3 July 2021

Comments by the Federal Republic of Germany on the following draft standards and guidelines:

1) **Draft Guidelines for the establishment of baseline environmental data**
2) **Draft Standard and Guidelines for environmental impact assessment process**
3) **Draft Guidelines for the preparation of an environmental impact statement**
4) **Draft Guidelines for the preparation of environmental management and monitoring plans**
5) **Draft guidelines on tools and techniques for hazard identification and risk assessment**
6) **Draft standard and guidelines for the preparation and implementation of emergency response and contingency plans**
7) **Draft standard and guidelines for the safe management and operation of mining vessels and installations**

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Overarching comments for all drafts submitted
With reference to the decision taken by the ISA Council during the second part of the 25th annual session, stating that "the necessary standards and guidelines should be developed before the adoption of the regulations" (ISBA/25/C/37), Germany would like to highlight that the Council has yet to consider (on the basis of the recommendations by the Commission in ISBA/25/C/19/Add1) and finally decide which standards are most "necessary" to be developed. Even though it is acknowledged that sufficient room must be left for adaptive management, any normative requirements of these instruments need to be binding and should therefore be agreed by the Council in the form of 'standards'. As part of an environmental regulatory framework and in line with draft regulation 45, Germany considers the following categories are to be developed as binding standards and adopted by the Council, e.g. as part of the requirements for the EIA/EIS and the EMMP: - Environmental quality objectives, including threshold values on plume density and extent, sedimentation rates of mining-related suspended sediments, and on biodiversity status such as ecosystem functioning and faunal indicators of environmental change;

- Specific monitoring requirements (i.e., how an effective monitoring should be established – inter alia containing requirements on frequency, spatial distribution, sampling methods, independent observers).
Germany notes that all seven draft standards/guidelines submitted are primarily formulated as process-oriented instructions. None of the so far considered standards or guidelines contain normative requirements, e.g. in the form of binding threshold values. Germany regards the latter as a prerequisite for establishing an effective environmental protection regime in the permitting process and therefore believes that they should constitute the core of environmental standards in the future mining code.
It appears that clarity is needed with regard to the relationship between the EMS, EMMP and EIA/EIS and the related standards/guidelines.
The exploitation regulations are still in the drafting stage. Therefore, if any regulatory instruments or concepts in the draft regulations are amended, the respective standards/guidelines may need to be adapted accordingly. The relationship of the standards and guidelines to the draft exploitation regulations needs to be clarified – with regard to both terminology and interplay. This includes adequate review and decision-making processes for the Scoping Report, EIS, and EMMP. Clear procedures and responsibilities are fundamental to ensuring effective protection of the marine environment and should be considered further in the development of the draft regulations.
It needs to be considered that the current draft regulations already contain requirements for EIA/EIS and EMMP and others in their Annexes – any inconsistencies with these should be avoided.
Regarding the draft standards/guidelines submitted we suggest that the process would benefit from increased transparency. E.g., it would be helpful to know how and which experts have been selected for this development. In view of the high workload of the LTC, support from experts on standard setting from the Authority's member States would have been regarded as helpful. We thus request that member states be invited to nominate experts for future working groups of the LTC. This would also be sensitive and appropriate as the S+G entail normative decisions and will constitute the operational supplement to the Draft Exploitation Regulations. The Standards and Guidelines are of eminent importance with regard to the de facto level of the protection of the marine environment. We had already pointed this out in our note in October 2020 but have yet to notice any changes in working modalities.
Germany would like to emphasise that the draft environmental standards and guidelines submitted are of key importance as they determine the level of protection that needs to be complied with when conducting activities in the Area. As a precaution, we here highlight our understanding that these standards and guidelines are of a substantial nature and cannot be regarded as "matters of procedural nature" pursuant to the letter of the Council's President on

the use of the silence procedure of 21 September 2020[1]. Thus, these draft standards and guidelines need to be fully considered and extensively discussed by the Council at the next physical meeting and should not be approved via written procedure.
In addition to our comments included here, we refer to our written submission of 15 October 2019 (Comments on the Draft Regulations on Exploitation of Mineral Resources in the Area (ISBA/25/C/WP.1).

