



**AGREEMENT ON EXPLORATION FOR POLYMETALLIC  
NODULES**

**BETWEEN**

**THE INTERNATIONAL SEABED AUTHORITY**

**AND**

**THE FEDERAL INSTITUTE FOR GEOSCIENCES AND NATURAL  
RESOURCES OF THE FEDERAL REPUBLIC OF GERMANY**



**THE INTERNATIONAL SEABED AUTHORITY**  
**AND**  
**THE FEDERAL INSTITUTE FOR GEOSCIENCES AND NATURAL**  
**RESOURCES OF THE FEDERAL REPUBLIC OF GERMANY**

**WHEREAS**, on 21 July 2005, in accordance with regulation 25 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (“the Regulations”), a request for approval of a plan of work for exploration was submitted by the **FEDERAL INSTITUTE FOR GEOSCIENCES AND NATURAL RESOURCES OF THE FEDERAL REPUBLIC OF GERMANY** (hereinafter referred to as “the Federal Institute”),

**AND WHEREAS**, on 22 August 2005, in accordance with the Regulations and paragraph 6(a)(i) of section 1 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 10 December 1982, the Council of the International Seabed Authority approved such plan of work for exploration,

**AND WHEREAS**, such approved plan of work for exploration is attached to this contract as Appendix I,

**AND WHEREAS**, in accordance with article 153 of the United Nations Convention on the Law of the Sea, the plan of work for exploration shall be in the form of a contract,

**AND CONSIDERING** that this contract shall be a legal form of the above-mentioned plan of work for exploration,



**HAVE AGREED** on the following:

Incorporation of clauses

A. The standard clauses set out in Annex 4 to the Regulations and attached to this contract as Appendix II shall be incorporated herein and shall have effect as if herein set out at length.

Exploration area

B. For the purposes of this contract, the “exploration area” means that part of the Area allocated to the Federal Institute for exploration, defined by the coordinates listed in Schedule 1 hereto, as reduced from time to time in accordance with the standard clauses and the Regulations.

Grant of rights

C. In consideration of:

(1) their mutual interest in the conduct of exploration activities in the exploration area pursuant to the United Nations Convention on the Law of the Sea of 10 December 1982 (hereinafter referred to as “the Convention”) and the Agreement relating to the Implementation of Part XI of the Convention (hereinafter referred to as “the Agreement”);

(2) the responsibility of the Authority to organize and control activities in the Area, particularly with a view to administering the resources of the Area, in accordance with the legal regime established in Part XI of the Convention and the Agreement and Part XII of the Convention respectively; and





(3) the interest and financial commitment of the Federal Institute in conducting activities in the exploration area and the mutual covenants made herein,

the Authority hereby grants to the Federal Institute the exclusive right to explore for polymetallic nodules in the exploration area in accordance with the terms and conditions of this contract and the attached plan of work.

#### Entry into force and contract term

D. This contract shall enter into force on signature by both parties and, subject to the standard clauses, shall remain in force for a period of fifteen years thereafter unless:

(1) the Federal Institute obtains a contract for exploitation in the exploration area which enters into force before the expiration of such period of fifteen years; or

(2) the contract is sooner terminated, provided that the term of the contract may be extended in accordance with standard clauses 3.2 and 17.2.

#### Schedules

E. The schedules referred to in the standard clauses, namely section 4 and section 8, are for the purposes of this contract schedules 2 and 3 respectively.

#### Entire agreement

F. This contract expresses the entire agreement between the parties, and no oral understanding or prior writing shall modify the terms hereof.





SIGNED in two originals in the German and English languages, both languages being equally authentic, at Berlin, this 19th day of July 2006.

**FOR THE  
INTERNATIONAL  
SEABED AUTHORITY:**

**FOR FEDERAL INSTITUTE  
FOR GEOSCIENCES AND  
NATURAL RESOURCES OF  
THE FEDERAL REPUBLIC  
OF GERMANY:**

*Satya N. Nandan* *Bernhard Striemy*  
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Satya N. Nandan Prof. Dr. Bernhard Striemy  
Secretary-General President



SCHEDULE 1

COORDINATES AND ILLUSTRATIVE CHART OF THE EXPLORATION AREA

1. The area allocated to the Contractor is bounded by lines joining the following turning points, the coordinates of which (according to the World Geodetic System WGS84) are listed below:

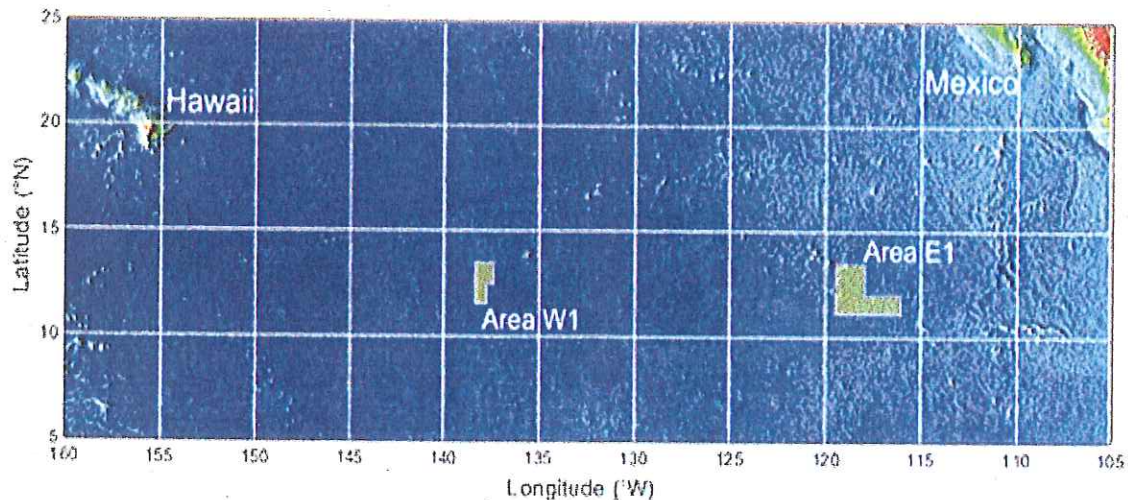
**Sector W1 (Area "W", western part)**

Starting Point 1: N 13°30' / W 138°22'  
E to 2: N 13°30' / W 137°32'  
S to 3: N 12°30' / W 137°32'  
W to 4: N 12°30' / W 137°50'  
S to 5: N 11°38' / W 137°50'  
W to 6: N 11°38' / W 138°22' return  
N to Starting Point 1: N 13°30' / W 138°22'

**Sector E1 (Area "E", northern part)**

Starting Point 1: N 13°26' / W 119°25'  
E to 2: N 13°26' / W 118°00'  
S to 3: N 12°00' / W 118°00'  
E to 4: N 12°00' / W 116°04'  
S to 5: N 11°05' / W 116°04'  
W to 6: N 11°05' / W 119°25' return  
N to Starting Point 1: N 13°26' / W 119°25'

2. Indicative map of the contract areas W1 and E1:





## SCHEDULE 2

### PROGRAMME OF ACTIVITIES FOR THE CURRENT FIVE-YEAR PERIOD (2006-2010)

#### Year 1 (2006)

Usage of archived data (I)

Cost estimate: € 155,000

Additional data will be extracted from archived Preussag AG files which BGR has inherited recently

- Analog sea floor photos of sampling sites: photos will be compiled from the archive, digitized / scanned and subsequently evaluated in terms of nodule abundance and sea floor characteristics; photos can also be used to gather initial information on macrofauna;
- Analog depth soundings: archive files will have to be searched for analog information on depth soundings from ship tracks and sampling stations to improve the information base on bathymetry as acquired during exploration activities in the 1970s and 1980s.

