



## Council

Distr.: General  
9 August 2017

Original: English

---

### Twenty-third session

Kingston, 7-18 August 2017

Agenda item 12

### Report of the Chair of the Legal and Technical Commission on the work of the Commission at its twenty-third session

## Report of the Chair of the Legal and Technical Commission on the work of the Commission at its session in 2017

### I. Introduction

1. The twenty-third session of the Legal and Technical Commission of the International Seabed Authority was held from 21 February to 3 March and from 31 July to 9 August 2017.
2. On 21 February, the Commission adopted its agenda ([ISBA/23/LTC/1](#)) and elected Christian Reichert (Germany) as Chair and Michelle Walker (Jamaica) as Vice-Chair.
3. The Commission noted with satisfaction that more than 80 per cent of its members attended both meetings of the session. Russell Howorth (Fiji) was unable to participate in either meeting. Mark Alcock (Australia) and Harald Brekke (Norway) participated in the meetings in February and March but were unable to participate in the meetings in July and August. Alfonso Ascencio-Herrera (Mexico), Montserrat González Carrillo (Chile) and Ryszard Andrzej Kotliński (Poland) resigned on 5 January, 6 January and 18 February 2017, respectively. Following previous practice, Piotr Nowak (candidate nominated by Poland) participated in both meetings and Alonso Martínez Ruiz (candidate nominated by Mexico) participated in the meetings in July and August before their election by the Council on 8 August. It was noted that Gastón Fernández Montero was nominated by Chile for the same election.
4. On 20 February, a workshop and training session was held to familiarize the new members of the Commission with the work of the Authority and the working methods of the Commission.



## **II. Activities of the contractors**

### **A. Status of contracts for exploration**

5. The Commission was provided with information on the status of contracts signed by the Authority for exploration for polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts ([ISBA/23/LTC/2](#)).

### **B. Implementation of training programmes under contracts for exploration and allocation of training opportunities**

6. In February and March, the Commission was informed that three training places were being offered by the Institut français de recherche pour l'exploitation de la mer, namely, one at-sea training place pursuant to its contract for exploration for polymetallic sulphides and two internships pursuant to its contract for exploration for polymetallic nodules. The Commission was also informed that two training places had been made available by Global Sea Mineral Resources NV pursuant to its contract for exploration for polymetallic nodules. A training subgroup was established to evaluate applications, select candidates and report to the full Commission. On the basis of the recommendations of the training subgroup, 5 first-ranked and 16 alternate candidates were selected by the Commission. Details on the selections can be found in document [ISBA/23/LTC/4](#).

7. By July, the Commission had been informed of 13 new training opportunities provided by four contractors in accordance with their respective contracts with the Authority. During the meetings in February and March, it was agreed by the Commission that the training subgroup would work with the secretariat in the intersessional period to identify appropriate candidates for training opportunities. Nine first-ranked candidates were selected in the intersessional period on the basis of the recommendations of the training subgroup (see [ISBA/23/LTC/7](#)). The training places are as follows:

(a) Two at-sea training places offered by the Ministry of Oceans and Fisheries of the Republic of Korea between June and August 2017;

(b) Three fellowship training places offered by China Ocean Mineral Resources Research and Development Association between September and November 2017;

(c) Four at-sea training places offered by the Federal Institute for Geosciences and Natural Resources of Germany between August and October 2017.

8. At its meetings in July and August, the Commission selected the candidates for the remaining four at-sea training places offered by Japan Oil, Gas and Metals National Corporation, scheduled between May and June 2018. Details on the selections can be found in document [ISBA/23/LTC/7](#).

9. The Commission noted with satisfaction that, to manage the substantial increase in workload relating to the training programmes, the dedicated training officer provided for in the budget for the financial period 2017-2018 has been recruited and is in post as at 1 July 2017.

### **C. Application for extension of an approved plan of work for exploration**

10. An application for extension, for a five-year period, of an approved plan of work for exploration for polymetallic nodules was submitted to the Secretary-General by the Government of India on 20 September 2016.

