

**TEMPLATE FOR SUBMISSION OF TEXTUAL PROPOSALS DURING THE 27TH
SESSION: COUNCIL - PART I**

Informal Working Group - Environment

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete.

1. Name(s) of Delegation(s) making the proposal:

Pew Charitable Trusts

2. Please indicate the relevant provision to which the textual proposal refers.

Annex IV (Additional Annex on content of Scoping Report proposed as well)

3. 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.

ANNEX IIIbis: Scoping Report

A Scoping Report should be submitted to the Authority in accordance with the relevant Standard and Guideline, and should include:

- (a) A brief description of the proposed Exploitation activities and any ancillary features, including what is known or anticipated about where the mining will occur within a Contract Area and the mining machinery to be used.
- (b) A description of what is known about the environmental setting for the project (Contract Area and regional setting),
- (c) Summary of existing environmental baseline studies, including a description of methodology for collecting and analyzing the baseline data,
- (d) Description of the technical, spatial and temporal boundaries for the EIA,
- (e) A list of any assumptions relied upon and identification and quantification of the uncertainties at this stage of the EIA, how they are being addressed, and assessment of their implications to the environmental risk assessment findings
- (f) A preliminary impact analysis which ranks the importance of issues for the EIA and evaluates the need for further information, taking into account the environmental risk assessment.
- (g) An environmental risk assessment, which includes:
 - the environmental consequence for each identified potential impact (the magnitude of the impact and the receptor characteristics),
 - the likelihood of the consequence occurring;
 - the confidence levels of experts, in order to account for uncertainty and a precautionary approach;
- (h) A description of the methodology employed in the environmental risk assessment
- (i) A description of the results of the environmental risk assessment, including identification of high priority risks requiring particular focus in the subsequent impact assessment phase of the EIA;
- (j) A preliminary Stakeholder list that proactively identifies likely Stakeholders, and an indicative schedule and methodology for engagement with key Stakeholders throughout the EIA process;
- (k) A report of consultations undertaken during scoping;
- (l) Consideration of feasible alternative means of carrying out the project that will be examined in detail in the EIA, and any others that have been discounted at this stage, and the reasons for that selection;
- (m) A draft Terms of Reference for the EIA, which identifies the activities and studies planned for the EIA, and any additional baseline data that will be required;
- (n) Explanation for how the activities and studies planned for the EIA will be sufficient to determine likely environmental impacts, and to propose Mitigation and management strategies and monitoring methodology;
- (o) A note describing and explaining any divergence from relevant ISA Guidelines.

ANNEX IV

1. Preparation of an Environmental Impact Statement

(b) Provide information, based on data from, as a general rule, a minimum of 15 years of monitoring and in accordance with the relevant regulations, Standards and Guidelines, and the relevant Regional Environmental Management Plan, 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

(d) be peer reviewed by competent independent experts, before submission and include a description of the experts, their qualifications, and the results of their review.

Executive summary

(c) Anticipated impacts of the activity (physical, chemical, oceanographic, geological, biological, socioeconomic) including expected recovery rates of the system to its original state;

(d) Mitigation measures to minimize environmental impacts and a description of any residual impacts that may occur despite Mitigation;;

Section 1: Introduction

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 based on earlier assessments or work. Link to other supporting information. A key item that should be included is a previous risk assessment that evaluates activities classified as low risk (and therefore should receive less emphasis), compared with high risk activities, which should be the focus of this Environmental Impact Statement.

Section 2: Policy , Legal and Administrative Context

2.1 Applicable mining and environmental legislation, policy, and ~~agreements~~instruments

Outline the national and international legislation, regulation, **Standards** or guidelines as well as the Regional Environmental Management Plan that apply to the management or regulation of Exploitation in the Area, including how the proposed operation will ~~comply with~~ implement them.

