



Council

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Agenda item 10

**Consideration, with a view to approval, of an
application for a plan of work for exploration**

Report and recommendations of the Legal and Technical Commission to the Council of the International Seabed Authority relating to an application for approval of a plan of work for exploration for polymetallic sulphides by the Government of Poland

I. Introduction

1. On 25 January 2017, the Secretary-General of the International Seabed Authority received an application for approval of a plan of work for exploration for polymetallic sulphides in the Area, submitted, pursuant to the regulations on prospecting and exploration for polymetallic sulphides in the Area ([ISBA/16/A/12/Rev.1](#), annex), by the Government of Poland.
2. On 26 January 2017, in accordance with regulation 22 (c) of the regulations, the Secretary-General notified the members of the Authority of the receipt of the application and circulated information of a general nature concerning the application. On the same date, the Secretary-General also notified members of the Legal and Technical Commission of the receipt of the application and placed consideration of the application on the agenda of the meeting of the Commission scheduled for 31 July to 9 August 2017.

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

3. In its consideration of the application, the Commission noted that, in keeping with the scheme established in article 6 of annex III to the United Nations Convention on the Law of the Sea, it was first required to make an objective determination as to whether the applicant had fulfilled the requirements contained in the regulations, particularly with respect to the form of applications; whether the applicant had provided the necessary undertaking and assurances specified in regulation 15 of the regulations; and whether it had the financial and technical



capability necessary to carry out the proposed plan of work for exploration and, as appropriate, had satisfactorily discharged its obligations under any previous contract with the Authority. The Commission was then required to determine, in accordance with regulation 23, paragraph 4, and its procedures, whether the proposed plan of work would provide for effective protection of human health and safety, effective protection and preservation of the marine environment, and 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 23, paragraph 5, provides 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.

4. In considering the proposed plan of work for exploration for polymetallic sulphides, the Commission took into account the principles, policies and objectives relating to activities in the Area as provided for in Part XI of and annex III to the Convention and in the Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982.

B. Consideration of the application

5. The Commission considered the application in closed meetings on 31 July and 1, 3 and 4 August 2017.

6. Prior to commencing a detailed examination of the application, the Commission invited a delegation to make a presentation of the application, on 31 July 2017. The delegation was headed by Andrzej Przybycin and included Teresa Radziejewska, Michał Dajek and Agata Kozłowska-Roman. Members of the Commission then posed questions to obtain clarification on certain aspects of the application. The Commission organized three working groups to evaluate the applications, namely a legal and financial group, a geological and technological group, and an environmental and training group. Following its initial consideration on 31 July and 1 and 3 August 2017, the Commission requested the presence of the delegation to respond to additional questions raised by the working groups, on 4 August 2017. The delegation also submitted a written response to those questions. Subsequently, the Commission continued its consideration of the application pursuant to the regulations.

III. Summary of basic information regarding the application

A. Identification of the applicant

7. Name of the applicant: Ministry of the Environment of Poland

8. Address of the applicant:

(a) Street address: Wawelska Str. 52/54, 00-922 Warsaw, Poland;

(b) Postal address: Wawelska Str. 52/54, 00-922 Warsaw, Poland;

(c) Telephone number: (+48 22) 36-92-900

(d) Fax number: (+48 22) 36-92-450

(e) Email address: sekretariatmmj@mos.gov.pl; seabed@pgi.gov.pl

9. The applicant's designated representative is:

(a) Name: Mariusz Orion Jędrysek

- (b) Street address: same as in paragraph 8 (a) above;
- (c) Postal address: same as in paragraph 8 (b) above;
- (d) Telephone number: (+48 22) 36-92-337
- (e) Fax number: (+48 22) 36-92-450
- (f) Email address: sekretariatmmj@mos.gov.pl

10. The applicant is a State party to the Convention.

11. The date of deposit of the instrument of ratification of the United Nations Convention on the Law of the Sea by Poland is 13 November 1998 and the date of its consent to be bound by the Agreement relating to the Implementation of Part XI of the Convention is 13 November 1998.

B. Area of application

12. The area of application is 10,000 km² in size and lies within the limits of two large segments of the Mid-Atlantic Ridge, located between the Hayes, Atlantis and Kane transforms faults/fracture zones (26°09'-32°50' N). The area consists of 100 exploration blocks of 10 km² each. The blocks are grouped into five clusters (a, b, c, d and e), each containing from 7 to 36 blocks. The coordinates and general location of the area under application are illustrated in the maps contained in the annex to the present document.

13. The area of application is a part of the international seabed area and lies beyond the limits of the national jurisdiction of any State and claimed continental shelf.

14. The applicant ensured that the area of the application does not overlap with reserved areas already delineated or with those claimed by other States parties, State enterprises or natural or juridical persons.

15. The area under application does not include sea lanes essential to international navigation or areas of intense fishing activity. The applicant nevertheless ensured that it would not establish any installations that would interfere with international navigation or fishing activities. Marine protected areas are not designated in the area under application.

