International Seabed Authority 14-20 Port Royal Street Kingston Jamaica

Potsdam, 24 June 2021

To: ola@isa.org.jm

IASS Comments on the Draft Guidelines on tools and techniques for hazard identification and risk assessments

Dear Madam/Sir,

The Institute for Advanced Sustainability Studies (IASS), which has had observer status at the Authority since 2017, is pleased to provide comments, as annexed to this cover letter, on the *Draft Guidelines on tools and techniques for hazard identification and risk assessments*, open for public consultation until 3 July 2021 (https://isa.org.jm/mining-code/standards-and-guidelines).

We provide express consent for this document to be uploaded to the Authority's website and for wider dissemination. The following persons have contributed to this document: Dr Sabine Christiansen, Pradeep Singh, Dr Aline Jaeckel, and Dr Sebastian Unger.

If you have any questions, kindly contact us at Sebastian.Unger@iass-potsdam.de. We thank you for your kind attention.

Yours sincerely,

Sebastian Unger

Lead, Ocean Governance Research Group

Institute for Advanced Sustainability Studies e.V. (IASS)

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TEMPLATE FOR COMMENTS

Document reviewed		
Title of the draft	Draft Guidelines on tools and techniques for hazard identification and risk	
being reviewed:	assessments	
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General Comments		

The stated **purpose of the Guideline** is inconsistent with UNCLOS and the draft exploitation regulations: '*Hazard identification and risk assessment activities should reduce the risk of Incidents and impacts of exploitation on the marine environment as much as reasonably practicable.*' (emphasis added)

While this aim might be appropriate for reducing the risk of accidents/**incidents** (see draft regulation 32), it is unsuitable for reducing the **routine impacts** of mining, including pollution from plumes etc.

UNCLOS unambiguously requires '*necessary measures*' for the '*effective protection for the marine environment*' (Art. 145), without limiting such measures to those that are '*reasonably practicable*.' Put differently, UNCLOS does not allow harm to the environment beyond a certain cost-threshold.

The Guidelines for hazard identification and risk assessment seem to conflate the framework needed for risks expected from routine exploitation activities and risks from accidents/incidents.

The current draft guidelines seem to focus on risks to health and safety and omit other risk categories, such as **environmental, socio-economic, and cultural risks**.

The submission of a **Closure Plan** to the ISA only twelve months prior to the planned end of production appears inappropriate (page 6, table). Instead, the Closure Plan (including financial preparations for post-closure monitoring) should be part of the mining application to ensure proper response to all impacts by the project.

How does one account for **uncertainty** (p. 13) when almost every factor regarding the environmental effects of seabed mining is uncertain. For example, it is currently completely unclear which concentration of heavy metals would be tolerable and what their effects under extreme pressure may be. For heavy metal immissions, as for many other factors, there are no known safe limits for the few described deep sea species, let alone the many undescribed species, due to a near complete lack of any information on their physiology and ecology.

Specific Comments		
Page	Line	Comment
3	138	The Guideline conflates routine risks from mining with those from accidents. Line 138 claims that risk assessment attempts to answer the question: 'What can go wrong?'. This applies to accidents/incidents but is not suitable for impacts of routing mining where the environmental risks arise not just when something goes wrong but indeed primarily arise from routine and "successful" mining operations.
7	251	 The example hazard categories listed should also include: Ecosystem issues: habitat removal or destruction sediment plume effects on the seafloor and water column crushing of organisms by mining vehicles Pollution Tailings Climatic and natural events: ocean acidification and other effects of climate change Socioeconomic issues: uses of the ocean by traditional owners and indigenous communities cultural significance of ocean spaces by local and indigenous communities
11	405-408	Suggest adding: where historical data are not available, the assessment must err on the side of caution, in line with the precautionary principle. The same applies to the consequence assessment (page 12).
15	550	The definition of cumulative risks is incomplete. It should not be limited to mining impacts but instead include other activities and processes, such as fishing, submarine cables, climate change etc. Otherwise, the risk assessment only assesses a part of the actual risks faced by the ecosystems in question. As the Preamble of UNCLOS recognises: <i>'the problems of ocean space are closely interrelated and need to be considered as a whole.'</i>
20	767	'Design the risk management program to reduce the risk of Incidents as much as reasonably practicable, to the point where the cost of further risk reduction would be grossly disproportionate to the benefits of such reduction, taking into account the relevant guidelines.' This focus on cost-benefit is not appropriate for environmental protection measures. UNCLOS requires 'necessary measures' for the 'effective protection for the marine environment' (Art. 145) and does not limit these to cost-effective measures. Suggest to delete paragraph 77(2) or to replace it with text that reflects Article 145 of UNCLOS.

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