



## Assembly

Distr.: General  
18 May 2001

Original: English

**Seventh session**  
Kingston, Jamaica  
2-13 July 2001

### **Report of the Secretary-General of the International Seabed Authority under article 166, paragraph 4, of the United Nations Convention on the Law of the Sea**

#### **I. Introduction**

1. The present report of the Secretary-General of the International Seabed Authority is submitted to the Assembly of the Authority under article 166, paragraph 4, of the 1982 United Nations Convention on the Law of the Sea ("the Convention"). The report covers the period from July 2000 to June 2001.

#### **II. Membership of the Authority**

2. In accordance with article 156, paragraph 2, of the Convention, all States parties to the Convention are ipso facto members of the Authority. As of 31 May 2001, there were 135 States parties to the Convention.

3. The Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 was adopted on 28 July 1994 by the General Assembly of the United Nations in its resolution 48/263 and entered into force on 28 July 1996. After the adoption of the Agreement, any instrument of ratification or formal confirmation of or accession to the Convention shall also represent consent to be bound by the Agreement. No State or entity may establish its consent to be bound by the Agreement unless it has previously established or establishes at the same time its consent to be bound by the Convention.

4. It continues to be a matter of concern that, as of 31 May 2001, 35 members of the Authority which became States parties to the Convention prior to the adoption of the Agreement had not yet completed the necessary procedural steps to become parties to the Agreement. Those States are: Angola, Antigua and Barbuda, Bahrain, Bosnia and Herzegovina, Botswana, Brazil, Cameroon, Cape Verde, Comoros, Costa Rica, Cuba, Democratic Republic of the Congo, Djibouti, Dominica, Egypt, Gambia, Ghana, Guinea-Bissau, Guyana, Honduras, Iraq, Kuwait, Mali, Marshall Islands, Mexico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, Somalia, Sudan, Tunisia, Uruguay, Viet Nam and Yemen. On 20 December 2000, the Secretary-General circulated a note verbale to the States parties mentioned above, drawing their attention to the report of the Secretary-General for 2000<sup>1</sup> and to paragraph 1 of United Nations General Assembly resolution 55/7 of 30 October 2000 calling upon all States that have not done so, in order to achieve the goal of universal participation, to become parties to the Convention and the Agreement.

#### **III. Sessions of the Authority**

5. The resumed sixth session of the Authority was held from 3 to 14 July 2000. The first part of the sixth session was held from 20 to 31 March 2000. Liesbeth



Lijnzaad (Netherlands) was elected President of the Assembly for the sixth session. The main achievement of the Assembly during the sixth session of the Authority was the approval of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area,<sup>2</sup> following the adoption of the Regulations by the Council at the same session. The Council also approved the Rules of Procedure of the Legal and Technical Commission<sup>3</sup> and the Staff Regulations of the Authority.

6. During the resumed sixth session, the Assembly also considered, in accordance with article 154 of the Convention, the matter of a general and systematic review of the manner in which the international regime of the Area established in the Convention had operated in practice. After consideration of the matter, the Assembly concurred with the recommendation of the Secretary-General, contained in his report,<sup>4</sup> that in the light of the very short experience of the Authority in implementing the regime, it would be premature for the Assembly to take any measures at the current stage.

#### **IV. Relations with the host country**

7. On 10 March 1998, the Minister for Foreign Affairs and Foreign Trade of Jamaica had informed the Secretary-General by letter that the Government of Jamaica had decided to offer the building currently occupied by the Authority for the permanent use and occupation of the Authority as its headquarters.<sup>5</sup> The Secretary-General informed the Assembly of the offer on 17 March 1998, noting that clarification would have to be obtained from the Government of Jamaica with respect to the terms and conditions of the offer and that a report on the financial and other implications of the offer for the Authority would be prepared as soon as relevant information was available. Of particular concern were the maintenance costs, the structural condition of the building, the condition of major equipment and the question of refurbishment.

