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Draft regulations for exploitation of mineral resources in the Area

Proposal for a template with minimum requirements for regional environmental management plans: a proposal for a standardized approach

**Submitted by the delegations of Germany and the Netherlands,
with co-sponsorship by Costa Rica**

Introduction

1. Regional environmental management plans have been interpreted as essential tools to ensure effective protection of the marine environment according to article 145 of the United Nations Convention on the Law of the Sea.¹ During the consultation process on the draft exploitation regulations, many States parties stressed that, in principle, a plan of work for exploitation should not be approved by the Council unless a regional environmental management plan were in place for the relevant area.
2. A regional environmental management plan provides region-specific information that facilitates the decision-making process for exploitation activities in the relevant areas. Region-specific objectives, taking into account the carrying capacity of the region, cumulative effects and conflicts with other legitimate uses, can only be considered appropriately through regional environmental management plans. The plans furthermore provide for long-term planning reliability and a level playing field for contractors, in particular when shifting from exploration to exploitation.
3. The International Seabed Authority has already approved the environmental management plan for the Clarion-Clipperton Fracture Zone region. Regional environmental management plans for polymetallic sulphides along the northern Mid-Atlantic Ridge and cobalt-rich ferromanganese crusts in the north-west Pacific are under development. Furthermore, the Authority has determined several specific

* [ISBA/26/C/L.1](#).

¹ See, for example, the adoption of the environmental management plan for the Clarion-Clipperton Zone ([ISBA/17/LTC/7](#) and [ISBA/18/C/22](#)), the submission of the Netherlands in 2014 ([ISBA/20/C/13](#)) and the International Seabed Authority's strategic plan 2019–2023.



regions as priority areas for the development of regional environmental management plans (see [ISBA/24/C/3](#) and [ISBA/25/C/13](#)).

Background

4. According to the strategic plan adopted by the Assembly in 2018 ([ISBA/24/A/4](#)), a regional environmental management plan is a means to protect the marine environment. As indicated under strategic direction 3 – protection of the marine environment – a regional environmental management plan should be developed, implemented and kept under review.
5. The draft regulations on exploitation of mineral resources in the Area – in the current version – require that a contractor’s environmental impact statement (draft regulation 47), environmental management and monitoring plan (draft regulation 48) and closure plan (annex VIII) be in accordance with the relevant regional environmental management plan.
6. In November 2019, the secretariat of the Authority, having consulted the Legal and Technical Commission, issued a document on guidance to facilitate the development of regional environmental management plans.²
7. The required contents of regional environmental management plans, the procedure for the development, approval and review of such plans, as well as the relationship between the plans and activities in the Area, have so far not been explicitly clarified and agreed.
8. During the consultation process on the draft exploitation regulations, many States parties expressed the view that a standardized approach concerning the development and the contents of regional environmental management plans was required.
9. To this end, Germany and the Netherlands, with co-sponsorship by Costa Rica, hereby submit a proposal for a template (see annex) that contains a standardized approach and a structured way forward regarding the content of regional environmental management plans and their relationship with activities in the Area.
10. A document on the procedure for the development, approval and review of regional environmental management plans is dealt with in a separate submission by Germany and the Netherlands, with co-sponsorship by Costa Rica.
11. Both documents reflect the outcome of the international workshop held on the theme “Towards a standardized approach for regional environmental management plans in the Area”, which was organized by Germany, the Netherlands and the Pew Charitable Trusts in Hamburg, Germany, from 11 to 13 November 2019. The workshop was attended by more than 80 experts, as well as by members of the Council, organs of the Authority and other international bodies, reflecting broad regional representation and a variety of stakeholder perspectives.
12. The need for a standardized approach as well as for defined minimum requirements and contents for all regional environmental management plans and the need for a specified procedure were strongly supported by the workshop participants.
13. The report on the workshop will be submitted to the Council during the first part of the twenty-sixth session of the Authority.

² See www.isa.org.jm/workshop/workshop-regional-environmental-management-plan-area-northern-mid-atlantic-ridge.

