

**Council** 

Distr.: General 8 July 2011

Original: English

#### **Seventeenth session**

Kingston, Jamaica 11-22 July 2011

> Report and recommendations to the Council of the International Seabed Authority relating to an application for the approval of a plan of work for exploration for polymetallic nodules by Tonga Offshore Mining Limited

Submitted by the Legal and Technical Commission

#### I. Introduction

- 1. On 10 April 2008, the Secretary-General of the International Seabed Authority received an application for the approval of a plan of work for exploration for polymetallic nodules in the Area. The application was submitted pursuant to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (ISBA/6/A/18, annex) by Tonga Offshore Mining Limited (TOML). The application covers a total surface area of 74,713 km² located within the areas reserved for the Authority pursuant to Annex III, article 8, of the 1982 United Nations Convention on the Law of the Sea. The reserved areas in the application were contributed by the Federal Institute for Geosciences and Natural Resources of the Federal Republic of Germany, Deep Ocean Resources Development Co., Ltd., the Government of the Republic of Korea and the Institut français de recherche pour l'exploitation de la mer.
- 2. In accordance with regulation 20, paragraph 1 (c), of the Regulations, the Secretary-General notified members of the Authority of the receipt of the application and circulated to them information of a general nature concerning the application. The Secretary-General also placed consideration of the application as an item on the agenda of the Legal and Technical Commission at its meeting, held from 19 to 28 May 2008.
- 3. The Commission was informed that the applicant had formally notified the Secretary-General of its intention to make an application for approval of a plan of work for exploration in a reserved area on 3 April 2008. Thereafter, in accordance



<sup>\*</sup> Reissued for technical reasons on 23 November 2011.

with regulation 17, paragraph 1, of the Regulations, the Secretary-General on 11 April 2008 forwarded such notification to the Enterprise (represented by its Interim Director-General), whereupon the Interim Director-General informed the Secretary-General in writing that the Enterprise had no intention of carrying out activities in the areas under application.

- 4. In that regard, the Commission recalled that the Enterprise had not yet begun to function independently of the Secretariat of the Authority and that, by reason of article 170 of the Convention and of section 2, paragraph 2, of the annex to the Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 1994, the Council would only take up the issue of the functioning of the Enterprise independently of the Secretariat of the Authority either: (a) upon the approval of a plan of work for exploitation by an entity other than the Enterprise; or (b) upon receipt by the Council of an application for a joint-venture operation with the Enterprise. Until such time as either of these eventualities takes place, the Secretariat of the Authority shall perform the functions of the Enterprise, which shall be set out in section 2, paragraph 1 of the annex to the Agreement.
- 5. The Commission met to consider the application on 21, 22, 26 and 27 May 2008. As the Commission had not reached consensus with respect to a recommendation to the Council in relation to the application, it decided to continue its consideration of the application at the next possible opportunity. The matter was placed on the agenda of the Commission for its fifteenth session. At that session, the Commission was informed that, by a letter dated 5 May 2009 addressed to the Legal Counsel of the Authority, the applicant had requested that consideration of its application be postponed in the light of global economic circumstances and other concerns. The Commission took due note of the request and decided to defer further consideration of the item until further notice.
- 6. On 28 April 2011, Tonga Offshore Mining Limited submitted to the Secretary-General updated information in relation to the pending application before the Commission. The matter was then placed on the agenda of the Commission for its seventeenth session.

## II. Methodology for consideration of the application by the Legal and Technical Commission

## A. General methodology applied by the Commission in consideration of the application

7. In its consideration of the application, the Commission noted that, in keeping with annex III, article 6, of the Convention, it is first required to make an objective determination as to whether the applicant has fulfilled the requirements set out in the Regulations, particularly with respect to the form of applications; whether the applicant has provided the necessary undertakings and assurances specified in regulation 14 of the Regulations; and whether it has the necessary financial and technical capability to carry out the proposed plan of work for exploration and (as appropriate) has satisfactorily discharged its obligations under any previous contract with the Authority. The Commission is then required to determine, in accordance with regulation 21, paragraph 4, of the Regulations and its procedures, whether the

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proposed plan of work will provide for effective protection of human health and safety, effective protection and preservation of the marine environment and will ensure that installations are not established where interference may be caused to the use of recognized sea lanes essential to international navigation or in areas of intense fishing activity. Regulation 21, paragraph 5, of the Regulations goes on to provide that:

If the Commission makes the determinations specified in paragraph 3 and determines that the proposed plan of work for exploration meets the requirements of paragraph 4, the Commission shall recommend approval of the plan of work for exploration to the Council.