C. Other information

16. Poland is a sponsoring State of the Interoceanmetal Joint Organization, which was formed on 27 April 1987 on the basis of an intergovernmental agreement and commenced operations in December of the same year. The current sponsoring States of the Interoceanmetal Joint Organization are: Bulgaria, Cuba, Czechia, Poland, Russian Federation and Slovakia.

17. The applicant attached a written undertaking signed by the applicant's designated representative, in compliance with regulation 15 of the regulations.

18. The applicant elected to offer an equity interest in a joint venture arrangement, in accordance with regulation 19 of the regulations. The applicant submitted the data and information required for the election of equity interest in a joint venture agreement, in accordance with regulation 20 of the regulations.

19. The applicant has paid a fee of \$500,000, in accordance with regulation 21, paragraph 1, of the regulations.

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

20. The following technical documents and information were submitted in the application:

- (a) Information relating to the area under application:
 - (i) Charts of the location of the blocks under application;
 - (ii) A list of the coordinates of the corners of the blocks under application, in accordance with the World Geodetic System, 1984;
- (b) Information to enable the Council to determine whether the applicant is financially capable of carrying out the proposed plan of work for exploration;
- (c) Information to enable the Council to determine whether the applicant is technically capable of carrying out the proposed plan of work for exploration;
- (d) Plan of work for exploration;
- (e) Training programme;
- (f) Written undertaking by the applicant.

V. Consideration of financial and technical qualifications of the applicant

A. Financial capability

21. The applicant has submitted a certificate of financial capability signed by its designated representative, certifying that the applicant has the necessary funds to meet the estimated minimum expenditure under the proposed plan of work for exploration and to fulfil its financial obligation to the Authority.

B. Technical capability

22. In evaluating the technical capability of the applicant, the Commission took note of the scope of responsibilities of the Government of Poland, as well as information in relation to its marine expertise, in particular as one of the sponsoring States of the Interoceanmetal Joint Organization.

23. The applicant provided details on the technical capability of the Interoceanmetal Joint Organization and its achievements since its inception, including the development and testing of mining and processing technologies, environmental research, economic and other appropriate studies necessary to commence nodule exploitation, and deep sea mining operations. Other technical capabilities include the following: complex mathematical modelling and computer simulations of mining complex systems; control process; assessment of the effects of the marine environment, such as waves and currents, on the mining complex, movement of the mining vessel and nodule miner and the effects of the movement on the vertical transport riser and its deformation.

General description of equipment and methods

24. The applicant provided information regarding the planned operation for carrying out the proposed plan of work for exploration, as well as on the methods

and instruments to be used for that purpose, including a detailed list of equipment to be utilized each year for the first five-year programme of activities. The applicant informed that it would use its own or a chartered research vessel and equipment such as the following:

- (a) A multi-beam echo-sounder with relevant technical capabilities for conducting bathymetric surveys of the seabed in the area of exploration;
- (b) A deep-water hydro-acoustic system including side-scan sonar and acoustic sub-bottom profiler operating at relevant frequencies, with a sufficient depth of penetration of the signal below the seabed and a system to measure the (electrical) self-potential;
- (c) A hydrological system including an on-board unit and its underwater part;
- (d) An underwater television-camera module, coupled with a manipulator installed on the platform of a remotely operated vehicle, to conduct near-bottom profile visual identification, contouring and sampling of polymetallic sulphide ore bodies and to conduct baseline environmental monitoring and sampling;
- (e) A system of geological sampling equipment (contact bottom samplers);
- (f) A ship navigation system, including the underwater acoustic ultrashort baseline positioning system with accuracy sufficient for precise determination of the position of the deep sea exploration equipment and sample locations coupled with on-board satellite positioning;
- (g) A dynamic positioning or a track keeping system, enabling automatic piloting of a ship at specified low speeds and on assumed courses in following or towing deep sea underwater sampling and recording devices.

Financial and technical capability to respond to any incident or activity which causes serious harm to the marine environment

25. The applicant provided information related to the prevention, reduction and control of hazards to and possible impacts on the marine environment. The applicant stated that it was a State party to the following instruments: International Convention for the Prevention of Pollution from Ships; International Convention for the Safety of Life at Sea; Convention on International Regulations for Preventing Collisions at Sea; and International Convention on Standards of Training, Certification and Watchkeeping for Seafarers. The applicant also indicated that it would fully comply with the related international rules and the regulations of the International Maritime Organization for responding to any incident which causes serious harm to the marine environment.

26. The applicant indicated that it would use research vessels that carry protection and indemnity insurance or other appropriate insurance to ensure the financial responsibility for possible incidents. The applicant also indicated that it would play an active role in the response to any incident causing serious harm to the marine environment as a result of activities under the application.

27. It also indicated that there would be regular training of crews and on-board technicians on activities and emergency response to potential incidents that would cause serious harm to the marine environment. The applicant indicated that it would comply with the rules and standards established by competent international organizations concerning the safety of life at sea.

28. The applicant stated that it would observe and comply with rules, regulations and procedures related to employment, occupational safety and health, labour

relations, social security, employment security and living conditions at the work site in carrying out exploration activities under the application.

