For over a year I have conducted negotiations on the system of exploration and exploitation, first as Chairman of the negotiating group created during the intercessional meeting held in February 1978 in New York, and afterwards as Chairman of negotiating group 1. During that time I have not only conducted negotiations from the podium; I have also carried out consultations with delegations of individual countries and with groups of countries with special interests, encouraged consultations amongst them, promoted restrictive meetings to deal with specific problems at a technical level, and prepared and encouraged the presentation of drafts and proposals.

The result of all this activity is reflected in document NGO/16/Rev.1 (annex III). As you see, this document contains provisions related to almost every aspect of the system of exploration and exploitation, from general principles governing the area such as those in article 140 on benefit of mankind, article 143 on marine scientific research and article 144 on transfer of technology, to the detailed provisions of annex II on approval of plans of work or selection of applicants. Some formulations have been maintained without substantially changing their structure from the informal composite negotiating text such as that defining the basic elements of the system in article 151. Some other provisions contain new ideas developed during the negotiations in negotiating group 1, such as those related to technology transfer or to the anti-monopoly clause.

On the whole, the set of articles I am submitting now is a new attempt to answer the questions of who will exploit the resources of the area, and how the area has to be exploited in order to ensure that all mankind, not some States or persons, will benefit.

The problems we had to face were particularly difficult because our objectives were twofold: on the one side to agree on a system of exploration and exploitation satisfactory to developed as well as developing countries, to producers as well as consumers. I think that the setting up of the system was the easiest part of our task, because we worked on the already accepted assumption that the exploitation of the area should be carried out both by the Enterprise on behalf of the Authority and by other entities in association with the Authority, at least for the interim period until the review conference reaches an agreement on a new system.

But the second objective proved to be far more difficult or at least more complex than the first. This second objective was to ensure that the system of exploration and exploitation will operate in reality in the manner which has been devised in the text. In other words, that which is known in the jargon of the Conference as the "parallel system" will indeed be parallel once the regime comes into force. This was an enormous task since we had to imagine ways and means to equalize two different kinds of entities: the powerful consortium with all their capital and credit, technology and organization, some of which are already engaged in sea-bed operations; and the Enterprise, an entity so far existing only in our imagination, a creature to be born without the necessary tools to fulfill the purpose for which it is created. Indeed, the most extensive discussions in our group focused on the availability for the Enterprise of one of those tools, namely, technology.

I know that in negotiating group 2 discussions about the other fundamental tool, finance, have been equally arduous.

Thus considerable time was devoted during the negotiations to the analysis and discussion of proposals providing mechanisms to ensure that the parallel system will operate as such, that is to say, to ensure that the Enterprise will be an effective operator in the exploitation of the resources of the area. The detailed provisions on transfer of technology, constituting a considerable expansion of paragraph 4 (c) (iv) of annex II of the informal composite negotiating text, and may be seen, I think, as the most important outcome of the work of negotiating group 1. Trying to reconcile the opposite point of views of different interest groups on this extremely sensitive subject has required strenuous efforts and has forced me to review my proposals many times. The last version of paragraph 4 (b) of annex II may be found in document NGO/16/Rev.1. I decided to present a new version of this paragraph including some important additions to the text contained in document NGO/16 in view of the very useful comments made during the last meeting of negotiating group 1 and the deliberations in the working group of 21.

In subparagraph (b) I have inserted a provision to reinforce the assurance given by the owner of the technology concerning the availability of such technology. In subparagraph (b) I have clarified the scope of the undertaking of the applicant in establishing that the Enterprise may invoke it only if it finds that it is unable to obtain the same or similar technology on the open market on fair and reasonable terms and conditions.

Subparagraph (c) is new and discusses the intricate problem of the transfer of the Enterprise of technology for processing minerals. I hope that it will command acceptance by all interested groups. This new provision not only acknowledges the right of and the need for the Enterprise to engage in processing activities but also puts on State parties operating in the area some concrete obligations relating to the transfer of technology for processing. Finally, article 4 (b) (b) has been redrafted to meet some objections expressed in negotiating group 1.

Some comments made on paragraphs 4 (b) by members of negotiating group 1 and also by members of the working group of 21 convinced me that the inclusion of a definition of "technology" was necessary in order to make more precise the undertaking of the applicant in this field. Therefore I decided to add a new subparagraph at the end of paragraph 4 (b) establishing what is the meaning of "technology" for the purpose of the application of annex II.