[1] https://isa.org.jm/files/files/documents/letter%20concerning%20election%20of%20president_Council.pdf

Document reviewed (1)	
Title of the draft being reviewed:	**Draft Guidelines for the establishment of baseline environmental data**

General Comments
The catalogue of environmental parameters to be measured is well thought out and covers most of the necessary categories. The information on sampling and measurement methodology is helpful and important to ensure consistent processing by the different contractors; however more specific sampling methodologies will need to be included. Furthermore, the "draft Guidelines for the establishment of baseline environmental data" so far provide only methodologies to *acquire* baseline data, but lack the minimum requirements for the *establishment* of baselines themselves, against which the impacts on the marine environment caused by activities can be evaluated as a part of an EIA.
The draft necessarily focuses on sampling work that must be done during the exploration phase, as the baseline must be established by the time a contractor applies for an exploitation contract. As such, it is unclear how the draft Guidelines relate to the existing "Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area" (ISBA/25/LTC/6/Rev.1+Corr.1). The latter provide guidance to contractors on issues such as species-specificity and minimum standards for the sampling distribution over space and time. These and other key requirements are either not mentioned or not clearly spelled out in the draft Guidelines.
The draft is not sufficiently specific in several key areas. For example, for the pelagic part of the ecosystem, sampling methodologies and a sampling design are missing. Furthermore, the existing guidance for contractors developed for the exploration phase, as cited in our comment above, provides more detailed guidance and it needs to be clarified how this relates to the present draft document.
The draft is not considered fit for purpose/adoption yet and needs substantial further development.

Specific Comments		
Page	**Line**	**Comment**
4	89	"Good Industrial Practice" is relatively meaningless in a frontier industry. Given that these Guidelines focus on baselines, it might be appropriate to refer instead to "Best environmental practice" or "Good scientific practice", or similar.
4	93	*"Scope, coverage and standard of baseline data needed to characterize the physical, chemical, geological as well as sediment properties and biological communities in the Area."*

		We suggest replacing “Area” with “Marine Environment” or “impact zone” which must include the water column. “Area” is legally defined as “the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction.” (UNCLOS, article 1(1)(1)) Much of the environmental impacts of DSM will be in the water column rather than the seabed and subsoil and the ISA is legally required to protect *all* areas of the marine environment from harmful effects of DSM. (UNCLOS, articles 145, 192). Limiting baselines to the seabed and subsoil would not be in accordance with UNCLOS.
56	2233-2256	The study of contaminant loads of (migratory) birds or of population changes in breeding colonies at a distance of hundreds to thousands of kilometres from the mine site is not helpful.
56	2258-2261	To utilize apex predators (seabirds, cetaceans and the like) as indicator species, trained MMOs (marine mammal observers) and the appropriate methodology will have to be employed (as also suggested in lines 2204-2212 of the draft guideline). Recording chance sightings (as required in para. 51 of ISBA/25/LTC/6/Rev.1 + Corr.1) will not suffice when one wants to obtain useful data on the abundance and distribution of seabirds, cetaceans and the like.

Document reviewed (2)	
Title of the draft being reviewed:	**Draft Standard and Guidelines for environmental impact assessment process**
General Comments	
Germany regards the draft Standard/Guidelines document for the EIA process as a good initial basis for further discussion.	
The draft EIA Standard and Guidelines fail to set clear and measurable requirements for contractors, as recommended in the Article 154 review. Assessment criteria including quantitative environmental thresholds (e.g. for harmful effects) are a key basis for any future environmental impact assessments before granting a mining permit. However, such thresholds are entirely missing in the current draft. Examples for criteria where threshold values are to be developed are impacted seabed habitat area, sediment plume density and extent (operational plume at the seafloor; discharge plume at mid-water depths or deeper) and sedimentation rates of mining-related suspended sediments.	
The current draft merely contains requirements to be addressed descriptively by the contractor and lack specific and normative requirements. For example, in the draft it is required to report on potential impacts, but no standard against which the impact can be assessed is provided (see lines 709-711: “In the EIS, report the nature and extent of potential impacts, residual effects and mitigation measures, to allow the Authority to make a decision regarding approval of the proposed mining project, and to develop suitable requirements to attach to any such approval”).	
We should discuss whether it is helpful to develop separate Standards/Guidelines for the EIA and the EIS.	
The Guideline suggests both restoration and biodiversity offsets as relevant to the seabed mining context, despite the fact that restoration is poorly studied at present. Offsets, if at all possible, should only be considered as an additional mechanism and must not substitute any management/mitigation requirements.	
The EIA Standards and Guidelines do not prepare for the internationally applied BACI design (Before-After-Control-Impact) which measures impacts before and after an activity and reflects best practice. Instead, the draft Guidelines focus primarily on the risk assessment before the mining and thus do not include any obligation for the quantification of actual impacts. As such, it would be of little help in addressing accidental, cumulative or unforeseen impacts. Ideally, the draft Standard/Guidelines should prepare for an independent impact review at specific intervals during mining using verifiable monitoring data from the IRZ and PRZ and compare them to each other and to the baseline information. The outcome of this comparison allows for the quantification of mining impacts on the environment and possibly for the immediate issue of obligations to mitigate certain damages or to avoid them altogether.	