Submission of cruise proposal

Cost estimate: € 36,000

Preparation and submission of a thematic proposal for a research cruise to the license area; this proposal will have to undergo a review within Germany; main topics will be:

- Acquisition of state-of-the-art multibeam bathymetry;
- Acquisition and interpretation of acoustic reflectivity data (utilization of side-scan sonar function of modern swath sounding systems);
- Seafloor sampling for calibration and ground truthing of digital acoustic data;
- Investigation of benthic communities (taxonomy, composition of assemblages, biodiversity).

#### Year 2 (2007)

Usage of archived data I (continued)

Cost estimate: € 40,000

Work will continue on the archived data; evaluation of seafloor photos; determination of nodule abundance; cross-checking and calibration of data from seafloor sampling with results from interpretation of photos; re-evaluation of data from all sources.

Usage of additional archived survey data (II)

Cost estimate: € 155,000

Extraction of further data from archived Preussag AG files and use for exploration of nodules:

- Analog subbottom echosounder data (3.5 kHz) from requested license area: These data will have to be located, paper printouts have to be prepared from photo negatives; interpretation of photos will be done to achieve information on acoustic sediment character and thickness of sequences; results will be compiled and appropriate maps should be prepared;





- Integration of sampling data on sediment sequences from Preussag AG activities and academic research cruises from requested license area (characteristics of sediments and sequences from sampling and numerous reports have to be extracted and standardized including mapping (geo-referencing)).

### Year 3 (2008)

Research cruise I

Personnel and ship's charter approx. € 1.5 million

A cruise to the license area will be carried out. Focus will be on acquisition of swath bathymetry, side-scan sonar data, sediment sampling and biological baseline information (according to proposal/ see year 1) (cruise length: approx. 25 days).

Preparation of bathymetric maps

Cost estimate: € 95,000

Following the cruise a compilation of bathymetric data will be commenced aiming at preparation of reliable bathymetric maps of the license area; this process should integrate existing data from archives, published information, and newly acquired high-resolution swath bathymetry.

### Year 4 (2009)

Analysis and interpretation of data and samples from cruise I

Cost estimate: € 470,000

- Data on acoustic reflectivity of the seafloor (side-scan-sonar type information) will be extracted from digital acoustic data; digital data will have to be processed and interpreted;
- Analyses of biological data from the license area will commence in year 3 and will continue in year 4.

Integration of existing and new data sets on nodule coverage

Cost estimate: € 80,000

After completion of interpretation of acoustic reflectivity data of cruise I and compilation of facies maps, all data (digital and archived data, and those derived from sampling) should be compared, and correlation be tested; more prospective areas in terms of nodule coverage should be selected.

Submission of cruise proposal II

Cost estimate: € 38,000

Preparation and submission of a thematic proposal (no. 2) for a research cruise to the license area; this proposal will have to undergo a review within Germany; main topics will be:

- Acquisition of seafloor photo profiles and video data for calibration and ground truthing of digital acoustic data sets;
- Gathering of biological/ecological baseline data;
- Acquisition of additional detailed high-resolution bathymetric data of selected areas.



**Year 5 (2010)**

Development of a nodule distribution model

Cost estimate: € 100,000

Correlation of bathymetric maps with those of sediment characteristics and nodule coverage; an integrative evaluation will come up with a general nodule distribution model for the license area.

Selection of prospective mining areas from the license area

Cost estimate: € 80,000

Reasonably sized areas will be defined based on all data types gathered so far which will be the focus for further detailed work.

**Total cost estimates for the first five years: € 2.749 million**



### SCHEDULE 3

#### TRAINING PROGRAMME

The training programme consists of two parts:

- A) *participation in research cruises and post-cruise evaluation.*
- B) *a four-month training programme for two participants.*

Details of the two programme components are specified below.

**Part A: *Participation in research cruises and post-cruise evaluation***

- A1. BGR is prepared to integrate participants in German research cruises of opportunity.
- A2. These cruise participants shall be nominated by their Governments and confirmed and selected by the International Seabed Authority, in consultation with BGR.
- A3. Participants shall take part in the particular research cruise and then visit BGR in Hannover for a 4-6 week stay, to work on the results of the cruise (the exact length of stay depends on the organizational details of each stay).
- A4. BGR will adopt the costs of the participants stay in Hannover; the following shall be provided:
  - 4.1 International travel expenses, economy class.
  - 4.2 Accommodation and daily allowance according to German law for travel expenses.
- A5. Shipboard training shall include:
  - Instructions in vessel navigation techniques;
  - Instruction in the use of rosette water samplers and acquisition of data on water properties;
  - Instructions in the use of geophysical survey techniques (swath bathymetric mapping, high-resolution seismic profiling);
  - Instructions in the use of geological sampling instruments (seafloor surface sampling, different coring techniques, sampling of hard rocks);
  - Instruction in the use of seafloor observation techniques (TV/ Video observations and deployment of still camera);
  - Planning of surveys and selection of sampling sites;
  - Treatment of samples, conservation of samples for different usage in home laboratories.
- A6. Post-cruise training in Hannover shall include:
  - Compilation of cruise data;
  - Preparation of a cruise report;





- Initial interpretation of results;
- Planning of further investigations;
- Introduction to laboratory facilities at BGR.

A7. General qualification of candidates:

- Candidates should hold a qualified Bachelor degree /Master degree of science, marine geology, geophysics, marine biology/ecology/environment, oceanography, or an equivalent education;
- At least one year practical experience in the candidates' specialized field;
- A sound knowledge of English;
- Upper age limit of 40 years;
- Good state of health both physically and mentally;
- Recommended: Seafaring experience.

A8. Research cruises for consideration are:

- 8.1 2006: RV SONNE cruise of opportunity, two participants;
- 8.2 2008: Cruise to the German license area in the central Pacific, 4 participants;
- 8.3 2010: Cruise of opportunity (to be determined), two participants.

