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Agenda item 14

**Report of the Chair of the Legal and Technical Commission
on the work of the Commission at its twenty-eighth session**

Report of the Chair of the Legal and Technical Commission on the work of the Commission at the second part of its twenty-ninth session

Addendum

I. Introduction

1. The second part of the twenty-ninth session of the Legal and Technical Commission of the International Seabed Authority held from 1 to 12 July 2024. A total of 32 members participated in the meetings. Some members could not attend due to budgetary or health reasons. Malcolm Clark, Se-Jong Ju and Haryo Nugroho contributed to agenda items remotely and by emails. Due to the impacts of Hurricane Beryl in Jamaica, which disrupted and delayed the planned work schedule, the Commission held meetings remotely on 3, 4 and 5 July 2024.

II. Activities of the contractors

A. Report on the Status of the Contracts for exploration and periodic reviews of the implementation of plans of work for exploration

2. The Commission took note of the status of contracts for exploration as of 31 May 2024, which had not changed much since March.¹ It noted that three contractors submitted their 5-year periodic reports in the first half of 2024 which are currently under review.²
3. The Commission pursuant to paragraph 15 of ISBA/29/C/5 developed a 5-year periodic reporting template aimed at ensuring contractors provide analytical

¹ISBA/29/C/5

²China Ocean Mineral Resources Research and Development Association, Government of the Republic of Korea, and Global Sea Mineral Resources NV. Periodic review reports are expected from the following contractors in 2024: Institut français de recherche pour l'exploitation de la mer; Marawa Research and Exploration Ltd; Ocean Mineral Singapore Pte. Ltd.; Beijing Pioneer Hi-Tech Development Corporation; and Ministry of Natural Resources and Environment of the Russian Federation.

information in nevertheless a concise manner during the periodic reporting process, such as information related to gap analyses and how such gaps would be bridged in the following reporting cycle.³

Prospecting report

4. On 1, 9, 10 and 11 July the Commission considered a prospecting survey report from Argeo Survey AS (Argeo). It noted that on 28 February 2023, the Secretary-General received notification of the intention from Argeo to conduct a prospecting survey in the northern part of the Mid-Atlantic Ridge pursuant to regulations 4 of the Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area.⁴
5. The prospecting activities took place between April and May 2023 and on 7 December 2023, Argeo submitted a report to the Secretary-General with a preliminary analysis of the data collected.
6. The Commission equally took note of the key results obtained including actions undertaken by the prospector to operate in compliance with the United Nations Convention on the Law of the Sea as well as the rules, regulations and procedures of the Authority including in relation to the protection and preservation of the marine environment. After consideration of the report and additional responses by the prospector, the Commission noted that the prospector complied with [ISBA/16/A/12/Rev.1](#) and that it will submit an annual report in 2024 which will be considered by the Commission at its next meeting.

B. Implementation of training programmes under plans of work for exploration and allocation of training opportunities

7. On 1 July, the Commission was briefed on the status of the contractors' training programmes since its meeting in March 2024. It noted that during the intersessional period, a total of 40 training placements were successfully implemented by 10 contractors pursuant to 12 contracts for exploration. Furthermore, 20 out of 25 training placements offered pursuant to 6 contracts for exploration were selected by the Commission for the benefit of candidates from developing member States. The remaining 5 placements were recommended for re-advertisement due to the limited number of applications received. The Commission acknowledged that in line with the Women in Deep Sea Research pledge, progress had been made to ensure greater gender balance through the selection of 50% qualified female candidates where possible and welcomed continued efforts in this regard.
8. On 11 July, the Commission, based on the recommendations of the training subgroup, selected two candidates and alternates for at-sea and post-cruise training offered by the Federal Institute for Geosciences and Natural Resources of the Federal Republic of Germany, pursuant to its exploration contract for polymetallic sulphides.⁵
9. The Commission welcomed information provided by the secretariat on the training expenditure incurred by contractors from 2001 to 2022. It noted the need to remind contractors to submit disaggregated figures for training costs in their annual reports.
10. The Commission noted that the launch of the ISA – Capacity Development Alumni Network (iCAN)⁶ would foster synergies with other programmes and initiatives

³ISBA/29/LTC/7

⁴ [ISBA/16/A/12/Rev.1](#)

⁵ ISBA/29/LTC/9

⁶ [Capacity Development Alumni Network \(iCAN\) - International Seabed Authority](#)

implemented by the Authority and promote further engagement of former trainees/alumni from the contractors' training programme.

