

**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 VII Environmental Management and Monitoring Plan (and a new Annex on Impact Reference Zones and Preservation Reference Zones)

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.

1. The Environmental Management and Monitoring Plan prepared under these regulations and this annex VII shall be:

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

(a)bis Prepared in accordance with the relevant Regulations and Standards, and Regional Environmental Management Plan, taking into account applicable Guidelines, on the basis of Best Environmental Practice, Best Available Scientific Evidence, and Best Available Information; and

_____ (b) Verified by the report of independent competent persons appointed by the Authority.

2. An Environmental Management and Monitoring Plan shall contain:

(a) A non-technical summary of the main conclusions and information provided to facilitate understanding by members of the Authority and Stakeholders;

(b) A description of the project and the area likely to be affected by the proposed activities, the Preservation Reference Zones, and the surrounding area with reference to the Regional Environmental Management Plan;

(b) bis A description of relevant legal and administrative frameworks applicable to the proposed Plan of Work, including: the rules, regulations and procedures of the Authority; the applicant’s own environmental policy, regulations of the Sponsoring State, and other relevant policy or legal instruments to which the applicant may be subject (e.g. environmental or sustainability requirements from funders);

(b) ter A description as to how the Environmental Management and Monitoring Plan has been prepared, and a list of Stakeholders;

- (c) The project-specific environmental objectives, indicators and thresholds, based on baseline environmental data and relevant ~~S~~standards ~~to be met~~;
- (d) Details of or cross-references to, the Environmental Management System including allocation of roles and responsibilities [and the training programme] ~~for and the applicant's environmental policy~~;
- implementing the measures reflected in the EMMP,
 - monitoring, recording and reporting fulfilment of the EMMP, and
 - regularly reviewing and updating the EMMP to ensure that it complies with rules, regulations, and procedures of the Authority;
- (e) An assessment of the predicted potential Environmental Effects of the proposed activities on the Marine Environment, including how long they will last, and any significant changes likely to result, consistent with the environmental impact assessment and the Environmental Impact Statement;

(e) bis A description of uncertainties identified from the environmental impact assessment and the plan to reduce or manage these;

(g) A description of the planned monitoring programme and the overall approach, standards, protocols, methodologies, procedures and performance assessment of the Environmental Management and Monitoring Plan, including the necessary risk assessment and management techniques, including the use of monitoring data to validate predictive models and reduce uncertainties, and adaptive management techniques (process, procedure, response), if appropriate, needed to achieve the desired outcomes Each component should be described separately in a manner consistent with sections 7-10 of Annex IV. This section should also include monitoring targets and actions that will contribute to an understanding of regional and cumulative effects and inform the Authority's Regional Environmental Management Plan.

(h) Details of the proposed monitoring stations across and beyond the project Contract Area, including the frequency of monitoring and data collection, the spatial and temporal arrangements for such monitoring and the justification for such arrangements;

(i) ter Details of any plans outside of the Contract Area to increase scientific knowledge in the relevant region, including in collaboration with other contractors or via international cooperation efforts;

(l) Details of the quality control and management standards, and how the effectiveness of management measures will be monitored, assessed and reviewed, including list of reporting deliverables to the Authority and time schedule, plans for real-time reporting of environmental data to the Authority, internal and external auditing and reporting of environmental performance, and the frequency of the review of the performance of the Environmental Management and Monitoring Plan for the purposes of Regulation 51;

(p) bis. Details of arrangements made or planned with other marine users, with the aim to ensure due regard to each other's rights and activities.

(q) Details of any practicable restoration and rehabilitation of the project area;

(r) A plan for further research and studies; ~~and~~

~~(r) bis~~ A description of the measures that will be taken to address non-compliance with the Environmental Monitoring and Management Plan, including reporting, recording and response action protocols;

(r) ter A description of the document control system that will be used for environmental management documentation; and

Annex Xter: Design Criteria For Impact Reference Zones And Preservation Reference Zones

Contractors must establish impact reference zones (IRZs) and preservation reference zones (PRZs) in order to monitor the environmental impacts of their activities. The following parameters shall be followed in the designation of IRZs and PRZs.

