

# Regulations on Polymetallic Nodules Adopted

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The International Seabed Authority met twice this year in Kingston, Jamaica, for its sixth session.<sup>1</sup> The first part of the sixth session was convened from 20 to 31 March 2000. The second part was held from 3 to 14 July 2000. The main result of the meeting was the adoption of the *Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area*. These regulations are the first part of a Mining Code that will eventually cover prospecting and exploration for and exploitation of all deep seabed minerals.

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<sup>1</sup> See for general information the web site of the International Seabed Authority at <http://www.isa.org.jm/>. See for a recent overview of the activities of the Authority the 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, ISBA/6/A/9 of 6 June 2000, presented at the resumed sixth session of the Authority.

<sup>2</sup> LOS Convention, Article 156(2).

The International Seabed Authority (the Authority) is an autonomous international organization, which was established under the 1982 United Nations Convention on the Law of the Sea (LOS Convention) and the 1994 Agreement relating to the Implementation of Part XI of the LOS Convention. It is the international organization through which States Parties to the LOS Convention organize and control activities in the Area (the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction, which were designated under the LOS Convention as the common heritage of mankind), particularly with a view to administering the resources of the Area. All States Parties to the LOS Convention are *ipso facto* members of the Authority.<sup>2</sup> The Authority performs its functions and tasks through its three main organs: the Assembly, the Council and the Secretariat. These are assisted by two subsidiary bodies: a Legal and Technical Commission and

a Finance Commission. At the first part of the sixth session, Ms. Liesbeth Lijnzaad (the Netherlands) was elected President of the Assembly for the sixth session. Sakiusa S. Rabuka (Fiji) was elected as President of the Council for the sixth session.

With the adoption of the Regulations the Authority has completed its first legislative task. The LOS Convention and the Implementation Agreement require the Authority to elaborate and adopt rules, regulations and procedures necessary for the conduct of activities in the Area as they progress. They also provide that such rules, regulations and procedures have to incorporate applicable standards for the protection and preservation of the marine environment. Priority was to be given to the adoption of regulations with respect to exploration for and exploitation of polymetallic nodules (previously known as manganese nodules).<sup>3</sup> The Regulations are intended to give effect to these provisions.

The work on the Regulations commenced in 1997 within the Authority's Legal and Technical Commission. The Commission built on the work conducted by the Preparatory Commission of the Authority between 1984 and 1993, which produced drafts of several parts of a Mining Code in the form of working papers. The Legal and Technical Commission completed its work in 1998, at which time the draft regulations were submitted for adoption to the Council of the Authority. The Council discussed and revised the draft regulations in informal sessions at the second part of the fourth meeting and again during the fifth and sixth meetings of the Authority.

The purpose of the Regulations is to establish the conditions under which States and other entities will be allowed to prospect and explore for polymetallic nodules in the Area. They elaborate the general provisions contained in the LOS Convention and the Implementation Agreement, in particular those relating to environmental protection and the handling of confidential data and information. The Regulations seek to balance the interests of the Authority and prospectors and contractors by setting out specific rights, duties and understandings.

The instrument consists of a preamble; 40 regulations, divided among nine parts; and four Annexes. The respective Parts deal with: an introduction containing definitions of terms used in the Regulations and a few general provisions (Part I); prospecting (Part II); the process of applying for approval of plans of work for exploration in the form of contracts (Part III); the form and contents of contracts for exploration (Part IV); regulations relating to protection and preservation of the marine environment (Part V); confidentiality (Part VI); general procedures for the implementation of the regulations (Part VII); settlement of disputes (Part VIII); and resources other than polymetallic nodules (Part IX). Annexes I and II contain the standard forms to be used to notify the Authority of the intention to engage in prospecting and to apply for approval of a plan of work for exploration to obtain a contract. Annexes 3 and 4 contain the contract for explora-

tion to be signed by the Authority and the future contractor and the standard clauses to be included in such a contract.

The Regulations distinguish between "prospecting" and "exploration" for nodules. The main difference is that prospecting covers only few activities and does not confer exclusive rights, while exploration does. Prospecting is defined to cover the search for deposits of polymetallic nodules, including estimation of their composition, sizes, distribution and economic values. Exploration is defined as searching for deposits of polymetallic nodules in the Area with exclusive rights, the analysis of such deposits, the testing of collecting systems and equipment, processing facilities and transportation systems, and the carrying out of studies of the environmental, technical, economic, commercial and other appropriate factors that must be taken into account in exploitation. As opposed to prospecting, exploration activities are subject to stringent requirements.

