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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

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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"). While providing the usual account of the work of the Authority over the past 12 months, the report also provides a more detailed overview of the achievements and milestones in the life of the Authority since its establishment.
- 2. The International Seabed Authority formally came into existence upon the entry into force of the Convention on 16 November 1994, but its establishment was the outcome of protracted and difficult negotiations dating back to the late 1960s. Dissatisfaction with the deep seabed mining regime contained in Part XI of the Convention was the primary reason expressed for the rejection of the Convention by the United States of America and other key industrialized States in 1982. It was not until 1994, with the adoption by the General Assembly of the United Nations on 28 July 1994 of 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 Agreement"), that it was possible to resolve the outstanding differences with respect to Part XI by the introduction of significant ameliorations to the regime contained in Part XI. The adoption of the Agreement followed extensive consultations initiated in 1990 under the auspices of the Secretary-General of the United Nations, Javier Pérez de Cuéllar, and continued by his successor, Boutros Boutros-Ghali, after it had become apparent that in the light of the significant ideological, political and economic changes that had occurred around the world since the adoption of the Convention, it was timely to re-examine the controversial provisions on seabed mining.
- The Authority is to function in accordance with the regime for deep seabed mining established in Part XI of the Convention and the Agreement. However, when the Authority held its inaugural session, from 16 to 18 November 1994, at Kingston, it was by no means clear how the complex provisions of the Convention and the Agreement would be applied in practice and how the Authority would carry out its substantive functions, particularly bearing in mind the long delay in deep seabed mining and the uncertain prospects of any form of commercial mining taking place in the immediate future. The first several years of the Authority's existence were therefore devoted to taking the organizational decisions necessary for the proper functioning of the Authority as an autonomous international organization, including election of the various organs and bodies of the Authority, adoption of the rules of procedure for those organs and bodies, adoption of financial and staff regulations and rules and conclusion of a headquarters agreement. The organizational phase of the Authority's work is now complete, and the Authority has entered into a new, more substantive, phase of its existence. Over recent years the focus of its work has become increasingly technical in nature. It is therefore appropriate at this stage, 10 years after the establishment of the Authority, for the Assembly to review the progress the Authority has made to date in carrying out the functions and responsibilities described in the Convention and the Agreement and to determine the future direction of the Authority's work programme.
- 4. Sections III to IX of the present report deal primarily with organizational matters, including an account of the establishment of the principal organs of the Authority, while sections X and XI contain a review of the most significant

substantive accomplishments of the Authority. Section XII provides details of the proposed three-year work programme of the Authority. The human and financial resources needed to accomplish the proposed work programme are reflected in the proposals for a revised Secretariat structure in section III.F and in the proposed administrative budget for 2005-2006 (ISBA/10/A/4-ISBA/10/C/6). Section XIII offers some concluding remarks.

5. It may also be noted that article 154 of the Convention requires the Assembly of the International Seabed Authority, every five years from the date of entry into force of the Convention, to undertake a general and systematic review of the manner in which the international regime of the Area established in the Convention has operated in practice. In the light of this review, the Assembly may take, or recommend that other organs take, measures that will lead to the improvement of the operation of the regime. The last such review took place in 2000, during the sixth session. At that time, the Assembly concurred with the recommendation of the Secretary-General that, in view of the very brief experience that the Authority had had in implementing the regime, it was premature to make any recommendations to the Assembly concerning measures that would lead to the improvement of the operation of the regime. A further review will be due in November 2004 (and therefore may be taken up by the Authority at its eleventh session, in 2005); the present report may therefore be considered useful background material for such a review.

II. Membership of the Authority

- 6. In accordance with article 156, paragraph 2, of the Convention, all States parties to the Convention are ipso facto members of the Authority. As at 29 February 2004, 144 States and the European Community were parties to the Convention and hence members of the Authority.
- 7. Article 4 of the Agreement provides that 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. Conversely, the Agreement provides that any instrument of ratification or formal confirmation of or accession to the Convention following the adoption of the Agreement shall also represent consent to be bound by the Agreement. An important feature of the Agreement was its provisional application. This was done not only to facilitate universal acceptance of the Convention, but also to promote universal participation in the Authority by allowing for provisional membership until such time as the necessary formalities could be completed prior to ratification of or accession to the Convention. Article 7 of the Agreement provided that if, on 16 November 1994 (the date of entry into force of the Convention), the Agreement had not entered into force, it would be applied provisionally pending its entry into force, subject to certain exceptions. This was an important provision designed to avoid the possibility of a duality of regimes existing upon entry into force of the Convention.
- 8. In accordance with article 6, paragraph 1,³ the Agreement entered into force on 28 July 1996. On the same date, in accordance with article 7, paragraph 3, provisional application of the Agreement terminated. Nevertheless, in accordance with the provisions of section 1, paragraph 12 (a), of the annex to the Agreement, States and entities that had been applying the Agreement provisionally and for

which it was not in force were able to continue to be members of the Authority on a provisional basis, pending its entry into force for such States and entities, by sending a written notification to the depositary to that effect prior to 16 November 1996 and by making an application to the Council of the Authority for an extension of membership on a provisional basis after 16 November 1996. In accordance with section 1, paragraph 12 (a), of the annex to the Agreement, the Council was able to extend such membership beyond 16 November 1996 for a further period or periods not exceeding a total of two years, provided that the Council was satisfied that the State or entity concerned had been making efforts in good faith to become a party to the Agreement and the Convention. Provisional membership, for all States, terminated on 16 November 1998.⁴

9. The annual reports of the Secretary-General have consistently noted that there remain a small group of States that have not yet become parties to the Agreement, even though they had consented to be bound by the Convention prior to the adoption of the Agreement. As at 29 February 2004, there remained 28 such States: Angola, Antigua and Barbuda, Bahrain, Bosnia and Herzegovina, Botswana, Brazil, Cape Verde, the Comoros, the Democratic Republic of the Congo, Djibouti, Dominica, Egypt, the Gambia, Ghana, Guinea-Bissau, Guyana, Iraq, Mali, the Marshall Islands, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, Somalia, the Sudan, Uruguay, Viet Nam and Yemen. Although the situation has improved significantly since 1997, when there were 38 States in this position, it is to be hoped that all States parties to the Convention will be able to complete the necessary procedural steps to become parties to the Agreement as soon as possible. Since 1998, the Secretary-General has established a practice of writing to all such States, on an annual basis, urging them to consider becoming party to the Agreement.

III. Establishment of the principal organs of the Authority

A. The Assembly

10. The Assembly consists of all members of the Authority and, under article 160 of the Convention, is considered to be the supreme organ of the Authority to which the other organs shall be accountable as provided for in the Convention. The first meeting of the Assembly took place on 16 November 1994 at Kingston and was chaired by the Secretary-General of the United Nations and the Prime Minister and Minister for Foreign Affairs of Jamaica. This was a largely ceremonial meeting. The second part of the first session of the Authority took place at Kingston in February 1995. On 27 February 1995, the Assembly elected by acclamation Ambassador Hasjim Djalal (Indonesia) its first President.⁵ Following the practice that had been adopted during the existence of the Preparatory Commission,⁶ four Vice-Presidents were elected, ensuring that the Bureau consisted of one member from each of the five regional groups.⁷ Ambassador Djalal continued to serve as President pro tem of the Assembly during the second session, in 1996, but since 1997, the practice of regional group rotation has become established. In no case has the election of the President been contested.

1. Rules of procedure of the Assembly

11. In accordance with its term of reference, the Preparatory Commission drew up draft rules of procedure for the consideration of the Assembly. However, in the light of the adoption of the Agreement, the United Nations Secretariat suggested a number of revisions to the draft rules of procedure in order to take account of the provisions of the Agreement. During the second part of its first session, in March 1995, the Assembly established a working group consisting of 10 members (two from each regional group) to review the draft rules of procedure: Egypt, Brazil, Germany, Indonesia, Jamaica, Poland, the Republic of Korea, the Russian Federation, Senegal and the United Kingdom of Great Britain and Northern Ireland. The United States of America was invited to participate in the work of the group as an observer. Wael Aboulmagd (Egypt) was elected Chairman of the working group. A revised draft of the rules was introduced to the Assembly at its fourteenth meeting, on 16 March 1995. Following a debate, during which a proposal for certain amendments was submitted by New Zealand, the Assembly adopted its rules of procedure at its 15th plenary meeting, on 17 March 1995.

2. Quorum

- 12. Since 1996, the Assembly has met annually. The first session (1994 to 1995) was held in three parts, the second session (1996) and the third session (1997) in two parts and the fourth session (1998) in three parts. For the fifth session (1999), the Assembly held only one meeting of two weeks' duration. The sixth session (2000) was again held in two parts, each of two weeks' duration, owing to the need for the Council to consider and adopt regulations on prospecting and exploration for polymetallic sulphides. The seventh (2001), eighth (2002) and ninth (2003) sessions have each been held in one part of two weeks' duration.
- 13. The main difficulty the Assembly has encountered has been to secure broad participation in its work. The Convention, in article 159, paragraph 5, states that a majority of the members of the Authority constitutes a quorum. This provision is repeated in the rules of procedure of the Assembly. Since 1998, it has become apparent that there has been great difficulty in securing the required quorum of member States for meetings of the Assembly at Kingston, which adversely affects the ability of the Assembly to take decisions. These difficulties were exemplified during the third part of the fourth session, when it was necessary to hold a two-day meeting of the Assembly at New York simply for the purpose of adopting the budget of the Authority, as it had not been possible to adopt it at the second part of the session owing to the lack of a quorum at Kingston. At the eighth session (2002), during the debate on the annual report of the Secretary-General, this difficulty was brought to the attention of the Assembly. It was pointed out that between 1997 and 1999 the Assembly had in fact needed to meet on only 6 out of 30 days of scheduled meetings. Most of the business of the Authority is carried out by the Council, the Legal and Technical Commission and the Finance Committee. The decisions and recommendations of those bodies are then forwarded to the Assembly for its consideration and approval. In those circumstances, it was suggested that, bearing in mind that the internal organization of the Authority was largely complete, and that the Authority had moved to a budget structure requiring the Assembly to adopt a budget only once every two years, it might be appropriate to consider the possibility that the Assembly should meet only once every two years in the hope that this would encourage more States to attend its meetings. At that time the Assembly would adopt

a budget and work programme, hold the necessary elections for seats on the Council and carry out such other business as might be required. The Council and the Legal and Technical Commission will continue to meet annually. While the Assembly acknowledged that the lack of a quorum at its meetings at Kingston was a serious matter that needed to be addressed, it was not ready at that time to move to a two-year cycle of meetings. The Secretary-General was requested, however, to organize future sessions of the Authority in the most efficient manner possible, according to the programme of work for each session and bearing in mind the need for flexibility and the existing organic links between the various organs and bodies of the Authority.¹¹

14. In accordance with that request, the schedule of meetings for the ninth session (2003) was organized in such a way that the Assembly met on only four days over a seven-day period. Similarly, the schedule for the tenth session (apart from the two-day special session on 25 and 26 May 2004) has been organized so that the Assembly will meet over a seven-day period. Despite such measures, no significant increase in attendance was noted in 2003. The required quorum for the Assembly is one half of the Authority's membership. As the number of States parties to the Convention continues to increase, so the required number for a quorum increases. Given that many States parties have little direct or even indirect interest in the exploratory phase of deep seabed mining, it is inevitable that the Assembly will continue to have difficulty in securing a quorum for taking important decisions on matters such as the budget, the scale of contributions and elections to subsidiary bodies. This situation remains a matter of grave concern to the Authority and needs to be addressed.

B. The Council

- 15. The Council is the executive organ of the Authority. It has the power to establish, in conformity with the Convention and the Agreement, and the general policies established by the Assembly, the specific policies to be followed by the Authority on any question or matter within the competence of the Authority. In addition, the Council has a number of specific powers and functions, which are listed in article 162, paragraph 2, of the Convention.
- 16. In accordance with paragraph 15 of section 3 of the annex to the Agreement, the Council shall consist of 36 members of the Authority, elected by the Assembly in the following order:
 - "(a) Four members from among those States Parties which, during the last five years for which statistics are available, have either consumed more than 2 per cent in value terms of total world consumption or have had net imports of more than 2 per cent in value terms of total world imports of the commodities produced from the categories of minerals to be derived from the Area, provided that the four members shall include one State from the Eastern European region having the largest economy in that region in terms of gross domestic product and the State, on the date of entry into force of the Convention, having the largest economy in terms of gross domestic product, if such States wish to be represented in this group;

- "(b) Four members from among the eight States Parties which have made the largest investments in preparation for and in the conduct of activities in the Area, either directly or through their nationals;
- "(c) Four members from among States Parties which, on the basis of production in areas under their jurisdiction, are major net exporters of the categories of minerals to be derived from the Area, including at least two developing States whose exports of such minerals have a substantial bearing upon their economies;
- "(d) Six members from among developing States Parties, representing special interests. The special interests to be represented shall include those of States with large populations, States which are land-locked or geographically disadvantaged, island States, States which are major importers of the categories of minerals to be derived from the Area, States which are potential producers of such minerals and least developed States;
- "(e) Eighteen members elected according to the principle of ensuring an equitable geographical distribution of seats in the Council as a whole, provided that each geographical region shall have at least one member elected under this subparagraph. For this purpose, the geographical regions shall be Africa, Asia, Eastern Europe, Latin America and the Caribbean and the Western Europe and Others."
- 17. The procedure for nominating and electing the 36 members of the Council laid down in the Convention and the Agreement is as follows. First, the Assembly is to establish lists of countries fulfilling the criteria for membership in each of the four groups specified in paragraphs 15 (a) to (d). Second, each of the four groups nominates members to represent them on the Council. Third, the Assembly elects the members of the Council in the following order: the 4 nominated by Group A, the 4 nominated by Group B, the 4 nominated by Group C, the 6 nominated by Group D and, finally, 18 elected according to the principle of ensuring an equitable geographical distribution of seats in the Council as a whole.

1. Election of the first Council

18. Following the adoption of its rules of procedure, one of the first tasks of the Assembly was to elect the first Council of the Authority. This became a lengthy and complex process, and the application of the provisions of the Convention and the Agreement gave rise to a number of practical difficulties. These included the question of how to determine which States fulfilled the criteria for membership in Groups A to D, the procedure for nomination by each Group of the required number of candidates, the application of the principle of rotation within each Group, the selection of the members of each Group to be elected for a two-year term and the application of the principle of ensuring an equitable geographical distribution of seats in the Council as a whole. In view of the complexity of determining the criteria for membership in each of the various groups, the Secretariat, at the request of a number of delegations, had prepared an informal indicative list of States that would fulfil the criteria for membership in each group. 13 It was agreed that that paper should be regarded as an indicative guide only, not as establishing definitive criteria, and would be without prejudice to the right of States to submit or use other criteria. Following seven weeks of informal consultations at meetings of the Authority, as well as intersessional consultations in New York, 14 the first Council of the Authority was elected on 21 March 1996.¹⁵ Agreement on the composition of the first Council was subject to a complex system of rotation and seat-sharing and was also based on a number of understandings within the regional groups and interest groups. These understandings are recorded in the statement of the President of the Assembly on the work of the Assembly during the first part of the second session and its accompanying annexes.¹⁶

- 19. The Council met for the first time during the second part of the second session of the Authority in August 1996. The President pro tem of the Assembly, Ambassador Djalal (Indonesia), acted as President pro tem of the Council until the election of the first President of the Council. On 15 August 1996, following consultations within and among the regional groups, Lennox Ballah (Trinidad and Tobago) was elected first President of the Council. As in the case of the Assembly, since 1997 the practice of regional group rotation for the presidency of the Council has become established, and in no case has the election of the President been contested.
- 20. During the second part of the second session the Council was also able to speedily adopt its rules of procedure following consideration of a draft of the rules by a working group chaired by Mohamed Mouldi Marsit (Tunisia).

