



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 establishment of baseline environmental data |
| <i>Contact information</i> | |
| Surname: | Jacob |
| Given Name: | Peter |
| Government (if applicable): | |
| Organization (if applicable): | Nauru Ocean Resources Inc (NORI) |
| Country: | Nauru |
| E-mail: | peter@metals.co |
| <i>General Comments</i> | |

NORI appreciates the opportunity to comment on the draft guideline and thanks the Legal and Technical Commission for their efforts in drafting the guideline.

NORI notes that the level of detail and granularity within the guideline doesn't appear to be consistent. As a consequence, there are some parameters and processes that are very prescriptive, whereas others are less so. These Guidelines provide guidance based on knowledge available today and in order to allow applicants and contractors to incorporate best available techniques they must have the ability to adapt and NORI believes that too much prescription will reduce innovation, efficiencies and has the potential to delay the incorporation of new knowledge. NORI appreciates the need to balance the consistent collection of data but believes that can be managed with more flexibility.

NORI fully supports the primary goal as outlined within paragraph 5 (line 82-86) but would note that some of the of the studies and processes appear to exceed what is required to acquire the environmental baseline data required for an assessment and the development of monitoring and management plans.

NORI is concerned that even with the very best of intent, the full achievement of the described studies and techniques is unlikely due to them being overly complex and prescriptive. NORI believes that some of the detail is unnecessary and/or without contextual relationship with the project. Acknowledging that these proposed Guidelines are intended to apply to different projects in different areas, NORI suggest that it would be more appropriate for a contractor or applicant to develop a scoping report and TOR based on the Guidelines in collaboration with the Legal and Technical Commission. Once approved and agreed to, this TOR and scoping report would form the basis of the environmental baselines studies that need to be completed for the review of an application. This process is typically used in national jurisdictions and avoids the uncertainty about content during the progression of the studies.

NORI notes the Guidelines are recommendatory in nature and would like to seek clarity on the role of the Recommendations relating to assessment of the possible environmental impacts arising from exploration for marine minerals in the Area (ISBA/25/LTC/6/Rev.1) once this Guideline is adopted.

NORI and other contractors have developed scopes of work based on the existing Recommendations (ISBA/25/LTC/6/Rev.1. and ISBA/19/LTC/8) and notes that there are significant inconsistencies between the existing Recommendations and the proposed Guidelines.

NORI has used ISBA/25/LTC/6/Rev.1 and Corr.1. to develop a Terms of Reference and has executed a scope of work to develop a baseline for monitoring in accordance with these Recommendations. The Guidelines in their current form are an expansion of the Recommendations which now include a significantly higher expectation of spatial and temporal sampling and additional studies, often with no rationale or supporting citations (e.g. Line 167; Lines 376-381). Examples of additional studies include, for example, Radioisotope in seawater (Line 1246); dedicated marine mammal and seabird surveys (Lines 2208 and 2206).

In other cases, studies that NORI is pursuing (e.g. the midwater gelatinous plankton) based on the existing Recommendations are not mentioned specifically in the proposed Guidelines.

NORI believes that the Recommendations that were just adopted in 2020 and are being used by

contractors and applicants today are more concise, with fewer inconsistencies in the outline of the baseline data required to be collected.

NORI would like the Guidelines to include more of the rationale on what should be included and why, and less prescriptive detail on the methodology of how studies should be done. It is for the contractor and its experts to demonstrate competence to carry out the required tasks, and to provide the information required by ISA, using best practices and best available technology.

NORI would suggest that adopting Guidelines that have significant variance from the existing Recommendations will cause confusion and does not believe it is fair to ask contractors and applicants who have designed plans of work and have begun collecting baseline data based on the Recommendations to adapt their programs to align with the new Guidelines barely one year after they were adopted.

NORI would strongly recommend that where possible, the Guideline aligns itself with the existing Recommendations or acknowledges that programs of work designed based on the Recommendations will be accepted if contractors have already begun collecting their baseline data.