29. The applicant also stated that it would promptly report to the Secretary-General any incident arising from activities, which had caused, was causing, or threatened to cause serious harm to the marine environment. The applicant would also comply with emergency orders issued by the Council and immediate measures of a temporary nature issued by the Secretary-General with regard to a reported incident.

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

30. In accordance with regulation 20 of the regulations, the applicant submitted the following information for approval of the plan of work for exploration:

(a) A general description and schedule of the proposed exploration programme, including the programme of activities for the immediate five-year period;

(b) A description of the programme for oceanographic and environmental baseline studies, in accordance with the regulations and any environmental rules, regulations and procedures established by the Authority that would enable an assessment of the potential environmental impact, including, but not restricted to, the impact on biodiversity of the proposed exploration activities, taking into account any recommendations issued by the Legal and Technical Commission, including those contained in its recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area ([ISBA/19/LTC/8](#));

(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 on, the marine environment;

(e) Data necessary for the Council to make the determination as required by regulation 13, paragraph 1;

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

VII. Training programme

31. The Commission noted that the applicant's proposed training programme included at-sea training opportunities and on-land training opportunities. The applicant also provided detailed information on the objectives and content of the training opportunities, including the general qualifications required of candidates. The Commission highlighted the fact that, in developing the training programme, the applicant and the Secretary-General should ensure that the training programme was in line with the recommendations for the guidance of contractors and sponsoring States relating to training programmes under plans of work for exploration, issued by the Commission at the nineteenth session ([ISBA/19/LTC/14](#)).

VIII. Conclusion and recommendations

32. Having examined the particulars submitted by the applicant, as summarized in sections III to VII above, 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 article 4 of annex III to the Convention.

33. The Commission is further satisfied that the applicant:

- (a) Has complied with the provisions of the regulations;
- (b) Has provided the undertaking and assurances specified in regulation 15 of the regulations;
- (c) Possesses the financial and technical capability to carry out the proposed plan of work for exploration.

34. The Commission is satisfied that none of the conditions in regulation 23, paragraph 6, of the regulations apply.

35. 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.

36. Accordingly, pursuant to regulation 23, paragraph 5, of the regulations, the Commission recommends to the Council approval of the plan of work for exploration for polymetallic sulphides submitted by the Government of Poland.

