



Legal and Technical Commission

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Functions, working practices and anticipated programme of work of the Legal and Technical Commission for the period from 2017 to 2021

Note by the Secretariat

1. The present note has been prepared by the Secretariat for the benefit of the incoming members of the Legal and Technical Commission. Its purpose is to describe the status and responsibilities of the Commission along with the working practices that have been developed since the establishment of the Commission in 1997. The paper is also designed to provide the context and framework in which the Commission will exercise its mandate over the next five years. For that purpose, it briefly outlines the anticipated scope of work of the Commission for the period from 2017 to 2021.

I. Status and responsibilities of the Commission

A. Status of the Commission

2. The Commission is established as an organ of the Council of the International Seabed Authority, in accordance with article 163 (1) (b) of the United Nations Convention on the Law of the Sea.¹

3. In accordance with the Convention and the rules of procedure of the Council, the Council elects the members of the Commission. Elections take place in accordance with a streamlined procedure decided on by the Council at the thirteenth session.² Members hold office for a five-year term and are eligible for re-election for a further term. Members serve in their personal capacity. As experts on mission,

¹ United Nations, *Treaty Series*, vol. 1833, No. 31363.

² See [ISBA/13/C/6](#).



they are covered by article 9 of the Protocol on the Privileges and Immunities of the International Seabed Authority.³

4. Article 165 (1) of the Convention requires that members of the Commission have appropriate qualifications such as those relevant to exploration for and exploitation and processing of mineral resources, oceanology, protection of the marine environment, or economic or legal matters related to ocean mining and related fields of expertise. This requirement is designed to enable the Commission to fulfil its various technical and legal responsibilities.

5. In 2016, the Council decided, on an exceptional and temporary basis, without prejudice to future elections, and with due regard to economy and efficiency, to increase the number of members of the Commission to 30.⁴

6. Before assumption of duties, members of the Commission are required to sign an undertaking that they shall have no financial interest in any activity relating to exploration and exploitation in the Area and that they shall not disclose, even after the termination of their functions, any industrial secret or proprietary data which are transferred to the Authority in accordance with the Convention and the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (“the Part XI Agreement”),⁵ or any other confidential information coming to their knowledge by reason of their duties for the Authority.⁶

B. Functions of the Commission

7. The functions of the Commission are complementary to the functions of the Council. These functions are mainly of an advisory or recommendatory nature. However, some of the functions listed in article 165 (2) of the Convention require the Commission to make independent expert assessments, for example, on the environmental implications of activities in the Area. The functions of the Commission must also be exercised in accordance with such policy guidelines and directives that the Council may adopt (article 163 (9) of the Convention).

8. The functions of the Commission are set out in article 165 (2) of the Convention as read in conjunction with the Part XI Agreement. These functions are to:

(a) Make recommendations with regard to the exercise of the Authority’s functions upon the request of the Council;

(b) Review formal written plans of work for activities in the Area and submit appropriate recommendations to the Council;

(c) Supervise, upon the request of the Council, activities in the Area, where appropriate, in consultation and collaboration with any entity carrying out such activities or State or States concerned, and to report thereon to the Council;

³ United Nations, *Treaty Series*, vol. 2214, No. 39357. As at 4 May 2017, 42 members of the Authority have become parties to the Protocol, namely: Albania, Antigua and Barbuda, Argentina, Austria, Brazil, Bulgaria, Cameroon, Chile, Croatia, Cuba, Czechia, Denmark, Egypt, Estonia, Finland, France, Germany, Ghana, Guinea, Guyana, India, Iraq, Ireland, Italy, Jamaica, Lithuania, Mauritius, Mozambique, the Netherlands, Nigeria, Norway, Oman, Poland, Portugal, Senegal, Slovakia, Slovenia, Spain, Togo, Trinidad and Tobago, the United Kingdom of Great Britain and Northern Ireland and Uruguay.

⁴ See [ISBA/22/C/29](#).

⁵ United Nations, *Treaty Series*, vol. 1836, No. 31364.

⁶ Article 163, paragraph 8, of the Convention; rule 11 of the rules of procedure of the Legal and Technical Commission.

(d) Prepare assessments of the environmental implications of activities in the Area;

(e) Make recommendations to the Council on the protection of the marine environment, taking into account the views of recognized experts in that field;

(f) Formulate and submit to the Council the rules, regulations and procedures referred to in article 162 (2) (o) of the Convention, taking into account all relevant factors, including assessments of the environmental implications of activities in the Area;

(g) Keep such rules, regulations and procedures under review and recommend to the Council from time to time such amendments thereto as it may deem necessary or desirable;

(h) Make recommendations to the Council regarding the establishment of a monitoring programme to observe, measure, evaluate and analyse, by recognized scientific methods, on a regular basis, the risks or effects of pollution of the marine environment resulting from activities in the Area, to ensure that existing regulations are adequate and are complied with and coordinate the implementation of the monitoring programme approved by the Council;

