval.
Information listed include a description of the applicant's Environmental Management System and should reflect the proponent's environmental policy and the translation of that policy to meet the requirements of this section and previous sections during different stages of the project life (i.e., from construction to Decommissioning and closure and the post-closure period).

The Environmental Management and Monitoring Plan is a separate report from the Environmental Impact Statement, but this could be a useful opportunity to include a summary of the key issues including residual effects from the Statement how they will be addressed in the full Environmental Management and Monitoring Plan and Closure Plan.

12. Responsible p~~P~~roduct stewardship

[[An overview of the downstream supply chain] A description of responsible product stewardship] related to],.]~~Provide a brief description of~~ the intended use of the Mineral-bearing ore once it leaves the [Contract] Area. The description should also address how the Contractor will minimize health, safety, environmental, and socioeconomic and sociocultural effects [and impacts] of the intended product or products to meet standards for environmental management, and should address the following potential impacts:

(a) Energy and materials consumption;
(b) Waste generation;
(c) Toxic substances;
(d) Air and water emissions.

The intention is not to provide a full and highly detailed account, but, where information is known about environmental impacts, these impacts should be described briefly here.

13. Consultation [and stakeholder engagement and methods]

[The Environmental Impact Statement should include a [description summary] of [the nature, extent, participation and outcomes of] consultation[s] and [stakeholder] engagement [that have taken place with Stakeholders], including commission consultation, and how their comments have been addressed in the environmental impact statement. A description of consultation ~~and~~ methods shall also be provided,]

Consultations [and engagement] shall be inclusive, transparent and open to all Stakeholders, including States, global, regional, subregional and sectoral bodies, as well as civil society, the scientific community, indigenous peoples and local communities [and in accordance with this Regulation and the applicable Standards and taking into consideration Guidelines].

Note: The group notes that text on Stakeholder consultation needs to be square-bracketed and considered how to be aligned and streamlined in light of how Council adopts the work of IWG Stakeholder consultation (which has now handed its final work over to Council), including whether references to 93bis shall be added here as proposed by IWG Stakeholder consultation. The outcomes of the IWG Coastal States is also likely to be relevant

to this section and updates may need to be made in light of its outcomes.

14. Glossary and abbreviations

Include a glossary of terms, acronyms and abbreviations used throughout the document so as to ensure that users of the Environmental Impact Statement, including the decision-makers and relevant Stakeholders, have a clear understanding of the intention behind the use of certain terms in the Environmental Impact Statement.

15. Study team

Outline the people involved in carrying out the environmental impact assessment studies and in writing the Environmental Impact Statement.

16. References

Evidence obtained from outside sources should be documented throughout the Environmental Impact Statement, with the use of footnotes or other suitable reference mechanism. In addition, all sources used in preparation of the Environmental Impact Statement (including those specifically referenced in the body of the document) should be listed in bibliography format, with full details of the source (including website addresses, if applicable).

17. Appendices

The appendices section should include a list of all the technical reports carried out for parts of the environmental impact assessment or that are used in support of any aspect of the environmental impact assessment (such as prior risk assessments or monitoring activities conducted as part of exploration contracts). Copies of these reports should be provided as appendices to the Environmental Impact Statement, with clear indications as to which section(s) the document is being provided to support.

Addendum II: Annex IV joint text proposal process:

Outline of the process undertaken for merging content of Regulation 48alt (4) with content the proponents recommend retaining in Annex IV.

Green highlight – this proposal recommends should be in Annex IV

Yellow highlight – this proposal recommends should be in Standards *(only included in this Addendum II where required to understand flow of draft text)*

Tracked changes (Word function) – tracked changes as appear in consolidated text (ISBA/29/C/CRP.1 March 2024)

Orange text – this proposal's recommendations for merging content of regulations and Annex IV.

Blue italics - notes from the proponents of the text proposal

Moved from EIA Regulations to Annex IV (48alt (4))	**Annex IV - elements to retain in Annex IV**	**New Annex IV proposal (Jul 2024)** *(merged content of first and second columns. No substance changes proposed, only restructure. See Addendum I for full page proposal – easier to read)*
[4. The Environmental Impact Statement shall, but not limited to, entail the following elements, which are described in greater detail in Annex IV[/ Standard]:	**Annex IV** **Environmental Impact Statement** **1. Preparation of an Environmental Impact Statement** The Environmental Impact Statement prepared under these Regulations and the present Annex shall, [but not limited to, entail the following elements]: (a) Be prepared in clear language and in an official language of the Authority together with an English-language version, where applicable; (b) Provide information [] in accordance with the Regulations, and taking into account the applicable Regional Environmental Management Plan, Standards and Guidelines, corresponding to the scale and potential magnitude of the activities, to assess the likely Environmental Effects of the proposed activities. Such effects shall be discussed in proportion to their significance. Where an applicant or Contractor considers an Environmental Effect to be of no significance, there should be sufficient information to substantiate such conclusion, or a brief discussion as to why further research is not warranted; and (c) Include a non-technical summary of the main conclusions and information provided to	**Annex IV** **Environmental Impact Statement** **1. Preparation of an Environmental Impact Statement** The Environmental Impact Statement prepared under these Regulations and the present Annex shall, [but not limited to, entail the following elements]: (a) Be prepared in clear language and in an official language of the Authority together with an English-language version, where applicable; (b) Provide information [] in accordance with the Regulations, and taking into account the applicable Regional Environmental Management Plan, Standards and Guidelines, corresponding to the scale and potential magnitude of the activities, to assess the likely Environmental Effects of the proposed activities. Such effects shall be discussed in proportion to their significance. Where an applicant or Contractor considers an Environmental Effect to be of no significance, there should be sufficient information to substantiate such conclusion, or a brief discussion as to why further research is not warranted; and (c) Include a non-technical summary of the main conclusions and information provided to

	facilitate understanding of the nature of the activity by Stakeholders. []	facilitate understanding of the nature of the activity by Stakeholders. []
	2. Template for Environmental Impact Statement The required contents and recommended format for an Environmental Impact Statement is outlined below. It is intended to provide the International Seabed Authority, its member States and other stakeholders with unambiguous documentation of the potential Environmental Effects based on the Best Available Scientific Evidence, Best Environmental Practices, and Best Available Techniques, and Good Industry Practice on which the Authority can base its decision, and any subsequent approval that may be granted. Further detail for each section is provided following the overview. This document is a template and does not provide details of methodology or thresholds that may be resource- and site-specific. These methodologies and thresholds may also change over time in according to, for example, development of new technologies, new scientific data or new knowledge, and will be developed as Standards and Guidelines to support the regulations.	**2. Template for Environmental Impact Statement** The required contents and recommended format for an Environmental Impact Statement is outlined below. It is intended to provide the International Seabed Authority, its member States and other stakeholders with unambiguous documentation of the potential Environmental Effects based on the Best Available Scientific Evidence, Best Environmental Practices, and Best Available Techniques, and Good Industry Practice on which the Authority can base its decision, and any subsequent approval that may be granted. Further detail for each section is provided following the overview. This document is a template and does not provide details of methodology or thresholds that may be resource- and site-specific. These methodologies and thresholds may also change over time in according to, for example, development of new technologies, new scientific data or new knowledge, and will be developed as Standards and Guidelines to support the regulations.
(a) An executive summary to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers,	**Executive summary** One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers.	**Executive summary** One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers.
	1. Introduction The purpose of the Introduction section is to set the scene for the Environmental Impact Assessment. This section should contain enough detail for a reader to form an overall impression of the proposed project and how it has developed and understand how the Environmental Impact Assessment is structured. As this section mainly provides a 'roadmap' to more detailed material in the Environmental Impact Assessment, it may be relatively short.	**1. Introduction** The purpose of the Introduction section is to set the scene for the Environmental Impact Assessment. This section should contain enough detail for a reader to form an overall impression of the proposed project and how it has developed and understand how the Environmental Impact Assessment is structured. As this section mainly provides a 'roadmap' to more detailed material in the Environmental Impact Assessment, it may be relatively short.
[(b)bis A description of applicable national and international legislation, procedures and policies, and other applicable standards, principles and guidelines, for example the Convention	**2. Policy, legal and administrative context** Provide information on the relevant policies, legislation, agreements, Standards and	**2. Policy, legal and administrative context** Provide information on the relevant policies, legislation, agreements, Standards and

including the 1994 Agreement relating, relevant rules from the International maritime Organization and International Law in general,]	Guidelines that are applicable to the proposed Exploitation activities .	Guidelines that are applicable to the proposed Exploitation activities .
A description of the proposed project, [including information on location, associated activities, required infrastructure, mineral resources (type, size, shape, tonnage, volume, grade), technologies and (mining-)equipment to be used, project scale overview (spatial, temporal, operational depth), transport and handling of materials, on-site processing, commissioning, construction and operating standards, design codes, health and safety aspects, workforce, decommissioning and closure, a timetable for the entire operation project proponents as well as a description of the report, including its scope and structure and overview of the stakeholder consultation process and consultation,]	**3. Description of the proposed project** Provide details of the proposed project and the area of influence of the project or impact area, including relevant diagrams and drawings. It is understood that most projects will likely involve the recovery of minerals from the Area, with the concentrating process(es) occurring on land within a national jurisdiction (outside the jurisdiction of the Authority). While this section should provide a description of the entire project, including offshore and land-based components, the Environmental Impact Statement should focus on those activities occurring within the Authority's jurisdiction (e.g., activities related to the recovery of the minerals from the Area up to the point of trans-shipment). + Location *(required as per section 3.1.1), to be incorporated into this paragraph)* and associated activities *(required as per section 3.1.2, to be incorporated into this paragraph)* + Mineral resources *(required as per section 3.2, to be incorporated into this paragraph)* + Project components *(required as per section 3.3, to be incorporated into this paragraph) including* project Scale *(required as per section 3.3.1, to be incorporated into this paragraph)* mining equipment *(required as per section 3.3.2, to be incorporated into this paragraph)* transport/materials handling *(required as per section 3.3.3, to be incorporated into this paragraph)* + Commissioning *(required as per section 3.4, to be incorporated into this paragraph)* including construction and operating standards *(required as per section 3.5, to be incorporated into this paragraph)* design codes *(required as per section 3.5.1, to be incorporated into this paragraph)* health and safety *(required as per section 3.5.2, to be incorporated into this paragraph)* workforce description *(required as per section 3.5.3, to be incorporated into this paragraph)* + Decommissioning and closure *(required as per section 3.6, to be incorporated into this paragraph)* + Other alternatives considered *(required as per section 3.7, to be incorporated into this paragraph)* + Environmental management measures to mitigate impacts *(required as per section 3.7bis, incorporated into this paragraph)*	**3. Description of the proposed project** Provide details of the proposed project and the area of influence of the project or impact area, including relevant diagrams and drawings. It is understood that most projects will likely involve the recovery of minerals from the Area, with the concentrating process(es) occurring on land within a national jurisdiction (outside the jurisdiction of the Authority). While this section should provide a description of the entire project, including offshore and land-based components, the Environmental Impact Statement should focus on those activities occurring within the Authority's jurisdiction (e.g., activities related to the recovery of the minerals from the Area up to the point of trans-shipment). Details of the proposed project should include the location and associated activities, mineral resources, project components (which includes project scale, mining equipment, transport and materials handling and on-site-processing), commissioning, construction and operating standards (which includes design codes, health and safety and workforce description), decommissioning and closure, other alternatives considered, environmental management measures to Mitigate impact and a development timetable. [ALT: Details of the proposed project should include: - The location and associated activities - Mineral resources - Project components including project scale, mining equipment, transport and materials handling and on-site-processing - Commissioning including construction, operating standards, design codes, health and safety, and workforce description - Decommissioning and closure - Environmental management measures to mitigate impact - A development timetable - Other alternatives considered,]

	+ Development timetable *(required as per section 3.8, incorporated into this paragraph)*	
[(b)ter A summary of the Commission's recommendations on the scoping report and the agreed terms of reference for the applicant's Environmental Impact Assessment submitted to the Commission, and justification for any deviation either from those terms of reference, or from the Commission's recommendations,]	**3.10. Summary of Scoping results, including of the risk assessment process** Provide a brief overview of the results of the scoping exercise including with regard to the sufficiency of the scientific baseline data collected during exploration [or through other means] to support a robust Environmental Impact Assessment.	**3.10. Summary of Scoping results, including of the risk assessment process** Provide a brief overview of the results of the scoping exercise including with regard to the sufficiency of the scientific baseline data collected during exploration [or through other means] to support a robust Environmental Impact Assessment. *Note: the proponents question whether sections 3.10 and 3.11 are appropriate as subsections of section 3 'description of the proposed project'. We ask whether Council considers Sections 3.10 & 3.11 below are subsections of Section 3 'Description of the proposed project' or rather standalone sections elsewhere in Annex IV, or subsections to be addressed in sections 4, 4 & 6 of Annex IV?*
[A description of] Methodologies, [for collecting and analyzing baseline and 'test mining' data and assessing the potential environmental impact and Environmental Effects from the proposed operations and alternatives considered,]	**3.11. Methodology for Description of the Marine Environment and Assessment of Impacts and Environmental Effects** Methodological approaches should be consistent with established community standards. In the case that novel sampling techniques, new technology, or sampling designs are employed, particularly detailed methodology and justification should be provided in this section.	**3.11. Methodology for Description of the Marine Environment and Assessment of Impacts and Environmental Effects** Provide [A description of] Methodologies, [for collecting and analyzing baseline and 'test mining' data and assessing the potential environmental impact and Environmental Effects from the proposed operations and alternatives considered,] [Methodological approaches should be consistent with established community standards. In the case that novel sampling techniques, new technology, or sampling designs are employed, particularly detailed methodology and justification should be provided in this section.] *Note: the proponents question whether sections 3.10 and 3.11 are appropriate as subsections of section 3 'description of the proposed project'. We ask whether Council considers Sections 3.10 & 3.11 below are subsections of Section 3 'Description of the proposed project' or rather standalone sections elsewhere in Annex IV, or subsections to be addressed in sections 4, 4 & 6 of Annex IV?*

(d) A description of the existing oceanographic, physiochemical and geological environment,	**4. Description of the existing [oceanographic,] physiochemical and geological environment** Give a detailed account of [] the oceanographic (physical, chemical and geological) [environmental] conditions at each mining site, [the expected total] and Impact Area as well as [the Impact and Preservation] Reference Zones [(PRZs)], which should include information from a thorough literature review as well as from on-site studies in accordance with the Regulations and applicable Standard and taking into consideration Guidelines to be specified. The Guidelines on baseline data collection as updated from time to time by the Commission, shall guide the drafting of this section by providiIg information on the minimum amount of detail required for an acceptable baseline description. The account will provide the baseline description of the oceanographic conditions, including physical, chemical and geological oceanographic setting, including its spatial and temporal variability and temporal trends [], against which impacts will be measured and assessed. The detIil in this secIion is based on the prior Environmental Risk Assessment carried out in accordance with the respective Standard and taking into consideration Guidelines, that will have identified the main impacts, and thus the priority elements that need to be considered and assessed in the Environmental Impact Assessment. + Regional overview *(required as per section 4.2, incorporated into this paragraph)* + Meteorological and air quality *(required as per section 4.4, incorporated into this paragraph)* + Climate change *(required as per section 4.11bis, incorporated into this paragraph)*	**4. Description of the existing [oceanographic,] physiochemical and geological environment** Give a detailed account of [] the oceanographic (physical, chemical and geological) and meteorological (including air quality) [environmental] conditions and implications of climate change on such conditions as a regional overview, at each mining site, [the expected total] and Impact Area as well as [the Impact and Preservation] Reference Zones [(PRZs)], which should include information from a thorough literature review as well as from on-site studies in accordance with the Regulations and applicable Standard and taking into consideration Guidelines to be specified. The Guidelines on baseline data collection as updated from time to time by the Commission, shall guide the drafting of this section by providiIg information on the minimum amount of detail required for an acceptable baseline description. The account will provide the baseline description of the oceanographic conditions, including physical, chemical and geological oceanographic setting, including its spatial and temporal variability and temporal trends [], against which impacts will be measured and assessed. The detIil in this secIion is based on the prior Environmental Risk Assessment carried out in accordance with the respective Standard and taking into consideration Guidelines, that will have identified the main impacts, and thus the priority elements that need to be considered and assessed in the Environmental Impact Assessment.
(e) A description of the existing biological environment, [including information on prior research/Exploration studies, biological properties and communities and ecosystem that could be impacted by proposed activities,]	**5. Description of the existing biological environment** Give a detailed account of knowledge of the biological communities' composition and structure and ecosystem functions in the proposed mining sites and Impact Areas, and the designated [Impact and] Preservation Reference Zones , including information from a thorough literature review and baseline data collected from on-site campaigns, in accordance with the Regulations and applicable Standards and taking into consideration Guidelines. + regional overview *(required as per section 5.2, incorporated into this paragraph)*	**5. Description of the existing biological environment** Give a detailed account of knowledge of the existing biological environment, including biological properties, biological communities' composition and structure and ecosystems including their functions that could be impacted by proposed activities as a regional overview, in the proposed mining sites and Impact Areas, and the designated [Impact and] Preservation Reference Zones , including information from a thorough literature review and baseline data collected from on-site campaigns, in accordance with the Regulations and applicable Standards and taking into consideration Guidelines.