Annex I

Geographical coordinates of the 100 blocks under application

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
A	1	1	39° 57.760' W	32° 45.378' N
A	1	2	40° 4.164' W	32° 45.326' N
A	1	3	40° 4.230' W	32° 50.785' N
A	1	4	39° 57.819' W	32° 50.837' N
A	2	1	39° 51.338' W	32° 45.434' N
A	2	2	39° 57.742' W	32° 45.388' N
A	2	3	39° 57.801' W	32° 50.846' N
A	2	4	39° 51.390' W	32° 50.893' N
A	3	1	39° 44.923' W	32° 43.561' N
A	3	2	39° 51.325' W	32° 43.520' N
A	3	3	39° 51.377' W	32° 48.979' N
A	3	4	39° 44.968' W	32° 49.020' N
A	4	1	39° 38.504' W	32° 42.809' N
A	4	2	39° 44.906' W	32° 42.774' N
A	4	3	39° 44.952' W	32° 48.2334' N
A	4	4	39° 38.543' W	32° 48.2648' N
A	5	1	39° 32.100' W	32° 41.481' N
A	5	2	39° 38.501' W	32° 41.451' N
A	5	3	39° 38.540' W	32° 46.910' N
A	5	4	39° 32.133' W	32° 46.940' N
A	6	1	40° 4.092' W	32° 39.868' N
A	6	2	40° 10.489' W	32° 39.810' N
A	6	3	40° 10.561' W	32° 45.268' N
A	6	4	40° 4.157' W	32° 45.326' N
A	7	1	39° 57.673' W	32° 39.909' N
A	7	2	40° 4.071' W	32° 39.857' N
A	7	3	40° 4.136' W	32° 45.316' N
A	7	4	39° 57.732' W	32° 45.368' N
A	8	1	39° 51.277' W	32° 39.963' N
A	8	2	39° 57.675' W	32° 39.917' N
A	8	3	39° 57.734' W	32° 45.375' N
A	8	4	39° 51.329' W	32° 45.422' N
A	9	1	39° 44.888' W	32° 38.125' N
A	9	2	39° 51.284' W	32° 38.085' N
A	9	3	39° 51.336' W	32° 43.543' N
A	9	4	39° 44.934' W	32° 43.584' N
A	10	1	39° 38.470' W	32° 37.347' N
A	10	2	39° 44.865' W	32° 37.312' N
A	10	3	39° 44.910' W	32° 42.771' N
A	10	4	39° 38.509' W	32° 42.806' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
A	11	1	40° 8.177' W	32° 34.370' N
A	11	2	40° 14.567' W	32° 34.310' N
A	11	3	40° 14.643' W	32° 39.768' N
A	11	4	40° 8.246' W	32° 39.828' N
A	12	1	40° 1.788' W	32° 34.422' N
A	12	2	40° 8.179' W	32° 34.367' N
A	12	3	40° 8.248' W	32° 39.826' N
A	12	4	40° 1.850' W	32° 39.881' N
A	13	1	39° 55.391' W	32° 34.468' N
A	13	2	40° 1.782' W	32° 34.418' N
A	13	3	40° 1.845' W	32° 39.876' N
A	13	4	39° 55.447' W	32° 39.926' N
A	14	1	39° 48.987' W	32° 32.629' N
A	14	2	39° 55.377' W	32° 32.585' N
A	14	3	39° 55.433' W	32° 38.044' N
A	14	4	39° 49.037' W	32° 38.088' N
A	15	1	40° 1.721' W	32° 28.967' N
A	15	2	40° 8.106' W	32° 28.912' N
A	15	3	40° 8.175' W	32° 34.371' N
A	15	4	40° 1.784' W	32° 34.426' N
A	16	1	39° 55.335' W	32° 29.006' N
A	16	2	40° 1.720' W	32° 28.956' N
A	16	3	40° 1.783' W	32° 34.415' N
A	16	4	39° 55.391' W	32° 34.465' N
A	17	1	39° 48.935' W	32° 27.158' N
A	17	2	39° 55.318' W	32° 27.114' N
A	17	3	39° 55.373' W	32° 32.573' N
A	17	4	39° 48.984' W	32° 32.617' N
A	18	1	40° 8.037' W	32° 23.459' N
A	18	2	40° 14.415' W	32° 23.399' N
A	18	3	40° 14.490' W	32° 28.857' N
A	18	4	40° 8.105' W	32° 28.917' N
A	19	1	40° 1.661' W	32° 23.507' N
A	19	2	40° 8.039' W	32° 23.452' N
A	19	3	40° 8.107' W	32° 28.911' N
A	19	4	40° 1.723' W	32° 28.966' N
A	20	1	39° 55.282' W	32° 23.551' N
A	20	2	40° 1.661' W	32° 23.501' N
A	20	3	40° 1.723' W	32° 28.960' N
A	20	4	39° 55.338' W	32° 29.009' N
A	21	1	40° 11.558' W	32° 17.967' N
A	21	2	40° 17.930' W	32° 17.904' N
A	21	3	40° 18.008' W	32° 23.362' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