**Part B: Four-month training programme in Germany**

- B1. BGR is prepared to receive two trainees in Germany for a period of four months beginning in 2008.
- B2. The training programme on deep-sea minerals and mining is designed to convey a broad knowledge of all matters related to the use of non-living resources and of its environmental protection including the economical, ecological and social aspects. The participants should be enabled to realize and to reflect the complexity of marine projects such as deep-sea mining and furthermore to consider the latest progress in research and to develop a better understanding of the matter and improve judgement of future needs. A description of the training programme is provided in the annex (**Annex I**) to the present schedule.
- B3. The training programme will be carried out in interrelated stages.
  - 3.1 Introductory seminar and language course: The introductory seminar will be held at BGR and will give an overview on the general structure of the training programme. It will help prepare the trainee for the daily life in Germany; it will be complemented by a two-week German language course (in Hannover) to improve everyday life skills in Germany. The costs shall be covered by BGR.



- 3.2 Professional training: The curriculum of the professional training programme is presented in Annex I.
- 3.3 Final seminar: A final seminar shall be organized at BGR shortly before the end of the training measure for evaluation and assessment of the programme.
- B4. General qualifications of candidates:
- Candidates should hold a qualified Bachelor degree /Master degree of science, marine geology, geophysics, marine biology/ecology/environment, oceanography, or an equivalent education;
  - At least two years practical experience in the candidates specialized field;
  - A sound knowledge of English;
  - Upper age limit of 40 years;
  - Good state of health both physically and mentally;
  - Recommended: Experience in marine projects.
- B5. BGR shall defray the costs related to the training programme. The following shall be provided:
- 5.1 Accommodation and daily allowance according to German law for travel expenses.
- 5.2 International travel expenses, economy class. Local travel within the scope of the official programme.
- B6. The trainees should be nominated by their Governments and confirmed and selected by the International Seabed Authority in consultation with BGR.
- B7. BGR will organize the training programme with the participation of the following institutions:
- University of Bremen, Bremen
  - IfM-GEOMAR, Kiel
  - Specialists from other institutions as needed.



## Annex I

### Curriculum of Training Programme

#### Professional training:

1. The Ocean, its global significance, its resources – an overview
  - 1.1 Introduction to multidisciplinary way of thinking
  - 1.2 Introduction to system management/ analysis
  - 1.3 Definition of relevant subjects to be focussed on within the field of deep-sea minerals and mining
  - 1.4 Why proceeding to deep-sea mining ?
  - 1.5 Ecology and deep-sea mining
  - 1.6 International legal and regulatory framework for deep-sea minerals and mining
  
2. The Ocean Ecosystem
  - 2.1 Global Significance of the ocean for climate and nourishment
  - 2.2 Physical oceanography
  - 2.3 Chemical oceanography
  - 2.4 Biological oceanography
  - 2.5 Sedimentation
  
3. Marine geology / geophysics
  - 3.1 Structure and development of the ocean
  - 3.2 Plate tectonics
  - 3.3 The sedimentary regime
  - 3.4 Processes, cycling, events, influence of time
  
4. Deep-sea resources and their origin
  - 4.1 Polymetallic nodules
  - 4.2 Polymetallic crusts
  - 4.3 Polymetallic (massive) sulphides
  - 4.4 Metalliferous sediments
  - 4.5 Phosphorite nodules
  - 4.6 Other resources
  
5. Exploration for resources
  - 5.1 Exploration techniques
  - 5.2 Explored resources
  - 5.3 Unexplored resources
  
6. Mining in the deep sea
  - 6.1 Mining techniques (first and second generation)
  - 6.2 Pre-pilot and Pilot mining tests
  - 6.3 Commercial mining





7. The oceanic environment under the influence of mining
  - 7.1 Polymetallic nodules
  - 7.2 Polymetallic crusts
  - 7.3 Metalliferous muds
  - 7.4 Other resources
  - 7.5 Minimizing mining effects
  - 7.6 Bottom impacts
  - 7.7 Impacts on intermediate and upper ocean water layer
  
8. Impact Research and Monitoring
  - 8.1 Different types of required impact studies
  - 8.2 Impacts of exploration and research
  - 8.3 Basic philosophy of monitoring
  - 8.4 Reference areas (impact reference, stable reference)
  
9. Resource processing
  - 9.1 Polymetallic nodules
  - 9.2 Metalliferous muds
  - 9.3 Other resources
  
10. The terrestrial and the marine environment under the influence of processing and tailing storage
  - 10.1 Impact on the atmosphere
  - 10.2 Impact on the terrestrial environment
  - 10.3 Impact on the marine environment
  
11. Social impacts
  - 11.1 Local impacts
  - 11.2 Regional impacts
  - 11.3 Global impacts
  
12. Final seminar organized by BGR for evaluation and assessment of the programme.



## APPENDIX I

### PLAN OF WORK FOR EXPLORATION AS APPROVED BY THE COUNCIL<sup>1</sup>

(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 which must be taken into account in exploration.

#### WORKPLAN FOR YEARS ONE TO FIVE

##### YEAR 1 (2006)

- Usage of archived data (I)

Additional data will be extracted from archived Preussag AG files which BGR has inherited recently:<sup>A</sup>

- Analog sea floor photos of sampling sites: photos will be compiled from the archive, digitized / scanned and subsequently evaluated in terms of nodule abundance and sea floor characteristics; photos can also be used to gather initial information on macrofauna;
- Analog depth soundings: archive files will have to be searched for analog information on depth soundings from ship tracks and sampling stations to improve the information base on bathymetry as acquired during exploration activities in the 1970s and 1980s.

**Cost estimate: € 155,000**

- Submission of cruise proposal

Preparation and submission of a thematic proposal for a research cruise to the license area; this proposal will have to undergo a review within Germany; main topics will be:

- Acquisition of state-of-the-art multibeam bathymetry;
- Acquisition and interpretation of acoustic reflectivity data (utilization of side-scan sonar function of modern swath sounding systems);
- Seafloor sampling for calibration and ground truthing of digital acoustic data;
- Investigation of benthic communities (taxonomy, composition of assemblages, biodiversity).

**Cost estimate: € 36,000**

**Estimated total costs for year 1: € 191,000**

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<sup>1</sup> ISBA/11/C/10.

<sup>A</sup> BGR has inherited voluminous archive material from the German Preussag AG company, this company was active as pioneer prospector on polymetallic nodules in the central Pacific Ocean. Exploration activities concentrated in the 1970s and early 1980s; the company even undertook a pilot mining test in the 1980s. The archive material is the basis for the BGR application and contains a multitude of valuable data which can be utilized for the German polymetallic nodule exploration license.