The EIA Standards and Guidelines were developed by working groups of LTC members, independent experts, and contractor representatives. In contrast, member states of the ISA have not been involved in the drafting of these key documents. This arguably undermines the procedural integrity of the ISA's Standards and Guidelines.		
The draft, although providing a good basis for further discussion, is not considered fit for purpose/adoption yet and needs substantial further development.		
Specific Comments on EIA <u>Standards</u>		
Page	**Line**	**Comment**
1	21	The EIA Standard and Guideline only focus on the exploitation phase. Are separate S&Gs envisaged for EIAs conducted during the exploration phase?
1	40-49	An additional aim of the Standard for EIAs should be to meet the ISA's strategic environmental goals and objectives, which need to be incorporated in the draft regulations and broken down into measurable goals, objectives, targets, thresholds, indicators. This will be necessary to define 'serious harm' and to provide clarity to applicants, the LTC, and states as to how environmental protection is to be balanced with mining operations.
3	87-94	An EIA should also be expressly required when any Material Change to a Plan of Works is proposed.
3	101-125	The section about the Scoping Report should entail an explicit requirement for an applicant or Contractor to produce a Scoping Report. The Scoping Report should outline all aspects to be addressed by the EIA/EIS. The Standards should clearly state that it is compulsory for a Scoping Report to be subject to public comments (as indicated in the EIA Guidelines).
3	108	Considering alternatives is key during EIAs to enable the ISA to determine the least harmful option. Alternatives should include a "no action" option.
3	119	Identifying uncertainties is key during an EIA. The Standard should require a Scoping Report identifying uncertainties and proposals for how to respond to them.
4	133	We suggest rephrasing '*development of mitigation'* to '*inform avoidance and minimisation measures to limit unavoidable impacts'.* This recognises the difficulty of offsetting in deep-sea environments and clearly sets the first two stages of the mitigation hierarchy (avoidance and minimisation) as the necessary focus for impact management (see further comments below on the mitigation hierarchy).

		This section should also reference the precautionary principle and how this has been applied in assessment of avoidance and minimisation.
5	176	Monitoring of impacts is crucial and should not be left solely to the contractor. An independent monitoring programme is needed and should be supervised by the ISA using its powers under UNCLOS, art 165(2)(h). Germany already made the proposal in autumn 2019 to amend Draft Exploitation Regulation 48 accordingly that the monitoring should be conducted by independent experts during at least the first seven years. Engagement with sponsoring states is possible here. See UNCLOS, article 204, requiring state to '*keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment*.'
13-15	Table 1	As Table 1 (pp. 13-15) demonstrates, an EIA requires judgment calls (here called "consequence levels") that have yet to be set. Given that these include not only scientific considerations but also value judgments and political decisions about how much harm to the common heritage is deemed "acceptable", the LTC or the Secretariat will not be the appropriate organs to make these decisions.
31	1066	Restoration techniques for the deep seabed are not yet available and are unlikely to be achieved "*on timescales relevant to management and possibly for many human generations"* (See Niner et al, 'Deep-Sea Mining With No Net Loss of Biodiversity—An Impossible Aim' (2018) 5 Frontiers in Marine Science 53 http://journal.frontiersin.org/article/10.3389/fmars.2018.00053/full . Accordingly, this should promote further exploration of the first two steps of the mitigation hierarchy: avoidance and minimisation.
30	1042-1044	Offsetting be kept as an option in the "mitigation hierarchy"; however it should not be regarded as a substitute for appropriate management/mitigation measures. We suggest that the issue of offsetting in the seabed mining context requires further discussion by the LTC and the Council.
32	1080-1083	The definition of offset in para 94 does not reflect scientific consensus. The term "biodiversity offset" is frequently misapplied and misused. True offsets require new and additional benefits and "measurable and commensurate gains" (See Bull et al (2016). Seeking convergence on key concepts in no net loss policy. J. Appl. Ecol. 53, 1686–1693. doi: 10.1111/1365-2664.12726)
35	1209-1212	Para 112: We suggest adding that stakeholder consultation also means providing feedback about the extent to which stakeholder comments were implemented and reasons for accepting/rejecting them. This will enable the