2. Terms of office of members of the Council

21. In accordance with the Convention and the Agreement, the terms of office of one half of the members of the first Council expired after two years. Accordingly, at the first part of the fourth session, in March 1998, an election for half of the members of the Council took place. Although the agreement of March 1996 effectively determined, in most cases, which members of the Council would serve for a two-year term, further informal consultations were necessary in order to reach agreement on the composition of the Council. In addition, it was proposed by the Secretary-General that, in order to harmonize the terms of office of the members of the Council with the calendar year, the terms of office of the members of the Council elected in March 1998 would commence on 1 January 1999 and continue for four calendar years, until 31 December 2002. The Assembly adopted a decision to that effect on 25 March 1998. At the same time, the Assembly also decided that the terms of office of the members of the Council elected in 1996 for a two-year term would end on 31 December 1998.

3. Subsequent elections

22. Since 1998, elections for one half of the members of the Council have taken place every two years. The elections in 2000 and 2002 were not controversial. To facilitate the establishment by the Assembly of lists of States that would fulfil the criteria for membership in the various groups in the Council, the practice has developed whereby the Secretariat prepares an informal paper containing indicative lists of the States members of the Authority that would fulfil the criteria for membership in the various groups of States in the Council, measured against publicly available statistical information, such as that available to the United Nations Statistics Division, but on the understanding that, as in 1996, such lists should be regarded as an indicative guide only.

C. The Finance Committee

23. The Finance Committee is established by section 9 of the annex to the Agreement. Paragraph 3 of section 9 provides that:

"Members of the Finance Committee shall be elected by the Assembly and due account shall be taken of the need for equitable geographical distribution and the representation of special interests. Each group of States referred to in section 3, paragraph 15 (a), (b), (c) and (d), of this Annex shall be represented on the Committee by at least one member. Until the Authority has sufficient funds other than assessed contributions to meet its administrative expenses, the membership of the Committee shall include representatives of the five largest financial contributors to the administrative budget of the Authority. Thereafter, the election of one member from each group shall be on the basis of nomination by the members of the respective group, without prejudice to the possibility of further members being elected from each group."

- Although not as contentious as the election of the first Council, the question of the election of the first members of the Finance Committee occupied most of the second part of the second session of the Authority, in August 1996. At that time, the five largest contributors to the administrative budget of the Authority were France, Germany, Japan, the United Kingdom of Great Britain and Northern Ireland and the United States of America. In order to reach an accommodation on the balance of regional representation on the Finance Committee, it was necessary to come to an understanding whereby the Latin American and Caribbean Group would relinquish one of its seats on the Finance Committee after two years, in favour of the Asian Group. The Western European and Others Group would relinquish one of its seats after two and a half years, in favour of the Eastern European Group. 19 It was also agreed that the five-year term of office of the members of the Finance Committee would run from 1 January 1997. The agreement on the composition of the Finance Committee was said to be "without prejudice to the overall composition of the Finance Committee for future elections and in particular to the claims of the regional groups".20
- 25. The five-year term of office of the members of the Finance Committee expired on 31 December 2001. An election took place at the seventh session of the Authority (2001). In contrast to the situation in 1996, the second election for members of the Finance Committee was uncontroversial. Fifteen nominations were received, and the candidates were elected by acclamation on 10 July 2001 for a five-year term commencing on 1 January 2002. Again, the election was said to be "without prejudice to the overall composition of the Finance Committee for future elections and in particular to the claims of the regional groups".²⁰
- 26. Among the significant tasks carried out by the Finance Committee have been the adoption of its rules of procedure and the preparation of draft Financial Regulations for the Authority. Although the Preparatory Commission had drawn up draft rules of procedure for a finance committee,²¹ these predated the 1994 Agreement and therefore needed substantial revision. Following the election of the first Finance Committee in 1996, a revised draft was prepared by the Secretariat;²² it was considered and progressively revised by the Finance Committee at its meetings

during the third, fourth and fifth sessions of the Authority and the rules of procedure were finally adopted by the Committee on 20 August 1999.

- 27. Pending the adoption of its own Financial Regulations consistent with the Financial Regulations of the United Nations, the Authority applied, mutatis mutandis, the Financial Regulations of the United Nations. Draft financial regulations were considered and revised by the Finance Committee during the resumed third session of the Authority, in August 1997 and again during the first part of the fourth session, in March 1998. The Finance Committee completed its work on the draft Financial Regulations of the Authority at the resumed fourth session of the Authority, in August 1998. The draft proposed by the Finance Committee²³ was taken up by the Council on 27 August 1998, but, owing to lack of time, detailed consideration was deferred to the fifth session, in 1999. Following a detailed examination of the draft, the Council decided, on 27 August 1999, to adopt and apply provisionally the draft Financial Regulations of the Authority, pending their approval by the Assembly.²⁴ The Assembly approved the Financial Regulations of the Authority at its seventy-first meeting, on 23 March 2000.²⁵
- 28. Since its establishment, the Finance Committee has considered, and recommended to the Council and Assembly, the budget of the Authority and the scale of assessed contributions to the budget. On each occasion, the Committee has been able to carry out its work by consensus (see also section IV below). The Committee also reviewed the audit reports on the finances of the Authority and reported thereon to the Council and the Assembly, and made recommendations on the appointment of auditors.

D. The Legal and Technical Commission

- 29. The Legal and Technical Commission is established by article 163 of the Convention. Paragraph 2 of that article provides that the Commission shall consist of 15 members, elected by the Council from among the candidates nominated by States parties. However, if necessary, the Council may decide to increase the size of the Commission, having due regard to economy and efficiency. The first members of the Commission were elected by the Council in August 1996, following the election of the first President of the Council. There were 22 nominations. In the light of the difficulties that had been encountered in electing the Council and the Finance Committee, the President of the Council decided to take advantage of the provisions of article 163, paragraph 2, of the Convention, to increase the number of seats on the Legal and Technical Commission from 15 to 22 and to have all 22 candidates elected by acclamation. This was done, without prejudice to future elections to the Commission. The Commission of the Commission.
- 30. A second election of members of the Legal and Technical Commission took place in July 2001. At that time, 24 candidates had been nominated. Following consultations between the regional groups and interest groups, the Council again decided, in accordance with article 163, paragraph 2, of the Convention, to increase the membership of the Legal and Technical Commission to 24 and to elect all candidates by acclamation, without prejudice to future elections and the claims of the regional groups and interest groups.²⁸ Nevertheless, several members of the Council expressed concern over the potential imbalance in regional representation in the membership of the Legal and Technical Commission. Some members considered

that the requirements for equitable geographic representation and representation of special interests were not being respected. In the light of these concerns, the Council decided that, for future elections to the Legal and Technical Commission, and in order to allow members of the Council adequate time to review the candidacies, nominations and curricula vitae of candidates for election should be submitted to the Secretary-General not later than two months prior to the opening of the session at which the election was to take place. In addition, the secretariat was requested to consider whether it might be possible to provide the Council with an indication of the likely programme of work for the Commission prior to each election, so that members of the Council could make informed judgements of the type of qualifications needed for members of the Commission.

1. Rules of procedure of the Legal and Technical Commission

- 31. Following the election of the first Legal and Technical Commission in 1996, the Commission considered the revised draft rules of procedure prepared by the Secretariat.²⁹ It completed work on the draft during the resumed fourth session of the Authority and, on 26 August 1998, adopted an informal revised text, which was submitted to the Council at the fifth session of the Authority for approval, in accordance with article 163, paragraph 10, of the Convention. The Council considered the draft rules of procedure proposed by the Commission in 1999. Following detailed examination of the draft, the secretariat prepared a revised text for further consideration by the Council.³⁰ At its 58th meeting, on 26 August 1999. the Council approved the rules of procedure, with the exception of rule 6 (meetings) and rule 53 (participation by members of the Authority and entities carrying out activities in the Area). These particular rules had caused some controversy because of the insistence of some States that the meetings of the Commission on certain matters should be open to all members of the Authority. At the third session of the Authority, in 1997, after the Commission met for the first time and commenced work on the draft regulations for prospecting and exploration for polymetallic sulphides in the Area, the representative of Brazil, on behalf of the Group of 77, requested the Council to open the meetings of the Commission to participation by observers. The Commission itself had considered whether its meetings should be held in public or in private, but had decided that observers should not be permitted to attend. It was feared by the members of the Commission that the attendance of observers would unnecessarily politicize what were essentially expert discussions. It was also pointed out that many of the matters that would be considered by the Commission, particularly those relating to commercially sensitive data provided by contractors, were of a confidential nature and that members of the Commission were bound by obligations of confidentiality pursuant to the Convention. As a compromise, an understanding was reached between the Council and the Commission that a limited number of observers could be present at meetings of the Commission relating to discussions on the draft regulations, but that such observers would not participate in the discussions.
- 32. The compromise reached was reflected in a revision of rule 6 and rule 53 considered by the Council at the sixth session, in 2000. Essentially, the modified version of rule 6 requires the Commission to take into account the desirability of holding open meetings when issues of general interest to members of the Authority, which do not involve the discussion of confidential information, are being discussed. Rule 53, inter alia, enables any member of the Authority, with the

permission of the Commission, to send a representative to attend a meeting of the Commission when a matter particularly affecting that member is under consideration. The rules of procedure of the Commission were approved by the Council at its 68th meeting, on 13 July 2000.³¹ Since the adoption of the rules of procedure, and in accordance with rule 6, the Commission has followed the practice of holding discussions on matters of general concern, such as the formulation of regulations on prospecting and exploration for polymetallic sulphides and cobaltrich crusts, in open session, in order to allow members of the Council to follow the debate in the Commission.³² A practice has also developed whereby the Chairman of the Commission provides a written report on the work of the Commission to the Council at the conclusion of each session. At the same time, the Commission has been careful to preserve the confidentiality of its discussions on other issues, such as the consideration of the annual reports submitted by contractors with the Authority.

2. Participation in meetings of the Legal and Technical Commission and the Finance Committee

- 33. A persistent problem that has confronted both the Legal and Technical Commission and the Finance Committee has been to secure the effective participation in their work of elected members from developing countries. Attendance at meetings of these bodies by members from developing countries has been generally poor, primarily for financial reasons. At the fifth session of the Authority, in 1999, commenting upon the report of the Chairman of the Legal and Technical Commission, the Council encouraged all members of the Commission to attend meetings of the Commission and requested the Secretary-General, when notifying members of the date of a meeting, to write both to the members individually and to their respective Governments. It was also suggested that, in the case of members who had failed to attend consecutive meetings of the Commission, the Secretary-General should try to ascertain whether such members intended to maintain their seats on the Commission.³³
- 34. At the eighth session, in 2002, in response to a request by the Council, 34 the secretariat presented to the Council a study of possible modalities for financing participation in meetings of the Commission and the Finance Committee, based on a survey of the practice of the United Nations and various other international bodies. The matter was taken up by the Finance Committee and the Council, and it was decided to recommend to the Assembly that, as an interim measure, a voluntary trust fund be established for the purpose of defraying the cost of participation of members from developing countries. It was requested that the Finance Committee consider this matter further at its next session, including the possibility of making provision from the administrative budget.³⁵ Such a trust fund was established in 2002, but it attracted a relatively low level of contributions. As requested by the Council and Assembly, the matter was taken up again by the Finance Committee during the ninth session (2003). After noting that the response by donors had been slow, the Finance Committee recommended to the Assembly that the voluntary trust fund be continued and used to defray the costs of participation of members of the Legal and Technical Commission and Finance Committee from developing countries. In its recommendation, which was subsequently adopted by the Assembly, the Finance Committee also established provisional terms and conditions for access to the fund and further recommended that, for the first year of operation of the voluntary trust fund, the Secretary-General be authorized to advance, to the extent

necessary, up to \$75,000 from such extraordinary sources of funding as might be under the custody of the Secretary-General and accrued to the Authority, on the understanding that that authorization was made on an exceptional, one-time basis and was without prejudice to any future recourse to the general administrative fund that might arise from the determination of definitive sources of financing for the fund.³⁶

35. In accordance with the recommendation of the Finance Committee, the Secretary-General is to report annually to the Finance Committee on the use and status of the fund. It was also agreed that, at its tenth session, the Authority should decide on a definitive source of financing for supplementing the voluntary funds for the participation of members of the Legal and Technical Commission and Finance Committee from developing countries on the basis of a recommendation of the Finance Committee and the Council.

E. The Secretary-General

- 36. Under article 166, paragraph 2, of the Convention, "the Secretary-General shall be elected for four years by the Assembly from among the candidates proposed by the Council and may be re-elected". For the election of the first Secretary-General, in 1996, there were four candidates: Satya N. Nandan (Fiji), Luis Preval Páez (Cuba), Kenneth Rattray (Jamaica) and Joseph Warioba (United Republic of Tanzania). Two of the candidates subsequently withdrew, and on 21 March 1996 the Assembly proceeded to a secret indicative vote on the remaining two candidacies, those of Mr. Nandan and Mr. Warioba. Following the secret indicative vote, Mr. Warioba withdrew and the Assembly by acclamation elected Satya N. Nandan Secretary-General for a four-year term.
- 37. That four-year term expired in 2000. During the sixth session of the Authority, on 31 March 2000, the President of the Council informed the Assembly that the Council had decided to propose to the Assembly that Satya N. Nandan, the sole candidate, be re-elected to the position of Secretary-General. The Assembly re-elected Mr. Nandan by acclamation.³⁷
- 38. Mr. Nandan's second four-year term will expire in 2004. An election for a Secretary-General will therefore take place during the tenth session of the Authority, in 2004.

F. The secretariat

- 39. The secretariat for the Preparatory Commission was provided by the United Nations. In preparation for the establishment of the Authority, a small core staff had been stationed at Kingston since 1984 as the Kingston Office for the Law of the Sea. That office was abolished with effect from 30 September 1995, but it had been agreed that the Authority would continue to use the facilities and staff of the Kingston Office as the interim secretariat of the Authority until such time as the Secretary-General entered on duty and was able to assume administrative responsibility for the staff.
- 40. Immediately upon assuming his duties, the Secretary-General of the Authority began to make the necessary arrangements for an orderly transition of staff from the

former Kingston Office for the Law of the Sea to the Authority and to assemble a core team of staff members. Although a number of administrative and technical matters remained to be dealt with, the transition from the Kingston Office was effectively completed by the end of May 1996, and, by agreement with the Legal Counsel of the United Nations, whose Office had also been responsible for the operations of the Kingston Office for the Law of the Sea, the Secretary-General assumed full administrative responsibility for the Authority with effect from 1 June 1996.

1. Recruitment of core staff

41. Following the transfer of administrative responsibility, the Secretary-General established a small core Secretariat that assisted him in reviewing the future staffing requirements for the secretariat and in preparing for the meetings of the Authority in 1996. After the first administrative budget of the Authority had been approved (see section IV), the Secretary-General commenced the recruitment process for both general service and professional staff. The recruitment of General Service staff, up to the numbers provided for in the 1997 budget, was completed by April 1997. The recruitment of Professional staff also commenced and, in accordance with established practice, was opened to international competition in March 1997.

2. Structure and organization of the secretariat

- 42. In the study presented to the third United Nations Conference on the Law of the Sea (UNCLOS III) in 1981, it had been suggested that the secretariat would require an establishment of some 257 posts.³⁸ In fact, by the time the Secretary-General came to present his first budget proposals to the Authority, it was proposed that, consistent with the principle of cost-effectiveness and the evolutionary approach to the establishment of the Authority, the development of the secretariat should be phased in over a period of time, beginning at 36 posts and with the eventual staff of the secretariat numbering 44 by 1999.³⁹ In fact, no additional posts were requested in the budget proposals for 1999, and only one additional post has been requested subsequently. By 2003, therefore, the approved establishment of the secretariat remained at 37 posts.
- 43. The initial secretariat that was established was organized in a traditionally rigid hierarchical system, based very much upon the example of the United Nations itself. Thus, four separate divisions were created as follows:
 - (a) Office of the Secretary-General;
 - (b) Office of Administration and Management;
 - (c) Office of Legal Affairs;
 - (d) Office of Resources and Environmental Monitoring.