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-list the international agreements applicable to the operation **(whether directly or via incorporation into domestic laws cited in section 2.2 above)**, such as ~~the United Nations Convention on the Law of the Sea and~~ the International Maritime Organization suite of environmental and safety conventions, which includes the International Convention for the Safety of Life at Sea (SOLAS), the International Convention for the Prevention of Pollution from Ships (MARPOL) and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) and the 1996 Protocol thereof; the

[Convention on Biological Diversity](#) and the [Convention on Migratory Species of Wild Animals](#); and applicable regional agreements **and describe how the proposed operation will comply with them.**

2.4 Other applicable standards, principles and guidelines

Discuss applicable standards and guidelines that will be adhered to or aligned with throughout the operation, **such as instruments ~~the Standards and Guidelines~~ of the International Seabed 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

Describe any national processes followed and permits received from the sponsoring State in relation to the environmental impact assessment.

Section 3. Description of the Proposed Development

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, ~~a layout of the site and~~ the locations of impact reference zones and preservation reference zones, Areas of Particular Environmental Interest, Sites in Need of Protection, or other sites designated for particular status under the rules, regulations, procedures, Standards, or Regional Environmental Management Plans of the Authority. This may also include sites 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 mining activities, and any adjacent ISA 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.

3.3.1 Project scale

Provide an overview of the spatial (**horizontal and vertical**) and temporal (**seasonal and annual**) scales of the mining operation, including volumes, **depth, and physical and chemical properties** of material to be recovered, processed and deposited or discharged into the water column or back to the seabed, **and the target depth range for any such discharge.** This should include an account and a map of the area to be physically mined, 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

Provide details of the technologies to be employed, including relevant diagrams and drawings, that address: the Mining Workplan, timelines and the general mining sequence, the technologies to be employed to recover the resource from the seabed, the depth of penetration into the seabed and other details of the mining activities. **Describe the energy requirements of the requisite machinery.**

3.3.3 Transport/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 from the mining vessel to the processing plant**, and any methods related to the trans-shipment of the mineral-bearing ore, including transfers at sea. **Describe the energy requirements of the requisite machinery.**

3.3.4 On-site processing

Provide a description of the processing of the mineralized material that will occur within or above the Area, including 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 of the mineralized material at the surface. This section should also cover any disposal of seawater/fines.

Include a description of the disposal and discharge of sediment, wastes or other effluents into the Marine Environment and the disposal of waste from general ship operations. The handling and management of hazardous materials should also be described, together with a description of the nature of such material and its transportation, storage and disposal. [Describe the energy requirements of the requisite machinery.](#)

3.3.5 Support equipment

Describe any equipment expected for mining and support operations (e.g., mining vessels/platforms, supply vessels, barges). Describe the anticipated frequency of vessel movements for these activities. [Describe the energy requirements of the requisite machinery.](#)

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 mining operations. This section should include subsections such as those set out below.

3.7 Other alternatives considered

Provide an account of alternative options 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](#), transport and materials handling and shipboard processing.

Section 3bis Methodology for Description of the Marine Environment and Assessment of Impacts and Environmental Effects

3bis.1 Studies completed

Describe any prior research/Exploration that could provide relevant information for this Environmental Impact Statement and future activities. These should be detailed in the appendices, ~~[and the environmental reference baseline data collected for the Authority, as outlined in the exploration contract conditions, should accompany the Environmental Impact Statement.](#)~~

3bis.2 Methodology for Collecting Baseline Data

For each of the baseline descriptions of the Marine Environment in sections 4 and 5 and socioeconomic environment in section 6, describe the methodology for collecting baseline data, including:

- spatial and temporal extent of sampling;
- spatial and temporal frequency of sampling;
- gear used for sampling and any modifications or calibrations conducted to the gear;
- results of power analysis;
- limitations of sampling and how this may impact certainty of impact assessments; and
- Any cooperation with other research programmes in the Area, such as with the ISA, 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.