8. The Secretary-General reported to the Assembly on the offer by the Government of Jamaica at the fifth session of the Authority, in August 1999.<sup>6</sup> After consideration of the Secretary-General's report, the Finance Committee recommended to the Assembly that it accept the offer on the basis that the Authority would occupy such space within the building as might be required. The Finance Committee also recommended that the Secretary-General should pursue negotiations

with the host country, based on the most complete information available, in order to secure the best terms for the maintenance of the premises.<sup>7</sup>

9. At its 67th meeting, on 25 August 1999, the Assembly approved the Agreement between the International Seabed Authority and the Government of Jamaica concerning the headquarters of the Authority and accepted with appreciation the offer of the Government of Jamaica for a long-term lease of the second floor and such other space as might be required in the building for the use and occupation by the Authority as its permanent headquarters.<sup>8</sup> The Assembly further requested the Secretary-General to negotiate with the Government of Jamaica, pursuant to article 2 of the Headquarters Agreement, a supplementary agreement concerning the use and occupation of the permanent headquarters. At the 68th meeting, on 26 August 1999, in a formal ceremony, the Headquarters Agreement was signed by the Secretary-General, on behalf of the Authority, and by the Deputy Prime Minister and Minister for Foreign Affairs of Jamaica, the Hon. Seymour Mullings, on behalf of the Government of Jamaica.

10. In October 1999, the Secretary-General invited the Government of Jamaica to commence as soon as possible the negotiations on the supplementary agreement. In November 1999, the Government of Jamaica indicated that it was making the necessary internal arrangements for the internal transfer of the title to the proposed headquarters building. Consequently, it was not until May 2000 that a preliminary round of discussions could take place between the Authority and the Government. During those discussions, the Secretary-General requested the Government of Jamaica to provide accurate and transparent information concerning the actual costs of maintenance of the headquarters building. His request was followed up in writing on 7 June 2000. Following further communications in writing from the Secretary-General on 15 December 2000 and 8 March 2001, a meeting was convened with the representatives of the Government of Jamaica on 24 May 2001. However, no further information was made available at the meeting with respect to the request of the Secretary-General. As at the date of the present report, therefore, no supplementary agreement is in place and, despite the best efforts of the Authority, the Secretary-General is unable to report any substantive progress in the negotiations.

## **V. Protocol on privileges and immunities**

11. The Protocol on the Privileges and Immunities of the International Seabed Authority, adopted by the Assembly at its 54th meeting, on 26 March 1998, was opened for signature in Kingston on 26 August 1998. In accordance with its article 16, the Protocol remained open for signature at United Nations Headquarters in New York until 16 August 2000. As at that date, the Protocol had been signed by 28 members of the Authority: Bahamas, Brazil, Chile, Côte d'Ivoire, Czech Republic, Egypt, Finland, Ghana, Greece, Indonesia, Italy, Jamaica, Kenya, Malta, Namibia, Netherlands, Oman, Pakistan, Portugal, Saudi Arabia, Senegal, Spain, Slovakia, Sudan, Trinidad and Tobago, the former Yugoslav Republic of Macedonia, United Kingdom of Great Britain and Northern Ireland and Uruguay. The Protocol has been ratified by Slovakia, Spain and the United Kingdom. On 8 September 2000, Croatia acceded to the Protocol. The Protocol will enter into force 30 days after the date of deposit of the tenth instrument of ratification or accession. It is hoped that States members of the Authority will give consideration to the early ratification of or accession to the Protocol.

## **VI. Permanent representatives to the Authority**

12. As at 31 May 2001, Argentina, Brazil, Chile, China, Costa Rica, Cuba, France, Gabon, Germany, Haiti, Italy, Jamaica, Mexico, the Netherlands and Trinidad and Tobago had established permanent missions to the Authority.

## **VII. The Secretariat**

13. The Secretariat is organized into four main functional areas: Office of the Secretary-General; Office of Administration and Management; Office of Legal Affairs; and Office of Resources and Environmental Monitoring. The approved establishment of the Secretariat for 2001 was 37 posts. It was noted in the report of the Secretary-General to the sixth session<sup>9</sup> that a number of Professional posts were vacant, and it had been anticipated that those posts would be filled by the end of 2000.

Unfortunately, it was not possible to fill the posts and there continue to be vacancies at the Professional level in certain key areas. While recruitment and selection procedures were carried out for all posts, and candidates identified for a number of positions, it proved impossible to attract candidates with appropriate qualifications and experience for all posts. In a number of cases, following the interview and selection process candidates who were selected declined to accept the offer of positions with the Authority.