A description of the socioeconomic and sociocultural environment. including existing human activities, [on fisheries, marine traffic, submarine cables, tourism, ongoing scientific research, sociocultural use, and sites of cultural or historical significance,]	**6. Description of the existing human activities, socioeconomic and sociocultural environment** This section should describe the socioeconomic and sociocultural environment aspects and potential impacts of the project on existing human activities. This may include consideration of the scale of effects (such as the creation of jobs and estimates of the risk of Environmental Impacts), extent of duration of impacts in time and space, intensity or severity of social impacts and an assessment of whether impacts are likely to be cumulative. It is important to consider the social equity or distribution of impacts across different populations: in other words, which groups are likely to be affected in which ways. + planned uses (for which information is publicly available) *(required as per section 6.2bis, incorporated into this paragraph)*	**6. Description of the existing human activities, socioeconomic and sociocultural environment** This section should describe the socioeconomic and sociocultural environment aspects and potential impacts of the project on existing human activities and planned uses of the area for which information is publicly available. This may include consideration of the scale of effects (such as the creation of jobs and estimates of the risk of Environmental Impacts), extent of duration of impacts in time and space, intensity or severity of social impacts and an assessment of whether impacts are likely to be cumulative. It is important to consider the social equity or distribution of impacts across different populations: in other words, which groups are likely to be affected in which ways.
(g) An assessment of [environmental] impacts on the physical, chemical and geological environment and proposed Mitigation, [including description of the impact source, potential impact categories and pathways, receptors and impacts, any potential Cumulative Environmental Effects, unavoidable residual impacts and effects that may remain, and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction,]	**7. Assessment of impacts on the physical, chemical and geological environment and proposed Mitigation** Provide a detailed description and evaluation of potential impacts and Environmental Effects of the operation [which could degrade the current status and functioning of] components of the physical chemical and geological environment identified in section 4. This should consider the entire lifespan of the project, i.e. construction/development (pre-commissioning) of the mine site, operational and Decommissioning phases, and following Closure of the site. The potential for accidental events and natural hazards. The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 and respective Standard and Guideline for Environmental Impact Assessment (chapter III Scoping, D). + Environmental management measures to mitigate impacts *(required as per sections 8 & 9 but missing in section 7, incorporated into this paragraph)* + summary of residual effects *(required as per section 7.15, incorporated into this paragraph)*	**7. Assessment of impacts on the physical, chemical and geological environment and proposed Mitigation** Provide a detailed description and evaluation of potential impacts and Environmental Effects [including Cumulative Environmental Effects] of the operation [which could degrade the current status and functioning of] components of the physical chemical and geological environment identified in section 4 including the proposed environmental management measures to mitigate impacts and a summary of residual effects, [and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction].This should consider the entire lifespan of the project, i.e. construction/development (pre-commissioning) of the mine site, operational and Decommissioning phases, and following Closure of the site. The potential for accidental events and natural hazards. The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 and respective Standard and Guideline for Environmental Impact Assessment (chapter III Scoping, D).

(h) An assessment of [environmental] impacts and Environmental Effects on the biological environment and proposed Mitigation, [including description of the impact source, potential impact categories and pathways, receptors and impacts, any potential Cumulative Environmental Effects, unavoidable residual impacts and effects that may remain, and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction,]	**8. Assessment of [effects and] impacts on the biological environment and proposed Mitigation** Provide a detailed description and evaluation of [the sufficiency of available information] [on] potential impacts and Environmental Effects of the proposed operation and alternatives considered in section 3.7 [which could degrade the current function of] [] the biological environment components identified in section 5 in the [Contract Area, the] mine site and the Impact Areas, [with special regard to the Impact and Preservation Reference Zones]. Consider impacts and effects that could happen during the entire lifespan of the project i.e. construction/development (pre-commissioning), operational and Decommissioning phases and following Closure of the site. The potential for accidental events and natural hazards should be considered. The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 , Standards and taking into consideration Guidelines for Environmental Impact Assessment Process. + Environmental management measures to mitigate impacts / [Mitigation hierarchy measures to avoid, reduce and Mitigate the effects caused by the project], / [Measures taken to avoid, reduce and Mitigate effects, including alternatives] *(required as per section 8.6.2, incorporated into this paragraph. Consider 8.7 bis and 8.7bis 2 are different versions of 8.6.2 so have included as alternatives)* + residual effects *(required as per section 8.8 and 8.7bis.3, incorporated into this paragraph)*	**8.Assessment of impacts and Environmental Effects on the biological environment and proposed Mitigation** Provide a detailed description and evaluation of ~~[the sufficiency of available information] [on]~~ potential impacts and Environmental Effects [including Cumulative Environmental Effects] of the proposed operation, and a summary of the environmental management measures to mitigate impacts and residual effects, alt.1 [[Mitigation hierarchy measures to avoid, reduce and Mitigate the effects caused by the project], alt. 2 [Measures taken to avoid, reduce and Mitigate effects, including alternatives] [and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction] and alternatives considered in section 3.7 [which could degrade the current function of] [] the biological environment components identified in section 5 in the [Contract Area, the] mine site and the Impact Areas, ~~[with special regard to the Impact and Preservation Reference Zones].~~ Consider impacts and effects that could happen during the entire lifespan of the project i.e. construction/development (pre-commissioning), operational and Decommissioning phases and following Closure of the site. The potential for accidental events and natural hazards should be considered. The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 , Standards and taking into consideration Guidelines for Environmental Impact Assessment Process. *Note: the alternative wordings for mitigation should be retained and revisited in light of Council's discussions on how to refer to Mitigation across the regulations.*
(i) An assessment of impacts on the socioeconomic and sociocultural environment and proposed Mitigation, [including description of potential impact categories and pathways and impact identification of existing use (fisheries, marine traffic, submarine cables, tourism, ongoing scientific research, sociocultural use, area-based management tools, sites of cultural or historical significance, ecosystem	**9. Assessment of impacts on the socioeconomic and sociocultural environment and proposed Mitigation** Provide a detailed description and evaluation of potential impacts and Environmental Effects of the operation to the socioeconomic and sociocultural components identified in section 6. This should include projections on the potential impacts in national waters outside the Mining Area and should also consider the entire lifespan of the project i.e.	**9. Assessment of impacts on the socioeconomic and sociocultural environment and proposed Mitigation** Provide a detailed description and evaluation of potential impacts and Environmental Effects of the operation to the socioeconomic and sociocultural components identified in section 6 and a summary of the environmental management measures to mitigate impacts and residual effects. This should include projections on the potential impacts in national

services), impact on gender and residual impacts,]	construction/development (pre-commissioning), operational (including maintenance) and Decommissioning phases. A description of the benefits to humankind may be included. Attitudes towards, and perceptions of, the proposed project are among the variables that should be considered in determining the significance of impacts. The potential for accidental events [and natural hazards] should also be considered. + Environmental management measures to mitigate impacts *(required as per section 9.6.2, incorporated into this paragraph)* + Residual effects *(required as per section 9.6.3, incorporated into this paragraph)*	waters outside the Mining Area and should also consider the entire lifespan of the project i.e. construction/development (pre-commissioning), operational (including maintenance) and Decommissioning phases. A description of the benefits to humankind may be included. Attitudes towards, and perceptions of, the proposed project are among the variables that should be considered in determining the significance of impacts. The potential for accidental events [and natural hazards] should also be considered.
(k) An [description outline] of waste management,	10.6. Waste management Provide a description of proposed vessel waste management, with reference to compliance with relevant conventions, legislation and principles, and methods of cleaner production and energy balance. 10.7 Balast Water management Provide a description of proposed vessel balast water management where applicable, with reference to compliance with relevant rules and principles, and methods of cleaner production and energy balance.	**9bis** (k) An [description outline] of waste management, Provide a description of proposed vessel waste management, with reference to compliance with relevant conventions, legislation and principles, and methods of cleaner production and energy balance. *Note: the proponents have added in a new section 9bis, in light of the fact 48alt (4) (k) requires '*An [description outline] of waste management,'. *The proponents recognise that Section 10.6 and 10.7 currently sit in section 10 below, but consider that should only cover waste management with regard to '*potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes and wastewaters' *as outlined below. Section 9bis would be about all waste management, and section 10 could refer to this section but provide situation-specific detail relevant to section 10.*
(j) An [description outline] of hazards arising from natural, accidental and discharge events, for example related to extreme weather, natural hazards, accidental events, maritime safety, emergency response,	**10. Hazards arising from natural, accidental and discharge events** This section should outline the possibility/probability of accidental events and natural hazards occurring, an assessment of the impact they may have, to the mine site and Impact Area, the measures taken to prevent or respond to such an event and an assessment of the residual impact should an event occur. This should include an overview of potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes	**10. Hazards arising from natural, accidental and discharge events** This section should outline hazards arising from natural, accidental and discharge events, for example related to extreme weather, natural hazards, accidental events, maritime safety and emergency response and their possibility/probability this includes an assessment of the impact they may have, to the mine site and Impact Area, the measures taken to prevent or respond to such an event and an assessment of the residual impact should an event occur. This should include an overview of potential environmentally hazardous

	and wastewaters. Reference should be made to the ERCP.	discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes and wastewaters. Reference should be made to the ERCP.
[(i bis) An assessment of any uncertainties associated with assessments detailed in paragraph 4 subparagraphs (g), (h), and (i) under this regulation, including the implications of those uncertainties for the Environmental Impact Assessment and its findings, measures taken to reduce uncertainties in those findings to as low as reasonably practicable and manage any remaining uncertainties,]	**[10 bis Assessment of Uncertainty** **10 bis.1 Uncertainty Assessment** Provide a detailed description and evaluation of any uncertainties in the assessments described in section 7, 8, and 9. This uncertainty assessment shall: (1) Identify any relevant areas of uncertainty and gaps in knowledge and their implications for the Environmental Impact Assessment and its findings; and, (2) Describe the measures taken in the Environmental Impact Assessment to reduce uncertainty in its findings to as low as reasonably practicable. **10 bis.2 Addressing Significant Uncertainty** Where significant uncertainty exists despite the efforts described in 9bis.1(b), provide a detailed description of environmental monitoring and management measures for managing and reducing uncertainty during the proposed operations, to be incorporated into the Environmental Monitoring and Management Plan and describe how these will enable the applicant to ensure compliance with rules, regulations and procedures of the Authority.	**[10 bis Assessment of Uncertainty** **10 bis.1 Uncertainty Assessment** Provide a detailed description and evaluation of any uncertainties in the assessments described in section 7, 8, and 9. This uncertainty assessment shall: ~~(1) Identify any relevant areas of uncertainty and gaps in knowledge and their implications for the Environmental Impact Assessment and its findings; and,~~ ~~(2)~~ ~~D~~describe the measures taken in the Environmental Impact Assessment to reduce uncertainty in its findings to as low as reasonably practicable. **10 bis.2 Addressing Significant Uncertainty** Where significant uncertainty exists despite the efforts described in 9bis.1(b), provide a detailed description of environmental monitoring and management measures for managing and reducing uncertainty during the proposed operations, to be incorporated into the Environmental Monitoring and Management Plan and describe how these will enable the applicant to ensure compliance with rules, regulations and procedures of the Authority.
	10 ter Holistic cumulative impact assessment and issues to be addressed	**10 ter Holistic cumulative impact assessment and issues to be addressed**
	~~10 quat Environmental management measures to avoid, reduce and Mitigate impacts~~	**~~10 quat Environmental management measures to avoid, reduce and Mitigate impacts~~** *Note: the proponents consider this section 10 quat is covered by Section 11 so deleted here. Wording is copied as an alternation in Section 11, and should be consider in light of how Council decides how to refer to mitigation across the regulations.*