11. In February and March 2017, the Commission considered the application expeditiously, in accordance with paragraphs 8-13 of the procedures and criteria for the extension of an approved plan of work for exploration ([ISBA/21/C/19](#), annex). The Commission established three working groups to review the geological and technological aspects, the environmental and training aspects and the legal and financial aspects of the application. Following extensive deliberations, the Commission requested the applicant to provide additional data and information, including historical data, through a set of questions transmitted on 7 March. The applicant submitted its response to the questions in a letter addressed to the Secretary-General on 3 May.

12. During the meetings in July and August, the Commission considered the responses provided by the applicant and requested additional information. The responses were provided by the applicant on 4 August and were satisfactory to the Commission.

13. The Commission recalled that, following past practice and pursuant to paragraph 12 of the procedures and criteria for the extension of an approved plan of work for exploration, if it considered that the contractor had made efforts in good faith to comply with the requirements of the contract for exploration but, for reasons beyond the contractor's control, had been unable to complete the preparatory work necessary for proceeding to the exploitation stage, or if the prevailing economic circumstances did not justify proceeding to the exploitation stage, then it was to recommend the approval of the application.

14. Having concluded that the information provided by the applicant was in line with the above-mentioned procedures and criteria, the Commission recommended that the Council approve the application. The Commission noted that the contract for exploration for which an extension had been requested had expired and that the agreement to be drafted concerning the extension (*ibid.*, appendix II) would come into effect the day after the date of expiry of the contract. The recommendations of the Commission on the application are contained in document [ISBA/23/C/9](#).

### **D. Annual reports of contractors**

15. In July and August 2017, the Commission considered 23 annual reports on activities carried out by contractors in 2016. Of the reports, 14 were related to exploration for polymetallic nodules, 5 to exploration for polymetallic sulphides and 4 to exploration for cobalt-rich ferromanganese crusts. It was noted that one contractor had provided a combined report for two contracts for exploration for polymetallic nodules. Following its previous practice, the Commission divided itself into three working groups to review the geological and technological aspects, the environmental and training aspects and the legal and financial aspects of the applications. In addition to specific comments on each report to be conveyed to the contractor concerned by the Secretary-General, the Commission made the following general comments:

(a) The Commission welcomed the progress of exploration activities conducted in the Area. More than 750 days at sea, comprising 15 survey cruises, were completed;

(b) The Commission welcomed the presentation of well-structured annual reports and noted a high overall level of reporting. Moreover, almost all annual reports complied with the templates issued by the Commission (see [ISBA/21/LTC/15](#)), and the Commission urged contractors to continue to use the templates. The Commission reiterated the need to proceed with the resource classification as recommended by the Commission (*ibid.*);

(c) In general, the Commission found that most contractors met the reporting requirements under the standard clauses of the contract. However, there were some cases of non-compliance, which were noted. One contractor submitted two annual reports late. Another contractor did not meet its reporting requirement regarding environmental data and generally failed to comply with requirements prescribed under the standard clauses of the contract;

(d) The Commission noted that some contractors faced delays in following the plan of work as approved by the Authority. The Commission stressed the need for those contractors to present an updated schedule and strategy in order to assist the Commission in evaluating the ability of the contractors to overcome such delays and proceed to and complete the exploration activities under the contracts for exploration;

(e) The Commission recommended that consultations be undertaken by the secretariat to ensure that the training programme undertaken by one contractor was consistent with the agreed plan of work;

(f) The Commission noted that most contractors had made good progress with regard to the collection or analysis of baseline environmental data. Two contractors appeared not to have advanced environmental objectives at all, but others had made further progress analysing existing or new data, or in several cases taking stock of previous data and undertaking a review of many years of data collection. The latter is important to ensure that workplans remain robust and future sampling is optimized;

(g) Contractors had all largely followed the methodology as detailed in the recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area ([ISBA/19/LTC/8](#)). One contractor reported its non-compliance with one specific condition in the recommendations but provided a detailed explanation. Environmental studies reported in 2016, especially for biological communities, focused on sea floor data. There were some issues relating to small sample sizes and insufficient numbers of sampling stations for describing environmental variability and some variation in methodology, environmental classifications or sampling equipment that may limit regional-level analyses, and more description on pelagic communities will be needed in the future. In general, the Commission was pleased with the quality of environmental studies being conducted;

(h) To generate appropriate regional environmental management plans, the Authority needs all contractors to collect samples consistently and to fully report their data. Significant progress had been made in the submission of data to the Authority as part of applications for contract extensions and to meet annual reporting requirements. All reported data have been submitted in Excel spreadsheet format, but the Commission noted that some contractors had still not used the recommended templates. One contractor had not provided data owing to confidentiality clauses of an international research programme;

