



Legal and Technical Commission

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Evaluation of the annual reports submitted by contractors

Report and recommendations of the Legal and Technical Commission

I. Introduction

1. The Legal and Technical Commission met during the eighth session of the Authority to evaluate the annual reports of contractors¹ submitted pursuant to the Regulations on Prospecting and Exploration for polymetallic nodules in the Area.² The Commission notes that one of the consequences of the signature of the contracts for exploration is the obligation on contractors to submit annual reports in accordance with the provisions of the contract. In this regard, the standard clauses set out in annex 4 to the Regulations contain detailed provisions relating to the format and content of such annual reports.³ The objective of these reporting requirements is to establish a mechanism whereby the Authority, and particularly the Legal and Technical Commission, can be provided with the information necessary to carry out its responsibilities under the Convention, particularly those relating to the protection of the marine environment from the harmful effects of activities in the Area. Additional guidance to contractors in preparing their annual reports has been provided in the form of a set of recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for polymetallic nodules in the Area issued

by the Commission in 2001 pursuant to regulation 38 of the Regulations.⁴ The purpose of the recommendations for guidance is to describe the procedures to be followed in the acquisition of baseline data by contractors, including the monitoring to be performed during or after any activities having the potential to cause serious harm to the environment, and to facilitate reporting by contractors.

2. The Commission notes that the first annual reports were due to be received at the end of March 2002. As at 5 July 2002, reports had been received from China Ocean Mineral Resources Research and Development Association (COMRA), Interoceanmetal Joint Organization (IOM), Deep Ocean Resources Development Ltd. (DORD) and the Republic of Korea. The Commission was provided with a preliminary evaluation of those reports prepared by the secretariat.⁵ The Commission was informed that, in July 2002, annual reports had been received from Yuzhmorgeologiya (Russian Federation) and IFREMER/AFERNOD (France). In addition, a periodic report covering the period from 1 January to 31 December 2001 had been submitted by the Government of India. It had not been possible, in the time available, for the secretariat to carry out a preliminary evaluation of those reports.

II. Evaluation of reports and recommendations

3. Taking the preliminary evaluation prepared by the secretariat as a starting point, the Commission discussed and evaluated the reports submitted by all the contractors. For this purpose, the Commission met in informal working groups to review the following aspects of the work carried out by the contractors: (a) exploration work; (b) environmental studies; (c) mining tests; and (d) legal and financial issues.

4. The Commission acknowledges the efforts that were made by the contractors to produce their first annual reports and notes that the quality of the reports, as well as the level of detail contained in them, represents a significant improvement over the periodic reports that had been submitted in previous years. It is noted that there are a number of elements missing from some of the reports and the Commission makes specific recommendations in relation to those elements. In the case of India, the Commission notes that the periodic report that was submitted covered activities in 2001, but that it was not presented in the format of an annual report since the contract between the Authority and the Government of India was not signed until 25 March 2002.

5. The Commission finds that all the contractors made efforts to comply with reporting requirements under the contract. However, the annual reports presented by the contractors have to be completed to enable the Commission to be properly informed. The Commission recommends that the Secretary-General request the contractors to fulfil these requirements in accordance with section 10.3 of the standard clauses.

III. Specific recommendations

6. The findings and recommendations of the Commission on the different reports are presented below.

A. Yuzhmorgeologiya

7. The contractor followed the programme of work submitted in its contract. The information given is comprehensive and follows the different items of section 10 of the standard clauses.

1. Summary of activities in the exploration area

Exploration work

8. Bathymetric survey, sampling, and photography were carried out in the exploration area. The contractor gave a very complete description of equipment and methodology used and of the results obtained. However, detailed information on the observations and measurements could have been made available.

Environmental studies

9. The contractor reported on analyses and data processing carried out during 2001 of the information acquired by the cruise conducted in 2000. This environmental study was carried out in the area of the benthic impact experiment (BIE II) undertaken seven years before.

Mining test

10. In accordance with the programme of work of the contractor, no work was carried out.

Training

11. In accordance with the programme of work of the contractor, no training was carried out.

Quantity of nodules recovered

12. A total of 453 kg of wet nodules was recovered.

Exploration expenditure

13. There is a breakdown of expenditure and appropriate certification.

Proposed adjustments to the future programme

14. The contractor proposed a change in the methodology for the investigation of nodule distribution and density to reflect the use of new methods and equipment. In addition, adjustments to the proposed expenditures over the first five-year period of the contract are proposed in order to reflect the actual expenditure during 2001.