8. In considering the proposed plan of work for exploration for polymetallic nodules, the Commission had regard to the principles, policies and objectives relating to activities in the Area as provided for in part XI and annex III of the Convention and in the Agreement.

#### B. Consideration of the application at the seventeenth session

- 9. The Commission considered the application in closed meetings on 5 to 7 July 2011. The Commission took note of the updated information submitted by the applicant, as well as the written answers to a list of questions transmitted on 23 May 2008 by the Chairman of the Legal and Technical Commission through the Secretary-General.
- 10. Prior to commencing a detailed examination of the application, the Commission invited the applicant's representative, Paul Taumoepeau, TOML Country Manager, accompanied by Aminiasi Kefu, Solicitor-General of the Kingdom of Tonga, Rennie Vaiomounga, Ministry of Lands, Survey and Natural Resources, Michael Johnston, Vice-President Strategic Development, Nautilus Minerals Incorporated and Samantha Smith, Environment Manager, Nautilus Minerals Incorporated, to present the application. Members of the Commission then asked questions to clarify certain aspects of the application before convening in closed session to examine the application in detail.
- 11. The Commission's detailed examination of the legal and financial, technical and environmental aspects of the application was conducted in smaller groups.

## III. Summary of basic information regarding the application

#### A. Identification of the applicant

- 12. Name of applicant: Tonga Offshore Mining Limited.
- 13. Address of applicant:
  - (a) Street address: 2nd Floor, Kupu House, Fatafehi Road, Kingdom of Tonga;
  - (b) Postal address: P. O. Box 893, Nuku'alofa, Tongatapu, Kingdom of Tonga;

(c) Telephone: +676 21 733;

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- (d) Facsimile number: none;
- (e) E-mail address: office@tongaoffshoremining.com.
- 14. Applicant's designated representative:
  - (a) Name: Paul Taumoepeau;
  - (b) Address: 2nd Floor, Kupu House, Fatafehi Road, P. O. Box 893, Nuku'alofa, Kingdom of Tonga;
  - (c) Telephone number: +676 21 733;
  - (d) Facsimile number: none;
  - (e) E-mail address: office@tongaoffshoremining.com;
  - (f) Applicant's place of registration and principal place of business/domicile: The Kingdom of Tonga.
- 15. The applicant indicated that TOML is a registered national of the Kingdom of Tonga that is incorporated within the jurisdiction of the Kingdom of Tonga and is under the effective control of the Kingdom of Tonga. TOML is a Tongan incorporated subsidiary of Nautilus Minerals Incorporated, which holds 100 per cent of the shares of TOML through another wholly owned subsidiary, United Nickel Ltd., incorporated in Canada. According to the information provided by the applicant, United Nickel is an investment vehicle, similar to other 100 per cent owned investment vehicles that Nautilus Minerals Incorporated uses to keep its various licences in order to allow the company to easily manage its corporate investments. Details of the corporate structure of Nautilus Minerals Incorporated were provided to the Commission at its request. Nautilus Minerals Incorporated has among its largest shareholders Teck Cominco, AngloAmerican and Gazmetall. A copy of the Certificate of Incorporation of TOML has been submitted.