14. Pending the adoption of its own regulations, the Authority applied, *mutatis mutandis*, the Staff Regulations of the United Nations. Draft staff regulations for the Authority were reviewed by the Finance Committee in 1999. During the resumed sixth session, the Council considered the draft Staff Regulations and decided, pursuant to article 162, paragraph 2 (o) (ii), of the Convention, to adopt and apply provisionally the Staff Regulations pending their approval by the Assembly. Subsequently, in accordance with the Staff Regulations, the Secretary-General promulgated Staff Rules for the Authority. At the same time, the Secretariat has commenced discussions with the United Nations Administrative Tribunal with a view to implementing the provisions of the Staff Regulations relating to appeals against administrative decisions.

15. During the period under review, essential refurbishment work to the portion of the headquarters building occupied by the Authority was completed. As a result, significant improvements have been made to the working environment for staff members, conference-servicing staff and delegates. Although all refurbishment was carried out at the Authority's expense, this was achieved through utilizing savings in the approved budget and resulted in no additional budgetary implication for members of the Authority. It must be recalled in this regard that no maintenance or replacement of furniture, fittings and carpets had been carried out since the allocation of the present building to the Kingston Office for the Law of the Sea in 1983.

## VIII. Budget and finance

### A. Budget

16. In accordance with the Convention and the Agreement, the administrative expenses of the Authority shall be met by assessed contributions of its members, until the Authority has sufficient funds from other sources to meet those expenses.

17. The budget of the Authority for the financial period 2001-2002 is the first budget to cover a two-year financial period, as envisaged in the Financial Regulations of the Authority. Following the review of the Secretary-General's proposed budget by the Finance Committee<sup>10</sup> and the decision and recommendation of the Council in relation to the budget,<sup>11</sup> the Assembly adopted the budget of the Authority for the financial period 2001-2002 in the sum of US\$ 10,506,400. The Assembly also authorized the Secretary-General to establish the scale of assessment for the financial period 2001-2002 based on the scale used for the regular budget of the United Nations for 2000 and 2001 respectively.

### B. Status of contributions

18. As at 31 May 2001, contributions to the 2001 budget had been received from 38 members of the Authority. The total amount received was \$1,834,518, or 38 per cent of the total assessed contributions. As at the same date, contributions to the 2000 budget had been received in full from 68 members of the Authority and in part from 45 members of the Authority. The total amount received was \$5,047,167, or 98 per cent of the total budget for 2000. The Working Capital Fund as at 31 May 2001 stood at \$324,130 (74 per cent of the total).

19. In respect of the budget for 2000, contributions of \$123,533 (2 per cent of the budget) remained outstanding from 64 members of the Authority as at 31 May 2001, while in respect of the 1999 budget, contributions of \$47,456 (1 per cent of the budget) remained outstanding from 49 members of the Authority. As at 31 May 2001, 49 members of the Authority were in arrears of contributions for a period exceeding two years. In accordance with article 184 of the Convention and rule 80 of the Rules of Procedure of the Assembly, a member of the Authority which is in arrears in the payment of its financial contribution to

the Authority shall have no vote if the amount of its arrears equals or exceeds the amount of the contribution due from it for the preceding two full years.

20. In addition to the above, assessed contributions of \$1,256,099 remain outstanding from four former provisional members of the Authority. As noted in the audit report for 2000, these amounts must be recovered.

### C. Audit

21. In accordance with article 175 of the Convention, the records, books and accounts of the Authority, including its annual financial statements, shall be audited annually by an independent auditor appointed by the Assembly. At the resumed sixth session, in July 2000, in accordance with the recommendation of the Finance Committee, the Assembly appointed KPMG Peat Marwick to audit the Authority for 2000. An audit was conducted in April 2001. Having reviewed the accounts, transactions and operations of the Authority, the auditors were satisfied that the financial statements presented fairly, in all material respects, the financial position of the Authority and that the financial business of the Authority had been conducted in accordance with the Financial Regulations.