The regulations provide that prospecting may commence only after the Authority has been notified in accordance with the requirements contained in the Regulations and in the prescribed form contained in Annex I. Prospecting is not permitted if substantial evidence indicates the risk of serious harm to the marine environment. It is also not allowed in an area covered by an approved plan of work for exploration or in a reserved or prohibited area.

Exploration activities on the other hand are only permitted after the Council has approved a plan of work and has subsequently signed a contract with the applicant containing the required standard clauses. The Regulations and the Annexes contain detailed financial, technical and other requirements for the applications for approval of work plans and the form and content of the contract for exploration. Such requirements include measures intended to provide for adequate protection and preservation of the marine environment. Upon the fulfillment of these requirements, the Authority is obliged to offer guarantees of security of tenure and ensure that proprietary data and information will be treated confidentially. According to the Regulations responsibility and liability of the contractor and the Authority will be in accordance with the relevant provisions of the LOS Convention. The responsibility of contractors for any damage arising out of wrongful acts in the conduct of their operations, including damage to the marine environment, will continue after the completion of the exploration phase.

The Regulations contain detailed requirements for both the Authority and prospectors and contractors to ensure effective protection of the marine environment from harmful effects which may arise from activities in the Area. Most of the environmental regulations are contained in Part V, but relevant provisions can be found throughout the text of the instrument. Some of these were already mentioned. The environmental provisions of the regulations were, together with the sensitive issue of confidentiality of data and information, among the most difficult to reach agreement on during the negotiations.

Important definitions are contained in Part I. The term

<sup>3</sup> *Ibid.*, Articles 145 and 162(2)(o)(ii) and Annex III, Article 17. See also Section 1 of the Annex to the Implementation Agreement.

“marine environment” is defined in a non-exhaustive way as “the physical, chemical, geological and biological components, conditions and factors which interact and determine the productivity, state, condition and quality of the marine ecosystem, the waters of the seas and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof”. The term “serious harm to the marine environment” is defined as “any effect from activities in the Area on the marine environment which represents a significant adverse change in the marine environment determined according to the rules, regulations and procedures adopted by the Authority on the basis of internationally recognized standards and practices”. It is the first time that these terms have been explicitly defined in an international instrument. They provide guidance for the interpretation and implementation of the relevant requirements contained in the Regulations and the basis for the adoption of further rules, regulations and procedures.

Part V of the Regulations contains a general obligation for the Authority to establish and keep under periodic review environmental rules, regulations and procedures to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area. This provision recognizes that the regulations will have to be supplemented and revised regularly by the Authority, as more knowledge and experience is gained. Contractors have a general obligation to take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from its activities in the Area. They are required to do this “as far as reasonably possible using the best technology available” to them.

The Regulations also embrace a precautionary approach to protect the marine environment from harmful effects which may arise from activities in the Area. They require the Authority and sponsoring States (and indirectly also contractors) to apply a precautionary approach, as reflected in Principle 15 of the Rio Declaration, to such activities. The Legal and Technical Commission is required to make recommendations to the Council on the implementation of this provision. The inclusion of the precautionary principle or approach was a particularly thorny issue to reach agreement on. Initially the Code contained an obligation for contractors to take precautionary measures and a definition of such measures in line with Principle 15 of the Rio Declaration. These terms were, however, deleted from the text. At the fifth session the delegation of the Netherlands submitted a proposal to include a provision in Part V stating that “[i]n the conduct of activities in the Area, the precautionary principle shall be applied to protect and preserve the marine environment, by virtue of which cost-effective preventive measures are to be taken when they are reasonable grounds for concern that these activities may cause serious harm to the marine environment, even where there is lack of full scientific certainty”. Several delegates objected to this proposal, which they regarded as unnecessary. It was also stated that the wording “reasonable grounds for concern” could be broadly interpreted and possibly create an impediment for potential investors. A compromise was ultimately

reached through the inclusion of the term “precautionary approach” with a reference (but not the wording itself) to Principle 15 of the Rio Declaration.

In addition to these general requirements, contractors will be obliged to gather environmental baseline data and to establish environmental baselines against which to assess the likely effects of its activities and a programme to monitor and report on such effects. The environmental baselines and monitoring programmes are to be developed in collaboration with the Authority and the sponsoring States. Contractors will be required to take into account the recommendations adopted by the Legal and Technical Commission for the guidance of contractors. These recommendations may, *inter alia*, include a list of exploration activities which may be considered to have no potential for causing harmful effects on the marine environment. Contractors will have to report annually in writing to the Secretary-General of the Authority on the implementation and results of such monitoring programmes and submit data and information to be transmitted to the Legal and Technical Commission for its consideration.



