



Template for the review of the draft standards and guidelines associated with the draft regulations on exploitation of mineral resources in the Area

I. Background

1. The draft regulations on exploitation of mineral resources in the Area ([ISBA/25/C/WP.1](#)) require that certain issues are addressed in accordance with, or taking into account, standards and guidelines to be developed by the organs of the Authority. The standards will be adopted by the Council and will be legally binding on Contractors and the Authority, whereas the guidelines will be issued by the Legal and Technical Commission or the Secretary-General and will be recommendatory in nature.
2. Stakeholder consultation is an integral part of the process decided upon by the Commission for the development of the standards and guidelines ([ISBA/25/C/19/Add.1](#)).
3. The Legal and Technical Commission will consider the comments received through stakeholder consultation during its current session.
4. The drafts include a cover page containing background and contextual information on the approach taken by the Legal and Technical Commission in developing each standard and guidelines. Please note that stakeholder comments are not sought on this cover note.
5. Issues of format and consistency across the standards and guidelines will be reviewed by the secretariat and the Legal and Technical Commission once the content of the various standards and guidelines is finalized following stakeholder consultation.

II. Submitting Comments

6. To ensure that your comments are given due consideration, please send them by e-mail to ola@isa.org.im, at your earliest convenience but **no later than the date announced on the ISA website for the relevant draft standards and guidelines**.
7. When submitting comments, please adhere to the following guidance as much as possible:
 - a. Please provide all comments in writing and in an MS Word .doc or .docx format using the table provided below.
 - b. The table format allows for an unlimited number of comments to be added. To add more comments, you may add more rows.

- c. Please provide full contact information for the individual/Government/organization submitting the comments.
 - d. Please avoid commenting on issues related to format, grammar, spelling or punctuation, unless it affects the overall meaning of the text, as the document will be formatted and edited when the final draft is prepared by the Legal and Technical Commission.
 - e. To facilitate the revision process please be as specific as possible in your comments. In areas where you feel additional or alternative text or information is required, please suggest what this text may look like or what information should be included.
 - f. Text may be copied from the draft into the table if stakeholders wish to use "track changes" in editing text (this is encouraged to ensure accuracy and avoid numbering errors).
 - g. If you refer to additional sources of information, please include these with your comments when possible or provide a complete reference or hyperlink.
 - h. All review comments will be posted on the ISA website, unless otherwise requested by the submitting entity.
8. Should you have any questions regarding the review process, please contact ola@isa.org.jm.

III. Template for Comments

- 9. Please use the review template below when providing comments.
- 10. Line and page numbers have been provided in the drafts. Please use these as a reference as illustrated in the table below.

TEMPLATE FOR COMMENTS

<i>Document reviewed</i>	
Title of the draft being reviewed:	Draft Guidelines for the preparation of environmental management and monitoring plans developed by the Legal and Technical Commission
<i>Contact information</i>	
Surname:	
Given Name:	
Government (if applicable):	
Organization (if applicable):	UK Seabed Resources
Country:	United Kingdom

E-mail:		
General Comments		
<p>UK Seabed Resources is grateful for the opportunity to comment on this draft set of guidelines and appreciates the considerable efforts and expertise that have gone into its production. UKSR has incorporated expert 3rd-party input from MarineSpace in producing this stakeholder response.</p>		
<p>There is currently no reference in the Draft Guidelines to the Electronic Monitoring Systems required by the draft Exploitation Regulations. This important information regarding the place of effect is critical in understanding the impacts, and determining the mitigation, monitoring and management plans. Information on the exploitation plan should be updated with EMS data as exploitation progresses to ensure the EMMPs are targeted at the effects and impacts.</p>		
<p>There is no reference within the Draft Guidelines document to the Human Environment. Fisheries and Navigation, whilst not currently a primary focus, should also be considered in the EMMP to ensure that the protocols in place are effective and impacts predicted in the EIS are in line with those observed.</p>		
<p>Where there is cross referencing to other guidelines documents within this Draft Guideline document it is not consistent in how it is presented, and/or it is not clear E.g. Paragraph 68 in relation to that a waste assessment and prevention audit should evaluate 'The amount, type, and hazard of the waste [In accordance with Guideline 5]'</p>		
<p>We would suggest that the Draft Guidelines document would benefit from including, where possible, links to documents referenced within the Draft Guidelines.</p>		
<p>There should be clearer signposting in document and structure e.g. reference made to 'Competent persons' as a requirement, but here no further definition in the Draft Guidelines document of what a 'Competent person' is.</p>		
<p>It would be useful to see a glossary of terms up front or in back of document, ensuring consistency of wording across the various documents.</p>		
Specific Comments		
Page	Line	Comment
2	110-111	<p><i>Environmental management is critical, particularly for the conservation and sustainable use of the oceans, seas, and marine resources for sustainable development consistent with the UN Sustainable Development Goal 14.</i></p> <p>Is there a Reference for this? And which of the targets listed under 'Goal 14' (on-line) is relevant for this activity?</p>
2	113-118	<p><i>One of the fundamental policies and principles set out in Regulation 2 is to provide "pursuant to article of the Convention, for the effective protection of the Marine Environment from the harmful effects which may arise from Exploitation" based on the principle of "a fundamental consideration for the development of environmental objectives shall be the effective protection of the marine environment, including biological diversity and ecological integrity" and "the application of an ecosystem approach."</i></p> <p>(1) What legislation is Regulation 2 referring to? Assume the draft Exploitation Regulations? (2) Prior to paragraph 12, Regulation 48 and annex VII is listed for the draft regulations on exploitation. Should it be 52</p>