Raw baseline data and computer code used to analyse and provide a description of the Marine Environment shall be included in the annexures of the Environmental Impact Statement or, if the data and/or code has been previously submitted to the

Authority, the applicant may provide a link to the Authority's database where the data and/or code is stored or other location where such information has been made available online.

3bis.3 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;
- a list of program(s) used to analyze results; and,

Any limitations associated with the results of the analysis.

3bis.4 Methodology for Assessments of potential environmental impacts and Environmental Effects to the Marine Environment

(a) For each assessment of potential environmental impacts and Environmental Effects in sections 7 and 8 and socioeconomic environment in section 9, describe the methodology used to assess impacts and Environmental Effects from proposed operations and alternatives considered in section 3.7. Data, predictive models, and computer code used to analyse and provide a description of the Marine Environment shall be included in the annexures to the Environmental Impact Statement or, if the data, model, and/or code has been previously submitted to the Authority, the applicant may provide a link to the Authority's database where the data and/or code is stored or other location where such information has been made available online. Each description of methodology used to assess impacts shall include:

- a description and justification of analyses and models used to summarize the data; and
- Any limitations associated with the analysis or results.

(b) In accordance with Regulation 47quater, where predictive models have been used these shall be reviewed by competent independent experts and the relevant review reports shall be provided as annexures to the Environmental Impact Statement.

Section 4 Description of the Existing Physiochemical Environment

Give a detailed account of knowledge of the environmental ([physical, chemical, geological, oceanographic](#)) conditions at the ~~mine site~~[Impact Area](#), which should include information from a thorough literature review as well as from on-site studies. [The Standard on baseline 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 account will provide the baseline description of the [physical, chemical, geological and oceanographic](#) conditions against which impacts will be measured and assessed. The detail in this section is expected to be based on a prior environmental risk assessment that will have identified the main impacts, and thus the elements that need to be emphasized in the environmental impact assessment.

4.2 Regional Overview

Describe the general [baseline](#) environmental conditions of the site [and impact area](#), including the [physical, chemical, geological and oceanographic](#) setting within a broader regional context [and in accordance with refer to the applicable Regional Environmental Management Plan](#). This should be brief section that includes a map. A more detailed site-specific description [and Impact Area description](#) will be provided in accordance with the sections below.

4.5.1 Description of Broader Geological Setting

Provide a baseline description of ~~Describe~~ the nature and extent of the mineral resource and bedrock within a broader geological context. Describe the ~~general geological landscape and topographic features~~ [geological petrographic and geomorphological setting](#) of the site, including [high-resolution bathymetric maps and sedimentation rates, and refer to submarine features such as hydrothermal vents, seeps and seamounts](#). Provide information about tectonic and

geophysical stability.

4.5.2 Description of Seabed Substrate Characteristics

Provide a baseline description of seabed substrate ~~composition~~ characteristics (to benthic subsurface layers), including specific gravity, bulk density, grain size, dissolved and particulate organic and inorganic carbon, concentration of toxic elements, nutrients, carbonate, physical and chemical composition of pore-water, 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 relevant Standard or Regional Environmental Management Plan.

4.6 Physical oceanographic setting

Provide a baseline description of physical oceanographic properties including ~~turbidity aspects such as~~ currents, natural particle concentrations throughout the water column, ~~sedimentation rates~~ oceanographic fronts, eddies, particle flux and waves. Seasonal and interannual variability is an important element. Detail is required on the regional setting, as well as the specific site, 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 (~~near field, far field~~). Climate change projections should be included.

4.7 Chemical oceanographic setting

Provide a description of ~~water mass~~ chemical oceanographic properties at the site and ~~above the site at various depths~~ throughout 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, oxygen, salinity, density, particulate and dissolved organic matter, pH, chemical composition, including concentrations of toxic elements and trace metals, ~~and~~ dissolved gas profiles, depth range and characteristics of oxygen minimum zone, redox regimes, carbonate saturation, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability of these properties, and vent-fluid characteristics if applicable, ~~turbidity and geochemistry, etc.~~ Provide projections of how and where these aspects are likely to change over the next 50 years (or time period relevant to the contract term and subsequent Closure period.)