## YEAR 2 (2007)

- Usage of archived data I (continued)

Work will continue on the archived data; evaluation of seafloor photos; determination of nodule abundance; cross-checking and calibration of data from seafloor sampling with results from interpretation of photos; re-evaluation of data from all sources.

**Cost estimate: € 40,000**

- Usage of additional archived survey data (II)

Extraction of further data from archived Preussag AG files and use for exploration of nodules:

- Analog subbottom echosounder data (3.5 kHz) from requested license area: these data will have to be located, paper printouts have to be prepared from photo negatives; interpretation of photos will be done to achieve information on acoustic sediment character and thickness of sequences; results will be compiled and appropriate maps should be prepared;
- Integration of sampling data on sediment sequences from Preussag AG activities and academic research cruises from requested license area (characteristics of sediments and sequences from sampling and numerous reports have to be extracted and standardized including mapping (geo referencing).

**Cost estimate: € 155,000**

**Estimated total costs for year 2: € 195,000**

## YEAR 3 (2008)

- Research cruise I

A cruise to the license area will be carried out. Focus will be on acquisition of swath bathymetry, side-scan sonar data, sediment sampling and biological baseline information (according to proposal/ see year 1) (cruise length: approx. 25 days).

**Personnel and ship's charter approx. € 1.5 million**

- Preparation of bathymetric maps

Following the cruise a compilation of bathymetric data will be commenced aiming at preparation of reliable bathymetric maps of the license area; this process should integrate existing data from archives, published information, and newly acquired high-resolution swath bathymetry.

**Cost estimate: € 95,000**

**Estimated total costs for year 3: € 1.595 million**





#### YEAR 4 (2009)

- Analysis and interpretation of data and samples from cruise I
  - Data on acoustic reflectivity of the seafloor (side-scan-sonar type information) will be extracted from digital acoustic data; digital data will have to be processed and interpreted;
  - Analyses of biological data from the license area will commence in year 3 and will continue in year 4.

**Cost estimate: € 470,000**

- Integration of existing and new data sets on nodule coverage

After completion of interpretation of acoustic reflectivity data of cruise I and compilation of facies maps all data (digital and archived data, and those derived from sampling) should be compared, and correlation be tested; more prospective areas in terms of nodule coverage should be selected.

**Cost estimate: € 80,000**

- Submission of cruise proposal II

Preparation and submission of a thematic proposal (no. 2) for a research cruise to the license area; this proposal will have to undergo a review within Germany; main topics will be:

- Acquisition of seafloor photo profiles and video data for calibration and ground truthing of digital acoustic data sets;
- Gathering of biological/ecological baseline data;
- Acquisition of additional detailed high-resolution bathymetric data of selected areas.

**Cost estimate: € 38,000**

**Estimated total costs for year 4: € 588,000**

#### YEAR 5 (2010)

- Development of a nodule distribution model

Correlation of bathymetric maps with those of sediment characteristics and nodule coverage; an integrative evaluation will come up with a general nodule distribution model for the license area.

**Cost estimate: € 100,000**

- Selection of prospective mining areas from the license area

Reasonably sized areas will be defined based on all data types gathered so far which will be the focus for further detailed work.

**Cost estimate: € 80,000**

**Estimated total costs for year 5: € 180,000**

**ESTIMATED TOTAL COSTS FOR THE FIRST FIVE YEARS: € 2.749 MILLION**



## WORK PLAN FOR YEARS SIX TO FIFTEEN

A time schedule on work planned in the license area beyond the timeline of 5 years in advance is presented as a listing of needed activities. A precise schedule will have to be defined when the work plan will be updated.

- Research cruise II

A second cruise (see proposal, year 4) to the license area will be carried out. Focus will be on the acquisition of biological data, seafloor-photo profiles, sampling for calibration and ground truthing, and additional detailed high-resolution swath bathymetry (cruise length: 30 days). We expect that evaluation of data at that point will allow selection of most prospective parts of the license area; these will be the focus of most of this work.

**Personnel and ship's charter approx. € 1.5 million**

- Analyses and evaluation of cruise data and samples

Processing of data, analyses of samples of cruise II, interpretation of results will begin after the cruise in year 6 and continue in year 7.

**Cost estimate: € 480,000**

- Studies on recent marine technological developments

As marine technology is undergoing changes due to computerization (remote control, automatization, use of autonomous vehicles, etc.), studies should focus on most recent marine technological developments which are of importance for the mining process.

**Cost estimate: € 130,000**

- Studies on market trends/land-based mining developments

As work on nodule exploration evolves, studies on the evolution of land-based mine sites and market analyses focusing on intermediate trend development will be undertaken.

**Cost estimate: € 130,000**

- Development of a mining concept

Once final data processing has been completed and evaluation of cruise and archive data is done a mining concept will be developed considering all relevant data including nodule coverage, grade, extend of mineable areas, water depths.

**Cost estimate: € 120,000**

- Combined evaluation of all seafloor data for ecological impact assessment

In the light of a mining concept and considering results from working on the ecological baseline for the license area, a study on the assessment of a possible ecological impact will be completed.

**Cost estimate: € 200,000**





- Feasibility study

On the assumption that the at-sea exploration work will have been completed, an initial feasibility study would be outlined and commenced utilizing the most recent data. If this preliminary feasibility assessment leads to positive conclusions, further conceptual and design work will be devoted to the mining process.

**Cost estimate: € 100,000**

- Contingency cruise

A contingency cruise will be scheduled for the later part of this phase. The cruise will be undertaken for final sampling in accordance with the needs that may have come up with an appropriate mining concept which is based on the evaluation of all data (archived and newly acquired data).

**Personnel and ship's charter € 1.5 million**

- Design of mining and recovery process

Design of the mining and recovery process will have to be completed towards the end of this phase. This includes all steps including economical assessment, legal and political developments, assessment of mining impact and recovery progress.

**Cost estimate: € 130,000**

- Preparations for a pilot mining test

If technological concepts are favourable and the feasibility study is positive all necessary steps should be designed and organized to get prepared for a pilot mining test.

**Cost estimate: € 100,000**

**ESTIMATED TOTAL COSTS FOR YEARS SIX TO FIFTEEN: € 4.39 MILLION**

**(b) Description of a programme for oceanographic and environmental baseline studies.**

In a first step the high resolution bathymetry data will be used to define the different marine environments in the area under application. These different areas will then be sampled for oceanographic parameters, epifauna and endofauna to properly determine the current state of the benthic community. The samples will be investigated in detail in subsequent years. The potential impact of mining on the marine environment has been investigated in an open ocean setting in the Peru basin (90°W/7°S) in the 1990s. Because of the similar settings we will try to adapt these results to the situation in the area under application. Details concerning the planned investigations on the biological community will be arranged with participating scientists representing the different biological and oceanographic disciplines.