(i) Recommend to the Council that proceedings be instituted on behalf of the Authority before the Seabed Disputes Chamber, in accordance with Part XI of the Convention and the relevant annexes, taking into account particularly article 187;

(j) Make recommendations to the Council with respect to measures to be taken, upon a decision by the Seabed Disputes Chamber in proceedings instituted in accordance with subparagraph (i) above;

(k) Make recommendations to the Council to issue emergency orders, which may include orders for the suspension or adjustment of operations, to prevent serious harm to the marine environment arising out of activities in the Area. Such recommendations shall be taken up by the Council on a priority basis;

(l) Make recommendations to the Council to disapprove areas for exploitation by contractors or the Enterprise in cases where substantial evidence indicates the risk of serious harm to the marine environment;

(m) Make recommendations to the Council regarding the direction and supervision of a staff of inspectors who shall inspect activities in the Area to determine whether the provisions of Part XI, the rules, regulations and procedures of the Authority and the terms and conditions of any contract with the Authority are being complied with.

9. These functions can be classified into four categories:

(a) Functions relating to the approval of plans of work;⁷

(b) Functions relating to the supervision of activities in the Area and the exercise of the functions of the Authority;⁸

(c) Regulatory functions;⁹

(d) Functions relating to the assessment of the environmental impact of activities in the Area.¹⁰

⁷ Article 165 (2) (b) of the Convention; Part XI Agreement, annex, section 1, paragraph 6.

⁸ Article 165 (2) (a), (c), (i), (j) and (m) of the Convention.

⁹ Article 165 (f) and (g) of the Convention.

¹⁰ Article 165 (d), (e), (f), (h), (k) and (l) of the Convention.

10. The Commission is also responsible for carrying out the functions of the Economic Planning Commission (established as an organ of the Council under article 163 (1) (a) of the Convention) until the Council decides otherwise or until the approval of the first plan of work for exploitation (Part XI Agreement, annex, section 1, paragraph 4). These functions are set out in article 164 of the Convention; they relate to the policy of the Authority for assisting developing land-based producer States being seriously affected by the production of minerals from the Area.

11. The responsibilities of the Commission are discharged at various stages of the development of activities in the Area. By way of illustration, since its inception in 1997, the Commission has, inter alia:

(a) Considered 17 applications for approval of a plan of work for exploration for polymetallic nodules, 6 applications for approval of a plan of work for exploration for polymetallic sulphides and 5 applications for approval of a plan of work for exploration for cobalt-rich ferromanganese crusts, and made recommendations to the Council;

(b) Issued recommendations for the guidance of the contractors on environmental and financial matters, on training programmes and on annual reporting;

(c) Evaluated contractors' activity reports every year since 2002;

(d) Prepared draft regulations on prospecting and exploration for polymetallic nodules, for polymetallic sulphides and for cobalt-rich ferromanganese crusts in the Area;

(e) Developed and recommended an environmental management plan for purposes of assessing the environmental implications of activities in the Area.

12. A summary of the main work carried out by the Commission over the past five years is contained in annex II.

II. Working practices of the Commission

A. Rules of procedure of the Commission

13. The meetings are conducted in accordance with the rules of procedure of the Legal and Technical Commission, which the Council approved at its sixty-eighth meeting on 13 July 2000.¹¹

B. Chairmanship

14. In accordance with the rules of procedure of the Commission, the Chair and Vice-Chair are elected from among the members of the Commission at the opening of the session. They hold office for a one-year term and are eligible for re-election.¹² At the opening of its twenty-third meeting, on 21 February 2017, the Commission elected Christian Reichert (Germany) as Chair and Michelle Walker (Jamaica) as Vice-Chair.

¹¹ The rules of procedure of the Commission are contained in the annex to document [ISBA/6/C/9](#); they are also reproduced in *International Seabed Authority: Basic Texts* (Kingston, International Seabed Authority, 2nd ed., 2012), pp.70-84. In accordance with rule 54, the rules entered into force on the day of their approval by the Council.

¹² Rule 16 of the rules of procedure of the Commission.

15. The Chair of the Commission is not formally required to report to the Council on the work of the Commission, nor is it necessary for the Commission to formally adopt a consensus report on its work. However, a practice has developed since the first session of the Commission in 1997 whereby the Chair makes a statement to the Council summarizing the work of the Commission and identifying any issues that require attention by the Council. The practice has developed of the Chair and other members of the Commission, responding to questions from the Council and entering into a dialogue. This is much appreciated by the Council as it facilitates the liaison between the Council and its subsidiary body.

C. Work patterns

16. The schedule of meetings of the Commission has been established on the basis of an evolutionary approach and in accordance with the principle of cost-effectiveness that applies to the work of all the organs of the Authority, together with the need for sequential consideration of some agenda items by the various organs of the Authority.