		Commission and Council to make an informed decision about an EIA. We cannot expect Council members to read all stakeholder comments and check whether they have been adopted.

Document reviewed (3)	
Title of the draft being reviewed:	**Draft Guidelines for the preparation of an environmental impact statement**

General Comments
The EIS Guidelines do not contain any specific environmental standards/threshold values (see our comments on the EIA standard/guideline above).
The information required for the EIS should be directly based on and linked to the requirements as contained in the binding EIA standard (see above). The EIS requirements may be developed as guidance as suggested in the present draft; however, this would require that the EIS template remains a part of the binding exploitation regulations document.
The EIS should have a dedicated section that clearly outlines whether the proposed mineral exploitation could affect marine protected areas or special conservation areas designated by any competent organisation, including Ecologically and Biologically Sensitive Areas (EBSAs) and vulnerable marine ecosystems.
The draft is not considered fit for purpose/adoption yet and needs substantial further development.

Specific Comments		
Page	**Line**	**Comment**
2	103	Suggest deleting the following: The EIS template …. '*recognizes that details of methodology or thresholds are likely to be resource- and project-specific*'. This sentence is superfluous and presupposes the outcomes of ongoing discussions around who should set environmental thresholds and when. There is a strong argument to be made for thresholds to be region- and resource-specific but not project-specific. In any event, the Guidelines should not pre-empt these discussions.
6	244	Suggest adding the following international agreements: - Convention on Biological Diversity - 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter
10	421	Suggest adding the following wording: "The Contractor should provide a comprehensive list of known and newly-described species in and around the proposed Contract Area as possible.", since a list of approx. 10% of species (i.e., the proportion probably known to science) could hardly be called comprehensive.

Document reviewed (4)	
Title of the draft being reviewed:	**Draft Guidelines for the preparation of environmental management and monitoring plans**

General Comments
Germany regards the development of an elaborated EMMP as a key task for contractors in order to guarantee an effective protection of the marine environment during its mining operation and will represent a key pillar of the future mining code. It should therefore represent a binding Standard and not a Guideline.
Draft regulation 11 requires all Environmental Plans to be subject to public review. We therefore suggest adding a stakeholder review into the Guideline.
The Guideline supports adaptive management without setting clear limits and rules for which aspects and under which conditions adaptive management is appropriate and when it would lead to a watering down of environmental protection. The contracts need to entail clear stipulations on the scope of potential adaptive management measures by the contractors.
The EMMP standard should contain normative requirements for the contractor to be fulfilled as a basis for the mining permit. These should include a detailed requirement for the establishment of non-mining areas in the form of *long-term protected areas* on different geographical scales (larger areas representative of the contract area as well as small-scale areas resulting from the specific mining pattern applied. Furthermore, the standard on EMMP should provide specific information on how to mitigate and monitor every category of potential impacts, including monitoring extent, frequencies, sampling methodologies.
It is so far not clear that the monitoring and management measures required to be included in the EMMP must reflect the requirements and determinations of the relevant Regional Environmental Management Plan (REMP). Reference to the relevant REMPs in the Guidelines is insufficient.
The draft is not considered fit for purpose/adoption yet and needs substantial further development.