## IX. Substantive work of the Authority

### A. Regulations for prospecting and exploration for polymetallic nodules in the Area

22. According to the mandate provided by the Convention and the Agreement, the elaboration and adoption of rules, regulations and procedures for exploration for polymetallic nodules is one of the major legislative tasks of the Authority. Such rules, regulations and procedures shall incorporate applicable standards for the protection and preservation of the marine environment. The Legal and Technical Commission commenced work on the draft regulations for prospecting and exploration for polymetallic nodules in March 1997 and completed its work in March 1998, when the draft regulations proposed by the Commission were submitted to the Council.<sup>12</sup>

23. During the resumed fourth session of the Authority in August 1998 and the fifth session in August 1999, the Council met in informal sessions, open to all interested members of the Authority, to examine the text of the draft regulations. At the end of the fifth session, the Assembly decided that, with respect to the organization of work for the sixth session of the Authority, priority would be given to the work of the Council on the draft regulations, with a view to adopting the regulations during 2000. Accordingly, most of the time available during the first part of the sixth session, in March 2000, was devoted to the work of the Council. The Council continued its work on outstanding issues related to the draft regulations during the resumed sixth session. In the light of the discussions, the President of the Council, Mr. Sakiusa A. Rabuka (Fiji), revised the text of the draft regulations and made a proposal to the Council for adoption.<sup>13</sup> On 13 July 2000 the Council decided to adopt and apply provisionally the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, pending their approval by the Assembly.<sup>14</sup> In its decision, recalling concerns expressed concerning the need for appropriate forms of guarantee to enable the Council to take immediately the necessary measures to implement an emergency order under the Regulations, the Council also decided to give further consideration to the matter of such a guarantee prior to the phase of testing of collecting systems and processing operations for the exploitation of polymetallic nodules with a view to adopting appropriate forms of guarantee to ensure compliance with emergency orders and the effective protection of the marine environment in accordance with article 145 and other relevant provisions of the Convention. The Regulations were approved by the Assembly on 13 July 2000.<sup>15</sup>

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

24. Following the adoption of the Regulations for Prospecting and Exploration for Polymetallic Nodules in the Area, it became incumbent upon the Secretary-General to prepare draft contracts for exploration in respect of each of the seven registered pioneer investors whose plans of work for exploration were considered to be approved by the Council on 27 August 1997.<sup>16</sup> Draft contracts were prepared and submitted to each of the registered pioneer investors in August 2000.

25. Following discussions with the pioneer investors, the first 15-year contracts for exploration for polymetallic nodules in the deep seabed were signed on 29 March 2001 at the headquarters of the Authority. The contract between the Authority and the State enterprise Yuzhmorgeologiya (Russian Federation) was signed by the Secretary-General and by the Deputy Minister/State Secretary of the Ministry of Natural Resources of the Russian Federation, Ivan F. Gloumov. The contract between the Authority and Interoceanmetal Joint Organization (IOM) (a consortium formed by Bulgaria, Cuba, the Czech Republic, Poland, the Russian Federation and Slovakia) was signed by the Secretary-General and by the Director-General of IOM, Ryszard Kotlinski. On the same date, the Secretary-General also signed a contract with the Republic of Korea, which was signed in Seoul, Republic of Korea, on 27 April 2001 by the Minister for Maritime Affairs and Fisheries of the Republic of Korea, Mr. Woo-Taik Chung.

26. The contract between the Authority and China Ocean Mineral Resources Research and Development Association (COMRA) (China) was signed at Beijing on 22 May 2001. The contract between the Authority and India had not yet been signed at the time of preparation of the present report. The contracts between the Authority and Deep Ocean Resources Development Company (DORD) (Japan), and Institut français de recherche pour l'exploitation de la mer/l'Association française pour l'étude et la recherche des nodules (IFREMER/AFERNOD) (France), will be signed at Kingston on 20 June 2001.

## **C. Obligations of registered pioneer investors**

27. Since its establishment in August 1997, the Legal and Technical Commission has considered the periodic reports and relinquishments submitted to the Authority by the registered pioneer investors pursuant to resolution II. Prior to signing contracts for exploration, Yuzhmorgeologiya and COMRA had submitted periodic reports on activities up to December 1997. Periodic reports on activities up to December 1998 had been submitted by Interoceanmetal Joint Organization. The Republic of Korea had submitted periodic reports on activities up to July 2000. DORD and IFREMER/AFERNOD had submitted periodic reports on activities up to 1994 and 1993 respectively. India,

which had not, as of the date of the present report, signed a contract for exploration, has submitted periodic reports on activities up to December 2000.