	10 quin Analysis of residual effects against the RRP, Standards and Guidelines of the Authority Provide a description of any residual impacts that may remain following the application of Mitigation measures, including the expected longevity of those impacts, and outline the measures that will be taken to ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.]	**10 quin Analysis of residual effects against the RRP, Standards and Guidelines of the Authority** Provide a description of any residual impacts that may remain following the application of Mitigation measures, including the expected longevity of those impacts, and outline the measures that will be taken to ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.] *Note: The proponents highlight for Council consideration whether a separate standalone section on residual effects would be necessary or whether 'residual effects' should be added to 10 ter ('cumulative impact assessment…') (noting it is already included in sections 7, 8 & 9 ("assessment of impacts on….") and section 11("Environmental management, monitoring and reporting"). If Council decides to retain the more detailed content in 10 quin, then Council should consider whether such content should also be added to any of the aforementioned sections, or instead the Standards and Guidelines. We have retained here in the annex until Council decides.*
(l) A summary of key issues in the Environmental Impact Statement and how they will be addressed in the Environmental Management, and Monitoring Plan and Closure Plan,	**11. Environmental management, monitoring and reporting** Provide sufficient information to enable the Authority to anticipate possible environmental management, monitoring and reporting requirements for an environmental approval. Information listed include a description of the applicant's Environmental Management System and should reflect the proponent's environmental policy and the translation of that policy to meet the requirements of this section and previous sections during different stages of the project life (i.e., from construction to Decommissioning and closure and the post-closure period). The Environmental Management and Monitoring Plan is a separate report from the Environmental Impact Statement, but this could be a useful opportunity to highlight some of the key issues from the Statement that will be addressed in the full Environmental Management and Monitoring Plan.	**11. Environmental management, monitoring and reporting** **[10 quat Environmental management measures to avoid, reduce and Mitigate impacts]** Provide sufficient information to enable the Authority to anticipate possible environmental management, monitoring and reporting requirements for an environmental approval. Information listed include a description of the applicant's Environmental Management System and should reflect the proponent's environmental policy and the translation of that policy to meet the requirements of this section and previous sections during different stages of the project life (i.e., from construction to Decommissioning and closure and the post-closure period). The Environmental Management and Monitoring Plan is a separate report from the Environmental Impact Statement, but this

		could be a useful opportunity to include a summary of the key issues including residual effects from the Statement how they will be addressed in the full Environmental Management and Monitoring Plan and Closure Plan.
(m) [An overview of the downstream supply chain A description of responsible product stewardship] related to the intended use of the mineral-bearing ore once it leaves the [Contract] Area, [including how the Contractor will minimize effects on health, safety, environmental as well as socioeconomic and sociocultural impacts,]	**12. Product stewardship** Provide a brief description of the intended use of the Mineral-bearing ore once it leaves the Area. The description should also address how the Contractor will minimize health, safety, environmental, and socioeconomic and sociocultural effects [and impacts] of the intended product or products to meet standards for environmental management, and should address the following potential impacts: (a) Energy and materials consumption; (b) Waste generation; (c) Toxic substances; (d) Air and water emissions. The intention is not to provide a full and highly detailed account, but, where information is known about environmental impacts, these impacts should be described briefly here.	**12. Responsible ~~p~~Product stewardship** [[An overview of the downstream supply chain] A description of responsible product stewardship] related to]..]~~Provide a brief description of~~ the intended use of the Mineral-bearing ore once it leaves the [Contract} Area. The description should also address how the Contractor will minimize health, safety, environmental, and socioeconomic and sociocultural effects [and impacts] of the intended product or products to meet standards for environmental management, and should address the following potential impacts: (a) Energy and materials consumption; (b) Waste generation; (c) Toxic substances; (d) Air and water emissions. The intention is not to provide a full and highly detailed account, but, where information is known about environmental impacts, these impacts should be described briefly here.
(n) A [description summary] of [the nature, extent, participation and outcomes of] consultations [that have taken place with Stakeholders, and how their comments have been addressed in the environmental impact assessment,and stakeholder engagement and methods.]	**13. Consultation [and stakeholder engagement and methods]** [The Environmental Impact Statement should include a summary of consultation and stakeholder engagement and methods,] Consultations [and engagement] shall be inclusive, transparent and open to all Stakeholders, including States, global, regional, subregional and sectoral bodies, as well as civil society, the scientific community, indigenous peoples and local communities [and in accordance with this Regulation and the applicable Standards and taking into consideration Guidelines]. + Commission consultation; *(required as per section 13.4.3bis, incorporated into this paragraph)*	**13. Consultation [and stakeholder engagement and methods]** [The Environmental Impact Statement should include a [description summary] of [the nature, extent, participation and outcomes of] consultation[s] and [stakeholder] engagement [that have taken place with Stakeholders], including commission consultation, and how their comments have been addressed in the environmental impact statement. A description of consultation ~~and~~ methods shall also be provided,] Consultations [and engagement] shall be inclusive, transparent and open to all Stakeholders, including States, global, regional, subregional and sectoral bodies, as well as civil society, the scientific community, indigenous peoples and local communities [and in accordance with this Regulation and the applicable Standards and taking into consideration Guidelines]. *Note: The group notes that text on Stakeholder consultation needs to be square-bracketed and*

		considered how to be aligned and streamlined in light of how Council adopts the work of IWG Stakeholder consultation (which has now handed its final work over to Council), including whether references to 93bis shall be added here as proposed by IWG Stakeholder consultation. The outcomes of the IWG Coastal States is also likely to be relevant to this section and updates may need to be made in light of its outcomes.
	14.Glossary and abbreviations Include a glossary of terms, acronyms and abbreviations used throughout the document. The glossary should include definitions for, and key terms defined in the regulations so as to ensure that users of the Environmental Impact Statement, including the decision-makers and relevant Stakeholders, have a clear understanding of the intention behind the use of certain terms in the Environmental Impact Statement.	**14.Glossary and abbreviations** Include a glossary of terms, acronyms and abbreviations used throughout the document. ~~The glossary should include definitions for, and key terms defined in the regulations~~ so as to ensure that users of the Environmental Impact Statement, including the decision-makers and relevant Stakeholders, have a clear understanding of the intention behind the use of certain terms in the Environmental Impact Statement.
[(o) A summary of the study team outlining the people involved in the environmental impact assessment studies and in writing the Environmental Impact Statement.]]	**15.Study team** Outline the people involved in carrying out the environmental impact assessment studies and in writing the Environmental Impact Statement.	**15.Study team** Outline the people involved in carrying out the environmental impact assessment studies and in writing the Environmental Impact Statement.
	16. References Evidence obtained from outside sources should be documented throughout the Environmental Impact Statement, with the use of footnotes or other suitable reference mechanism. In addition, all sources used in preparation of the Environmental Impact Statement (including those specifically referenced in the body of the document) should be listed in bibliography format, with full details of the source (including website addresses, if applicable).	**16. References** Evidence obtained from outside sources should be documented throughout the Environmental Impact Statement, with the use of footnotes or other suitable reference mechanism. In addition, all sources used in preparation of the Environmental Impact Statement (including those specifically referenced in the body of the document) should be listed in bibliography format, with full details of the source (including website addresses, if applicable).

	17.Appendices The appendices section should include a list of all the technical reports carried out for parts of the environmental impact assessment or that are used in support of any aspect of the environmental impact assessment (such as prior risk assessments or monitoring activities conducted as part of exploration contracts). Copies of these reports should be provided as appendices to the Environmental Impact Statement, with clear indications as to which section(s) the document is being provided to support.	**17.Appendices** The appendices section should include a list of all the technical reports carried out for parts of the environmental impact assessment or that are used in support of any aspect of the environmental impact assessment (such as prior risk assessments or monitoring activities conducted as part of exploration contracts). Copies of these reports should be provided as appendices to the Environmental Impact Statement, with clear indications as to which section(s) the document is being provided to support.

Addendum III: Full restructuring proposal (marked up highlighted text without deletions)

This additional addendum was provided to Council in March 2024 as part of the joint text proposal on EIA/EIS restructure, and has been updated in light of new consolidated text.

This document has been provided to show where detail is proposed to be moved from, and in particular, is the repository which retains the detail that we propose to delete from the Regulations and Annexes and move to Standards and Guidelines. This has formed the basis for the work the proponents of this joint text proposal for new Annex IV (EIS).

Tracked changes (Word function) is as appears in March 2024 consolidated text draft regulations ISBA/29/C/CRP.1

Green - elements for and Annex IV (EIS)
Yellow - elements to be moved to Standards
Grey - elements to be moved to Guidelines
Blue italics: notes from the proponents of the text proposal

Part IV, Section II 'Environmental Impact Assessment Process' and Annex IV 'Environmental Impact Statement'.

Text is as appears in ISBA/29/C/CRP.1
16 February 2024

Section 2

The Environmental Impact Assessment Process

Regulation 46 *[previously 47 Alt.][IWG ENV]*

Environmental Impact Assessment Process

1. An applicant or Contractor shall carry out an Environmental Impact Assessment on the potential [impacts and] effects on the Marine Environment of the proposed operations and activities.

2. The purpose of an Environmental Impact Assessment under this Regulation shall be to [identify and inform the Authority's assessment of an application of a Plan of Work under Regulations 13 to 16, or a Contract's continued adherence to these Regulations and] predict [and evaluate the potential] Environmental Impacts, [effects and risks] anticipated from the proposed activities [on the marine environment and identify necessary measures to Mitigate or manage such effects and risks], to enable the Authority to assess the potential adverse Environmental Effects [and risks], with the aim to:

(a) Ensure effective Protection for the Marine Environment from harmful effects which may arise from such proposed activities;

(b) Ensure that activities in the Area are carried out with reasonable regard for other activities in the Marine Environment;

(c) [] [Prevent] harm to the Marine Environment arising out of the proposed activities;

(d) Ensure, in accordance with [] the Convention [], that the Sponsoring State [or States] and the Contractor, [] conduct the Environmental Impact Assessment with due regard to the rights and legitimate interests [] of [adjacent] coastal States and any other potentially most affected coastal State by maintaining, [targeted and proactive] consultations in accordance with Regulation 93 ter]; and

(e) Ensure that the proposed activities are carried out in accordance with [the Convention, the Agreement], rules, regulations and procedures of the Authority [] and the applicable Standards and taking into consideration Guidelines as well as, Best Available Scientific Information, Best Environmental Practices, and Best Available Techniques.

3. The Environmental Impact Assessment [Process] shall:

(a) Be based on relevant environmental baseline data [] in accordance with [applicable] Standards and taking into consideration [] Guidelines and the objectives and measures of the [relevant] Regional Environmental Management Plan;

[(a)bis Be based on a Scoping Report;]

(b) Be carried out by [competent] [] experts;

(b) bis Be based on the best available [] scientific information, and, [if applicable, taking into account] relevant traditional knowledge of Indigenous Peoples and local communities;

(c) Include an Environmental Risk Assessment [] that takes into consideration the region as a whole taking into account the objectives and measures of the relevant [] Regional Environmental Management Plan;

(d) Provide for Stakeholder consultation in accordance with Regulation 93 bis, applicable Standards and taking into consideration Guidelines;

(e) Be subject to an independent scientific assessment prior to the submission of the proposed Environmental Impact Statement to the Authority;

(f) Take into account the results from Test Mining, if applicable, in accordance with Regulation 48 ter ;

(g) Be conducted in accordance with the terms of reference developed during scoping in accordance with Regulation 47 bis ;

(h) Identify scientific and other knowledge gaps or data uncertainties, and [assess] the degree to which these influence the assessment; and

(i) Be an iterative process where specific stages [of the activities] are revisited and may be updated in the light of new information or new activity at a later stage.

4. The Environmental Impact Assessment [process] must follow certain procedural steps and entail the following elements:

(a) A scoping Stage and scoping report in accordance with Regulation 47 bis to identify and risk assess the anticipated activities and potential impacts associated with the proposed Exploitation which are relevant to the Environmental Impact Assessment;

(b) A stage for assessment of Environmental Impacts [in accordance with Regulation 47;]

(c) A stage on the preparation and submission to the Authority of the Environmental Impact Statement to document and report the results of the Environmental Impact Assessment in accordance with Regulation 47, the applicable Standards and taking into consideration Guidelines;

(d) The [development,] publication and review by the Commission of the Environmental Impact Statement, and publication of the [Commissions] report and recommendations [] to the Council pursuant to Regulations 11-15;

(e) A decision by the Council to approve, or not approve, the proposed activities or proposed modification to the Plan of Work that was the subject of the Environmental Impact Assessment, including any conditions imposed upon an approval, which decision shall be recorded and published in accordance with Regulation 16, and

[(f) A proactive consultation by an applicant or Contractor with Stakeholders at all stages, in accordance with [the applicable] Standards and taking [into] consideration Guidelines.

Note: Noting all text on Stakeholder consultation should be retained in square brackets until Council has decided on how to address Stakeholder consultation in the regulations, including in light of the work by IWG Stakeholder consultation.

Comments

- Regulation 47 Alt. gained most support during the third part of the twenty-eight session. Therefore, that version has been retained.
- Several sub-paragraphs have been suggested replaced to the Standard and Guidelines and is currently placed in the suspense document.

Regulation 47 *[IWG ENV]*

Environmental Impact Assessment

1. The applicant or Contractor shall, in accordance with the Standards, and taking into consideration Guidelines, undertake an impact assessment, [as described in Regulation 46 (4),] based on the Terms of Reference [] in the Scoping report [.] This includes assessing:

(a) The intensity or severity of the impact at the specific site being affected;

(b) The spatial extent of the impact relative to the availability of the habitat type affected;

(c) The sensitivity/vulnerability of the ecosystem to the impact;

(d) The ability of an ecosystem to recover from harm, and the rate of such recovery; [and](e) The extent to which ecosystem functions may be altered by the impact. []

2. [In] undertaking the impact assessment, the applicant or Contractor shall complete:

(a) An analysis of reasonable alternatives [] to the planned activity under the jurisdiction or control of a State Party, including the no-action alternative;

(b) Identification of measures envisaged to [monitor,] mitigate and manage [] Environmental Effects and risks to as low as reasonably practicable, while within acceptable levels in accordance with environmental Standards, including through the development and preparation of an Environmental Management and Monitoring Plan;

(c) An Environmental Risk Assessment, which adds to the preliminary Environmental Risk Assessment required during scoping by this Regulation;

(d) An analysis of the results of the Environmental Risk Assessment, including identification of [] risks requiring particular focus, including in the Environmental Management and Monitoring Plan;

(e) Provide for engagement with potentially directly affected Stakeholders and in accordance with [Regulation 93 ter], applicable Standards and taking into consideration Guidelines; and

(e) bis Provide for consultation with all States and Stakeholders in accordance with Regulation 93 bis, applicable Standards and taking into consideration Guidelines.

Comment

Regulation 47 bis Alt gained most support during the third part of the twenty-eight session and has thus been retained and the numbering has been updated to Regulation 47.

Regulation 47 bis *[IWG ENV]*

Scoping Report

1. [An] applicant or Contractor, shall prepare and submit to the Secretary-General a scoping report in accordance with this Regulation, [the applicable Standard and taking into consideration Guidelines].

2. An applicant or Contractor, shall use Environmental Impact Assessment scoping to identify and prioritize the main activities and potential impacts associated with the proposed Exploitation activities, in order to focus the Environmental Impact Assessment and Environmental Impact Statement on the key environmental issues.

3. In undertaking the Environmental Impact Assessment scoping process, the applicant or Contractor, shall:

(a) Review available data and knowledge, and propose additional data to be collected and studies needed to complete an Environmental Impact Statement in accordance with these Regulations;

(b) Undertake a preliminary impact analysis and Environmental Risk Assessment which will be updated as the Environmental Impact Assessment proceeds;

(c) Identify [potentially directly affected] Stakeholders in accordance with [the applicable] Standards and taking into consideration Guidelines;

(c) bis Endeavour to engage with potentially directly affected Stakeholders, and in accordance with [Regulation 93 ter,] Standards and taking into consideration Guidelines;

(d) Identify and evaluate feasible alternative means of carrying out the project that will be [further] examined in the Environmental Impact Assessment; and

(e) Use the best available science and scientific information and, where available, relevant traditional knowledge of Indigenous Peoples and local communities.

5. Following submission of a scoping report in accordance with this Regulation, the applicant or Contractor shall conduct a consultation process on the Scoping Report, with all States and Stakeholders in accordance with Regulation 93 bis.

6. The Commission shall consider a scoping report submitted in accordance with this Regulation, and taking into account the consultation submission received under Regulation 93 bis (8), the applicant or Contractor's written response prepared under Regulation 93 bis (9), any additional information provided by the Secretary-General, and in accordance with [the applicable] Standards and taking into consideration Guidelines. Based on this review, the Commission shall approve a scoping report, disapprove it or make recommendations to the applicant or Contractor regarding the proposed scope of the Environmental Impact Assessment, accompanied by a detailed rationale [for such recommendations].