The text of the definition is as follows:

"For the purposes of this paragraph, ‘technology’ means the equipment and technical know-how, including manuals, designs, operating instructions, training and technical advice and assistance necessary to assemble, maintain and operate a system for the exploration and exploitation of the resources of the Area and the non-exclusive legal right to use these items for that purpose."

The other amendments that appear in document NGO/16/Rev.1 are mainly drafting changes. I will simply point them out because they are self-explanatory. In article 145, at the beginning of paragraph 3, the words "and their nationals" have been deleted. It is understood that reference to "States" incorporates their nationals.

Article 153, paragraph 2, has been redrafted so as to express the same idea in a clearer way. In annex II, paragraph 2 (a) (ii), I have adopted a simpler way to express the prosector's acceptance of the Authority's right to verify that he...
conference for the review of those provisions of this Part of the present Convention and the annexes thereto which govern the system of exploration and exploitation of the resources of the Area. The Conference shall consider in detail, in the light of the experience acquired during that period, whether the provisions of this Part of the present Convention governing that system of exploration and exploitation of the resources of the Area have achieved their aims in all respects, in particular whether they have benefited mankind as a whole, whether they have not resulted in an excessive concentration of the exploitation of these resources in the hands of a small number of States, whether the economic policies set forth in articles 150 and 150 bis have been complied with and whether the régime has resulted in a just distribution of the benefits from activities in the Area, in the light of the general economic situation of developing countries.

2. (Re-inserted)

In particular, the Conference shall consider whether, during the 20-year period, rent and area have been exploited in an effective and balanced way in comparison with non-renewed areas.

3. ... The Conference ... shall ... ensure that the principles of the common heritage of mankind, the international régime designed to ensure its equitable exploitation for the benefit of all countries, especially the developing countries, and an Authority to conduct, organize and control activities in the Area are maintained. It shall also ensure the maintenance of the principles laid down in this Part of the present Convention with regard to the exclusion of claims or exercise of sovereignty over any part of the Area, the rights of States and their general conduct in relation to the Area, the prevention of monopolization of activities in the Area, the use of the Area exclusively for peaceful purposes, economic aspects of activities in the Area, scientific research, transfer of technology, protection of the marine environment, and of human life, rights of coastal States, the legal status of the superjacent waters and air space and accommodation as between the various forms of activities in the Area and in the marine environment.

4. The Conference shall establish its own rules of procedure.

5. Decisions adopted by the Conference under the provisions of this article shall not affect rights acquired under existing contracts ...

6. Five years after the commencement of the Review Conference, and until an agreement on the system of exploration and exploitation of the resources of the Area enters into force, the Assembly may decide, by the majority required for questions of substance, that no new contracts or plans of work for activities in the Area shall be approved. However, such decision shall not affect contracts already approved, or contracts and plans of work for the conduct of activities in the Area which already existed in accordance with annex II, paragraph 5 ter.

ANNEX II

Basic conditions of prospecting, exploration and exploitation

Title to minerals ...

1. Title to the minerals shall ... be passed upon recovery of the minerals pursuant to a contract of exploration and exploitation.

... Prospecting ...

2. (a) The Authority shall encourage the conduct of prospecting in the Area.

(b) Prospecting shall not confer any preferential, proprietary, ... exclusive or any other rights on the prospectors with respect to the resources. A prospector shall, however, be entitled to recover a reasonable amount of resources of the Area to be used for sampling.

... Exploration and exploitation ...

3. (a) Exploration and exploitation shall be carried out only in areas specified in plans of work referred to in article 151, paragraph 3, and approved by the Authority in accordance with the provisions of this annex and the relevant rules, regulations and procedures of the Authority.

(b) ...

(c) Every plan of work approved by the Authority shall ...

(i) Be in strict conformity with the present Convention and the rules and regulations of the Authority.

(ii) Be subject to the approval of the Authority of the project in the manner prescribed by regulations of the Authority.

(iii) Conform to the operator exclusive rights for the exploration and exploitation of the resources of the area in accordance with article 151, paragraph 4;

(iv) Conform to the operator exclusive rights for the exploration and exploitation of the resources of the area in accordance with the plan of work in accordance with the rules and regulations of the Authority. If the applicant presents a plan of work for one of the two stages only, the operator may confer exclusive rights with respect to such stage.