A	21	4	40° 11.630' W	32° 23.425' N
A	22	1	40° 12.848' W	32° 12.495' N
A	22	2	40° 19.213' W	32° 12.432' N
A	22	3	40° 19.292' W	32° 17.890' N
A	22	4	40° 12.921' W	32° 17.954' N
B	23	1	41° 40.339' W	30° 37.319' N
B	23	2	41° 46.592' W	30° 37.188' N
B	23	3	41° 46.749' W	30° 42.642' N
B	23	4	41° 40.489' W	30° 42.774' N
B	24	1	41° 34.080' W	30° 37.442' N
B	24	2	41° 40.334' W	30° 37.316' N
B	24	3	41° 40.484' W	30° 42.771' N
B	24	4	41° 34.225' W	30° 42.898' N
B	25	1	41° 27.835' W	30° 37.564' N
B	25	2	41° 34.089' W	30° 37.443' N
B	25	3	41° 34.234' W	30° 42.898' N
B	25	4	41° 27.973' W	30° 43.020' N
B	26	1	41° 42.893' W	30° 31.804' N
B	26	2	41° 49.140' W	30° 31.671' N
B	26	3	41° 49.298' W	30° 37.125' N
B	26	4	41° 43.045' W	30° 37.259' N
B	27	1	41° 36.646' W	30° 31.930' N
B	27	2	41° 42.893' W	30° 31.803' N
B	27	3	41° 43.045' W	30° 37.258' N
B	27	4	41° 36.792' W	30° 37.386' N
B	28	1	41° 30.401' W	30° 32.051' N
B	28	2	41° 36.650' W	30° 31.928' N
B	28	3	41° 36.796' W	30° 37.383' N
B	28	4	41° 30.542' W	30° 37.507' N
B	29	1	41° 48.979' W	30° 26.224' N
B	29	2	41° 55.219' W	30° 26.087' N
B	29	3	41° 55.382' W	30° 31.541' N
B	29	4	41° 49.136' W	30° 31.678' N
B	30	1	41° 42.743' W	30° 26.348' N
B	30	2	41° 48.984' W	30° 26.216' N
B	30	3	41° 49.141' W	30° 31.670' N
B	30	4	41° 42.894' W	30° 31.803' N
C	31	1	41° 59.811' W	30° 19.081' N
C	31	2	42° 6.043' W	30° 18.936' N
C	31	3	42° 6.216' W	30° 24.389' N
C	31	4	41° 59.978' W	30° 24.535' N
C	32	1	41° 49.509' W	30° 20.750' N
C	32	2	41° 55.744' W	30° 20.613' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
C	32	3	41° 55.907' W	30° 26.067' N
C	32	4	41° 49.666' W	30° 26.205' N
B	33	1	41° 43.272' W	30° 20.884' N
B	33	2	41° 49.507' W	30° 20.752' N
B	33	3	41° 49.664' W	30° 26.206' N
B	33	4	41° 43.423' W	30° 26.339' N
C	34	1	42° 2.376' W	30° 13.568' N
C	34	2	42° 8.602' W	30° 13.421' N
C	34	3	42° 8.776' W	30° 18.874' N
C	34	4	42° 2.544' W	30° 19.021' N
C	35	1	41° 56.138' W	30° 13.710' N
C	35	2	42° 2.364' W	30° 13.568' N
C	35	3	42° 2.533' W	30° 19.022' N
C	35	4	41° 56.300' W	30° 19.165' N
C	36	1	42° 5.414' W	30° 8.039' N
C	36	2	42° 11.634' W	30° 7.890' N
C	36	3	42° 11.810' W	30° 13.343' N
C	36	4	42° 5.584' W	30° 13.493' N
C	37	1	41° 59.194' W	30° 8.178' N
C	37	2	42° 5.414' W	30° 8.034' N
C	37	3	42° 5.585' W	30° 13.487' N
C	37	4	41° 59.358' W	30° 13.632' N
C	38	1	42° 5.248' W	30° 2.586' N
C	38	2	42° 11.462' W	30° 2.437' N
C	38	3	42° 11.638' W	30° 7.890' N
C	38	4	42° 5.418' W	30° 8.039' N
C	39	1	41° 59.022' W	30° 2.726' N
C	39	2	42° 5.237' W	30° 2.583' N
C	39	3	42° 5.407' W	30° 8.036' N
C	39	4	41° 59.186' W	30° 8.180' N
D	40	1	42° 38.076' W	29° 55.214' N
D	40	2	42° 44.287' W	29° 55.323' N
D	40	3	42° 44.165' W	30° 0.734' N
D	40	4	42° 37.948' W	30° 0.624' N
D	41	1	42° 31.866' W	29° 55.100' N
D	41	2	42° 38.076' W	29° 55.214' N
D	41	3	42° 37.948' W	30° 0.624' N
D	41	4	42° 31.732' W	30° 0.510' N
D	42	1	42° 25.656' W	29° 54.982' N
D	42	2	42° 31.866' W	29° 55.100' N
D	42	3	42° 31.732' W	30° 0.510' N
D	42	4	42° 25.517' W	30° 0.391' N
D	43	1	42° 43.358' W	29° 49.899' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
