Berlin, October 15th 2019

Comments on the Draft Regulations on Exploitation of Mineral Resources in the Area (ISBA/25/C/WP.1)

Submitted by the Federal Republic of Germany

I. Introduction

We have taken note of the third draft of the Regulations on Exploitation of Mineral Resources in the Area ("Draft Regulations") and acknowledge the significant progress made by the ISA Secretariat and the LTC in further developing the Draft Regulations.

However, from our point of view, a number of substantial issues, which we consider as essential for achieving a balanced regulatory approach, remain to be clarified and would benefit from further discussion.

In addition to the following comments in relation to certain issues we consider to be crucial, and as requested by the Council in its decision ISBA25/C/37, we also include *specific drafting suggestions* in relation to individual Draft Regulations of the text as contained in ISBA/25/C/WP.1.

II. Main issues

We have identified six comprehensive issues which we consider crucial going forward.

1. Standards and guidelines

This chapter particularly (but not exclusively) touches upon draft regulations 11, 45, 94 and 95 as well as Annexes IV, VII and VIII.

We welcome the new Draft Regulation 45 on the development of standards and guidelines. At the same time, we see the need for further clarification and specification.

Legal nature of standards and guidelines: It is Germany's firm view that standards must be legally binding, whereas guidelines may be recommendatory. With regard to

the latter, Germany favours a legal interpretation according to which the ISA may utilise guidelines as a compliance-inducing instrument. This means that in those cases where a contractor can demonstrate compliance with ISA guidelines, there is a legal presumption that the resulting outcome is legally sound.

No exploitation prior to the adoption of relevant standards: It is of utmost importance for Germany that no exploitation activities will be permitted by the ISA unless the relevant (including environmental) standards have been adopted. To decide upon applications for exploitation before the finalisation of relevant standards would risk non-compliance with Art. 145 of UNCLOS, it would impose an unfair regulatory risk on the applicant/contractor, and it might also place a question mark over the overall legitimacy of the licence. In this respect, we welcome the decision taken by the Council during the second part of the 25th annual session of the ISA, stating that "*the necessary standards and guidelines should be developed before the adoption of the regulations*" (ISBA/25/C/37).

For the development of standards and guidelines, we suggest that a structured, transparent, inclusive and comprehensive procedure be developed and implemented. This should include a comprehensive stakeholder consultation within a reasonable time period and a final decision or a referral back to the LTC by the Council. The suggestions made by the LTC in July 2019 (ISBA/25/C/19/Add.1), and the processes already initiated by the LTC in this regard, may serve as a starting point.

The development of the "necessary standards" needs to be pursued in a structured manner as certain standards might interfere with one another. On the positive side, there may also be synergies that arise due to the order in which they are discussed. At the same time, different bodies may be responsible for the development of different standards or groups of standards, which highlights the importance of coordination among the different actors involved. And finally, to ensure the standards' scientific quality as well as their legitimacy, the process of the development of standards and guidelines should as a rule be transparent and open to all stakeholders, including, but not limited to, industry representatives and environmental NGOs. The procedure for the development of standards and guidelines after the adoption of the Exploitation Regulations should be established similarly, following the same criteria – structured,

transparent, inclusive and comprehensive. This needs to be stipulated in the Draft Regulations, in particular in Draft Regulations 94 and 95.

The current draft regulations on e.g. the EIA, the EMMP and the Closure Plan still lack specific environmental standards: Presently, the EIA/EIS requirements represent a list of requirements to be addressed descriptively by the contractor and lack specific assessment criteria including quantitative environmental thresholds (e.g. for harmful effects) or, alternatively, methodologies to develop thresholds. The Art. 154 evaluation report recommended clear and measurable requirements, not least because agreed thresholds ensure a level playing field for contractors. Examples where thresholds are needed are impacted seabed habitat and sediment plumes (operational plume at the seafloor; discharge plume at mid-water depths or deeper).

Types and categories of standards need to be clearly differentiated: Germany supports the distinction between process and performance standards as proposed to the Council in its spring meeting in 2019. However, both terms are inadequate to describe criteria and thresholds for environmental quality status, which represent a third category of standards. For illustration, examples for such criteria are i) the bioturbation rates in surface sediments, ii) an index for benthic meiofauna biodiversity or iii) the oxygene concentrations in certain sediment depths.

Interplay between environmental standards, guidelines and technology: It is Germany's view that environmental standards and guidelines should also include requirements and references for the technology to be used. At the same time, these requirements should be flexible if contractors can demonstrate to the satisfaction of the Authority that other kinds of technology are equally well-equipped to ensure the same outcome.

2. Regional Environmental Management Plans (REMPs)

This chapter principally touches upon draft regulations 2, 15, 20, 31, 38, 47, 48, 49, 52, 58, 60, 76 as well as Annexes IV, VII and VIII. The purpose and function of the REMPs are explained in the proposed new Draft Regulation [44bis] as well as the new Annex [IVbis].

Legal nature of REMPs: Germany holds the view that the provisions of an REMP should be binding. This should be achieved both by decisions of the Council when

adopting the REMP which are explicit in this regard and by imposing in the exploitation regulations an obligation on the EIS, the EMMP and the Closure Plan to comply with the relevant REMP.

No exploitation prior to existing regional environmental management plans (in principle): Germany believes that the decision to establish an REMP is a necessary measure to ensure the effective protection of the marine environment from harmful effects that may arise from activities in the Area. Accordingly, Germany suggests that fully developed and agreed REMPs should be made a condition for the granting of exploitation licences. At the same time, a situation should be avoided whereby the granting of exploitation licenses could be prevented simply by blocking the further development and adoption of the respective REMP.

Implications of regional environmental management plans: It is Germany's view that it should be clarified that REMPs will entail mandatory requirements for the approval of plans of work. For example, vulnerable ecosystems in these regions need to be identified and protected as part of REMPs before mining contracts are granted. Ideally, this should happen before specific areas are fixed for exploration.

Regional Environmental Management Plans and the Precautionary Approach: It is Germany's view that it needs to be ensured that the development of REMPs and APEIs is science-driven. Owing to the limited scientific knowledge available for most deep-sea habitats, we underline that the precautionary approach will need to be the starting point and basic principle for any REMP development.

Development and approval of Regional Environmental Management Plans: Germany holds the view that the Authority currently lacks a general strategy for the development and approval of REMPs. Before further analysing resource and region-specific needs for environmental planning, we see a need to agree on the basic requirements and procedures for REMPs. This includes defining the legal status of REMPs, the legal status of the provisions within the REMPs, the role of relevant regional organisations and other competent international bodies, the requirements and criteria for developing networks of protected areas and the regionalisation of environmental standards and thresholds.

3. Adaptive management

This chapter particularly touches upon draft regulation 48 and Annex VII.

Concept of adaptive management: Germany sees an urgent need for an in-depth discussion of the concept of “adaptive management”. Contractors have a vested interest under the contract with the ISA. A legal challenge may arise when the contract is amended by ISA “recommendations”, “decisions” or “guidelines” and additional obligations for the contractor are introduced. In principle, exploitation contracts should only be amended by agreement and in consensus of the contracting parties. In cases where unilateral amendments are necessary, these amendments should be binding, but need to be undertaken in a balanced manner. In order to balance the various interests, an effective concept of adaptive management should be developed and established. Criteria and procedures for adaptive management to modify approved plans of work according to emerging scientific knowledge and technology should be defined precisely in the Draft Regulations. However, at present, adaptive management is only required very generally as part of the provisions for the Environmental Management and Monitoring Plan (Annex VII) and as an obligation for the contractor only. Germany takes a much broader view of the concept of adaptive management. In particular, Germany would like to discuss the Authority, as the regulator, having an active role as well as specific procedures for implementing the Precautionary Approach in this respect.