28. All registered pioneer investors have completed the schedule of relinquishments specified in their certificates of registration, with the exception of India, which is yet to relinquish the final 20 per cent of the area allocated to it. Information of a general nature regarding the plans of work for exploration submitted by the registered pioneer investors, including details of all reports submitted both to the Preparatory Commission and to the Authority, is contained in ISBA/4/A/1/Rev.2.<sup>17</sup>

29. Under resolution II, paragraph 12 (a) (ii), every registered pioneer investor is required to provide training at all levels for personnel designated by the Preparatory Commission. The Special Commission for the Enterprise, Special Commission 2, was established in accordance with paragraph 8 of resolution I of annex I to the Final Act of the Third United Nations Conference on the Law of the Sea and was entrusted with the functions referred to in paragraph 12 of resolution II. All registered pioneer investors, with the exception of the Government of the Republic of Korea, had fulfilled their obligations with regard to training by the time the Preparatory Commission completed its work. The training programme of the Republic of Korea was approved by the Legal and Technical Commission in August 1997.<sup>18</sup> The training programme commenced in March 1999 and continued until December 1999. At its meeting during the resumed sixth session of the Authority, the Legal and Technical Commission noted with satisfaction the completion of the training programme of the Government of the Republic of Korea and requested the Secretariat to compile a comprehensive report on the current whereabouts of all trainees who had benefited from training programmes since 1990.<sup>19</sup> That report will be provided to the Legal and Technical Commission during the seventh session.

#### **D. Recommendations for the assessment of the possible environmental impacts arising from exploration for polymetallic nodules**

30. During the resumed sixth session, the Legal and Technical Commission continued its consideration of

draft recommendations for the assessment of the possible environmental impacts arising from exploration for polymetallic nodules. The draft recommendations had been prepared on the basis of the outcomes of a workshop convened by the Authority in June 1998.<sup>20</sup> After lengthy discussions, the Secretariat was requested to revise and restructure the draft for final consideration by the Commission during the seventh session. The purpose of the recommendations is to describe the procedures to be followed in the acquisition of baseline data by contractors, including the monitoring to be performed during or after any activities having the potential to cause serious harm to the environment, and to facilitate reporting by contractors.

#### **E. Draft regulations for prospecting and exploration for polymetallic sulphides and cobalt-rich crusts in the Area**

31. At the resumed fourth session of the Authority, in August 1998, the representative of the Russian Federation had made a request to the Authority to adopt rules, regulations and procedures for exploration for polymetallic sulphides and cobalt-rich crusts.<sup>21</sup> In accordance with article 162, paragraph 2 (o) (ii), of the Convention, and the provisions of the Part XI Agreement, such rules, regulations and procedures shall be adopted within three years from the date of such a request.

32. In the light of the request to the Authority by the Russian Federation, the Secretariat commenced work in 1999 on a review of the status of knowledge and research on resources other than polymetallic nodules. To further this work, the Authority convened in June 2000 the third in its series of workshops. The objectives of the workshop were to provide information on the occurrence, technical parameters, economic interest and potential resources contained in mineral resources other than polymetallic nodules, to identify existing institutional factors that have contributed to the discovery of such resources and continuing research on them and to provide information which would assist in drafting rules, regulations and procedures for prospecting and exploration for these mineral deposits, in particular deep sea polymetallic massive sulphide deposits and cobalt-bearing ferromanganese encrustations.

33. The workshop was attended by over 60 participants from 34 countries, including several members of the Legal and Technical Commission. The proceedings of the workshop will contain technical papers on the geology and mineralogy of polymetallic sulphides and cobalt-rich crusts, their distribution and resource potential, as well as the status of research on such resources and the technical requirements for their exploration and future mining. The workshop also had the benefit of presentations on other potential resources, such as methane hydrates. Information was also presented on existing national regulatory frameworks for established marine mineral industries in Namibia (diamonds), Papua New Guinea (polymetallic sulphides) and Indonesia, Norway and Brazil (petroleum).