**(c) A preliminary assessment of the possible impact of the proposed exploration activities on the marine environment.**

To a large proportion at-sea operations have been carried out during the exploration activities of the OMI and Preussag AG company in the early 1980s. Our work plan will utilize the archived exploration data from that early phase aiming at extracting much of the needed information from that source. Additional at-sea operations are restricted to complementary work, refinement of the most prospective area, and those types of data, which have not been addressed in the early days (e.g. ecological baseline data). Two cruises are planned with the research vessel RV SONNE (or an equivalent vessel) where modern hull-mounted acoustic systems will be deployed, which will have no pollution effects to the environment. Sampling with a box corer (50x50x40 cm) and a multicorer (pipes of 8 cm diameter and 50 cm length) is a standard procedure during any research cruise and is considered to not have a significant impact on the seabed. The number of deployments ranges on the order of 100 times per cruise in an area of 150 000 km<sup>2</sup>. The vessel itself is strictly following the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) and all German regulations regarding the handling and containment of any waste. The impact of the suggested cruises on the environment is considered negligible and of no significance.

**(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.**

Sampling with a box corer (50x50x40 cm) and a multicorer (pipes of 8 cm diameter and 50 cm length) is a standard procedure during any research cruise and is considered to not have a significant impact on the seabed. The number of deployments ranges on the order of 100 times per cruise directly affecting a total area of 25 m<sup>2</sup> in an area of 150 000 km<sup>2</sup>. Photographic surveys will not have any impact on the seafloor communities. The vessel itself is strictly following the MARPOL convention and all German regulations regarding the handling and containment of any waste. The impact of the suggested cruises on the environment is considered harmless and of no significance. For the work at sea we plan to utilize the German RV SONNE (or an equivalent vessel). The vessel conforms to the international standards regarding safety and environmental practice including MARPOL. It has the certificates of the Germanischer Lloyd (GL) and the Seeberufsgenossenschaft (SBG). If requested, copies of the certificates can be provided in due time. For clarification we want to point out, that BGR to date has made no contractual commitment for the use of any particular vessel pursuant to our exploration plans.

**(e) A schedule of anticipated yearly expenditures in respect of the programme of activities for the immediate five-year period.**

YEAR	ACTIVITY	COST ESTIMATE(€)	TOTAL(€)
2006 (Year 1)	Usage of archived data (I)	155,000	191,000
	Submission of cruise proposal	36,000	
2007 (Year 2)	Usage of archived data I (continued)	40,000	195,000
	Usage of additional archived survey data (II)	155,000	



YEAR	ACTIVITY	COST ESTIMATE(€)	TOTAL(€)
2008 (Year 3)	Research cruise I	1,500,000	1,595,000
	Preparation of bathymetric maps	95,000	
2009 (Year 4)	Analysis and interpretation of data and samples from cruise I	470,000	588,000
	Integration of existing and new data sets on nodule coverage	80,000	
	Submission of cruise proposal II	38,000	
2010 (Year 5)	Development of a nodule distribution model	100,000	180,000
	Selection of prospective mining areas from the license area	80,000	
<b>ESTIMATED TOTAL COSTS FOR THE FIRST FIVE YEARS: € 2.749 MILLION</b>			





## APPENDIX II

### STANDARD CLAUSES FOR EXPLORATION CONTRACT

#### Section 1

##### Definitions

1.1 In the following clauses:

(a) "Exploration area" means that part of the Area allocated to the Contractor for exploration, described in schedule 1 hereto, as the same may be reduced from time to time in accordance with this contract and the Regulations;

(b) "Programme of activities" means the programme of activities which is set out in schedule 2 hereto as the same may be adjusted from time to time in accordance with sections 4.3 and 4.4 hereof;

(c) "Regulations" means the Regulations for Prospecting and Exploration for Polymetallic Nodules in the Area, adopted by the Authority.

1.2 Terms and phrases defined in the Regulations shall have the same meaning in these standard clauses.

1.3 In accordance with the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, its provisions and Part XI of the Convention are to be interpreted and applied together as a single instrument; this contract and references in this contract to the Convention are to be interpreted and applied accordingly.

1.4 This contract includes the schedules to this contract, which shall be an integral part hereof.

#### Section 2

##### Security of tenure

2.1 The Contractor shall have security of tenure and this contract shall not be suspended, terminated or revised except in accordance with sections 20, 21 and 24 hereof.

2.2 The Contractor shall have the exclusive right to explore for polymetallic nodules in the exploration area in accordance with the terms and conditions of this contract. The Authority shall ensure that no other entity operates in the exploration area for a different category of resources in a manner that might unreasonably interfere with the operations of the Contractor.

2.3 The Contractor, by notice to the Authority, shall have the right at any time to renounce without penalty the whole or part of its rights in the exploration area, provided that the Contractor shall remain liable for all obligations accrued prior to the date of such renunciation in respect of the area renounced.

2.4 Nothing in this contract shall be deemed to confer any right on the Contractor other than those rights expressly granted herein. The Authority reserves the right to enter into contracts with respect to resources other than polymetallic nodules with third parties in the area covered by this contract.





### Section 3

#### Contract term

3.1 This contract shall enter into force on signature by both parties and shall remain in force for a period of fifteen years thereafter unless:

(a) the Contractor obtains a contract for exploitation in the exploration area which enters into force before the expiration of such period of fifteen years; or

(b) the contract is sooner terminated,

provided that the term of the contract may be extended in accordance with sections 3.2 and 17.2 hereof.

3.2 Upon application by the Contractor, not later than six months before the expiration of this contract, this contract may be extended for periods of not more than five years each on such terms and conditions as the Authority and the Contractor may then agree in accordance with the Regulations. Such extensions shall be approved if the Contractor has made efforts in good faith to comply with the requirements of this contract but for reasons beyond the Contractor's control has been unable to complete the necessary preparatory work for proceeding to the exploitation stage or if the prevailing economic circumstances do not justify proceeding to the exploitation stage.

3.3 Notwithstanding the expiration of this contract in accordance with section 3.1 hereof, if the Contractor has, at least 90 days prior to the date of expiration, applied for a contract for exploitation, the Contractor's rights and obligations under this contract shall continue until such time as the application has been considered and a contract for exploitation has been issued or refused.

### Section 4

#### Exploration

4.1 The Contractor shall commence exploration in accordance with the time schedule stipulated in the programme of activities set out in schedule 2 hereto and shall adhere to such time periods or any modification thereto as provided for by this contract.

4.2 The Contractor shall carry out the programme of activities set out in schedule 2 hereto. In carrying out such activities the Contractor shall spend in each contract year not less than the amount specified in such programme, or any agreed review thereof, in actual and direct exploration expenditures.

4.3 The Contractor, with the consent of the Authority, which consent shall not be unreasonably withheld, may from time to time make such changes in the programme of activities and the expenditures specified therein as may be necessary and prudent in accordance with good mining industry practice, and taking into account the market conditions for the metals contained in polymetallic nodules and other relevant global economic conditions.