4. Test mining

This chapter inter alia touches upon draft regulations 7 and 92. Germany suggests that a new set of regulations be established (see proposed new Draft Regulation [48bis], amendments to Draft Regulations 7, 11, 15 and 25 as well as the proposal for a new Annex [IVter]).

No exploitation prior to successful test mining: Germany reiterates its position that licensed and successfully performed test mining should be made a legal prerequisite for any application for exploitation in the geographical area concerned and should be made a mandatory requirement for the approval of a Plan of Work. Provisions to this effect should be explicitly included in the Draft Regulations. The conditions, requirements and procedures under which test mining is to be conducted (e.g.

necessity of EIA, monitoring requirements, disclosure of scientific results, certification of equipment etc.) should be regulated under a separate set of regulations, e.g. in a dedicated part of the exploitation regulations.

5. Monitoring

This chapter principally touches upon the draft provisions of Sections 2 and 4 of Part IV as well as upon Annexes IV, VII and VIII.

Monitoring in the initial phase of exploitation: It is Germany's view that a provision needs to be established in the draft regulations requiring independent monitoring for a set period of time (e.g. the first seven years of operations).

Monitoring and the EIA/EIS provisions: The draft EIA/EIS provisions lack specific and measurable requirements to be met by the contractor. Germany furthermore recommends the development of a separate manual for monitoring and assessment activities before, during and after the exploitation phase. This could include detailed methodologies for the establishment of environmental baselines. Only on the basis of a standardised collection of data can any changes (including, but not limited to, the loss of biodiversity) be appropriately detected and reasonable mitigating efforts initiated.

Monitoring and test mining operations: In relation to test mining operations, Germany recommends that an independent and legally binding scientific monitoring strategy be established, with monitoring partly or completely conducted by third parties, to validate the environmental impact of such activities.

6. Delegation of Functions

This chapter touches upon draft regulations 25, 57, 58, 76, 89, 95 and 101.

Germany welcomed the discussion initiated by the Secretariat's note before the first part of the 25th session of the Council titled "Delegation of functions by the Council and regulatory efficiency" (ISBA/25/C/6). As has been obvious from the lively and interesting debate, this process has not yet come to a close. Germany would therefore welcome a continuation of this discussion. At various instances throughout the Draft Regulations, the Secretary-General seems to be entitled to decide upon matters which are substantial and material in nature. For the sake of efficiency as well as out

of urgency, this may be a prudent and reasonable procedure. However, and according to Art. 166 para. 3 UNCLOS, the responsibilities entrusted to the Secretary-General are primarily administrative in nature. It is Germany's view that far-reaching decisions such as the one determining whether or not there is a material change in a modification of a Plan of Work should not be solely within the competence of the Secretary-General. Accordingly, we propose an addition to Draft Regulation 57 in order to involve the Council in this process. In certain instances, the Council needs to provide abstract guidance to the Secretary-General on how to fulfill these tasks. Different requirements may apply in the case that a matter requires urgent action such as emergency orders. Presently, such guidance is missing, which, in our view, is incompatible with the balance of the roles and responsibilities established under UNCLOS.

II. Specific issues

In addition to the above-mentioned main issues, we raise numerous select points relating to specific regulations as below. Specific drafting suggestions in relation to individual Draft Regulations of the text as contained in ISBA/25/C/WP.1 are provided in the frames below and marked by underlining.

- In addition to acknowledging the importance of the United Nations' Sustainable Development Goals, the **Preamble** should also indicate the delicate balance which needs to be achieved between Art. 145 UNCLOS and exploitation activities.

Preamble:
"[…] Considering that the objective of these Regulations is to provide for the Exploitation of the Resources of the Area consistent with the Convention and the Agreement, while ensuring effective protection for the marine environment from harmful effects caused by exploitation activities, Taking into account the Sustainable Development Goals and Targets of the 2030 Agenda, as adopted by the General Assembly of the United Nations in September 2015 (resolution 70/1)."

- In our opinion, **Draft Regulation 1** should clearly state that Standards are an integral part of the regulations.

Draft Regulation 1:

“[…] 5. These regulations are supplemented by Standards and Guidelines, as referred to in these regulations and the annexes thereto, as well as by further rules, regulations and procedures of the Authority, in particular on the protection and preservation of the Marine Environment. Standards form an integral part of these regulations and any reference to the regulations includes the Standards that form part of these. […]”

- The United Nations’ Sustainable Development Goals should be mentioned as a leading principle for mining operations in the Area (**Draft Regulation 2**). Further suggested changes are as follows:

Draft Regulation 2:
“In furtherance of and consistent with Part XI of the Convention and the Agreement, the fundamental policies and principles of these regulations are, inter alia, to: […] (b) Give effect to article 150 of the Convention by ensuring that activities in the Area shall be carried out in such a manner as to foster the healthy development of the world economy and the balanced growth of international trade, and to promote international cooperation for the overall development of all countries, especially developing States, and with a view to ensuring: […] (xi) The effective implementation of the Sustainable Development Goals and Targets of the 2030 Agenda, as adopted by the General Assembly of the United Nations in September 2015 (resolution 70/1); […] (e) Provide, pursuant to article 145 of the Convention, for the effective protection of the Marine Environment from the harmful effects which may arise from Exploitation, in accordance with the Authority’s environmental policy, including regional environmental management plans, based on the following principles: […] (v) Open access to data and information relating to the protection and preservation of the Marine Environment; […] (e bis) Ensure that Regional Environmental Management Plans are adopted by the Authority before exploitation activities are permitted in the respective areas, while preventing any misuse of Regional Environmental Management Plans to block Plans of Work; […].”

- **Draft Regulation 3 (g)** requires the Contractor to assist the Authority in carrying out its policies and duties under section 7 of the annex to the Agreement. However, in doing so, the legal standard it uses seems to be weak and essentially

unenforceable ("*[…] Contractors shall use their best endeavours […]*"). Given the Authority's track record so far in ensuring compliance by the Contractors with rather simple obligations such as document formats, it seems prudent and advisable to (at least) establish a wording in these regulations which can actually be enforced. Further suggested changes are as follows:

Draft Regulation 3:

"[…]

(g) In order to assist the Authority in carrying out its policy and duties under section 7 of the annex to the Agreement, Contractors shall ~~use their best endeavours,~~ upon the request of the Secretary-General, ~~to~~ provide or facilitate access to such information as is reasonably required by the Secretary-General to prepare studies of the potential impact of Exploitation in the Area on the economies of developing land-based producers of those Minerals which are likely to be most seriously affected. The content of any such studies shall take account of the relevant Guidelines.

(h) The Council shall, taking into account recommendations by the Commission, adopt Guidelines concerning the duties mentioned in paras. (c) to (f) which establish requirements, obligations and procedural arrangements within three years after the adoption of these regulations."

- In our view, **Draft Regulation 4** should also include an information obligation by means of which the Secretary-General informs potentially affected coastal States about an application which has been submitted to the Authority. In order to provide guidance to the Secretary-General in this regard, the applicable Regional Environmental Management Plan should identify which coastal State may potentially be affected from such activities in each region (or part thereof, if considered necessary).