(i) The Commission expressed support for and encouraged the emerging trend of collaboration between contractors. One contractor has proposed to convene a forum for contractors in 2018 to discuss issues of common concern, such as the development of exploration methods and technologies. It was noted that collaboration has extended to environmental surveys and data collection, which potentially enables an improved regional understanding of environmental patterns. Mapping of biological communities at a regional scale is required for the creation of robust regional environmental management plans. In that regard, the Commission noted improved taxonomic standardization, collaboration between contractors, linkages between contractors and international research programmes, sampling in areas of particular environmental interest as well as contract areas, and several joint contractor voyages in recent years. The Commission noted that when joint work is undertaken, it is nevertheless important to report on results by each individual contract area, and not on combined environmental data and analyses alone, which caused some confusion in the reporting by one contractor.

### **III. Application for approval of a plan of work for exploration for polymetallic sulphides by the Government of Poland**

16. On 25 January 2017, the Secretary-General received an application for approval of a plan of work for exploration for polymetallic sulphides from the Government of Poland. The area under application is 10,000 square kilometres in size and lies within the limits of two large segments of the Mid-Atlantic Ridge, located between the Hayes, Atlantis and Kane transform faults/fracture zones. The Secretary-General notified the members of the Authority and the members of the Commission of the receipt of the application and placed the consideration of the application on the agenda of the Commission, to be taken up at the meetings in July and August. On 31 July, the applicant gave a presentation on its application and responded to questions raised by the members of the Commission. The Commission established three working groups to review the legal and financial aspects, the geological and technological aspects and the environmental and training aspects of the application. On 1 and 3 August, the Commission considered the evaluation by the working groups. The Commission invited the applicant to respond to additional questions on 4 August. In addition to providing answers orally, the applicant submitted its answers to the additional questions in writing on 4 August. On the basis of the evaluation of the application by the working groups, the Commission adopted its report and recommendations to the Council ([ISBA/23/C/11](#)).

### **IV. Regulatory activities of the Authority**

#### **A. Consideration and approval of draft regulations for exploitation of mineral resources in the Area**

17. During the first meeting of its twenty-third session, in February 2017, the Commission considered a report prepared by the secretariat containing an overview of the submissions made by stakeholders to the revised working draft of exploitation regulations issued by the Commission for comment in July 2016. In that report, a summary of stakeholder responses on matters put forward by the Commission for consideration was also provided. Transparency remains an overarching theme in stakeholder responses; the current approach being taken on regulatory development was generally welcomed. With regard to separate regulations dealing with environmental matters and a mining inspectorate, the Commission noted a general sentiment that while the development of separate regulations might be appropriate,

such an approach also entailed challenges owing to the potential for duplication, ambiguity and a lack of consistency between separate sets of regulations. The Commission also noted a number of areas for further consideration, including the role of sponsoring States, and further noted that a future draft should provide realistic time frames for the application and other processes.

18. The Commission continued its review of the working draft in the light of stakeholder comments, and considered a discussion paper on the development and drafting of environmental regulations, issued by the secretariat in January 2017 for initial comments and review.

19. The Commission requested the secretariat to take note of its feedback on stakeholder comments and discussions within the Commission, together with relevant expert input arising from subsequent workshops held in Berlin relating to an environmental management strategy<sup>1</sup> and in Singapore relating to a working financial model,<sup>2</sup> and to prepare a consolidated set of draft regulations.

20. At its meetings in July and August, the Commission took note of the reports of the Berlin and Singapore workshops and acknowledged both the thoroughness of their preparation and expert contribution to the regulatory development process. The Commission then reviewed, chapter by chapter, a single set of draft regulations presented by the secretariat, including a framework for environmental and inspection provisions. With regard to the structure and flow of the draft, as well as regulatory language, the Commission acknowledged the progress made to date, but noted that more work was needed to clarify ambiguities and facilitate a clearer understanding of the regulatory process.

21. Given the significance of a payment mechanism in the development of the common heritage, the Commission noted that the secretariat would prepare a consultation paper on the design of a payment mechanism and financial terms. The Commission would review the outcome of the exercise at its next meeting, in 2018, with a view to issuing a consultation paper to all stakeholders.