17. For a number of years the practice was to convene meetings of the Commission in conjunction with the annual session of the Assembly and Council. As of 2013, in view of the substantial general increase in the workload of the Commission, the Commission meets twice a year with full conference services. The first part of the session takes place early in the year, normally in mid-February. The second part of the session commences one week immediately prior to the session of the Council.

18. It should be noted that this practice has developed only after the Commission experimented with various other formats, including holding meetings without full services, as well as requesting members to arrive over the weekend in order to work on a voluntary basis to advance the agenda. Neither format was considered satisfactory by the outgoing Commission, which held a firm view that, in the light of the importance of the work of the Commission, full conference services should be provided to enable all members to contribute on an equal basis.

19. Another factor to be taken into consideration is that there are many issues on which the Council cannot make progress without a recommendation by the Commission. Accordingly, holding meetings of the Council and the Commission in parallel is becoming increasingly impractical and inefficient.

D. Subcommittees and working groups

20. The establishment of subcommittees or working groups that subsequently report to the full Commission does not result from a formal procedure; rather it has developed as a frequent practice of the Commission for specific purposes involving the detailed consideration of complex technical and legal issues. For example, the Commission has often divided itself into informal working groups to evaluate the annual reports of contractors with the Authority, to draft exploration regulations and to consider applications for approval of plans of work for exploration. The appointment of a small group from the membership of the Commission has also been the method used to carry out an initial review and appraisal of applications for training programmes and to report back to the full Commission.

21. In some years, depending on the workload, the Commission decided, before the end of its session, to appoint an informal subcommittee with the task of arriving in Kingston in advance of the next year's meeting of the Commission in order to

conduct a preliminary evaluation of the contractors' annual reports. In recent years, however, the working groups were convened during regular sessions, without interpretation, as they were involved mainly in reading and summarizing the views of the groups for consideration in plenary meetings of the Commission.

22. The Commission has also requested small groups of members with specific expertise to work between sessions on the preparation of draft documents. For example, in 2011 an environmental working group was appointed to prepare draft recommendations for the guidance of contractors on the assessment of the environmental impacts of exploration for polymetallic sulphides. With the increase in the number of training opportunities provided by the contractors over recent years, a training working group was appointed to select candidates during the session and to select candidates in the intersessional period by electronic means for training opportunities provided at short notice.

23. Over the course of the next five years, given the technical nature of some of the issues before the Commission in its work programme, the Commission may wish to set up additional working groups to facilitate the analysis and discussion of related topics. During its meetings in February and March 2017, the Commission appointed a working group to review its recommendations for the guidance of contractors in the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area, and established a working group to facilitate the review of the implementation of the Environmental Management Plan for the Clarion-Clipperton Zone and the development of environmental management plans in other international seabed area zones.

E. Decision-making

24. As a general rule, decisions of the organs of the Authority, including the Commission, should be by consensus. If, in spite of all efforts, there is no consensus, then decisions by voting are made by a majority of members of the Commission present and voting.¹³ To date, the Commission has taken all its decisions by consensus, except on one single occasion in the context of the consideration of the draft procedures and criteria for the extension of an approved plan of work pursuant to section 1, paragraph 9, of the annex to the 1994 Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 and pursuant to section 3.2 of the standard clauses set out in annex IV to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area. At its meeting in February 2015, after having exhausted all efforts to reach a decision by consensus, the Commission proceeded to a vote pursuant to rules 44 and 47 of its rules of procedure.¹⁴

F. Open and private meetings

25. The question of holding open or private meetings was controversial in the early years of the Authority. A compromise was found in rules 6 and 53 of the rules of procedure of the Commission. Rule 6 establishes that the meetings of the Commission are held in private unless the Commission decides otherwise; rule 6 also states that the Commission shall take account of the desirability of holding open meetings when it discusses issues of general interest to members of the Authority which do not involve the discussion of confidential information. Further,

¹³ Part XI Agreement, annex, section 3, paragraphs 2 and 13; rule 44 of the Rules of Procedure of the Commission.

¹⁴ See [ISBA/21/C/16](#), para. 42.

rule 53, *inter alia*, allows any member of the Authority, with the permission of the Commission, to send a representative to attend a meeting of the Commission when the Commission considers a matter particularly affecting that member.

26. In the light of the above, the practice of the Commission is to hold open meetings when matters of general concern, such as the draft environmental management plan for the Clarion-Clipperton Zone or 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 Convention, are examined in order to allow members and observers of the Authority to follow the discussions.¹⁵ At the same time, the Commission has carefully preserved the confidentiality of its discussions on matters involving the consideration of confidential information, such as the evaluation of the annual reports of the contractors or the review of applications for approval of plans of work, those being always discussed in closed meetings. Those private meetings are scheduled, to the extent possible, when the Commission meets prior to the opening of the session of the other organs of the Authority.

