



## Council

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### **Report of the Chair of the Legal and Technical Commission on the work of the Commission at its session in 2016**

#### **I. Introduction**

1. The session of the Legal and Technical Commission was held from 22 February to 4 March and from 4 to 13 July 2016.
2. On 22 February, the Commission adopted its agenda ([ISBA/22/LTC/1](#)) and elected Christian Reichert as Chair and Elva Escobar as Vice-Chair.
3. The following members of the Commission participated in the session: Adesina Adegbe, David Billett, Harald Brekke, Winifred Broadbelt, Georgy Cherkashov, Elva Escobar, Montserrat González Carrillo, Russell Howorth, Kiseong Hyeong, Elie Jarmache, Carlos Roberto Leite, Eusebio Lopera, Pedro Madureira, Hussein Mubarak, Théophile Ndougsa Mbarga, Juan Pablo Paniego, Andrzej Przybycin, Christian Reichert, Marzia Rovere, Maruthadu Sudhakar, Michelle Walker and Haiqi Zhang. Farhan M.S. al-Farhan was unable to attend. Natsumi Kamiya attended the first part of the session and resigned before the meetings in July. Following previous practice, Nobuyuki Okamoto participated in the meetings before his election by the Council on 12 July. The high level of attendance of members was noted.

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

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

4. The secretariat provided the Commission with information on the status of contracts issued by the International Seabed Authority pertaining to exploration for polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts ([ISBA/22/LTC/5](#)). The Commission took note of the report.



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

5. The Commission, having been informed that 18 training places would be provided by the contractors individually in accordance with their respective exploration contracts with the Authority, selected the candidates. In February, the Commission selected candidates for training places provided by Global Sea Mineral Resources NV, China Ocean Mineral Resources Research and Development Association and Japan Oil, Gas and Metals National Corporation and agreed to apply its streamlined process for selection in order to enable it to select candidates for the training opportunities to be provided in June by the Institut français de recherche pour l'exploitation de la mer. Details on the selections can be found in documents [ISBA/22/LTC/7](#), [ISBA/22/LTC/8](#) and [ISBA/22/LTC/11](#). The training places are as follows:

(a) Two internships at a workshop by Nauru Ocean Resources Incorporated, in December 2015;

(b) One two-year master's programme by Global Sea Mineral Resources NV, beginning in September 2016;

(c) Five at-sea training places by China Ocean Mineral Resources Research and Development Association, between September and November 2016;

(d) Five at-sea training places by Japan Oil, Gas and Metals National Corporation, between May and June 2016;

(e) Five internships at a workshop by the Institut français de recherche pour l'exploitation de la mer, between June and July 2016.

6. The Commission also had before it a preliminary analysis of the status of implementation of the training programmes provided by the contractors from 2013 to date, together with proposed training opportunities from 2016 to 2020 under new, continuing and extended exploration contracts. The Commission expressed its appreciation to the contractors for their valuable commitment in bringing about a substantial increase in the number of training places over the coming five years, including as part of the programme of activities under the six extended contracts for exploration for polymetallic nodules, noting that the number might reach 200. The opportunities included ship attachments, laboratory attachments and participation in workshops and courses that were both broad in scope and covered specific technical disciplines, environmental assessment and technology development. The Commission encouraged developing member States to take advantage of the opportunities. It requested the secretariat to continue its analysis of the implementation of the training programmes since 2013 and forthcoming training opportunities until 2020 and to provide a detailed report, including on the benefits for sponsoring States and trainees arising from those opportunities, for consideration at its next session.

7. The Commission noted with satisfaction that, to manage the substantial increase in workload relating to the training programmes, a position in the secretariat focused on training had been included in the next proposed budget of the Authority.

8. In the light of the increasing number of training opportunities, the Commission decided to revise the recommendations for the guidance of contractors and sponsoring States relating to training programmes under plans of work for exploration (ISBA/19/LTC/14). In July, it established a working group to make suggestions in that regard, but, owing to time constraints, deferred the revision for consideration at its next session.

### **C. Applications for extension of approved plans of work for exploration**

9. Six applications for extension, for a five-year period, of approved plans of work for exploration were placed on the agenda of the Commission (see ISBA/22/LTC/2). They were submitted as follows: Interoceanmetal Joint Organization (28 September 2015); Yuzhmorgeologiya (28 September 2015); the Government of the Republic of Korea (20 October 2015); China Ocean Mineral Resources Research and Development Association (19 November 2015); Deep Ocean Resources Development Co. Ltd. (3 December 2015); and the Institut français de recherche pour l'exploitation de la mer (16 December 2015). The Commission was informed that all applicants had paid the required processing fee of \$67,000 and noted that no applicant had proposed relinquishing any part of its exploration area and that no sponsoring State or States had renounced sponsorship.

10. The Commission considered the applications expeditiously and in the order of receipt, in accordance with paragraphs 8 and 13 of the procedures and criteria set out in the decision of the Council relating to the procedures and criteria for the extension of an approved plan of work for exploration pursuant to section 1, paragraph 9, of the annex to the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (ISBA/21/C/19). The Commission observed that that had been the first time that such applications had been placed before it for consideration and the procedures and criteria implemented. At the request of the Commission, the secretariat presented a note to clarify the status of the former registered pioneer investors (see annex I to the present report).

11. 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.

12. Following extensive deliberations, the Commission requested each applicant to provide additional data and information, including historical data, through a set of specific questions transmitted on 4 March. The questions were related to the submission of financial, technical and scientific data and information and further details on proposed environmental sampling, training programmes and mining technology developments. As at 13 June, all the applicants had provided responses, which were submitted to the Commission for review in July.