Draft Regulation 4:

"[…]

1.bis The Secretary-General shall inform potentially affected coastal States, as identified in the applicable Regional Environmental Management Plan, upon the submission of an application for exploitation. Appropriate consultation and notification protocols will be developed.

2. Contractors shall take all measures necessary to ensure that their activities are conducted so as not to cause ~~Serious~~ Significant Harm to the Marine Environment, including, but not restricted to, pollution, under the jurisdiction or sovereignty of coastal States, and that such ~~Serious~~ Significant Harm or pollution arising from Incidents in its Contract Area does not spread into areas under the jurisdiction or sovereignty of a coastal State.

[…]"

- While the Commission is asked in Draft Regulation 13 to assess inter alia the technical capabilities of a Contractor, currently an obligation is missing asking the

Contractor to provide such references. We suggest that such an obligation be included as new **Draft Regulation 5 para. 3 (c)**.

Draft Regulation 5:
“[…] 3. Each application by a State enterprise or one of the entities referred to in paragraph 1 (b) above shall also contain: […] (c) Sufficient information that the applicant has the necessary technical and operational capability to carry out the proposed Plan of Work in accordance with Good Industry Practice using appropriately qualified and adequately supervised personnel; […].”

- In relation to **Draft Regulation 7**, Germany would like to highlight that the obligations applicable to applicants apply throughout all the time. The reference in Draft Regulation 7 para. 3 to “regulations” should, in our view, also explicitly mention “Standards” *unless* it is made clear in Draft Regulation 1 para. 5, as suggested above, that “Standards” form an integral part of the regulations.

Draft Regulation 7:
“[…] 2. Each applicant, including the Enterprise, shall, as part of its application, provide a written undertaking to the Authority that it will: (a) Accept as enforceable during all stages of the process chain and comply with the applicable obligations created by the provisions of Part XI of the Convention, the rules, regulations and procedures of the Authority, the decisions of the organs of the Authority and the terms of its contract with the Authority; (b) Accept control by the Authority of activities in the Area during all stages of the process chain, as authorized by the Convention; (c) Provide the Authority with a written, substantiated assurance that its obligations under its contract will be fulfilled in good faith; and […]. 3. An application shall be prepared in accordance with these regulations [and Standards] and accompanied by the following: […] (a bis) A test mining study prepared in accordance with Regulation [48bis] Paragraph 2 or 3, as applicable, and Annex [IVter]; […] (h) An Environmental Management and Monitoring Plan prepared in accordance with regulation 48 and annex VII to these Regulations which documents that management and monitoring are in

compliance with the applicable Regional Environment Management Plan;
[…].“

- It seems an obvious issue, but we would like to explicitly state in **Draft Regulation 8** that exploitation should only happen in the local area where exploration took place.

Draft Regulation 8:
“[…] 3. The area under application shall be located within an exploration contract area.”

- According to **Draft Regulation 11**, only the environmental plans are to be placed on the Authority’s website. However, it needs to be ensured that general information on the project – in particular with regard to the exploitation techniques – is made accessible so that the public is in a position to comment on the environmental plans. In this respect, it is important that the requirements of the EIS with regard to the provision of information on, inter alia, project viability, mineral resource, and mining technology are sufficiently clear (Annex IV, paras. 1 and 3).

  We support the establishment of a mandatory mechanism for independent review of environmental plans and performance assessments under the Draft Regulation 11. We hold the view that a mechanism based on expertise, independence and transparency supports well-informed decision-making and contains advantages in comparison to external input on an ad-hoc basis.

Draft Regulation 11:
“1. The Secretary-General shall, within seven days after determining that an application for the approval of a Plan of Work is complete under regulation 10: (a) Place the Environmental Plans and any information necessary for their assessment as well as the non-confidential parts of the test mining study on the Authority’s website for a period of 60 Days, and invite members of the Authority and Stakeholders to submit comments in writing, taking account of the relevant Guidelines; and (b) Request the Commission to provide its comments on the Environmental Plans and the test mining study, prepared in accordance with Regulation [48bis] Paragraph 2 or 3, as applicable, and Annex [IVter], within the comment period. Confidential information pursuant to Regulation 89 contained in the test mining study shall not be made publicly available. 2. The Secretary-General shall within 7 Days following the close of the comment period, provide the comments submitted by members of the Authority, Stakeholders, the Commission and any comments by the Secretary-General to the applicant for its consideration. The applicant shall

consider the comments and may revise the Environmental Plans and the test mining study or provide responses in reply to the comments and shall submit any revised plans or responses within a period of 30 Days following the close of the comment period. All comments shall be published on the ISA-Website.

3. The Commission shall, as part of its examination of an application under regulation 12 and assessment of applicants under regulation 13, examine the Environmental Plans or revised plans and the test mining study in the light of the comments made under paragraph 2 above, together with any responses by the applicant, and any additional information provided by the Secretary-General.

4. Notwithstanding the provisions of regulation 12 (2), the Commission shall not consider an application for approval of a Plan of Work until the Environmental Plans and the test mining study have been published and reviewed in accordance with this regulation.

5. The Commission shall prepare a report on the Environmental Plans and the test mining study. The report shall include details of the Commission's determination under regulation 13 (4) (e) as well as a summary of the comments or responses made under regulation 11 (2). The report shall also include any amendments or modifications to the Environmental Plans recommended by the Commission under regulation 14. Such report on the Environmental Plans or revised plans shall be published on the Authority's website and shall be included as part of the reports and recommendations to the Council pursuant to regulation 15. […]."

- In relation to **Draft Regulation 13 para. 1(e)**, the wording ("*Has, or can demonstrate it will have, […]*") seems to provide utmost flexibility to the Contractor. However, it is Germany's view that this kind of flexibility is neither appropriate nor reasonable. By allowing for such flexibility, the Authority basically entitles each Contractor to determine by itself, on the basis of board presentations and the-like, that, while not yet possessing the necessary financial and technical capabilities, it plans to obtain the necessary financial and technical capabilities to carry out its suggested Plan of Work in an appropriate manner at some point in the future. It is Germany's view that there needs to be clarity in relation to the financial and technical capability that is actually available to the Contractor at the point in time when the application is assessed.

  Additionally, Germany suggests including an additional provision as new **Draft Regulation 13 para. 3(a)** which asks the Contractor to provide references and/or certificates, as appropriate, to illustrate a certain level of proficiency in terms of quality control and management.

  Lastly, Germany would like to point out that **Draft Regulation 13 paras. 1–3** address the assessment of the applicant, while **Draft Regulation 13 para. 4**

establishes rules for the assessment of the application (i.e. the Plan of Work). It may therefore be prudent to either reflect this aspect in this regulation's title or to split this regulation into two separate provisions.

Draft Regulation 13:

"1. The Commission shall determine~~, under consideration of~~ taking into account the comments made by State Parties and Stakeholders, ~~any~~ responses by the applicant and any additional information or comments provided by the Secretary-General, if the applicant:

[…]

(e) Has~~, or can demonstrate that it will have,~~ the financial and technical capability to carry out the Plan of Work and to meet all obligations under an exploitation contract, according to criteria defined by the Council; and

[…].

3. In considering the technical capability of an applicant, the Commission shall determine in accordance with the Guidelines whether the applicant has or will have:

(a) Certification to operate under internationally recognised quality control and management standards;

(a bis) The necessary technical and operational capability […].