Rationale for a standardized approach

14. Many environmental management challenges, such as region-specific aspects, the carrying capacity of a region, the cumulative effects of multiple mining operations and conflicts between mining and other marine uses, can only be addressed at the regional level. Thus, regional environmental management plans are essential tools for ensuring effective protection of the marine environment. To this end, a regional environmental management plan must be in place before any exploitation activity is approved in a relevant area, and exploitation activities must be conducted in a way that does not conflict with the objectives and management measures of such a plan.

15. A standardized approach for the development of regional environmental management plans (a template) is essential for several reasons. First, a standardized approach facilitates the identification and determination of the necessary management measures based on an appropriate assessment scheme and can thus ensure that the plans are as effective as possible with regard to protecting the marine environment. Second, a standardized approach is required for good governance and should ensure the high quality of each regional environmental management plan; provide for consistency and comparability between respective plans; ensure the involvement of all stakeholders, including scientists and other international bodies; and promote accountability and transparency, reliability and acceptability, the clarification of standards of environmental protection and a level playing field for contractors.

16. This proposal is in line with the overall environmental policy of the Authority as outlined in the strategic plan of 2019–2023. In the strategic plan, the Authority called for the application of regional environmental management plans as means to protect the marine environment. By adopting a standardized approach for the development of the plans, this goal in the strategic plan could be implemented more effectively.

17. According to the draft exploitation regulations, a contractor's environmental impact statement, environmental management and monitoring plan and closure plan will be in accordance with the relevant regional environmental management plan. This proposal is in line with these requirements.

18. There is a sense of urgency with regard to developing regional environmental management plans in view of the ongoing progress of drafting the exploitation regulations. This sense of urgency is reflected in the document on guidance to facilitate the development of regional environmental management plans as well as in the many workshops that are being convened to address the development of the plans.

Recommendations

19. The Council is invited to take note of the above issues when considering the annex to the present document.

20. The Council is further invited to adopt the template in the annex with the aim of ensuring that all future regional environmental management plans comply with a jointly agreed standardized approach.

Annex

Template with minimum requirements for regional environmental management plans

Introduction

A standardized approach in the development of regional environmental management plans is required in order to ensure consistency and comprehensiveness in their development, application and implementation in all regions.

The template is a standardized format – a blueprint – to be used when developing future International Seabed Authority regional environmental management plans.

Sections 1, 2 and 3 of the template are to be reproduced as drafted, for each regional environmental management plan. Sections 4 to 8 contain region-specific requirements to be completed with region-specific information under each heading.

1. Purpose of the regional environmental management plan

The purpose of the regional environmental management plan is to provide region-specific information, measures and procedures to ensure effective protection of the marine environment in accordance with article 145 of the United Nations Convention on the Law of the Sea. To this end, it sets overarching goals and objectives, is guided by principles, establishes environmental management measures (including area-based management tools), with cumulative and synergistic effects taken into account, and serves to manage potential conflicts between different human activities occurring in the same region.

The regional environmental management plan is used by the Authority, sponsoring States and contractors as a framework for their decision-making.

2. Overarching goals

The regional environmental management plans include assessment, management and monitoring measures, aimed at facilitating seabed mining activities as well as:

- Protecting and preserving the marine environment, in particular, in order to:
 - Maintain biodiversity, connectivity, ecosystem structure, ecosystem service and resilience
 - Preserve unique marine ecosystems
 - Prevent species extinctions
 - Prevent impacts on benthic and pelagic ecosystems, including on mid-water fish stocks
 - Prevent exacerbation of vulnerable ecosystems that are under particular risk from projected climate change effects
- Applying precaution in management decisions corresponding to the level of knowledge gap and risk, in particular by:
 - Using all available environmental data to inform management decisions
 - Monitoring and assessing the state of the environment before, during and after any activities in the Area
 - Identifying and taking into account uncertainties
 - Applying adaptive management

- Identifying and mitigating conflicts in different uses by avoiding overlap between contract areas, reserved areas, areas of particular environmental interest, marine protected areas and areas designated for other legitimate uses (such as fisheries, submarine cables)
- Promoting marine scientific research and capacity-building in the Area
- Promoting cooperation between States, contractors and other stakeholders of the Authority, with particular regard to the interests and needs of developing States

3. Principles

The regional environmental management plan is guided by the following principles:

- Common heritage of humankind
- Precautionary approach
- Integrated ecosystem-based management for the whole region
- Accountability through transparent decision-making and public participation
- Use of best available science techniques
- Use of relevant traditional knowledge of indigenous peoples and local communities
- Use of best environmental practices and technologies
- International cooperation

4. Technical and scientific information

4.1. *Identification and definition of the spatial scope of application of the specific regional environmental management plan*

[Insert geographic maps (preferably three-dimensional) that contain the coordinates and depths of the specific regional environmental management plan and indicate the:

- Mineral resources of the specific regional environmental management plan region;
- Benthic and pelagic biogeographic areas in the specific regional environmental management plan region (with reference to International Seabed Authority guidelines on how to define boundaries of ocean regions, where available), and taking into account cross-boundary biogeographic and oceanographic areas
- Maritime boundaries (e.g., exclusive economic zones)
- International Seabed Authority contract areas, reserved areas and relinquished areas.]

4.2. *Environmental baseline information*

4.2.1. *Description of the marine environment* [Insert description of environmental baseline data and results of data analyses in the region, gathered through contractor reports to the Authority, the DeepData platform, as well as other global and regional databases (see document issued in November 2019 by the secretariat of the Authority on guidance to facilitate the development of regional environmental management plans, pp. 26–29¹) and scientific literature, supported by

¹ Available at www.isa.org.jm/workshop/workshop-regional-environmental-management-plan-area-northern-mid-atlantic-ridge.

geographic information system (GIS) maps and layers, where appropriate, and including the following categories:

- 4.2.1.1. Geophysical and chemical features:
 - o Physical properties (ISBA/25/LTC/6, para. 15(a)), including advection and eddy diffusion measurements
 - o Chemical properties (ISBA/25/LTC/6, para. 15(b))
 - o Geological properties (ISBA/25/LTC/6, para. 15(c)), including mineral resources
- 4.2.1.2. Biological features (ISBA/25/LTC/6, paras. 15(d)–(f), 17, 18) and associated biogeographic areas:
 - o Maps of the most recent applicable biogeographic classification of benthic and pelagic realms
 - o Biogeographic ranges of characteristic benthic and pelagic species, including transient and migratory species
 - o Habitat and abundance models derived from species occurrence data
 - o Analysis of species communities through ordination approaches or other techniques to assess species groupings
 - o Identification of representative species, taking into account variability of habitats
 - o Genetic connectivity of representative species, including source and sink dynamics within a metapopulation
 - o Connectivity of migratory species, including those of cultural significance to indigenous peoples and local communities
 - o Identification of food-web structure of benthic and pelagic habitats
 - o Ecosystem functioning, including the identification of key species
 - o Identification of rare and fragile, or otherwise ecologically important, or sensitive or vulnerable ecosystems, or communities
 - o Identification of main ecosystem services (e.g., natural carbon capture by biological pump)
- 4.2.1.3. Identification of natural stressors in the region, including climate change.]

4.2.2. *Description of uncertainties* [Insert details, using descriptive methods and GIS maps, on the identification of existing data gaps and uncertainties (due to data quality or quantity) with regard to environmental information.]

4.3. Information on human activities and limitations in the region

4.3.1. *Activities in the Area* [Insert details, using descriptive methods and GIS maps, of seabed mineral activities, including exploration and exploitation contracts, applications for contracts received, other spatial information from contracted areas such as preservation reference zones and impact reference zones in the region]

4.3.2. *Activities in areas beyond the limits of national jurisdiction and in adjacent waters under national jurisdiction* [Insert details, using descriptive methods and GIS maps, of identified descriptions, designations, management systems or standards by other international organizations or agreements (e.g., Convention on Biological Diversity, Food and Agriculture Organization of the United Nations,

regional fisheries management organizations, International Maritime Organization (IMO), International Finance Corporation, regional seas conventions, marine biological diversity of areas beyond national jurisdiction, ecologically or biologically significant marine areas, traditional marine management areas and measures) relevant to the region]

4.3.3. *Freedom of the high seas activities* [Insert details, using descriptive methods and GIS maps, of other legitimate marine uses in the region (e.g., shipping, fishing, laying of submarine cables, marine scientific research projects)]