13. In July, the Commission noted with appreciation that all the requested data and information, including historical data, had been duly supplied by the applicants. The Commission recalled that, pursuant to paragraph 12 of the procedures and criteria, 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 (such as technical feasibility conditions connected with the development of polymetallic nodules mining technology), it had been unable to complete the

preparatory work necessary for proceeding to the exploitation stage, or if the prevailing economic circumstances (such as those encountered in the global markets and low metal prices) did not justify proceeding to the exploitation stage, then it was to recommend the approval of the applications.

14. The Commission noted the following general outcomes while considering the applications:

(a) The opportunity to gather historical data from the contractors had proved very successful and the data would be entered into the database by the secretariat in due course;

(b) The six contractors had offered training opportunities in line with the recommendations for the guidance of contractors and sponsoring States relating to training programmes under plans of work for exploration issued by the Commission in 2014 ([ISBA/19/LTC/14](#));

(c) As part of the survey work, nine cruises would be carried out by the six contractors during the extension period;

(d) The six contractors had each indicated that there would be an emphasis on environmental baseline data collection, in particular biological data, during the extension period;

(e) Contractors had noted that carrying out test mining and mineral processing would involve significant expenditure, and most had expressed a willingness to carry out that work collaboratively to reduce the costs and risks.

15. Having concluded that the information provided by the applicants was sufficient, in line with the above-mentioned procedures and criteria, the Commission recommended that the Council should approve the six applications.

16. The Commission also recommended that the applicants should be ready to proceed to exploitation at the end of the five-year extension period.

17. The Commission noted that the six contracts for exploration for which an extension had been requested had expired and that agreements to be drawn up concerning their extension (see [ISBA/21/C/19](#), appendix II) would come into effect from the day after the date of expiry of each contract.

18. The recommendations of the Commission on each of the applications are contained in documents [ISBA/22/C/11-16](#).

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

19. In July, the Commission considered 22 annual reports on activities carried out by contractors in 2015 and noted the high quality of reporting. Of the reports, 14 were related to exploration for polymetallic nodules, 5 to exploration for polymetallic sulphides and 3 to exploration for cobalt-rich ferromanganese crusts. 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 of the International Seabed Authority, the Commission made the following general comments:

(a) The Commission expressed support for and encouraged the emerging trend of collaboration between contractors. That positive development would be even more valuable as the Authority moved into the phase of developing regulations on exploitation of mineral resources in the Area;

(b) The Commission recalled the requirement to submit annual reports in due time (see annex IV, sect. 10.1, of the three sets of regulations on prospecting and exploration) with a duly certified financial statement that was in line with the format recommended in the recommendations for the guidance of contractors for the reporting of actual and direct exploration expenditure (ISBA/21/LTC/11, annex). In that context, the Commission once again called upon the contractors to fulfil their contractual obligations, as agreed upon in their contracts and further specified in the standard clauses, noting that regulations and the contract were not optional and must be complied with;

(c) The Commission, noting that 14 contractors had used the reporting templates and recommendations on classification of resources contained in document ISBA/21/LTC/15, urged all contractors to apply those templates to future reports;

(d) The Commission noted with satisfaction that, in the evaluation of the environmental baseline study, the criteria listed in its recommendations (ISBA/21/LTC/15) had been applied. Furthermore, there had been significant advances in the reporting of environmental baseline data and mineral resources by most contractors, including the use of the following: molecular genetic data for studies on the distribution and connectivity of species across the Clarion-Clipperton Fracture Zone; autonomous underwater vehicles for high-resolution (metre-scale) bathymetric mapping; remotely operated vehicles for precision sampling; video and sea-floor reflectivity mosaicking for habitat and mineral mapping; and sediment trap sampling for geographical and temporal change in particle export to the sea-floor;

(e) All contractors were encouraged to adopt best environmental practices and best available technologies, 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), and to report environmental data in full in 2017;

(f) To generate a regional environmental management plan, the Authority needed all contractors to collect samples consistently and to fully report their data, including metadata. Significant progress had been made in the submission of data to the Authority as part of applications for contract extensions. Other contractors had also made substantial data contributions;

(g) Where contractors advised a change in the recommendations, that advice should be supported by empirical evidence. If the changes were accepted, the Commission would update the Authority's recommendations (such as on the mesh sizes to be used for studying the infauna of the seabed). With reference to sieve sizes for benthic infauna, contractors were encouraged to set up an intercalibration study to advise the Commission;

(h) Biogeographic mapping of the species in the Clarion-Clipperton Fracture Zone posed a major challenge, but was required for the creation of a regional environmental management plan. Progress in taxonomic classification to the species level was being pursued by many contractors following the Authority's workshops on standardization of taxonomy and sampling methods, but the overall picture remained patchy. Contractors were encouraged to continue to work together to achieve a consistent taxonomy for the Zone.

## **E. Periodic reviews of implementation of plans of work for exploration**

20. The three sets of regulations provide a mechanism whereby contractors can adjust their programmes of activities at five-year intervals. This is done through a periodic review process undertaken jointly between the contractor and the Secretary-General, not later than 90 days before the expiration of each five-year period from the date of entry into force of the contract. The Commission was informed that, in 2016, periodic reviews were due to be undertaken in respect of two exploration contracts for polymetallic nodules. The Commission took note of the status report on the review and the information submitted by the Federal Institute for Geosciences and Natural Resources of Germany and Nauru Ocean Resources Inc. with regard to the implementation of their programmes of activities for the second five-year period expiring on 19 July 2016 for the former, and for the first five-year period expiring on 22 July 2016 for the latter, and with regard to their proposed programmes for the coming five years ([ISBA/22/LTC/14](#)).

21. The Commission welcomed the first submission of an environmental inception report, which gave advance notice of the intention to carry out an environmental impact assessment of a proposed testing of elements of mining equipment in a contractor's area in the near future. The Commission encouraged other contractors to conduct similar tests.