Additional information provided by the Contractor

15. None.

2. Recommendations of the Commission

16. The Commission recommends to the Secretary-General to take the necessary steps to ensure that the proposed adjustments are made in accordance with the provisions of the standard clauses.

B. Interoceanmetal Joint Organization (IOM)

17. The contractor followed the programme of work submitted in its contract. The information given is comprehensive and follows the different items of section 10 of the standard clauses.

1. Summary of activities in the exploration area

Exploration work

18. One cruise was carried out in the exploration area in 2000 before the signature of the contract. However, processing and analyses of these data were performed in 2001. The contractor gave a very complete description of the equipment and methodology used and of the results obtained. Nevertheless, the locations of some observations and measurements are missing.

Environmental studies

19. The contractor reported on analyses and data processing carried out during 2001 of the information acquired by a cruise completed in 2000. This environmental study was conducted in the area of the benthic impact experiment (BIE) undertaken in 1995.

Mining test

20. In accordance with the programme of work of the contractor, no work was carried out.

Training

21. In accordance with the programme of work of the contractor, no training was carried out.

Quantity of nodules recovered

22. The nodule sample totalled 961.2 kg wet nodules. This included one haul of 700 kg that was split to provide samples for both analysis and archiving.

Exploration expenditure

23. The report contains full details of expenditure although no certification had been submitted. The Commission notes that the contractor stated in the report that the majority of the fieldwork had been undertaken prior to the reporting year but expenditure had been set against the cost attributed to the 2001 accounting year.

Proposed adjustments to the future programme

24. IOM proposed adjustments to its programme of activities that are favourably considered.

Additional information provided by the contractor

25. Additional information was given by the contractor both on its research programme on marine technology and processing of nodules and on its acquired meteorological and physical oceanography data.

2. Recommendations of the Commission

26. The Commission recommends that the contractor be requested to provide a statement in the proper form indicating the actual and direct expenditures of the relevant accounting year as well as the appropriate certification thereof. Moreover, additional information shall be given on the location of acquired photographic data. In addition, the Commission recommends to the Secretary-General to take the necessary steps to ensure that the proposed adjustments are made in accordance with the provisions of the standard clauses of the contract.

C. Republic of Korea

27. The contractor followed the programme of work submitted in its contract. The information given is comprehensive and follows the different items of section 10 of annex 4 to the Regulations.

1. Summary of activities in the exploration area

Exploration work

28. Two cruises of one month each were carried out in the exploration area. The contractor gives a very complete description of the equipment and methodology used and of the results obtained.

Information enabling the cross-referencing of the individual sampling stations and analyses with their locations should be provided in the next report.

Environmental studies

29. Environmental studies were carried out on the sediment characteristics, as well as on the biology of the upper water column and of the benthos.

Mining test

30. In accordance with the programme of work of the contractor, no work was carried out.

Training

31. In accordance with the programme of work of the contractor, no training was carried out.

Quantity of nodules recovered

32. A total of 376 kg of nodules was recovered.

Exploration expenditure

33. While a brief description of expenditure is supplied, no auditing or certification is presented.

Proposed adjustments to the future programme

34. None.

Additional information provided by the contractor

35. The contractor reported on the work completed in the field of mining and processing technologies.

2. Recommendations of the Commission

36. The Commission recommends that the contractor be requested to provide a statement in the proper form indicating the actual and direct expenditures of the relevant accounting year as well as the appropriate certification thereof.

D. China Ocean Mineral Resources Research and Development Association (COMRA)

37. The contractor followed the programme of work listed in its contract. The information given follows the different items of section 10 of the standard clauses.

1. Summary of activities in the exploration area

Exploration work

38. One cruise of 60 days' duration (two legs) was undertaken in the exploration area for exploration and environmental studies. The report lacks details of the results obtained and the location of measurement and sampling stations. The Commission considers that these missing data should be provided in the next report.

Environmental studies

39. COMRA reported on the progress with the NAVABA programme. Two North-South traverses were made in the East and West regions. Results of observations and measurements are provided as charts, figures and tables. During a test of mining equipment carried out in a lake, environmental parameters were also monitored.