C. Annual reports of contractors

11. During the second part of its twenty-ninth session, the Commission considered 30 annual reports on activities carried out by the contractors in 2023, submitted pursuant to section 10 of the standard clauses for exploration contracts. The Commission expressed appreciation to the secretariat for its support in the evaluation of the annual reports.
12. Following extant practice, the Commission set up 3 working groups to review the legal, financial, and training; geological and technological; and environmental aspects of the annual reports. It dedicated 5 out of the 10 days of its meetings (2, 3, 4, 8 and 9 July) for the consideration of the annual reports within the respective working groups.
13. The Commission noted that some contractors had indicated in their annual reports that they will and in some cases already had sought adjustments to their plans of work and suggested that such adjustments would be necessitated owing, inter-alia to, the continued absence of a regulatory framework for exploitation and uncertainties in global economic conditions as well as metal price forecasts. In light of this, the Commission observed that such adjustments would need to be in line with the respective contracts and follow proper consultation with the Authority. Whilst the Commission will continue to monitor the work of those contractors, with the expectation that their work will be carried out in accordance with their respective obligations, the Commission wishes to bring this concern to the attention of the Council.
14. It is noted that the Commission assessed the performance of all contractor activities based on ISBA/29/LTC/5. Due to the disruption and delay caused by Hurricane Beryl in its work, the Commission decided to continue working in the intersessional period on such assessment and revert to the matter during the first part of the thirtieth session. In line with the procedure described in ISBA/29/LTC/5, the Commission preliminarily identified those contractors that would merit specific attention and requested the Secretariat to transmit its concerns in order to consider the matter further in early 2025.
15. In addition to specific comments on each report to be conveyed to the individual contractors by the Secretary-General, the Commission considered the general comments set out below.

Legal, financial, and training aspects

16. The Commission noted with satisfaction that the contractors submitted their annual reports within the prescribed deadline. It noted that although most contractors had complied with the reporting requirements in ISBA/21/LTC/15, some had not. Contractors are reminded to comply with the reporting requirements listed in the template, including the strict use of chapter numbering and headings to structure their annual reports. All chapter numbers and headings must be included, even if no work was carried out on specific topics in a given year.
17. The Commission reiterates that contractors are required to report correctly and completely on activities in their contract area. The Commission notes with appreciation the extent of detailed information submitted but encourages contractors to consider doing so in a more concise manner. It was equally noted that some

contractors refer to external sources instead of including the relevant information in their annual reports. Annual reports should contain all information required to present specific topics.

18. While most contractors complied with their plans of work, the Commission noted with concern that expenditure levels for a number of contractors had been far lower than estimated and reminded contractors that explanations on the variance should be made by contractors who are yet to do so. On the other hand, some other contractors reported much higher expenditures indicating that they had been updating their exploration work. The Commission notes that this is a positive trend. The Commission also noted with satisfaction that a number of training programmes had been completed in 2023.

Geological and technological aspects

19. The Commission noted that, in general, contractors had performed their activities in accordance with their plans of work. Contractors that had conducted activities beyond their planned undertakings and reported discoveries of new polymetallic sulphide deposits for 2023 are commended whilst others who had not performed their activities as projected are encouraged to strategize on how to do so. It is noted that the responses from contractors to the questions related to geological and technical aspects raised in the previous reporting cycle were satisfactory.
20. The Commission noted that some contractors had not complied with all requirements in section III of ISBA/21/LTC/15, (e.g. Ship track, navigation, bathymetry). It is requested that the delivery of digital data should be improved and submitted in line with the DeepData database templates.⁷ Significant progress was observed in the utilization and quality of data provided by various contractors. Whilst there had been notable improvement, the Commission notes that some contractors are still not providing digital data, which remains a critical aspect for comprehensive and efficient data management within the Area. Furthermore, The Commission requests that maps be included in the annual reports to present any spatially related data (such as sampling sites of materials analysed).
21. The Commission noted that few contractors had made significant progress in conducting tests of mining component whilst others had not provided information regarding mining technology. The Commission reminds contractors whose contracts are coming to an end to provide information on their strategy to prepare for the exploitation stage.
22. The Commission equally noted that several contractors were entering the last 5 years of their contract and had neither performed resource estimation nor development of mining equipment and testing protocols.
23. It noted that regarding polymetallic nodule exploration activities, there was a large disparity in the degree of progress amongst contractors toward commercial production. Whilst some contractors had succeeded in testing of mining components at sea, others were still conducting conceptual design of mining systems. The Commission requests contractors to consider cooperating/collaborating with other contractors in the development of their mining systems.