4. (a) Except for plans of work proposed by the Enterprise, such plans of work shall take the form of a contract to be signed by the Authority and the operator or operators upon approval in the plan of work by the Authority.

Qualifications of applicants

4. (a) Applicants, other than the Enterprise, shall be qualified if they have the nationality or control and sponsorship required by article 151, paragraph 3, and if they follow the procedures and meet the standards established by the Authority by means of rules, regulations, and procedures.

(b) ... Except as provided in subparagraph (b) below, the qualifications standards prescribed by the Authority shall relate to the financial and technical capabilities of the applicant and his performance under previous contracts with the Authority.

(c) The procedures for assessing the qualifications of States Parties which are applicants shall take into account their character as States.

(d) The qualification standards shall require that every applicant, without exception, shall be part of his application undertake ...

(ii) To accept as enforceable and comply with the applicable obligations created by the provisions of Part XIV of the present Convention, rules and regulations adopted by the Authority, decisions of the organs of the Authority, and terms of his contracts with the Authority;

(iii) To accept control by the Authority of activities in the Area, as authorized by the present Convention;

(iv) To provide the Authority with written assurances that its obligations covered by the contract entered into by it will be fulfilled in good faith.

(v) To comply with the provisions on the transfer of technology set forth in paragraph 4 bis.

Transfer of technology

4. (bis) (a) ... In respect of transfer of technology, every applicant, other than the Enterprise, shall ...

(b) ... If made available to the Authority a general description of the equipment and methods to be used in carrying out activities in the Area, as well as other relevant information about the characteristics of such technology, and information as to where such technology is available on the open market, that description shall be submitted with the application and thereafter whenever a substantial technological change or innovation is introduced.

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17 Formerly paragraph 4 c, i of document NGO/1/13 and Corr.l.
18 Formerly paragraph 5 c, iii of document NGO/1/13 and Corr.1.
20 Formerly paragraph 4 c, ii of 10 duodex of document NGO/1/13 and Corr.1, with amendments.
(New)

(ii) Undertake to use, in carrying out activities in the Area, technology other than that covered by subparagraph (iii) and which is not generally available on the open market only if he has obtained written assurance from the owner of the technology that he will, if and when the Authority so requests, make available to the Enterprise to the same extent as made available to the operator, that technology under licence or other appropriate arrangements and on fair and reasonable commercial terms and conditions. Should an owner of technology refuse to honour his assurance when requested by the Enterprise, subsequent assurance by him shall not be accepted; and if the owner who refuses to honour his assurance has a corporate or family relationship with the applicant, this refusal shall be considered relevant to the applicant's qualifications for any subsequent proposed plan of work.

(iii) Undertake to make available to the Enterprise, if he realizes the contract and on fair and reasonable commercial terms and conditions, the technology which is to be used by him in carrying out activities in the Area and which is legally entitled to transfer. This shall be done upon the conclusion of the contract and if and when the Authority shall so request by license or other appropriate arrangements which the Contractor shall negotiate with the Enterprise and which shall be set forth in a special agreement supplementary to the contract. This undertakement may be invoked only if the Enterprise finds that it is unable to obtain the same or equally efficient and useful technology on the open market and on fair and reasonable terms and conditions.

(iv) Undertake to facilitate, upon the conclusion of the contract and if and when the Authority shall so request, the acquisition by the Enterprise, under licence or other appropriate arrangements and on fair and reasonable commercial terms and conditions, of the technology covered by subparagraph (iii).

(v) Undertake the same obligations as those prescribed in subparagraphs (ii), (iii) and (iv) for the benefit of a developing country or a group of developing countries which has applied for a contract under paragraph 5 for provided that these obligations shall be limited to the exploitation of the reserved part of the Area proposed by the applicant, and provided that activities under the contract sought by the developing country or group of developing countries would not involve transfer of technology to a third country or the nationals of a third country.