## **III. Application for approval of a plan of work for exploration for cobalt-rich ferromanganese crusts by the Government of the Republic of Korea**

22. On 10 May, the Secretary-General received an application for approval of a plan of work for exploration for cobalt-rich ferromanganese crusts from the Government of the Republic of Korea. The area under application is located to the east of the Northern Mariana Islands. The Secretary-General notified the members of the Authority and the members of the Commission of the receipt of the application and placed consideration of the application on the agenda of the Commission in July. The Commission considered the application in closed meetings held on 5, 8 and 11 July. After the presentation of the application, the Commission submitted a list of questions to the applicant. The Commission considered the responses received and adopted its report and recommendations to the Council ([ISBA/22/C/10](#)).

## **IV. Environmental matters**

### **A. Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area**

23. In February, the Commission had before it a summary of the recommendations arising from three workshops on taxonomic standardization of benthic fauna inhabiting the Clarion-Clipperton Fracture Zone. The recommendations constituted expert advice from taxonomists in order to improve 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). They covered such topics as best practices, biological cruises and sampling, onboard treatment of samples, subcoring, molecular samples, taxonomic resolution, analytical requirements, storage requirements, contractor collaboration, publishing, workshops, an expert panel, capacity-building and protocols and regulations.

24. The Commission welcomed the recommendations and encouraged the contractors to apply best practices to implement them wherever appropriate. The Commission deferred the revision of the recommendations to its next session.

## **B. Review of the implementation of the environmental management plan for the Clarion-Clipperton Fracture Zone and issues relating to the development of other environmental management plans in the Area**

25. The environmental management plan for the Clarion-Clipperton Fracture Zone (ISBA/17/LTC/7) is the first, and to date only, environmental management plan created by the Authority. It was approved by the Council at its eighteenth session and implemented over an initial period of three years (see ISBA/18/C/22). The plan included the designation of a network of nine areas of particular environmental interest based on the best existing knowledge of the Zone at the time. The plan was to be subject to periodic external review by the Commission every two to five years.

26. In February, the Commission was provided with terms of reference for a possible workshop on impact reference zones and preservation reference zones. It recalled that the review of the environmental management plan due to be submitted to the Council in 2016 required an in-depth analysis of the status of the elements of the plan, including the number and location of areas of particular environmental interest and the data collected in those areas since the establishment of the plan. The Commission requested the secretariat to prepare a detailed report for review in July.

27. In July, the Commission considered the report (ISBA/22/LTC/12), in which the progress made in the implementation of the plan and the steps to be taken until 2021 were recalled. In its deliberations, the Commission noted the suggested creation of two additional areas of particular environmental interest, as indicated on a map, and recommended that the proposed eleventh area should be shifted further north, directly east of the UK Seabed Resources Ltd. exploration area. The rationale behind the creation of the new areas was based on recent work by contractors, most notably using molecular genetic methods, which indicated that species ranges in the Zone might span a few hundred kilometres. The Commission also pointed out a need for cross-sectoral planning of areas, such as with areas closed to fishing on seamounts.

28. To determine the suitability or need for amendment of the areas of particular environmental interest, the Commission decided to consider holding a scientific workshop together with marine reserve/management specialists to review the data. The participants should define the size, location and number of such areas in order to enable the Commission to make a recommendation to the Council.

29. The Commission was informed that the measures recommended in the environmental management plan had been implemented in part and that the measures

would have a greater impact were sustained, focused action by contractors considered in the coming years. That potential growth based on better environmental and biodiversity knowledge would contribute to assessing the role of areas of particular environmental interest with regard to conservation in the Area. Exploring the input from independent data and stakeholder participation would allow the secretariat to be in a position to better assess expanding the areas. The need to work in coordination with other international organizations (the secretariat of the Convention on Biological Diversity, the Food and Agriculture Organization of the United Nations and the International Union for Conservation of Nature) was recognized, and it was noted that that would help the work on the scientific design of the areas.

30. The Commission took note of the concerns expressed with regard to developing specific guidelines for contractors to use in the establishment of impact reference zones and preservation reference zones that were needed during the exploration phase to proceed to exploitation. The Commission indicated that there was a need to redefine the term “impact reference zones” at its next session, in February 2017. A workshop might then be organized by the secretariat to help to develop specific guidelines for contractors in the establishment of impact and preservation reference zones.

### **C. Outcomes of the international workshop on taxonomic methods and standardization of meiofauna in the Clarion-Clipperton Fracture Zone, held in Ghent, Belgium, from 14 to 17 December 2015**

31. In February, the Commission had before it a status report on the outcomes of the international workshop on taxonomic methods and standardization of meiofauna in the Clarion-Clipperton Fracture Zone, held in Ghent, Belgium, from 14 to 17 December 2015. The Commission concluded that the recommendations arising from that and other related workshops were relevant to its review of its existing recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area ([ISBA/19/LTC/8](#)) in order to keep abreast of latest scientific developments, including in terms of taxonomic methods and standardization. The Commission suggested that revisions should be included in the workplan of its next session.

### **V. Draft regulations for exploitation of mineral resources in the Area**

32. In 2015, the Commission proposed a list of seven priority deliverables that the Council endorsed (see [ISBA/21/C/16](#), annex III). It included, as priority deliverable No. 1, the preparation of a zero draft of regulations for exploitation of mineral resources in the Area. In February, the Commission began to review a report prepared by the secretariat and external consultants containing a working draft of those regulations, including a suggestion for the development of separate environmental regulations and regulations relating to setting up a mining directorate or inspectorate. The Commission also had before it technical discussion papers relating to specific areas of regulatory development, including confidentiality, dispute settlement and a stakeholder participation and communications strategy. The papers were submitted in response to actions proposed by the Commission in that field.

33. The Commission noted with appreciation, and in relation to priority deliverable No. 5 concerning adaptive management, a paper prepared by the Government of New Zealand on the country's experiences with adaptive management in seabed mining projects. The Commission suggested that the content of that paper should be reflected in the Authority's discussions on the role of adaptive management in the environmental regulations.