The core functions of these Offices were described in the annex to the report of the Secretary-General to the third session (1997). Since 1997, it has become apparent that the sort of hierarchical structure that may be appropriate for a large, diverse, organization like the United Nations is not necessarily appropriate for a very small, specialist organization like the Authority. The separation of the core functions of the secretariat into small, semi-autonomous offices has generally not proved conducive to task-based teamwork. In 2002, with a view to streamlining the organization of the

secretariat, as a temporary measure, the Office of Administration and Management was absorbed into the Office of the Secretary-General. This experiment was generally successful. Nevertheless, it is apparent that there remains some opportunity for further streamlining throughout the secretariat.

- 44. As foreshadowed in the report of the Secretary-General to the ninth session, ⁴¹ it is proposed for 2005 to move the secretariat to a flatter, less hierarchical, management structure, with clearer lines of responsibility. The objective should be to create a secretariat that is not only efficient, technically competent and appropriate for the increasingly technical and scientific needs of the Authority, but also more cost-effective and result-oriented. Now that the organizational work, in terms of setting up basic accounting, human resource management and administrative procedures, has been done, there is further scope for streamlining the administration of the secretariat. On the other hand, there is a need for a significant strengthening of its technical capabilities. These measures will be progressively implemented through 2005 and 2006 as current fixed-term contracts expire.
- 45. Despite the measures that have been taken to develop competitive terms and conditions of service, it has not been easy to recruit qualified and experienced staff for the secretariat. As noted in previous reports of the Secretary-General, great difficulty has been experienced in attracting candidates with appropriate qualifications and experience for posts in certain key technical areas. Apart from the lack of a defined career structure within a very small secretariat, one of the main difficulties in attracting such staff relates to the lack of possibilities for employment of spouses and partners in Jamaica. It may be noted that this issue has also been raised as a matter of general concern to the wider United Nations system by the Secretary-General of the United Nations, who in 2002 called upon host Governments to give favourable consideration to permitting spouses of staff members to seek employment. Since the ninth session (2003), the Secretary-General of the Authority has pursued this matter with the Government of Jamaica, which has indicated a willingness to cooperate with the Authority to facilitate the employment of spouses of staff members, subject to certain conditions as are normally applied to other diplomatic missions. In order to compensate for the inadequate career structure within the Authority, the Secretary-General also intends in future to explore the possibilities for seconding specialized scientific and technical staff from relevant national and international institutions for definite periods in order to carry out specific projects within the scope of the work programme of the Authority.

3. Terms and conditions of service

46. It was understood from the outset that, while the Authority would be an autonomous international organization, it would apply to its staff the common system of salaries, allowances and other conditions of service of the United Nations and its specialized agencies. Thus, at its 39th meeting, on 29 August 1996, the Assembly recognized that, pending the approval of its own regulations, the Authority should apply the Financial Regulations and Staff Regulations of the United Nations. At the same time, the Assembly requested the Secretary-General to take the necessary steps to apply for membership in the United Nations Joint Staff Pension Fund and to conclude with the Secretary of the United Nations Joint Staff Pension Board an agreement regarding the participation of the Authority in the Pension Fund, as required by article 3, paragraph (c), of the Regulations of the Pension Fund.

(a) United Nations Joint Staff Pension Fund

47. In accordance with the Assembly's request, the necessary steps were taken to apply for membership in the Pension Fund early in 1997. At its 180th meeting, in July 1997, the Standing Committee of the United Nations Joint Staff Pension Board, on behalf of the Board, decided to recommend to the General Assembly of the United Nations that the Authority be admitted to membership in the Fund. On 22 December 1997 the General Assembly decided to approve the admission to membership in the Fund of the Authority as from 1 January 1998. In accordance with the regulations of the Pension Fund, the Secretary-General, on 18 June 1998, executed an agreement between the Fund and the Authority governing the admission of the Authority to membership. On the same date, the Authority and the United Nations also executed a special agreement extending the jurisdiction of the Administrative Tribunal of the United Nations to the Authority with respect to applications by staff members of the Authority alleging non-observance of the regulations of the Pension Fund. This completed the administrative steps necessary to enable the Authority to become a member of the Fund.

(b) Staff Regulations and Rules

48. Draft Staff Regulations, based substantially on the Staff Regulations of the United Nations, were drawn up by the secretariat during 1997. These were subsequently revised following significant revisions to the Staff Regulations of the United Nations, approved by the General Assembly in 1998. The draft Staff Regulations of the Authority were considered by the Finance Committee during the fifth session (1999) and submitted to the Council for consideration. The Council considered the Staff Regulations of the Authority at the sixth session (2000). At its 69th meeting, on 13 July 2000, the Council 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, at its 79th meeting, on 10 July 2001, the Assembly approved the Staff Regulations of the Authority.

49. In November 2001, in accordance with the Staff Regulations, the Secretary-General promulgated the Staff Rules.⁴⁷

(c) Inter-Organization Agreement

50. The Authority being a small organization with a staff that is composed largely of specialists, one of the problems that it has encountered is that it is very difficult to offer any scope for promotion or career progression. Accordingly, in 2000, and as envisaged in the Relationship Agreement between the Authority and the United Nations, the Authority applied for admission to the Inter-Organization Agreement concerning Transfer, Secondment or Loan of Staff among the Organizations Applying the United Nations Common System of Salaries and Allowances ("the Inter-Organization Agreement"). That Agreement, which is administered by the Chief Executives Board for Coordination of the United Nations, is, as its name suggests, an agreement between the United Nations, its specialized agencies and other intergovernmental organizations applying the United Nations common system of salaries and allowances and is designed to facilitate the transfer, loan or secondment of staff between organizations by setting out the respective rights and

liabilities of staff members and the organizations concerned. The Authority became a party to the Inter-Organization Agreement on 26 February 2001. 49

(d) Health insurance

- 51. One of the important matters that needed to be addressed was the establishment of a scheme of health insurance for staff members. In the case of General Service staff, it was found that the self-insurance scheme used by the United Nations (and therefore previously applicable to General Service staff of the Kingston Office for the Law of the Sea) was not sustainable for an organization of the size of the Authority. Accordingly, with effect from 1 March 1998, the Authority arranged a new group health insurance plan on the local market for General Service staff members. This plan has been reviewed and renegotiated as necessary since 1998.
- 52. In the case of Professional staff members, the Authority was informed in 1996 that, because of the autonomous nature of the Authority, Professional staff members would no longer be eligible to participate in the United Nations worldwide Van Breda health insurance plan. That plan provides international health insurance cover to all United Nations and United Nations Development Programme (UNDP) field staff posted away from New York. 50 The Authority therefore had to negotiate its own health insurance plan for Professional staff. After making comparisons between a number of providers, the Authority elected to enter into a group insurance contract with Van Breda, which became effective on 1 October 1997.⁵¹ Unfortunately, because of the small numbers of staff involved, it was not possible for the Authority to obtain terms comparable to those enjoyed by staff members of the United Nations and UNDP. In particular, staff of the Authority were not entitled to after-service health insurance, and the level of premiums (and, consequently, the level of insurance subsidy payable by the Authority) was significantly higher than would have been the case under the United Nations Van Breda plan. Following a review of the level of coverage in 2002, as well as discussions with the Insurance Service of the United Nations and with Van Breda International, it was possible to come to an arrangement whereby the Authority terminated its contract with Van Breda in September 2003 and the Professional staff of the Authority were absorbed into the United Nations Van Breda plan. As a result, Professional staff now enjoy the same level of coverage as all other United Nations and UNDP field staff, while the level of premiums has been reduced, thus resulting in an overall cost saving to the Authority. Since insurance matters are dealt with and processed centrally at United Nations Headquarters, the administrative burden on the Authority has also been reduced.

(e) United Nations Administrative Tribunal

53. The last remaining matter to be resolved in connection with the terms of service of the staff of the Authority concerned the establishment of a system of appeals against administrative decisions or disciplinary action. As foreseen in the relationship agreement between the Authority and the United Nations, regulation 11.2 of the Staff Regulations of the Authority provides that the United Nations Administrative Tribunal shall, under conditions prescribed in its statute, hear and pass judgement upon applications from staff members of the Authority alleging non-observance of their terms of appointment, including all pertinent regulations and rules. In order to give effect to this provision, however, certain procedural steps are

necessary. In particular, General Assembly resolution 52/166 of 15 December 1997 and article 14, paragraph 4, of the statute of the United Nations Administrative Tribunal provide that in order to extend the competence of the Tribunal to any international organization or entity established by a treaty and participating in the common system of conditions of service, it is necessary first to conclude a special agreement between the organization or entity concerned and the Secretary-General of the United Nations. Following discussions between the Legal Office of the Authority and the Office of Legal Affairs of the United Nations, such a special agreement was concluded through an exchange of letters between the Secretary-General of the Authority and the Secretary-General of the United Nations on 13 March 2003. The special agreement confers jurisdiction on the United Nations Administrative Tribunal in respect of any administrative decision or disciplinary action complained of after 30 June 1996, subject to the time limits specified in the statute of the Tribunal and other provisions as to receivability.

IV. Budget and finance

A. Budget

- 54. In accordance with section 1, paragraph 14, of the annex to the Agreement, until the end of the year following the year during which the Agreement entered into force, that is, until 31 December 1997, the administrative expenses of the Authority were met through the budget of the United Nations. Following the election of the Secretary-General in 1996, a draft budget for 1997 was submitted to the Authority at its resumed second session, in August 1996. The draft budget was considered by the Finance Committee, which recommended certain amendments and submitted a report to the Council and the Assembly.⁵² Subsequently, on the basis of the recommendations of the Finance Committee and the Council, the Assembly of the Authority adopted a revised budget for 1997 in the sum of \$4,150,500 (being \$2,750,500 in respect of administrative costs and \$1,400,000 in respect of meeting services). The revised budget was subsequently approved by the General Assembly of the United Nations.⁵³
- 55. Since 1998 the Authority's budgets have followed a conservative pattern. The approved budget for 1998 was \$4,697,100 (including \$1,375,800 for meeting services). The budget for 1999 increased to \$5,011,700 (including \$1,200,300 for meeting services), with a further increase in 2000 to \$5,275,200. At the sixth session (2000), the Assembly decided to move to a two-year budget cycle. The approved budget for the financial period 2001-2002 was \$10,506,400, while for the financial period 2003-2004, with a budget of \$10,509,700, there was a minimal change in nominal terms and a reduction in real terms in comparison with the previous financial period. The range of the aggregate budget amounts over the period 1999 to 2003 has been relatively small. The 2003 budget was only 4 per cent larger than the 1999 budget, which indicates an average annual increase over five years of less than 1 per cent per annum. In terms of composition, the budget components have conformed to a pattern of approximately 75 per cent allocated for conference servicing and staffing costs, with approximately 25 per cent allocated for the remaining administrative and deep seabed programme-related activities.

B. Contributions to the budget

- 56. In accordance with the Convention and the Agreement, the administrative expenses of the Authority will be met by assessed contributions of its members until the Authority has sufficient funds from other sources to meet those expenses. The scale of assessments will be based upon the scale used for the regular budget of the United Nations, adjusted for differences in membership. In practice, the Authority has based its scale of assessments on that adopted by the General Assembly for the United Nations for the previous year.
- 57. As at 31 January 2004, the Authority had received over 99 per cent of assessed contributions in respect of the years 1998 to 2001 and 97 per cent in respect of 2002, but only 87 per cent in respect of 2003. This resulted in the Authority's reporting, for the first time, a small excess of expenditure over income for 2003. It is hoped that the delayed 2003 contributions will be received early in 2004 in order that the final budget out-turn for the financial period 2003-2004 is not unduly affected.
- 58. The negative trend in relation to the payment of contributions is emphasized when expressed in terms of the number of members of the Authority that are in arrears. In 1998, 83 per cent of members had paid their contributions in full. This proportion has steadily declined to the extent that, as at 31 January 2004, only 46 per cent of members had paid their 2003 contributions. In accordance with article 184 of the Convention and rule 80 of the rules of procedure of the Assembly, a member of the Authority that is in arrears in the payment of its financial contribution to the Authority will have no vote if the amount of its arrears equals or exceeds the amount of financial contribution due from it for the preceding two years. As at 31 March 2004, 52 members of the Authority were in arrears for a period of two years or more: Antigua and Barbuda, Argentina, Bahrain, Benin, Bolivia, Cape Verde, the Comoros, the Cook Islands, Côte d'Ivoire, the Democratic Republic of the Congo, Dominica, Egypt, Equatorial Guinea, Gabon, the Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Iraq, Lebanon, Luxembourg, Madagascar, Maldives, Mali, Mauritania, Mongolia, Myanmar, Nauru, Nicaragua, Panama, Papua New Guinea, Paraguay, the Philippines, Saint Kitts and Nevis, Sao Tome and Principe, Seychelles, Solomon Islands, Somalia, the Sudan, Suriname, Togo, Uganda, Uruguay, Vanuatu, Yemen, Serbia and Montenegro (formerly Yugoslavia), Zambia and Zimbabwe.

V. Relations with the host country

59. Article 156, paragraph 4, of the Convention provides that the seat of the Authority will be in Jamaica. As noted in paragraph 40 above, when the secretariat of the Authority became operational in 1996, it took over the premises formerly occupied by the Kingston Office for the Law of the Sea, established by the United Nations to service the Preparatory Commission. For that purpose, there had been in effect an agreement between the Government of Jamaica and the United Nations relating to the use of the premises.

A. Headquarters Agreement

- 60. At its eighth meeting, on 11 November 1996, the Council formally requested the Secretary-General to negotiate with the Government of Jamaica an agreement regarding the headquarters of the Authority, taking into account the draft of such an agreement prepared by the Preparatory Commission.⁵⁸ The Council also decided that such negotiations would be under its guidance.⁵⁹ Following initial negotiations between the Secretary-General and the Government of Jamaica, a draft headquarters agreement was submitted for the consideration of the Council at the third session (1997).⁶⁰ In the light of concerns expressed by some delegations, it was not possible to resolve all outstanding issues, particularly with respect to article 2 of the draft agreement, which dealt with the precise location of the headquarters of the Authority within Jamaica, and the matter was deferred to the fourth session (1998). At the fourth session, the matter was further deferred to the fifth session, at which time the Secretary-General presented to the Assembly a report on considerations relating to an offer by the Government of Jamaica to locate the permanent headquarters of the Authority to the same premises in downtown Kingston as had previously been occupied by the Kingston Office for the Law of the Sea, at Block 11, 14-20 Port Royal Street. 61 That report was considered further by the Finance Committee, which recommended that the Assembly approve the recommendations of the Secretary-General contained in his report.⁶² Having considered the recommendations of the Finance Committee, the Council decided, on 24 August 1999, to recommend to the Assembly that it approve the Headquarters Agreement contained in document ISBA/3/A/L.3-ISBA/3/C/L.3 and Corr.1.
- 61. The Headquarters Agreement between the International Seabed Authority and the Government of Jamaica was approved by the Assembly at its 67th meeting, on 25 August 1999. At that time, the Assembly also accepted the offer of the Government of Jamaica for the use of the Authority's existing premises as the permanent headquarters of the Authority and 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 in order to secure the best terms for the maintenance of the Authority's premises. At the 68th meeting of the Assembly, 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, Seymour Mullings, on behalf of the Government of Jamaica.