(b) If upon request in accordance with this paragraph the pertinent negotiations fail within a reasonable time to reach agreement on the terms and conditions of transfer to the Enterprise, either party may refer any matter arising in the negotiations to conciliation in accordance with annex IV of the present Convention. The Conciliation Commission shall within 90 days make recommendations to the parties which shall form the basis of further negotiations. Should the latter negotiations fail to reach agreement on the terms and conditions of transfer either the Enterprise, acting on behalf of the Authority, or the Contractor may thereafter refer to binding commercial arbitration in accordance with the arbitration rules of the United Nations Commission on International Trade Law (or other arbitration rules if and when prescribed in the rules, regulations and procedures of the Authority), within 90 days the question whether the offers made are within the range of fair and reasonable commercial terms and conditions. In cases where the arbitral tribunal determines that the Contractor's offer is not within that range and the Contractor fails to revise its offer within a further period of 90 days to bring it within that range, the tribunal shall make an award. Where the disputes in the pertinent negotiations refers to matters other than the terms and conditions of transfer and the parties fails to reach agreement in negotiations subsequent to the recommendations of the Conciliation Commission, either party may, within 90 days, refer the matter to the appropriate dispute settlement mechanism established in the present Convention for its award. In the event that the Contractor does not accept, or fails to implement the arbitral award, or the decision of the appropriate tribunal, the Contractor shall be liable to penalties in accordance with the provisions of paragraph 12 of this annex.

(c) In the event that the Enterprise is unable to obtain appropriate technology on fair and reasonable commercial terms and conditions in a timely manner the processing of the minerals it recovers from the Area, the States Parties which are engaged in activities in the Area or whose nationals are engaged in activities in the Area, and other States Parties having access to such technology shall consult together and shall take effective measures to ensure that such technology it made available to the Enterprise on fair and reasonable commercial terms and conditions.

(d) In the case of joint ventures with the Enterprise technology transfer will be in accordance with the terms of the joint venture agreement.

(NEW) (e) For the purposes of this paragraph, "technology" means the equipment and technical know-how, including manuals, designs, operating instructions, training and technical advice and assistance necessary to assemble, maintain and operate a system for exploration for and exploitation of the resources of the Area and the non-exclusive legal right to use these items for this purpose.

Approval of plans of work submitted by applicants

5. (a) . . . Six months after the entry into force of the present Convention, and thereafter each fourth month . . . the Authority shall take up for consideration proposed plans of work.

(b) When considering an application for a contract with respect to exploration and exploitation, the Authority shall first ascertain whether:

(i) The applicant has complied with the procedures established for applications in accordance with paragraph 6 above and has given the Authority the commitments and assurances required by that paragraph. In cases of non-compliance with these procedures or of absence of any of the commitments and assurances referred to, the applicant shall be given 45 days to remedy such defects.

(ii) The applicant possesses the requisite qualifications pursuant to paragraph 4.

(NEW) (c) All plans of work proposed by qualified applicants shall be dealt with in the order in which they were received, and the Authority shall conduct, as expeditiously as possible, an inquiry in connection with operational requirements, financial contributions, and transfer of technology as provided in the relevant provisions of the present Convention and this annex. As soon as the issues under investigation have been settled, the Authority shall approve such plans of work, provided that they conform to the uniform and nondiscriminatory requirements established by the rules, regulations and procedures of the Authority, unless:

(i) Part or all of the proposed area is included in a previously approved plan of work or a previously submitted proposed plan of work which has not yet been finally acted on by the Authority; or

(ii) Selection among applications received during that period of time is necessary because approval of all plans of work proposed during that period would be contrary to the production limitations set forth in article 155, paragraph 2, or to the obligations of the Authority under a commodity agreement or arrangement to which it has become a party, as provided for in article 158, paragraph 1; or

(iv) The proposed plan of work has been submitted or sponsored by a State Party which has already had approved:

— three plans of work for exploration and exploitation of sites not reserved pursuant to paragraph 5 for below within a circular area of 400,000 square kilometers which is centered upon a point selected by the applicant within the requested additional site, plans of work for exploration and exploitation of sites not reserved pursuant to paragraph 5 for below, which in agreemen

22 Formerly paragraph 5 e of document NG/13 and Cor.1, with amendments.
23 Formerly paragraph 5 b of document NG/13 and Cor.1.
gate size constitute 3 per cent of the total tonnage area which is not reserved pursuant to that paragraph or otherwise withdrawn by the Authority from eligibility for exploitation pursuant to article 153, paragraph 2, sub-

(New) (c) For the purpose of the standard set forth in subparagraph e, iv, a plot of work proposed by a consortium shall be counted on a pro rata basis among the States Parties whose nationals comprise the consortium. The Authority may approve plans of work covered by subparagraph e, iv above if it determines that such approval would not permit a State Party or persons sponsored by it to monopolize the conduct of activities in the Area or to preclude other States Parties from activities in the Area.