4. The Commission shall determine if the proposed Plan of Work:

[…]

(c) Provides for the effective protection of human health and safety of individuals engaged in Exploitation activities, in accordance with the rules, regulations and procedures adopted by the Authority and by any other competent international organisations;

[…]

(e) Provides, under the Environmental Plans, for the effective protection for the Marine Environment in accordance with the rules, regulations and procedures adopted by the Authority, in particular the fundamental policies and procedures under regulation 2, taking into account in particular the cumulative effects of all relevant activities."

- With regard to **Draft Regulation 15**, Germany advocates for two specific references to the applicable Regional Environmental Management Plan.

Draft Regulation 15:

"[…]

2. The Commission shall not recommend approval of a proposed Plan of Work if part or all of the area covered by the proposed Plan of Work is included in:

[…]

(c bis) An area disapproved for Exploitation by the Council, as determined in the applicable Regional Environmental Management Plan;

[…].

3. The Commission shall not recommend the approval of a proposed Plan of Work if it determines that: […] (b) The total area allocated to a Contractor under any approved Plan of Work would exceed: [...] (c bis) Such approval would undermine or contradict the regional goals, objectives or measures as determined by the requirements of the applicable Regional Environmental Management Plan."

- It should be clarified within the related provision that the right to conduct marine scientific research is not limited by the exclusivity rights under an exploitation contract (**Draft Regulation 18**). We therefore suggest adding a provision which explicitly grants access to the contract area for marine scientific research activities.

Draft Regulation 18:
„[…] 5. An exploitation contract shall not confer any interest or right on a Contractor in or over any other part of the Area or its Resources other than those rights expressly granted by the terms of the exploitation contract or these regulations nor limit any (other) freedoms of the high seas. […]"

- Germany considers it essential that also regional and regionally adapted requirements, as developed under applicable Regional Environmental Management Plans, inform decision-making with regard to exploitation contracts, as referred to in **Draft Regulation 20**. Environmental thresholds always need a consideration of cumulative effects of all relevant human activities.

Draft Regulation 20:
"[…] 6. The Commission shall recommend to the Council the approval of an application to renew an exploitation contract, and an exploitation contract shall be renewed by the Council, provided that: […] (b bis) The cumulative environmental impact does not exceed the thresholds set by the applicable Regional Environmental Management Plan; […]."

- Before commencement of commercial production, in particular the environmental plans should have to be revised by the contractor. Thereafter, (only) the revised parts should be considered by the Commission, and finally approved by the Council. In case of substantial changes, the public needs to be involved in this

approval procedure (**Draft Regulation 25 para 1**, in connection with the amendments to Draft Regulation 57 para. 2).

Furthermore, it is Germany's view that a Test Mining Study should be among the list of documents to be submitted prior to production.

Draft Regulation 25:
"1. At least 12 months prior to the proposed commencement of production in a Mining Area, the Contractor shall provide to the Secretary-General a Feasibility Study prepared in accordance with Good Industry Practice, taking into account the Guidelines as well as the results of the test mining study pursuant to Regulation [48bis] Paragraph 2 or 3, as applicable, and in accordance with Annex [IVter]. In the light of the Feasibility Study and the test mining study, the Secretary-General shall consider whether any Material Change needs to be made to the Plan of Work in accordance with regulation 57 (2). If he or she determines that any such Material Change needs to be made, the Contractor shall prepare and submit to the Secretary-General a revised Plan of Work accordingly. […]."

- In relation to **Draft Regulation 31 para. 1**, Germany suggests including a reference to the applicable Regional Environmental Management Plan.

  Furthermore, it is Germany's view that this regulation so far lacks a provision regarding exploitation in an area close to the border of a neighboring license area. The far-field drift of a suspension plume produced by mining activities may cause severe impacts on the exploitation potential and the environment e.g. in a nodule field of another contractor. To avoid this, the spatial extent of an exploitation area could, e.g. by means of a guideline, be limited to a certain minimum distance with respect to the limits of other contractor areas.

  In general, Germany is of the opinion that the "reasonable regard"-obligation (Art. 147 para. 1 UNCLOS) illustrates the very need for a consultation among the stakeholders and their differing activities. This balancing exercise, as well as the necessary consultative efforts which should, in Germany's opinion, be initiated as early as possible, require procedural assistance on the basis of this Draft Regulation 31, but also on the basis of a related recommendatory Guideline addressed to Contractors. It seems that, on the basis of the current wording of this regulation, the implications of Art. 147 para. 1 UNCLOS and in particular the different freedoms' abstract equality have not yet been properly reflected. It is recommended that Draft Regulation 31 accordingly be reconsidered and possibly redrafted.

- Germany suggests including a reference to Regional Environmental Management plans in **Draft Regulation 38 para. 2(g)** as well as a recommendation with regard to the Contractors' annual reports in **Draft Regulation 38 para. 3**.

Draft Regulation 38:
"[…] 2. Such annual reports shall include: […] (g) The actual results obtained from environmental monitoring programmes, including observations, measurements, evaluations and the analysis of environmental parameters, reported against, where applicable, any criteria, technical and environmental Standards and indicators pursuant to the applicable Regional Environmental Management Plan and the Environmental Management and Monitoring Plan, together with details of any response actions implemented under the plan and the actual costs of compliance with the plan; […]. (2 bis) The Secretariat shall arrange for the effective management of the submitted information in order to overcome existing gaps in knowledge concerning the marine ecosystems including their sensitivity and resilience, the determination of environmental quality standards and appropriate exploitation equipment. 3. Annual reports shall be published in the Seabed Mining Register, except for Confidential Information, which shall be redacted. To this end, Contractors shall structure the annual reports such that any confidential information can clearly be identified and extracted."

- With regard to **Draft Regulation 39 para. 3**, it is Germany's view that this Contractor obligation cannot and should not be limited by the term "to the extent practical". The Authority will not be able to satisfactorily and appropriately fulfill its regulatory responsibilities under the system established by the Law of the Sea Convention, if it is ultimately up to the Contractor to decide which mineral resource samples or cores as well as biological samples it can easily keep. It is therefore suggested to delete the term mentioned.

Draft Regulation 39:
"[…] 3. ~~To the extent practical, a~~A Contractor shall keep, in good condition, a representative portion of samples or cores, as the case may be, of the Resource category, together with biological samples, obtained in the course of Exploitation until the termination of the exploitation contract. Samples shall be maintained taking into account the relevant Guidelines, which shall provide the option for the Contractor to maintain them itself or to have such maintenance performed on its behalf in whole or in part by a third party. […]"

- The current version of **Draft Regulation 41** asks the Contractor to notify the Secretary-General if it finds Resources in the Area other than the Resource category to which the exploitation contract relates. It is Germany's view that the Council should also be informed of such development in due course.

Draft Regulation 41:
"1. The Contractor shall notify the Secretary-General if it finds Resources in the Area other than the Resource category to which the exploitation contract relates within 30 Days of its find. The Secretary-General shall inform the Council about such notification during the next regular session of the Council. […]"

- With regard to **Draft Regulation 44**, Germany would like to suggest a clear re-phrasing of the whole provision in order to clarify which general obligations are aimed at which body and/or actor mentioned. On the basis of the current wording, it seems unclear which of the four paragraphs is addressed to the Authority, Sponsoring States and/or to Contractors. Given that Part IV eventually is one of the most crucial chapters of the Draft Regulations, there should be no ambiguity whatsoever in its introductory provision spelling out "general obligations". The inclusion of the disclaimer "as appropriate" does not sufficiently help here either, as it should not be left to the discretion of any of the bodies/actors mentioned to determine whether or not it feels targeted by (any of) these general obligations.