4.8 Seabed substrate characteristics

Provide a description of seabed substrate composition, including physical and chemical properties (e.g., sediment composition, pore-water profiles, grain size, sediment mechanics, dissolved and particulate organic and inorganic carbon, concentration of toxic elements, nutrients, carbonate, redox regimes, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics).

4.9 Natural hazards

Provide a description of applicable potential natural hazards for the site, including volcanism, seismic activity, cyclone/hurricane trends, tsunamis, and climate-related variability etc.

4.10 Noise and light

Provide a description of ambient noise and light, including light intensity, backscatter, and attenuation, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics, indicating pertinence to fauna where known, and the influence of existing Exploitation, Exploration and maritime activity.

4.11 Greenhouse gas emissions and climate change

Provide a description of the level of gas and chemical emissions from both natural and anthropogenic activities in the Area, as well as those affecting sea floor and water-column chemistry. 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).

4.12 Summary of the existing physicochemical environment

Summarize key findings and include notes on special considerations for hydrothermal vents, seeps, seamounts and

oceanographic fronts or eddies, 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 biological communities and ecosystem functions in the Impact Area, including information from a thorough literature review and baseline data collected, in accordance with the Regulations. The description of the site should be divided by depth regime (surface, midwater and benthic, 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 detail in this section is expected to be based on a prior environmental risk assessment that will have identified the main impacts, and thus the elements that need to be emphasized in the environmental impact assessment.

5.2 Regional overview

~~Provide general regional context, and include site specific issues and characteristics, existing Regional Environmental Management Plan, areas of particular environmental interest and national areas of adjacent countries, if any. References to relevant technical data and previous studies should also be included. This section should be brief, but provide broader context for the more detailed site specific description below.~~

Describe the general baseline biological environmental conditions of the site and Impact Area, within a broader regional context and in accordance with the applicable Regional Environmental Management Plan. This should be a brief section that includes a map. A more detailed site-specific description and Impact Area description will be provided in accordance with the sections below.

5.4 Biological environment

Provide a description of biological properties in the Impact Area, including ~~Address~~ diversity, abundance, biomass, life history parameters, relevant behaviour, including feeding rates, community-level analyses, connectivity, trophic relationships, resilience, ecosystem function and services, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability of these properties. 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.

5.4.1 Alt Descriptions of biological communities and ecosystem functions shall be structured by depth ranges, described in accordance with relevant Standards, and encompassing, as relevant:

- (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.

5.4.4. Ecosystem/community-level description

Summarize existing community ~~of~~ and ecosystem studies that integrate elements of the above sections. The summary should consider productivity, habitat heterogeneity, food-web complexity, carbon and nutrient cycling, benthic-pelagic coupling, biodiversity, succession, stability, the potential toxicity effects of plumes, bioavailability of toxins, early life-history stages, recruitment and behavioural information.

Section 7. Assessment of impacts on the physiochemical environment and proposed Mitigation

Provide a detailed description and evaluation of potential impacts and Environmental Effects of the operation to

components of the physical, chemical, geological and oceanographic environment identified in section 4. This may need to consider impacts and effects that could happen during the construction/development (pre-commissioning), operational and decommissioning phases, as well as the potential for accidental events. The detail in this section is expected to be based on a prior environmental risk assessment prepared, reviewed, and revised in accordance with regulation 47quater. ~~The preferred approach for this template is to include for each component a description of:~~

(b) Measures that will be taken to ~~avoid, remedy or m~~Mitigate 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 in areas under a State's national jurisdiction.

7.2 Description of potential impact categories

Provide an overview and description of the categories of ~~general~~ potential impacts caused by the proposed mining operation. This should introduce the major types of ~~effect~~ potential impacts, such as habitat removal, the creation of sediment plumes, noise and light, etc. and be used in the subsequent descriptions and evaluations of potential environmental impacts and Environmental Effects from the proposed operation and alternatives considered to components of the physical, chemical, geologic, and oceanographic environment identified in section 4.