4.4 Not later than 90 days prior to the expiration of each five-year period from the date on which this contract enters into force in accordance with section 3 hereof, the Contractor and the Secretary-General shall jointly undertake a review of the implementation of the plan of work for exploration under this contract. The Secretary-General may require the Contractor to submit such additional data and



information as may be necessary for the purposes of the review. In the light of the review, the Contractor shall indicate its programme of activities for the following five-year period, including a revised schedule of anticipated yearly expenditures, making such adjustments to its previous programme of activities as are necessary. Schedule 2 hereto shall be adjusted accordingly.

## Section 5

### Environmental monitoring

5.1 The Contractor shall take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from its activities in the Area as far as reasonably possible using the best technology available to it.

5.2 The Contractor shall, in accordance with the Regulations, gather environmental baseline data as exploration activities progress and develop and shall establish environmental baselines against which to assess the likely effects of the Contractor's activities on the marine environment.

5.3 The Contractor shall, in accordance with the Regulations, establish and carry out a programme to monitor and report on such effects on the marine environment. The Contractor shall cooperate with the Authority in the implementation of such monitoring.

5.4 The Contractor shall, within 90 days of the end of each calendar year, report to the Secretary-General on the implementation and results of the monitoring programme referred to in section 5.3 hereof and shall submit data and information in accordance with the Regulations.

5.5 Prior to the commencement of testing of collecting systems and processing operations, the Contractor shall submit to the Authority:

(a) A site-specific environmental impact statement based on available meteorological, oceanographic and environmental data collected during the preceding phases of exploration and containing data that could be used to establish an environmental baseline against which to assess the likely effect of the mining tests;

(b) An assessment of the effects on the marine environment of the proposed tests of collecting systems;

(c) A proposal for a monitoring programme to determine the effect on the marine environment of the equipment that will be used during the proposed mining tests.

## Section 6

### Contingency plans and emergencies

6.1 The Contractor shall, prior to the commencement of its programme of activities under this contract, submit to the Secretary-General a contingency plan to respond effectively to incidents that are likely to cause serious harm to the marine environment arising from the Contractor's activities at sea in the exploration area. Such contingency plan shall establish special procedures and provide for adequate and appropriate equipment to deal with such incidents and, in particular, shall include arrangements for:





- (a) The immediate raising of a general alarm in the area of the exploration activities;
- (b) Immediate notification to the Secretary-General;
- (c) The warning of ships which might be about to enter the immediate vicinity;
- (d) A continuing flow of full information to the Secretary-General relating to particulars of the contingency measures already taken and further actions required;
- (e) The removal, as appropriate, of polluting substances;
- (f) The reduction and, so far as reasonably possible, prevention of serious harm to the marine environment, as well as mitigation of such effects;
- (g) As appropriate, cooperation with other contractors with the Authority to respond to an emergency; and
- (h) Periodic emergency response exercises.

6.2 The Contractor shall 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. Each such report shall contain the details of such incident, including, *inter alia*:

- (a) The coordinates of the area affected or which can reasonably be anticipated to be affected;
- (b) The description of the action being taken by the Contractor to prevent, contain, minimize and repair the serious harm to the marine environment;
- (c) A description of the action being taken by the Contractor to monitor the effects of the incident on the marine environment; and
- (d) Such supplementary information as may reasonably be required by the Secretary-General.

6.3 The Contractor shall comply with emergency orders issued by the Council and immediate measures of a temporary nature issued by the Secretary-General in accordance with the Regulations, to prevent, contain, minimize or repair serious harm to the marine environment, which may include orders to the Contractor to immediately suspend or adjust any activities in the exploration area.

6.4 If the Contractor does not promptly comply with such emergency orders or immediate measures of a temporary nature, the Council may take such reasonable measures as are necessary to prevent, contain, minimize or repair any such serious harm to the marine environment at the Contractor's expense. The Contractor shall promptly reimburse the Authority the amount of such expenses. Such expenses shall be in addition to any monetary penalties which may be imposed on the Contractor pursuant to the terms of this contract or the Regulations.





## Section 7

### Objects of an archaeological or historical nature

The Contractor shall immediately notify the Secretary-General in writing of any finding in the exploration area of an object of an archaeological or historical nature and its location. Following the finding of any such object of an archaeological or historical nature in the exploration area, the Contractor shall take all reasonable measures to avoid disturbing such object.

## Section 8

### Training

8.1 In accordance with the Regulations, the Contractor shall, prior to the commencement of exploration under this contract, submit to the Authority for approval proposed training programmes for the training of personnel of the Authority and developing States, including the participation of such personnel in all of the Contractor's activities under this contract.

8.2 The scope and financing of the training programme shall be subject to negotiation between the Contractor, the Authority and the sponsoring State or States.

8.3 The Contractor shall conduct training programmes in accordance with the specific programme for the training of personnel referred to in section 8.1 hereof approved by the Authority in accordance with the Regulations, which programme, as revised and developed from time to time, shall become a part of this contract as schedule 3.

## Section 9

### Books and records

The Contractor shall keep a complete and proper set of books, accounts and financial records, consistent with internationally accepted accounting principles. Such books, accounts and financial records shall include information which will fully disclose the actual and direct expenditures for exploration and such other information as will facilitate an effective audit of such expenditures.

## Section 10

### Annual reports

10.1 The Contractor shall, within 90 days of the end of each calendar year, submit a report to the Secretary-General covering its programme of activities in the exploration area and containing, as applicable, information in sufficient detail on:

(a) The exploration work carried out during the calendar year, including maps, charts and graphs illustrating the work that has been done and the results obtained;



(b) The equipment used to carry out the exploration work, including the results of tests conducted of proposed mining technologies, but not equipment design data; and

(c) The implementation of training programmes, including any proposed revisions to or developments of such programmes.

10.2 Such reports shall also contain:

(a) The results obtained from environmental monitoring programmes, including observations, measurements, evaluations and analyses of environmental parameters;

(b) A statement of the quantity of polymetallic nodules recovered as samples or for the purpose of testing;

(c) A statement, in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants, or, where the Contractor is a State or a state enterprise, by the sponsoring State, of the actual and direct exploration expenditures of the Contractor in carrying out the programme of activities during the Contractor's accounting year. Such expenditures may be claimed by the contractor as part of the contractor's development costs incurred prior to the commencement of commercial production; and

(d) Details of any proposed adjustments to the programme of activities and the reasons for such adjustments.

10.3 The Contractor shall also submit such additional information to supplement the reports referred to in sections 10.1 and 10.2 hereof as the Secretary-General may from time to time reasonably require in order to carry out the Authority's functions under the Convention, the Regulations and this contract.