G. Expertise from outside the membership of the Commission

27. In order to assist the work of the Commission when issues of a highly technical nature arise, experts from outside the membership of the Commission may be invited to participate in its work. The Convention itself encourages such a practice¹⁶ and previous Commissions benefited from external expertise at the time of drafting the regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts in the Area.¹⁷ The Commission also receives briefings on the technical workshops convened regularly by the Secretariat. The Commission was, for example, given presentations on the geological model for nodules in the Clarion-Clipperton Zone; on the establishment of areas of an environmental interest in the Clarion-Clipperton Zone; on the Code for environmental management of marine mining of the International Marine Minerals Society;¹⁸ and, more recently, on taxonomic methods and standardization; on the development of a payment mechanism and financial terms for contracts for exploitation; and on environmental assessment and management for the exploitation of minerals in the Area.

III. Anticipated workload of the Commission for the period 2017-2021

28. The anticipated programme of work of the Commission over the next five-year period includes two kinds of agenda items. There are regular items which are annually or periodically considered by the Commission and those which are not placed on the agenda of the Commission on a regular basis. The regular agenda items mainly include the evaluation of the annual reports of the contractors, the drafting and revision of regulations and recommendations for guidance to contractors, the environmental management of impacts that may result from

¹⁵ See, for example, ISBA/8/C/6, para. 7. Issues relating to the biodiversity of the Area were also discussed in open session. See ISBA/9/C/4, para. 15; ISBA/10/C/4, para. 20; and ISBA/22/C/17, paras. 58-60.

¹⁶ Article 165 (2) (e) of the Convention.

¹⁷ See, for example, ISBA/10/C/4, para. 12.

¹⁸ See, for example, ISBA/16/C/7, paras. 15-17; ISBA/15/C/5, para. 21; ISBA/14/C/8, paras. 15-18; and ISBA/13/C/3, paras. 19 and 20.

activities in the Area and applications for approval of plans of work for exploration as they are submitted. Items which are not periodically addressed by the Commission are a result of specific requests from the Council relating, for example, to the interpretation of provisions. For instance, the Council has referred to the Commission a set of various questions, including on issues related to the sponsorship by States of contracts for exploration in the Area and issues relating to the operation of the Enterprise. Moreover, a distinction can be drawn between those agenda items requiring priority action and those to which consideration can be given in due course between 2018 and 2021. The anticipated programme of work of the Commission is set out below, based on the assumption that the necessary resources will be made available to enable the Commission to discharge its functions.

Standing items

(a) Draft regulations for exploitation of mineral resources in the Area

29. The highest priority item on the Commission's agenda in 2017 is the consideration of draft regulations for exploitation of mineral resources in the Area. It is recalled that the Council, at its seventeenth session in 2011, requested the Secretariat to prepare a strategic workplan for the formulation of the regulations for mining of deep-sea minerals in the Area.¹⁹ At its nineteenth session in 2013, the Commission began consideration of the issues relating to the proposed regulations for exploitation of polymetallic nodules in the Area.²⁰ At its twentieth session in 2014, the Council requested the Commission to continue its work on the regulations governing exploitation as a matter of priority and to make available to all members of the Authority and all stakeholders a draft framework for the regulation of exploitation in the Area.²¹ Accordingly, in July 2015, the Commission issued a revised draft framework and action plan and identified seven priority deliverables for the following 12 to 18 months.²² The Council endorsed the Commission's list of priority deliverables and requested the Commission to continue its work on exploitation regulations as a matter of priority.²³ In July 2016, the Commission considered a revised working draft of the exploitation regulations and provided a second phase of priority deliverables for the development of the exploitation regulations over the following 12 to 18 months,²⁴ which was endorsed by the Council. The Council further requested the Commission to continue its work on exploitation regulations as a matter of priority.²⁵ Subsequent to that meeting, the Commission issued a revised working draft to the members of the Authority and all stakeholders for comments. The Commission highlighted as a matter of priority for its next session in 2017 that consideration be given to identifying a better working methodology in relation to regulatory development, including establishing timelines and facilitating stakeholder contributions to the regulatory content and drafting process. During its meetings in February and March 2017, the Commission considered the stakeholders' comments to the working draft exploitation regulations as well as a discussion paper on the development and drafting of the Regulations on Exploitation for Mineral Resources in the Area (Environmental Matters), issued in January 2017 on the Authority website. Both will be further considered by the Commission in July 2017. In the two years to come, the Commission could

¹⁹ See [ISBA/17/C/21](#), para. 20.

²⁰ See [ISBA/19/C/14](#), paras. 22 and 23.

²¹ See [ISBA/20/C/31](#), para. 3.

²² See [ISBA/21/C/16](#), paras. 26-35 and annex III.

²³ See [ISBA/21/C/20](#), paras. 4 and 5.

²⁴ See [ISBA/22/C/17](#), paras. 32-41 and annex II.

²⁵ See [ISBA/22/C/28](#), paras. 3 and 4.

reasonably be expected to continue its work on the further development and drafting of the draft exploitation regulations, based on the “building block” approach being taken by the Authority. This will likely include discussion of issues connected to the implementation of the payment regime, legal issues concerning responsibility and liability, jurisdictional competencies, establishment of a staff of inspectors and mechanisms for compensation for environmental damage, such as liability insurance or special funds.