7. The Commission may recommend that the applicant:

(a) Revise the Environmental Risk Assessment or other aspects of the scoping report based on different methodology or inputs;

(b) Amend the proposed terms of reference for the Environmental Impact Assessment;

(c) Revise a Scoping Report and submit the report for further consideration; or

(d) Consult under Regulation 93 bis on any revised scoping report, particularly if the recommendations are likely to lead to a Material Change in the Scoping Report.

8. The applicant or Contractor shall, before proceeding with an Environmental Impact Assessment [pursuant to Regulation 47]:

(a) Take full account of the Commission's recommendations under this Regulation [or any recommendations or scoping reports concluded prior to the adoption of these Regulations and in accordance with an Exploration contract];

[(b) Submit a revised scoping report, including any amended terms of reference]; and

(c) Agree the final contents of the proposed terms of reference in the Scoping Report with the Commission.

Comment

Several proposals were received to refine the Regulation, and reallocate elements to the Annex on Scoping Report. The text thus contained significant mark-up. For the sake of clarity, the Regulation has been placed in a clean version. It is now renumbered to Regulation 47 bis.

Regulation 48 *[IWG ENV]*

Environmental Impact Statement

1. An applicant or Contractor shall prepare an Environmental Impact Statement in accordance with this Regulation. Such [] Environmental Impact Statement [will] [] be considered by the Authority in accordance with Part II or Regulation 57, [which include a consultation with States and Stakeholders on the Environmental Impact Statement, by the applicant or Contractor and in accordance with Regulation 93 bis], and is required for an application for a Plan of Work pursuant to Regulation 7(3)(d).

2. The Environmental Impact Statement shall document and report the results of the Environmental Impact Assessment carried out in accordance with Regulation 47 and shall provide the [] Authority, its member States and other Stakeholders with unambiguous documentation of the potential Environmental Effects based on [] Best Environmental Practices, [] and Good Industry Practice [].

3. The Environmental Impact Statement shall be in a form prescribed by the Authority in the applicable Standard and Guidelines, [and shall]:

(a) Detail the results of the Environmental Impact Assessment including the methodology used, [the sufficiency of information] and evaluation of the identified Environmental Impacts;

(b) Demonstrate that the proposed Exploitation is in accordance with all relevant environmental Standards and the Authority's environmental objectives and [taking into consideration] [] the relevant Regional Environmental Management Plan, environmental baseline data as well as any additional objectives as set by the Contractor and any results of the performed Test Mining Study, where applicable;

(c) [Describe outreach and consultations undertaken and] identify substantive [and relevant] comments received through public consultation on the Environmental Impact Assessment and explain how [such] [] comments have been incorporated or otherwise addressed,

(c) bis Demonstrate it has conducted consultation with Stakeholders, in accordance with [Regulation 93 ter] and the applicable Standards, and taking into consideration the Guidelines.

(d) Be prepared in clear and non-technical language and in an official language of the Authority together with an English-language version, where applicable,

(e) Be peer reviewed by competent independent experts, before submission,

3. bis The applicant or Contractor shall endeavour to engage with potentially directly affected Stakeholders, and in accordance with [Regulation 93 ter] applicable Standards, and taking into consideration Guidelines, during the development of the Environmental Impact Statement.

5. The Environmental Impact Statement of every project, including any revisions, [shall] be [made] available on the [] Authority's website.

Comments

- Regulation 48 Alt. gained most support during the third part of the twenty-eight session meeting, and has thus been retained. Updated to Regulation 48.
- The content of paragraph 4 of Regulation 48 Alt. is suggested removed to Annex IV.

Regulation 48 bis *[IWG ENV]*

New Environmental Impact Assessment and Revised Environmental Impact Statement **[Revision for change or new or increased effect or risk]**

1. [If a Contractor becomes aware that any of the circumstances listed in paragraph 2 below have not been addressed by either an Environmental Impact Assessment or an environmental management and monitoring plan, it shall promptly notify the Secretary-General in writing, including:

(a) a detailed description of the circumstance;

(b) details of the potential effect on or risk to the marine environment; and

(c) details of any Environmental Impact Assessment conducted or to be conducted, or proposed modification to the Environmental Management and Monitoring Plan

[2.] A Contractor shall conduct an [additional] Environmental Impact Assessment in accordance with Regulation 47 and submit a [] revised Environmental Impact Statement [where]:

(a) A [] change to an existing Plan of Work is proposed which is likely to [significantly] increase the adverse Environmental Effects [or risks] caused by the activities, and is not covered by Regulation 57(3),

(b) A [significant] change in the Marine Environment [compared to baseline data] is detected through monitoring or other data sources which would call for a new or [revised] Environmental Impact Statement [or Environmental Management and Monitoring Plan],

(c) An activity described in the Plan of Work is predicted to exceed the impact thresholds set out in the Standards on environmental thresholds,

(d) An applicable Standard, activity or predicted [significant] impact has not already been addressed by an Environmental Impact Statement, or

(e) Otherwise deemed necessary by the Commission or Council, in accordance with applicable Standards and taking into consideration Guidelines, following its review of a Contractors' activities contained in an annual report submitted pursuant to Regulation 38 or review of a Plan of Work pursuant to Regulation 58.

3. The Secretary-General shall transmit the information received from the Contractor under paragraph 1 above to the Commission. The Commission shall assess the information and determine whether the Contractor shall:

(a) undertake an Environmental Impact Assessment and prepare a revised Environmental Impact Statement; or

(b) prepare a revised Environmental Management and Monitoring Plan.

4. Where required by the Commission, the Contractor shall submit a revised Environmental Impact Statement or revised Environmental Management and Monitoring Plan to the Commission for review.

5. Where the Commission determines that any change to the statement or plan constitutes a Material Change, the procedure set out in Regulation 11 shall apply.

6. In the course of conducting a new Environmental Impact Assessment and preparing a revised Environmental Impact Statement as required by any Material Change, a Contractor shall endeavour to engage with potentially directly affected Stakeholders, and in accordance with [Regulation 93 ter], the Standards, and taking into consideration the Guidelines.

7. The Contractor shall also conduct a consultation regarding the revised Environmental Impact Statement in accordance with Regulation 93 bis.

Comment

Regulation 48 bis. Alt. gained most support during the third part of the twenty-eight session, and has thus been retained, and updated according to the suggestions provided by the Intersessional Working Group on a Standardized Approach to Stakeholder Consultation. Updated to Regulation 48 bis.

Annex IV *[IWG ENV]*

Environmental Impact Statement

1. Preparation of an Environmental Impact Statement

The Environmental Impact Statement prepared under these Regulations and the present Annex shall, [but not limited to, entail the following elements]:

(a) Be prepared in clear language and in an official language of the Authority together with an English-language version, where applicable;

(b) Provide information [] in accordance with the Regulations, and taking into account the applicable Regional Environmental Management Plan, Standards and Guidelines, corresponding to the scale and potential magnitude of the activities, to assess the likely Environmental Effects of the proposed activities. Such effects shall be discussed in proportion to their significance. Where an applicant or Contractor considers an Environmental Effect to be of no significance, there should be sufficient information to substantiate such conclusion, or a brief discussion as to why further research is not warranted; and

(c) Include a non-technical summary of the main conclusions and information provided to facilitate understanding of the nature of the activity by Stakeholders.

[]

2. Template for Environmental Impact Statement

The required contents and recommended format for an Environmental Impact Statement is outlined below. It is intended to provide the Authority, its member States and other stakeholders with unambiguous documentation of the potential Environmental Effects based on the Best Available Scientific

Evidence, Best Environmental Practices, and Best Available Techniques, and Good Industry Practice on which the Authority can base its decision, and any subsequent approval that may be granted. Further detail for each section is provided following the overview.

This document is a template and does not provide details of methodology or thresholds that may be resource- and site-specific. These

ologies and thresholds may also change over time in according to, for example, development of new technologies, new scientific data or new knowledge, and will be developed as Standards and Guidelines to support the Regulations.

[Table of content to be inserted]

Executive summary

One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers. Information provided in the executive summary should include:

(a) A description of the proposed project, its objectives, if any, a description of alternatives analysed, and a justification of the alternative chosen;

(a) bis. A description of alternatives analysed;

(b) Anticipated Economic, financial and other benefits to be derived from the project, and the beneficiaries for each, [including humankind];

(c) A description of anticipated and cumulative, risks and impacts of the activity, as assessed by experts, (including, but not limited to, oceanographic, geological, biological, socioeconomic and sociocultural) including the expected spatial extent and duration of impacts and cumulative impacts in relation to the identified baselines, and the expected recovery rates of the system to its original state;

(d) Measures to minimize and Mitigate anticipated and Cumulative Environmental Impacts, support recovery of the Marine Environment from impacts,] and a description of any anticipated and cumulative residual impacts, that may occur despite Mitigation, noting how the Mitigation hierarchy is being employed in assessing impacts;

(d bis) A description of any residual impacts;

(d ter) Expected recovery rate of the Marine Environment impacted;

(e) Linkages with development of the Environmental Monitoring and Management Plan and the Closure Plan; and

(f) Consultation undertaken with other parties and Stakeholders.

1. Introduction

The purpose of the Introduction section is to set the scene for the Environmental Impact Assessment. This section should contain enough detail for a reader to form an overall impression of the proposed project and how it has developed and understand how the Environmental Impact Assessment is structured. As this section mainly provides a ‘roadmap’ to more detailed material in the Environmental Impact Assessment, it may be relatively short.

1.1. Background

Summarize briefly the project being proposed, including all main activities and locations.

1.2. Project viability

Provide information on the viability of the proposed development, its economic context and why the project is needed.

Provide understanding of the policy on alternatives being followed by the applicant. The determination of project viability may include a summary of

feasibility investigations related to geophysical, engineering, geotechnical, oceanographic, biological and other components of project operations.

1.3. Project history

Summarize briefly the work undertaken up to the date the Environmental Impact Statement was finalized and ready to be submitted to the Authority. This should include a brief description of the resource discovery, the Exploration undertaken, depth zones, and any component/ system testing conducted to date. The time, location, and parties involved in Exploration work should be included. For the component/ system testing, provide a brief description of activities here. If applicable, include any report(s) related to results of component/system testing and Test Mining studies including any monitoring and assessment of the Environmental Impacts in an appendix.

1.4. Project proponent

Summarize the credentials of the proponent, including major shareholders, other contracts or licences held (including in other jurisdictions), previous and existing contracts with the Authority The proponent's technological and environmental expertise, capacity and financial resources should be outlined, and the proponent's environmental record for this work and any previous comparable works should be summarised as well as how they intend to support commitments made elsewhere in the application.

1.5. This report

This section should constitute a guide for users of the Environmental Impact Statement on how to effectively use the information contained in the Environmental Impact Statement.

1.5.1. Scope

Provide detail as to what is and is not included, and which risks have been prioritised and which received less emphasis, in this Environmental Impact Statement, based on the Scoping Report and previous feedback from the Authority and Stakeholders. Link to other supporting information.

1.5.2. Report structure

This subsection should refer to the prescribed structure of the template but should also indicate where to find information that is not obvious from the table of contents, for example in cases where the Environmental Impact Statement relates to a larger project covering several Mining Areas within the Contract Area or for an Environmental Impact Statement that contains a large volume of information (especially multiple volumes). Authorship should be provided for chapters.

1.5.3. Consultation overview

Provide overview of mandatory, as well as any voluntary stakeholder consultation processes and consultations.

2. Policy, legal and administrative context

Provide information on the relevant policies, legislation, agreements, Standards and Guidelines that are applicable to the proposed Exploitation activities .

2.1. Applicable national and international legislation policies and procedures

Outline the national and international legislation, procedures and policies, for example those adopted in accordance with Article 209 of the Convention to prevent, reduce and control pollution of the Marine Environment, including the coastline, from activities in the Area, as well as applicable rules, regulations and procedures of the Authority, applicable Standards and taking into consideration Guidelines and the relevant Regional Environmental Management Plan, that is applicable to the proposed Exploitation activities in the Area, including any guidance provided for implementation and how the proposed operation will comply with them.

2.2. Other applicable national legislation, policies and regulations

Outline any other legislation, policies, regulations or Sustainable Development Bills that do not necessarily apply specifically to seabed mining or the environment, but may be relevant to the proposal (e.g., shipping regulations, maritime declarations, flag State laws, climate. This section should also refer to national regulations and laws that relate to the effects of Exploitation activities on coastal States [].

2.3. Applicable international and regional agreements

In addition to the United Nations Convention on the Law of the Sea and the 1994 Agreement relating to the Implementation of Part XI of the Convention, list the international and regional agreements applicable to the operation, (whether directly or via incorporation into domestic laws cited in section 2.2 above), such as relevant conventions, including Annexes and Guidelines, of the International Maritime Organization related to Protection of the environment, biodiversity and safety. These include the International Convention for the Safety of Life at Sea (SOLAS), the International Convention for the Prevention of Pollution from Ships (MARPOL), the Ballast Water Management Convention (BWMC), the International Convention on the Control of Harmful Anti-fouling Systems on Ships and the 1996 Protocol thereof and the Convention on Biological Diversity and the Convention on Migratory Species of Wild Animals and the international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ); and describe how the proposed operation will comply with them.

2.4. Other applicable standards, principles and Guidelines

Discuss applicable standards and Guidelines, including those mandated by the source(s) of funding for the operations, that will be adhered to or aligned with throughout the operation, such as those of the Authority not already included in section 2.1, the Equator Principles, the Environmental Management Standards of the International Organization for Standardization, the Code for Environmental Management of Marine Mining of the International Marine Minerals Society, the Performance Standards on

Environmental and Social Sustainability of the International Finance Corporation and the Standards of the Extractive Industries Transparency Initiative.

2.5. National Processes related to Sponsoring State permits

Describe any national processes followed and permits received from the Sponsoring State in relation to the Environmental Impact Assessment.

[]

3. Description of the proposed project

Provide details of the proposed project and the area of influence of the project or Impact Area, including relevant diagrams and drawings. It is understood that most projects will likely involve the recovery of Minerals from the Area, with the concentrating process(es) occurring on land within a national jurisdiction (outside the jurisdiction of the Authority). While this section should provide a description of the entire project, including offshore and land-based components, the Environmental Impact Statement should focus on those activities occurring within the Authority's jurisdiction (e.g., activities related to the recovery of the Minerals from the Area up to the point of trans-shipment).

Details to be provided under this section should include the headings listed below.

3.1. Project area definition

3.1.1. Location

Include coordinates of the project area, detailed location maps (drawn to scale), showing the relevant sites proposed as Contract Area and Mining Area and any other features that can be usefully marked upon the map at the time of application, including the locations of Impact Reference Zones and Preservation Reference Zones as well as locations of other nearby contract areas or known seabed infrastructure. Provide general location of the project on a regional map.

[Provide a map (drawn to scale), and list the coordinates detailing the location of the project area, with the proposed Contract Area, the sequence of areas planned to be mined (Mined Areas), the Impact Reference Zones (IRZ) and Preservation Reference Zones (PRZ) for each Mined Area, and the presumed impact zones covering the benthic and pelagic extent of sediment plumes created by the Exploitation activities. Add any other features that can be usefully marked upon the map at the time of application, including the locations of other nearby contract areas or known seabed infrastructure. Provide general location of the project on a regional map.]