34. The Commission had planned, following its review, to circulate a copy of the working draft of the exploitation regulations to all members of the Authority and all stakeholders in March for their comments. Owing to its excessive workload, however, the Commission did not complete its review and deferred the matter until July.

35. In July, the Commission considered a supplementary report and a revised working draft of the exploitation regulations. It reviewed the structure and general approach of the revised working draft and discussed specific regulations. It noted that the revised working draft reflected further input from the technical discussion papers and had benefited from two further workshops held in May in connection with the development of a payment mechanism and financial terms for contracts for exploitation and in connection with environmental assessment and management.

36. The Commission took note of the report of the Co-Chairs of the workshop on environmental assessment and management for exploitation of minerals in the Area, organized by the Griffith Law School and the Authority in Surfers Paradise, Queensland, Australia, from 23 to 26 May,<sup>1</sup> and the list of recommended actions flowing from that workshop, elements of which had been incorporated into an action plan (see annex II to the present report). The Commission expressed its appreciation to the Government of Australia for the commitment that it had showed in sponsoring the workshop, to the Griffith Law School for its contribution in planning the workshop and facilitating its outcomes and to all the participants who contributed their time and expertise. The Commission considered that the workshop had made significant progress by providing the Authority with a clearer direction in formulating a regulatory framework for environmental assessment and management.

37. The Commission welcomed the initiative to develop a payment mechanism in the Area and noted the challenges and complexities in doing so. It welcomed a wider discussion of environmental policies and approaches and related financial incentives and tools that must be considered in developing a total package. It noted the proposed points for future consideration in the report of the workshop on a deep seabed mining payment regime, held in San Diego, California, United States of America, on 17 and 18 May 2016,<sup>2</sup> and called for them to be addressed at a subsequent workshop.

38. The Commission noted the challenges in developing a full regulatory framework, considering the "building block" approach being taken by the Authority to tackle it the best approach. It reiterated, however, the proviso that no single element or package of the regulatory code would be agreed upon until everything had been agreed upon.

39. The Commission concluded that the working draft, once discussed by the Commission, should be circulated to stakeholders at the earliest available

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<sup>1</sup> Available from [www.isa.org.jm/files/documents/EN/Pubs/2016/GLS-ISA-Rep.pdf](http://www.isa.org.jm/files/documents/EN/Pubs/2016/GLS-ISA-Rep.pdf).

<sup>2</sup> Available from [www.isa.org.jm/files/documents/EN/Pubs/2016/DSM-ConfRep.pdf](http://www.isa.org.jm/files/documents/EN/Pubs/2016/DSM-ConfRep.pdf).

opportunity for their comments. It noted that the draft should be considered a work in progress because several areas required further feedback, discussion and expert input. Following the receipt of comments, a new working draft, together with stakeholder feedback, would be submitted to the Commission in February 2017.

40. The Commission observed that there was a need to identify a better working methodology in relation to regulatory development, including timelines and stakeholder contribution in the regulatory content and drafting process, considering it a matter of priority for its next session.

41. Following its deliberations on the working draft, the Commission reviewed suggested areas of action towards regulatory development, including the second phase of work on the priority deliverables and actions flowing from the high-level issues and action plan submitted to the Council in July 2015. An updated and indicative work programme is provided in annex II to the present report for consideration by the Council.

## **VI. Technical implementation plan for improved databases and data management strategy of the Authority**

42. In February, the Commission established a working group to assist its consideration of the data management strategy and related issues. The Commission considered the data management project prepared by the secretariat to develop and strengthen the data management capacity of the Authority (see [ISBA/22/LTC/15](#)).

43. The Commission expressed strong support for the project, noting that it would begin on 1 January 2017, at the same time as the next budget cycle, and urged the Finance Committee to ensure the availability of adequate resources, including for the two proposed staff positions.

44. For the second half of 2016, the Commission encouraged the secretariat to work on incorporating into the existing databases the data submitted by the contractors during the extension process and those contained in the annual reports of the contractors for activities carried out in 2015. At the same time, the secretariat should begin the preparatory work for the new data management project.

45. The Commission recalled its strong position in recent years in advocating a data management facility at the Authority that was fit for purpose.

46. The Chair of the Commission reported to the Finance Committee on the matter in order to facilitate the consideration of the next budget.

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

### **A. Issues relating to the handling of confidential data and information, as provided for in rule 12 of the rules of procedure of the Commission**

47. By paragraph 8 of its decision [ISBA/20/C/31](#), the Council requested the Commission to prepare draft procedures on the handling of confidential data and information, as provided for in rule 12 of the rules of procedure of the Commission ([ISBA/6/C/9](#)). Under rule 12 (2), the Commission is to recommend to the Council,

for approval, procedures on the handling of confidential data and information coming to the knowledge of members of the Commission by reason of their duties for the Commission. Such procedures are to be based upon the relevant provisions of the United Nations Convention on the Law of the Sea, the rules, regulations and procedures of the Authority and the procedures established by the Secretary-General pursuant thereto in order to carry out his responsibility to maintain the confidentiality of such data and information.