Selection of applicants

(New) 5 bls. (b) Where the selection shall be made among applicants because of the production limitation set forth in article 150, paragraph 2, or because of the obligations of the Authority under a commodity agreement or arrangement to which it has been a party, as provided for in article 150, paragraph 1, the Authority shall make the selection on the basis of objective and nondiscriminatory standards set forth in rules and regulations drawn up in accordance with this paragraph.

(i) Give better assurance of performance, taking into account the financial and technical qualifications of the proposed operator and performance, if any, under previously approved plans of work; or

(ii) Provide earlier prospective financial benefits to the Authority, taking into account when production is scheduled to begin...

(c) Selection shall be made taking into account the need to provide for all States Parties, irrespective of their social and economic systems or geographical locations, opportunities to participate in activities in the Area, the need to prevent monopolization of such activities, and the need to exploit reserved sites, and on the basis of a determination of equitable merit, taking into account the resources and effort already invested by prospective operators in prospecting and in exploration, if any.

(New) (d) Where, due to the same reasons set forth in subparagraph a, the selection must be made among the enterprises and applicants for contracts, the Authority shall have priority to exploit the area reserved to it under paragraph 3 ter below within the production policies of article 150 bis, either solely through the Enterprise or through joint ventures with States or with private entities sponsored by the States.

(e) The Authority shall make its decisions pursuant to this paragraph as promptly as possible after the close of each period.

Reservation of sites

5 ter. (a)²⁴ Each application, other than those proposed by the Enterprise or by any others for reserved sites, shall cover a total area which need not be a single continuous area but shall be sufficiently large, and of sufficient value to allow two mining operations. The proposed operator shall indicate the co-ordinates dividing the area into two parts of equal estimated commercial value. Within 45 days of receiving the data necessary to make the assessment of the value of the sites from the applicant, the Authority shall designate the part which is to be reserved solely for the conduct of activities by the Authority through the Enterprise or in association with developing countries. The area designated shall become a reserved area as soon as the plan of work for the non-reserved area is approved and the contract is signed.

(b)²⁴ The Enterprise shall be given an opportunity to decide whether it wishes itself to conduct activities in each area reserved pursuant to this paragraph.

(c)²⁴ In conducting activities in the areas reserved pursuant to this paragraph, the Enterprise may enter into joint arrangements with any entity qualified to conduct activities in the Area, in such joint arrangements appropriate provision shall be made for participation by developing countries, the nature and extent of such participation to be approved by the Authority.

(d)²⁴ Nothing in this paragraph shall be interpreted as preventing the Enterprise from carrying out activities in accordance with this annex in any part of the Area not included in a previously approved plan of work or a previously submitted plan of work which has not yet been finally acted on by the Authority.

Separate stages of operations

5 quinquies. (a)²⁵ Contracts for the exploration and exploitation of the resources of the Area may provide for joint arrangements between the Contractor and the Authority through the Enterprise, in the form of joint ventures, production sharing or service contracts, as well as any other form of joint arrangement for the exploration or exploitation of the resources of the Area.

(b)²⁵ Contractors entering into such joint arrangements with the Enterprise... may receive financial incentives as provided for in the financial arrangements established in paragraph 7 below.

Activities conducted by the Enterprise

6. (a)²¹ Activities in the Area conducted under article 151, paragraph 2, through the Enterprise shall be governed by the provisions of Part XI of the present Convention, the rules, regulations and procedures of the Authority and its relevant decisions... (New) (b) Any plan of work proposed by the Enterprise shall be accompanied by evidence supporting its financial and technological capability.

Financial terms of contracts

7. Transfer of data

8. (a) The operator shall transfer in accordance with the rules and regulations and the terms and conditions of the plan of work to the Authority at time intervals determined by the Authority all data which are both necessary and relevant to the effective implementation of the powers and functions of the principal organs of the Authority in respect of the area covered by the plan of work.

(b)²⁶ Transferred data in respect of the area covered by the plan of work, deemed to be proprietary — may only be used for the purposes set forth above in this paragraph. Data which are necessary for the promulgation of rules and regulations concerning protection of the marine environment and safety shall not be deemed to be proprietary.