D	43	2	42° 49.564' W	29° 50.004' N
D	43	3	42° 49.446' W	29° 55.415' N
D	43	4	42° 43.235' W	29° 55.310' N
D	44	1	42° 37.153' W	29° 49.790' N
D	44	2	42° 43.358' W	29° 49.899' N
D	44	3	42° 43.235' W	29° 55.310' N
D	44	4	42° 37.024' W	29° 55.200' N
D	45	1	42° 30.948' W	29° 49.675' N
D	45	2	42° 37.153' W	29° 49.790' N
D	45	3	42° 37.024' W	29° 55.200' N
D	45	4	42° 30.814' W	29° 55.085' N
D	46	1	42° 24.744' W	29° 49.556' N
D	46	2	42° 30.948' W	29° 49.675' N
D	46	3	42° 30.814' W	29° 55.085' N
D	46	4	42° 24.604' W	29° 54.965' N
D	47	1	42° 44.959' W	29° 44.524' N
D	47	2	42° 51.159' W	29° 44.627' N
D	47	3	42° 51.043' W	29° 50.038' N
D	47	4	42° 44.837' W	29° 49.935' N
D	48	1	42° 38.759' W	29° 44.411' N
D	48	2	42° 44.959' W	29° 44.519' N
D	48	3	42° 44.838' W	29° 49.930' N
D	48	4	42° 38.632' W	29° 49.822' N
D	49	1	42° 51.274' W	29° 39.209' N
D	49	2	42° 57.470' W	29° 39.307' N
D	49	3	42° 57.360' W	29° 44.719' N
D	49	4	42° 51.159' W	29° 44.620' N
D	50	1	42° 44.014' W	29° 39.091' N
D	50	2	42° 50.209' W	29° 39.194' N
D	50	3	42° 50.093' W	29° 44.606' N
D	50	4	42° 43.892' W	29° 44.502' N
D	51	1	42° 51.389' W	29° 33.798' N
D	51	2	42° 57.579' W	29° 33.895' N
D	51	3	42° 57.470' W	29° 39.307' N
D	51	4	42° 51.275' W	29° 39.209' N
D	52	1	42° 45.200' W	29° 33.698' N
D	52	2	42° 51.389' W	29° 33.800' N
D	52	3	42° 51.274' W	29° 39.211' N
D	52	4	42° 45.080' W	29° 39.109' N
D	53	1	42° 51.503' W	29° 28.386' N
D	53	2	42° 57.688' W	29° 28.484' N
D	53	3	42° 57.579' W	29° 33.895' N
D	53	4	42° 51.389' W	29° 33.798' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
D	54	1	42° 59.667' W	29° 23.104' N
D	54	2	43° 5.847' W	29° 23.195' N
D	54	3	43° 5.746' W	29° 28.607' N
D	54	4	42° 59.561' W	29° 28.516' N
D	55	1	42° 53.488' W	29° 23.009' N
D	55	2	42° 59.667' W	29° 23.104' N
D	55	3	42° 59.561' W	29° 28.516' N
D	55	4	42° 53.376' W	29° 28.420' N
D	56	1	43° 1.378' W	29° 17.716' N
D	56	2	43° 7.553' W	29° 17.805' N
D	56	3	43° 7.454' W	29° 23.218' N
D	56	4	43° 1.274' W	29° 23.128' N
D	57	1	42° 55.204' W	29° 17.622' N
D	57	2	43° 1.378' W	29° 17.716' N
D	57	3	43° 1.274' W	29° 23.128' N
D	57	4	42° 55.095' W	29° 23.034' N
D	58	1	43° 4.982' W	29° 12.354' N
D	58	2	43° 11.151' W	29° 12.440' N
D	58	3	43° 11.056' W	29° 17.852' N
D	58	4	43° 4.881' W	29° 17.766' N
D	59	1	42° 58.813' W	29° 12.263' N
D	59	2	43° 4.982' W	29° 12.354' N
D	59	3	43° 4.881' W	29° 17.766' N
D	59	4	42° 58.707' W	29° 17.675' N
D	60	1	43° 13.587' W	29° 7.060' N
D	60	2	43° 19.751' W	29° 7.139' N
D	60	3	43° 19.663' W	29° 12.552' N
D	60	4	43° 13.494' W	29° 12.473' N
D	61	1	43° 7.423' W	29° 6.976' N
D	61	2	43° 13.587' W	29° 7.060' N
D	61	3	43° 13.494' W	29° 12.473' N
D	61	4	43° 7.324' W	29° 12.388' N
D	62	1	43° 1.252' W	29° 6.886' N
D	62	2	43° 7.416' W	29° 6.974' N
D	62	3	43° 7.317' W	29° 12.387' N
D	62	4	43° 1.148' W	29° 12.298' N
D	63	1	43° 18.246' W	29° 1.703' N
D	63	2	43° 24.406' W	29° 1.778' N
D	63	3	43° 24.322' W	29° 7.192' N
D	63	4	43° 18.158' W	29° 7.116' N
D	64	1	43° 12.087' W	29° 1.623' N
D	64	2	43° 18.246' W	29° 1.703' N
D	64	3	43° 18.158' W	29° 7.116' N