48. In February, the Commission deliberated on the matter and considered a note by the secretariat ([ISBA/22/LTC/6](#)). It also recalled its previous discussions on conflicts of interest. The Commission took note of the relevant provisions of the Convention relating to obligations of non-disclosure and financial interests relating to members of the Commission and of similar obligations relating to the Secretary-General and staff of the secretariat. The Commission noted that, while the Convention established an obligation not to disclose confidential information, and to some extent defined the data and information that were to be considered confidential, it did not deal with the procedures by which confidential information was to be handled. Instead, such procedures were outlined in the Authority's regulations on prospecting and exploration.<sup>3</sup>

49. The Commission noted that, pursuant to regulation 37 (1) of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, the Secretary-General was responsible for establishing procedures for maintaining the confidentiality of all confidential data and information and the handling of such data and information by members of the secretariat, members of the Commission and any other person participating in any activity or programme of the Authority. In 2011, the Secretary-General had issued procedures for information sensitivity, classification and handling in the form of a Secretary-General's bulletin ([ISBA/ST/SGB/2011/03](#)). In the bulletin, the Secretary-General had, among other things, established procedures to ensure the appropriate classification and secure handling by the secretariat of confidential data and information entrusted to or originating from the Authority, with a view to implementing article 168 of the Convention and the Regulations. The Secretary-General had also defined therein the scope of applicability and the responsibilities and basic obligations of staff, in addition to elaborating on the classification principles, classification levels and procedures for identification and marking of documents, including those to be provided to members of the Commission in the course of their work.

50. The Commission noted that annex II to the bulletin contained additional procedures for the handling of confidential data and information transferred to the Authority or to any other person (including members of the Commission) participating in any activity or programme of the Authority pursuant to the Regulations or a contract issued thereunder. It contained procedures on general security, system access control, authenticity and data access security. It also contained procedures for communication security, data security and the handling and processing of data and information, together with a declaration of

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<sup>3</sup> Regulation 37 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area ([ISBA/19/C/17](#), annex), for example, deals with procedures to ensure confidentiality. The same provision is found in regulation 39 of the Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area ([ISBA/16/A/12/Rev.1](#), annex) and regulation 39 of the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area ([ISBA/18/A/11](#), annex).

confidentiality to be signed by persons authorized to have access to such confidential data and information. The same declaration of confidentiality was signed by all members of the Commission immediately upon assuming office.

51. In their deliberations, members of the Commission noted that the procedures contained in annex II to the Secretary-General's bulletin appeared to be sufficient and appropriate to safeguard the confidentiality of confidential data and information used by members in the course of their duties and would provide a satisfactory response to the requirement under rule 12 of the rules of procedure to establish procedures on the handling of confidential data and information. It would not be necessary or desirable to establish additional, and potentially inconsistent, rules for the Commission. Nevertheless, for the avoidance of any doubt as to the legal effect of a Secretary-General's bulletin on members of a body external to the secretariat, and therefore not subject to a letter of appointment pursuant to the Staff Regulations, the Commission decided to recommend that the Council should take a formal decision recognizing the applicability, *mutatis mutandis*, of the additional procedures for handling of confidential data and information contained in annex II to the Secretary-General's bulletin to members of the Commission.

## **B. Issues relating to the operation of the Enterprise, in particular the legal, technical and financial implications for the Authority**

52. The Commission was provided with an update on the status of consideration of issues relating to the operation of the Enterprise ([ISBA/22/LTC/9](#)). It was noted that other priorities to address had limited the progress made in relation to that issue, which involved complex questions, such as the capitalization of, and the value of joint ventures with, the Enterprise. In the discussions, it was recalled that the Enterprise occupied a fundamental place in the legal framework that governed activities in the Area and that existing available reserved areas were current assets of the Enterprise. The question of the operationalization of the Enterprise needed to be addressed in the near future, in particular because it was closely related to the possible election of an equity interest in joint arrangements with the Enterprise in lieu of a contribution by a reserved area. It was also suggested that the current economic context must be taken into account with regard to the operationalization of the Enterprise. The Commission took note of the progress report and decided to keep the matter on its agenda for further consideration. In the meantime, the Commission requested the secretariat, within existing resources and priorities, to continue its work on the studies identified in 2014 on the identification of gaps and clarification of the terms and conditions upon which a future joint venture arrangement between a contractor and the Enterprise could be implemented, on the basis of the terms of reference set out in the annex to document [ISBA/20/LTC/12](#).

## **C. Stakeholder consultation and engagement strategy**

53. In February, the Commission was provided with a consultant report on a stakeholder consultation and engagement strategy. The Commission took note of the report and recalled the engagement with stakeholders in developing the regulations on exploitation for mineral resources in the Area. The Commission also observed that there was a need for the Authority to develop such a strategy.

#### **D. Issues relating to the sponsorship of contracts for exploration in the Area, monopolization, effective control and related matters**

54. In July 2015, the Commission requested the Secretariat to prepare an analysis illustrating and identifying more specifically the new ways of doing business and the new models of business arrangement and any implications of those trends in the light of questions of monopolization, abuse of dominant position and effective control by a sponsoring State over sponsored entities.

55. At the current session, in considering that analysis (ISBA/22/LTC/13), the Commission recalled that it had highlighted the emergence of those trends in connection with the rights to apply for a plan of work for activities in reserved areas that were accorded exclusively to developing States, their sponsored entities and the Enterprise. While recognizing that applicants were qualified, the Commission drew the attention of the Council to models of business arrangements rooted in the close partnership between developing States and their sponsored entities with the business interest of entities registered in, or owned by nationals of, developed States who had contributed to the reserved areas under applications by developing States or entities sponsored by them. By way of illustration, the analysis provided examples of various operational arrangements (such as a corporate structure between a parent company incorporated in a developed State and its subsidiary being an entity sponsored by a developing State, an equal and equitable arrangement between a developing State and a contractor sponsored by a developed State or a model of collaboration in the execution of the plan of work between the contractor that contributed to the reserved area and the contractor, sponsored by a developing State, that is granted that reserved area).