Specific Comments		
Page	**Line**	**Comment**
1	59	Cumulative effects should be defined to include not only cumulative effects from other mining impacts but also other human impacts on the ocean, e.g. fishing, cables, climate change.
1	62	The scope of the EMMP is too narrow. It should include details for

		monitoring the environmental effects of mining, not only the effectiveness of mitigation measures.
6	273-284	The monitoring programme should also mention a minimum number and operational duration of the monitoring stations as well as statistical robustness. At present, only general considerations are requested (para.82, under "Additional considerations") and statistical power has to be "considered" only in IRZ and PRZ monitoring (in Annex B).
7	302	"*37. 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 to be used, and available equipment and resources (including financial and human)~~.* Suggest adding the following sentence: "Any variance in specific details relating to each potential significant Environmental Effect should not be due to a difference in effort, such as the techniques used, available equipment or other resources (including financial and human)."
7	317 327	Compliance monitoring (para. 37): To provide a level playing field, all compliance monitoring should be conducted periodically with the same timing for all projects to ensure that the prescribed mitigation measures are effective in reducing the residual impacts to acceptable levels. Long-term monitoring: The details of long-term monitoring (para. 38) may be developed in accordance with the Closure Plan, but their time-scale beyond the closure of the mine has to be determined by the presence of statistically significant differences between IRZ and PRZ due to environmental impacts of mining activities (e.g. to allow for final estimation of reparations by the contractor). Furthermore, the "Standard and Guidelines on Closure Plans" appear to be still outstanding.
8	347	Paragraph 41 should require the collection and storage of samples (as required during exploration monitoring, for example) for future and external studies.
9	389	Monitoring should focus not only on evaluating the characteristics of the plumes but also on their effects on the marine environment.
9	398	Performance assessment should be conducted independently, not by the contractor.
10	455-461	Where can the "trigger values for corrective action" (mentioned in paras 52+53) be found?

11	493-502	Suggest to add a more specific guideline for the frequency of performance assessments. A rigorous schedule of performance assessments should not depend on "*the nature and scale of the impacts and risks 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*" but instead apply to all mining projects in the same way to provide a level playing field for all contractors. These performance assessments should take place every 3-5 years by an independent assessor.
11	506	Do non-scheduled performance assessments (para. 59) make sense when they are based entirely on information provided by the contractor?
12	524	The prescription to the area-based management tools that are key to environmental impact assessment and to contractor performance assessment (para. 61) appears to be rather wanting and falling short of all cardinal information, e.g. how the contractor is to fit IRZ and PRZ into the highly fragmented claim areas for massive sulphides (PMS) and cobalt crusts (CRC).
12 14	532 543 581	The section on mining discharges (paras 63-71) should clearly prohibit the dumping of chemical additives. The Mining Discharge Guideline appears to be still outstanding. Unclear which "Guideline 5" is referenced in para. 68.

Document reviewed (5)	
Title of the draft being reviewed:	**Draft guidelines on tools and techniques for hazard identification and risk assessment**

General Comments
The purpose of this document is to ensure that adequate methods are used to identify and assess risks associated with seabed mining projects. The area of application outlined (see: lines 194 ff.) is very broad, so that practical application remains imprecise. Furthermore, it seems to be more an academic background paper rather than a technical guideline, and the relationship of this Guideline to the Draft Regulations and the other Standards and Guidelines is not really clarified. For example, the paper mentions the need for a public participation process without determining how this should fit in the procedures required by the Draft Regulations. Both general planning risks and specific operational risks are addressed. The application of the same principles of risk assessment to all project stages creates uncertainty, as it may be the case that risks which have already been identified for a project will be reassessed when evaluating sub-projects. To avoid multiple iteration of risks assessment at different project stages it is recommended to establish principles which ensure that risk identification takes place only for those risks that are relevant for the present project stage. The Guidelines for hazard identification and risk assessment conflates routine risks from mining with those from accidents/incidents. It is our strong view that the present guideline should focus on the latter.
Another aspect is the failure to name the addressee and examiner of the methodology proposed. There is no clear regulation for assessing the completeness of a risk assessment, whether this should be done by the supervisory authorities of the respective national state or by the supervisory authorities of the ISA that still need to be created. Accordingly, it is unclear in which way and by which institution the completeness of the risk assessment shall be checked. Clear rules governing who is the addressee of this document and which institution carries out the check would be useful.