7.3 Meteorology and air quality

Provide a description of potential impacts and Environmental Effects on air quality and components of meteorology from the ~~surface or subsurface~~ proposed operations.

7.x.x Potential impacts and Environmental Effects and issues to be addressed

7.x.x Environmental management measures to mitigate impacts and effects

7.x.x Residual impacts

7.x.x Potential impacts and effects in areas under any State's national jurisdiction

7.9 Noise and light

Provide a description of potential impacts and Environmental Effects from the proposed operation from noise and light above existing levels.

7.10 Greenhouse gas emissions and climate change

Provide an ~~a~~ Assessment of gas and chemical emissions from proposed operations, relative to emissions from both natural and anthropogenic activities, ~~as well as those affecting sea floor and water column chemistry~~. Subsections should include estimated greenhouse gas emissions and a greenhouse gas emissions assessment where appropriate.

7.11 Maritime safety and interactions with shipping

Provide a description of ~~include~~ predicted maritime safety issues and potential interactions with other vessels from the proposed activities.

7.12 Waste management

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

7.13 Cumulative impacts

Provide a description of ~~t~~ the source, nature and extent of any interactions between various potential environmental impacts and Environmental Effects across the environment. ~~W~~ where they may have cumulative effects, must be considered on both spatial and temporal scales over the lifetime of the proposed mining operation. and alternatives considered.

7.13.1 Proposed operations impacts

Cumulative within the ~~scope~~ Impact Area of the mining proposed herein.

7.15 Summary of residual effects

Summarize key findings on potential environmental impacts and Environmental Effects, environmental management measures, residual effects, and any 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.

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 of the proposed operation and alternatives considered in section 3.7 to the biological environment components identified in section 5 in the Impact Area. ~~This may need to e~~Consider impacts and effects that could happen during the construction/development (pre-commissioning), operational and decommissioning phases, as well as the potential for accidental events. The detail in this section is expected to be based on a prior environmental risk assessment prepared, reviewed, and revised in accordance with regulation 47quarter. The description shall be structured by the depth ranges described in section 5 and shall ~~preferred approach for this template is~~ to include for each component a description of:

- (a) bis The nature and extent (temporal and spatial) of any actual or potential impact, including cumulative impacts;
- (b) Measures that will be taken to ~~avoid, remedy or M~~mitigate and manage such impacts; and
- (c) The unavoidable (residual) impacts that will remain, including their expected longevity.
- (d) A comparison of the impacts and effects against tThe applicable environmental goals and objectives, indicators and threshold values as identified in the applicable Regional Environmental Management Plan.

8.2 Description of potential impact categories

~~This section is an overview and description of the categories of general potential impacts caused by the mining operation. This is not expected to be detailed, but rather to introduce the major types of effects, such as habitat removal, the crushing of animals, the creation of sediment plumes, noise and light, etc. The methods applied to describe and quantify impacts should be explained. A description should be included of any lessons learned from activities during the exploratory phase of the programme (e.g., mining system component tests).~~

Provide an overview and description of the categories of potential impacts caused by the proposed mining operation and alternatives considered. This should introduce the major types of potential impacts, such as habitat removal, the creation of sediment plumes, noise and light, etc. and be used in the subsequent descriptions and evaluations of potential environmental impacts and Environmental Effects from the proposed operation and alternatives considered to components of the biological, physical, chemical, geological, and oceanographic environment identified in section

Key elements that need to be included are:

- Descriptions of impact studies carried out during exploration (e.g., component testing and the resulting observations);
- Descriptions of the results of any environmental risk assessments, which should be based on the initial environmental risk assessment conducted in accordance with Regulation 46quarter[See Pew Submission 46bis] and included in the Scoping Report, and may be included as separate reports or appendices where appropriate; and
- Descriptions of the methods applied to describe and quantify impact categories and assessment of associated effects that have not previously been described in section 3bis.