Specific Comments

| Page | Line | Comment |
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| 1 | 69 | NORI recommends adding the following sentences to paragraph 3: “An applicant or contractor can choose to acquire its environmental baseline data in ways other than is listed within these Guidelines. An applicant or contractor is encouraged to provide a rationale and explanation in these instances.” |
| 1 | 71 | NORI notes that Guidelines are said to “build” on the recommendations of ISBA/25/LTC/6/Rev.1 and Corr.1, whereas they differ in detail and content in ways near impossible to reconcile without some indication from the author(s) of the intent of the changes. NORI recommends that there needs to be greater alignment with the Recommendations or that the wording from the Recommendations is adopted into the Guidelines. |
| 4 | 82- 95 | <p>NORI fully supports the primary goal as outlined within paragraph 5 (line 82-86) but would note that some of the of the studies and processes appear to exceed what is required to acquire the environmental baseline data required for an assessment and the development of monitoring and management plans.</p> <p>NORI suggests that one way to mitigate this is to differentiate “baseline characterization” from “baseline monitoring”, where characterization has descriptive value but not necessarily important or appropriate for carrying through to monitoring, whereas baseline monitoring progresses through quantification of magnitude and temporal spatial variation and criteria etc. Calling everything ‘baseline’ can lead to much confusion when developing the monitoring program.</p> <p>Some examples of ‘characterization’ (as well as excessive detail) would apply to high resolution of water sampling in the upper 200 m (lines 179-184), optical properties in the upper water levels (lines 528 to 551), isotope tracers (lines 1242 - 1286), and dedicated seabird studies, for which observational evidence to date from the NORI area would suggests such expansion of study unnecessary.</p> |
| 5 | 122 | This is the first introduction to the terms IRZs and PRZs in this document. No clear |

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| | | definition of these terms is provided or their context in terms of collecting baseline data. NORI recommends that a definition is included. |
| 7 | 167 | NORI questions why the Guidelines suggest that observations should be carried over at least in three different years? There is no scientific reference cited. NORI would recommend that without a scientific basis for suggesting three years, that the baseline data at EIS submission should provide sufficient characterization and quantification to inform decision-making, and can be completed (as part of the EMMP) prior to any commencement of operations. This will allow for the additional data collection if required to ensure appropriate temporal variability and statistical power. |
| 7 | 179-194 | NORI believes that this section is overly prescriptive and the level of detail is not consistent with rest of the guidelines. NORI recommends the removal this section and suggests the sampling details provided in the subsequent sections of the Guidelines provide sufficient detail and are more relevant. |
| 8 | 208 | NORI would like to reiterate its recommendation that these Guidelines be aligned with ISBA/25/LTC/6/Rev.1 and Corr.1 to avoid confusion or gaps as noted in this line. |
| 9 | 281-284 | NORI recommends adding the following sentence to the end of paragraph 33: <i>The sampling effort and levels of detection of statistical change should be focused on those environmental values for which the magnitude and extent of impacts predicted from the risk assessment process are indicative of serious harm.</i> |
| 11 | 335 | There is overlap, duplication and inconsistency between the Physical Oceanography Section IV (from line 335) and the Chemical Oceanography and Bio geochemistry section V, (starting Line 671), particularly in relation to the types and usages of CTD and ADCP equipment, and parameters in common such as DO. NORO would recommend using language from Recommendations - ISBA/25/LTC/6/Rev.1 and Corr.1. |
| 12 | 376 - 381 | The proposed 50 km grid pattern (and 10-30 km in some areas) does not have any scientific evidence cited for this suggested distance. NORI's data to date does not seem to support that this level of sampling is required. NORI suggests that the spatial array of moorings should be determined primarily by the data required for modeling. NORI recommends the following sentence replace line 167: <i>"Observations in similar seasons or environmental conditions should be conducted to assess interannual variability and increase the chance to capture periodic events."</i> |
| 12 | 391-394 | NORI would suggest that the emphasis should be on collecting diurnal variability and the contractor should be able to propose how to do it |
| 12 | 395-404 | NORI believes that this section is unnecessarily prescriptive. The focus should be on what is required versus being so prescriptive. |
| 12-13 | 405-409 | The Guidance wording in this section is unclear. Is the intention to suggest that there should be two mounted ADCP's on one ship? NORI requests clarity is provided. |
| 13 | 410-420 | NORI notes that this section appears to be repetitive and not consistent. Please see comment for lines 376-381 |
| 13-14 | 421-526 | NORI would recommend that this section is moved to annex – while it can be useful to include suggestions such as these, NORI believes that they are better served in an annex. |
| 17 | 577- | NORI suggests that the purpose of measuring noise is not just to measure natural |