4.3.4. *Dumpsites* [Insert details, using descriptive methods and GIS maps, on identification of underwater munition, weapons, radioactive substances, or other spoil, if applicable]

4.3.5. *Cultural heritage and interests* [Insert details, using descriptive methods and GIS maps, of any cultural heritage and interests in the region (e.g., sunken ships, fossils, human remains, routes and marine features used by indigenous peoples and local communities for traditional instrument-free navigation)]

5. Established area-based management tools

Provide information on all existing area-based management tools, using descriptive methods and GIS maps, including the size and location of, and measures applicable, for example, in designated marine protected areas, in IMO-designated particularly sensitive sea areas, in special areas established by the International Convention for the Prevention of Pollution from Ships and in areas with restrictions established by regional fisheries management organizations.

6. Scenarios for mining activities and forecast of possible effects at the regional level

Provide a forecast of the possible effects of various mining scenarios (extent, duration, frequency of exploitation), taking into account cumulative impacts and climate change, potential stress from outside the region, using modelling that follows the best available scientific techniques and comparisons against the baseline established above.

7. Region-specific objectives, targets and indicators

The region-specific objectives of the regional environmental management plan are as follows: [Insert region-specific objectives for each regional environmental management plan, based on the content of the section on technical and scientific details.]

The region-specific targets and indicators of the regional environmental management plan are as follows: [Insert region-specific targets and indicators that are measurable, based on the content of the section on technical and scientific details.]

8. Management measures

[To be developed based on the overarching goals, principles and information in sections 4, 5 and 6, taking into account their socioeconomic feasibility.]

8.1 Area-based management

[Provide proposals for the establishment of area-based management tools, including:

8.1.1. *Size and location of, and restrictions imposed by, International Seabed Authority areas of particular environmental interest,² as well as, if appropriate, marine protected areas, including a map*

8.1.2. *Guidance on how the size and location of impact and preservation reference zones within contract areas in the region are established, consistent with relevant rules, regulations or procedures of the Authority*

8.1.3. *Sites in need of protection (with buffer zones) (this relates to the fine-scale approach as described in the guidance issued by the secretariat of the Authority in 2019. These sites are particularly at risk from mining activities)*

8.1.4. *Areas of increased sensitivity and/or areas requiring precaution, including existing ecologically or biologically significant marine areas, as recognized by the Convention on Biodiversity, and vulnerable marine ecosystems, as designated by the relevant regional fisheries management organizations]*

8.2. *Designation of mining areas within contract areas*

[Provide details on the number, size and locations of designated mining areas within currently licensed contract areas.]

8.3. *Seasonal or temporal restrictions*

[Provide details of any seasonal or temporal restrictions that should be applied to seabed mineral activities (e.g., to take into account breeding seasons, migration of cetaceans and other marine species, including culturally significant migratory species).]

8.4. *Restrictions of impacts on specific biota*

[Provide details of any measures designed to prevent or minimize impacts on specific biota (including, for example, habitats, areas of scientific value and/or interest, areas of cultural, social importance).]

8.5. *Measures to deal with potential conflicts with other legitimate uses*

The purpose of this section is to address measures to avoid potential conflicts with other legitimate uses, in accordance with article 147 of the Convention and draft regulation 31.

[Provide details, including how potential conflicts will be addressed by procedural arrangements with other international bodies.]

8.6. *Strategy for enhancing knowledge and cooperation*

[Provide details for each of the following items below:

8.6.1. *Future research plans, sampling methodologies, data analyses, to minimize current data gaps (see 4.2.2.)*

8.6.2. *Measures to promote and incentivise test mining (and impact monitoring) projects*

8.6.3. *Measures to incentivise marine scientific research, through international cooperation*

² Areas of particular environmental interest are defined as sectoral, non-permanent closures to mining activities under the auspices of the International Seabed Authority.

8.6.4. *Measures for capacity-building, training and technology transfer*

8.6.5. *Communication and public information strategy]*

8.7. *Regional monitoring plan*

8.7.1. Provide a regional monitoring plan, taking into account the overarching goals and regional objectives of the regional environmental management plan, in particular with regard to the effectiveness of the management measures

8.7.2. Indicate how the regional monitoring plan can enhance knowledge and cooperation (see 7.5 above).