The map should indicate Areas of Particular Environmental Interest, Sites/Areas in Need of Protection, or other sites designated for particular status under the rules, regulations, procedures of the Authority, applicable Standards and taking into consideration Guidelines, or relevant Regional Environmental Management Plan, [as well as area-based designations] of other competent authorities, as well as information on any other known conservation or spatial measures and other uses of the Marine Environment (e.g. submarine cables and pipelines, long-standing scientific research sites and established fishing areas) in the vicinity of the project area. The map shall

also identify the nearest coastal States and States that may be affected by Exploitation activities, and any adjacent [] contract sites. This map may be the same as the map supplied in Annex 1 Section II.

3.1.2. Associated activities

Describe the supporting activities and infrastructure required (e.g., transportation corridors, ports for disembarkation of vessels, ports for unloading of ore that are outside the direct mining site, anchoring areas for vessels and machinery).

3.2. Mineral resource

Provide details of the type of resource proposed for extraction (e.g. sea floor massive sulphides, polymetallic nodules, ferromanganese crusts), the type, size, shape, tonnage, volume grade and distribution pattern of the Mineral deposits. Estimates of the inferred indicated resource should be provided on the basis of the international CRIRSCO reporting template or national accepted codes (NI 43-101, JORC Code) and the official Mineral classification of the Authority (PMN, PMS and CFC).

3.3. Project components

Provide background information on the proposal and the technologies and equipment to be employed, and include the subsections set out below.

3.3.1. Project scale

Provide an overview of the spatial (horizontal and vertical) and temporal (seasonal and annual) scales of the Exploitation activities , including volumes, depth of penetration into the seabed. Provide an overview of physical, chemical, geological and oceanographic properties of material to be recovered, dewatered and deposited or discharged into the water column or back to the seabed, and the target depth range for any such discharge, [in accordance with the applicable Standards and Guidelines]. This should include an account of the [residual] area to be directly impacted over time, including the water column and seafloor beyond the Contract Area, if applicable, as well as the likely extent of any secondary impacts (e.g., sediment plumes, noise, light), which will be discussed in greater detail later.

3.3.2. Mining Equipment

Describe any equipment expected to [be used] [] for mining and support operations (e.g., mining vessels/platforms, supply vessels, barges), including the anticipated frequency of vessel movements for these activities. Also, including a description of any specific technologies developed to reduce impacts should be included.

Provide details of methodologies of exploitation (drilling, dredging, excavating, disposing of waste, constructing and operating or maintaining Installations, pipelines and other devices) and give specifications of the technologies to be employed in relation to Best Environmental Practice, including relevant diagrams and drawings, that address: the Mining Workplan, timelines and the general mining sequence, the technologies to be engaged in Exploitation activities , the depth of penetration into the seabed the specific technologies developed to reduce the direct impact of Exploitation activities

(e.g. noise, light, plumes) and other details of the Exploitation activities subsea and on the surface. Describe the energy requirements of the requisite machinery.

3.3.3. Transport and materials handling

Provide a description of all methods to be used to transport the Mineral-bearing ore, including from the sea floor to the surface [and how it relates] to Best Environmental Practice, and any methods related to the trans-shipment of the Mineral-bearing ore, including transfers at sea. [] Also, [include] a description of any [measures and] technologies developed to [avoid,] reduce [and Mitigate] impacts [anywhere] in the water column ([e.g.] generation of plume at the seafloor, turbidity in the water column, addition of bottom sediments to the surface waters)[] during the different phases for collection, separation, lifting, transportation, processing, and discharge of effluents.

3.3.4. On-site processing

Provide a detailed description of the plan for processing of the mineralized material that will occur within or above the Area [and how it relates] to Best Environmental Practice, including water column activities (such as riser pipe transfer) and shipboard processing. Include a description of any methods to be used on the sea floor to separate the mineralized material from surrounding sediment and/or rock, as well as any dewatering and separation of the mineralized material at the surface.

This section should also cover any disposal of seawater[] and include the spatial layout of the activities over time which will provide a comprehensive map of the disturbance area from which to assess harm to the Marine Environment.

Include a description of the waste management, transport, disposal and discharge of sediment, wastes or other effluents into the Marine Environment and the disposal of waste from general ship operations, including the specific technologies and methods to be adopted to reduce harmful impacts of such disposal to the Marine Environment. The description should acknowledge respective [] Standards and Guidelines [of the Authority] as well as other applicable legal frameworks. Describe the management of shipboard wastes to be transported to shore-based disposal facilities, including the handling and management of hazardous materials , together with a description of the nature of such material and its transportation, storage and disposal. [] Also, a description of any specific technologies developed to reduce impacts should be included.

3.4. Commissioning

Describe the pre-production activities that will take place with regard to the establishment and set-up of the site for Exploitation activities. The management of this process (such as the establishment of safety zones around vessels) should also be described.

3.5. Construction and operating standards

Outline the design codes or certification standards to which the equipment will be or has been built, as well as the operating standards that will be applied to Exploitation activities, including [any relevant] Best Available Technology

and Best Environmental Practice [guidance] issued by the [] Authority. This section should include subsections such as those set out below.

3.5.1. Design codes

3.5.2. Health and safety

3.5.3. Workforce description

This section should also outline capacity-building objectives and commitments.

3.6. Decommissioning and Closure

Describe the steps that will occur when the Exploitation activities are completed or in the event of an emergency, including the Decommissioning and removal of offshore infrastructure or the temporary suspension of Exploitation activities, under a Closure Plan.

3.7. Other alternatives considered

Provide an account of alternative options that were rigorously explored and objectively evaluated, including a no-action alternative, that were considered and rejected in favour of the current proposal with justification as to why the alternatives were rejected. Aspects should include the selection of the mine site, mine production scenarios, equipment design and engineering decisions, including technologies selected to reduce the direct impact of Exploitation activities, Environmental Impacts, financial feasibility, transport and materials handling, shipboard processing and stakeholder support. A no mining scenario must be included.

3.8 Environmental management measures to Mitigate impact

Provide a summary description of [the sufficiency of information on environmental management measures and] [] measures taken to [avoid, reduce and] Mitigate adverse impacts to the physical, chemical, geological, biological, socioeconomic and sociocultural environment, [while developing the project].

3.9. Development timetable (detailed schedule)

Provide a description of the overall timetable, from initiation and equipment construction through the implementation of the mining programme, to the Decommissioning and closure of operations. The description should include the major phases of the operation as well as the milestone dates on which relevant tasks are expected to be completed. Information on the development timetable provided under this section should clearly communicate the different phases in the development proposal. For reasons of clarity, a flow chart or a Gantt or PERT (Programme Evaluation and Review Technique) chart should be used where appropriate. Information provided in this section should include the following:

(a) The funding arrangement for the proposed activity, or whether the availability of funds is subject to this or other approvals being granted;

(a) bis Timing of expected regulatory approvals;

(b) Pre-construction activities including the development and testing of mining equipment, operations and systems in situ (if applicable);

(c) A construction schedule and staging timetable;

(d) An infrastructure development schedule;

(e) A monitoring schedule (during and after operations); and

(f) A Closure schedule.

Whether the availability of funds is subject to approvals should be noted on the timetable.

3.10. Summary of Scoping results, including of the risk assessment process

Provide a brief overview of the results of the scoping exercise including with regard to the sufficiency of the scientific baseline data collected during Exploration [or through other means] to support a robust Environmental Impact Assessment.

Note: the proponents question whether sections 3.10 and 3.11 are appropriate as subsections of section 3 'description of the proposed project'. We ask whether Council considers Sections 3.10 & 3.11 below are subsections of Section 3 'Description of the proposed project' or rather standalone sections elsewhere in Annex IV, or subsections to be addressed in sections 4, 4 & 6 of Annex IV?

3.11. Methodology for Description of the Marine Environment and Assessment of Impacts and Environmental Effects

Methodological approaches should be consistent with established community standards. In the case that novel sampling techniques, new technology, or sampling designs are employed, particularly detailed methodology and justification should be provided in this section.

Note: the proponents question whether sections 3.10 and 3.11 are appropriate as subsections of section 3 'description of the proposed project'. We ask whether Council considers Sections 3.10 & 3.11 below are subsections of Section 3 'Description of the proposed project' or rather standalone sections elsewhere in Annex IV, or subsections to be addressed in sections 4, 4 & 6 of Annex IV?

3.12. Studies completed

Describe any prior research/Exploration that could provide relevant information for this Environmental Impact Statement and future activities. These studies should be detailed in the appendices.

3.13. Methodology for Collecting Baseline Data

For each of the baseline descriptions of the Marine Environment in sections 4 [], describe the methodology for collecting and analysing baseline data, including:

(a) spatial and temporal extent of sampling;
(b) spatial and temporal frequency of sampling;

(c) gear used for sampling and any modifications or calibrations conducted to the gear;

(d) results of power analysis;

(e) limitations of sampling and how this may impact certainty of impact assessments; and

(f) any cooperation with other research programmes in the Area, such as with the Authority, States, other Contractors, or non-governmental organizations.

Highlight any deviations from baseline data collection requirements provided in relevant Standards and Guidelines, and the Regional Environmental Management Plan, and provide a rationale for those deviations.

Assess the sufficiency of baseline data collected and compiled in view of the aim to establish mining-related environmental change in relation to natural variability.

Raw baseline data [] used to analyse and provide a description of the Marine Environment shall be included in the Annexes of the Environmental Impact Statement or, if the data [has] been previously submitted to the Authority, the applicant may provide a link to the Authority's database where the data [is] stored or other location where such information has been made available online.

3.14. Methodology for Summarizing Baseline Data

Provide a description of the methodology used to summarize baseline data collected. This shall include:

(a) description and justification of transformations performed to the data and analyses used to summarize the data;

(b) a list of program(s) used to analyse results;

I a list of methods to determine species identification and life history; and

(d) any limitations associated with the results of the analysis.

3.15. Methodology for Assessment of potential Environmental Impacts and Environmental Effects to the Marine Environment

For each assessment of potential Environmental Impacts and Environmental Effects in sections 7 and 8 and socioeconomic [and sociocultural] environment in section 9, describe the methodology used to assess impacts and Environmental Effects from proposed operations and alternatives considered in section 3.7. in line with the applicable regulations and Standards and taking into consideration Guidelines.

Data [and], predictive models [] used to analyse and provide a description of the Marine Environment shall be included in the Annexes to the Environmental Impact Statement or, if the data [and/or] model [] has been previously submitted to the Authority, other location where such information has been made available online. Each description of methodology used to assess impacts shall include:

(a) a description and justification of analyses and models used to summarize the data; and

(b) any limitations associated with the analysis or results.

[.4. Description of the existing [oceanographic,] physiochemical and geological environment

Give a detailed account of [] the oceanographic (physical, chemical and geological) and meteorological (including air quality) [environmental] conditions and implications of climate change on such conditions as a regional overview, at each mining site, [the expected total] and Impact Area as well as

[the Impact and Preservation] Reference Zones [(PRZs)], which should include information from a thorough literature review as well as from on-site studies in accordance with the Regulations and applicable Standard and taking into consideration Guidelines to be specified. The Guidelines on baseline data collection as updated from time to time by the Commission, shall guide the drafting of this section by providiIg information on the minimum amount of detail required for an acceptable baseline description. The account will provide the baseline description of the oceanographic conditions, including physical, chemical and geological oceanographic setting, including its spatial and temporal variability and temporal trends [], against which impacts will be measured and assessed. The detIil in this secIion is based on the prior Environmental Risk Assessment carried out in accordance with the respective Standard and taking into consideration Guidelines, that will have identified the main impacts, and thus the priority elements that need to be considered and assessed in the Environmental Impact Assessment.

4.1. Key messages

Provide an overview of key content (this information can be provided in a box that contains up to 6 bullet points on either the main aspects covered or the main findings).

4.2. Regional overview

Describe the general baseline environmental conditions [and expected trends and variability] of the site and Impact Area, in accordance with the Standards and taking into consideration Guidelines on baseline data collection, including but not limited to the physical, chemical and geological oceanographic setting within a broader regional context and taking into account the applicable Regional Environmental Management Plan. This should be a brief section that includes a map. A more detailed site-specific and Impact Area description will be provided in accordance with the sections below.

4.3. Studies completed

Describe any prior research/Exploration studies (including methods used for completing the studies based on Best Available [] Techniques that could provide relevant information for this Environmental Impact Statement. This research should be detailed in the appendices [and/]or in reports attached to the appendices. [The environmental baseline data collected for the Authority, as outlined in exploration contract conditions, should accompany the Environmental Impact Statement.]

4.4. Meteorology and air quality

Provide a general Characterization of the local meteorology (e.g., wind directions and speeds, seasonal and interannual patterns and variability). Provide description of air quality, including chemical characteristics. This section may be most relevant to surface operations and the general risk assessment.

4.5. Geological properties and habitat classification

Provide a baseline description of the nature and extent of the Mineral resource and bedrock within a broader geological context. Describe the geological petrographic and geomorphological setting of the mining sites, the Impact Areas, and the designated [Impact and] Preservation Reference Zones [] including sea floor mapping (bathymetry and backscatter), high-resolution sub-bottom profiling, and sedimentation rates, and refer to submarine features such as hydrothermal vents, seamounts abyssal hills and canyons as appropriate.

Provide habitat classification using an appropriate system as prescribed in the applicable Standard, []taking into consideration the Regional Environmental Management Plan.

4.6. Oceanographic setting

Provide a description of oceanographic aspects including but not limited to thermohaline conditions, optical properties and turbidity, surface, []water [column] and bottom currents regime, tides, waves, turbulence, and oceanographic fronts, eddies and climate change projections, including spatial variation at and above the site. Seasonal and longer-term variability is an important element. Detail is required on the regional setting, as well as the specific mining site and Impact Area, and the designated [Impact and] Preservation Reference Zones [], and should include changes in physical conditions and processes according to depth and horizontal distance from the proposed mine site to boundaries of the Impact Area. For activities conducted in areas of seamount chains, hydrothermal vent fields, trenches and canyons or other areas with complex bathymetry, oceanographic currents will be influence by topographic forcing and will require a more detailed oceanographic assessment, including targeted sampling programs, to determine the Impact Area. Climate change projections should also be included.

4.7. Chemical oceanographic setting

Provide a description of water mass characteristics at the mining sites, the Impact Areas, and the designated [Impact and] Preservation Reference Zones [] and above the sites at various depths of the water column, including the structure and development of the oxygen minimum zone in particular near the sea floor (up to 200m above bottom), that includes nutrients, particle loads, temperature and dissolved gas profiles, vent-fluid characteristics if applicable, turbidity, etc.

Provide a description of chemical oceanographic properties at the mining sites, the Impact Areas, and the designated [Impact and] Preservation Reference Zones [], throughout the water column and horizontally from the proposed mine site, that includes nutrients, particle loads, temperature, oxygen, salinity, density, particulate and dissolved organic matter, pH, chemical composition, including, but not limited to, concentrations of trace metals, dissolved gas profiles, depth range and characteristics of oxygen minimum zone, redox regimes, carbonate saturation, hydrocarbon and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability of these properties, and vent-fluid characteristics if applicable.