10.4 The Contractor shall keep, in good condition, a representative portion of samples of the polymetallic nodules obtained in the course of exploration until the expiration of this contract. The Authority may request the Contractor in writing to deliver to it for analysis a portion of any such sample obtained during the course of exploration.

## Section 11

### Data and information to be submitted on expiration of the contract

11.1 The Contractor shall transfer to the Authority all data and information that are both necessary for and relevant to the effective exercise of the powers and functions of the Authority in respect of the exploration area in accordance with the provisions of this section.

11.2 Upon expiration or termination of this contract the Contractor, if it has not already done so, shall submit the following data and information to the Secretary-General:

(a) Copies of geological, environmental, geochemical and geophysical data acquired by the Contractor in the course of carrying out the programme of activities that are necessary for and relevant to the effective exercise of the powers and functions of the Authority in respect of the exploration area;





(b) The estimation of mineable areas, when such areas have been identified, which shall include details of the grade and quantity of the proven, probable and possible polymetallic nodule reserves and the anticipated mining conditions;

(c) Copies of geological, technical, financial and economic reports made by or for the Contractor that are necessary for and relevant to the effective exercise of the powers and functions of the Authority in respect of the exploration area;

(d) Information in sufficient detail on the equipment used to carry out the exploration work, including the results of tests conducted of proposed mining technologies, but not equipment design data; and

(e) A statement of the quantity of polymetallic nodules recovered as samples or for the purpose of testing.

11.3 The data and information referred to in section 11.2 hereof shall also be submitted to the Secretary-General if, prior to the expiration of this contract, the Contractor applies for approval of a plan of work for exploitation or if the Contractor renounces its rights in the exploration area to the extent that such data and information relates to the renounced area.

#### Section 12

##### Confidentiality

Data and information transferred to the Authority in accordance with this contract shall be treated as confidential in accordance with the provisions of the Regulations.

#### Section 13

##### Undertakings

13.1 The Contractor shall carry out exploration in accordance with the terms and conditions of this contract, the Regulations, Part XI of the Convention, the Agreement and other rules of international law not incompatible with the Convention.

13.2 The Contractor undertakes:

- (a) To accept as enforceable and comply with the terms of this contract;
- (b) To comply with the applicable obligations created by the provisions of the Convention, the rules, regulations and procedures of the Authority and the decisions of the relevant organs of the Authority;
- (c) To accept control by the Authority of activities in the Area as authorized by the Convention;
- (d) To fulfil its obligations under this contract in good faith; and





(e) To observe, as far as reasonably practicable, any recommendations which may be issued from time to time by the Legal and Technical Commission.

13.3 The Contractor shall actively carry out the programme of activities:

- (a) With due diligence, efficiency and economy;
- (b) With due regard to the impact of its activities on the marine environment; and
- (c) With reasonable regard for other activities in the marine environment.

13.4 The Authority undertakes to fulfil in good faith its powers and functions under the Convention and the Agreement in accordance with article 157 of the Convention.

#### Section 14

##### Inspection

14.1 The Contractor shall permit the Authority to send its inspectors on board vessels and installations used by the Contractor to carry out activities in the exploration area to:

- (a) Monitor the Contractor's compliance with the terms and conditions of this contract and the Regulations; and
- (b) Monitor the effects of such activities on the marine environment.

14.2 The Secretary-General shall give reasonable notice to the Contractor of the projected time and duration of inspections, the name of the inspectors and any activities the inspectors are to perform that are likely to require the availability of special equipment or special assistance from personnel of the Contractor.

14.3 Such inspectors shall have the authority to inspect any vessel or installation, including its log, equipment, records, facilities, all other recorded data and any relevant documents which are necessary to monitor the Contractor's compliance.

14.4 The Contractor, its agents and employees shall assist the inspectors in the performance of their duties and shall:

- (a) Accept and facilitate prompt and safe boarding of vessels and installations by inspectors;
- (b) Cooperate with and assist in the inspection of any vessel or installation conducted pursuant to these procedures;
- (c) Provide access to all relevant equipment, facilities and personnel on vessels and installations at all reasonable times;
- (d) Not obstruct, intimidate or interfere with inspectors in the performance of their duties;



(e) Provide reasonable facilities, including, where appropriate, food and accommodation, to inspectors; and

(f) Facilitate safe disembarkation by inspectors.

14.5 Inspectors shall avoid interference with the safe and normal operations on board vessels and installations used by the Contractor to carry out activities in the area visited and shall act in accordance with the Regulations and the measures adopted to protect confidentiality of data and information.

14.6 The Secretary-General and any duly authorized representatives of the Secretary-General, shall have access, for purposes of audit and examination, to any books, documents, papers and records of the Contractor which are necessary and directly pertinent to verify the expenditures referred to in section 10.2 (c).

14.7 The Secretary-General shall provide relevant information contained in the reports of inspectors to the Contractor and its sponsoring State or States where action is necessary.

14.8 If for any reason the contractor does not pursue exploration and does not request a contract for exploitation, it shall, before withdrawing from the exploration area, notify the Secretary-General in writing in order to permit the Authority, if it so decides, to carry out an inspection pursuant to this section.

#### Section 15

##### Safety, labour and health standards

15.1 The Contractor shall comply with the generally accepted international rules and standards established by competent international organizations or general diplomatic conferences concerning the safety of life at sea, and the prevention of collisions and such rules, regulations and procedures as may be adopted by the Authority relating to safety at sea. Each vessel used for carrying out activities in the Area shall possess current valid certificates required by and issued pursuant to such international rules and standards.

15.2 The Contractor shall, in carrying out exploration under this contract, observe and comply with such rules, regulations and procedures as may be adopted by the Authority relating to protection against discrimination in employment, occupational safety and health, labour relations, social security, employment security and living conditions at the work site. Such rules, regulations and procedures shall take into account conventions and recommendations of the International Labour Organization and other competent international organizations.

#### Section 16

##### Responsibility and liability

16.1 The Contractor shall be liable for the actual amount of any damage, including damage to the marine environment, arising out of its wrongful acts or omissions, and those of its employees, subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations under this contract, including the costs of reasonable measures to prevent or limit damage to the marine environment, account being taken of any contributory acts or omissions by the Authority.





## Section 18

### Disclaimer

Neither the Contractor nor any affiliated company or subcontractor shall in any manner claim or suggest, whether expressly or by implication, that the Authority or any official thereof has, or has expressed, any opinion with respect to polymetallic nodules in the exploration area and a statement to that effect shall not be included in or endorsed on any prospectus, notice, circular, advertisement, press release or similar document issued by the Contractor, any affiliated company or any subcontractor that refers directly or indirectly to this contract. For the purposes of this section, an "affiliated company" means any person, firm or company or State-owned entity controlling, controlled by, or under common control with, the Contractor.