(c)²⁶ Data transferred to the Authority by prospectors, applicants for contracts for exploration and exploitation, and Contractors, deemed to be proprietary, shall not be disclosed by the Authority. The responsibilities set forth in article 167, paragraph 2 are equally applicable to the staff of the Enterprise.

Training programmes

9. The Contractor shall draw up precontract programmes for the training of personnel of the Authority and developing countries, including the participation of such personnel in all activities covered by the contract in accordance with article 164, paragraph 2.
Exclusive right to explore and exploit

10. The Authority shall, pursuant to Part XI of the present Convention and its rules and regulations prescribed by the Authority, accord the operator the exclusive right to explore and exploit the area covered by the plan of work in respect of a specified category of minerals and shall assure that not other entity operates in the same area for a different category of minerals in a manner which might interfere with the operations of the operator. . . . An operator shall have security of tenure in accordance with article III, paragraph 8.

Rules, regulations and procedures

11. (a) The Authority shall adopt and uniformly apply rules, regulations and procedures for the implementation of its functions as prescribed in Part XI of the present Convention, . . . on the following matters:

(i) Administrative procedures relating to prospecting, exploration and exploitation in the Area;

(ii) Operations;

(iii) Site of area;

(iv) Duration of operations;

(v) Performance requirements including assurances pursuant to paragraph 6;

(vi) Categories of minerals;

(vii) Reconnaissance of areas;

(viii) Progress reports;

(ix) Submission of data;

(x) Inspection and supervision of operations;

(xi) . . .

Prevention of interference with other activities in the marine environment;

(xii) Transfer of rights by a Contractor;

(xiii) Procedures for transfer of technology to developing countries in accordance with article 184 and for their direct participation;

(xiv) Mining standards and practices including those relating to operational safety, conservation of the resources and the protection of the marine environment;

(xv) Definition of commercial production;

(xvi) Qualification standards for applicants.

(2) Financial matters:

(i) Establishment of uniform and non-discretionary costing and accounting rules, as well as the method of selection of auditors;

(ii) Apportionment of proceeds of operations;

(iii) The incentives referred to in paragraph 7 above.

(4) Rules, regulations and procedures to implement decisions of the Council taken in pursuance of articles 150 bis and 152, paragraph 7.

(6) Regulations on the following items shall fully reflect the objective criteria set out below:

(1) Size of area:

The Authority shall determine the appropriate size of areas for exploration which may be up to twice as large as those for exploitation in order to permit intensive exploration operations. Areas for exploitation shall be calculated to satisfy the requirements of paragraph 3 relative on reservation of areas as well as stated production requirements over the term of the contract taking into account the state of the art of technology then available for ocean mining and the relevant physical characteristics of the area. Areas shall neither be smaller or larger than are necessary to satisfy this objective. . . .

(2) Duration of operations:

(i) Prospecting shall be without time-limit;

(ii) Exploration should be of sufficient duration as to permit a thorough survey of the specific area, the design and construction of mining equipment for the area, the design and construction of small and medium-size processing plants for the purpose of testing mining and processing systems;

(iii) The duration of exploitation should be related to the economic life of the mining project, taking into consideration such factors as the depletion of the ore, the useful life of mining equipment and processing facilities and commercial viability. Exploitation should be of sufficient duration as to permit commercial extraction of minerals of the area and should include a reasonable time period for construction of commercial scale mining and processing systems, during which period commercial production should not be required. The total duration of exploitation, however, should also be short enough to give the Authority an opportunity to amend the terms and conditions of the plan of work at the time it considers renewal in accordance with rules and regulations which it has issued subsequent to entering into the plan of work.

(3) Performance requirements:

The Authority shall require that during the exploration stage, periodic expenditures be made by the operator which are reasonably related to the size of the area covered by the plan of work and the expenditures which would be expected of a bona fide operator who intended to bring the area into commercial production within the time-limits established by the Authority. Such required expenditures should not be established at a level which would discourage prospective operators with less costly technology than is presently used. The Authority shall establish a maximum time interval after the exploration stage is completed and the exploitation stage begins to achieve commercial production. To determine this interval, the Authority should take into consideration that construction of large-scale mining and processing systems cannot be initiated until after the termination of the exploration stage and the commencement of the exploitation stage. Accordingly, the interval to bring an area into commercial production should take into account the time necessary for this construction after the completion of the exploration stage and reasonable allocation should be made for unavoidable delays in the construction schedule.