B. Supplementary Agreement

62. Following the signature of the Headquarters Agreement, in October 1999 the Secretary-General invited the Government of Jamaica to commence as soon as possible the negotiations on the supplementary agreement. However, owing to the need to carry out an internal transfer of the title to the proposed headquarters building, it was not until May 2000 that a preliminary round of discussions could take place between the Authority and the Government. Regrettably, it was not possible to reach an early agreement on the parameters of the proposed supplementary agreement, and a number of problems emerged that made progress difficult to achieve. Background information on the issues and a complete synopsis

of the negotiations may be found in a note by the Secretary-General prepared for the tenth session and in the successive annual reports of the Secretary-General.⁶⁴

- 63. At the ninth session (2003), the Assembly once again expressed its concern about the long delay in completing the supplementary agreement and urged the Secretary-General and the Government of Jamaica to continue their efforts to conclude an agreement as soon as possible.⁶⁵ In accordance with the injunction of the Assembly, in September 2003 the Secretary-General and the Government of Jamaica renewed their efforts to reach agreement on the technical aspects of the supplementary agreement. Following detailed and intensive negotiations, it was possible to reach agreement on the terms of the agreement by November 2003. Subsequently, at a ceremony at the Authority's headquarters at Kingston on 17 December 2003, the Agreement was signed by the Secretary-General, on behalf of the Authority, and by K. D. Knight, Minister for Foreign Affairs and Foreign Trade, on behalf of the Government of Jamaica. In accordance with its article 19, the Supplementary Agreement will be applied provisionally upon signature and will enter into force on its approval by the Assembly of the Authority and by the Government of Jamaica. The Assembly will be invited to approve the Supplementary Agreement during the tenth session.
- 64. The key elements of the Supplementary Agreement are described in document ISBA/10/A/2-ISBA/10/C/2. The financial implications of the Supplementary Agreement will be considered by the Finance Committee in the context of the proposed budget of the Authority for the financial period 2005-2006. Overall, however, it is expected that there will be no additional cost to the Authority as a result of the Agreement.

VI. Protocol on the Privileges and Immunities of the International Seabed Authority

65. Section 4, subsection G, of the Convention (articles 176-183) deals with the legal status, privileges and immunities of the Authority and of certain persons connected with the Authority. This section of the Convention was modelled on other instruments, including articles 104 and 105 of the Charter of the United Nations, the Convention on the Privileges and Immunities of the United Nations of 13 February 1946 and the Convention on the Privileges and Immunities of the Specialized Agencies of 21 November 1947. Using these provisions as a starting point, the Preparatory Commission elaborated a complex and comprehensive final draft Protocol on the Privileges and Immunities of the International Seabed Authority.⁶⁶ At its first session (1995), the Assembly set up an ad hoc working group, chaired by Mohamed Mouldi Marsit (Tunisia), to review that final draft. The working group reconvened during the resumed second session (1996) under the chairmanship of Zdislaw Galicki (Poland). It continued to meet during the third session (1997) under the same chairmanship and with the benefit of a revised and much-simplified text prepared by the secretariat of the Authority.⁶⁷ Discussions in the working group centred on the fact that some members of the Authority preferred a detailed protocol similar to that proposed by the Preparatory Commission, while others argued for a short document containing only those essential matters not covered in the Convention. Some States preferred to dispense with a protocol altogether, simply

relying upon the provisions of the Convention as the sole basis for the privileges and immunities of the Authority.

- 66. At the end of the resumed third session (1997), the working group had produced a revised draft of the Protocol in the form of an informal working paper. The final draft Protocol prepared by the working group was a much-shortened version of the draft proposed by the Preparatory Commission. The draft was considered by the Assembly at the fourth session (1998) and was approved by consensus at the 54th meeting of the Assembly, on 26 March 1998. In order to facilitate signature by member States, the Protocol was opened for signature at the headquarters of the Authority at a formal ceremony on 26 and 27 August 1998 and subsequently until 16 August 2000 at United Nations Headquarters in New York. The following members of the Authority signed the Protocol at Kingston: the Bahamas, Brazil, Indonesia, Jamaica, Kenya, the Netherlands and Trinidad and Tobago. The following members signed during the time the Protocol was open for signature at United Nations Headquarters: Chile, Côte d'Ivoire, the Czech Republic, Egypt, Finland, Ghana, Greece, Italy, Malta, Namibia, Oman, Pakistan, Portugal, Saudi Arabia, Senegal, Slovakia, Spain, the Sudan, the former Yugoslav Republic of Macedonia, the United Kingdom of Great Britain and Northern Ireland and Uruguay.
- 67. On 1 May 2003, Nigeria became the tenth member of the Authority to ratify or accede to the Protocol. In accordance with its article 18, paragraph 1, the Protocol therefore entered into force on 31 May 2003. As at February 2004, the parties to the Protocol were Cameroon, Croatia, the Czech Republic, Egypt, Jamaica, the Netherlands, Nigeria, Slovakia, Spain and the United Kingdom of Great Britain and Northern Ireland.
- 68. The Protocol deals with the immunities and privileges of the Authority in relation to those matters not already covered in the Convention and is based substantially on articles I, II, IV, V, VI and VII of the Convention on the Privileges and Immunities of the United Nations (1946), as well as the Convention on the Privileges and Immunities of the Specialized Agencies (1947). These include immunities and privileges of representatives travelling to and from the seat of the Authority and the use of the United Nations laissez-passer by staff of the Authority. The Protocol also elaborates upon the privileges and immunities to be accorded to certain categories of persons, including officials of the Authority, experts on mission and representatives of members of the Authority. It is hoped that other members of the Authority will give consideration to early ratification of or accession to the Protocol.

VII. Permanent missions to the Authority

69. The first member State to establish a permanent mission to the Authority was Italy, on 26 June 1996. Thereafter, permanent missions were established (in order of first presentation of credentials) by Costa Rica, Argentina, Germany, Cuba, the Netherlands, the Republic of Korea, Brazil, Mexico, Chile, Haiti, Jamaica, China, Gabon, Trinidad and Tobago, France, Cameroon, South Africa, Saint Kitts and Nevis and Honduras. The permanent missions of the Netherlands and the Republic of Korea have since closed.

VIII. Flag and emblem

- 70. The official seal, flag and emblem of the Authority were adopted by resolution by the Assembly at its 84th meeting, on 14 August 2002.⁶⁸
- 71. The emblem of the International Seabed Authority, which now appears in two principal variants on the official documents of the Authority as well as on the flag, letterhead and publications of the Authority, was created in 1997 and is a modification of the design that had been used by the United Nations for the purposes of UNCLOS III and subsequently by the Office of the Special Representative of the Secretary-General for the Law of the Sea.
- 72. The flag depicts the official seal of the Authority, which shows the scales of justice hanging over the waves of the oceans, all encompassed by a wreath of laurel leaves. Apart from representing justice governing the oceans, the emblem also reflects the strong links between the United Nations Division for Ocean Affairs and the Law of the Sea, the International Tribunal for the Law of the Sea and the Authority.

IX. Relations with the United Nations and other bodies

73. Article 162, paragraph 2 (f), of the Convention provides that the Council may "enter into agreements with the United Nations or other international organizations on behalf of the Authority and within its competence, subject to approval by the Assembly". Since its establishment, the Authority has entered into a Relationship Agreement with the United Nations and has established cooperative arrangements with the International Tribunal for the Law of the Sea and the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC/UNESCO).

A. Relationship Agreement with the United Nations

- 74. At the second session (1996), recognizing the particular status of the Authority as an autonomous international organization that is neither a specialized agency of the United Nations nor an organization having a similar status to that of a specialized agency, such as the International Atomic Energy Agency, ⁶⁹ the Assembly decided that the Authority should seek to obtain observer status at the United Nations in order to enable it to participate in the deliberations of the General Assembly. ⁷⁰ In addition, the Council requested the Secretary-General to negotiate with the Secretary-General of the United Nations a relationship agreement between the Authority and the United Nations. ⁷¹ A parallel request was made by the General Assembly in the same year. ⁷²
- 75. Negotiations on such an agreement took place in January 1997 and were rapidly completed. The Agreement was signed by the Secretary-General of the United Nations and the Secretary-General of the International Seabed Authority on 14 March 1997 in New York and applied provisionally upon signature pending its approval by the General Assembly of the United Nations and the Assembly of the Authority. The Relationship Agreement was approved by the Assembly of the Authority at its 45th meeting, on 27 March 1997, 73 on the recommendation of the

Council. The Agreement was approved by the General Assembly of the United Nations on 26 November 1997 and entered into force on that date.⁷⁴

76. The Relationship Agreement establishes a mechanism for close cooperation between the secretariats of the two organizations in order to ensure effective coordination of activities and avoid unnecessary duplication of work. Such cooperative arrangements are to include cooperation regarding personnel arrangements. The Agreement also provides for reciprocal representation at meetings, taking into account the status of the Authority as an observer at the United Nations, and establishes mechanisms whereby the Authority and the United Nations will cooperate in exchanging information and in fulfilling their respective functions under the Convention. Most importantly for the Authority, article 12 of the Agreement provides that unless the General Assembly, after giving reasonable notice to the Authority, decides otherwise, the United Nations will continue to make available to the Authority, on a cost-reimbursable basis, such facilities and services as may be required for the meetings of the Authority, including translation and interpretation services, documentation, and conference services.

77. On 24 October 1996, following a request by the Assembly of the Authority, the Authority was granted observer status in the General Assembly. The Authority also has observer status at the annual Meetings of States Parties convened by the Secretary-General of the United Nations pursuant to article 319, paragraph 2 (e), of the Convention and, since 1998, has been invited to make a brief report on its work to those Meetings. The Authority also has observer status at the annual Meetings of States Parties convened by the Secretary-General of the United Nations pursuant to article 319, paragraph 2 (e), of the Convention and, since 1998, has been invited to make a brief report on its work to those Meetings.

B. Relations with other international organizations

78. Special Commission 4 of the Preparatory Commission had made a number of recommendations concerning the relationship between the Authority and the International Tribunal for the Law of the Sea. 77 However, in the debate on this topic following the presentation of the first annual report of the Secretary-General to the Assembly, a number of delegations stated that "while a good working relationship with the International Tribunal for the Law of the Sea was desirable, it should be borne in mind that the Tribunal was also the court to which the Authority was answerable with regard to any seabed mining dispute". 78 Subsequently, the matter of a relationship agreement was taken up informally between the secretariat of the Authority and the Registry of the Tribunal. Following those consultations, it was decided in July 2003 not to enter into a formal relationship agreement, but to make provision for administrative cooperation between the two institutions through an exchange of letters between the Secretary-General of the Authority and the Registrar of the Tribunal. The agreement provides for the possibility of cooperation, subject to requirements of confidentiality, in respect of the free exchange of information, publications and reports, provision of conference services and personnel matters. In fact, such cooperation had already been taking place — for example, in the free exchange of publications between the two institutions — and, in that regard, the exchange of letters simply endorses already-existing arrangements.

79. In May 2000, the Secretary-General of the Authority and the Executive Secretary of IOC/UNESCO signed a memorandum of understanding concerning cooperation between the two organizations in promoting the conduct of marine scientific research in the international seabed area. Under the memorandum of

understanding, the two organizations will, where appropriate and practical, consult on matters of mutual interest in the field of marine scientific research and cooperate in the collection of environmental data and information.

80. Since 1996, the Assembly has granted observer status to three intergovernmental organizations — the Secretariat of the Convention on Biological Diversity, the Permanent Commission of the South Pacific and the South Pacific Applied Geoscience Commission — and four non-governmental organizations — Greenpeace International, the International Association of Drilling Contractors, the International Ocean Institute and the Law of the Sea Institute.

X. Substantive work of the Authority

- 81. The substantive functions of the Authority are derived from the provisions of the Convention and the Agreement. Indeed, the powers and functions of the Authority are limited to those expressly conferred upon it by the Convention. Under article 157, paragraph 1, of the Convention, the Authority exists primarily as the "organization through which States parties ... organize and control activities in the Area, particularly with a view to administering the resources of the Area." The Authority also has a general responsibility to promote and encourage the conduct of marine scientific research in the international area and to disseminate the results of such research⁷⁹ and a specific duty to ensure effective protection of the marine environment from harmful effects that may arise both from exploration of the international area and, subsequently, from exploitation of its resources. Marine scientific research in the Area is itself to be carried out in conformity with Part XI and for the benefit of mankind as a whole.
- 82. The Agreement provides that, in order to minimize costs to States parties, all organs and subsidiary bodies to be established under the Convention and the Agreement shall be cost-effective, and that the setting up and functioning of the organs and subsidiary bodies of the Authority shall be "based on an evolutionary approach, taking into account the functional needs of the organs and subsidiary bodies concerned in order that they may discharge effectively their respective responsibilities at various stages in the development of activities in the Area". This statement of general principle is given greater specificity in paragraph 5 of section 1 of the annex to the Agreement, which provides that, between the entry into force of the Convention and the approval of the first plan of work for exploitation, the Authority shall concentrate on:
- (a) Processing of applications for approval of plans of work for exploration in accordance with Part XI and the Agreement;
- (b) Implementation of decisions of the Preparatory Commission relating to the registered pioneer investors and their certifying States, including their rights and obligations, in accordance with article 308, paragraph 5, of the Convention and resolution II, paragraph 13;
- (c) Monitoring of compliance with plans of work for exploration approved in the form of contracts;
- (d) Monitoring and review of trends and developments relating to deep seabed mining activities, including regular analysis of world metal market conditions and metal prices, trends and prospects;

- (e) Study of the potential impact of mineral production from the Area on the economies of developing land-based producers of those minerals that are likely to be most seriously affected, with a view to minimizing their difficulties and assisting them in their economic adjustment, taking into account the work done in this regard by the Preparatory Commission;
- (f) Adoption of rules, regulations and procedures necessary for the conduct of activities in the Area as they progress. Notwithstanding the provisions of annex III, article 17, paragraph 2 (b) and (c), of the Convention, such rules, regulations and procedures shall take into account the terms of the Agreement, the prolonged delay in commercial deep seabed mining and the likely pace of activities in the Area;
- (g) Adoption of rules, regulations and procedures incorporating applicable standards for the protection and preservation of the marine environment;
- (h) Promotion and encouragement of the conduct of marine scientific research with respect to activities in the Area and the collection and dissemination of the results of such research and analysis, when available, with particular emphasis on research related to the environmental impact of activities in the Area;
- (i) Acquisition of scientific knowledge and monitoring of the development of marine technology relevant to activities in the Area, in particular technology relating to the protection and preservation of the marine environment;
 - (j) Assessment of available data relating to prospecting and exploration;
- (k) Timely elaboration of rules, regulations and procedures for exploitation, including those relating to the protection and preservation of the marine environment.
- 83. In addition, the Authority has a number of other, specific responsibilities, such as the responsibility to distribute to States parties to the Convention payments or contributions in kind derived from exploitation of the resources of the outer continental shelf pursuant to article 82, paragraph 4, of the Convention.
- 84. The most significant milestones in the substantive work of the Authority to date have been the adoption of the first set of regulations on prospecting and exploration for polymetallic nodules in the Area and the approval, in accordance with the Agreement, of the plans of work for exploration of the former registered pioneer investors, followed by the issue, pursuant to the Regulations, of contracts for exploration to each of the pioneer investors.

A. Approval of plans of work for exploration

85. By the final session of the Preparatory Commission, seven pioneer investors had been registered by the General Committee under the provisions of resolution II: India, on 17 August 1987; l'Institut Français de recherche pour l'exploitation de la mer/l'Association française pour l'étude et la recherche des nodules (IFREMER/AFERNOD) (France), the Deep Ocean Resources Development Company (Japan) and Yuzhmorgeologiya (Union of Soviet Socialist Republics (now the Russian Federation)), all on 17 December 1987; the China Ocean Mineral Resources Research and Development Association (COMRA) (China), on 5 March 1991; Interoceanmetal Joint Organization (IOM) (Bulgaria, Cuba, Czechoslovakia

(now the Czech Republic and Slovakia), Poland and the Union of Soviet Socialist Republics (now the Russian Federation)), on 21 August 1991; and the Republic of Korea, on 2 August 1994.