56. In its deliberations, the Commission noted that new ways of doing business and new models of business arrangements were distinct issues. The former was related to partnerships between an entity that contributed a reserved area and an entity sponsored by a developing State that carried out its exploration activities. The latter referred to the observation that the election of an equity interest in joint arrangements was frequently preferred over the contribution of reserved areas, which was simpler to opt for in the case of polymetallic nodules. The Commission observed that those issues were also closely related to the question of the operationalization of the Enterprise. It also observed that the recent trends of partnerships between developing States or entities sponsored by them on the one hand, and developed States or entities sponsored by them on the other, required the undertaking of a more complete study of the implications of those trends for key features at the heart of the common heritage regime (the operationalization of the Enterprise, the future of the parallel system, cherry-picking or selective use of reserved areas and a reduction in the availability of reserved areas, for example). The point was made that new ways of doing business and new business arrangements illustrated a form of cooperation chosen by developing States or entities sponsored by them. It was also indicated that those models could provide options for the operationalization of the Enterprise through a joint venture arrangement. Reference was also made to a consortium, which offered another example of how to enable developing States to carry out activities in the Area.

57. The Commission agreed that it was premature to take action and reach any conclusion until a detailed analysis had been made. It therefore agreed to keep those issues under review and on its agenda as part of its workplan over the coming five

years. The Commission requested the secretariat to prepare terms of reference for an in-depth analysis of those issues for its consideration in 2017.

### **VIII. Consideration of the interim report of the review committee established to oversee the periodic review of the international regime of the Area pursuant to article 154 of the United Nations Convention on the Law of the Sea**

58. The Commission welcomed those in attendance at the open session and expressed its great satisfaction at the interest shown by the many individuals present. It considered the interim report provided by the consultants, deeming it timely and essential to the assessment of the implementation of the international regime of the Area pursuant to article 154 of the United Nations Convention on the Law of the Sea to date. The Commission was unable to reach consensus, however, meaning that the following paragraphs reflect the views of the majority of its members.

59. Concerns were expressed, including with regard to shortcomings in the methodology of the review survey, such as drawing conclusions on the basis of the few responses to the questionnaire, and to recommendations stemming from only one or a handful of respondents. In addition, there was no visibility of the largest category of respondents as to their knowledge of the regime under review and consequently their accountability or responsibility in relation to matters relating to the mandate of the Authority. Furthermore, the underrepresentation of geographical regions and the phrasing of some questions that had the potential to influence responses, and thus outcomes, were noted. Some members of the Commission were of the opinion that there had been misunderstandings, such as regarding the distinction between transparency and lack of information. That demonstrated a need for the Authority to develop a clear communication strategy.

60. The interim report should be taken as a wake-up call for the Authority to act at the current session. The majority of the Commission members considered it to be the first in a series of steps to facilitate improved monitoring of the activities of the Authority. The point raised by the Commission was strongly connected to the comments of 25 May made by the committee established to oversee the review of the manner in which the international regime of the Area established in the Convention had operated in practice. It was also highlighted that the report was simply interim in nature.

## Annex I

### Status of the former registered pioneer investors

#### Note by the secretariat

1. The Legal and Technical Commission has requested the secretariat to clarify the legal status, with regard to their contracts for exploration for polymetallic nodules, of the former registered pioneer investors under resolution II of the Third United Nations Conference on the Law of the Sea.

2. Resolution II, which was adopted together with the Convention on 30 April 1982, set out rules governing preparatory investment in pioneer activities relating to polymetallic nodules. During the final stages of the Third United Nations Conference on the Law of the Sea, a number of countries made unilateral claims to deep seabed mine sites and enacted domestic legislation giving reciprocal recognition to such claims. The intention behind resolution II therefore was to create an interim system, applicable between the adoption of the Convention and its entry into force, in order to recognize and “protect the substantial investments already made in the development of seabed mining technology, equipment and expertise”<sup>a</sup> and in the research and identification of potential mining areas made by early investors, but at the same time to bring these within the umbrella of the Convention.

3. Pioneer investors were registered by the Preparatory Commission, as follows:

- India, 17 August 1987
- Institut français de recherche pour l’exploitation de la mer (IFREMER)/ Association française pour l’exploration et la recherche des nodules (AFERNOD) (France), 17 December 1987
- Deep Ocean Resources Development Co. Ltd (Japan), 17 December 1987
- Yuzhmoregeologiya, sponsored by the former Union of Soviet Socialist Republics (now the Russian Federation), 17 December 1987
- China Ocean Mineral Resources Research and Development Association (COMRA) (China), 5 March 1991
- Interoceanmetal Joint Organization (IOM), a consortium sponsored by Bulgaria, Cuba, the former Czechoslovakia (now the Czech Republic and Slovakia), Poland and the former Union of Soviet Socialist Republics, 21 August 1991
- Government of the Republic of Korea, 2 August 1994.

4. Others that qualified as pioneer investors under resolution II but did not register as pioneer investors were four consortia based in the United States of America: (a) Kennecott Consortium, formed in 1974, composed of Kennecott Corporation (United States), TTZ Deepsea Mining Enterprises Ltd (United Kingdom of Great Britain and Northern Ireland), Consolidated Gold Fields PLC (United Kingdom), BP Petroleum Development Ltd (United Kingdom), Noranda

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<sup>a</sup> See [LOS/PCN/L.103](#), para. 11 (Chairman of the Preparatory Commission).

Exploration Inc. (Canada) and Mitsubishi Group (Japan); (b) Ocean Mining Associates, formed in 1974, composed of Essex Minerals Company (United States), Union Seas Inc. (Belgium), Sun Ocean Ventures (United States) and Samim Ocean Inc. (Italy); (c) Ocean Management Inc., formed in 1975, composed of Inco Inc. (Canada), SEDCO Inc. (United States), Arbeitsgemeinschaft Meeretechnisch Gewinnbare Rohstoffe (Germany) and Deep Ocean Minerals Company (Japan); and (d) Ocean Minerals Company (OMCO), formed in 1977, composed of Amoco Ocean Minerals Co. (United States), Lockheed Corporation (United States), Royal Dutch Shell (Netherlands) and Royal Boskalis Westminster (Netherlands).