- Germany suggests including a **Draft Regulation [44bis]** on Regional Environmental Management Plans.

Draft Regulation [44bis]:
"1. The Authority shall develop Regional Environmental Management Plans in each regional area that is under consideration for the conduct of activities in the Area. 2. The purpose of Regional Environmental Management Plans is to provide region-specific information, measures and procedures in order to ensure effective protection of the marine environment in accordance with Article 145 UNCLOS. To this end, REMPs should in particular entail environmental objectives and standards, if appropriate, taking into account cumulative and synergistic effects, spatial planning instruments, such as the determination of mining areas, APEIs as well as PRZ and IRZ, and procedures and measures taking into account all relevant human activities. Regional Environmental Management Plans shall be drafted in the form prescribed by the Authority in Annex [IVbis]. 3. An application for a Plan of Work shall not be considered by the Commission until and unless a Regional Environmental Management Plan has been adopted by the Council for the particular area

concerned. In the event that an application for a Plan of Work is submitted for an area where no such Regional Environmental Management Plan exists, the drafting of a Regional Environmental Management Plan applicable to the area in concern shall be prioritised and adopted without any undue delay, taking into account Section 2, Article 15 b/c of the 1994 Implementing Agreement.

4. Before the adoption of an REMP by the Council, all potentially concerned States, international and regional competent organisations and all stakeholders shall be consulted in accordance with the relevant standards or guidelines.

5. All Regional Environmental Management Plans shall undergo a review after every six years. In addition, the Council may decide to review any Regional Environmental Management Plan at any time before such a review is due, especially if such review is deemed necessary in the light of new scientific information, or if it is of an opinion that the measures to ensure the effective protection of the marine environment prescribed therein are inadequate or ineffective."

- With regard to **Draft Regulation 45**, Germany suggests including a second paragraph in order to capture one crucial element of Council Decision ISBA/25/C/37.

Draft Regulation 45:
"1. Environmental Standards shall be developed in accordance with regulation 94 and shall include the following subject matters: (a) Environmental quality objectives and indicators, including on biodiversity status, plume density and extent, and sedimentation rates; […]. 2. The Authority shall not approve any exploitation activities unless the necessary environmental standards have been adopted."

- In relation to **Draft Regulation 47**, Germany proposes the following changes.

Draft Regulation 47:
"1. The purpose of the Environmental Impact Statement (EIS) is to document and report the results of the environmental impact assessment process (EIA process). The EIA process: […] (b) Includes at the outset a screening and scoping process, which identifies and prioritises the main activities and impacts associated with the potential mining operation in order to focus the EIS on the key environmental issues. This should be based on the prior testing of equipment and operations in the mining area under application and include an environmental risk assessment; […]. 4. The EIS shall demonstrate that the activity is in accordance with all relevant environmental Standards and with the requirements of the applicable Regional Environmental Management Plan."

- In relation to **Draft Regulation 48**, Germany proposes the following changes.

Draft Regulation 48:
"[…] 3. The Environmental Management and Monitoring Plan shall cover the main aspects prescribed by the Authority in annex VII to these Regulations and shall be: […] (c) Prepared in accordance with the applicable Standards and 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. 4. The EMMP shall contain a monitoring programme for at least the first seven years of Exploitation, to be conducted by independent experts and in compliance with the applicable Standards."

- Germany would like to suggest introducing a new **Draft Regulation [48bis]** on test mining to be conducted, in principle, before an application for exploitation is submitted. In the following draft it is suggested to include, in principle, a two-fold requirement for test mining to be conducted: Before the application for the approval of a Plan of Work and before commercial production. Paragraph 5 then clarifies that if between the two stages the equipment and methodology as well as the regional specificities have not substantially changed, no second test mining is needed. The same applies if a Contractor can refer to a successful test mining in the context of another Plan of Work conducted either by the Contractor itself or jointly with other Contractors, as long as the requirements of paragraph 5 are met.

Draft Regulation [48bis]:
"1. The purpose of test mining is to ensure that no significant harm is caused by exploitation activities. Test mining projects shall as a general rule provide evidence that appropriate equipment is available to ensure the effective protection of the marine environment in accordance with Article 145. To this end, a Contractor shall conduct test mining, in at least two critical stages, unless Paragraph 5 applies; firstly, when applying for an approval of a Plan of Work in accordance with Part II, and secondly, before commercial production shall commence in accordance with Regulation 25. 2. Before applying for an approval of a Plan of Work, a Contractor has to provide evidence to substantiate the required information in accordance with Regulation 7. A test mining study in accordance with Annex [IVter] shall be submitted with the application for the approval of a Plan of Work. 3. Before commercial production may commence in accordance with Regulation 25, a Contractor shall provide evidence demonstrating its ability to ensure effective protection of the marine environment, in particular, to show that no significant harm to the marine environment is likely to

occur during the phase of commercial production. A test mining study in accordance with Annex [IVter] must be submitted to substantiate this.

4. Contractors should apply for the approval for test mining projects from the Authority in accordance with all relevant Standards and Guidelines. The potential effects of test mining projects shall be assessed in the form of an Environmental Impact Assessment. Potentially affected States, international organisations and relevant stakeholders shall be consulted in accordance with the relevant Standards and Guidelines.

5. A test mining study pursuant to Paragraph 3 does not have to be submitted if the evidence required pursuant to Paragraph 3 has been demonstrated in the test mining study pursuant to Paragraph 2 or in a test mining study in the context of another approved plan of work. The Contractor has to submit relevant information to the LTC. The Commission shall decide whether the submission of a test mining study pursuant to Paragraph 2 is required."

- Germany suggests including a reference to REMPs also in **Draft Regulation 49**.

Draft Regulation 49:
"A Contractor shall take necessary measures to prevent, reduce and control pollution and other hazards to the Marine Environment from its activities in the Area, in accordance with the Environmental Management and Monitoring Plan, the applicable Regional Environmental Management Plan and the applicable Standards and Guidelines."

- In relation to **Draft Regulation 52**, we believe it is reasonable to also mention the applicable REMP.

Draft Regulation 52:
"1. A Contractor shall conduct performance assessments of the Environmental Management and Monitoring Plan to assess: (a) The compliance of the mining operation with the plan; ~~and~~ (b) The continued appropriateness and adequacy of the plan, including the management conditions and actions linked to this; and (c) The compliance of the plan with the applicable Regional Environmental Management Plan. […]"

- Concerning the "modification of a plan of work", we believe it is necessary for the Commission and the Council to be involved in the decision as to whether there is "material change" (**Draft Regulation 57, para. 2; Draft Regulation 25, para. 1**). This aspect relates to the main issue "Delegation of Functions" we noted above.

Draft Regulation 57:
"[…] 2. A Contractor shall notify the Secretary-General if it wishes to modify the Plan of Work. The Secretary-General shall, in consultation with the Contractor, consider whether a proposed

modification to the Plan of Work constitutes a Material Change in accordance with the Guidelines. If the Secretary-General considers that the proposed modification constitutes a Material Change, the Contractor shall seek the prior approval of the Council based on the recommendation of the Commission under regulations 12 and 16, and before such Material Change is implemented by the Contractor. If the Secretary-General considers that the proposed modification does not constitute a Material Change, the Secretary-General shall report the main reasons for this finding to the Commission. If the Commission disagrees with the determination of the Secretary-General, the Commission shall inform the Council and provide a recommendation to the Council to take the final decision.