Section 9 Assessment of impacts on socioeconomic environment and proposed Mitigation

~~As in the preceding sections, P~~ provide a detailed description and evaluation of potential impacts ~~and Environmental Effects~~ of the operation to the socioeconomic components identified in section 6. This may need to consider effects that could happen during the construction/development (pre-commissioning), operational (including maintenance) and decommissioning phases, as well as the potential for accidental events. The preferred approach for this template is to include for each component a description of:

- (a) The ~~source~~, nature and (~~horizontal and vertical~~) and temporal (~~seasonal and annual~~) extent of any actual or potential impacts ~~and effects from the proposed operation and alternatives considered~~, including cumulative impacts;
- (b) Measures that will be taken to ~~avoid, remedy or m~~Mitigate and manage such impacts ~~within acceptable levels from the proposed operation~~. This will include a comparative analysis of how measures taken may differ across alternative operations considered;
- (c) The unavoidable (residual) impacts that will remain.
- (d) The extent to which any potential impacts and effects may occur in areas under a State's national jurisdiction.

9.2.1 Existing 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.

9.2.1.5 bis Ecosystem Services

A description of potential impacts of the operation on any ecosystem services, for example, carbon burial and sequestration.

9.4. Socioeconomic and sociocultural issues

This section will provide a description of ~~socioeconomic and sociocultural~~ benefits or impacts, including any applicable social initiatives. ~~Information considered relevant to the Convention's 'benefit to mankind' requirement for activities in the Area may be included here.~~

9.4 bis Gender Impact analysis

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

9.4 Summary of ~~existing socioeconomic impactscultural environment~~

Summarize key findings on potential impact and effects, management measures, residual effects, 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. Potential cumulative effects should also be included.

9bis. Assessment of Uncertainty 9bis.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:

- identify any relevant areas of uncertainty and gaps in knowledge and their implications for the environmental impact assessment and its findings; and,
- describe the measures taken in the environmental impact assessment to reduce uncertainty in its findings to as low as reasonably practicable.

9bis.2 Resolving 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 relevant Rules of the Authority.

11. Environmental management, monitoring and reporting

11.1 Organizational structure and responsibilities

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

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 mining operations. This section should provide an overview of what the Plan would entail. ~~This section should include, at a minimum, with reference to the headings set out below and Annex VIII of the Exploitation Regulations of the Authority.~~ Alternatively, the applicant may prefer to submit the draft Environmental Management and Monitoring Plan alongside this EIS, and use this section to cross-refer.

11.3.1 Mitigation and management

Summarize the mitigation and management measures that will be taken, based on ~~actions and commitments that have arisen from the~~ impact minimization and mitigation analysis undertaken as part of the environmental impact assessment.

11.3.3 Closure Plan

A Closure Plan will be submitted as a separate document for the Authority's approval. However, this section should provide an overview of what the Closure Plan will entail, including decommissioning, continued monitoring and rehabilitation measures, if applicable. ~~Alternatively, the applicant may prefer to submit the draft Closure Plan alongside this EIS, and use this section to cross-refer.~~

Section 13 Consultation

Describe the nature, ~~and extent,~~ participation and outcomes of consultation(s) that have taken place with ~~parties identified who have existing interests in the proposed project area and with other relevant~~ Stakeholders.

13.1 Consultation methods

Describe the mechanism(s) used to consult with different groups and how this aligns with any relevant consultation obligations, including in the Regulations and Standards.

13.3bis Commission consultation

Summarise the Legal and Technical Commission's recommendations on the g 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

13.3 ter Stakeholder and coastal State Consultation

A description of 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.