4.8. Seabed substrate and sub-seabed characteristics

Provide a description of seabed substrate and sub-seabed composition (to benthic subsurface layers) of the wider mine sites, the Impact Areas, and the designated [Impact and] Preservation Reference Zones [], including, but not limited to, physical, chemical, geological and oceanographic properties, specific gravity, bulk density, sediment composition, physical and chemical composition of pore-water and pore-water profiles, grain size, mineralogy sediment mechanics, dissolved and particulate organic and inorganic carbon, nutrients, carbonates, redox regimes, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics). Substrate composition shall be described to a depth below the seafloor prescribed in the [] Standard on Baseline Information and taking into consideration [the applicable] [] the Regional Environmental Management Plan.

4.8. bis. Rare or sensitive habitats

Identify and describe the physical and chemical characteristics of rare or sensitive habitats in line with the respective international guidelines (FAO 2009, Azores Criteria 2010) and policy decisions (inter alia from UN and CBD) on hydrothermal vents, ridges, seamounts, as well as oceanographic fronts or eddies, abyss hills and canyons and other geological and oceanographic features.

4.9. Natural hazards

Provide a description and trend analysis of variation related to applicable potential natural hazards for the site, including, but not limited to, volcanism, seismic activity, cyclone/hurricane, tsunamis, climate-related oceanographic changes and variability, slides, slumps, etc. and how these may develop in future, e.g. as a consequence of climate change.

4.10. Noise and light

Provide a description of local ambient noise and light at the seabed, throughout the water column and at the surface, including, but not limited to, light intensity, backscatter, and attenuation, bioluminescence, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics, indicating pertinence to fauna where known.

4.11. Greenhouse gas emissions

Provide a description and quantification of the level of gas and fluid emissions from anthropogenic activities [related to the proposed Exploitation activities in the proposed Mining Area], as well as those affecting sea floor and water-column chemistry.

4.12. Climate Change

Description of the expected changes in physical and chemical oceanographic conditions and processes in the broader area of the mine site due to climate change.

4.13. Summary of the existing physicochemical environment

Summarize key findings and include notes on special considerations for rare or sensitive habitats, hydrothermal vents, ridges, seamounts and oceanographic fronts or eddies, abyss hills, fracture zones and canyons and other geological and oceanographic features described in this section. It is anticipated that this summary will be up to one page and be more extensive than the key messages section.

5. Description of the existing biological environment

Give a detailed account of knowledge of the existing biological environment, including biological properties, biological communities' composition and structure and ecosystems including their functions that could be impacted by proposed activities as a regional overview, in the proposed mining sites and Impact Areas, and the designated [Impact and] Preservation Reference Zones , including information from a thorough literature review and baseline data collected from on-site campaigns, in accordance with the Regulations and applicable Standards and taking into consideration Guidelines. The description of the site should be divided by depth regime (surface, midwater from 200m depth to 50m above bottom and benthic including benthopelagic, where appropriate) or otherwise as indicated in the relevant Regional Environmental Management Plan and provide a description of the various biological components and communities that are present in or utilize the area. The Standard on baseline environmental data collection shall guide the drafting of this section by providing information on the minimum amount of detail required for an acceptable baseline description. The detail in this section is expected to be based on a prior Environmental Risk Assessment that identified, and thus the elements that need to be measured and assessed in the Environmental Impact Assessment.

5.1. Key messages

Provide key messages (overview of main findings, covered in six or fewer bullet points).

5.2. Regional overview

Provide regional context for the baseline environmental conditions [and expected trends and variability]of the mining site and Impact Areas, and the designated [Impact and] Preservation Reference Zones [], including but not limited to the general biological setting, [taking into account] in accordance with the applicable Regional Environmental Management Plan. This should be a brief section that includes a habitat classification map. A more detailed description of the mining site, the [Impact and] Preservation Reference Zones [] and Impact Area description will be provided in accordance with the sections below.

5.3. Studies completed

Describe any prior research/Exploration studies (including methods used for completing the studies based on Best Available [Science using Best Available Techniques] that could provide relevant information for this Environmental Impact Statement and future activity. This research should be detailed in the appendices [and/or in reports], and the environmental reference baseline data collected for the Authority, as outlined in the Exploration contract conditions, should accompany the Environmental Impact Statement.

5.4. Biological environment

Provide a description of biological and ecological properties in the region and the mine site, with special focus on the designated Preservation Reference Zones PRZ and the total mine site and Impact Area, including diversity, abundance, biomass, life history parameters, relevant behaviour, including feeding rates, community-level analyses, connectivity, trophic relationships, resilience, ecosystem functions and services as well as seasonality and spatial (horizontal and vertical) and temporal variability. Any work on ecosystem models and appropriate ecosystem indicators, etc., should also be presented here. This section should span the size range from megafauna to microbial communities and shall be guided by the variables given by the Standard for the establishment of baseline environmental data.

The description of the benthic [and pelagic communities and] ecosystem [with functional relationships] is structured by depth range, as this enables a direct link to the source and location of an impact. For each depth zone, (at least surface, []water [column] and [seafloor] as below) there should be an inventory [] of the known taxonomic/ecological groups (e.g., plankton, fish, marine mammals, marine turtles, benthic microbial invertebrates, demersal scavengers), in accordance with the Authority's Guidelines.

Describe the biological communities and ecosystem functions, structured by depth ranges in accordance with the applicable Standards and taking into consideration Regional Environmental Management Plans, [which] may encompass:

(a) surface seawater
(b) epipelagic zone (< 200 metres)
(c) mesopelagic zone (200-1000 metres),
(d) bathypelagic zone (1000 - 4000 metres),
(e) abyssopelagic zone (4000 - 6000 metres),
(f) hadalpelagic zone (> 6000 meters),
(g) demersal zone (part of the water column near to and significantly affected by the seabed), and
(h) benthic zone.

The description should evaluate the temporal and spatial variability in distribution and composition.

The description should include the size and habitat distributions of the fauna and their life history stages (such as larval and juvenile stages, which differ from the adult stage) as well as trophic pathways. Discussions of species and communities should include considerations of whether they are endemic (restricted to just the site, resource substrate or region) or are known to be rare, threatened or endangered.

Migratory and highly mobile species should be included where foraging ranges / migration pathways / management units have been noted as overlapping with proposed operations during scoping.

The climate Mitigation functions and services of the ocean shall also be described (including CO2 update and sequestration, or nutrient cycling).

5.4.1. Surface

Describe the biological communities from the surface to a depth of 200 metres, including [] plankton (phytoplankton and zooplankton, microbial plankton and organic matter), micro-nekton, surface/near-surface fish such as tuna, and seabirds, marine turtles and marine mammals. Address factors

provided in 5.4, as well as spatial and temporal variability and trends, in distribution and composition.

5.4.2. [Midwater] [Water Column]

Describe the pelagic communities and their habitat in the open water from a depth of 200 metres down to 50 metres above the sea floor, and include particulate organic matter, microbes, zooplankton, nekton, mesopelagic, bathypelagic and abyssopelagic fishes and deep-diving mammals. Particular focus should be given to gelatinous and other fragile taxa which may be most vulnerable to sediment loads.] Address factors provided in 5.4, as well as spatial and temporal variability.

5.4.3. Benthic

Describe the known benthic microbial, invertebrate and fish communities, including infauna, epifauna, benthopelagic fauna, and demersal fish and scavengers, up to an altitude of [ca.] 50 metres above the sea floor [(or the height of the nepheloid layer)] and at least 5 meters below (into the sediments). This inventory should include considerations of species richness, biodiversity, faunal densities, taxonomic uniqueness, community structures and connectivity, etc. Ecosystem functions, such as bioturbation, habitat and food [supply] and elemental cycling etc. should also be covered in this section. Address factors provided in 5.4, as well as spatial and temporal variability and patchiness.

5.4.3.bis. Rare or sensitive habitats and species

Identify and describe the biological characteristics of rare or sensitive habitats and species potentially affected by the planned Exploitation activities. The identification (as in 4.8bis) shall be guided by the respective international guidelines (FAO 2009, Azores Criteria 2010) and policy decisions (UNGA, CBD) and include features such as hydrothermal vents, ridges, seamounts, as well as oceanographic fronts or eddies, abyss hills and canyons and other geological and oceanographic features. Identify any unique, rare and threatened elements and their potential vulnerability to the effects of mining, outline which habitats and communities can be considered representative and their distribution, indicate existence and connectivity to the same habitats and communities outside the mine site and the potential impact zone.]

5.4.4. Alt. Ecosystem and community-level description

Summarize existing community and ecosystem-level studies. This should include integration of connectivity studies (e.g. life history and recruitment research), trophic interactions and the linkages between food energy and contaminants in the food chain (including benthopelagic couplings) and ecosystem functioning / services. Food energy linkages and the complexity of the food web should be included, giving consideration to the impacts that may result from contaminants or other disruptions to the food web. Understanding across depths should be provided. Emphasis might be placed on knowledge of trophic levels, the degree of interaction between benthic and pelagic

communities, whether there are specialized predators that could be more vulnerable than generalists, and the complexity of the food web and species interactions, with a view to gaining an idea of the resilience of the system to disturbances. It is important to consider wider community relationships to enable assessments to move beyond community descriptions to incorporate potential changes in ecosystem function. [Identify, preserve and distribute to the scientific community any unique, rare and threatened elements, outline which habitats and communities can be considered representative and their distribution, indicate existence and connectivity to the same habitats and communities outside the mine site and the potential impact zone.]

5.5. Summary of the existing biological environment

Summarize the findings focusing on key ecosystems and species determined above. It is envisaged that this summary will be up to one page in length.

6. Description of the existing human activities, socioeconomic and sociocultural environment

This section should describe the socioeconomic and sociocultural environment aspects and potential impacts of the project on existing human activities and planned uses of the area for which information is publicly available. This may include consideration of the scale of effects (such as the creation of jobs and estimates of the risk of Environmental Impacts), extent of duration of impacts in time and space, intensity or severity of social impacts and an assessment of whether impacts are likely to be cumulative. It is important to consider the social equity or distribution of impacts across different populations: in other words, which groups are likely to be affected in which ways.

6.1. Key messages

Provide key messages (overview of main findings, covered in six or fewer bullet points).

6.2. Existing uses

6.2.1. Fisheries

Relevant fisheries shall be described here to further assess the socioeconomic impacts. This should include description of areas of significance for migratory fish stocks, such as spawning grounds, nursery areas or feeding sites. Any closed fishery areas such as VME closures, MPAs, or voluntary closures must be named and taken into consideration. Provide a ‘heat map’ showing important fishery areas in relation to proposed operations and note any areas of interaction or cumulative impact.

6.2.2. Marine traffic

This section describes the non-project-related marine traffic occurring within the Contract Area and uses the Regional Environmental Management Plan in accordance with IALA's regulations to provide a summary of regional movements. Provide a 'heat map' showing densities of marine traffic in relation to proposed operations and note any areas of interaction or cumulative impact. Provide this per season if repeatable seasonal variation exists.

6.2.3. Submarine cables

This section describes the [known] in situ non-project-related submarine cables occurring within the Contract Area. Provide a map showing known submarine cables in relation to proposed operations and note any areas of interaction or cumulative impact.

6.2.4. Tourism

Describe areas used by cruise liners and for game fishing, sightseeing, marine mammal watching and other relevant tourism activities. Provide a 'heat map' showing densities of tourism in relation to proposed operations and note any areas of interaction or cumulative impact. Provide this per season if repeatable seasonal variation exists.

6.2.5. Marine scientific research

Outline the [past, present and planned] scientific research programmes taking place in the [region], studying the essence of phenomena and processes occurring in the Marine Environment and the interrelations between them.

6.2.5. Sociocultural values and uses

List sociocultural [values and] uses the project area (e.g., traditional navigation routes, migratory paths of culturally significant marine species, sacred sites and waters associated with ritual or ceremonial activities of Indigenous Peoples and local communities as well as known or suspected objects or sites of an archaeological or historical nature, taking into account the work of the United Nations Educational, Scientific and Cultural Organization referred to in Regulation 35(2).

6.2.6. Other

List other uses of the project area that are not related to the above (e.g., other, Exploitation projects sports and leisure).

6.2. bis Planned uses

Describe the planned uses of the area for which information is publicly available (e.g. other Exploitation Contracts, Exploration contracts, fisheries, maritime traffic, tourism, marine scientific research, submarine cables, area-based management tools).

6.3. Sites of an archaeological, historical significance

List any sites of archaeological or historical significance that are known to occur within the potential area of impact. Provide a map as applicable showing known archaeological and historical sites in relation to proposed operations and note any areas of interaction or cumulative impact taking into account the work of the United Nations Educational, Scientific and Cultural Organization referred to in Regulation 35(2).

6.4. Summary of existing socioeconomic and sociocultural environment

Summarize key findings regarding the socioeconomic and sociocultural environment. It is envisaged that this section will be up to a page in length, and more extensive than the key messages.

7. Assessment of impacts on the physical, chemical and geological environment and proposed Mitigation

Provide a detailed description and evaluation of potential impacts and Environmental Effects [including Cumulative Environmental Effects] of the operation [which could degrade the current status and functioning of] components of the physical chemical and geological environment identified in section 4 including the proposed environmental management measures to mitigate impacts and a summary of residual effects. [and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction].. This should consider the entire lifespan of the project, i.e. construction/development (pre-commissioning) of the mine site, operational and Decommissioning phases, and following Closure of the site. The potential for accidental events and natural hazards. The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 and respective Standard and Guideline for Environmental Impact Assessment (chapter III Scoping, D). It should include for each component a description of:

(a) The [hazard: detailing the] source (action, temporal and spatial duration), [probability and frequency of the risk] and [the] nature [and severity] of the disturbance;

(a) bis [Exposure characterization: evaluation and probability of exposure of the ecosystem components (see section 5) to the identified hazard,] nature, duration and extent of any actual or potential impact, including cumulative effects and taking into account ecological and biologically significant areas;

(a) ter The methods used to determine impacts (including the assumptions and limitations of any impact modelling or other analysis undertaken);

(b) Risk evaluation and management: Document how decisions were taken to determine] Measures [] to prevent, Mitigate and manage such impacts; and

(c) The unavoidable residual impacts that will remain, including their expected longevity.

(d) The extent to which any potential impacts and Environmental Effects may occur [beyond the Contract Area or] in areas under a State's national jurisdiction.

The detail in this section is expected to be based on the Environmental Risk Assessment carried out according to the relevant Regulations, Standards and by taking into consideration Guidelines that will have identified the main impacts, and thus the elements that need to be emphasized in the Environmental Impact Assessment.

7.1. Key messages

Provide an overview of the key content covered in section 7.

7.2. Description of potential impact categories

Provide an overview and description of the categories of potential impacts caused by [hazards owing to] the proposed Exploitation activities.

Key elements that need to be included are:

(a) The major types of potential impacts, such as habitat removal, variations in communities' composition, the creation of sediment plumes, dewatering plumes, noise, light, etc.;

(b) Descriptions of impact studies carried out during Exploration (e.g., component testing and the resulting observations from the associated monitoring);

(b) bis. Descriptions of Test Mining studies undertaken prior to the application;

(c) Descriptions of the results of any Environmental Risk Assessments, which should be included as separate reports or appendices where appropriate; and

(d) Descriptions of the methods applied to describe and quantify impact categories and assessment from impact to receptor (including the assumptions and limitations of any impact modelling undertaken);

7.2. bis. Description of impact pathways

The preferred approach for this template is to include for each receptor descriptions of:

(a) The methods used to determine the pathway from impact to receptor (including the assumptions and limitations of any impact modelling undertaken);

(b) The source(s) of impact;

(c) The nature, spatial extent and temporal extent of potential impact(s), including cumulative impacts;

(d) Measures that will be taken to avoid, minimise or Mitigate such impacts; and

(e) The unavoidable (residual) impacts that will remain, including their expected longevity and outline the measures that will be taken to ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.