⁷ Annex IV ISBA/21/LTC/15/Corr.; <https://www.isa.org/jm/exploration-contracts/reporting-templates/> and <https://data.isa.org/jm/isa/map/>

Environmental aspects

24. The Commission commended the quality and quantity of environmental studies conducted by a number of contractors. It noted an increasing number of comparisons and collaborations within regions or mineral resource type. To this end, contractors are also encouraged to conduct environmental studies outside of their contract areas to help inform establishing and/or reviewing regional environmental management plans (REMPs). However, the Commission reminds Contractors that arrangements with other Contractors to facilitate cooperation and/or engaging in joint activities do not abdicate the obligation to carry out their own plans of work and provide information on activities undertaken.
25. The Commission noted that a number of Contractors had yet to undertake systematic surface observations of seabirds, and pelagic fauna like marine mammals, sea turtles and other megafauna (e.g. sharks, tuna, sunfish), which may be impacted by mineral resource-related activities of Contractors. The Commission further notes that studies in general carried out by Contractors on pelagic biological communities (in the water column) were limited.
26. It was equally noted that some contractors include large appendices as part of their annual reports. Whilst the Commission appreciates this level of detail where appropriate, it is proposed that contractors submit relevant supplementary data and information in separate files or as hyperlinks.
27. The Commission noted with appreciation that more contractors had undertaken gap analyses to achieve the goals of the 5-year programme of activities in line with the requirements contained in ISBA/19/LTC/8. It noted however that a number of these were focused on a particular biological component. The Commission recommends contractors undertake a comprehensive evaluation across the entire environmental baseline which should include the study of chemical and physical oceanography, geological properties, fluxes to the sediment, bioturbation and sedimentation rates, and biological communities.
28. The Commission noted with respect to environmental baseline studies that adequate levels of sampling effort and replication still needed to be addressed by a number of Contractors.
29. The Commission reminds contractors to submit environmental digital data using the designated reporting templates and through the 'upload' user interface on the DeepData portal.⁸
30. In general, the definition and level of description in the programme of activities of Contractors provided could be improved, albeit, in a concise manner. It noted that in several cases contractors did not provide indications of the level of sampling effort and distribution for the following year. The Commission reminds contractors to do so in the annual reporting and periodic review processes.

⁸ <https://www.isa.org.jm/exploration-contracts/reporting-templates>
<https://data.isa.org.jm/isa/map>

D. Relinquishment of areas under contracts for exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts

31. On 1 July the Commission took note of the relinquishment of areas under three contracts for exploration of polymetallic sulphides and cobalt-rich ferromanganese crusts,⁹ signed between the Authority and the following contractors: Federal Institute for Geosciences and Natural Resources¹⁰; Japan Oil, Gas and Metals National Corporation¹¹ and China Ocean Mineral Resources Research and Development Association¹².
32. The Commission noted that contractors had been complying with the requirements contained in the regulations on exploration and the recommendations on relinquishment¹³ and reiterated its invitation to contractors to consider the ecological characteristics of an area when identifying cells for relinquishment whilst noting that this could only be on a voluntary basis.