[…]

4. The Secretary-General may propose to the Contractor a change to the Plan of Work which is not a Material Change to correct minor omissions, errors, or other such defects. After consulting the Contractor, the Secretary-General may make the change to the Plan of Work, and the Contractor shall implement such change. The Secretary-General shall inform the Commission and the Council of this at ~~its~~ their next meetings."

- In relation to the "review of activities under a plan of work", Germany considers it necessary that the Authority a priori provides guidance to the Secretary-General to allow him to exercise the functions entrusted to him in **Draft Regulation 58 para. 1 and para. 4**. This aspect relates to the main issue "Delegation of Functions" noted above. We furthermore propose a reference to thresholds and objectives under the applicable REMP.

Draft Regulation 58:

"1. At intervals not exceeding five years from the date of signature of the exploitation contract, or where, in the opinion of the Secretary-General, ~~there have occurred~~ any of the following events or changes of circumstance have occurred:

[…]

(b bis) An indication that the cumulative impacts of the Exploitation activities exceed any environmental objectives or thresholds as established under the applicable Regional Environmental Management Plan;

[…]."

- **Draft Regulation 59 para. 4** should also include a reference to "best available scientific evidence".

Draft Regulation 59:

"[…]

4. A Contractor shall maintain the currency and adequacy of its Closure Plan in accordance with Good Industry Practice, Best Environmental Practices, Best Available Techniques, Best Available

Scientific Evidence and the relevant Guidelines. […]”

- **Draft Regulation 60 para. 1** should in our view also be mindful of the fact that an applicable REMP could also establish obligations for the period subsequent to exploitation activities.

Draft Regulation 60:
“1. A Contractor shall, at least 12 months prior to the planned end of Commercial Production, or as soon as is reasonably practicable in the case of any unexpected cessation, submit to the Secretary-General, for the consideration of the Commission, a final Closure Plan, if such cessation requires a Material Change to the Closure Plan, determined in accordance with the procedures established in Regulation 57, taking into account the results of the monitoring and data and information which has been gathered during the exploitation phase and the applicable Regional Environmental Management Plan. […]”

- With regard to **Parts VII and VIII of the Draft Regulations**, Germany refers to the ongoing discussions in the Ad Hoc Working Group on the Financial Terms. We see the need to resume discussion on the proposed draft text after a final result has been presented by the Working Group and a decision on a way forward has been taken by the Council.
- Any incentives for Contractors should only be established if fully in line with the policies and principles mentioned in Draft Regulation 2 (**Draft Regulation 63**).

Draft Regulation 63:
“[…] 4. Any incentives shall be fully compatible with the policies and principles under Regulation 2.”

- In relation to the “assessment by the Authority”, Germany considers it necessary that the Authority a priori provides guidance to the Secretary-General to allow him to make the determination as established in **Draft Regulation 76 para. 1**. This aspect relates to the main issue “Delegation of Functions” noted above.

Draft Regulation 76:
“1. Where the Secretary-General so determines, taking into account the relevant guidance provided by the Council and following any audit under this Part, or by otherwise becoming aware that any royalty return is not accurate and correct in accordance with this Part, the Secretary-General may, by written notice to a Contractor, request any additional information that the Secretary-General considers reasonable in the circumstances, including the report of an auditor. […]”

- With regard to **Draft Regulation 78 para. 2**, Germany wonders whether the Secretariat is equipped and qualified to appropriately support and assist the Secretary-General in the fulfillment of his task to “adjust the value of such costs, prices and revenues to reflect an arm’s length value in accordance with internationally accepted principles”. Germany therefore suggests including the Finance Committee in this particular determination process.

Draft Regulation 78:
“[…] 2. Where, for the purposes of calculating any amounts due under this Part VII, any costs, prices and revenues have not been charged or determined on an arm’s-length basis, pursuant to a contract or transaction between a Contractor and a related party, the Secretary-General, on the basis of a recommendation by the Finance Committee, may adjust the value of such costs, prices and revenues to reflect an arm’s-length value in accordance with internationally accepted principles. […]”

- Concerning the confidentiality of information we regard it necessary to establish unambiguous definitions on which information has to be considered confidential or public. Regarding the suggested designation procedures, utmost transparency has to be ensured. In cases where information is designated “confidential”, it should be possible to trace which entity is in possession of the information concerned to enable access to it following an authorisation at a later stage (**Draft Regulation 89**). In relation to Draft Regulation 89 para. 5, Germany considers it necessary that the Authority a priori provides guidance to the Secretary-General to allow him to decide whether or not to object. This aspect relates to the main issue “Delegation of Functions” noted above. Furthermore, Draft Regulation 89 para. 3(f) needs to be modified as it was contradictory.

Draft Regulation 89:
“[…] 3. “Confidential Information” does not mean or include data and information that: […] (f) Relate to the marine environment, ~~provided that~~unless the Secretary-General agrees that such information is regarded as confidential information for a reasonable period where there are bona fide academic reasons for delaying its release; or […].”

- We suggest including specific sets of additional information to be contained in the Seabed Mining Register (**Draft Regulation 92**).

Draft Regulation 92:
“1. The Secretary-General shall establish, maintain and publish a Seabed Mining Register in accordance with the Standards and Guidelines. Such register shall contain: […] (b) The applications made by the various Contractors and the accompanying documents submitted in accordance with regulation 7, including any revisions, as well as any non-confidential parts of annual reports and the results of monitoring and test mining projects; […].”

- In relation to **Draft Regulation 94**, Germany proposes the following changes.

Draft Regulation 94:
“[…] 2. The Council shall consider and approve, upon the recommendation of the Commission and taking into account statements submitted by stakeholders during a public consultation, the Standards, provided that such Standards are consistent with the intent and purpose of the rules of the Authority and developed on the basis of Best Available Scientific Evidence. If the Council does not approve such Standards, the Council shall return the Standards to the Commission for reconsideration in the light of the views expressed by the Council. […] 3bis. Standards shall be methodological, procedural, technical and environmental rules that are necessary to implement the regulations and to ensure a coherent approach to monitoring and assessment, as referred to in Regulation 45. Standards are legally binding on Contractors and the Authority, and shall be revised every 5 years in the light of new knowledge, e.g. resulting from environmental impact assessments and monitoring. […]”

- We strongly advocate at least the Council having an opt-in possibility to stimulate and impact the scope, development and/or issuance of guidance documents (**Draft Regulation 95**). Furthermore, Germany considers it misleading that, according to Draft Regulation 95 para. 1, the obligation to develop guidelines currently is addressed to the Commission “or” the Secretary-General. It is Germany’s view that this provision should clearly target the body/actor responsible for such task. And it should also be taken into account that the Commission is an organ of the Authority which subordinate to the Council (and, for this reason, it is not a body equivalent to the Secretariat). It seems therefore at least to some extent misleading that guidelines of a technical or administrative nature are mixed here. On the basis of

the current version, it furthermore is not clear when these guidelines enter into force. On the basis of the institutional setup of the Authority, these guidelines would actually need to be adopted by either the Council or the Assembly. However, the wording of Draft Regulation 95 para. 2 implies otherwise for the simple reason that guidelines which have not yet entered into force do not need to be actually “withdrawn”.