34. Participants in the workshop exchanged views on the possible elements of a regime for prospecting and exploration for polymetallic sulphides and cobalt-rich crusts in the Area. The findings of the workshop in this regard are summarized in document ISBA/7/C/2, prepared by the Secretariat, on draft regulations for prospecting and exploration for polymetallic sulphides and cobalt-rich crusts. The document will be presented to the Council at the seventh session for discussion.

35. In addition, the workshop also considered the future resource potential of gas hydrates, ice-like crystals formed from natural gas and water in which water molecules form the rigid lattice and the void is occupied by a guest gas molecule. It was noted that one unit of hydrate, when released from its pressure-temperature curve, forms about 164 units of gas and about 0.8 units of fresh water. The significance of methane hydrates lies mainly in the tremendous resource potential of such resources. The workshop also noted that Canada, India, Japan, the Russian Federation and the United States of America were actively involved in research on gas hydrates and that in the past two years some 400 patents relating to gas hydrate research had been sealed in United States, Japanese and European patent offices.

#### **F. Information and data relating to the international seabed Area**

36. Among the substantive functions of the Authority are the promotion and encouragement of marine scientific research with respect to activities in the Area and the collection and dissemination of the results of

such research. The Authority uses information and data obtained from marine scientific research and from contractors for the preparation of assessments of the resource potential of minerals to be found in the Area as well as studies of the environmental implications of activities in the Area.

37. The report of the Secretary-General to the Authority at the sixth session identified a number of activities to be carried out during the period 2000-2002 with respect to the collection and organization of data and information by the Authority, including the establishment of a central data repository and an environmental database to assist in the evaluation of data and information received from monitoring programmes established by contractors for the purpose of observing and measuring the effects of exploration activities on the marine environment.<sup>22</sup> In order to further this work, the Authority utilized the services of a consultant to assist in the acquisition and evaluation of substantial quantities of non-proprietary data. Once complete, this evaluation will help the Authority to better define the hardware and software requirements of a central data repository as well as the expected outputs from the database. The objective is to establish a central data repository not only for polymetallic nodules but also for all marine minerals in the Area. Such a central data repository would be accessible to all members of the Authority, would display the acquired data and information, would include quantitative resource assessments and would enable the Authority, among other things, to process information for the purposes of preparing technical reports, producing CD-ROMs and uploading to the Authority's web site.

#### **G. Resource assessment of the areas reserved for the Authority**

38. The Authority commenced work in 1998 on a detailed assessment of the resource potential of the areas reserved for the Authority. Following an initial study of available data and a systematic review and critical analysis of the Authority's database, POLYDAT, a report on the overall resource assessment of the reserved areas, including a detailed resource assessment of a single block, was prepared. The review revealed a number of missing elements in the original submissions for registration as pioneer investors made under resolution II, as well as a need for greater

capacity to perform geo-statistical manipulation of the data. Some of the missing elements and their effects on resource assessment include: insufficient information on the methods used for seabed topography, making it difficult to carry out a proper analysis of the correlation between topography and nodule abundance; and discrepancies between data sets provided by different registered pioneer investors.

39. To overcome these problems, in March 2001, the Secretariat convened at the headquarters of the Authority a meeting of representatives of the registered pioneer investors. The objectives of the meeting were, *inter alia*, to review the data and information on the reserved areas with a view to ascertaining whether the identified discrepancies were a result of geological anomalies or of technical errors introduced by methods and equipment used during prospecting and to provide the necessary clarifications.

40. At the meeting, the Secretariat was informed that the discrepancies were the result of geological anomalies. The Secretariat was also advised that, while it could proceed with the resource assessment of the reserved areas in the Clarion-Clipperton Fracture Zone, its future work in that regard would be enhanced through the development of a geological model of that part of the seabed. To facilitate the Authority's work on resource assessment, IFREMER/AFERNOD provided the Secretariat with a considerable amount of the data and information in its possession. A resource assessment has been prepared for consideration by the Legal and Technical Commission.