III. Applications for approval of plans of work for exploration

33. The Commission continued with its consideration of the two applications submitted by the Government of India. It is noted that the Commission received notification of responses from the applicants on 28 May 2024 to questions posed to the applicants on 7 March 2024.¹⁴
34. The Commission considered the application for a plan of work for polymetallic sulphides on 3, 4, 10 and 11 July 2024. On 6 July, the Commission formulated additional questions for the applicant. On 10 July, the Commission received a letter from the Secretary-General transmitting responses from the applicants to the questions. On 11 July, the Commission recommended the approval of the application and adopted its report and recommendation to the Council.¹⁵
35. The Commission considered the application for a plan of work for cobalt-rich ferromanganese crusts on 8, 9, 10 and 11 July 2024 and adopted a report for the consideration of the Council.¹⁶

IV. Regulatory activities of the Authority

A. Development of environmental threshold values

36. On 5 July, the Commission took note of the progress that had been made with respect to the development of environmental threshold values by the subgroups of the intersessional expert group (IEG). In view of the need to align progress across the three subgroups effectively and enable discussions on possible interactions between the environmental pressures that may result from mining, an in-person meeting of the IEG was held in Kingston, at the Secretariat from 27-29 June 2024.

⁹ ISBA/29/C/16, ISBA/29/C/17 and ISBA/29/C/18

¹⁰ Contract ID: PMS/05/2015/DEU (polymetallic sulphides)

¹¹ Contract ID: CFC/01/2014/JPN (cobalt-rich ferromanganese crusts)

¹² Contract ID: CFC/02/2014/CHN (cobalt-rich ferromanganese crusts).

¹³ Regulation 27 of the regulations on prospecting and exploration for polymetallic sulphides in the Area (ISBA/16/A/12/Rev.1, annex) and regulation 27 of the regulations on prospecting and exploration for cobalt-rich ferromanganese crusts in the Area (ISBA/18/A/11, annex) and ISBA/25/LTC/8

¹⁴ ISBA/29/LTC/2 and ISBA/29/LTC/3

¹⁵ ISBA/29/C/14

¹⁶ ISBA/29/C/19

37. The Commission noted that significant progress had been made within the respective groups related to the status of knowledge base for determining threshold levels, the scope of thresholds, including appropriate indicators, and the approaches to develop threshold values considering levels of uncertainty and confidence.
38. The Commission highlighted the value of the in-person meeting in advancing the development of threshold values in a timely manner. The draft IEG report is expected to be considered by the Commission at its next meeting during the first part of the thirtieth session. The draft IEG report will be released for stakeholder consultation following the Commission's consideration.

IV. Environmental management planning

A. Development of a standardized approach for the development, approval and review of regional environmental management plans

39. The Commission, during the first part of this session, provisionally adopted a standardized procedure for the development, establishment and review of REMPs, including a template with minimum requirements contained in ISBA/29/C/10. During the same meetings, the Commission decided to support the practical implementation of the standardized procedure and template by developing recommendations on technical guidance for the Commission to complement the standardized procedure and template thereby creating a comprehensive package for the development, establishment and review of REMPs.¹⁷ To this end, the Commission worked extensively during the intersessional period and held a virtual meeting on 20 June 2024.
40. In finalizing the draft standardized procedure, template and recommendations, the Commission considered the written comments in the 8 written submissions¹⁸ made by Member States and observers on an earlier version of the draft standardized procedure and template as contained in ISBA/27/C/37. The Commission's consideration of the written comments is summarized in the annex to the present note. The Commission noted that these written comments reflected the key elements in the proposals submitted to the Council in 2020 on a procedure¹⁹ and template²⁰ for REMPs.
41. The Commission further noted that some aspects of the standardized procedure, template and recommendations would need to be aligned with the regulations for exploitation of mineral resources in the Area when adopted. It is further envisaged that the recommendations would need to be updated to incorporate advancements in scientific knowledge and ensure they provide appropriate technical guidance to continue to support the REMP process. During the meetings, the Commission further reviewed the draft recommendations on 1 and 5 July, and on 10 July, the Commission adopted the Recommendations (ISBA/29/LTC/8).

¹⁷ ISBA/29/C/7

¹⁸ [Standardized approach to the development, approval and review of a REMP - International Seabed Authority](#)

¹⁹ ISBA/26/C/6.

²⁰ ISBA/26/C/7.