(b) Application for approval of plan of work

30. One of the most important responsibilities of the Commission is to consider applications for approval of plans of work for exploration for polymetallic nodules, polymetallic sulphides or cobalt-rich crusts and make recommendations thereon to the Council. To date, based on the recommendations by the Commission, and in accordance with the request of the Council, the Authority has concluded 26 exploration contracts and it is expected that 2 additional contracts will be concluded in 2017. The status of the contracts with the Authority is set out in annex II to the present note. It is noted that, on 25 January 2017, the Secretariat received an application submitted by the Government of Poland for approval of a plan of work for exploration for polymetallic sulphides, which will be considered by the Commission at its second meeting in July 2017. In the event that any new applications for approval of plans of work are received prior to the session, the Commission will consider applications for plans of work for exploration and make recommendations thereon to the Council. All proposed plans of work shall be taken up in the order in which they are received.

(c) Applications for extension of an approved plan of work

31. The Commission may consider applications for extension of an approved plan of work. It is recalled that, in 2015, the Council adopted a decision relating to the procedures and criteria for the extension of an approved plan of work pursuant to section 1, paragraph 9, of the annex to the 1994 Agreement.²⁶ Contractors may apply for such extensions for periods of not more than five years. In 2016, the Council, on the basis of the consideration of the reports and recommendations of the Commission, approved the extension of six approved plans of work for exploration for polymetallic nodules. During 2017, the Commission will consider one further application for extension of an approved plan of work for exploration for polymetallic nodules submitted by the Government of India. It is noted that the exploration contract with the Federal Institute for Geosciences and Natural Resources of Germany (BGR) will expire on 18 July 2021. The above-mentioned six extended exploration contracts will also expire in 2021.

(d) Review of Contractors’ annual reports

32. Another important and very time-consuming task of the Commission is to review the annual reports submitted by contractors and provide advice thereon to the Secretary-General of the Authority. Under the regulations, contractors are required to submit an annual report on their activities by 31 March each year. In parallel with the increased number of exploration contracts over the past five years, the number of annual reports to be evaluated yearly by the Commission has also increased. Compared with 8 annual reports in 2010, the Commission is expected to evaluate up to 26 annual reports in 2017. From 2018, this number will further increase to 28 and might reasonably be expected to increase further in the future. Reports are received in narrative format, accompanied in some cases by

²⁶ See [ISBA/21/C/19](#) and its annex and associated appendices I and II.

photographs, graphs and charts and data in various media formats. These are subject to internal analysis by technical staff within the Secretariat and a summary is prepared for the use of the members of the Commission. After review, the Commission prepares a document, in the form of an evaluation report for submission to the Secretary-General. That document contains the Commission's general comments on the reports, which are subsequently forwarded to the Council, as well as specific comments on the reports of each individual contractor. In 2016, the Commission adopted a revised reporting template for contractors, requiring submission of raw data in a standardized format that can be entered directly into the Authority database.²⁷ To improve the process, a number of further measures are being explored. The proposal to introduce page limits for annual reports is potentially useful. It would be desirable for the Commission to consider issuing annual reports in October or November each year, which would allow sufficient time for the preparation of a comprehensive report for the Council. The Commission will need to find the most efficient and effective working methodology in order to complete the review of annual reports in the time available. For this purpose, the Commission has already signalled its intention to review its internal working methods during 2017.

(e) Selection of candidates for and review of the implementation of the Contractor's training programme

33. The Commission will also proceed to the selection of candidates from developing countries for the training programmes under exploration contracts. It is estimated that there are about 200 training opportunities to be provided by contractors in the five years to come. The current training opportunities fall into the following categories: at-sea training on board contractor vessels; bursaries and fellowships to allow candidates to participate in scheduled or specific training programmes, including PhD or Master's programmes; internships at scientific or environmental workshops; and engineering training. In this respect, one main difficulty has been to attract suitable candidacies from developing countries. In order to overcome this difficulty, since 2012, the Secretariat has invited prospective trainees to register their interest and has maintained a roster of suitable candidates for training opportunities. The candidates on the roster will be invited to submit their applications for the latest specific training opportunities.

(f) Review of the implementation of the Environmental Management Plan for the Clarion-Clipperton Zone

34. Another agenda item requiring action is the review of the implementation of the Environmental Management Plan for the Clarion-Clipperton Zone and development of environmental management plans in other international seabed area zones. The Environmental Management plan for the Clarion-Clipperton Zone is the first and, to date, only, environmental management plan created by the Authority.²⁸ It was approved by the Council at its eighteenth session and implemented over an initial period of three years.²⁹ The plan included the designation of a network of nine areas of particular environmental interest and is subject to periodic review by the Commission every two to five years. In 2016, the Commission considered 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. In addition, the Commission took note of the concerns expressed with regard to developing specific

²⁷ See [ISBA/21/LTC/15](#).