		and not 2, as Regulation 52 is mentioned in Paragraph no. 13)?
2	120-123	<p><i>The EIA, EIS, and EMMP are important instruments for adherence to these principles. In accordance with Regulation 52 the EMMP remains as a 'living document' to be used as a management tool to ensure that the commitments made in the EIS are implemented throughout the project life.</i></p> <p>Comment as above for paragraph no.12 and for all other mention of Regulation item numbers?</p>
3	126	<p><i>An EMMP should:</i></p> <ul style="list-style-type: none"> • <i>Be balanced and objective through independent verification;</i> <p>Who does the independent verification?</p>
3	128-129	<ul style="list-style-type: none"> • <i>Identify scientific uncertainties and include adaptive management strategies for managing uncertainty, where appropriate;</i> <p>It should also identify where the precautionary principle was applied, and what hypotheses are being tested to allow these precautionary measures to be removed once the science demonstrates the effect.</p> <p>It should also be proportionate and linked to the volume of disturbance and footprint of effect. Therefore, we would suggest adding in here a link to the historic and ongoing production activity and EMS data collected during extraction operations.</p>
3	136-148	<p><i>In accordance with Regulation 48 the EMMP must be consistent with other plans including the Closure Plan and Emergency Response and Contingency Plan. Regulation 48 further provides that the EMMP shall cover aspects prescribed in Annex VII and shall be:</i></p> <ul style="list-style-type: none"> • <i>Based on the environmental impact assessment and the Environmental Impact Statement;</i> • <i>In accordance with the relevant regional environmental management plan;</i> <p><i>and</i></p> <ul style="list-style-type: none"> • <i>Prepared in accordance with the applicable guidelines, Good Industry Practice, Best Available Scientific Evidence and Best Available Techniques, and consistent with other plans in these regulations, including the Closure Plan and the Emergency Response and Contingency Plan.</i> <p>(1) Can a full list of these 'other plans' be provided alongside the <i>Closure Plan and Emergency Response and Contingency Plan</i>, even if these are listed or marked as a minimum required, and additional ones maybe expected, or links to relevant Appendices?</p> <p>(2) Can more details on Good Industry Practice and Best Available Scientific Evidence/Techniques be provided as examples?</p> <p>As far as we are aware, there are not yet any definitions or guidelines for the Closure Plan and signing up for this here could be quite onerous. It would be useful for ISA to publish their expectations for these linked plans as soon as they are referenced</p>
3	157-158	<i>This Section 3 provides guidance to Applicants on the requirements for preparing an EMMP for an application for a Plan of Work.</i>