7.2. ter. Receptors and impacts

Receptors for which this will be done include:

(a) Meteorology and air quality

(b) Geology [and Geophysics]

(c) Physical oceanography

(d) Chemical oceanography of the mine site and Impact Area

(e) Seabed substrate characteristics

Impacts to be considered include:

(a) Sediment plume generation,

(b) Discharge of water,

(b)bis Energy flow pathways (such as hydrothermal fluid),

(c) Noise and light,

(d) Greenhouse gas emissions and climate change emissions (including estimated greenhouse gas emissions and a greenhouse gas emissions assessment where appropriate)

Effects to be considered include:

(a) Changes in temperature and salinity of water,

(b) Optical characteristics / water clarity,

(c) Turbidity / particulate loading,

(d) Sediment characteristics (including changes in the sediment composition, grain size, density and pore-water profiles),

(e) Discharge plumes (frequency, spatial extent, composition and concentration, etc.),

(f) Primary sediment plume (frequency, spatial extent, composition and concentration),

(g) Dissolved gas levels,

(h) Nutrient levels,

(i) For a sea floor massive sulphide project, the modification of vent-fluid discharges, if present, should be addressed.

7.8. Accidental events and Natural hazards

Discuss impacts of accidental events and the cumulative effects of the Exploitation activities in relation to any natural hazards that could occur, including, but not limited to, volcanism, seismic activity, cyclone/hurricane, tsunamis, etc. and the measures that will be taken to avoid, remedy or Mitigate those impacts.

7.9. Noise and light

Provide a description of the expected emissions of noise and light from the proposed operations.

7.10 Greenhouse gas emissions and climate change

Provide an assessment of gas and chemical emissions from proposed operations, relative to emissions both natural and anthropogenic activities. Subsections should include estimated greenhouse gas emissions and a greenhouse gas emissions assessment where appropriate.

7.11. Cumulative impacts

Provide a description of the source of nature and extent of any interactions between various potential Environmental Impacts and Environmental Effects across the environment. Where they may have cumulative effects, they must be considered on both spatial and temporal scales over the lifetime of the proposed Exploitation activities and in the post-Closure period and alternatives considered.

7.12. Proposed operations impacts

Cumulative within the mining site and Impact Area of the mining proposed herein.

7.13. Regional operation impacts

Cumulative between activities, actions, or natural phenomena, where known in the region.

7.14. Other issues

Outline here other, more general issues, as applicable.

7.15. Summary of residual effects

Summarize key findings on potential Environmental Impacts and Environmental Effects, environmental management measures, and any potential impacts and effects to areas under any State's national jurisdiction. A table may be a useful summary format to pull together the above elements in a simple visual mode. The table should include a column outlining the measures that will be taken to address potential Environmental Impacts and manage residual effects and ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard and taking into consideration Guidelines.

8. Assessment of [effects and] impacts on the biological environment and proposed Mitigation

Provide a detailed description and evaluation of [the sufficiency of available information] [on] potential impacts and Environmental Effects [including Cumulative Environmental Effects] of the proposed operation , and a summary of the environmental management measures to mitigate impacts and residual effects, alt.1 [[Mitigation hierarchy measures to avoid, reduce and Mitigate the effects caused by the project], alt. 2 [Measures taken to avoid, reduce and Mitigate effects, including alternatives] [and the extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction] and alternatives considered in section 3.7 [which could degrade the current function of] [] the biological environment components identified in section 5 in the [Contract Area, the] mine site and the Impact Areas, [with

special regard to the Impact and Preservation Reference Zones]. Consider impacts and effects that could happen during the entire lifespan of the project i.e. construction/development (pre-commissioning), operational and Decommissioning phases and following Closure of the site. The potential for accidental events and natural hazards should be considered.

The detail in this section is expected to be based on a prior Environmental Impact Assessment prepared, reviewed, and revised in accordance with Regulation 47 , Standards and taking into consideration Guidelines for Environmental Impact Assessment Process.

Note: the alternative wordings for mitigation should be retained and revisited in light of Council's discussions on how to refer to Mitigation across the regulations.

The [] analysis shall be structured by the depth ranges described in section 5 and shall for each component, provide a description of:

(a) The [hazard detailing the] source (action, temporal and spatial duration) [of the risk] and nature of the [ecological effects];

(a) bis. [Exposure characterization: evaluation and probability of exposure of the ecosystem components (see section 5) to the identified hazard,] nature and extent (temporal and spatial) of any actual or potential impact, including cumulative effects;

(a) ter. The methods used to determine impacts (including the assumptions and limitations of any impact modelling or other analyses undertaken);

(b) [Risk evaluation and management: Document how decisions were taken to determine] Measures [] to prevent, Mitigate and manage such impacts with reference to the submitted Environmental Management and Monitoring Plan; []

(c) The unavoidable residual impacts that will remain, including their significance and expected longevity.

(d) An evaluation of the impacts and effects against the applicable environmental goals and objectives, indicators and thresholds as identified in the applicable environmental Standards and Guidelines and in the applicable Regional Environmental Management Plan, [and]

(e) The extent to which any potential impacts and Environmental Effects may occur in areas beyond the Contract Area or under a State's national jurisdiction.

The detail in this section is expected to be based on the Environmental Risk Assessment, carried out according to the applicable Regulations, Standards and taking into consideration Guidelines that will have identified the main impacts, and thus the elements that need to be emphasized in the Environmental Impact Assessment.

8.1. Key messages

This section should provide an overview of the key content covered in section 8.

8.1.bis. Description of the key sources of Environmental Impacts

This section should describe the key sources of [risks and] impacts on the Marine Environment from the Exploitation activities.

8.2. Description of [hazards and the nature of] potential impact

Provide an overview and description of the categories of potential impacts caused by the hazards arising from the proposed Exploitation activities and alternatives considered. This should introduce the major types of impacts and their effects on the biotic environment, such as habitat removal, the crushing of animals, the creation of sediment plumes, noise and light, etc. and be referred to in subsequent descriptions and evaluations of potential Environmental Impacts and Environmental Effects from the hazards posed by the proposed operation and alternatives considered. A description should be included of any lessons learned from activities during the exploratory phase of the programme (e.g., mining system component tests).

Key elements that need to be included are:

(a) Description of the major types of potential impacts, such as habitat removal, the biological effects of sediment plumes and dewatering plumes, noise, light, etc. [Each impact has to be characterized by its nature, duration and extent of any actual or potential exposure, including cumulative effects and taking into account ecological and biologically significant areas, rare and fragile species and habitats.] These impact categories should be used in subsequent descriptions and evaluations of potential Environmental Impacts and Environmental Effects from the proposed operations.

(b) Descriptions of impact studies carried out during Exploration (e.g., component testing and the resulting observations from the associated monitoring);

(b) bis. Descriptions of Test Mining studies undertaken prior to the application; Descriptions of the results of any Environmental Risk Assessments, which should be included as separate reports or appendices where appropriate; and

(c) Descriptions of the methods applied to describe and quantify impact pathways and assessment in line with the applicable Standards and taking into consideration Guidelines, i.e. [the Environmental Impact Assessment] Guideline.

8.2. bis Description of impact pathways

The preferred approach for this template is to include for each impact pathway an overarching description of:

(a) The methods used to determine the pathway from impact to receptor (including the assumptions and limitations of any impact modelling undertaken);

(b) The source(s) of impact

(c) The nature, spatial extent and temporal extent of potential impact(s), including cumulative impacts;

(d) Measures that will be taken to avoid, minimise or Mitigate such impacts; and

(e) The unavoidable (residual) impacts that will remain, including their expected longevity and outline the measures that will be taken to ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.

8.2.ter. [Assessment of risks] and impacts

[The Assessment of risks and impacts must be done in as much detail as possible for the following community Receptors [including]:

(a) Microbial communities

(b) Phytoplankton]

(b)bis zooplankton and micronekton

(b)ter nekton

(b)quat benthopelagic fauna, including scavengers

(c) Meiofauna (infauna / epifauna)

(d) Macrofauna (infauna / epifauna / demersal fish)

(e) Megafauna, including surface/near-surface fish such as tuna, and seabirds, marine turtles and marine mammals

As appropriate, these receptors are to be considered:

(a) at the surface (from the surface down to a depth of 200 metres)

(b) [for the water column] (from a depth of 200 metres down to 50 metres above the sea floor), [separate for the different water masses, including deep diving and migratory species]

(c) up to an altitude of 50 metres above the sea floor, including zooplankton, [scavengers] nekton, mesopelagic and bathypelagic fishes and deep-diving mammals.

Impact [categories] to be considered include:

(a) Sediment plume generation [(frequency, spatial extent, composition and concentration)],

(b) discharge [plumes]

[(b bis) Seafloor destruction]

(c) Noise and light [emissions]

(d) Greenhouse gas emissions and climate change emissions (including estimated greenhouse gas emissions and a greenhouse gas emissions assessment where appropriate).

Effects to be considered include:

(a) changes in temperature [] salinity [stratification and mixing] of water [column],

(b) optical characteristics / water clarity

(c) turbidity / particulate loading

(d) sediment characteristics (including changes in the sediment composition, grain size, density and pore-water profiles)

(e) [effects of] discharge plumes, [Contamination and pollution, turbidity, temperature change]

(f) primary sediment plume (frequency, spatial extent, composition and concentration)

(g) dissolved gas levels

(h) nutrient levels

(i) For a sea floor massive sulphide project, the modification of vent-fluid discharges, if present, should be addressed.

8.6. [Summary of] Ecosystem/community level [effects caused by the project]

[Analyse and] describe [potential and probable] effects on the ecosystem [and ecosystem dynamics during the term of contract and long-term].

8.6.1. Potential [other effects and] impact to be addressed

8.6.1.1. Noise and light

Provide a description of the expected emissions of noise and light from the proposed operations and any potential Environmental Effects, especially any impacts of noise on avoidance, masking and availability of prey (e.g., on marine mammals) and fish. [Indicate the range of light pollution and potential effects in the different depths.] Provide a description of the measures that will be taken to ensure compliance with applicable environmental quality objectives and quantitative thresholds for noise and light levels for relevant fauna, in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.

8.6.1.2. Greenhouse gas emissions and climate change

Effects of mining on ocean climate Mitigation functions and services should be described (including any anticipated alteration of CO2 uptake and sequestration, or nutrient cycling.)

[8.6.2 Environmental management measures to Mitigate impacts]

Moved to section “8.7 bis”

8.7. Cumulative effects

The nature and extent of any interactions between various impacts where they may have cumulative effects must be considered. This should include an evaluation of the spatial and temporal intensity of mining and its effects on other impacts including existing uses considered in the Assessment and described in Section 9 of the Environmental Impact Statement as well as an evaluation of the resulting cumulative effects to the ecological balance of the Marine Environment, including the spatial and temporal extent of such effects. Describe how spatial and temporal cumulation will differ between faunal groups and different habitats.

Provide a description of the source of nature and extent of any interactions between various potential Environmental Impacts and Environmental Effects across the environment. Where they may have cumulative effects, they must be considered on both spatial and temporal scales over the lifetime of the proposed Exploitation activities and in the post-Closure period and alternatives considered.

8.7.1. Proposed operations effects

Cumulative effects [of the proposed mining with all other known influences and effects, including from other Exploitation activities,] within the scope of the site and Impact Area of the mining proposed herein.

8.7.2. Regional operations effects

Cumulative effects [on a regional scale, due to Authority-related and other] activities to be analysed by the Secretariat according to the [Regional Environmental Management Plans. The analysis will periodically be provided in a regional quality status report.]

[8.7 bis. Mitigation hierarchy measures to avoid, reduce and Mitigate the effects caused by the project

8.7bis.1 Decision-making

Explain here how decisions were taken to Mitigate Environmental Effects, and what were the goals to be achieved.

8.7bis.2 Measures taken to avoid, reduce and Mitigate effects, including alternatives

8.7bis.3 Expected unavoidable residual effects

8.7bis.4 Restoration and Rehabilitation measures

Practicable Restoration and Rehabilitation of the project area – approach. The Restoration and Rehabilitation of the project area should be considered as a part of the Mitigation hierarchy. At this stage in the Environmental Assessment Process, there might be no final knowledge on the potential of Restoration and Rehabilitation in the area, so a plan should be proposed to develop this knowledge throughout the lifespan of the project and to prepare the decision on the issue at the end of the project. This should be done in accordance with applicable Standards and taking into consideration Guidelines.]

8.8. Summary of residual effects

Summarize key findings on potential Environmental Impacts and Environmental Effects, environmental management measures, residual effects, and any potential impacts and effects to areas under any State's national jurisdiction. Information on potential recovery times following disturbance and the longevity of residual effects should be included. This will give readers an understanding of the temporal component and efficacy of proposed Mitigation measures. A table may be a useful summary format to pull together the above elements in a simple visual mode. The table should include a column outlining the measures that will be taken to address potential Environmental Impacts and residual effects and ensure long-term site compliance with the environmental quality objectives, quantitative thresholds,

and indicators in accordance with these Regulations and the applicable Standard and taking into consideration Guidelines.

[8.9 Practicable restoration and rehabilitation of the project area]

Moved to section “8.7 bis.4.”

[]

9. Assessment of impacts on the socioeconomic and sociocultural environment and proposed Mitigation

Provide a detailed description and evaluation of potential impacts and Environmental Effects of the operation to the socioeconomic and sociocultural components identified in section 6 and a summary of the environmental management measures to mitigate impacts and residual effects. This should include projections on the potential impacts in national waters outside the Mining Area and should also consider the entire lifespan of the project i.e. construction/development (pre-commissioning), operational (including maintenance) and Decommissioning phases. A description of the benefits to humankind may be included. Attitudes towards, and perceptions of, the proposed project are among the variables that should be considered in determining the significance of impacts. The potential for accidental events [and natural hazards] should also be considered.

9.1. Key messages

This section should provide an overview of the key content covered in section 9.

9.1. bis. Description of potential impact categories

Provide an overview and description of the categories of potential impacts caused by the proposed Exploitation activities. Key elements that need to be included are:

(a) the major types of potential impacts, such as habitat removal, the creation of sediment plumes, noise, light, etc. These impact categories should be used in subsequent descriptions and evaluations of potential Environmental Impacts and Environmental Effects from the proposed operations;

(b) Descriptions of impact studies carried out during Exploration (e.g., component testing and the resulting observations from the associated monitoring);

(c) bis Descriptions of Test Mining studies undertaken prior to the application;

(d) Descriptions of the results of any Environmental Risk Assessments, which should be included as separate reports or appendices where appropriate; and

(e) Descriptions of the methods applied to describe and quantify impact pathways and assessment.