1. IRZs and PRZs must be situated within the Contract Area (and the Contract Area may need to be selected around the need for appropriate IRZ/PRZs, especially where multiple or large zones are required).
2. IRZs must be sites where direct impacts from mining are likely to occur.
3. For each type of impact identified in the environmental impact statement, there must be at least one corresponding IRZ which will enable the Contractor to monitor that impact. This is likely to require multiple IRZs (or a very large IRZ).
4. PRZs will be important in identifying natural variations in environmental conditions against which impacts will be assessed. Their species composition, habitat types, and occurrence of mineral resource, must be comparable to that of the impacted areas.
5. PRZs must be areas that will not be impacted by mining activities, including impacts from operational and discharge plumes.
6. If a Contract Area consists of several disjunct sub-areas that are isolated from each other, then each of those areas would require a corresponding PRZ.
7. Use of multiple PRZs should be considered for increase in statistical rigour, and chance of detecting effects and adding redundancy in case of unexpected variation/plan changes.
8. The area of the PRZ needs to be sufficiently large to contain (and buffer) sufficiently large populations to guarantee long-term survival.
9. In theory, all species within the IRZ and PRZ will need to be monitored to quantify impacts. In practice, some representative set might suffice. To establish an adequate baseline and find suitable indicator species (e.g. the sensitive species that will suffer most from an impact) it will be necessary to catalogue most species in the IRZ and PRZ in question. This will require an extensive sampling effort to collect sample sizes that allow for a meaningful comparison (i.e., with high statistical power)
10. The longevity of PRZs is important. The duration of post-mining monitoring should until no measurable difference between IRZ and PRZ can be detected anymore.
11. Isolation of PRZs is important: any PRZ will by definition have to remain unimpacted throughout the post-mining monitoring period.
12. To designate representative IRZs/PRZs requires characterisation of pelagic and benthic communities within all sub-habitats that may be impacted by mining operations, and determination of regional distributions and patterns of connectivity. Temporal variation must also be evaluated annually over multiple years (for at least one test-mining site, and the PRZ site).
13. A Contractor will need to be able to demonstrate knowledge of species' ecological requirements (e.g. for successful reproduction); an average population density alone will not suffice.

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

On para 1(a) we propose the addition of 'Standards' and 'Regional Environmental Management Plan' after 'Regulations' in listing the instruments that the Contractor must use in order to prepare the EMMP.

On para 1 (b), we note the reference to independent competent persons. The same term is used in various places in the Regulations. Pew recalls, we hope correctly, that Jamaica made a submission previous to this session, that there could be provisions added to the Regulations - a new Annex perhaps - that would more precisely set out a process for identification and selection of competent independent experts. We would support that proposal in the interests of ensuring accountability and transparency about use of experts. It should also help ensure that there is collective understanding about the meaning and process behind the use of 'independent competent persons' each time this phrase appears in the regulations.

On proposals regarding 2 (b) (b bis) and (b ter): Pew would recommend that not only should the EMMP describe the area 'likely to be affected', but also the surrounding area (with reference to the Regional Environmental Management Plan) as well as the Preservation Reference Zones (which by definition should not be 'area likely to be affected').

An EMMP should also, for context, at the outset contain a description of the proposed activities that are the subject of the EMMP. This seems to have been omitted in this Annex. But could be added into sub-paragraph (b) also.

We would also consider it usual practice for an EMMP to include a description of the relevant legal framework applicable to the proposed Plan of Work; as well as a description as to how the EMMP has been prepared, including a list of stakeholders consulted.

With regards sub-paragraph (c), we consider use of the term 'environmental objectives' here to be confusing. We presume this means project-specific environmental objectives, rather than the ISA's strategic environmental objectives, and suggest this be specified in the Regulation. We also think that the word 'standards' should be capitalised here, so it is clear that this means to refer to ISA Standards.

Edit on para2 (h): 'Project area' is not a defined term in the regulations.

Proposal on 2 (i)ter: Contractors should be key players in collecting essential survey data to contribute to large-scale regional assessments and to assist ISA's governance of activities in the Area. But this is only likely to happen if the ISA incentivises or requires scientific work outside of Contract Areas, and takes leadership in directing that research.

Edits on para 2 (l) - To ensure the ISA is receiving appropriate monitoring information, and that the Contractor is regularly auditing its environmental systems.

New Annex on Impact Reference Zones and Preservation Reference Zones

Impact Reference Zones (IRZ) and Preservation Reference Zones (PRZ) should be designated during the exploration phase, as they will be needed to assess the impacts of test mining under an exploration contract. As such, rules for the design of these zones may be better placed in another instrument that pertains more specifically to Exploration Contractors. But in the current absence of such a document, we do have some provisional ideas for parameters for their design which we might provisionally incorporate as additional annex to these draft regulations pending the opportunity to find them a better home. There is an urgency to elaborate this aspect of the regime, as Contractors should be taking these design decisions now during testing, but at present confusion continues to persist over what the terminology means and what their designation

entails.