#### B. Sponsorship

- 16. Sponsoring State: The Kingdom of Tonga.
- 17. Date of deposit of the Kingdom of Tonga's instrument of ratification of, or accession to, the 1982 United Nations Convention on the Law of the Sea and the date of the consent to be bound by the Agreement relating to the Implementation of Part XI of the Convention: 2 August 1995.
- 18. Date of certificate of sponsorship: 12 March 2008, signed by Hon. Tuita, Minister of Lands, Survey, Natural Resources and Environment, Kingdom of Tonga.
- 19. The Commission noted that the application was sponsored by the Kingdom of Tonga and that a certificate of sponsorship, in due and proper form, had been submitted, under which the Kingdom of Tonga stated that the applicant is under the effective control of the Kingdom of Tonga and declared further that it assumed responsibility in accordance with article 139, article 153, paragraph 4, and Annex III, article 4, paragraph 4, of the Convention. During the presentation, in response to questions from the Commission, the representatives of the Kingdom of Tonga also stated the intention to adopt laws and regulations and to take administrative measures, within the framework of its legal system, for securing compliance by the applicant under its jurisdiction.

#### C. Area of application

20. The application area of Tonga Offshore Mining Limited covers a total of 74,713 km² in the Clarion-Clipperton Zone of the Pacific Ocean. The area lies within the reserved areas and is divided into six regions: Area A is located within Block 2 and covers an area of 10,281 km²; Area B is located within Block 15 and covers an area of 9,966 km²; Area C is located within Block 16 and covers an area of 15,763 km²; Area D is located within Block 21 and covers an area of 15,881 km²; Area E is located within Block 20 and covers an area of 7,002 km²; Area F is located within Block 25 and covers an area of 15,820 km². The coordinates and general location of the areas under application are shown in the annex to the present document.

#### D. Other information

- 21. Date of receipt of application: 10 April 2008.
- 22. Previous contracts with Authority: the applicant has not been previously awarded any contract with the Authority.
- 23. Undertakings: the applicant submitted a written undertaking dated 28 April 2011 signed by the Country Manager of Tonga Offshore Mining Limited, Paul Taumoepeau, stating that it will comply with regulation 14 of the Regulations.

# IV. Examination of information and technical data submitted by the applicant

- 24. The following technical documents were submitted in the application:
  - (a) Information relating to the application area:
  - (i) Boundaries of the area under application according to the World Geodetic System 1984;
  - (ii) A chart and a list of the coordinates of the area under application;
  - (b) Certificate of sponsorship issued by the sponsoring State;
- (c) Information to enable the Council to determine whether the applicant is financially capable of carrying out the proposed plan of work for exploration;
- (d) Information to enable the Council to determine whether the applicant is technically capable of carrying out the proposed plan of work for exploration;
  - (e) Plan of work for exploration;
  - (f) Training programmes.
- 25. During his presentation, the representative of the applicant provided clarifications as required by the Commission on the information and technical data supplied.

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# V. Consideration of financial and technical qualifications of the applicant

#### A. Financial capacity

26. In evaluating the financial capacity of the applicant, the Commission noted that Tonga Offshore Mining Limited was incorporated in the Kingdom of Tonga on 7 May 2008 and is a Tongan incorporated subsidiary of Nautilus Minerals Incorporated. The Commission was provided with a letter dated 11 July 2011 from Avisar Chartered Accountants, of British Columbia, Canada, stating that the applicant had the financial resources to carry out the proposed plan of work for exploration. In accordance with regulation 12, paragraph 5 (b) of the Regulations, the Commission was also provided with the financial statements of Nautilus Minerals Incorporated, the parent company of Tonga Offshore Mining Limited, for 2007 to 2010.

#### B. Technical capacity

- 27. The Commission was provided with technical information in relation to the previous experience and skills of Nautilus Minerals in the field of dredging, excavation techniques and deep-sea mining technology. The Commission noted that the applicant's technical team benefits from the experience of leaders in the field of seafloor mining. To date, Nautilus's activities have focused on pioneering the commercial development of seafloor polymetallic sulphides within the exclusive economic zones of south-west Pacific island nations, and is currently preparing for commercial extraction of polymetallic sulphides on the Solwara 1 project in Papua New Guinea.
- 28. The Commission was provided with information related to the prevention, reduction and control of hazards and possible impacts to the marine environment. This included the description of a plan for a programme for oceanographic and environmental baseline studies to ensure that the exploration activities have minimal impact on the marine environment. It enclosed a plan of action to take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from the exploration activities. It also included a description of a monitoring programme and the proposed measures for the prevention, reduction and control of pollution and other hazards, as well as their possible impacts to the marine environment.