22. The Commission discussed a road map for the delivery of the draft regulations to the Council and for their subsequent adoption and approval. To that end, the annex to the present report summarizes the key milestone deliverables and dates discussed, including stakeholder consultation. The Commission highlighted the need for the development of technical criteria, recommendations and guidelines to support the delivery of the exploitation regulations.

23. In connection with priority deliverable No. 7, concerning responsibility and liability (see ISBA/21/C/16, annex III), the Commission was informed that a legal working group would meet in London in the last week of September 2017. The group would explore key questions and issues to be addressed in order to advance the development of a liability regime in the Area. The Commission welcomed the initiative and recommended that the group also explore the concept of effective control and its relevance in a liability context. It was noted that the secretariat would brief the Commission on the outcome of the workshop, together with recommended next steps, at the next meeting of the Commission, in 2018.

---

<sup>1</sup> Workshop entitled “Towards an ISA environmental management strategy for the Area”, held from 20 to 24 March 2017 in Berlin and co-organized and hosted by the Federal Environment Agency and the Federal Institute for Geosciences and Natural Resources of Germany and the secretariat of the Authority. The report of the workshop (International Seabed Authority technical study No. 17) is available from <https://www.isa.org.jm/sites/default/files/files/documents/berlinrep-web.pdf>.

<sup>2</sup> Workshop entitled “Deep seabed mining: payment regime workshop No. 3”, held from 19 to 21 April 2017 in Singapore. The report of the workshop is available from <https://www.isa.org.jm/files/documents/EN/Regs/DraftExpl/DSM-PRW-3.pdf>.

24. The Commission noted that the Secretary-General would make publicly available the draft regulations presented to it. The Commission will continue its work on the draft regulations and consider additional stakeholder responses at its next meeting.

**B. Review of the recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area**

25. In February and March, a working group was established to review the recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area (see [ISBA/19/LTC/8](#)). It continued its work during the intersessional period in order to be able to propose revisions during the meetings in July and August. At those meetings, a set of draft revised recommendations were submitted by the working group.

26. Following extensive deliberations on the draft revised recommendations and, in particular, in view of the reasons for the review exercise, namely, to provide up-to-date guidance on the current best available methodology and technology to support the contractors in implementing their plans of work for exploration and achieving the effective protection of the marine environment from the harmful effects that may arise from activities in the Area, the Commission decided to provide the draft revised recommendations to the contractors for their comments. The responses of the contractors will be considered by the Commission at its next meeting, after which the Commission is likely to issue an updated version of the recommendations.

**C. Review of the implementation of the environmental management plan for the Clarion-Clipperton Fracture Zone and the development of environmental management plans in other international seabed area zones**

27. At its meetings in February and March, the Commission set up a working group to review the implementation of the environmental management plan for the Clarion-Clipperton Fracture Zone and the development of environmental management plans in other international seabed area zones. In relation to that matter and on the basis of the advice of the working group, the secretariat will convene a technical workshop from 27 to 29 September 2017 in Berlin on the criteria for the selection of impact reference zones and preservation reference zones. It was also noted that a second workshop, dedicated to the review of the status of implementation of the environmental management plan for the Zone and areas of particular environmental interest will be deferred to the first half of 2018 (see [ISBA/23/C/8](#), para. 19).

28. The Commission noted that no environmental management plans had been developed for massive sea floor sulphide deposits associated with mid-ocean ridges of the Atlantic and Indian Oceans or for the cobalt-rich crusts of the seamounts in the Pacific Ocean. It observed that, in the light of the development of regulations on exploitation and the applications for exploration contracts and given increasing activity in those regions, there was a need for a regional approach on establishing effective environmental management plans similar to that developed for the Clarion-Clipperton Fracture Zone in the central Pacific. It took note with appreciation of the report of the workshop convened in Berlin in March 2017,<sup>1</sup> and requested the

secretariat to continue its work on the development of environmental management plans in the intersessional period.