Contractors applying for exploitation rights will be required to propose areas to be set aside and used exclusively as impact reference zones (areas used to assess the effects of mining activities on the marine environment and which are representative of the environmental characteristics of the Area) and preservation reference zones (areas in which no mining shall occur to ensure representative and stable biota of the seabed in order to assess any changes in the flora and fauna of the marine environment).

The Regulations also contain provisions to deal with environmental emergencies. Prospectors are required to notify the Secretary-General of the Authority of any incident arising from prospecting which causes serious harm to the marine environment. Contractors will be required to submit contingency plans and promptly report to the Secretary-General any incident arising from its activities that has caused or is likely to cause serious harm to the marine environment. Upon such notification, the Secretary-General of the Authority has to issue a general notification of the incident; notify in writing the contractor and its sponsoring State and report immediately to the Legal and Technical Commission and to the Council. On the basis of the recommendations of the Commission, the Council may then issue emergency orders. Pending such action, the Secretary-General is obliged to take immediate measures of a temporary nature (no longer than 90 days or until the Council has acted) as are practical and reasonable in the circumstances to prevent, contain and minimize serious harm to the marine environment.

In case a contractor does not comply with an emergency order, the Council may take the necessary measures itself. Contractors are obliged to provide the Council, prior to the commencement of testing of collecting systems and processing operations, with a guarantee of

its financial and technical capability to promptly comply with such emergency measures or to assure that the Council can deal with the matter itself. Sponsoring States are required to see to it that this requirement is fulfilled by contractors. The regulations do not specify the exact form of the guarantee. The Council decided to study this matter further. This guarantee requirement was included as a compromise instead of a proposed provision that would have required applicants for contracts to provide an "environmental surety", in an amount to be assessed by the Legal and Technical Commission, to enable the Council to take action when a contractor would not promptly comply.

Part V of the Regulations also contains provisions dealing with the rights of coastal States and objects of an archaeological or historical nature. In addition to affirming the rights of coastal States with regard to maritime emergencies as existing under the LOS Convention and customary international law, the Regulations also provide that coastal States may notify the Secretary-General that they have grounds for believing that activities conducted by contractors in the Area are likely to cause serious harm to the marine environment under its jurisdiction or sovereignty. With respect to archeological or historical objects, contractors will be obliged to notify the Secretary-General of such findings and take all reasonable measures to avoid disturbing such objects.

With respect to the confidentiality of proprietary data and information transferred to the Authority by contractors, the Regulations provide that such data and information is to be maintained for limited use by the Secretary-General, the staff of the Authority, and the members of the Legal and Technical Commission as authorized by the Secretary-General. This is subject to a review after ten years or when the contract expires. A proposed provision that would have excluded data and information necessary for the formulation by the Authority of rules, regulations and procedures concerning protection of the marine environment and safety (other than equipment design data) from the confidentiality requirements was not included in the final version of the Regulations.

Finally, the Regulations also incorporate general procedures for dealings between the Authority and prospec-

tors, applicants for exploration and contractors; a provision authorizing the Legal and Technical Commission to issue technical or administrative recommendations to guide contractors; a provision that requires disputes to be settled in accordance with Part XI of the LOS Convention; and a provision stating that prospecting and exploration for and exploitation of resources other than polymetallic nodules found by prospectors or contractors in the Area will be subject to the rules, regulations and procedures dealing with such resources to be established by the Authority.

The Regulations were adopted by the Council and approved by the Assembly on 13 July 2000. They take effect immediately and will apply to all contractors. At the sixth session the Secretary-General Satya Nandan announced that he planned to sign contracts with the seven registered pioneer investors before the Authority's next session.

With the adoption of the Regulations for polymetallic nodules completed, the Authority is expected to shift its attention to the development of rules, regulations and procedures on prospecting and exploration for other deep seabed mineral resources (in particular deep sea polymetallic sulphides deposits and cobalt-rich crusts). To further work in this area, the Authority convened a workshop on seabed resources other than polymetallic nodules in Kingston, Jamaica, from 26 to 30 June 2000.

The Authority is engaged in several other activities with regard to environmental protection. The Legal and Technical Committee is currently developing draft guidelines for the assessment of the possible environmental impacts arising from exploration for polymetallic nodules. These guidelines are intended to assist future contractors to assess the environmental impacts of the exploration for polymetallic nodules. At the sixth meeting, the Legal and Technical Commission also endorsed a proposal of the Secretary-General to establish an international framework for cooperation on environmental protection of the international seabed and waters in connection with deep seabed exploration and mining. The proposal is intended to draw the attention of potential investors to deep-sea environmental research.