### VI. Consideration of data and information submitted for the approval of the plan of work for exploration of polymetallic nodules

- 29. In accordance with regulation 18 of the Regulations, the application included the following information for approval of the plan of work for exploration:
- (a) A general description and a schedule of the proposed exploration programme, including the programme of activities for the immediate five-year period, such as studies to be undertaken in respect of the environmental, technical,

economic and other appropriate factors that must be taken into account in exploration;

- (b) A description of the programme for oceanographic and environmental baseline studies in accordance with the Regulations and environmental rules, regulations and procedures established by the Authority that would enable an assessment of the potential environmental impact of the proposed exploration activities, taking into account any recommendations issued by the Legal and Technical Commission;
- (c) A preliminary assessment of the possible impact of the proposed exploration activities on the marine environment;
- (d) A description of proposed measures for the prevention, reduction and control of pollution and other hazards, as well as possible impacts, to the marine environment:
- (e) Data necessary for the Council to make the determination it is required to make in accordance with regulation 12, paragraph 1 of the Regulations;
- (f) A schedule of anticipated yearly expenditures in respect of the programme of activities for the immediate five-year period.
- 30. The Commission was satisfied that the information presented met the requirements of the Regulations and noted that it looked forward to the submission of reports and data by the applicant as required by the Regulations and the Commission's recommendations for the guidance of contractors.

### VII. Training programme

31. In accordance with regulation 27 and with Annex 4, section 8, of the Regulations, the applicant indicated that prior to the commencement of exploration, the contractor will draw up training programmes in cooperation with the Authority and the Kingdom of Tonga, and will submit these programmes to the Authority for approval.

#### VIII. Conclusion and recommendations

- 32. Having examined the particulars submitted by the applicant, summarized in sections II to VII of the present document, the Commission is satisfied that the application has been duly submitted in accordance with the Regulations and that the applicant is a qualified applicant within the meaning of Annex III, articles 4 and 9, of the Convention, and regulation 17 of the Regulations. The Commission is further satisfied that the applicant:
  - (a) Has complied with the provisions of the Regulations;
- (b) Has given the undertakings and assurances specified in regulation 14 of the Regulations;
- (c) Possesses the financial and technical capability to carry out the proposed plan of work for exploration.

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- 33. The Commission is satisfied that none of the conditions in regulation 21, paragraph 6, of the Regulations apply.
- 34. With respect to the proposed plan of work for exploration, the Commission is satisfied that the proposed plan of work for exploration will:
  - (a) Provide for effective protection of human health and safety;
- (b) Provide for effective protection and preservation of the marine environment;
- (c) Ensure that installations are not established where interference may be caused to the use of recognized sea lanes essential to international navigation or in areas of intense fishing activity.
- 35. Accordingly, pursuant to regulation 21, paragraph 5, of the Regulations, the Commission recommends to the Council approval of the plan of work for exploration submitted by Tonga Offshore Mining Limited.

#### Annex

## List of coordinates and map of general location of the reserved areas under application

#### Area A (10,281 km<sup>2</sup>)

All that area of seafloor within reserved Block 2 in the Clarion-Clipperton Zone of the Pacific Ocean bounded by a line commencing at the north-west corner at:

	Latitude	Longitude
	8.1667 N	-152.510 W (the point of commencement)
then to	8.1667 N	-151.667 W
then to	7.1667 N	-151.667 W
then to	7.1667 N	-152.510 W
then to	8.1667 N	-152.510 W being the point of commencement