- 86. In accordance with paragraph 6 (a) (ii) of section 1 of the annex to the Agreement, a registered pioneer investor was entitled to request approval of a plan of work for exploration within 36 months of the entry into force of the Convention, that is, by 16 November 1997. Pursuant to this provision, all seven registered pioneer investors submitted to the Secretary-General requests for approval of their plans of work for exploration on 19 August 1997. In accordance with the provisions of the Agreement, such plans of work consisted of the documents, reports and other data submitted to the Preparatory Commission both before and after registration, as well as the certificate of compliance issued by the Preparatory Commission in accordance with resolution II, paragraph 11 (a).
- 87. The requests for approval of plans of work for exploration were considered by the Legal and Technical Commission on 21 August 1997. In relation to each request, the Commission ascertained that the requirements of the Agreement had been met. At its 22nd meeting, on 27 August 1997, the Council, acting on the recommendation of the Legal and Technical Commission, noted that, in accordance with paragraph 6 (a) (ii) of section 1 of the annex to the Agreement, the plans of work for exploration submitted by the seven registered pioneer investors were considered to be approved and requested the Secretary-General to take the necessary steps to issue the plans of work in the form of contracts incorporating the applicable obligations under the provisions of the Convention, the Agreement and resolution II, and in accordance with the regulations for prospecting and exploration for polymetallic nodules in the Area and a standard form of contract to be approved by the Council. Secretary and the council.

B. Completion of outstanding obligations pursuant to resolution II

- 88. When the Convention entered into force in 1994, there remained for each of the registered pioneer investors a number of outstanding obligations to be completed in accordance with resolution II. These outstanding obligations were reported in detail in a document submitted to the second session (1996) under the headings (a) periodic expenditures, (b) periodic reports, (c) provision of data, (d) relinquishment, (e) exploration plan for reserved areas in the central region of the north-east Pacific Ocean and (f) training. 86
- 89. Following its establishment in 1996, the Legal and Technical Commission considered the periodic reports and relinquishments submitted to the Authority by the registered pioneer investors pursuant to resolution II. By the time exploration contracts were entered into in 2001 all former registered pioneer investors had completed their schedules of relinquishment. Since the conclusion of contracts for exploration, reports have been submitted in accordance with the standard conditions of such contracts (see para. 109 below).
- 90. Resolution II, paragraph 12 (a) (ii), required every registered pioneer investor to provide training at all levels for personnel designated by the Preparatory Commission. By the time of entry into force of the Convention, all registered pioneer investors, with the exception of the Government of the Republic of Korea, had fulfilled their obligations with regard to training. The Republic of Korea submitted its proposal for a training programme to the Authority on 6 March 1995,

after the training panel had concluded its work and presented its final report. The proposal was therefore taken up and approved by the Legal and Technical Commission at its meeting in August 1997. Subsequently, the Secretary-General, by a note verbale dated 14 April 1998, requested members of the Authority to nominate candidates for training by, at the latest, 31 July 1998. A total of 60 applications were received by that date. On the basis of the nominations received, the Legal and Technical Commission, at its meetings on 24 and 25 August 1998, selected four candidates and four alternate candidates for the training programme. Release training programme commenced in March 1999 and continued until December 1999. Four trainees, from Cameroon, Kenya, Malaysia and the Philippines, completed the course satisfactorily.

91. At the seventh session (2001), the Legal and Technical Commission was provided by the secretariat with a report on the status of training provided by the registered pioneer investors since 1990. The Commission took note of the report, which it considered to be a useful basis for the consideration of any future training programmes.

C. Adoption of the Regulations on Prospecting and Exploration for Polymetallic Nodules

- 92. The Legal and Technical Commission commenced work on a set of draft regulations covering prospecting and exploration for polymetallic nodules at the third session, in March 1997. Initial discussions were based on a draft of the regulations prepared by the Secretariat, ⁸⁹ which in turn drew in part upon the work carried out by the Preparatory Commission between 1984 and 1993. ⁹⁰ The initial draft prepared by the Secretariat dealt with prospecting, application for and approval of a plan of work for exploration leading to a contract and the basic terms and conditions of the contract. Certain basic principles and procedures relating to the protection of the marine environment were incorporated. The draft made special provision, in accordance with the provisions of the Agreement, for the registered pioneer investors.
- 93. At the end of its meeting in March 1997, the Legal and Technical Commission circulated an informal draft of a provisional text, 91 which, in addition to the text prepared by the secretariat, included as annexes the forms to be used to notify the Authority of prospecting and to apply for a plan of work for exploration. Prior to the next meeting of the Commission, the secretariat prepared in July 1997 a set of draft standard clauses for exploration contracts. 92 In August 1997, a consolidated version of the provisional text of the regulations and the draft standard clauses was issued under the symbol ISBA/3/LTC/WP.1/Rev.2. 93 The Commission considered that document at its August 1997 meeting. At the end of the meeting, a revised provisional text was issued. 94 Members of the Authority were invited to submit comments on the new text by 31 December 1997. 95 The Commission completed its work on the draft regulations at its meeting in March 1998, 96 and the draft was presented to the Council on 23 March 1998.
- 94. The Council began its consideration of the draft regulations recommended by the Legal and Technical Commission in March 1998 with a general debate open to participation by members of the Council and observers. The remainder of the March 1998 session was devoted to an examination of the draft, regulation by regulation.

This examination was conducted in informal session, open to participation by all interested members of the Authority. This regulation-by-regulation examination of the text continued throughout the resumed fourth session of the Authority, in August 1998. On the basis of these discussions, the Secretariat, together with the President of the Council, issued an informal revision of the preamble and regulations 2 to 21. President of the Council of the President of the President of the Council of the President of the Preside

- 95. During the lengthy fifth session (1999), the Council continued to work on the draft regulations in the same manner. Various informal texts were issued to reflect progress, 99 and, towards the end of the session, the Council returned to consider for a second time the preamble and regulation 1, containing definitions of key terms. At the end of the session, a revised text of the entire regulations was issued by the secretariat, together with the President of the Council. 100 In addition, the Council decided that, with respect to the organization of work for the sixth session of the Authority in 2000, priority would be given to the work of the Council on the draft regulations, with a view to their adoption during 2000. 101 Following consultations by the Secretary-General with the incoming President of the Council 2 and with the regional groups and interest groups, the key outstanding areas of difficulty in the draft were identified, and the Council met early in the sixth session to discuss them in detail. 103
- 96. By the end of the first part of the sixth session, the Council had made substantial progress on most of the outstanding issues, although there remained a wide divergence of views with respect to a proposal by the Netherlands to apply a precautionary approach to seabed exploration 104 and a proposal by Chile, supported by other members of the Group of Latin American and Caribbean States, requiring contractors to provide an "environmental guarantee", as well as to assume liability for damage to the marine environment after the end of the exploration phase. 105 At the end of the first part of the sixth session the President issued a further revised text of the regulations 106 and indicated his intention to continue informal consultations with a view to resolving the last remaining issues during the resumed sixth session, in July 2000. At the resumed sixth session, following consultations with key delegations that resulted in further minor changes to the text, the President proposed the adoption of the final text of the regulations, contained in document ISBA/6/C/8 and Corr.1. The Regulations were adopted by consensus in the Council on 13 July 2000. 107 On the same day, the Assembly approved the Regulations without further amendment.108

D. Issuance of contracts for exploration

97. The approval of the Regulations enabled the Authority finally to enter into contracts for exploration with the registered pioneer investors, thus bringing the pioneer investors within the single and definitive regime established by the Convention and the Agreement. Thus, on 29 March 2001, the Authority entered into the first 15-year contracts for exploration for polymetallic nodules in the deep seabed with the State enterprise Yuzhmorgeologiya (Russian Federation) and Interoceanmetal Joint Organization. On the same date, the Secretary-General also signed a contract with the Republic of Korea, which had been signed in Seoul on 27 April 2001 by the Minister for Maritime Affairs and Fisheries of the Republic of Korea, Woo-Taik Chung. A contract with COMRA (China) was signed at Beijing on 22 May 2001. Contracts with the Deep Ocean Resources Development Company

(Japan) and IFREMER/AFERNOD (France) were signed at Kingston on 20 June 2001, and a contract between the Authority and the Government of India was signed, also at Kingston, on 24 March 2002. The signature of these exploration contracts finally brought to an end the interim regime established by resolution II and gave effect to the single regime for the Area established by the Convention, the Agreement and the Regulations.

XI. Library, publications and web site

- 98. The library manages the Authority's specialized collection of reference and research materials on matters relating to the law of the sea and deep seabed mining. The objective is to provide a comprehensive collection of reference materials on relevant subject matters. The library serves the needs of member States, permanent missions and researchers interested in the law of the sea and ocean affairs. It also provides essential reference and research assistance to the staff of the secretariat. In addition, the library is responsible for the archiving and distribution of the official documents of the Authority and assists with the publications programme. The regular publications of the Authority include an annual compendium of selected decisions and documents of the Authority (published 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.
- 99. The Authority has also established a programme of legal and technical publications on matters of relevance to its work. Most of these publications contain important historical material that has not been published elsewhere. In 2001, the Authority published a compendium of basic documents on the law of the sea, ¹⁰⁹ which includes a consolidation of Part XI of the Convention and the annex to the 1994 Agreement, as well as the full text of the Convention, its nine annexes and associated resolutions, the implementation Agreements, the Regulations, the Final Act of UNCLOS III and other related material. In 2002, the Authority published a volume containing the full text of the documents issued during the Secretary-General's informal consultation on outstanding issues relating to the deep seabed mining provisions of the Convention. 110 Also in 2002, the Authority published a legislative history of article 170 and annex IV to the Convention. In 2003, the Authority published a volume containing all the basic organizational texts of the Authority, available in English, French and Spanish versions. In terms of public information, the Authority also produced in 2003 a new series of brochures, in all six official languages, explaining various aspects of the work of the Authority. Dynamic and interactive versions of these brochures are accessible through the web site (http://www.isa.org.jm).
- 100. With regard to its technical publications, the Authority has to date published the proceedings of its workshops, as well as technical studies on the prospects as at 2000 for global non-living resources on the extended continental shelf¹¹¹ and on the status of polymetallic sulphides and cobalt-rich ferromanganese crusts.¹¹² A complete listing of all current publications issued by the Authority may also be found on the Authority's web site.
- 101. One of the important long-term projects the Authority has been working on is the systematic preservation and archiving of many of the original official documents

of the Sea-Bed Committee, UNCLOS III and the Preparatory Commission. In 1999, the library engaged the services of a specialist conservation librarian to conduct a thorough review and analysis of the preservation needs of the library with respect to these documents. Since then, the recommendations made by the consultant have been progressively implemented. In the first instance, this entailed preservation of the original documents, some of which are badly deteriorated, through copying onto acid-free archival paper and their subsequent binding. These bound volumes are now available in the library. Duplicate sets of all of these volumes were also sent to the library of the International Tribunal for the Law of the Sea. The second stage of the project, which began in April 2003, was to transfer more than 20,000 pages of the documents to electronic mass storage media. As a result, in the first quarter of 2004, the Authority released a set of fully indexed and searchable CD-ROMs containing all documents in all official languages. The documents will also be made available through the web site.

102. In order to meet its key objective of providing ready access to information, an electronic cataloguing system has been developed. The electronic catalogue is available to all staff members and has been available to delegates attending sessions of the Authority since 2001. The catalogue will eventually be accessible online as an integral part of the Authority's central data repository.

103. The Authority's web site contains essential information about the Authority, primarily in English, French and Spanish. The texts of all the official documents and decisions of the organs of the Authority are available on the web site in all six official languages. Press releases are available in English and French. Official documents and press releases are available in a downloadable format to afford ready access for members of the Authority.

XII. Substantive work programme, 2005-2007

104. To date, rather than establishing a medium-term or long-term work plan, the Authority has taken up the substantive matters referred to in the Agreement as and when appropriate. This is largely because, for at least the first six sessions, the work programme was driven by the need to make progress on matters of an organizational nature or else related to the implementation of the recommendations of the Preparatory Commission relating to the registered pioneer investors¹¹³ and the subsequent processing of applications for approval of plans of work for exploration. The organizational phase of the Authority's existence is now complete, and following the adoption in 2000 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, 114 the Authority has entered into 15-year exploration contracts with the former registered pioneer investors. Exploration work under these contracts is proceeding at a very slow pace and is mainly financed through government funding by sponsoring or participating States. Deep seabed mining remains uncompetitive compared to land-based mining, and there would currently appear to be no immediate or even medium-term prospect of commercial exploitation of deep seabed minerals. On the other hand, notwithstanding the fact that the market situation is not favourable for the conduct of activities in the Area, it is evident that potential mineral resources remain in situ in the Area and may have value in the future. Thus, most of the efforts of the present contractors are directed at technological research and development, long-term environmental studies and the collection and analysis of environmental baseline data.

105. For the next three years, it is proposed that the work programme of the Authority will be focused on the implementation of items (c), (d), (f), (g), (h), (i) and (j) in the list set out in paragraph 5 of section 1 of the annex to the Agreement. It is not considered necessary or cost-effective at this stage for the Authority to invest its limited resources in studying the potential impact of mineral production from the Area on the economies of developing land-based producers of minerals (item (e)), or in the elaboration of rules, regulations and procedures for exploitation (item (k)), since it is clear that commercial exploitation is still many years away. Some of the items on the list — for example, (c) and (i) — require only passive monitoring and will require no additional resources within the secretariat, while others overlap to a greater or lesser extent. In order to carry out the functions listed in the remaining subparagraphs, the work programme of the Authority over the next three years will continue to be focused in the following five main areas:

- (a) The supervisory functions of the Authority with respect to existing contracts for exploration for polymetallic nodules;
- (b) The development of an appropriate regulatory framework for the future development of the mineral resources of the Area, particularly hydrothermal polymetallic sulphides and cobalt-rich crusts, including standards for the protection and preservation of the marine environment;
- (c) Ongoing assessment of available data relating to prospecting and exploration for polymetallic nodules in the Clarion-Clipperton fracture zone (CCZ);
- (d) The promotion and encouragement of marine scientific research in the Area through, inter alia, an ongoing programme of technical workshops, and the dissemination of the results of such research;
- (e) Information-gathering and the establishment and development of unique databases of scientific and technical information with a view to obtaining a better understanding of the deep ocean environment.
- 106. Proposed activities under each of these headings are discussed below.

A. Supervisory functions with respect to existing contracts

1. Consideration of annual reports of contractors

107. One of the consequences of the existence of a contractual relationship between the Authority and the contractors is the obligation for contractors to submit annual reports in accordance with the provisions of the contract. In this regard, the standard clauses set out in annex 4 to the Regulations contain detailed provisions relating to the format and content of such annual reports. The objective of the reporting requirements is to establish a mechanism whereby the Authority, through the Legal and Technical Commission, can be provided with the information necessary to carry out its responsibilities under the Convention, particularly those relating to the protection of the marine environment from the harmful effects of activities in the Area. Additional guidance for contractors in preparing their annual reports has been provided in the form of the recommendations for the guidance of contractors, issued by the Legal and Technical Commission in 2001. 115

108. At its meeting during the eighth session (2002), the Legal and Technical Commission evaluated the first set of annual reports submitted by contractors

pursuant to the Regulations. The Commission acknowledged the efforts made by the contractors to produce their first annual reports and the significant improvement of these reports over the periodic reports submitted during the pioneer investor regime. However, it also noted that there were a number of elements missing from some of the reports and therefore made specific recommendations for the submission of additional data and information by the contractors concerned in relation to those elements. In addition, the Commission adopted a recommended format and structure for annual reports, including a standardized contents list. The Commission adopted a similar methodology for the consideration of the annual reports of contractors during the ninth session (2003). In evaluating the reports for 2002, the Commission noted with appreciation that, in general, the contractors had taken note of the recommended format and structure for the annual reports suggested by the Commission.