Annex

Consideration of the written comments on the draft standardized procedure for the development, review, and approval of REMPs (ISBA/27/C/37).

In the revision of the draft standardized procedure and template for the development, establishment and review of REMPs, and through the preparation of the recommendations for the development of REMPs in support of the standardized procedure and template, the Commission addressed the majority of the written comments received, agreeing on many notably the following:

- Indicate that a REMP must be in place before the consideration of any plan of work for exploitation in the region concerned
- Avoid expressing a fixed number of workshops needed to support the development of a REMP
- Content and procedure for creating the regional environmental assessment and data reports should be formalized together with lists of scientific information to be compiled under these reports
- Relevant experts, stakeholders in the field and representatives of relevant international bodies should be invited to any particular workshop on the basis of an expert and stakeholder mapping exercise.
- Expand upon the criteria for the selection of experts who will be able to participate in the workshops.
- Provide a minimum of 90 days for stakeholder consultation on REMPs
- Specify the conditions that may trigger the review of a REMP and include consultations during the review and revision of a REMP
- Include the preparation of regular reports on newly available scientific information and monitoring data by the Commission and make them available
- The review of the REMP would possibly lead to the revision of management measures in the REMP.
- The template should contain “minimum requirements” that every REMP will need to fulfil
- Identify the overarching goals and objectives of REMPs that can be standardized in the template
- Specify the information needed to describe regional geological, oceanographic and environmental settings, human activities, management measures and description of ecologically important areas in the template
- Include a section on a regional monitoring programme in the standardized procedure and template.
- Include a list of potential management measures under the REMP template (area-based, seasonal/temporal, restrictions on biota, etc)
- Include consideration of ways to avoid impact from potential mining operations in area-based management tools

The Commission considered that the following written comments would require further consideration and were not incorporated into the standardized procedure, template and recommendations.

- Inclusion of reference to Article 149 of the Convention. A footnote was added in the Standardised Procedure to note that the concept is still under negotiation in the Council. Therefore, such references were not inserted. If necessary, any references to underwater cultural heritage will need to be aligned with the regulations on exploitation of mineral resources in the Area once these have been adopted.
- Comment that a REMP should serve to manage potential conflicts between different human activities occurring in the same region. The Commission considered that as part of the REMP process, cumulative impacts from different activities should be analysed and assessed to inform the establishment of management measures in line with the mandate of the Authority, but that the REMPs cannot manage potential conflict between activities.
- Comment related to whether standardized procedure and template for REMPs should be a binding Standard. The Commission noted that different views had been expressed in the written submissions received from the member States concerning the nature of REMPs.
- Comment related to the possible establishment of “expert committees” to undertake certain tasks in the REMP process that are currently carried out by the Commission. The Commission noted that different views had been expressed in the written submissions received from the member States in this regard. The development and review process of REMPs, as outlined in the revised standardised procedure, template and recommendations, provides for effective engagement with external experts through workshops and public consultation of draft REMPs.
- Comment related to the compilation of all data in the data report and regional environmental assessment in one database (such as DeepData). The data report and regional environmental report are available on the ISA website, and links to the datasets compiled are provided in the reports. However, uploading all data to DeepData would require significant resources given the volume and varied format of data, and that many data sets are not held by the Authority.
- Comments related to the inclusion of scenarios for mining activities and designation of mining areas within contract areas, as part of the management measures under the REMP. The Commission considered that as the REMP needed to be in place before consideration of any application for a plan of work for exploitation in the region concerned and given the uncertainty at present on the nature and extent of mining operations for some mineral resources, it would be challenging to develop and evaluate realistic scenarios.
- Comment related to the establishment of guidance under the REMP on the size and locations of impact and preservation reference zones within contract areas. The Commission considered that the guidance on impact and preservation reference zones should be set out through relevant rules, regulations, and standards and guidelines related to contract areas, and not be a role of the REMP development.
- Comment related to the provision of a compensation mechanism for contractors if establishing area-based management tools within their contract areas would result in the most prospective areas being protected and unavailable for resource development. The Commission considered that there should be further discussion on how contractors can carry out relinquishment if it improves regional environmental management.