Draft Regulation 95:
“1. The Commission ~~or the Secretary-General~~ shall, from time to time, ~~issue~~ develop Guidelines of a technical ~~or administrative~~ nature, for the guidance of Contractors in order to assist in the implementation of these Regulations, taking into account the views of relevant stakeholders. ~~Guidelines will support the implementation of these regulations from an administrative and technical perspective.~~ 1bis. The Secretary-General shall, from time to time, develop Guidelines of an administrative nature, taking into account the views of the Commission as well as other relevant stakeholders. 1ter. Guidelines will support the implementation of the Regulations from an administrative and technical perspective. Guidelines will also clarify documentation requirements for an application, detail process requirements (e.g. for the public consultation process, annual reporting and periodic review), and provide guidance on the interpretation of regulatory provisions. 2. The full text of such Guidelines shall be ~~reported~~ recommended to the Council for adoption. In the case of Guidelines which are not of a predominantly administrative nature, the Council shall take into account statements submitted by stakeholders during a public consultation. Should the Council find that a Guideline is inconsistent with the intent and purpose of the Rules of the Authority, it may request that the guideline be modified ~~or withdrawn~~. 3. The Commission ~~or~~ and the Secretary-General shall review the Guidelines in the light of improved knowledge or information and submit their recommendations to the Council for further consideration and, possibly, adoption.”

- In relation to the handling of “complaints”, Germany considers it necessary that the Authority a priori provides guidance to the Secretary-General to actually allow him to determine the “reasonable action as is necessary in response to the complaint”, in accordance with **Draft Regulation 101 para. 2**. This aspect relates to the main issue “Delegation of Functions” noted above.

- In relation to **Draft Regulation 103**, Germany proposes the following changes. This aspect also relates to the main issue “Delegation of Functions” noted above.

Draft Regulation 103:

"1. At any time, if it appears to the Secretary-General on reasonable grounds that a Contractor is in breach of the terms and conditions of its exploitation contract, the Secretary-General shall issue a compliance notice to the Contractor requiring the Contractor to take such action as may be specified in the compliance notice. The Secretary-General shall inform the Council of any violations by a Contractor.
[…]"

- **Draft Regulation 104** entitles the Authority to "carry out any remedial works or take such measures as it considers reasonably necessary to prevent or Mitigate the effects or potential effects of a Contractor's failure to comply with the terms and conditions of an exploitation contract". While the wording of Draft Regulation 104 is similar to the wording of Draft Regulation 101 para. 2, it strikes us that the former provision addresses the Authority as such, while the latter is aimed at the Secretary-General. Provided that the Secretary-General receives proper abstract guidance from the Council, Germany would prefer a version of Draft Regulation 104 which also entitles the Secretary-General to take appropriate measures. After all, this aspect relates to the main issue "Delegation of Functions" noted above.

Draft Regulation 104:
"1. Where a Contractor fails to take action required under regulation 103, the ~~Authority~~ Secretary-General may carry out any remedial works or take such measures as it considers reasonably necessary to prevent or Mitigate the effects or potential effects of a Contractor's failure to comply with the terms and conditions of an exploitation contract. 2. If the ~~Authority~~ Secretary-General takes remedial action or measures under paragraph 1 above, the actual and reasonable costs and expenses incurred by the Authority in taking that action are a debt due to the Authority from the Contractor, and may be recovered from the Environmental Performance Guarantee lodged by the Contractor."

- With regard to **Annex I**, we have the following suggestions:

Annex I:
"[…] 21. Attach such information, in accordance with the Standards and Guidelines, as applicable, to enable the Council to determine whether the applicant has or will have access to the financial resources to carry out the proposed Plan of Work and fulfil its financial obligations to the Authority, as follows: […].

25. Where the applicant or, in the case of an application by a partnership or consortium of entities in a joint arrangement, any member of the partnership or consortium has previously been awarded any contract with the Authority, attach: […] (d) The final report on the results of exploration and baseline investigations, including results of testing equipment and operations in the exploration area."

- As suggested in our 2018 submission, the financial plan should entail a cost-benefit analysis in order to document that the plan of work will allow for a net benefit, also taking into account costs to mitigate any impacts on the marine environment (**Annex III**). We propose that an initial discussion on potential approaches be held in the Finance Committee.
- The German contractor BGR based its Environmental Impact Assessment for the collector vehicle test in the German license area on the structure of the Draft Template for an Environmental Impact Statement in **Annex IV**. We found that the subdivision into sections according to methodology (geological setting, physical oceanographic setting, chemical oceanographic setting) is adequate for describing the existing environment (sections 4 and 5), but is not practical when it comes to describing potential impacts in the different parts of the water column and on the seafloor. The spread and impact of an operational discharge plume and its subsequent deposition, for example, has sedimentological, chemical and oceanographic components that have an integrated effect on the environment. In our view, it would be better to work with "potential impact categories" (in the example above, this would be the operational sediment plume) to provide detailed descriptions of the scale of the impact(s) and the mitigation measures that should be taken to minimise those.

Annex IV:
"1. Preparation of an Environmental Impact Statement The Environmental Impact Statement prepared under these regulations and the present annex shall: […] (b) Provide information based on data from, as a general rule, 15 years of monitoring, and in accordance with the relevant regulations, Standards and Guidelines, corresponding to the scale and potential magnitude of the activities, to assess the likely environmental effects of the proposed activities. Such effects shall be discussed in proportion to their significance. Where an applicant considers an effect to be of no significance, there should be sufficient information to substantiate

such conclusion, or a brief discussion as to why further research is not warranted;

[…].

II. Template

Executive Summary:

One of the main objectives of the executive summary is to provide an overview of the project and a summary of the content of the Environmental Impact Statement for non-technical readers.

Information provided in the executive summary should include:

[…]

(e) Linkages with ISA global environmental policy and strategy, the applicable regional environmental management plan and the development of the Environmental Monitoring and Management Plan; and

[…].

(1.3) Project history: Summarize briefly the work undertaken up to the date the Environmental Impact Statement was finalized and ready to be submitted to the International Seabed Authority. This should include a brief description of the resource discovery, the exploration undertaken and any component testing conducted to date. For the component testing, provide a brief description of activities here. If applicable, include any report(s) related to component testing, including any monitoring and assessment of the environmental impacts, in an appendix.

[…]

(2.1) Applicable mining and environmental legislation, policy and agreements: Outline the national and international legislation, regulation or guidelines, as well as the Regional Environmental Management Plan that apply to the management or regulation of Exploitation in the Area, including how the proposed operation will comply with them.

[…]

(3.8) Development timetable (detailed schedule):

Provide a description of the overall timetable, from the implementation of the mining programme to the decommissioning and closure of operations. The description should include the major phases of the operation as well as the milestone dates on which relevant tasks are expected to be completed. Information on the development timetable provided under this section should clearly communicate the different phases in the development proposal. For reasons of clarity, a flow chart or a Gantt or PERT (Programme Evaluation and Review Technique) chart should be used where appropriate. Information provided in this section should include, but not be limited to, the following:

[…]

(b) Pre-construction activities; including the development and testing of mining equipment, operations and systems in situ (if applicable);

[…]

(4) Description of the existing physicochemical environment: Give a detailed account of knowledge of the environmental conditions at the mine site, which should include information from a thorough literature review as well as from on-site studies. The Standard on baseline investigations shall guide the drafting of this section by providing information on the minimum amount of detail required for an acceptable baseline description. The account will provide the baseline description of the

geological and oceanographic conditions against which impacts will be measured and assessed. The detail in this section is expected to be based on a prior environmental risk assessment that will have identified the main impacts, and thus the elements that need to be emphasized in the environmental impact assessment.