2. Standardization of environmental data

109. In 2004, the Commission will consider the outcomes of the Authority's workshop on standardization of environmental data and information (see para. 126). It is anticipated that the Commission will then issue a further set of guidelines to contractors on standards to be used for environmental data collection and submission. Some of the recommendations of the workshop were the establishment of a common database by the Authority linking contractor and non-contractor databases and its publication on the Internet; taxonomic standardization of species identification to ensure that species are identified similarly during taxonomic analyses of samples that may have been taken by different contractors, in different locations and at different times; exchanges of seagoing scientists, to enable them to compare and standardize field procedures; and cooperative cruises to allow for the exchange of samples, technologies and protocols. The workshop also recommended that the Authority convene workshops for scientists and technicians involved in environmental monitoring of exploration activities to enable them to share, compare and standardize procedures. By definition, this work will be focused on the CCZ in the Pacific Ocean and on the Central Indian Ocean basin.

3. Environmental databases

110. During the three-year period, the Secretariat will also establish environmental databases of the best-known nodule-bearing provinces in the CCZ and the Central Indian Ocean basin. These databases will assist the Authority to regulate the activities of contractors in respect of environmental requirements and to manage the environmental impacts of deep seabed polymetallic nodule mining when it occurs. The databases will include benthic/biological databases of the CCZ and Central Indian Ocean basin, as well as carbonate compensation depth, oxygen minimum zone, organic carbon, sediments, sedimentation, bioturbation and ocean currents. The establishment of these databases will require the Secretariat to undertake literature searches to identify the sources and availability of data, to identify and select suitable databases, assemble private (from contractors) and public data, generate geographic information system files, screen the data and introduce them into the selected databases. Methods to be utilized to facilitate this work will include meetings of experts in the relevant fields and the establishment of cooperative arrangements with contractors and other private institutions for data exchange and for the establishment of data protocols. Outputs will include webenabled bibliographic databases, a web-enabled environmental database linked to contractor and non-contractor databases, information notes on databases and periodic reports to the Authority and its organs on the status of these databases. It is expected that the databases will form the basis for the environmental monitoring programmes of the Authority for polymetallic nodule exploration and mining.

B. Regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts

- 111. In the light of the request made in 1998 by the delegation of the Russian Federation for the Authority to develop regulations for prospecting and exploration for deep sea polymetallic sulphide deposits and cobalt crusts, and following a workshop on the status of and prospects for such other minerals, held in June 2000, a document was prepared for the consideration of the Council at the seventh session (2001) on considerations relating to the proposed regulations. That document contains a summary of the discussions that took place in the workshop on the possible elements of a regime for prospecting and exploration for polymetallic sulphides and cobalt crusts. ¹¹⁸
- 112. During the seventh session, the Council held extensive discussions on how to proceed with the consideration of the issues set out in ISBA/7/C/2. It decided to continue its consideration of issues associated with the elaboration of the regulations at the eighth session (2002) and in the meantime requested the Secretariat to provide additional background information to facilitate further discussions. It also decided that the Legal and Technical Commission should commence consideration of the issues. Consequently, during the eighth session, a one-day seminar was convened at which presentations were made by invited experts on the status of and prospects for polymetallic sulphides and cobalt-rich ferromanganese crusts. Subsequently, the Legal and Technical Commission began preliminary consideration of the subject by reviewing the approaches suggested in ISBA/7/C/2. The Commission emphasized the need to proceed cautiously and in a logical manner towards the development of regulations. It was emphasized that, bearing in mind the uncertainties associated with activities in the Area, any scheme for prospecting and exploration should be subject to review after an initial period. While prospecting and exploration should be encouraged, and potential prospectors should therefore be provided with rights over particular areas and priority to apply for exploration contracts, there was also a need to ensure that the Authority received adequate data and information, particularly with regard to the protection and preservation of the marine environment. 119
- 113. The Commission requested the Secretariat to provide it with further information on the problems associated with sulphides and crusts prior to its meeting in 2003. Key issues associated with the regulations that were identified by the Commission as matters for further discussion included a progressive fee system rather than a relinquishment system, further consideration of the grid system for licensing and continued development and elaboration of the parallel system as it applied to these resources. At the ninth session (2003), the Commission met for two weeks. During the first week, the members of the Commission convened informal working groups for detailed consideration of certain aspects of the proposed regulations. To facilitate further discussion by the Commission in 2004, the secretariat has prepared a complete set of draft regulations. The draft regulations are

based on the existing regulations on prospecting and exploration for polymetallic nodules in the Area, but incorporating the model clauses developed by the secretariat in 2001 together with some of the elements that emerged from discussions in the Commission during 2002 and 2003. These will be taken up by the Commission at its meeting in 2004, following which the draft regulations will be submitted to the Council for consideration.

C. Ongoing assessment of available data relating to prospecting and exploration for polymetallic nodules

114. Shortly after the establishment of the Authority, the secretariat established a database of polymetallic nodule resources in the areas reserved for the conduct of activities by the Authority through the Enterprise or in association with developing States. POLYDAT, the name of the database that was created, contains information and data from the applications submitted by the pioneer investors at the time of their registration. These include mapping data and nodule location, grade and concentration (abundance) data for six areas in the CCZ contributed by six registered pioneer investors, and similar data for an area in the Central Southern Indian Ocean basin contributed by India. Utilizing this database, and in accordance with paragraph 5 (j) of section 1 and paragraphs 1 (c) and (e) of section 2 of the annex to the Agreement, the secretariat took steps, in consultation with contractors, to undertake a preliminary resource assessment of the metals of interest (copper, cobalt, manganese and nickel) in polymetallic nodule deposits in reserved areas.

115. While indicating the tremendous potential of nickel, copper, cobalt and manganese resources to augment the global reserves of these metals, the resource assessment identified several weaknesses of the data and information contained in POLYDAT. These included the fact that it appeared that some of the data provided might require adjustment for consistency and the need for additional data and information, such as sampling station photographs to show nodule abundance and more accurate bathymetric data. If the database is to be used for resource assessments over vast geographic areas such as the CCZ, a major problem concerns assumptions on the continuity of nodule deposits. The size of the sampling grids used in prospecting work by the pioneer investors varied from 60 kilometres by 60 kilometres to 12.5 kilometres by 12.5 kilometres. For most areas, the grid size that the pioneer investors used was 30 kilometres by 30 kilometres. For resource assessments, and without any additional information, the assumption one would have to make is that both nodule abundance and grade vary uniformly between sample stations 30 kilometres apart. This is certainly not the case. While many of the pioneers took photographs at stations and between stations that could help validate assumptions on abundance, none of the photographs has been made available to the Authority. As a result, the density of information in many parts of the reserved areas is sparse and inadequate for establishing the continuity of deposits. Although, as a result of the resource assessment, additional sampling station data were provided by France and by COMRA, it was recommended by the pioneer investors that the Authority establish sampling, assaying and abundance estimation protocols for future exploration work.

116. Subsequently, the secretariat engaged the services of a consultancy firm¹²¹ specialized in this field to undertake a resource evaluation of the metals of economic interest in nodules. The resource evaluation was undertaken utilizing conventional

estimation techniques (polygons, inverse distance interpolation and inverse square distance interpolation) and geostatistical methods such as kriging. As part of its work, the consultancy firm developed a resource model, identified promising areas for further exploration within the reserved areas and recommended additional steps that the Authority might take to increase the accuracy of its resource assessments. A report on the efforts undertaken to produce a resource assessment of the reserved areas was presented to the Legal and Technical Commission. The Commission took note of the report and suggested that the secretariat should request from the concerned contractors any additional data and information that they might have on the reserved areas as well as try to obtain data and information on the reserved areas from potential applicants. In addition, the Commission recommended the progressive development of a geological model of the CCZ to enable the Authority to incorporate scientific findings relating to the continuity of nodule deposits and proxy data on high-grade and high-abundance nodule deposits for resource assessments.

117. As a follow-up to the Commission's recommendations, in January 2003, the Authority convened a meeting of scientists to assist the secretariat to define the type of model that would be the most appropriate to help in the understanding of the geological processes in the CCZ. The meeting also identified institutions that could make data available for use in defining different parameters of the model and made proposals on the computer software and expertise needed, as well as strategies that could be adopted to analyse the data and information from different organizations. Subsequently, from 13 to 20 May 2003, as the sixth in its series of international workshops, the Authority convened a workshop at Nadi, Fiji, to establish a geological model of polymetallic nodules of the CCZ. Participants included expert scientists in model-building, scientists involved in nodule prospecting and exploration in the deep seabed and representatives of contractors. The workshop produced a number of specific recommendations on what the model should cover and how the work should proceed and recommended a work programme leading to a reliable geological model of polymetallic nodules in the CCZ within three or four years. The model, as proposed, is designed to identify the chemical, physical and biological factors that contribute to the creation and growth of nodules. Its purpose is to assist scientists to understand the underlying geological processes and help prospectors find the most valuable deposits. The programme of work proposed by the workshop is divided into three phases, starting with data acquisition and processing, moving on to analysis, and culminating in the production of a geological model with the stated aim of improving resource assessment. One intermediate product would be an evolutionary framework for the Pacific plate underlying the CCZ, covering the past 20 million years — the lifespan of the oldest nodules. A prospector's guide is to accompany the model, giving descriptive explanations of nodule geology to complement the quantitative approach of the model. The project would rely mainly on data already available rather than original research. The model is to cover the broad range of factors that affect the two measures of greatest interest to both prospectors and scientists: abundance of nodules and their metal content. Inputs to the model will come from most fields covered by oceanography that relate to the environment of nodule deposits. These include seafloor topography and geology, as well as the structure and biology of the seawater overlying nodules. The data are to come from two sources: entities that have contracted with the Authority to explore specified areas of the deep seabed for polymetallic nodules, and public and private research institutions.

118. The establishment of the geological model for the CCZ, in line with the recommendations of the workshop, will therefore form a key component of the secretariat's work programme during the 2005-2007 period. Work will start with data acquisition, followed by data analysis, culminating in the production of the model and the prospector's guide. Data inputs will include bathymetric data and grade and abundance data. With respect to proxy data to be used in the model, these will include the evolutionary framework of the Pacific plate that underlies the CCZ, nodule types and species, water column factors such as the oxygen minimum zone and the carbonate compensation depth, and the benthic boundary layer. Work has already been initiated on compiling data and information on the bathymetry of the CCZ. In addition to data and information available in the public domain, a number of the contractors have agreed to provide the secretariat with their bathymetric data on the CCZ.

119. It is expected that consultants will be required to assist the secretariat in developing model components. It is also assumed that each model component, when finalized, will consist of one or more sets of proxy data and clearly defined mathematical algorithms that generate predictions of nodule abundance and/or grade for any location within the CCZ. Model component developers will be provided with data sets of nodule grade and abundance to use in the calibration of their input algorithms through an FTP site to be established by the secretariat to facilitate the transfer of data sets among all parties working on the project. A report on integration procedures and protocols will be prepared and distributed to model component developers for review. Their comments will be taken into account in modifying the procedures and protocols as appropriate. Ground-truth testing of the model's predictions will then be undertaken using subsets of nodule grade and abundance data that are different from those used in calibrating input algorithms. Upon completion of the work on model components, it is proposed to convene a second workshop on the model to review and modify as necessary the methods proposed for integrating the input data into the geological model. After this workshop, it is expected that work can proceed to complete the development, testing, and documentation of the model, incorporating the recommendations of the workshop into the final design of the model.

120. Once the optimal model has been developed, predictions of nodule grade and abundance for areas of the CCZ that do not have sufficient coverage will be undertaken. Estimates of the probable accuracy that would be expected for prediction of the grade and abundance variables will also be established. Utilizing the model, an updated resource assessment of the metals of commercial interest in polymetallic nodule deposits in reserved areas of the CCZ will be undertaken. It is also intended during the period covered by the work programme to begin work on a geological model of polymetallic nodule deposits in the Central Indian Ocean basin. To this end, a meeting with scientists of the Government of India, scientific experts on polymetallic nodules in the Central Indian Ocean basin and model developers will be convened by the Authority.

121. In addition to the above, the secretariat will continue its efforts to expand the Authority's central data repository by augmenting the data and information already contained therein and generating products that provide a better indication of the possible resources of the Area. During the seven years of the Legal and Technical Commission's existence, it has made a number of requests of the secretariat in relation to the protection of the marine environment from activities in the Area.

These have included, inter alia, the identification of international data repositories that collect environmental data required to monitor the impact of activities in the Area, the identification of gaps in their data coverage, the formulation of a plan to retrieve appropriate data from such sources and recommendations for the development of a database for the analysis and synthesis of such data. The Commission has also recommended that all contractors for polymetallic nodule exploration should make their environmental data on contract areas available to the Authority for this purpose. Over the next three years, the secretariat will address these tasks.

D. Promotion and encouragement of marine scientific research in the Area

122. It will be recalled that, under articles 143 and 145 of the Convention, the Authority has a general responsibility to promote and encourage the conduct of marine scientific research in the international Area and to disseminate the results of such research, and a specific duty to ensure effective protection of the marine environment from harmful effects that may arise from activities in the Area. A key factor for the Authority is that, although a significant amount of basic and applied research has been done in the past or is still in progress, it is broadly accepted that the current level of knowledge and understanding of deep sea ecology is not yet sufficient to allow conclusive risk assessment of large-scale commercial seabed mining. Effective administration of the Area requires knowledge of the Area. The only mechanisms available to the Authority (in the broadest sense of all its member States) to obtain better knowledge of the Area are through the results of general and applied marine scientific research or through active prospecting and exploration for minerals. Much knowledge has been gained by the present contractors through their prospecting and exploration work for polymetallic nodules. However, it must be borne in mind that the majority of their work is not a broad pursuit of science to help the international community to manage impacts from exploration and mining, but has been directed primarily towards commercial extraction of polymetallic nodules from the abyssal depths of the oceans. In order to be able in the future to manage the impacts from mineral development in the Area in such a way as to prevent serious harm to the marine environment, it will be essential for the Authority to have better knowledge of the state and vulnerability of the marine environment in mineral-bearing provinces. This includes, inter alia, knowledge of baseline conditions in these areas, the natural variability of these baseline conditions and the relationship with impacts related to exploration and mining.

123. The most immediate and practical way in which the Authority has begun to implement its responsibilities under the Convention and to fulfil its various mandates under paragraph 5 of section 1 of the annex to the Agreement, particularly under subparagraphs (f) to (j), has been through the establishment of a series of expert workshops, seminars and meetings. In all its workshops, the Authority has focused on obtaining a better understanding of the mineral resources to be found in the international seabed area and the environment in which they are to be found in order to better prepare to manage the impact of exploration and mining on the environment. At all of the workshops, the need for cooperation between scientists and coordination of their efforts has been raised repeatedly, and, hence, the second major element in the Authority's efforts to promote marine scientific research has

been to act as a catalyst for international collaboration in projects that will help to manage impacts from deep seabed mining and related activities.