## **H. Workshop on a standardized system of data interpretation**

41. One of the most important functions of the Authority in the future will be to monitor the implementation of plans of work for exploration and to review the reports and other data and information submitted by contractors. In this regard, it is recalled that the group of scientific experts convened by the Authority in March 1999 recommended the development of a standardized system of data interpretation. To continue this task and with a view to preparing proposals on standardization of environmental data for consideration by the Legal and Technical Commission, the Authority will convene the fourth in its series of technical workshops from 25 to

29 June 2001 at Kingston. The objectives of the workshop are:

(a) To propose standards for the measurement of the biological, chemical, geological and physical components of the marine environment that are required to establish environmental baselines in exploration areas;

(b) To recommend sampling designs for acquiring these data and for monitoring tests of mining equipment;

(c) To facilitate the conversion of data acquired by the registered pioneer investors to a common basis for comparison and for the development of a database to improve the capacity of the Authority to manage impacts from future mining for polymetallic nodules.

## **X. Public information**

### **A. Web site and publications**

42. The Authority gives publicity to its work by means of press releases, which may also be accessed through the Authority's web site.<sup>23</sup> The site contains essential information about the Authority in English, French and Spanish, as well as the texts of the official documents and decisions of the organs of the Authority. Press releases are available in English and French. Official documents and press releases are available in a downloadable format to afford ready access by members of the Authority.

43. The regular publications of the Authority include an annual compendium of selected decisions and documents of the Authority (available in English, French and Spanish) and a Handbook, containing details of the membership of the Assembly and the Council, the names and addresses of permanent representatives and the names of the members of the Legal and Technical Commission and the Finance Committee. In addition, the Authority has produced a brochure and information kit, in English, French and Spanish, explaining the work of the Authority, as well as a complete set of the official documents of the Authority on CD-ROM.

44. The Authority also published in May 2001 a technical report on the prospects as at 2000 for global non-living resources on the extended continental shelf. The report examines the global non-living resource



potential within extended continental shelf areas based on a statistical evaluation of known occurrences and reserves, the geologic environments favourable for their formation, models for sediment types and thickness, and basement composition. The result is an assessment of the potential for non-living resources to occur. The major resource potential within extended continental shelf areas is held in iron-manganese nodules and crusts, conventional oil and gas, and gas hydrates. In manganese nodules and crusts, four elemental metals comprise the main components of commercial value: manganese, copper, nickel and cobalt. However, the real value of these resources depends on the cost of recovery and production. With the probable exception of conventional oil and gas, most of these resources will remain unrecoverable until technological advances allow recovery from deep water. In the medium-term future there will likely be exploration for and exploitation of marine gas hydrates, which have substantial economic potential. As conventional hydrocarbon reserves dwindle, the prospect of marine gas hydrate exploitation becomes increasingly probable.

45. Future publications will include the proceedings of the workshop on technology held in June 1999 and the proceedings of the workshop on mineral resources other than polymetallic nodules held in June 2000. A complete listing of all current publications issued by the Authority may be found on the Authority's web site.

## **B. Library facilities**

46. The specialized library of the Authority exists to serve the needs of member States, permanent missions and researchers interested in all aspects of the Convention and seabed and marine-related affairs. It also provides essential reference and research assistance to Secretariat staff. In addition, the library handles the storage, cataloguing and distribution of the official documents and publications of the Authority. During the period under review, the library continued to handle requests from staff members and external users for information and documents. The subjects on which information was sought included general information on the work, history and development of the Authority, issues related to seabed mining and offshore development programmes, hydrothermal vents and crusts, biological diversity and underwater cultural

heritage. Increased interest was seen in topics dealing with environmental issues and regulations for seabed mining, as well as information on minerals other than polymetallic nodules, hydrocarbons and natural resources. Information was also sought on other law of the sea issues, including on baselines, the regime of straits, the continental shelf and the exclusive economic zone.

47. Work continued on the library's electronic cataloguing system, WINISIS, and the checking and editing of the core database of records is currently near completion. In response to an increase in demand, additional Internet-ready workstations are being made available for library users, including delegates. The library also continued its archival and preservation work on the documents of the United Nations Conferences on the Law of the Sea, including those of the Seabed Committee and UNCLOS III. The work includes preservation of documents through copying onto acid-free paper and subsequent binding of the documents and reports of UNCLOS III and the Preparatory Commission. Once the documents have been reviewed, catalogued and indexed, it is intended to transfer them onto electronic mass storage media.