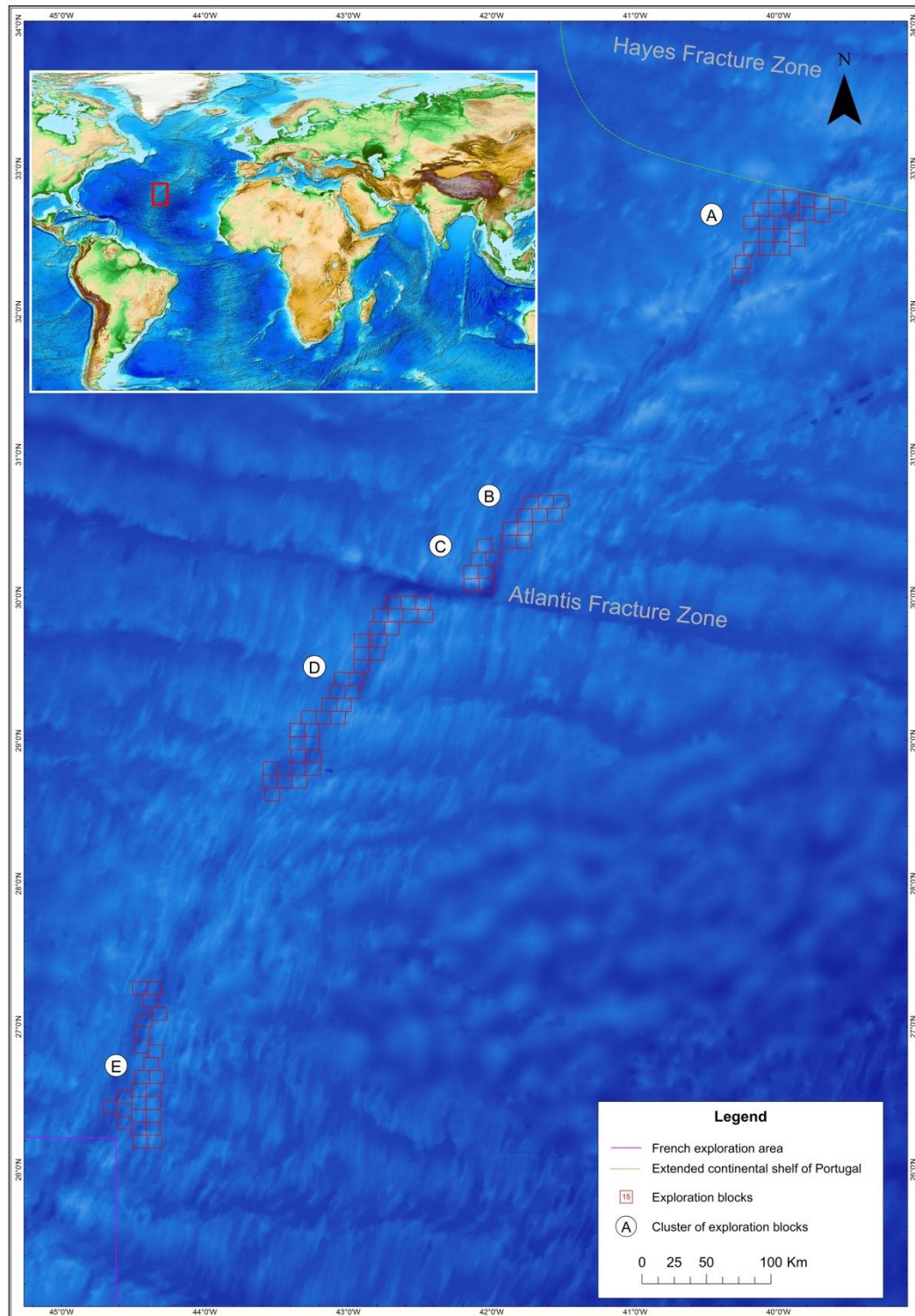
<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
D	64	4	43° 11.993' W	29° 7.036' N
D	65	1	43° 18.335' W	28° 56.275' N
D	65	2	43° 24.489' W	28° 56.351' N
D	65	3	43° 24.406' W	29° 1.764' N
D	65	4	43° 18.247' W	29° 1.689' N
D	66	1	43° 12.181' W	28° 56.196' N
D	66	2	43° 18.335' W	28° 56.275' N
D	66	3	43° 18.247' W	29° 1.689' N
D	66	4	43° 12.088' W	29° 1.609' N
D	67	1	43° 17.823' W	28° 50.858' N
D	67	2	43° 23.971' W	28° 50.933' N
D	67	3	43° 23.888' W	28° 56.347' N
D	67	4	43° 17.734' W	28° 56.271' N
D	68	1	43° 11.676' W	28° 50.778' N
D	68	2	43° 17.824' W	28° 50.858' N
D	68	3	43° 17.736' W	28° 56.271' N
D	68	4	43° 11.582' W	28° 56.191' N
D	69	1	43° 29.558' W	28° 45.582' N
D	69	2	43° 35.702' W	28° 45.648' N
D	69	3	43° 35.629' W	28° 51.062' N
D	69	4	43° 29.480' W	28° 50.996' N
D	70	1	43° 17.909' W	28° 45.450' N
D	70	2	43° 24.052' W	28° 45.525' N
D	70	3	43° 23.970' W	28° 50.938' N
D	70	4	43° 17.821' W	28° 50.863' N
D	71	1	43° 11.766' W	28° 45.370' N
D	71	2	43° 17.909' W	28° 45.450' N
D	71	3	43° 17.821' W	28° 50.863' N
D	71	4	43° 11.673' W	28° 50.783' N
D	72	1	43° 29.636' W	28° 40.170' N
D	72	2	43° 35.775' W	28° 40.236' N
D	72	3	43° 35.703' W	28° 45.650' N
D	72	4	43° 29.559' W	28° 45.584' N
D	73	1	43° 23.498' W	28° 40.100' N
D	73	2	43° 29.636' W	28° 40.170' N
D	73	3	43° 29.559' W	28° 45.584' N
D	73	4	43° 23.415' W	28° 45.513' N
D	74	1	43° 17.360' W	28° 40.024' N
D	74	2	43° 23.498' W	28° 40.100' N
D	74	3	43° 23.415' W	28° 45.513' N
D	74	4	43° 17.271' W	28° 45.438' N
D	75	1	43° 28.672' W	28° 34.745' N
D	75	2	43° 34.806' W	28° 34.812' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
D	75	3	43° 34.733' W	28° 40.226' N
D	75	4	43° 28.594' W	28° 40.159' N
E	76	1	44° 24.216' W	27° 13.474' N
E	76	2	44° 30.275' W	27° 13.498' N
E	76	3	44° 30.251' W	27° 18.914' N
E	76	4	44° 24.187' W	27° 18.891' N
E	77	1	44° 18.157' W	27° 13.447' N
E	77	2	44° 24.216' W	27° 13.475' N
E	77	3	44° 24.187' W	27° 18.891' N
E	77	4	44° 18.123' W	27° 18.863' N
E	78	1	44° 19.739' W	27° 8.040' N
E	78	2	44° 25.794' W	27° 8.066' N
E	78	3	44° 25.766' W	27° 13.483' N
E	78	4	44° 19.707' W	27° 13.456' N
E	79	1	44° 15.986' W	27° 2.603' N
E	79	2	44° 22.035' W	27° 2.632' N
E	79	3	44° 22.005' W	27° 8.049' N
E	79	4	44° 15.951' W	27° 8.019' N
E	80	1	44° 22.051' W	26° 59.736' N
E	80	2	44° 28.098' W	26° 59.761' N
E	80	3	44° 28.073' W	27° 5.178' N
E	80	4	44° 22.021' W	27° 5.153' N
E	81	1	44° 23.066' W	26° 54.323' N
E	81	2	44° 29.108' W	26° 54.347' N
E	81	3	44° 29.083' W	26° 59.764' N
E	81	4	44° 23.036' W	26° 59.740' N
E	82	1	44° 23.545' W	26° 48.909' N
E	82	2	44° 29.582' W	26° 48.933' N
E	82	3	44° 29.558' W	26° 54.350' N
E	82	4	44° 23.516' W	26° 54.326' N
E	83	1	44° 17.515' W	26° 46.908' N