1. Technical workshops

- 124. Since 1998, the Authority has established a pattern of workshops and seminars on specific issues related to deep seabed mining, with participation by internationally recognized scientists, experts, researchers and members of the Legal and Technical Commission, as well as representatives of contractors, the offshore mining industry and member States. Through these technical workshops, the Authority is able to obtain the views of recognized experts in the protection of the marine environment and other specific subjects under consideration and to obtain the most recent marine scientific research results pertinent to the subject matter. Since 1998, six such workshops have taken place, on the following themes:
- (a) Development of guidelines for the assessment of the environmental impacts from exploration for polymetallic nodules (Sanya, China, 1998);
- (b) Proposed technologies for deep seabed mining of polymetallic nodules (Kingston, 1999);
- (c) Mineral resources of the Area other than polymetallic nodules (Kingston, 2000);
 - (d) Standardization of environmental data and information (Kingston, 2001);
- (e) Prospects for international collaboration in marine scientific research to enhance understanding of the deep sea environment (Kingston, 2002);
 - (f) Development of a geological model for the CCZ (Nadi, Fiji, 2003).
- 125. The seventh workshop in the series will be convened at Kingston in September 2004. The objective of the workshop will be to assist the Authority to develop environmental guidelines for future exploration contractors for deposits of seafloor massive sulphides and cobalt-rich ferromanganese crusts. As was the case with polymetallic nodules, in order to monitor any impacts that occur as a result of exploration and subsequent mining for these resources, it is essential that the initial conditions be known and that they can be compared with the state of the environment once commercial activity has commenced. To ensure various studies are compatible, the programme for establishing baseline data must be carefully designed and implemented. The workshop will obtain information on proposed exploration and mining techniques for these deposits, compare and discuss information on the current state of scientific knowledge of the biological, chemical, physical and geological environments for deposits of seafloor massive sulphides and cobalt-rich ferromanganese crusts and propose guidelines for the acquisition of baseline data for these deposits. In due course, the recommendations of the workshop will be submitted to the Legal and Technical Commission to assist it in formulating future recommendations for the guidance of exploration contractors for these mineral resources.
- 126. During the three-year period, it is expected that another workshop will be convened to standardize the environmental data and information contained in the exploration code and in the recommended guidelines for the establishment of baselines for these two types of mineral resources. It is expected that the result of these two workshops will be to facilitate the acquisition of comparable

environmental data and information by contractors that would facilitate the establishment of cohesive monitoring programmes by the Authority and contractors for the two types of resources. It is also expected that such monitoring programmes will result in the establishment of rigorous databases for the protection and preservation of the marine environment of these deposits. The third workshop to be convened during the three-year period will relate to the geological model.

2. International collaboration in marine scientific research

- 127. The Sanya workshop, in 1998, recommended that the Authority prepare an environmental studies model that would encourage cooperation among States, national scientific institutions and the pioneer investors in areas of environmental study and research. Such common studies would encourage cooperation and economy and would be cost-effective for all concerned. In the light of this recommendation, in March 1999 the secretariat convened a small group of internationally recognized scientific experts to try to identify critical issues suitable for international collaboration. The experts noted that, while the general quality of the nodule ecosystems in the CCZ is known, the actual community resistance, resilience and pattern of biodiversity are very poorly understood. They agreed that a critical issue identified at the Sanya workshop in relation to polymetallic nodules was the lack of knowledge relating to the effects of resuspension of sediment on the benthic communities. This lack of knowledge makes the prediction and sound management of mining impacts difficult. At present, for example, it is not known if the time span for the biological recovery of mined localities would be in the order of a few years or several decades.
- 128. These discussions led to the decision to convene in 2002 a workshop on the prospects for international collaboration in marine scientific research. The workshop focused on four key scientific issues considered appropriate for international collaboration:
- (a) Levels of biodiversity, species range and gene flow in abyssal nodule provinces;
- (b) Disturbance and recolonization processes at the seafloor following mining track creation and plume resedimentation;
- (c) Mining plume impacts on the water column ecosystems (nutrient enrichment, enhanced turbidity, heavy-metal toxicity, enhanced oxygen demand);
 - (d) Natural variability in nodule province ecosystems.
- 129. Following the workshop, in November 2002, some of the participant scientists from international marine scientific research institutions and from exploration contractors met with representatives of the Authority at the offices of the British Antarctic Survey in Cambridge, United Kingdom of Great Britain and Northern Ireland. The purpose of the meeting was to discuss the current research being carried out by institutions and exploration contractors and to develop future collaboration between scientists from the various institutions and the contractors. A number of the proposed collaborations were envisioned to occur through the Kaplan Fund project. 122
- 130. The specific purpose of the Authority's collaboration in the Kaplan Fund project is to acquire information on biodiversity, species range and gene flow in the

abyssal Pacific nodule-bearing province with a view to predicting and managing the impacts of deep seabed mining. The project focuses on determining the number of polychaete, nematode and foraminiferal species at a number of stations in the CCZ using modern molecular methods that can facilitate standardization among scientists, prospectors and contractors, and using state-of-the-art molecular and morphological techniques to evaluate levels of species overlap and rates of gene flow for key components of the polychaete, nematode and foraminiferal fauna. In this collaborative effort, contractors with the Authority will provide berth space for Kaplan scientists in return for the training required in molecular techniques that will ultimately yield standardization. Reports will be made available to the Authority on a yearly basis, with a final report containing a CD-ROM with the detailed information concerning biodiversity and gene flow in the CCZ (raw data, analysis and recommendations). The results will also be published in peer-reviewed scientific literature. Other institutions participating in the project include the British Natural History Museum; the Southampton Oceanography Centre of the United Kingdom of Great Britain and Northern Ireland; Shizuoka University, Japan; and IFREMER, France. The first cruise for the study (4 February-8 March 2003) examined an investigation area of approximately 100 square kilometres centred on latitude 14° North, longitude 119° West. The Authority has also set up collaborations with the Census of the Diversity of Abyssal Marine Life project of the Census of Marine Life to allow comparisons between the results of the Kaplan project and other studies.

131. In recent years, the broader question of how to manage risks to the environment and the biodiversity¹²³ of the high seas, including the international seabed area, has become a matter of increasing concern to the international community. For instance, the General Assembly, in paragraph 52 of its resolution 58/240 of 23 December 2003, invited "the relevant global and regional bodies, in accordance with their mandates, to investigate urgently how to better address, on a scientific basis, including the application of precaution, the threats and risks to vulnerable and threatened marine ecosystems and biodiversity in areas beyond national jurisdiction; how existing treaties and other relevant instruments can be used in this process consistent with international law, in particular with the Convention, and with the principles of an integrated ecosystem-based approach to management, including the identification of those marine ecosystem types that warrant priority attention; and to explore a range of potential approaches and tools for their protection and management". In paragraph 68 of the same resolution the General Assembly recommended that the fifth meeting of the open-ended informal consultative process on oceans and the law of the sea, in New York from 7 to 11 June 2004, consider new sustainable uses of the oceans, including the conservation and management of the biological diversity of the seabed in areas beyond national jurisdiction.

132. While a number of threats to the biodiversity of the deep oceans from various human activities are recognized, including, for example, pollution, fishing, noise pollution and ecotourism, for the Authority, the issue is quite straightforward. Inasmuch as it is the responsibility of the Authority to ensure that measures are taken to protect the flora and fauna of the marine environment from harmful effects that may arise from activities in the Area, it is obvious that evaluation of the ecology of the deep ocean, including biodiversity associated with hydrothermal vent

systems and polymetallic nodule provinces, is a very important aspect of the work of the Authority.

133. Although the Authority has to date concentrated its efforts on understanding the ecology of polymetallic nodule provinces, because that is where most data have been collected, the most immediate and current concern relating to deep ocean biodiversity appears to be the marine scientific research being carried out around active hydrothermal vents, which are highly vulnerable to detrimental environmental effects. The hydrothermal vents concentrate polymetallic sulphide deposits and disperse into the oceans metals that contribute to the accumulation of cobalt-rich ferromanganese crusts, but also provide chemical energy from the earth's core that is used by genetic resources for their growth. These genetic resources are at the base of the food chain of a diverse and rich ecosystem of life forms with high levels of biodiversity and endemism. Of the 500 species discovered thus far, some 80 to 90 per cent appear to be endemic. In such circumstances, all scientific research activities, whether done for pure scientific research, in the course of mineral prospecting or exploration, or for other commercial purposes, have the potential to cause an impact on the marine environment. Consequently, while regulating exploration and mining activities relating to polymetallic sulphides, it is clearly within the responsibility of the Authority to take measures to protect extreme biological communities associated with polymetallic sulphides and cobalt-rich crusts in the Area.

134. While it is possible to attempt to reduce the impact of scientific research, it is impossible to measure the impact scientific research has on the marine environment, as to do so would itself require scientific research. Disturbance occurs from repeated observations. More coordinated cooperation is needed to limit repeated observations and their side effects to the deep sea ecosystem. There is also a need for better coordination among marine scientific research programmes. This enters into the functions of the Authority to promote and support marine research programmes in the Area and to ensure that their results will be disseminated and available for the benefit of mankind as a whole.

135. The lack of appropriate coordinating structures has been echoed by the United Nations General Assembly's call for the creation of an effective, transparent and regular inter-agency coordination mechanism on oceans and coastal issues within the United Nations system. Improved coordination is particularly important for high seas areas because there is no institutional structure for all relevant agencies to talk about threats to these areas. Relevant international institutions include the Authority, the Food and Agriculture Organization of the United Nations, the International Maritime Organization, the World Trade Organization, the International Atomic Energy Agency, the United Nations Environment Programme, IOC/UNESCO, the International Hydrographic Organization and the Division for Ocean Affairs and the Law of the Sea, convention secretariats, including those for the Convention on Biological Diversity and the Basel Convention, and regional organizations, including regional fisheries management organizations, as well as representatives of civil society. Of those, the Authority is the only institution that has an exclusive focus on areas beyond national jurisdiction.

136. Over the next three years, the secretariat intends to explore the possibility of obtaining funding from the Global Environment Facility to assist in furthering the international collaborative work required to manage environmental impacts from

deep seabed mining. Such collaboration will build upon existing collaborations between contractors and international marine scientific research institutions and will help improve knowledge of the biodiversity associated with polymetallic nodules, seafloor massive sulphides and cobalt-rich ferromanganese crusts. For example, useful international collaboration would include a centralized approach to taxonomic identification and standardized sampling protocols that are essential for developing consistency among contractors and other research institutions in species-level identifications and for establishing the geographic ranges of important species.

E. Information and data

137. In addition to POLYDAT, the Authority has also established a central data repository. The objective of the repository is to collect and centralize all public and private data and information on marine mineral resources available to the Authority. This will enable the Authority to reconcile available data and information from different sources using uniform data formats, evaluate those data and draw conclusions from them. The repository displays the acquired data and information and makes possible the elaboration of listings, graphs and maps, as well as quantitative mineral assessments. It will also enable the Authority to process information for the purposes of preparing technical reports and producing data on CD-ROM. Work on the central data repository commenced in 2000. In the preliminary phase of development, information was collected on the formats and availability of relevant data from 18 institutions worldwide. In 2001, the process of collecting data and information commenced with the collection of data relating to polymetallic nodules and cobalt-rich ferromanganese crusts. Useful data on polymetallic nodules was obtained from the United States National Geophysical Data Center. Data on cobalt-rich ferromanganese crusts was obtained from the United States Geological Survey, including information on the location, depth and thickness of known crust deposits, geochemical data and a reduced data set with a single entry for each location. The seafloor massive sulphides database contains a compilation of published and publicly available data on the chemical compositions of hydrothermal precipitates in deposits of seafloor massive sulphides from more than 2,600 sample locations worldwide.

138. In 2001, the secretariat acquired a relational database management system to support the development process. The current phase of development focuses on the development and testing of an integrated database system that can be used as a management and research tool. The system is web-enabled, and interfaces have been designed to make the central data repository accessible for authorized representatives of member States, scientists and researchers through the Authority's web site.

139. During the three-year period, the secretariat will continue to develop the central data repository in order to facilitate the dissemination of the results of marine scientific research relevant to the future commercialization of deposits of polymetallic nodules, cobalt-rich ferromanganese crusts, seafloor massive sulphides and gas hydrates. Data dictionary metafiles for the repository will be developed. Web pages will provide members of the Authority, the scientific community, prospectors and potential future applicants for plans of work for exploration with

relevant information on scientific research and prospecting related to these marine mineral resources, including:

- (a) Type of deposit, geographical location, metal content of the items of commercial interest and any information on baseline environmental conditions, including biota;
 - (b) A bibliographic database and recommendations for general reading;
 - (c) A synthesis of research carried out on each mineral;
 - (d) Lists of related projects and associated researchers;
 - (e) Links to the web sites of other institutions working on related subjects.
- 140. Towards the end of the three-year period, the secretariat aims to assemble, in cooperation with the International Hydrographic Organization and the United Nations Cartographic Section, a digital atlas of the mineral resources of the Area. This product will be based partly on the work accomplished on the geological models of the CCZ and the Central Indian Ocean basin for polymetallic nodules, and the work done in relation to seafloor massive sulphides, cobalt-rich ferromanganese crusts and gas hydrates. The digital atlas will comprise a series of maps and charts at various scales, which will include the following global and regional information relating to mineral resources of the Area:
 - (a) Natural and political boundaries of the Area;
 - (b) Geological features in known mineral provinces of the Area;
 - (c) Bathymetry and general seafloor relief;
- (d) The locations of all known mineral resources of the Area (phosphorite, seafloor massive sulphides, polymetallic nodules, hydrocarbons and methane hydrate deposits).
- 141. The Authority will also establish a database of the relevant parameters for the monitoring and review of trends and developments relating to deep seabed mining activities, including regular analysis of world metal market conditions and metal prices, trends and prospects. The database will focus on the metals of commercial interest in polymetallic nodules, seafloor massive sulphides and cobalt-rich ferromanganese crusts. In addition to compiling the relevant metal prices, the database will also seek to assemble public domain data and information on producing mines (including on reserve estimates, average grade, annual production and production cost) and on new deposits being brought on stream, by country. It will also include data on imports, exports and consumption.

XIII. Conclusion

142. The successful establishment of the institutional framework marks a critical milestone in the implementation of the international regime for the Area. It is evident that the Authority has made substantial progress in implementing the tasks it identified for itself in 1997. In particular, as detailed elsewhere in the present report, it has made substantial and tangible progress in formulating the rules, regulations and procedures for prospecting and exploration for polymetallic nodules. Through the Legal and Technical Commission, it has monitored the implementation by the registered pioneer investors of the remaining obligations established by resolution II and has taken the necessary steps in accordance with the Agreement to give formal recognition to the claims of the registered pioneer investors and bring them within the single regime created by the Convention and the Agreement. The Authority has also developed preliminary environmental guidelines and has carried out work on a resource assessment of the areas reserved for the Authority.

143. The Authority represents a unique experiment in international relations. It is the only international body with the responsibility of administering a global commons for the benefit of mankind. As a global body with an institutional structure and a finely balanced decision-making mechanism that safeguards the interests of all States, the Authority is well equipped to deal with new developments relating to the deep ocean and to play a more meaningful role in the international system of ocean governance. There is considerable international interest in the deep sea as the last frontier. This is evidenced by discussions taking place in many forums at the regional and the international level, including debates on the harvesting of genetic resources from the Area and the protection of biodiversity on the high seas, as well as multiple-use conflicts that will adversely affect the marine environment in the Area. In addition, debate continues on the issue of marine scientific research and how best to realize the ideals set out in the 1982 Convention concerning the dissemination of the benefits of marine scientific research and technology transfer.

