

**TEMPLATE FOR SUBMISSION OF TEXTUAL PROPOSALS DURING THE 27<sup>TH</sup> SESSION:  
COUNCIL - PART III**

*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](mailto:council@isa.org.jm).*

**1. Name of Working Group:**

Protection and Preservation of the Marine Environment

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

The Pew Charitable Trusts

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

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.**

The facilitators’ proposed amendments are reflected in **red**.

Our proposed amendments and our questions or comments regarding the facilitator’s remarks are indicated as in-line edits in **blue**. Where we propose deletions of the facilitator’s text this is shown **~~in strikethrough and bold~~**.

**1. Preparation of an Environmental Impact Statement**

(1)(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 taking into account the ~~relevant-applicable 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

**(1)(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 **[including but not limited to] (physiochemical, oceanographic, geological,** biological, socioeconomic), **including expected recovery rates of the system to its original state and cumulative impacts;**

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

### **3. Description of the proposed development project**

#### **3.1.1 Location**

Include coordinates of the project area, detailed location maps (drawn to scale), ~~a layout of the site and 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, 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.

### **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

#### **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.

### **4.6 Physical oceanographic setting**

Provide a description of oceanographic aspects such as thermohaline conditions, optical properties and turbidity, currents regime, tides, waves, turbulence, and oceanographic fronts and eddies. Seasonal 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 (~~near field, far field~~) to boundaries of the Impact Area. Climate change projections should be included.

### **4.9 Natural hazards**

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

### **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, diversity, abundance, biomass, community-level analyses, connectivity, trophic relationships, resilience, ecosystem function and services as well as 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.

5.4.1 Alt Describe the biological communities and ecosystem functions, structured by depth ranges in accordance with relevant Standards and Regional Environmental Management Plan, which may encompass:

1. surface seawater,
2. epipelagic zone (< 200 metres)
3. mesopelagic zone (200-1000 metres),
4. bathypelagic zone (1000 - 4000 metres),
5. abyssopelagic zone (4000 - 6000 metres),
6. hadalpelagic zone (> 6000 meters),
7. demersal zone (part of the water column near to and significantly affected by the seabed), and
8. benthic zone.

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

#### 5.4.4 Ecosystem/community-level description

Summarize existing community ~~or~~ 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, [trophic relationships, ecosystem functioning, benthic-pelagic couplings,] early life- history stages, recruitment and behavioural information.

## 7. Assessment of impacts on the physiochemical oceanographic 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 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 [Annex III(g)]. ~~The preferred approach for this template is to include for each component a description of:~~

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

#### 7.13 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 mining operation and alternatives considered.

## 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~~ 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 [Annex III(g)]. The description shall be structured by the depth ranges described in section 5 and shall preferred approach for this template is include for each component a description of:

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

#### 8.2 Description of potential impact categories

~~This section is~~ an overview and description of the categories of potential general impacts caused by the proposed mining operation and alternatives considered. ~~This is not expected to be detailed, but rather to~~ should introduce the major types of impacts and their effects, 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 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).

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

~~As in the preceding sections, provide~~ 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 temporal (seasonal and annual) extent of any actual or potential impacts and effects from the proposed operation and alternatives considered, including cumulative impacts;

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

(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.

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

##### 9.2.1.1.1 Potential impacts and issues to be addressed

##### 9.2.1.1.2 Environmental management measures to mitigate impacts

##### 9.2.1.1.3 Residual impacts

#### 9.2.1.2 Marine traA description of potential impacts on non-project- related marine traffic occurring within the project area, along with proposed management measures and a description of residual impact

#### 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.

## 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 s~~Stakeholders.

### **13.1 Consultation methods**

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

### **13.2 Stakeholders**

List ~~any relevant s~~Stakeholders that have been consulted and explain the process by which ~~s~~Stakeholders were identified.

### **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. Include a description of the concerns and comments identified by ~~s~~Stakeholders and how these will be addressed, and, if not, describe the reasons for that decision.

### **13.3bis Commission consultation**

Summarize the Legal and Technical 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

### **13.3 ter 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.

### **13.4 Continuing consultation and disclosure**

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

## **5. Please indicate the rationale for the proposal. [150-word limit]**

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.

Regarding section 3.1.1 - This section would be a good place 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 proposed section 3bis - It is critical that an EIS should describe methodologies used to prepare it. We note that there are some requirements to describe methodologies in the template already, but believe 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. We therefore propose that a new section be placed as 3bis, so that it precedes a discussion of results in the following sections.

Regarding section 5 - Depth ranges that should be used for biological baseline descriptions will likely vary from region-to-region, so we think it would make more sense to reference the relevant Standards and REMP here rather than list these three depth ranges (Surface, midwater, benthic), which may not be sufficient to adequately describe the existing biological environment. Therefore, we recommend that 5.4.1-5.4.3 be deleted and substituted with 5.4.1 Alt.

Regarding section 9.2.1.1 - We recommend reinserting this text. It is critical that an environmental impact assessment include consideration of existing mariner users. While the exploration regulations state that installations should not be “established where interference may be caused to the use of recognized sea lanes essential to international navigation or in areas of intense fishing activity”, these regulations do not provide sufficient protection from DSM impacts that will likely extend well beyond the mining installation/operation.

Regarding 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 also believe this section could benefit from a subsection summarizing the consultations with the LTC, specifically its recommendations on the Scoping Report (assuming can be agreed that 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.