## **V. Implementation of the data management strategy of the Authority**

29. On 31 July 2017, the secretariat informed the Commission of its progress towards the implementation of the data management strategy of the Authority. Starting in August 2016, the secretariat began to migrate all historical data provided by contractors into a digital format and into geo-referenced data. To date, approximately 1.8 million data points from areas in which plans of work have been approved have been migrated to the appropriate format. The migration of data has been achieved in accordance with international standards to ensure that the Authority's database will be compatible with worldwide databases. The Commission was informed that the secretariat had completed three of the eight phases and that it anticipated that the data management strategy would be fully implemented by the end of October 2018.

30. In its deliberations, the Commission noted with satisfaction the progress made by the secretariat since February 2017 and expressed its willingness to assist the secretariat with the further implementation of the data management strategy. The Commission emphasized the importance of migrating historical data to operationalize it in digital form and raised questions about the procedure, timeline and progress towards achieving that end. It welcomed the efforts of the secretariat to collaborate with other international organizations, United Nations agencies and institutions for the improved development of database systems, while raising questions about the nature and level of collaboration. Discussions were also held on specific technical questions pertaining to the format and flow of data, as well as security measures. The Commission expressed its concern that the management of the database, once operationalized, will require significant human and financial resources and queried whether the secretariat had the requisite capacity. In that context, the Commission emphasized the need for new positions in the secretariat for staff dedicated to operating and maintaining the database in terms of increasing data volume, updating storage media, handling security issues and evolving access requests. The Commission requested the secretariat to report regularly on the status of implementation of the data management strategy.

## **VI. Matters referred to the Commission by the Council**

31. In paragraph 13 of its decision relating to the summary report of the Chair of the Legal and Technical Commission ([ISBA/22/C/28](#)), the Council requested the Commission to review the provisions of the regulations on prospecting and exploration for polymetallic nodules relating to the option of offering an equity interest in a joint venture arrangement with a view to aligning all regulations in that respect, and to make a recommendation thereon for consideration by the Council at its next session.

32. At its meetings in July and August 2017, the Commission considered a paper prepared by the secretariat on issues relating to the possible alignment of the Authority's regulations on prospecting and exploration concerning the option of offering an equity interest in a joint venture arrangement. Several issues were raised during the ensuing discussion. The Commission recommended that the secretariat prepare a detailed analysis to compare the legal and policy implications of including or not including the option of offering an equity interest in a joint venture

arrangement in the regulations on prospecting and exploration for polymetallic nodules.

33. In view of the heavy workload of the Commission and time restraints, in particular owing to the request of the Council to afford priority to the development of the exploitation code, the Commission was unable to discuss other matters referred to it by the Council at the current session, including: issues related to the sponsorship by States of contracts for exploration in the Area, with particular attention to the test of effective control (see para. 23 above), as well as issues related to monopolization of activities in the Area, taking into consideration, in particular, the concept of abuse of a dominant position; issues relating to the operation of the Enterprise, in particular the legal, technical and financial implications for the Authority; and issues associated with the conduct of marine scientific research in exploration areas. Those matters will remain under the review of the Commission.

## **VII. Other matters**

34. The Commission noted that a number of recommendations contained in the report on the periodic review of the Authority pursuant to article 154 of the United Nations Convention on the Law of the Sea ([ISBA/23/A/3](#), annex) are related to the Commission and its work. The Commission stands ready to respond to the outcome of the Assembly's consideration of that report.

## Annex

## Timeline for the adoption and approval of the regulations on exploitation of mineral resources in the Area\*

	<i>Aug. 2017</i>	<i>Intersessional</i>	<i>Mar. 2018</i>	<i>Intersessional</i>	<i>July 2018</i>	<i>Intersessional</i>	<i>July 2019</i>	<i>Intersessional</i>	<i>July 2020</i>	<i>July 2020+</i>
Draft exploitation regulations	LTC considers draft regulations	Secretariat issues draft regulations for comment	LTC considers draft regulations	Stakeholder comments on revised draft regulations	LTC issues working paper to Council (including financial terms)	Council deliberates on working paper/draft regulations	Progress and status report by Council	Council continues deliberations	Council adopts regulations	Continued development of standards and LTC guidance
Financial model and financial terms			LTC issues consultation paper on financial terms	Stakeholder consultation on financial terms			Stakeholder consultation as required		Assembly approves regulations	

*Abbreviation:* LTC, Legal and Technical Commission.

\* Timeline does not reflect the proposed revised meeting schedule (see [ISBA/23/A/5/Rev.1](#), annex II).