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| | 587 | background but also sources of project-related noise (e.g., such as the riser) and potential impacts, e.g., on cetaceans. |
| 17-18 | 595-636 | NORI notes the inconsistencies between the data quality section (P30 to 38), and here for data quality (P92-103). Is it possible to consider the inclusion of all data quality details within one section for the whole document vs each section having its own data quality section, with its different styles and wording? |
| 26-27 | 984-1085 | The methodology presented here suggests following detailed literature. As noted previously, overly prescriptive guidance will require regular revision of the guidelines whenever revisions to best practices arise and makes adapting to changes in best practices more difficult. |
| 32 | 1246 | NORI notes that P179 Introduces new studies that were not part of the ISBA/25/LTC/6/Rev.1 and Corr.1. recommendations. NORI would reiterate its points above about changes from the Recommendations and seek clarity on the rationale for the differences. |
| 40 | 1571-1575 | NORI believes that this section is overly prescriptive. |
| 40 | 1576 | This appears to contradict the guidance provided in Fig.1 . |
| 41 | 1596 | NORI notes that there is no mention of the Underwater Video Profiler that was previously suggested in L1549 as a method for sampling beyond 1000m. NORI also notes that gelatinous zooplankton are not mentioned in these guidelines, but were a component of the ISBA/25/LTC/6/Rev.1 and Corr.1. recommendations and are included in NORI's TOR and scope of work. |
| 43 | 1676-1741 | NORI notes the inconsistent level of detail on how to conduct benthic image operations vs the methods for the videography for pelagic component methodology in L1549. |
| 44 | 1755 | L1755: Recommends 0-3cm, 3-5cm and 5-10cm horizons for macrofauna L185: Recommends 0-0.5cm, 0.5-1cm, every centimetre down to 10cm, every 2cm from 10 to 20cm depth or down to the sediment depth ISBA/25/LTC/6/Rev.1 and Corr.1. recommendations depths: 0–1, 1–5, 5–10 cm for Macrofauna. Such variation and inconsistency within and between guidelines and recommendations will inevitably lead to confusion for contractors and will cause issues with comparable datasets from REMPS. As above NORI recommends consistency between the Recommendations and the Guidelines. |
| | | Another example of the lack of consistency between the Recommendations and the Guideline is that there is no mention of the use of eDNA to assist in establishing a baseline for any of the eukaryote groups – these were suggested as an option in the ISBA/25/LTC/6/Rev.1 and Corr.1. recommendations and as a recognized tool for biodiversity monitoring through use of metagenomic or amplicon sequencing approaches. |
| 51 | 2012 | NORI notes the prescriptive detail on the specific metrics to be included for |

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| | | connectivity studies which is not consistent with the level of detail provided for other studies. |
| 54 | 2149-2202 | Given the absence of any processing and impacts predominantly from de-watering and seafloor sediment disturbance, NORI suggests initial toxicity characteristic range-finding studies from nodule samples and sediments should be used to guide further ecotoxicity studies, before committing to the full hierarchy of studies encompassed in lines 2149 to 2202. |
| 55 | 2208 | The introduction of dedicated ship-borne marine mammal, shark and turtle surveys should be based on a risk assessment informed by all the observational data from campaigns completed to date, supplemented by PAM. |
| 55 | 2216 - 2270 | Introduction of dedicated ship-borne bird surveys should be based on a risk assessment informed by all the observational data from campaigns completed to date, |
| <i>Additional rows can be added to this table by selecting "Table" followed by "insert" and "rows below"</i> | | |

Comments should be sent by e-mail to ola@isa.org.im

Team, here is the feedback Nauru received today from States:

- Fiji – appreciated the notification and said that their position is that they support a moratorium in their waters – this is very confusing as they have active exploration contracts within their waters and there was an article in the Fiji media quoting government officials touting the recent progress on exploration in their waters. This confirms, what we have known, there is confusion within Fiji on this issue
- Costa Rica – Gina said she would have supported