Once commercial production is achieved in the exploration stage, the Authority shall within reasonable limits and taking into consideration all relevant factors require the operator to maintain commercial production throughout the period of the plan of work.

(4) Categories of minerals:

In determining the category of mineral in respect of which a plan of work may be approved the Authority shall give emphasis inter alia to the following characteristics:

(i) Resources which require the use of similar mining methods;

(ii) Resources which can be developed simultaneously without undue interference between operators in the same area developing different resources.

Nothing in this paragraph shall alter the Authority from granting a contract for more than one category of mineral in the same . . . area to the same applicant.

(5) Reclamation of areas:

The operator shall have the right at any time to request without penalty the whole or part of his rights in the area covered by a plan of work.

(6) Protection of the marine environment:

Rules and regulations shall be drawn up in order to secure effective protection of the marine environment from harmful effects directly resulting from activities in the Area or from shipboard processing immediately above a mine site of minerals derived from the mine site, taking into account the extent to which such harmful effects may directly result from drilling, dredging, coring and excavation as well as disposal, dumping and discharge into the marine environment of sediment, wastes or other effluents.

(7) Commercial production:

Commercial production shall be deemed to have begun if an operator engages in activity of sustained large-scale recovery operations which yield a sufficient quantity of materials as to indicate clearly that the principal purpose is large-scale production rather than production intended for information gathering, analysis or equipment or plant-testing.

Penalties

12. (a) A Contractor's rights under the contract concerned may be suspended or terminated only in the following cases:

(i) If, in spite of warnings by the Authority, the contractor has conducted its activities in such a way as to result in . . . serious, persistent and willful violations of the fundamental terms
of the contract, Part XI of the present Convention and the rules and regulations of the Authority ...; or

(6) If a Contractor has failed to comply with a final binding decision of the dispute settlement body applicable to him.

(b) The Authority may impose upon the Contractor monetary penalties proportionate to the seriousness of the violation ... in any case of violation of terms of contract not covered under subparagraph a above.

(c) Except in cases of emergency orders as provided for in article 53, paragraph 2, xii, the Authority may not execute a decision involving monetary penalties, suspension or termination until the Contractor has been accorded a reasonable opportunity to exhaust his judicial remedies available to him pursuant to Part XI, section 6, of the present Convention.

Revision of Contract

13. (a) When circumstances have arisen, or are likely to arise, which, in the opinion of either party, would render the contract inequitable or make it impracticable or impossible to achieve the objectives set out in the contract or in Part XI of the present Convention, the parties shall enter into negotiations to adjust it to new circumstances ...

(6) Any contract entered into in accordance with article 131, paragraph 5, may be revised only with the consent of the parties ...

Transfer of rights and obligations

14. The rights and obligations arising out of a contract shall be transferred only with the consent of the Authority, and in accordance with the rules and regulations adopted by it. The Authority shall not unreasonably withhold consent to the transfer if the proposed transferee is in all respects a qualified applicant, and assumes all of the obligations of the transferor.

Applicable law

15. (a) The law applicable to the contract shall be the provisions of Part XI of the present Convention, the rules and regulations of the Authority, ... the terms and conditions of the contract, and other rules of international law not incompatible with the present Convention. Any final decision rendered by a court or tribunal having jurisdiction by virtue of the present convention relating to the rights and obligations of the Authority and of the Contractor shall be valid and enforceable in the territory of each State Party.

(b) No State Party may impose conditions on a Contractor that are inconsistent with Part XI of the present Convention. However, the application by a State Party of environmental or other regulations to sea-bed mining or to ships flying its flag, more stringent than those imposed by the Authority pursuant to paragraph 11 b, 6 of this annex, shall not be deemed inconsistent with Part XI of the present Convention.

Liability

16. Any responsibility or liability for wrongful damage arising out of the conduct of operations by the Contractor shall lie with the Contractor, account being taken of contributory factors by the Authority. ... Similarly, any responsibility or liability for wrongful damage arising out of the exercise of the powers and functions of the Authority shall lie with the Authority account being taken of contributory factors by the Contractor. Liability in every case shall be for the actual amount of damages.