[…]

(4.2) Regional overview: Describe the general environmental conditions of the site, including the geological and oceanographic setting within a broader regional context and refer to the applicable Regional Environmental Management Plan. This should be brief section that includes a map. A more detailed site-specific description will be provided in accordance with the sections below.

[…]

(4.5) Geological setting: Describe the nature and extent of the mineral resource and bedrock within a broader geological context. Describe the general geological landscape and topographic features of the site, including bathymetric maps and sedimentation rates, and refer to special features such as hydrothermal vents, seeps and seamounts.

(4.6) Physical oceanographic setting: Provide a description of oceanographic aspects such as currents, oceanographic fronts, eddies, particle flux ~~sedimentation rates~~ and waves. Detail is required on the regional setting, as well as the specific site, and should include changes in physical conditions and processes according to depth and horizontal distance from the proposed mine site (near-field, far-field).

(4.7) Chemical oceanographic setting: Provide a description of water mass characteristics at the site and at various depths of the water column, including the structure and development of the oxygen minimum zone, and in particular ~~detail~~ near the sea floor (up to 200 m above bottom), that includes nutrients, particle loads, temperature and dissolved gas profiles, vent-fluid characteristics if applicable, turbidity and geochemistry, etc.

(5.4) Biological environment: Address diversity, abundance, biomass, community-level analyses, connectivity, trophic relationships, resilience, ecosystem function and temporal variability. Any work on ecosystem models and appropriate ecosystem indicators, etc., should also be presented here. This section should span the size range from megafauna to microbial communities.

The description of the fauna is structured by depth range, as this enables a direct linkage to the source and location of an impact. For each depth zone, there should be a description of the main taxonomic/ecological groups (e.g., plankton, fish, marine mammals, benthic invertebrates, demersal scavengers), using the Authority’s Guidelines.

The description here needs to detail the animal communities in the water column down to the mining area and beyond, their relationship to the natural habitat, including the mineral resource, and the functional ecological relationships across groups to assess the scale of impacts to be expected if mining occurs.

(5.4.1) Surface: Describe the biological environment from the surface to a depth of 200 metres, including plankton (phytoplankton and zooplankton), surface/near-surface fish such as tuna, and seabirds and marine mammals. The description should also evaluate the temporal and spatial variability in distribution and composition.

(5.4.2) Midwater: Describe the pelagic fauna and their habitat ~~biological environment~~ in the open

water from a depth of 200 metres down to 50 metres above the sea floor, including zooplankton, nekton, mesopelagic and bathypelagic fishes and deep-diving mammals. The description should also evaluate the temporal and spatial variability in distribution and composition.

[…]

(7) Assessment of impacts on the physicochemical environment and proposed mitigation: Provide a detailed description and evaluation of potential impacts of the operation to components of the physical environment identified in section 4. This may need to consider effects that could happen during the construction/development (pre-commissioning), operational and decommissioning phases, as well as the potential for accidental events. The preferred approach for this template is to include for each component a description of:

(a) The source (action, temporal and spatial duration) and nature of the disturbance;

(b) The nature and extent of any actual or potential impact, including cumulative impacts (in the mining area of the operation over the duration of the mining contract, in the contract area and the wider region from all known pressures together);

[…]

(7.2) Description of potential impact categories: Provide an overview and description of the categories of general impacts caused by the mining operation. This should introduce the major types of effect, such as habitat removal, the creation of sediment plumes, noise and light, etc. Key elements that need to be included are:

(a) Descriptions of impact studies carried out during exploration (e.g., component testing and the resulting observations);

[…]

(8) Assessment of impacts on the biological environment and proposed mitigation: Provide a detailed description and evaluation of potential impacts of the operation to the biological environment components identified in section 5. This may need to consider effects that could happen during the construction/development (pre-commissioning), operational and decommissioning phases, as well as the potential for accidental events. The preferred approach for this template is to include for each component a description of:

(a) The source (action, temporal and spatial duration) and nature of the disturbance;

(b) The nature and extent of any actual or potential impact, including cumulative impacts (in the mining area of the operation over the duration of the mining contract, in the contract area and the wider region from all known pressures together);

(b bis) The applicable environmental goals and objectives, indicators and threshold values as identified in the applicable Regional Environmental Management Plan;

[…]

(8.1bis) Description of the key sources of environmental impacts

[…]

(11) Environmental management, monitoring and reporting: Provide sufficient information to enable the Authority to anticipate possible environmental management, monitoring and reporting requirements for an environmental approval. Information listed include a description of the proponent's environmental management system and should reflect the proponent's environmental

policy and the translation of that policy to meet the requirements under this section and previous sections during different stages of the project life (i.e., from construction to decommissioning and closure). […]

[…]

(11.2) Environmental management system: ~~Although a~~A full environmental management system ~~may~~ shall ~~not~~ exist at the time the Environmental Impact Statement is submitted. The proponent has to demonstrate that it will be capable of managing all relevant environmental questions.

[…]

(13) Consultation: Describe the nature and extent of consultation(s) that have taken place with parties identified who have existing interests or future interests in the proposed project area and with other relevant stakeholders based on the applicable guidelines.

[…]"

- In relation to a new **Annex [IVbis] on "Regional Environmental Management Plans"**, please see the explanations in the section "main issues".
- In relation to a new **Annex [IVter] on "Test Mining"**, please see the explanations in the section "main issues".
- With regard to **Annex VII**, we have the following suggestions:

Annex VII: Environmental Management and Monitoring Plan

"(1) The Environmental Management and Monitoring Plan prepared under these Regulations and this annex VII shall be:

(a) Prepared in accordance with the relevant Regulations and Standards, taking into account applicable ~~and~~ Guidelines, on the basis of Best Environmental Practice, Best Available Scientific Evidence, and Best Available Information;

(b) Prepared in ~~plain~~ clear language and in an official language of the Authority […].

[…].

(2) An Environmental Management and Monitoring Plan shall contain:

[…]

(i bis) The location and boundaries of planned or established long-term protected areas as determined in the applicable Regional Environment Management Plan;

[…]."

- With regard to **Appendix I on "Notifiable events"**, we suggest including the following additional incident as a further trigger for notification.

Appendix I: Notifiable Events

In respect of an Installation or vessel engaged in activities in the Area, notifiable events for the purposes of regulation 36 include:

[…]
17. Significant contact with equipment related to marine scientific research."

- We furthermore hold the view that certain terms need to be clearly defined, including "Best Environmental Practices", "Best Available Scientific Evidence" and "Best Available Techniques". With particular regard to the latter term, we recommend that the current definition be replaced by the definition established by the European Industrial Emissions Directive[1] (**Schedule 1**). We strongly advocate for a clarification in Schedule 1 that Standards are legally binding.
- In general, we question the use of various instances of "use their best endeavours", as this does not strike us to be the clearest and practically most feasible level of care.

Confidentiality

Germany hereby consents to making the contact details and this submission publicly available on the ISA website.

Contact Details

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[1] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), Article 3, para. 10:
'best available techniques' means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:
(a) 'techniques' includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
(b) 'available techniques' means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;
(c) 'best' means most effective in achieving a high general level of protection of the environment as a whole.