Specific Comments		
Page	**Line**	**Comment**
2	96	The document almost exclusively addresses the "Exploitation Regulations" (e.g. line 115, 230 and 253). However, in line 96, the "Exploration Regulations" are mentioned once. A uniform presentation across the entire document and in the other existing documents would be useful.
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 routine 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 - 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 to local and indigenous communities
15	550	The definition of cumulative risks is incomplete. It should not be limited to mining impacts but should instead include other human activities and pressures, such as fishing, sub-marine 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 recognizes: '*the problems of ocean space are closely interrelated and need to be considered as a whole.'*
18	639	A differentiation of the review period with regard to the approval period does not make sense. A uniform regulation with a review period at least of <u>two</u> years for all projects would be practicable.
19	687	When evaluating e.g. operational risks for the operations phase, the basic principle of "*Accept and involve the public as a partner*." is not constructive. We propose that the relevant line be deleted.
19	692	Defining the requirement "*Meets the needs of the media*." as a basic principle of risk communication seems questionable in our opinion. We propose that the relevant line be deleted.
20	767	*'Design the risk management program to reduce the risk of Incidents as much as reasonably practicable, to the point where the measures of further risk reduction would be grossly disproportionate to the benefits of such reduction, taking into account the relevant guidelines, as one element that reflects Article 145 of UNCLOS. Additional measures should be added in line with Article 145.'* Rationale: change text so it reflects Article 145 of UNCLOS.

Document reviewed (6)	
Title of the draft being reviewed:	**Draft standard and guidelines for the preparation and implementation of emergency response and contingency plans**

General Comments
The current draft standard and guideline only comprises process-related steps, entails no normative requirements and leaves any specification in this respect entirely to the contractor. E.g., according to the draft documents, the scope, objectives and the purpose of an EPA, the overall EP philosophy, the relevant risk assessment premises, the operational premises are all to be *described* by the contractor. This is insufficient and therefore needs further specification. The document provides for the parallel application of two sets of rules ("Vessel" and "Installation", page 1 Abstract 4.): *"The Commission noted that vessels engaged in exploitation in the Area will be subject to the jurisdiction and control of the flag State, while installations will be subject to the jurisdiction of the sponsoring State or States, and thus, several international instruments will apply."* In our opinion, such a separation does not make sense for an emergency plan, since a clear allocation will not be possible in most cases when an Emergency Alarm takes place. One uniform emergency plan for all types of emergencies during mining operation would be more effective. In addition, when a project is carried out by several sponsoring states, it is also necessary to ensure that the rules to be applied are unambiguous. We propose a uniform Emergency Response Plan (ERP) for vessel and installation, when the vessel is stationary with the installation on the mining site. It could be useful to differentiate between an internal and external ERP: <u>Internal ERP</u>: The incident can be handled by internal resources (contractor & sub-contractor) and is limited to the vessel and installation itself. <u>External ERP:</u> The incident requires external resources to mitigate the hazards, which cannot be handled by the contractor & sub-contractor alone. In order to differentiate between the scope of an internal and external ERP additional criteria need to be defined (see also page 13, line 469-475).
It is unclear why a standard and a guideline were developed in parallel with largely similar contents. The added value is not apparent.
Specific Comments

Page	Line	Comment
6	188	A review of at least every five years seems too long. An update of at least every two years would be more appropriate.
13	500	Performing exercises to ensure emergency readiness for each individual staying on board does not appear to be practicable, especially in the case of short-term changes (e.g. 14 days on/off). In our opinion, the corresponding wording *("… at least once during each period of stay.")* should be deleted.
13	501	Just one single annual exercise is not appropriate; it appears to be required at least every ½ year.
15-17		The identification of accidental events (appendix, p. 15-17) should also include environmental accidents and impacts to be avoided and responded to.

Document reviewed (7)	
Title of the draft being reviewed:	**Draft standard and guidelines for the safe management and operation of mining vessels and installations**

General Comments
The document defines guidelines and standards for the safe operation of mining vessels. With regard to the mining operation, page 1 line 50 defines: *"stationary on mining site ..., including temporary storage and transfer of mined material ...".* Conversely, the rest of the operation of the ships is not relevant under mining law or is not subject to mining supervision. The wording used here may be suitable to define the mining operation for all other existing documents. In the interests of uniform regulation, this approach should also be applied to the other documents. If necessary, a spatial extension of the relevant area can also be defined (e.g. 500 metre radius). The present requirements then also apply to ships and equipment in this area.

Specific Comments		
Page	**Line**	**Comment**
		no specific comments

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