²⁸ See [ISBA/17/LTC/7](#).

²⁹ See [ISBA/18/C/22](#).

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” in February 2017. At its twenty-second session, the Council, in its decision relating to the summary report of the Commission, further encouraged the Commission and the secretariat to make progress on the development of environmental management plans in other international seabed area zones, in particular where there are currently exploration contracts, recalling paragraph 60 of General Assembly resolution [70/235](#) on oceans and the law of the sea.

(g) Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration

35. Another matter that is likely to be raised is the review of its recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area,³⁰ particularly in the light of the recommendations of the Authority’s series of workshops on taxonomic methods and standardization. At its 2016 session, the Commission welcomed the recommendations arising from the various workshops on the subject and encouraged the contractors to apply best practices to implement them wherever appropriate. However, the Commission deferred the revision of the recommendations to the 2017 session to enable specific proposals for revision to be tabled. The Commission will need to consider how this issue will be taken up and a working methodology for the preparation of proposals for its consideration.

(h) Additional items

36. In addition, it is to be recalled that the Council has referred a number of questions to the Commission. In 2017, the Commission may wish to consider options as to how to deal with these issues, including timelines for their consideration over the five years to come. These issues are:

(a) Review of the provisions of the Regulations on prospecting and exploration 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 making a recommendation thereon for consideration by the Council at the twenty-third session;

(b) Issues relating to the sponsorship by States of contracts for exploration in the Area, with particular attention to the test of effective control, 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;

(c) Issues relating to the operation of the Enterprise; in particular the legal, technical and financial implications for the Authority; and

(d) Issues associated with the conduct of marine scientific research in exploration areas.

37. A table summarizing the anticipated workload of the Commission for the period 2017-2021 is provided in annex I to the present note. It should be stressed that this is an indicative programme that may evolve in the light of future requests from the Council over the five-year period under consideration, as well as the pace of development of activities in the Area and the time taken by the Commission to

³⁰ See [ISBA/19/LTC/8](#).

deal with each matter. Many matters on the agenda require considerable advance preparation, including technical studies and expert advice.

38. It should also be emphasized that the timing of various activities is purely for indicative purposes and is based on the Secretariat's assessment of when it may be possible to address each item on the basis of the existing resources available to the Authority, both in terms of the Secretariat and the resources available to service meetings of the Commission. In this regard, it is apparent that the workload of the Commission has increased substantially over the past five years and is continuing to increase in the light of additional requests from the Council, as well as increasing activities in the Area.

Annex I

Summary of the anticipated workload of the Legal and Technical Commission for the period 2017-2021

1. Standing items

- (a) Draft regulations for the exploitation of minerals in the Area;
- (b) Consideration of applications for approval of plans of work for exploration for polymetallic nodules, polymetallic sulphides or cobalt-rich crusts and recommendations to the Council of the International Seabed Authority, if any;
- (c) Consideration of applications for extension of approved plans of work for exploration for polymetallic nodules and recommendations to the Council, if any;
- (d) Evaluation of annual reports submitted by contractors;
- (e) Implementation of training programmes provided by contractors under the exploration contracts;
- (f) Review of the environmental management plan for the Clarion-Clipperton Zone and development of environmental management plans for areas of exploration activity and assessment of the environmental implications of activities in the Area;
- (g) Review of its recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area.

2. Additional items

- (h) Review of the provisions of the regulations on prospecting and exploration 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 making a recommendation thereon for consideration by the Council in 2017;
- (i) Consideration of issues related to the sponsorship by States of contracts for exploration in the Area, with particular attention to the test of effective control, 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;
- (j) Consideration of issues relating to the operation of the Enterprise, in particular the legal, technical and financial implications for the Authority;
- (k) Consideration of issues associated with the conduct of marine scientific research in exploration areas;
- (l) Consideration of any matters referred to the Commission by the Council.

Annex II

Summary of major works and achievements of the Commission over the past five years

(2012-2016)

Table 1

Consideration of applications for approval of plans of work for exploration

<i>No.</i>	<i>Applicants</i>	<i>Minerals</i>	<i>Year</i>	<i>Related documents</i>
1	Government of the Republic of Korea	PMS	2012	ISBA/18/C/15
2	Institut français de recherche pour l'exploitation de la mer (IFREMER)	PMS	2012	ISBA/18/C/16
3	UK Seabed Resources Ltd. (UKSRL)	PMN	2012	ISBA/18/C/17
4	Marawa Research and Exploration Ltd.	PMN	2012	ISBA/18/C/18
5	Global Sea Mineral Resources NV (GSR)	PMN	2012	ISBA/18/C/19
6	China Ocean Mineral Resources Research and Development Association (COMRA)	CFC	2013	ISBA/19/C/2
7	Japan Oil, Gas and Metals National Corporation (JOGMEC)	CFC	2013	ISBA/19/C/3
8	Government of the Russian Federation	CFC	2014	ISBA/20/C/4
9	UKSRL	PMN	2014	ISBA/20/C/5
10	Government of India	PMS	2014	ISBA/20/C/6
11	Ocean Mineral Singapore Pte. Ltd. (OMS)	PMN	2014	ISBA/20/C/7
12	Federal Institute for Geosciences and Natural Resources (BGR)	PMS	2014	ISBA/20/C/16
13	Serviço Geológico do Brasil (Companhia de Pesquisa de Recursos Minerais)	PMN	2014	ISBA/20/C/17
14	Cook Islands Investment Corporation (CIIC)	CFC	2014	ISBA/20/C/18
15	China Minmetals Corporation (CMC)	PMN	2015	ISBA/21/C/2
16	Government of the Republic of Korea	CFC	2016	ISBA/22/C/10