		Formatting – Section 3 is used but in document structure roman numerals are used for main headings (e.g., III), unless meant is Section 3 (page 6) but that is titled ‘Parameters to be monitored’?
4	176-178	<p><i>Annex VII (2)(d) of the Exploitation Regulations requires that an EMMP provide details of the Applicants EMS and environmental policy. Detailed guidance regarding preparation of the EMS can be found in the EMS Guideline.</i></p> <p>(1) What is the EMS (Environmental Management System) Guideline? How can this be sourced/where is this stored? (2) Are there guidelines on the environmental policy or is this to be developed and outlined by the Applicant/Contractor?</p>
4	209-210	<p><i>Section 3.5.1 below provides guidance on management techniques and Section 0 below on the monitoring program.</i></p> <p>Where is Section 3.5.1 and Section 0? Is this a typo?</p>
6	273	<p><i>Monitoring Program should detail the following: ...</i></p> <p>We think it would be useful to detail the impact/effect hypothesis being tested by each monitoring component, and therefore to be able to tie this back to the survey technique to ensure it is only monitored for the time it is required to prove or disprove the hypothesis. In this way a full feedback loop can be established to the EIA and ERA, allowing the monitoring to be adapted as required.</p>
6-7	288-294	<p>The types of environmental parameters that should be monitored as part of Exploitation applications in the Area are those studied during the baseline study, EIA and EIS phase, including:</p> <ul style="list-style-type: none"> • Physiochemical Environment; • Biological Environment; • Socioeconomic Environment. <p>A cross reference to ISA Guideline on Baseline Data Collection (and other relevant guideline documetations) would benefit the reader, as the above list is very broad.</p> <p>We feel it may be beneficial to highlight the results of the monitoring if applied at the concession scale, compared with those at a typical annual scale impact and perhaps draw the users to the use of a “type site” here – i.e. very detailed monitoring around a single operation that could be applied to wider impact regions or at the concession scale.</p>
7	298-300	<p><i>Non-significant environmental effects identified in the EIS will be monitored in accordance with Best Environmental Practices, consistent with Annex VII (2) (k) and regulation 48 (3) (c) of the Exploitation Regulations.</i></p> <p>(1) Is ‘non-significant environmental effects’ correct EIA terminology for the ISA EIA of deep sea mining projects, or is it ‘not significant? (2) Are potential non-significant and significant environmental effects treated differently, e.g., are to be monitored differently? (see no. 37 below for Significant effects and no. 38 for type of monitoring - Validation)</p>

7	302-305	<p><i>The specific details relating to each potential significant Environmental Effect will vary based on the planned activities, management objectives, character and magnitude of potential Environmental Effects, site characteristics, the techniques be used, and available equipment and resources (including financial and human).</i></p> <p>(1) Do not quite follow this. Assume meant: The specific details relating to the monitoring methodology for each identified potential significant Environmental Effect... (n/b sometimes capitals are used for Environmental Effects, sometimes all lower case).</p> <p>(2) And does this imply that that monitoring can be reduced if the resources are not available e.g., financial and human?</p>
7	327-332	<p>• <i>Long-term Monitoring: Monitoring of Environmental Effects must continue after completion of operations. This monitoring will be a continuation of some aspects of the compliance monitoring components, but likely with adjusted frequency and timescale. The details of long-term monitoring will be developed in accordance with the Closure Plan. Applicants and Contractors should refer to Standard and Guidelines on Closure Plans for further guidance.</i></p> <p>It would be useful to have sight of the Standard and Guidelines on Closure Plans before signing up to these.</p>
7	334-336	<p><i>The effort and resources allocated to monitoring different parameters should be proportionate to the importance of the predicted environmental impacts and effects (subject to complying with the overall objectives and requirements in the Exploitation Regulations)...</i></p> <p>Whilst we agree with the sentiment of this statement, it would be useful to understand how the relative importance, impact and uncertainty are judged against one another</p>
7	362	<p>• <i>An estimate of the anticipated annual cost of monitoring;</i></p> <p>This seems excessive and may be anti-competitive as prices can be fixed by suppliers if they know what is being charged. If publication of such information is required, we suggest that an “annual monitoring cost” or similar metric is recorded to prevent the detailed costs of individual components of the monitoring programme to be identified.</p>
8	372-378	<p><i>The adoption of consistent data collection methodology by Applicants/Contractors will enable the Authority to effectively manage the data and combine it to gain a ‘big picture’ understanding of mineral resources and the environments of the Area in the EMMP review and approval process. Applicants/Contractors may identify different/new Best Available Techniques for monitoring, if sufficient justification is provided. Not all sampling methodology is applicable to all resource types and should be evaluated by the Applicant/Contractor.</i></p> <p>Will the Authority confirm with Applicant/Contractor that not all sampling methodology is applicable to all resource types, or is this decision solely on the Applicant/Contractor? Also, will there be advice on how datasets should be compared or converted if alternative techniques have been used?</p>
9	386-387	<p><i>Monitoring associated with Exploitation in the Area should take place in multiple locations in the project area; including but not limited to:...</i></p>