5. The activities of the registered pioneer investors were supervised by the Preparatory Commission, while at the same time the negotiations on the implementation of Part XI of the Convention continued. In accordance with its provisions, resolution II expired six months after the date of entry into force of the Convention. Furthermore, in order to complete the link between resolution II and the Convention regime, under paragraph 8 of resolution II, an application for approval of a plan of work by a registered pioneer investor was required to be submitted within six months of the date of entry into force of the Convention, accompanied by a certificate of compliance issued by the Preparatory Commission. Under the 1994 Agreement, the six-month deadline was further extended to 36 months following the entry into force of the Convention (that is, by 16 November 1997).

6. In accordance with the 1994 Agreement, annex, section 1, paragraph 6 (a) (ii), a registered pioneer investor may request approval of a plan of work for exploration. The plan of work for exploration shall consist of documents, reports and other data submitted to the Preparatory Commission both before and after registration and shall be accompanied by a certificate of compliance, consisting of a factual report describing the status of fulfilment of obligations under the pioneer investor regime, issued by the Preparatory Commission. Such a plan of work shall be considered to be approved.

7. In accordance with the foregoing provisions, the seven registered pioneer investors submitted requests for approval of their plans of work for exploration on 19 August 1997. The requests were considered by the Legal and Technical Commission on 21 August 1997 and a report was submitted to the Council on 22 August 1997 ([ISBA/3/C/7](#)). On 27 August 1997, the Council, acting on the recommendation of the Commission, noted that in accordance with the Agreement, the plans of work for exploration were considered to be approved and requested the Secretary-General to issue the plans of work for exploration in the form of contracts incorporating the applicable obligations under the provisions of the Convention and the Agreement and in accordance with the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area in the standard form of contract to be agreed by the Council (see [ISBA/3/C/9](#)).

8. The Regulations, incorporating the standard form of contract, were adopted in 2000. Subsequently, the first group of contracts were issued, as follows: Interoceanmetal Joint Organization (sponsored by Bulgaria, Cuba, the Czech Republic, Poland, the Russian Federation and Slovakia), on 29 March 2001; Yuzhmorgeologiya (the Russian Federation) on 29 March 2001; Government of the Republic of Korea, on 27 April 2001; China Ocean Mineral Resources Research and Development Association (COMRA) (China), on 22 May 2001; Deep Ocean

Resources Development Ltd. (Japan), on 20 June 2001; Institut français de recherche pour l'exploitation de la mer (France), on 20 June 2001; Government of India, on 25 March 2002.

9. While paragraph 13 of resolution II provides that the Authority and its organs shall honour and recognize the rights and obligations arising from resolution II, this provision has to be read and understood in the light of paragraph 14, which provides that the resolution shall have effect until the entry into force of the Convention. In the case of the seven contractors referred to above, their status also has to be understood in the light of clause 6 of the Contract for Exploration (annex III.F to the Regulations), which provides that “this contract expresses the entire agreement between the parties, and no oral understanding or prior writing shall modify the terms hereof”.

10. The only qualification that must be noted is with respect to the obligation of training, pursuant to regulation 27 of the Regulations. The 2000 edition of the Regulations (ISBA/6/A/18, annex) contained a specific provision in paragraph 2 of regulation 27, as follows: “In the case of a registered pioneer investor, the contract shall take into account the training provided in accordance with the terms of its registration as a registered pioneer investor”.

11. The understanding, on the basis of this provision and of the terms of the contracts, is that, in the case of the former registered pioneer investors, there was no contractual obligation to provide further training beyond that which had been provided during the pioneer phase.<sup>b</sup>

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<sup>b</sup> In the case of the Republic of Korea, its training programme was submitted on 6 March 1995, after the Preparatory Commission had completed its work, and was therefore implemented under the supervision of the Legal and Technical Commission.

## Annex II

### Priority deliverables, high-level issues, action plan: update and suggested work programme for discussion

Task area

Stage 1: update

Stage 2: next steps 2016/17 and other comments

#### A. Priority deliverables ([ISBA/21/C/16](#), annex III)

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|---|---|--|
| 1. A zero draft of exploitation regulations and standard contract terms based on the working structure agreed by the Commission | A working draft of the exploitation regulations was presented for consideration by the Commission in July 2016  | <ul style="list-style-type: none"> <li>• Review, revise and issue the working draft exploitation regulations to all stakeholders in July 2016, with appropriate covering language</li> <li>• Commence working draft of environmental regulations (environmental assessment and management provisions) based on skeleton working structure (see also priority deliverable No. 4 below)</li> <li>• Prepare outline structure of seabed mining directorate regulations (see also high-level issue No. 14 below)</li> </ul>  |
| 2. Financial modelling for proposed financial terms and payment mechanism   | No detailed financial modelling has been undertaken. Financial terms now reflected as Part V of the working draft. See also output from payment regime workshop | <ul style="list-style-type: none"> <li>• Further payment regime workshop tentatively proposed for late 2016 but timing to be considered in light of other impact areas, e.g., jurisdictional competencies (high-level issues Nos. 2 and 10 below), responsibility and liability (priority deliverable No. 7). Initial desktop modelling an option</li> <li>• Areas for discussion highlighted in the conference report on the deep seabed mining payment regime workshop (San Diego, United States of America, 17-18 May 2016), including modelling of options (subject to data availability)</li> </ul> |
| 3. Data management strategy and plan (also high-level issue No. 1)  | This will be presented by the secretariat in July 2016  | <ul style="list-style-type: none"> <li>• <a href="#">ISBA/22/LTC/15</a></li> </ul>   |
| 4. Environmental assessment and management  | See outcomes of Brisbane workshop   | <ul style="list-style-type: none"> <li>• Workshop in Berlin tentatively proposed for January 2017 (mainly strategic environmental assessment-focused)</li> <li>• Precautionary approach — develop criteria/measures</li> <li>• Develop strategic environmental plan for Clarion-Clipperton Zone (<a href="#">ISBA/22/LTC/12</a>)</li> <li>• Establish regional environmental assessment process and regional environmental management plans</li> </ul>   |