A total of 16 applications were considered by the Commission

Abbreviations: CFC, cobalt-rich ferromanganese; PMN, polymetallic nodules; PMS, polymetallic sulphides.

Table 2
Consideration of an application for extension of an approved plan of work for exploration

<i>No.</i>	<i>Applicants</i>	<i>Minerals</i>	<i>Year</i>	<i>Related documents</i>
1	Interoceanmetal Joint Organization (IOM)	PMN	2016	ISBA/22/C/11
2	Yuzhmorgeologiya	PMN	2016	ISBA/22/C/12
3	Government of the Republic of Korea	PMN	2016	ISBA/22/C/13
4	COMRA	PMN	2016	ISBA/22/C/14
5	Deep Ocean Resources Development Co. Ltd. (DORD)	PMN	2016	ISBA/22/C/15
6	IFREMER	PMN	2016	ISBA/22/C/16

A total of 6 applications for extension were considered by the Commission

Abbreviation: PMN, polymetallic nodules.

Table 3
Consideration of the annual reports of contractors

<i>Years</i>	<i>Number of annual reports</i>
2012	9
2013	11
2014	13
2015	18
2016	22

A total of 63 annual reports were evaluated by the Commission

Table 4
Selection of candidates for contractors' training programme

<i>Year</i>	<i>Contractors</i>	<i>Types of training</i>	<i>Number of trainees</i>	<i>Applications reviewed</i>	<i>Documents</i>
2013	Tonga Offshore Mining Limited (TOML)	At-sea	2	45	ISBA/19/LTC/13
2013	BGR	At-sea	2	45	ISBA/19/LTC/13
2013	China Ocean Mineral Resources Research and Development Association (COMRA)	At-sea	4	45	ISBA/19/LTC/13
2014	JOGMEC	At-sea	3	32	ISBA/20/LTC/13
2014	Government of the Russian Federation	At-sea	2	17	ISBA/20/LTC/13

<i>Year</i>	<i>Contractors</i>	<i>Types of training</i>	<i>Number of trainees</i>	<i>Applications reviewed</i>	<i>Documents</i>
2015	COMRA	Fellowship and Engineering	4	95	ISBA/21/LTC/10
2015	TOML	At-sea	2	9	ISBA/21/LTC/13
2015	UKSRL	PhD	2	81	ISBA/21/LTC/14
2015	BGR	At-sea	6	73	ISBA/21/LTC/14
2016	COMRA	At-sea	5	49	ISBA/22/LTC/8
2016	JOGMEC	At-sea	5	54	ISBA/22/LTC/8
2016	Global Sea Mineral Resources NV (GSR)	Master's	1	13	ISBA/22/LTC/8
2016	Nauru Ocean Resources Incorporated (NORI)	Workshop internship	2	5	ISBA/22/LTC/7
2016	IFREMER	Workshop internship	5	76	ISBA/22/LTC/11

The Commission selected 45 first-ranked candidates from 639 applications for 14 training programmes

Table 5
Rules, regulations and procedures adopted or proposed by the Commission

<i>No.</i>	<i>Year</i>	<i>Document</i>	<i>Title</i>
1	2013	ISBA/19/LTC/8	Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area
2	2013	ISBA/19/LTC/14	Recommendations for the guidance of contractors and sponsoring States relating to training programmes under plans of work for exploration
3	2015	ISBA/21/LTC/11	Recommendations for the guidance of contractors for the reporting of actual and direct exploration expenditure
4	2015	ISBA/21/LTC/15	Recommendations for the guidance of contractors on the content, format and structure of annual reports
5	2013	ISBA/19/C/7	Proposed amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area
6	2014	ISBA/20/C/9	Proposed amendments to regulation 21 of the Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area

<i>No.</i>	<i>Year</i>	<i>Document</i>	<i>Title</i>
7	2015	ISBA/21/C/WP.1	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
8	From 2013 to date		Working draft exploitation regulations

Annex III**Status of approved contracts for exploration****A. Contracts for exploration for polymetallic nodules**