		Should the monitoring stations align with the monitoring stations used for the baseline surveys?
10	440-441	<p><i>Contractors should be aware that these specifications may be revised by the Authority during the implementation of the EMMP, in the spirit of promoting continuous improvement.</i></p> <p>If the specifications of the Performance assessment are to be revised by the Authority, after an EMMP has been developed, can this be readily adapted by the Applicant/Contractor without any risk of adverse changes to conditions or monitoring?</p>
10	445-446	<p><i>Performance assessment criteria should take the form of environmental objectives and standards that are:...</i></p> <p>Paragraph 51 reads that the Applicant/Contractor is able to devise its own assessment criteria for the Performance Assessment – we therefore assume that expert advice is required to devise these, and that they will be required to be signed off by the ISA before implementation?</p>
10	455-456	<p><i>Performance criteria should include trigger values or conditions under which corrective actions are taken.</i></p> <p>How are trigger values set for the Performance Assessment, to then become a “Notifiable Event”? Again, we assume these are to be devised by the Contractor (with expert help) and agreed with the ISA before implementation?</p>
10	458-465	<p><i>Subject to section "Description of plan in respect of Notifiable Events" below, the EMMP should specify:</i></p> <ul style="list-style-type: none"> • <i>monitoring results which exceed the trigger values for corrective action;</i> • <i>how monitoring records will be maintained;</i> • <i>when follow up action is required;</i> • <i>potential corrective actions; and</i> • <i>procedures and timelines for reporting non-compliance to the Commission/Authority.</i> <p>How are trigger values set for the Performance Assessment, to then become a “Notifiable Event”? Again, we assume these are to be devised by the Contractor (with expert help) and agreed with the ISA before implementation?</p>
11	496-502	<p><i>The frequency of the performance assessment should be appropriate to the nature and scale of the impacts and risks of the activity, with consideration given to the level of confidence in the cause-effect relationship for each risk/impact. Where there is less confidence in the effectiveness of a control measure, it would be appropriate to implement more regular performance assessments. In the context of deep seabed mining, Contractors should plan to carry out performance assessments more regularly as control measures.</i></p> <p>Note – there are no guidelines provided as an example of the frequency that Performance Assessments should be carried out. Without these guidelines, it is difficult to assess the burden that these Performance Assessments will place on the Contractor, regulator or independent bodies.</p>
12	518-520	<i>Applicants should plan to for performance assessments to be carried out internally or by independent competent persons. If they are carried out internally, they</i>

		<p><i>should be done by Competent Persons.</i></p> <p>There is no definition of ‘Competent Persons’ provided in the specific context of performance assessments (as opposed to mineral resource) e.g. is there a minimum experience (years) or accreditation/certification required to undertake Performance Assessments? There should also be a cross reference to Paragraphs 76-79 where Competent Person is further referred to.</p>
12	524-527	<p><i>Annex VII requires that each EMMP include the location and planned monitoring and management of preservation reference zones and impact reference zones, or other spatial management planning tools. These zones and tools assist Contractors in monitoring and evaluating the impacts of deep seabed mining on the Marine Environment.</i></p> <p>We suggest the subdivision of impact zones into Primary Impact Reference Zones (PIRZ - those where extraction has taken place) and Secondary Impact Reference Zones (SIRZ – those where there are indirect impacts from the plume or noise).</p>
13	565-569	<p>There is no discussion of Invasive Non-Native Species (INNS) here. Whilst exchanged waters on the vessels will be controlled by international treaties, the waters within the mining equipment and mining equipment itself is unlikely to be covered by these. Therefore, we would suggest some wording here to ensure that equipment and riser systems are thoroughly cleaned before moving concession areas to prevent the distribution of INNS.</p>
16	675-679	<p><i>On a regular basis (monthly or quarterly), Contractors could provide monitoring reports including monitoring data, statistical analysis, test results and model validation, assessment of trends, and identification of areas for improvement. Contractors should also discuss with the Authority the provision of periodic reports on longer-term Environmental Effects (e.g. annually or post-survey, and every 5-year substantive review).</i></p> <p>We would suggest that extraction data and Electronic Monitoring Systems data are also included in all of these monitoring reports to show the extraction activity and the likely effects predicted from this activity.</p>
22		<p>Appendix A: Missing from the document.</p>
23		<p>Appendix B: We assume these Monitoring Criteria will be standardised for all developers? Human environmental monitoring is not included in this. Does that mean there is no requirement to monitor navigational issues or military activity for example? Furthermore, item 8 states that monitoring should continue for a “reasonable period after the activities in the mining area [have ceased]”. It is difficult to commit to this without knowing what that “reasonable period” is expected to be – although there should be a good idea about recovery from other relinquished zones before termination of the licence.</p>
<p><i>Additional rows can be added to this table by selecting “Table” followed by “insert” and “rows below”</i></p>		

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