#### Area B (9,966 km<sup>2</sup>)

All that area of seafloor within reserved Block 15 in the Clarion-Clipperton Zone of the Pacific Ocean bounded by a line commencing at the north-west corner at:

	Latitude	Longitude
	14.2900 N	-132.800 W (the point of commencement)
then to	14.6667 N	-132.000 W
then to	13.5801 N	-132.000 W
then to	13.5801 N	-133.200 W
then to	13.8667 N	-133.200 W
then to	13.8667 N	-132.800 W
then to	14.2900 N	-132.800 W being the point of commencement

#### Area C (15,763 km<sup>2</sup>)

All that area of seafloor within reserved Block 16 in the Clarion-Clipperton Zone of the Pacific Ocean bounded by a line commencing at the north-west corner at:

	Latitude	Longitude
	15.800 N	-131.00000 W (the point of commencement)
then to	15.800 N	-130.00000 W
then to	15.333 N	-130.00000 W
then to	15.333 N	-129.30000 W
then to	15.500 N	-128.58333 W
then to	15.000 N	-128.58333 W
then to	15.000 N	-131.00000 W
then to	15.800 N	-131.00000 W being the point of commencement

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### Area D (15,881 km<sup>2</sup>)

All that area of seafloor within reserved Block 21 in the Clarion-Clipperton Zone of the Pacific Ocean bounded by a line commencing at the north-west corner at:

	Latitude	Longitude
	14.083333 N	-123.583333 W
then to	13.125000 N	-123.583333 W
then to	13.125000 N	-124.375000 W
then to	13.375000 N	-124.375000 W
then to	13.375000 N	-125.333300 W
then to	13.750000 N	-125.333300 W
then to	13.750000 N	-125.000000 W
then to	14.083333 N	-125.000000 W
then to	14.083333 N	-123.583333 W being the point of commencement

#### Area E (7,002 km<sup>2</sup>)

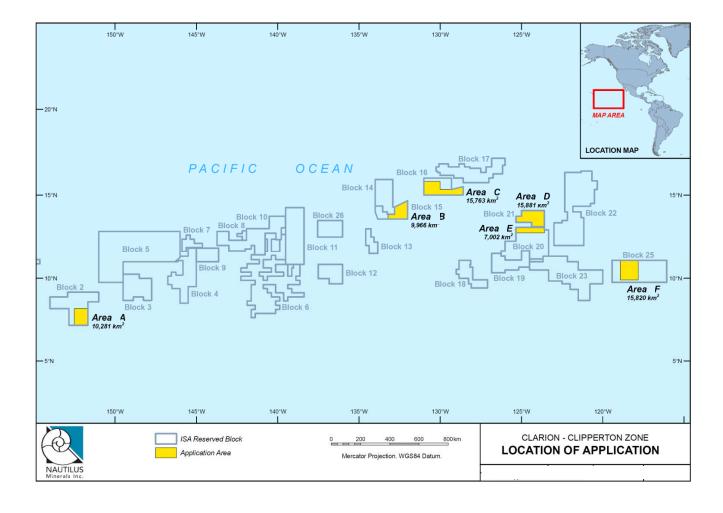
All that area of seafloor within reserved Block 20 in the Clarion-Clipperton Zone of the Pacific Ocean bounded by a line commencing at the north-west corner at:

	Latitude	Longitude
	13.0833 N	-125.333 W (the point of commencement)
then to	13.0833 N	-123.583 W
then to	12.7500 N	-123.583 W
then to	12.7500 N	-125.333 W
then to	13.0833 N	-125.333 W being the point of commencement

#### Area F (15,820 km<sup>2</sup>)

All that area of seafloor within reserved Block 25 in the Clarion-Clipperton Zone of the Pacific Ocean bounded by a line commencing at the north-west corner at:

	Latitude	Longitude
	11.083333 N	-117.81667 W (the point of commencement)
then to	9.895000 N	-117.81667 W
then to	9.895000 N	-118.91667 W
then to	11.083333 N	-118.91667 W
then to	11.083333 N	-117.81667 W being the point of commencement



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