



## **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.jm](mailto:ola@isa.org.jm), 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](mailto: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>		
<b>Title of the draft being reviewed:</b>	Draft Guidelines for the Establishment of Baseline Environmental Data	
<i>Contact information</i>		
<b>Surname:</b>	Danovaro	
<b>Given Name:</b>	Roberto	
<b>Government (if applicable):</b>		
<b>Organization (if applicable):</b>	Danovaro R, Fanelli E, Aguzzi J, Billett D, Carugati L, Corinaldesi C, Dell'Anno A, Gjerde K, Jamieson AJ, Kark S, McClain C, Levin L, Levin N, Ramirez-Llodra E, Ruhl E, Smith CR, Snelgrove PVR, Thomsen L, Van Dover CL and Yasuhara M (2020) Ecological variables for developing a global deep-ocean monitoring and conservation strategy. Nature Ecology & Evolution 4, 181-192	
<b>Country:</b>	Italy	
<b>E-mail:</b>	r.danovaro@univpm.it	
<i>General Comments</i>		
<i>Specific Comments</i>		
Page	Line	Comment
19	671	Add the following sentence: The introduction should stress the importance of the analysis of seascapes to assess changes after the mining activities based on habitat mapping approaches and georeferenced photomosaic compositions using high-resolution multi-beam bathymetry (TRL 9) and laser scanning (TRL 7).
41	1604	Add the following sentence: Classifying and quantifying species of macro- and meso-zooplankton can be carried out using by HD video and active acoustic imaging (that is, multi-beam cameras) and photomultipliers for bioluminescence (TRL 9), HD and acoustic imaging, photomultipliers (TRL8) and bioacoustic sonars. For community composition is important computing species distribution and assemblage structure per sampling zone and summing up the data for the whole area using HD and acoustic imaging (TRL 9). Complementary data could be obtained from the eDNA (DNA in situ sequencers, TRL 2), (Danovaro et al. 2020).

43	1682	<p>Add the following sentence:  Classifying and quantifying species of macro- and megafauna can be carried out with HD video and active acoustic imaging (that is, multi-beam cameras) TRL 9 (HD and acoustic imaging). For community composition is important computing species distribution and assemblage structure per sampling zone and summing up the data for the whole area TRL 9 (HD and acoustic imaging). Complementary data could be obtained from the eDNA (DNA in situ sequencers, TRL 2), (Danovaro et al. 2020).</p>
53	2147	<p>Add the following sentence:  To assess the trophic structure is also important classifying and quantifying feeding-oriented interactions (that is, listing food items for trophic niche characterization), combining the use of direct ethological observations as well as statistical proxies (that is, via recurrent species spatiotemporal co-presence). The food web architecture could be then inferred by joining together trophic niche data for all species using bio-acoustic sonars (TRL 8), in-sediments HD imaging (TRL 3), and geosonars (TRL 2). For ecosystem functions, also benthic faunal biomass could be estimated using biovolume (for example, class size frequencies from individuals' body lengths) towards bio-acoustic sonars (TRL 8) and geosonars (TRL 2), (Danovaro et al. 2020).</p>
<p>Danovaro R, Fanelli E, Aguzzi J, Billett D, Carugati L, Corinaldesi C, Dell'Anno A, Gjerde K, Jamieson AJ, Kark S, McClain C, Levin L, Levin N, Ramirez-Llodra E, Ruhl E, Smith CR, Snelgrove PVR, Thomsen L, Van Dover CL and Yasuhara M (2020) Ecological variables for developing a global deep-ocean monitoring and conservation strategy. <i>Nature Ecology &amp; Evolution</i> 4, 181-192</p>		

*Comments should be sent by e-mail to [ola@isa.org.im](mailto:ola@isa.org.im)*