E	83	2	44° 23.550' W	26° 46.936' N
E	83	3	44° 23.521' W	26° 52.353' N
E	83	4	44° 17.481' W	26° 52.325' N
E	84	1	44° 19.517' W	26° 41.499' N
E	84	2	44° 25.547' W	26° 41.525' N
E	84	3	44° 25.520' W	26° 46.943' N
E	84	4	44° 19.485' W	26° 46.916' N
E	85	1	44° 23.231' W	26° 36.102' N
E	85	2	44° 29.258' W	26° 36.126' N
E	85	3	44° 29.233' W	26° 41.543' N
E	85	4	44° 23.202' W	26° 41.519' N
E	86	1	44° 17.206' W	26° 36.074' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
E	86	2	44° 23.231' W	26° 36.102' N
E	86	3	44° 23.202' W	26° 41.519' N
E	86	4	44° 17.172' W	26° 41.491' N
E	87	1	44° 24.558' W	26° 30.695' N
E	87	2	44° 30.579' W	26° 30.718' N
E	87	3	44° 30.556' W	26° 36.135' N
E	87	4	44° 24.530' W	26° 36.112' N
E	88	1	44° 18.536' W	26° 30.668' N
E	88	2	44° 24.558' W	26° 30.695' N
E	88	3	44° 24.530' W	26° 36.112' N
E	88	4	44° 18.504' W	26° 36.085' N
E	89	1	44° 30.584' W	26° 27.701' N
E	89	2	44° 36.603' W	26° 27.720' N
E	89	3	44° 36.585' W	26° 33.137' N
E	89	4	44° 30.561' W	26° 33.119' N
E	90	1	44° 24.585' W	26° 25.282' N
E	90	2	44° 30.602' W	26° 25.305' N
E	90	3	44° 30.579' W	26° 30.722' N
E	90	4	44° 24.557' W	26° 30.699' N
E	91	1	44° 18.569' W	26° 25.255' N
E	91	2	44° 24.585' W	26° 25.282' N
E	91	3	44° 24.557' W	26° 30.699' N
E	91	4	44° 18.536' W	26° 30.672' N
E	92	1	44° 36.612' W	26° 23.534' N
E	92	2	44° 42.628' W	26° 23.549' N
E	92	3	44° 42.614' W	26° 28.966' N
E	92	4	44° 36.594' W	26° 28.952' N
E	93	1	44° 30.607' W	26° 22.284' N
E	93	2	44° 36.621' W	26° 22.302' N
E	93	3	44° 36.603' W	26° 27.720' N
E	93	4	44° 30.584' W	26° 27.701' N
E	94	1	44° 24.613' W	26° 19.864' N
E	94	2	44° 30.625' W	26° 19.887' N
E	94	3	44° 30.602' W	26° 25.305' N
E	94	4	44° 24.585' W	26° 25.282' N
E	95	1	44° 18.601' W	26° 19.838' N
E	95	2	44° 24.613' W	26° 19.864' N
E	95	3	44° 24.585' W	26° 25.282' N
E	95	4	44° 18.569' W	26° 25.255' N
E	96	1	44° 30.630' W	26° 16.866' N
E	96	2	44° 36.640' W	26° 16.885' N
E	96	3	44° 36.621' W	26° 22.302' N
E	96	4	44° 30.607' W	26° 22.284' N

<i>Cluster</i>	<i>Block No.</i>	<i>Corner</i>	<i>Longitude</i>	<i>Latitude</i>
E	97	1	44° 24.640' W	26° 14.447' N
E	97	2	44° 30.647' W	26° 14.470' N
E	97	3	44° 30.625' W	26° 19.887' N
E	97	4	44° 24.613' W	26° 19.864' N
E	98	1	44° 18.633' W	26° 14.420' N
E	98	2	44° 24.640' W	26° 14.447' N
E	98	3	44° 24.613' W	26° 19.864' N
E	98	4	44° 18.601' W	26° 19.838' N
E	99	1	44° 24.043' W	26° 9.020' N
E	99	2	44° 30.046' W	26° 9.043' N
E	99	3	44° 30.023' W	26° 14.461' N
E	99	4	44° 24.016' W	26° 14.438' N
E	100	1	44° 18.041' W	26° 8.993' N
E	100	2	44° 24.043' W	26° 9.020' N
E	100	3	44° 24.016' W	26° 14.438' N
E	100	4	44° 18.008' W	26° 14.411' N

Map of the general location of the area under application



Bathymetric map showing the detailed location of the area under application