9.1. ter. Description of impact pathways

The preferred approach for this template is to include for each impact pathway an overarching description of:

(a) The source;

(a)ter The methods used to determine impacts (including the assumptions and limitations of any impact modelling undertaken);

(a)bis The nature, spatial extent and temporal extent of potential impacts, including cumulative impacts;

(b) Measures that will be taken to avoid, minimise or Mitigate such impacts, including a comparative analysis of how measures taken may differ across alternative operations considered;

(c) The unavoidable (residual) impacts that will remain, including their expected longevity. The detail in this section is expected to be based on the scoping Environmental Risk Assessment that will have identified the main impacts, and thus the elements that need to be emphasized in the Environmental Impact Assessment; and

(d) The extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction.

9.2.Impact identification

9.2.1. Impacts on existing human uses

For each of the following marine uses, describe:

(a) Potential impacts and effects and issues to be addressed;
(b) Environmental management measures to Mitigate impacts and effects;

(c) Residual impacts and effects; and

(d) Potential impacts and effects in areas under any State's national jurisdiction.

9.2.1.1 Fisheries and biological conditions

A description of potential impacts, e.g., effects from light and noise on fisheries and biological conditions, with proposed management measures and a description of residual impacts.

9.2.1.2bis Submarine cables

A description of potential impacts on [known] non-project-related submarine cables occurring within the project area, along with proposed management measures and a description of residual impacts.

9.2.1.3 Tourism

A description of potential impacts and issues to be addressed, along with proposed management measures and a description of residual impacts.

9.2.1.4 Marine scientific research

A description of potential impacts and issues to be addressed, along with proposed management measures and a description of residual impacts, according to the IALA's regulations.

9.2.2 Impacts on Sociocultural values and uses

A description of potential impacts and issues to be addressed pertaining to sociocultural uses of the area (e.g., traditional navigation routes, migratory paths of culturally significant marine species, sacred sites and waters associated with ritual or ceremonial activities of Indigenous Peoples and local communities), along with proposed management measures and a description of residual impacts.

9.2.3 Impacts on Ecosystem Functions and Services

A description of potential impacts of the operation on any ecosystem functions and services, for example, carbon burial and sequestration, taking into account the relevant Guidance.

9.2.4 Other impacts

List other potential impacts that are not related to the above (e.g., submarine cables, other Mineral Exploration or Exploitation projects).

9.2.5 Impacts on Planned uses

Describe the potential impacts on planned uses of the area for which information is publicly available (e.g. fisheries, maritime traffic, tourism, marine scientific research, submarine cables, area-based management tools).

9.2.6 Impacts on Area-based management tools

A description of potential impacts and cross-boundary issues to be addressed, along with proposed management measures and a description of residual impacts.

9.3. Impacts on Sites of an archaeological or historical nature

Describe, as applicable, potential impacts to sites of archaeological, or historical significance that are known to occur within the potential area of impact, along with proposed management measures, taking into account the work of the United Nations Educational, Scientific and Cultural Organization referred to in Regulation 35(2).

9.4. Gender Impact analysis

Assess and analyse how the proposed operations may impact on gender roles and relationships.

9.5. Summary of socioeconomic and sociocultural environment

Summarize findings on management measures, residual effects, and any potential impacts and effects, (including to sociocultural conditions). A table may be a useful summary format to pull together the above elements in a simple visual mode. Potential cumulative effects should also be included.

[9.5bis. Assessment of Uncertainty]

Moved to section "10 bis".

]

[

Moved to section "10 ter".

Moved to section "10 quat".

9.6.3 Residual effects

Moved to section "10 quin".

9bis

(k) An [description outline] of waste management,

Provide a description of proposed vessel waste management, with reference to compliance with relevant conventions, legislation and principles, and methods of cleaner production and energy balance.

Note: the proponents have added in a new section 9bis, in light of the fact 48alt (4) (k) requires 'An [description outline] of waste management,'. *The proponents recognise that Section 10.6 and 10.7 currently sit in section 10 below, but consider that should only cover waste management with regard to* 'potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes and wastewaters' *as outlined below. Section 9bis would be about all waste management, and section 10 could refer to this section but provide situation-specific detail relevant to section 10.*

10. Hazards arising from natural, accidental and discharge events

This section should outline hazards arising from natural, accidental and discharge events, for example related to extreme weather, natural hazards, accidental events, maritime safety and emergency response and their ~~the~~ possibility/probability ~~of accidental events and natural hazards occurring,~~ this includes an assessment of the impact they may have, to the mine site and Impact Area, the measures taken to prevent or respond to such an event and an assessment of the residual impact should an event occur. This should include an overview of potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are

fundamentally different from normal operational discharges of wastes and wastewaters. Reference should be made to the ERCP.

For each component include:

(a) The nature and extent of any impact;

(b) Measures that will be taken to avoid, Mitigate or minimize such impact; and

(c) Residual impacts.

10.1. Extreme weather

For example: hurricanes/cyclones.

10.2. Natural hazards

For example: volcanic eruptions, seismic events.

10.3. Accidental events

For example: leakage or spillage of hazardous material, fires and explosions, and collisions, including potential loss of equipment.

10.4. Maritime safety and interactions with shipping

Provide a description of predicted maritime safety issues and potential interactions with other vessels from the proposed activities with reference to compliance with the relevant conventions.

10.5. Emergency Response and Contingency Plan

Provide a description of an Emergency Response and Contingency Plan.

10.6. Waste management

Provide a description of proposed vessel waste management, with reference to compliance with relevant conventions, legislation and principles, and methods of cleaner production and energy balance.

*Note: the proponents have added in a new section 9bis, in light of the fact 48alt (4) (k) requires '*An [description outline] of waste management,'. *The proponents recognise that Section 10.6 and 10.7 currently sit in section 10, but consider that should only cover waste management with regard to* 'potential environmentally hazardous discharges resulting from accidental and extreme natural events as these are fundamentally different from normal operational discharges of wastes and wastewaters' *as outlined in Section 10. Section 9bis would be about all waste management, and section 10 could refer to this section but provide situation-specific detail relevant to section 10.*

10.7 Balast Water management

Provide a description of proposed vessel balast water management where applicable, with reference to compliance with relevant rules and principles, and methods of cleaner production and energy balance.

[10.8. Hazards arising from natural, accidental and discharge events

Discuss any impacts of accidental events and the cumulative effects of the Exploitation activities and natural hazards, and the measures that will be taken to avoid, remedy or Mitigate those impacts.]

[10 bis Assessment of Uncertainty

10 bis.1 Uncertainty Assessment

Provide a detailed description and evaluation of any uncertainties in the assessments described in section 7, 8, and 9. This uncertainty assessment shall:

(1) Identify any relevant areas of uncertainty and gaps in knowledge and their implications for the Environmental Impact Assessment and its findings; and,

(2) Describe the measures taken in the Environmental Impact Assessment to reduce uncertainty in its findings to as low as reasonably practicable.

10 bis.2 Addressing Significant Uncertainty

Where significant uncertainty exists despite the efforts described in 9bis.1(b), provide a detailed description of environmental monitoring and management measures for managing and reducing uncertainty during the proposed operations, to be incorporated into the Environmental Monitoring and Management Plan and describe how these will enable the applicant to ensure compliance with rules, regulations and procedures of the Authority.

10 ter Holistic cumulative impact assessment and issues to be addressed

~~10 quat Environmental management measures to avoid, reduce and Mitigate impacts~~

Note: the proponents consider this section 10 quat is covered by Section 11 so deleted here. Wording is copied as an alternation in Section 11, and should be consider in light of how Council decides how to refer to mitigation across the regulations.

10 quin Analysis of residual effects against the RRP, Standards and Guidelines of the Authority

Provide a description of any residual impacts that may remain following the application of Mitigation measures, including the expected longevity of those impacts, and outline the measures that will be taken to ensure long-term site compliance with the environmental quality objectives, quantitative thresholds, and indicators in accordance with these Regulations and the applicable Standard, and taking into consideration Guidelines.]

Note: The proponents highlight for Council consideration whether a separate standalone section on residual effects would be necessary or whether 'residual effects' should be added to 10 ter ('cumulative impact assessment…') (noting it is already included in sections 7, 8 & 9 ("assessment of impacts on….") and section 11("Environmental management, monitoring and reporting"). If Council decides to retain the more detailed content in 10 quin, then Council should consider whether such content should also be added to any of the aforementioned sections, or instead the Standards and Guidelines. We have retained here in the annex until Council decides.

11. Environmental management, monitoring and reporting

[10 quat Environmental management measures to avoid, reduce and Mitigate impacts]

Provide sufficient information to enable the Authority to anticipate possible environmental management, monitoring and reporting requirements for an environmental approval. Information listed include a description of the applicant's Environmental Management System and should reflect the proponent's environmental policy and the translation of that policy to meet the requirements of this section and previous sections during different stages of the project life (i.e., from construction to Decommissioning and closure and the post-closure period).

The Environmental Management and Monitoring Plan is a separate report from the Environmental Impact Statement, but this could be a useful opportunity to highlight some of the key issues including residual effects from the Statement that will be addressed in the full Environmental Management and Monitoring Plan. Information detailed in this section should include the headings set out below.

11.1. Organizational structure and responsibilities

This section should show how the Contractor's environmental team fits into its overall organizational structure. Responsibilities and professional qualifications of key personnel should be outlined.

11.2. Environmental management system

A full Environmental Management System shall exist at the time the Environmental Impact Statement is submitted. The applicant has to demonstrate that it will be capable of managing appropriate relevant environmental questions and outline the standards that will be considered and/or aligned with when developing the system for the project.

11.3 Environmental Management and Monitoring Plan

An Environmental Management and Monitoring Plan will be submitted as a separate document for the Authority's approval prior to the commencement of Exploitation activities. This section should provide an overview of what the Plan would entail.

11.3.1 Mitigation and management

Summarize the Mitigation and management measures that will be taken, based on the impact minimization and Mitigation analysis undertaken as part of the Environmental Impact Assessment, and as described in the Environmental Impact Statement in Sections 7, 8, and 9.

11.3.3 Closure Plan

A Closure Plan will be submitted as a separate document for the Authority's approval prior to the commencement of Exploitation activities . However, this section should provide an overview of what the Closure Plan will entail, including Decommissioning, continued monitoring and Rehabilitation measures, if applicable.

11.4 Reporting

Outline how data collected at the mine site and Impact Area will meet reporting requirements and best scientific practices outlined in Annex VII on the Environmental Management and Monitoring Plan.

11.4.1 Monitoring

Outline how [information and] the results of monitoring studies will be reported to the Authority, as well as the frequency and format of data releases in accordance with the regulations and Standards and taking into consideration Guidelines.

11.4.2 Incident reporting

Outline how Incidents will be reported and managed.

12. Responsible pP**roduct stewardship**

[[An overview of the downstream supply chain] A description of responsible product stewardship] related to] ~~Provide a brief description of~~ the intended use of the Mineral-bearing ore once it leaves the [Contract] Area. The description should also address how the Contractor will minimize health, safety, environmental, socioeconomic and sociocultural effects [and impacts] of the intended product or products to meet standards for environmental management, and should address the following potential impacts:

(a) Energy and materials consumption;

(b) Waste generation;

(c) Toxic substances;

(d) Air and water emissions.

The intention is not to provide a full and highly detailed account, but, where information is known about Environmental Impacts, these impacts should be described briefly here.

13. Consultation [and stakeholder engagement and methods]

[The Environmental Impact Statement should include a [description summary of [the nature, extent, participation and outcomes of] consultation[s] and [stakeholder] engagement [that have taken place with Stakeholders], including commission consultation, and how their comments have been addressed in the environmental impact statement. A description of consultation and methods, shall also be provided] Consultations [and engagement] shall be inclusive, transparent and open to all Stakeholders, including States, global, regional, subregional and sectoral bodies, as well as civil society, the scientific community, indigenous peoples and local

communities [and in accordance with this Regulation and the applicable Standards and taking into consideration Guidelines].

Note: The group notes that text on Stakeholder consultation needs to be square-bracketed and considered how to be aligned and streamlined in light of how Council adopts the work of IWG Stakeholder consultation (which has now handed its final work over to Council), including whether references to 93bis shall be added here as proposed by IWG Stakeholder consultation. The outcomes of the IWG Coastal States is also likely to be relevant to this section and updates may need to be made in light of its outcomes.

13.1 Consultation methods

Provide a description of the nature and extent, participation and outcomes of consultation(s) that have taken place with Stakeholders, and how their comments have been addressed in the Environmental Impact Assessment. This will include the description of the mechanisms [and criteria] used to manage the diversity of Stakeholders addressed and comments provided.

This includes describing the mechanism(s) used to consult with different groups and how this aligns with the applicable Standards and Guidelines, also incorporating criteria for Preservation Reference Zones and Impact Reference Zones.

13.2 Stakeholders

List Stakeholders that have been consulted and explain the process by which Stakeholders were identified. This should include a brief description of the Stakeholders and a historic overview of any previous activities conducted by the Stakeholders in The Area.

13.3 Public consultation and disclosure

Provide a description of the goals and consultation workshops/meetings that occurred prior to the preparation of the report, including outlining any concerns and comments made by Stakeholders and how these will be addressed, and, if not, describe the reasons for that decision.

13.4 Commission consultation

Summarize the Commission's recommendations on the Scoping Report and proposed Terms of Reference for the applicant's Environmental Impact Assessment submitted to the Commission, and justification for any deviation either from those submitted Terms of Reference, or from the Commission's recommendations.

13.5. Stakeholder and coastal State Consultation

Describe how comments received under Stakeholder consultation have been or will be taken into account, or why they have not been taken into account, and the reasons for that decision. The summary should be based on the detailed response of the applicant to each consulted party and be available for review.

13.4 Continuing consultation and disclosure

Outline any further consultation with Stakeholders that has been deemed necessary and is being planned.

14. Glossary and abbreviations

Include a glossary of terms, acronyms and abbreviations used throughout the document. The glossary should include definitions for, and key terms defined in the regulations so as to ensure that users of the Environmental Impact Statement, including the decision-makers and Stakeholders, have a clear understanding of the intention behind the use of certain terms in the Environmental Impact Statement. The glossary should be included in the table of contents for the Environmental Impact Statement and referenced in the introduction section.

15. Study team

Outline the people involved in carrying out the Environmental Impact Assessment studies and in writing the Environmental Impact Statement. If independent scientists or other experts were involved in any of the work, they should be listed. [] The names, current and validated contact information, occupational qualifications and their role in the generation of the Environmental Impact Statement of such people should also be included. A statement that those individuals so named concur with the content of the report should be included. Any conflict of interest must be identified, disclosed in detail in this section including the way it was and continues to be managed.

16. References

Evidence obtained from outside sources should be documented throughout the Environmental Impact Statement, with the use of footnotes or other suitable reference mechanism. In addition, all sources used in preparation of the Environmental Impact Statement (including those specifically referenced in the body of the document) should be listed in bibliography format, with full details of the source (including website addresses, if applicable). This enables users of the Environmental Impact Statement to review the supporting documentation independently.

17. Appendices

The appendices section should include a list of all the technical reports carried out for parts of the Environmental Impact Assessment or that are used in support of any aspect of the Environmental Impact Assessment (such as prior risk assessments or monitoring activities conducted as part of Exploration contracts). Copies of these reports should be provided as appendices to the Environmental Impact Statement, with clear indications as to which section(s) the document is being provided to support.