	<i>Contractors</i>	<i>Date of entry into force</i>	<i>Sponsoring States</i>	<i>General location of the exploration area</i>	<i>Date of expiry</i>
1	Interoceanmetal Joint Organization	29 March 2001 29 March 2016 ^a	Bulgaria, Cuba, Czechia, Poland, Russian Federation and Slovakia	Clarion-Clipperton Fracture Zone	28 March 2016 28 March 2021
2	Yuzhmoregeologiya	29 March 2001 29 March 2016 ^a	Russian Federation	Clarion-Clipperton Fracture Zone	28 March 2016 28 March 2021
3	Government of the Republic of Korea	27 April 2001 27 April 2016 ^a	–	Clarion-Clipperton Fracture Zone	26 April 2016 26 April 2021
4	China Ocean Mineral Resources Research and Development Association	22 May 2001 22 May 2016 ^a	China	Clarion-Clipperton Fracture Zone	21 May 2016 21 May 2021
5	Deep Ocean Resources Development Co. Ltd.	20 June 2001 20 June 2016 ^a	Japan	Clarion-Clipperton Fracture Zone	19 June 2016 19 June 2021
6	Institut français de recherche pour l'exploitation de la mer	20 June 2001 20 June 2016 ^a	France	Clarion-Clipperton Fracture Zone	19 June 2016 19 June 2021
7	Government of India	25 March 2002	–	Central Indian Ocean Basin	24 March 2017
8	Federal Institute for Geosciences and Natural Resources	19 July 2006	Germany	Clarion-Clipperton Fracture Zone	18 July 2021
9	Nauru Ocean Resources Inc.	22 July 2011	Nauru	Clarion-Clipperton Fracture Zone (reserved area)	21 July 2026
10	Tonga Offshore Mining Limited	11 January 2012	Tonga	Clarion-Clipperton Fracture Zone (reserved area)	10 January 2027
11	Global Sea Mineral Resources NV	14 January 2013	Belgium	Clarion-Clipperton Fracture Zone	13 January 2028
12	UK Seabed Resources Ltd.	8 February 2013	United Kingdom of Great Britain and Northern Ireland	Clarion-Clipperton Fracture Zone	7 February 2028
13	Marawa Research and Exploration Ltd.	19 January 2015	Kiribati	Clarion-Clipperton Fracture Zone (reserved area)	18 January 2030

<i>Contractors</i>	<i>Date of entry into force</i>	<i>Sponsoring States</i>	<i>General location of the exploration area</i>	<i>Date of expiry</i>
14 Ocean Mineral Singapore Pte Ltd.	Signed in Kingston on 15 January 2015 and in Singapore on 22 January 2015	Singapore	Clarion-Clipperton Fracture Zone (reserved area)	21 January 2030
15 UK Seabed Resources Ltd.	29 March 2016	United Kingdom	Clarion-Clipperton Fracture Zone	28 March 2031
16 Cook Islands Investment Corporation	15 July 2016	Cook Islands	Clarion-Clipperton Fracture Zone (reserved area)	14 July 2031
17 China Minmetals Corporation	12 May 2017	China	Clarion-Clipperton Fracture Zone (reserved area)	–

^a Five-year extension of contract granted at the twenty-second session (2016).

B. Contracts for exploration for polymetallic sulphides

<i>Contractors</i>	<i>Date of entry into force</i>	<i>Sponsoring States</i>	<i>General location of the exploration area</i>	<i>Date of expiry</i>
1 China Ocean Mineral Resources Research and Development Association	18 November 2011	China	South-west Indian Ridge	17 November 2026
2 Government of the Russian Federation	29 October 2012	–	Mid-Atlantic Ridge	28 October 2027
3 Government of the Republic of Korea	24 June 2014	–	Central Indian Ocean	23 June 2029
4 Institut français de recherche pour l'exploitation de la mer	18 November 2014	France	Mid-Atlantic Ridge	17 November 2029
5 Federal Institute for Geosciences and Natural Resources	6 May 2015	Germany	Central Indian Ridge and South-east Indian Ridge	5 May 2030
6 Government of India	26 September 2016	–	Indian Ocean Ridge	25 September 2031

C. Contracts for exploration for cobalt-rich ferromanganese crusts

	<i>Contractors</i>	<i>Date of entry into force</i>	<i>Sponsoring States</i>	<i>General location of the exploration area</i>	<i>Date of expiry</i>
1	Japan Oil, Gas and Metals National Corporation	27 January 2014	Japan	Western Pacific Ocean	26 January 2029
2	China Ocean Mineral Resources Research and Development Association	29 April 2014	China	Western Pacific Ocean	28 April 2029
3	Ministry of Natural Resources and Environment of the Russian Federation	10 March 2015	–	Magellan Mountains in the Pacific Ocean	9 March 2030
4	Companhia de Pesquisa de Recursos Minerais S.A.	9 November 2015	Brazil	Rio Grande Rise in the South Atlantic Ocean	8 November 2030
5	Government of the Republic of Korea	To be signed	–	East of the Northern Mariana Islands in the Pacific Ocean	