4. Please indicate the rationale for the proposal. [150 word limit]

Annex (IIIbis)

'Scoping' is an essential part of the EIA process, in which the adequacy of a planned EIA and baseline datasets can be assessed before an EIA is undertaken. Scoping is critical as it enables early intervention to correct sub-standard EIA processes, targets the EIA processes towards the priority issues, and helps Contractors avoid expending resources on unnecessary or misguided research. Moreover, it provides comfort that a future EIS will not be rejected by the ISA for procedural flaws. While we note that the Draft Standard for environmental impact assessment process has a section

on scoping which calls for a scoping report, the required content for this report is not described. We think this would be a useful subject for an additional annex alongside this Annex IV and have submitted specific text accordingly.

Executive Summary

A key element of any environmental assessment is to analyze expected recovery rates of any systems affected. The length of time it will likely take an ecosystem to return to its original state may mean the difference between a minor or transitory impact and those that may last for years or in the case of the deep ocean, much longer still. These timelines should be a focus of any summary of anticipated impacts.

Section 1

We propose a conforming edit to account for the incorporation of an initial risk assessment into the Scoping Report.

Section 2

Currently, the ISA has contractors who are private sector companies, as well as State or State-owned contractors. International agreements will generally be applicable to States, but not the private sector companies unless there are national laws that apply the relevant provisions of international treaties to companies within the jurisdiction. We therefore propose a small drafting amendment to this section 2.3 to indicate that international agreements may be applicable to operations either directly, or via incorporation into domestic laws, and that this section further requires a description of how those agreements or laws will be observed.

Also, as clearly described by the ITLOS Advisory Opinion of 2011, Sponsoring States have their own direct obligations to ensure Environmental Impact Assessments are undertaken, which may involve separate processes from those managed by the ISA. We propose an additional provision (see 2.5)

Section 3

Regarding paragraph 3.1.1 we note that the term 'project area' is used. 'Project area' is not a defined term in the Regulations. It may therefore be helpful to specify that the Contract Area and Mining Area (which *are* defined terms) would be included in the project area.

This section 3.1.1 would be a good place in which to require the proponent to identify and elaborate on other marine users in the project area with a view toward describing later in the EIS how it will address them.

We also think there should be a requirement here to identify nearby Coastal States or States that may be affected by the mining activities as this will assist with implementation of DR4 and Article 142 UNCLOS.

Regarding section 3.3.2 we suggest a new short addition at the end of the section (and sections 3.3.4 and 3.3.5), which should read as follows "Describe the energy requirements of the requisite machinery". We propose this addition as we believe the energy requirements of the operation is important information that the ISA should require in order for the ISA to be able to assess the likely climate impacts of the project, and how these may be mitigated and managed and to verify projected emissions.

Regarding section 3.5, We suggest to insert 'or certification standards' after 'design codes'. Certification standards, which are usually audited and verified by third parties, may be a useful mechanism to assist the ISA in reviewing construction and operations standards of applicants.

Regarding section 3.7, we believe that justifications for not choosing alternative approaches and differences from proposed mining operations should be clearly described in this section to allow stakeholders and members of the ISA to be able discern the financial and environmental cost/benefits of each approach.

Section 3bis

It is critical that an EIS should describe methodologies used to prepare it. We note some inclusions to that effect in the facilitator's document, which we support. We are pleased that these include a requirement to describe assumptions relied upon in any models used. However, we would propose it would be clearer, and more in line with usual EIS practice, to include (instead or in addition) a standalone section to describe the methodology used by the proponent, both in collecting baseline data and assessing impacts. This should detail the methodology used to 1.

collect baseline information, 2. summarize baseline information, and 3. assess the impact of proposed/alternative mining operations with a justification of those methods and any underlying assumptions. Therefore, we propose that a new section be placed as *3bis*, so that it precedes a discussion of results in the following sections.

Section 4

One general comment: If the intent of these annexes is to provide enough detail for Contractors to carry out the various components of the Plan of Work, then this needs to be fleshed out in greater detail. If the intent of this Annex is merely to provide a template with substantive instructions to follow in Standards, then that should be made clearer. As of right now the drafting seems to us to be inconsistent in the amount of detail used. This comment applies particularly to sections 4-9. We have provided the level of detail we think appropriate but this may need to be revisited after further clarification about the level of detail for templates is clarified.