<i>Task area</i>	<i>Stage 1: update</i>	<i>Stage 2: next steps 2016/17 and other comments</i>
		<ul style="list-style-type: none"> <li>Options for environmental impact assessment scoping, review and decision-making process to be formulated, including public participation options</li> <li>Finalize environmental impact statement template/draft statement guidelines</li> </ul>
5. Adaptive management approach (also high-level issue No. 8)	New Zealand Government paper issued/considered at Brisbane workshop	<ul style="list-style-type: none"> <li>Prepare working definition and guidelines to assist the Authority in decision as to whether adaptive management is appropriate for deep sea mining</li> </ul>
6. “Serious harm”	Considered during working session at Brisbane workshop	<ul style="list-style-type: none"> <li>Expert study required on definition of “serious harm” (and related concepts) and study regarding definition and thresholds for “substantial evidence”</li> </ul>
7. Responsibility and liability	No action taken	<ul style="list-style-type: none"> <li>Legal working group to be established</li> <li>To also consider concept of environmental liability trust fund</li> </ul>
<b>B. High-level issues (exploitation draft framework, high-level issues and action plan, version II, 15 July 2015)</b>		
2. Activities in the Area — competence of the Authority and of other relevant competent international organizations	No action taken	<ul style="list-style-type: none"> <li>Possible workshop on jurisdictional competencies to be convened during last quarter of 2016?</li> </ul>
6. Confidentiality	See Authority discussion paper No. 2: Data and information management considerations arising under the proposed new exploration regulations	<ul style="list-style-type: none"> <li>Await Commission/Council/stakeholder feedback on confidentiality provisions in the working draft exploitation regulations</li> <li>Links with issue of “transparency” and access to information</li> </ul>
9. “Internationally recognized standards” and their significance in exploitation activities	No action taken	<ul style="list-style-type: none"> <li>Develop indicative list of relevant standards across subject areas</li> <li>Authority to engage with relevant stakeholders to initiate a standard development process and framework</li> </ul>

<i>Task area</i>	<i>Stage 1: update</i>	<i>Stage 2: next steps 2016/17 and other comments</i>
10. Sponsoring State(s) and the Authority — a clear division of duties and responsibilities?	No action taken	<ul style="list-style-type: none"> <li>• Matrix setting out duties and responsibilities to be developed</li> <li>• Link with workshop on jurisdictional competencies</li> </ul>
13. Authority stakeholder consultation	See Authority discussion paper No. 3: Developing a communications and engagement strategy for the International Seabed Authority to ensure active stakeholder participation in the development of a minerals exploitation code	<ul style="list-style-type: none"> <li>• A priority area that requires urgent attention</li> </ul>
14. Mining inspectorate/directorate/environmental regulator	No action taken	<ul style="list-style-type: none"> <li>• Action plan to be developed in light of article 154 review and decisions made by the Authority</li> <li>• Develop a working paper setting out a suggested structure and options, including funding, for the operation of an inspection regime</li> </ul>

### **C. Action plan (exploitation draft framework, high-level issues and action plan, version II, 15 July 2015)**

*Note: the Commission is encouraged to review the action plan attached to the draft framework for consideration of other tasks it considers important/a priority for 2016/17.*

Contract violations and penalties	No action taken	<ul style="list-style-type: none"> <li>• Desktop review to be undertaken on existing/comparable regimes</li> <li>• Interaction with sponsoring State offence and penalty regime to be understood</li> </ul>
Settlement of disputes	See Authority discussion paper No. 1: Dispute resolution considerations arising under the proposed new exploitation regulations	<ul style="list-style-type: none"> <li>• Await Commission/Council/stakeholder feedback on dispute resolution provisions in working draft exploitation regulations/consideration of discussion paper No. 1</li> </ul>
Suspension and termination of contract	No action taken	<ul style="list-style-type: none"> <li>• Technical paper to clarify meaning of “serious persistent and wilful violations”, on the basis of existing best practice in extractive industries</li> </ul>

<i>Task area</i>	<i>Stage 1: update</i>	<i>Stage 2: next steps 2016/17 and other comments</i>
Revision (of contract)	No action taken	<ul style="list-style-type: none"> <li>• Technical paper to clarify meaning of “inequitable, impracticable and impossible” referenced in annex III, article 19, of the Convention</li> </ul>
Environmental bonds and performance guarantees	Initial concepts and principles discussed at payment regime workshop	<ul style="list-style-type: none"> <li>• The interaction between commercial insurance and bond mechanisms needs to be investigated together with the terms and conditions, including appropriate quantum of any bond</li> <li>• Interaction with responsibility and liability regime to be considered</li> </ul>
Insurance	Discussed briefly at payment regime workshop. No definitive outcome/ recommendations	<ul style="list-style-type: none"> <li>• Discussions with contractors, the insurance industry and other stakeholders needed to gain knowledge and understanding of insurance specifics, including limitations, exceptions and exclusions. See also “Environmental bonds and performance guarantees” above</li> </ul>
Seabed sustainability fund	No action taken. Discussed in principle at payment regime workshop	<ul style="list-style-type: none"> <li>• A working paper to be drafted, articulating the concept and objectives of such a fund for circulation to interested parties</li> </ul>
Section 6 of the Agreement	Elements of section 6 obligations have been reflected in the working draft regulations	<ul style="list-style-type: none"> <li>• Expert in World Trade Organization law and affairs to be engaged to determine the Authority’s responsibility under section 6 of the Agreement, including drafting of relevant rules, regulations and procedures contemplated under section 6 (6)</li> </ul>