144. There is growing recognition of the vital role that the ocean plays in sustaining human habitation on planet earth. There is also a call for better management of the ocean environment and its resources. It is clear that long-term epistemic management of the ocean environment or biosphere will require a thorough knowledge and catalogue of ocean resources, both living and non-living. Not only must this be done, but the results of such study must be shared among all nations. We cannot conserve or sustainably manage the marine ecosystems with little or no knowledge of the marine environment. The Authority itself cannot discharge its responsibility to administer the mineral resources of the deep seabed and to ensure that measures are taken to protect the flora and fauna of the marine environment from harmful effects that may arise from activities in the Area without adequate knowledge of the marine environment. The problem is that no single nation or institution has the financial, technological and intellectual capacity to undertake a global programme of scientific research of the magnitude that is required. To be truly effective, international collaboration on a vast scale is required, involving scientists, researchers, organizations and Governments from around the world. We are beginning to see some such programmes take shape. The Authority's own modest efforts to develop a better understanding of the deep ocean environment are based on broad cooperation between prospective miners, research institutions and individual scientists. On a more ambitious scale, the Census of Marine Life is a programme of international research, involving more than 60 institutions from 15 countries, for assessing and explaining the diversity, distribution and abundance of marine organisms throughout the world's oceans. Likewise, the Integrated Ocean Drilling Programme, involving scientists from some 23 countries, is designed to study geological and geophysical aspects of the seabed. Many other cooperative programmes, of various levels of complexity and formality, are also taking place. But more can be done, by galvanizing international public opinion and fostering political commitment to make available greater resources for ocean research and exploration. Only in this way can the ideal of protecting, conserving or otherwise sustainably managing the marine ecosystem and its resources be realized for the benefit of humankind as a whole.

Notes

- Part XI (articles 133 to 191) is the largest single part of the Convention and was the most difficult to negotiate during the third United Nations Conference on the Law of the Sea (UNCLOS III).
- ² See General Assembly resolution 48/263.
- ³ Article 6, paragraph 1, stated that the Agreement would enter into force 30 days after 40 States had established their consent to be bound by it, provided that those 40 States included 7 of the States referred to in paragraph 1 (a) of resolution II of UNCLOS III and that at least five of those States were developed States.
- On 15 November 1998, the following were members of the Authority on a provisional basis: Bangladesh, Belarus, Canada, Qatar, Switzerland, Ukraine, the United Arab Emirates and the United States of America. In accordance with the Agreement, these States ceased to be members of the Authority on 16 November 1998. Bangladesh, Canada and Ukraine subsequently ratified or acceded to the Convention and the Agreement and therefore became members of the Authority.
- ⁵ Ambassador Djalal had previously served as Chairman of Special Commission II in the Preparatory Commission.
- ⁶ The Preparatory Commission for the International Seabed Authority and the International Tribunal for the Law of the Sea was established by resolution I of UNCLOS III. It commenced work in 1983 and remained in existence until the conclusion of the first session of the Assembly, on 18 August 1995. The final report of the Preparatory Commission is in document LOS/PCN/153 (vols. I-XIII, plus index).
- ⁷ This practice was subsequently confirmed in rule 28 of the rules of procedure of the Assembly, which provides that the President and Vice-Presidents shall be elected "in such a way as to ensure the representative character of the Bureau".
- ⁸ LOS/PCN/WP.20/Rev.3 (reproduced in LOS/PCN/153 (vol. V)).
- ⁹ ISBA/A/WP.1 and ISBA/A/WP.2.
- ¹⁰ ISBA/A/L.2. Reproduced in *International Seabed Authority Basic Texts* (2003).
- ¹¹ See ISBA/8/A/13.
- The relevant provisions of the Convention and the Agreement (annex, section 3, paragraphs 9
 (b), 10, and 15, and article 161, paragraphs 3 and 4, of the Convention) are reproduced verbatim in rules 83 to 86 of the rules of procedure of the Assembly.
- ¹³ Informal paper dated 19 November 1994. This paper was subsequently revised in the light of comments received from delegations and was reissued on 27 February 1995.
- ¹⁴ The informal consultations were conducted by the President of the Assembly and the Chairmen

of the five regional groups. Following the pattern established at UNCLOS III, the United States of America was also invited to participate in the informal consultations, and this has continued to be the practice followed by the Authority.

- 15 See ISBA/A/L.8.
- ¹⁶ ISBA/A/L.9 and annexes I-VII.
- 17 See ISBA/4/A/L.6.
- ¹⁸ ISBA/4/A/5.
- 19 See ISBA/A/L.13.
- ²⁰ ISBA/7/A/7, para. 5.
- ²¹ LOS/PCN/WP.45/Rev.2.
- ²² ISBA/4/F/WP.1 and ISBA/4/FC/WP.2.
- ²³ ISBA/4/C/L.3.
- ²⁴ See ISBA/5/C/10.
- ²⁵ See ISBA/6/A/3.
- The Convention provides for two organs of the Council, an Economic Planning Commission and a Legal and Technical Commission. The Agreement, however, provides that the functions of the Economic Planning Commission shall for the time being be carried out by the Legal and Technical Commission.
- ²⁷ See ISBA/C/L.3.
- ²⁸ See ISBA/7/C/6.
- ²⁹ ISBA/3/LTC/WP.3; the Preparatory Commission had prepared draft rules of procedure for the Legal and Technical Commission (LOS/PCN/WP.31/Rev.3). However, as with the rules of procedure of other organs of the Authority, these needed to be modified in order to bring them into conformity with the provisions of the Agreement.
- ³⁰ ISBA/5/C/L.1/Rev.1.
- ³¹ ISBA/6/C/9.
- ³² See, for example, ISBA/8/C/6*, report of the Chairman of the Legal and Technical Commission on the work of the Commission during the eighth session of the Authority (2002).
- ³³ See ISBA/5/C/11.
- ³⁴ ISBA/7/C/7, para. 7.
- 35 See ISBA/8/C/5 and ISBA/8/C/8.
- ³⁶ See ISBA/9/A/7 and ISBA/9/A/9.
- ³⁷ See ISBA/6/A/8, which also provides that the term of office shall begin on 1 June 2000.
- ³⁸ See A/CONF.62/L.65.
- ³⁹ See ISBA/A/9/Add.1.
- ⁴⁰ ISBA/3/A/4.
- ⁴¹ ISBA/9/A/3.
- ⁴² See LOS/PCN/153 (vol. V) and LOS/PCN/WP.50/Rev.3.
- ⁴³ See ISBA/A/15.
- ⁴⁴ See General Assembly decision 52/458.

- ⁴⁵ See ISBA/6/C/10.
- ⁴⁶ See ISBA/7/A/5.
- ⁴⁷ ST/SGB/2001/01 (ISA).
- ⁴⁸ Agreement concerning the Relationship between the United Nations and the International Seabed Authority, adopted by the General Assembly of the United Nations in its resolution 52/27; see paras. 74-77 below.
- ⁴⁹ This action was duly registered by the Treaty Section of the Office of Legal Affairs of the United Nations on 13 June 2003.
- ⁵⁰ Special arrangements apply in New York.
- 51 Similar arrangements were entered into by the International Tribunal for the Law of the Sea.
- ⁵² ISBA/A/12 and ISBA/C/7.
- ⁵³ See General Assembly resolution 51/221.
- ⁵⁴ See ISBA/3/A/9.
- ⁵⁵ See ISBA/4/A/17.
- ⁵⁶ See ISBA/5/A/12.
- ⁵⁷ See ISBA/6/A/15.
- ⁵⁸ LOS/PCN/WP.47/Rev.2.
- ⁵⁹ See ISBA/5/C/11.
- 60 ISBA/3/A/L.3-ISBA/3/C/L.3 and Corr.1.
- ⁶¹ See ISBA/5/A/4 and Add.1.
- 62 ISBA/5/A/8-ISBA/5/C/7.
- 63 See ISBA/5/A/11.
- ⁶⁴ ISBA/10/A/2; see also ISBA/7/A/2, section IV (reproduced in Selected Decisions 7, at 5); ISBA/8/A/5, section VI (Selected Decisions 8, at 11); and ISBA/9/A/3, section V (Selected Decisions 9, at 3).
- 65 See ISBA/9/A/9, para. 8.
- 66 LOS/PCN/WP.49/Rev.2.
- 67 ISBA/3/A/WP.1/Add.1.
- ⁶⁸ See ISBA/8/A/12; it may be noted that a similar procedure was employed by the United Nations in relation to its emblem and flag. In that case, separate resolutions were adopted on 7 December 1946 relating to the emblem and official seal of the United Nations and on 20 October 1947 relating to the flag of the United Nations.
- ⁶⁹ The status of the Authority as an autonomous international organization established under the Convention was recognized by the United Nations General Assembly in its resolutions 49/28 and 50/23.
- 70 See ISBA/A/13.
- Nee ISBA/C/10; in negotiating the agreement, the Secretary-General was asked to take into account the draft of such an agreement prepared by the Preparatory Commission (LOS/PCN/WP.50/Rev.3), although in fact much of the content of that draft had been rendered redundant.
- ⁷² See General Assembly resolution 51/34.
- ⁷³ See ISBA/3/A/3 and ISBA/3/A/L.4, para. 10.

- ⁷⁴ See General Assembly resolution 52/27; on 8 September 1998, the General Assembly approved a similar relationship agreement between the United Nations and the International Tribunal for the Law of the Sea (see resolution 52/251).
- ⁷⁵ See General Assembly resolution 51/6.
- ⁷⁶ In accordance with the decision of the ninth Meeting of States Parties (SPLOS/48, para. 53) and rule 37 of the rules of procedure for Meetings of States Parties (SPLOS/2/Rev.3), the report of the Secretary-General of the Authority has been placed on the agenda of the Meeting of States Parties since 2000.
- ⁷⁷ See LOS/PCN/SCN.4/WP.16/Add.5.
- ⁷⁸ ISBA/3/A/11, para. 7. See also ISBA/3/A/4, para. 23 (annual report of the Secretary-General).
- ⁷⁹ Convention, article 143.
- 80 Convention, article 145.
- 81 Convention, article 256.
- 82 1994 Agreement, annex, section 1, para. 3.
- ⁸³ In the case of the Republic of Korea, which was not able to obtain a certificate of compliance before the Preparatory Commission concluded its work, a statement describing the status of the implementation of the obligations by the registered pioneer investor was issued in lieu of the certificate of compliance (ISBA/3/C/6).
- 84 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.
- 85 ISBA/3/C/9.
- ⁸⁶ ISBA/A/10. The statement of the Chairman of the Preparatory Commission at the end of the resumed twelfth session of the Preparatory Commission (1994, New York) also contained a report on the status of the implementation of the obligations of the registered pioneer investors under resolution II and the related understandings (LOS/PCN/L.115/Rev.1).
- 87 See ISBA/3/LTC/2.
- 88 See ISBA/4/C/12 and Corr.1.
- 89 ISBA/3/LTC/WP.1.
- Between 1984 and 1993, Special Commission 3 of the Preparatory Commission undertook a great deal of work on a draft mining code and issued a total of 166 draft articles in the form of working papers (contained in the Final Report of the Preparatory Commission, LOS/PCN/153 (vol. XIII)). The work of Special Commission 3 therefore provided an obvious starting point for the Legal and Technical Commission in its consideration of the code, and, indeed, the 1994 Agreement (annex, section 1, para. 16) expressly required the work of the Preparatory Commission to be taken into account in the adoption of rules, regulations and procedures. Unfortunately, much of the work of Special Commission 3 was done piecemeal, over a number of years, and therefore contained significant areas of overlap. In addition, while Special Commission 3 dealt comprehensively with the process of application for approval of a plan of work, it barely touched on the contractual relationship between the contractor and the Authority; nor did it address the question of the protection of the marine environment. More fundamentally, the drafts prepared by the Preparatory Commission were elaborated before the 1994 Agreement was drafted. Much of its work was therefore superseded by the Agreement and was of limited relevance by the time the Authority began its work.
- 91 Issued officially on 28 May 1997 as ISBA/3/LTC.1/WP.1/Rev.1.
- 92 ISBA/3/LTC/WP.2.
- ⁹³ Being a consolidation of documents ISBA/3/LTC/WP.1/Rev.1 and ISBA/3/LTC/WP.2.

- 94 ISBA/3/LTC/WP.1/Rev.3, dated 27 August 1997.
- 95 For a summary of the comments received, see ISBA/4/INF.1 and Add.1 and 2, and ISBA/4/CRP.1, which incorporates the comments in the form of footnotes.
- ⁹⁶ The final draft presented to the Council was issued in document ISBA/4/C/4/Rev.1, dated 29 April 1998.
- This procedure was proposed by the President of the Council in 1998, Joachim Koch (Germany), in order to avoid the need to reopen discussion on controversial provisions at a later stage when the Regulations would be referred to the Assembly.
- 98 ISBA/4/C/CRP.1, dated 1 October 1998.
- ⁹⁹ ISBA/5/C/CRP.1 (5 August 1999) contained recommended technical revisions to ISBA/4/C/4/Rev.1 (29 April 1998); ISBA/5/C/CRP.2 (16 August 1999) contained an informal revision of regulation 1 and regulations 22 to 33 prepared by the Secretariat, together with the President of the Council.
- ¹⁰⁰ ISBA/5/C/4/Rev.1, 14 October 1999.
- ⁰¹ See the statement of the President on the work of the Council at the fifth session (ISBA/5/C/11).
- 102 Sakiusa A. Rabuka (Fiji).
- 103 To assist in these discussions, the Secretariat prepared a background paper (ISBA/6/C/INF.1), "Outstanding issues with respect to the draft regulations on prospecting and exploration for polymetallic nodules in the Area".
- 104 See ISBA/5/C/L.8.
- 105 ISBA/6/C/L.3.
- ¹⁰⁶ ISBA/6/C/2*.
- ¹⁰⁷ See ISBA/6/C/12.
- See ISBA/6/A/18; the official text of the Regulations was published in the annex to document ISBA/6/A/18 (13 July 2000).
- The Law of the Sea: Compendium of Basic Documents (International Seabed Authority in collaboration with Caribbean Law Publishing Company, Kingston, 2001).
- Secretary-General's Informal Consultations on Outstanding Issues Relating to the Deep Seabed Mining Provisions of the United Nations Convention on the Law of the Sea: Collected Documents (International Seabed Authority, 2002).
- 111 ISA Technical Study No. 1, Global Non-Living Resources on the Extended Continental Shelf: Prospects at the Year 2000 (International Seabed Authority 2001).
- ISA Technical Study No. 2, Polymetallic Massive Sulphides and Cobalt-Rich Ferromanganese Crusts: Status and Prospects (International Seabed Authority, 2002).
- Assembly that described in detail the substantive work of the Authority and reviewed the status of the exploration work carried out by the registered pioneer investors pursuant to resolution II (ISBA/A/10). Although this report was not formally adopted by the Assembly, it formed the background against which much of the substantive work of the Authority was carried out in the early years of its existence.
- ¹¹⁴ ISBA/5/A/18.

- See ISBA/7/LTC/1/Rev.1*; the purpose of the recommendations for guidance, which were developed from the recommendations of an international workshop held in 1998, 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.
- 116 See ISBA/8/LTC/2.
- 117 See ISBA/8/LTC/2, annex.
- 118 ISBA/7/C/2.
- ¹¹⁹ See ISBA/8/C/6*.
- ¹²⁰ The areas reserved for the conduct of activities by the Authority in the Pacific Ocean are between longitudes 118° and 115° West and latitudes 7° and 16° North. The area reserved for the conduct of activities in the Central Indian Ocean is between longitudes 73° and 79° East and latitudes 10° and 17° South.
- 121 Geostat Systems International, Inc., of Laval, Canada.
- Referred to as the Kaplan Fund project because of its main funding source, the J. M. Kaplan Fund.
- The term "biodiversity" has become fashionable in recent years and is often used imprecisely. Biodiversity is merely a contraction of the term biological diversity, first used by Rosen in 1985 as part of the title for a scientific meeting. The original term was used as a way to group ecological diversity and genetic diversity. Diversity is a measurement of difference, meaning that biological diversity, hence biodiversity, is a measure of biological difference. Often biodiversity refers only to species diversity, but in its true form it encompasses all biological measurements.