## Section 19

### Renunciation of rights

The Contractor, by notice to the Authority, shall have the right to renounce its rights and terminate this contract without penalty, provided that the Contractor shall remain liable for all obligations accrued prior to the date of such renunciation and those obligations required to be fulfilled after termination in accordance with the Regulations.

## Section 20

### Termination of sponsorship

20.1 If the nationality or control of the Contractor changes or the Contractor's sponsoring State, as defined in the Regulations, terminates its sponsorship, the Contractor shall promptly notify the Authority forthwith.

20.2 In either such event, if the Contractor does not obtain another sponsor meeting the requirements prescribed in the Regulations which submits to the Authority a certificate of sponsorship for the Contractor in the prescribed form within the time specified in the Regulations, this contract shall terminate forthwith.

## Section 21

### Suspension and termination of contract and penalties

21.1 The Council may suspend or terminate this contract, without prejudice to any other rights that the Authority may have, if any of the following events should occur:

(a) If, in spite of written warnings by the Authority, the Contractor has conducted its activities in such a way as to result in serious persistent and wilful violations of the fundamental terms of this contract, Part XI of the Convention, the Agreement and the rules, regulations and procedures of the Authority; or

(b) If the Contractor has failed to comply with a final binding decision of the dispute settlement body applicable to it; or





(c) If the Contractor becomes insolvent or commits an act of bankruptcy or enters into any agreement for composition with its creditors or goes into liquidation or receivership, whether compulsory or voluntary, or petitions or applies to any tribunal for the appointment of a receiver or a trustee or receiver for itself or commences any proceedings relating to itself under any bankruptcy, insolvency or readjustment of debt law, whether now or hereafter in effect, other than for the purpose of reconstruction.

21.2 Any suspension or termination shall be by notice, through the Secretary-General, which shall include a statement of the reasons for taking such action. The suspension or termination shall be effective 60 days after such notice, unless the Contractor within such period disputes the Authority's right to suspend or terminate this contract in accordance with Part XI, section 5, of the Convention.

21.3 If the Contractor takes such action, this contract shall only be suspended or terminated in accordance with a final binding decision in accordance with Part XI, section 5, of the Convention.

21.4 If the Council has suspended this contract, the Council may by notice require the Contractor to resume its operations and comply with the terms and conditions of this contract, not later than 60 days after such notice.

21.5 In the case of any violation of this contract not covered by section 21.1(a) hereof, or in lieu of suspension or termination under section 21.1 hereof, the Council may impose upon the Contractor monetary penalties proportionate to the seriousness of the violation.

21.6 The Council may not execute a decision involving monetary penalties until the Contractor has been accorded a reasonable opportunity to exhaust the judicial remedies available to it pursuant to Part XI, section 5, of the Convention.

21.7 In the event of termination or expiration of this contract, the Contractor shall comply with the Regulations and shall remove all installations, plant, equipment and materials in the exploration area and shall make the area safe so as not to constitute a danger to persons, shipping or to the marine environment.

## Section 22

### Transfer of rights and obligations

22.1 The rights and obligations of the Contractor under this contract may be transferred in whole or in part only with the consent of the Authority and in accordance with the Regulations.

22.2 The Authority shall not unreasonably withhold consent to the transfer if the proposed transferee is in all respects a qualified applicant in accordance with the Regulations and assumes all of the obligations of the Contractor and if the transfer does not confer to the transferee a plan of work, the approval of which would be forbidden by Annex 3, article 6, paragraph 3(c), of the Convention.

22.3 The terms, undertakings and conditions of this contract shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.



### Section 23

#### No waiver

No waiver by either party of any rights pursuant to a breach of the terms and conditions of this contract to be performed by the other party shall be construed as a waiver by the party of any succeeding breach of the same or any other term or condition to be performed by the other party.

### Section 24

#### Revision

24.1 When circumstances have arisen or are likely to arise which, in the opinion of the Authority or the Contractor, would render this contract inequitable or make it impracticable or impossible to achieve the objectives set out in this contract or in Part XI of the Convention or the Agreement, the parties shall enter into negotiations to revise it accordingly.

24.2 This contract may also be revised by agreement between the Contractor and the Authority to facilitate the application of any rules, regulations and procedures adopted by the Authority subsequent to the entry into force of this contract.

24.3 This contract may be revised, amended or otherwise modified only with the consent of the Contractor and the Authority by an appropriate instrument signed by the authorized representatives of the parties.

### Section 25

#### Disputes

25.1 Any dispute between the parties concerning the interpretation or application of this contract shall be settled in accordance with Part XI, section 5, of the Convention.

25.2 Any final decision rendered by a court or tribunal having jurisdiction under the Convention relating to the rights and obligations of the Authority and of the Contractor shall be enforceable in the territory of each State Party to the Convention.

### Section 26

#### Notice

26.1 Any application, request, notice, report, consent, approval, waiver, direction or instruction hereunder shall be made by the Secretary-General or by the designated representative of the Contractor, as the case may be, in writing. Service shall be by hand, or by telex, facsimile or registered airmail to the Secretary-General at the headquarters of the Authority or to the designated representative.

26.2 Either party shall be entitled to change any such address to any other address by not less than ten days' notice to the other party.





26.3 Delivery by hand shall be effective when made. Delivery by telex shall be deemed to be effective on the business day following the day when the "answer back" appears on the sender's telex machine. Delivery by facsimile shall be effective when the "transmit confirmation report" confirming the transmission to the recipient's published facsimile number is received by the transmitter. Delivery by registered airmail shall be deemed to be effective 21 days after posting.

26.4 Notice to the designated representative of the Contractor shall constitute effective notice to the Contractor for all purposes under this contract, and the designated representative shall be the Contractor's agent for the service of process or notification in any proceeding of any court or tribunal having jurisdiction.

26.5 Notice to the Secretary-General shall constitute effective notice to the Authority for all purposes under this contract, and the Secretary-General shall be the Authority's agent for the service of process or notification in any proceeding of any court or tribunal having jurisdiction.

#### Section 27

##### Applicable law

27.1 This contract shall be governed by the terms of this contract, the rules, regulations and procedures of the Authority, Part XI of the Convention, the Agreement and other rules of international law not incompatible with the Convention.

27.2 The Contractor, its employees, subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations under this contract shall observe the applicable law referred to in section 27.1 hereof and shall not engage in any transaction, directly or indirectly, prohibited by the applicable law.

27.3 Nothing contained in this contract shall be deemed an exemption from the necessity of applying for and obtaining any permit or authority that may be required for any activities under this contract.

#### Section 28

##### Interpretation

The division of this contract into sections and subsections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation hereof.

#### Section 29

##### Additional documents

Each party hereto agrees to execute and deliver all such further instruments, and to do and perform all such further acts and things as may be necessary or expedient to give effect to the provisions of this contract.