48. The library continued its acquisition programme with a view to building a comprehensive collection of reference materials and strengthening the research capability of the collection. This is being achieved through the acquisition of specialized and reference publications on the law of the sea and seabed-oriented technical and scientific material, both current and earlier works. During the reporting period the collection was enhanced through the acquisition of approximately 200 books, journals and CD-ROMs. A number of items were acquired through donations. This includes a number of personal donations and donations from related institutions and libraries. The library's association with the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) continues to provide considerable benefit in terms of research assistance and acquisition of specialized technical publications. The Secretary-General expresses his appreciation to all donors for their valuable contributions to the library.

## **XI. Future work**

49. With respect to the internal administration of the Authority, the only significant outstanding issue which

remains to be negotiated concerns the terms and conditions for the use and occupation of the headquarters building. As noted above, as at the date of preparation of the present report, it had not been possible to make any progress on this issue since the last session of the Authority in 2000.

50. The approval by the Assembly in July 2000 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area completed the first major legislative task of the Authority. Following the approval of the Regulations, the Secretary-General has been able to conclude contracts for exploration with four of the seven registered pioneer investors whose requests for approval of plans of work for exploration were considered approved in August 1997. It is anticipated that contracts with the remaining three registered pioneer investors will be concluded shortly. In the meantime, having carried out the necessary preparatory work, the Authority is in a position to commence work on the elaboration of rules, regulations and procedures for prospecting and exploration for polymetallic sulphides and cobalt-rich crusts in the Area, as requested by the Russian Federation.

51. As noted in the report of the Secretary-General for 2000,<sup>24</sup> the future work of the Authority is expected to have a more technical emphasis. One of the most important functions of the Authority will be to monitor the implementation of the plans of work for exploration of the future contractors and to review the reports and other data and information submitted pursuant to the contracts for exploration. In addition, the Authority intends to convene a further workshop in 2002 on the prospects for international cooperation and collaboration in marine scientific research on the deep oceans, with a view to gaining a better understanding of the deep ocean environment. A number of ongoing work programmes will be continued, such as the development of the central data repository, the review and evaluation of additional data for the reserved areas and work on a geological model of the Clarion-Clipperton area.

52. In addition, the Authority will continue to monitor developments in the law of the sea and ocean affairs generally insofar as they have the potential to impact upon the functions and responsibilities of the Authority and, where appropriate, provide a forum for discussion of relevant issues with a view to fostering better international cooperation. Current international concerns which have implications for the regime

established in the Convention and the Agreement include the conservation and management of genetic resources in the international seabed area, the development of resources such as methane hydrates and the establishment of protected areas on the high seas. The Authority will also keep under consideration the possibility of cooperative marine scientific research programmes to broaden the knowledge base of the international community with regard to the deep seabed.

#### *Notes*

<sup>1</sup> ISBA/6/A/9, para. 4.

<sup>2</sup> ISBA/6/A/18.

<sup>3</sup> ISBA/6/C/9.

<sup>4</sup> ISBA/6/A/9, para. 63.

<sup>5</sup> ISBA/4/A/9, annex.

<sup>6</sup> ISBA/5/A/4 and Add.1.

<sup>7</sup> ISBA/5/A/8-ISBA/5/C/7.

<sup>8</sup> ISBA/5/A/11.

<sup>9</sup> ISBA/6/A/9, para. 14.

<sup>10</sup> ISBA/6/A/13-ISBA/6/C/6.

<sup>11</sup> ISBA/6/C/7.

<sup>12</sup> ISBA/4/C/4/Rev.1.

<sup>13</sup> ISBA/6/C/8 and Corr.1.

<sup>14</sup> ISBA/6/C/12.

<sup>15</sup> ISBA/6/A/18.

<sup>16</sup> ISBA/3/C/9.

<sup>17</sup> Reproduced in Selected Decisions 4, 1.

<sup>18</sup> ISBA/3/LTC/2.

<sup>19</sup> ISBA/6/C/11.

<sup>20</sup> The outcomes of the 1998 workshop are summarized in ISBA/5/A/1.

<sup>21</sup> See ISBA/4/A/18, para. 14.

<sup>22</sup> ISBA/6/A/9, para. 47.

<sup>23</sup> <http://www.isa.org.jm>.

<sup>24</sup> ISBA/6/A/9, part XIV.