Regarding the first paragraph, the EIS cover the Impact Area, and use the definition of Impact Area used in a previous version of the draft Regulations.

Section 5

In the introduction to this section, there should be a reference to the relevant REMP, as depth range used for biological baseline descriptions may vary from region-to-region (see further text to this point in 5.4.1 alt above). In addition, to provide coherence and conform to other sections, there should be an instruction incorporated at the beginning of this section setting out the contractor's general duty

Regarding Section 5.2, we believe it can be usefully amended to be more specific.

Regarding 5.4.1-5.4.3, a Standard should be developed to specify the types of biota that need to be identified and how these should be reported, rather than an attempt to describe it in this template, using incomplete lists of examples.

Also the term 'main' taxonomic / ecological groups, should be deleted as it is unclear, subjective, and could have left important groups out of the assessment due to the high degrees of uncertainty regarding various communities in the pelagic zones.

Section 7

There is some inconsistency in drafting between the various subsections. Each subsection should cover the following points:

- 7.x.x. Potential impacts and Environmental Effects and issues to be addressed
- 7.x.x. Environmental management measures to Mitigate impacts and effects
- 7.x.x. Residual impacts
- 7.x.x. potential impacts and effects in areas under any State's national jurisdiction

Section 8

Section 8.3-8.5 could benefit from greater specifics and a more consistent framing as an obligation on a contractor, providing an overview and description of the categories of potential impacts caused by the proposed mining operation and alternatives considered. This should introduce the major types of potential impacts, such as habitat removal, the creation of sediment plumes, noise and light, etc. and be used in the subsequent descriptions and evaluations of potential environmental impacts and Environmental Effects from the proposed operation and alternatives considered to components of the biological, physical, chemical, geological, and oceanographic environment identified in section. These descriptions should be linked back to impact studies conducted, the environmental risk assessment, and descriptions of methods.

Section 9

Several delegations have noted throughout the week the importance of carefully assessing uncertainty in the face of the significant unknowns at play in this largely untested industry. While descriptions of uncertainty should be embedded throughout an EIS wherever it is relevant, we believe that following Section 9, an additional Section 9bis

would be the optimal point to include a synthesis of these uncertainties. We have proposed text to this effect.

Section 11

On section 11.1 we note that mining is renowned as one of the worst sectors globally for gender diversity. In adopting SDG5, States agreed to work to 'achieve gender equality and empower all women and girls' (in all sectors). Taking informed decisions, and tracking success towards that goal is difficult if gender-disaggregated data are not available. We therefore suggest that data on organizational structure and responsibilities be disaggregated by gender.

Regarding 11.3 the draft Regulations envisage an applicant for a Plan of Work submitting to the ISA the EIS (developed in accordance with this template) at the same time as the draft EMMP and Closure Plan, for Council review of both documents concurrently. It might be more sensible, however, for the regulations to provide that an EIS be submitted and reviewed prior to the development of EMMP and Closure Plan. While this would add another stage to the review process, it could usefully clarify the elements to be required in the EMMP and Closure Plan - such as measures to address uncertainty, or the length of post-contract monitoring that may be required by the Closure Plan - before it is submitted. In that case, these subsections would serve as a preview. If the two documents are indeed to be submitted together, it is unclear whether this 11.3-11.4 is needed and we would seek clarity on their intent.

Section 13

This section should describe not only the nature and extent, but also the outcome of consultations that have taken place with Stakeholders. We note that this is a defined term, and should be capitalized here, and would include parties with existing interests.

We also believe this section could benefit from a subsection summarizing the consultations with the LTC, specifically its recommendations on the scoping Report (assuming that we all agree an LTC review of this report would be useful) 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. Finally, it could also include a specific summary of the consultations carried out with Coastal States. We have submitted text to this effect.