Mining test

40. In accordance with the programme of work of the contractor, no work was carried out. However, COMRA reported on a lifting test carried out in a lake.

Training

41. In accordance with the programme of work of the contractor, no training was carried out.

Quantity of nodules recovered

42. No indication is given on the quantity of nodules recovered.

Exploration expenditure

43. COMRA submitted a financial statement without providing a breakdown of expenditure. The financial statement is not properly certified.

Proposed adjustments to the future programme

44. No adjustment to the programme of work is proposed. COMRA presented the programme for 2002.

Additional information provided by the Contractor

45. COMRA reported on a test of mining system in a lake and on its research on processing technologies.

2. Recommendations of the Commission

46. The Commission recommends that the financial statements be certified and that a full breakdown of expenditure be provided and also that additional information should be given on the exploration data. Furthermore, the Commission requires information regarding the quantity of nodules sampled.

E. Deep Ocean Resources Development Ltd. (DORD)

47. The programme of work only considered the analysis of data previously obtained. The information given follows the different items of section 10 of the standard clauses.

1. Summary of activities in the exploration area

Exploration work

48. In accordance with the programme of work, no cruise was carried out in the exploration area. The report contained statistical analyses of data and samples obtained prior to the contract. A synthesis of the survey results obtained was presented as a series of charts. No locations for these samples are provided.

Environmental studies

49. In accordance with the programme of work of the contractor, no work was carried out.

Mining test

50. In accordance with the programme of work of the contractor, no work was carried out.

Training

51. In accordance with the programme of work of the contractor, no training was carried out.

Quantity of nodules recovered

52. None.

Exploration expenditure

53. DORD supplied a summary of the expenditure for the year under consideration, certified by a public accountant. However, no breakdown of expenditure is provided.

Proposed adjustments to the future programme

54. None.

Additional information provided by the contractor

55. None.

2. Recommendations of the Commission

56. The Commission recommends that a full breakdown of expenditure be provided.

F. IFREMER/AFERNOD

57. The report of the contractor only considered future activities. The report did not comply with section 10 of annex 4 to the Regulations; however, information is given relating to a literature search carried out as well as additional information on development of new technologies.

1. Summary of activities in the exploration area

Exploration work

58. In accordance with the programme of work, no cruise was carried out. A schematic work plan is presented for the cruise scheduled for 2004.

Environmental studies

59. A literature search was carried out. The contractor noted that the methodologies in benthic fauna research varied greatly mainly due to the different methods of sampling as well as data and sample processing.

Mining test

60. In accordance with the programme of work of the contractor, no work was carried out.

Training

61. In accordance with the programme of work of the contractor, no training was carried out.

Quantity of nodules recovered

62. None.

Exploration expenditure

63. The report contains no indication of expenditure.

Proposed adjustments to the future programme

64. None.

Additional information provided by the contractor

65. The contractor provided information on the development of new technologies, on acoustical reflectivity and on a new generation of sub-sea instruments that could be used in future exploration work and environmental studies.

2. Recommendations of the Commission

66. The Commission recommends that the contractor be requested to submit a statement of expenditure in accordance with section 10.2 (c). If the expenditure is zero, this should be stated.

G. Government of India

67. The report submitted by India covered a period prior to the signature of the contract for exploration. Although the report was not submitted in a format consistent with section 10 of the standard clauses, it contains much useful information.

1. Summary of activities in the exploration area

Exploration work

68. Three cruises were carried out in the exploration area; two of them were undertaken for the re-evaluation of certain blocks in order to provide data for the relinquishment obligations. Little information is given on the results obtained or on the equipment and methodology used.

Environmental studies

69. Information is provided on the environmental assessment study carried out by the contractor. In 2001, the restoration and re-colonization of the disturbed area were investigated.

Mining test

70. None.

Training

71. None.

Quantity of nodules recovered

72. None.

Exploration expenditure

73. No indication of expenditure is given.

Proposed adjustments to the future programme

74. None.

Additional information provided by the contractor

75. The contractor provided additional information on its programme on mining and processing technologies.

2. Recommendations of the Commission

76. None.

IV. General recommendations

77. The Commission recommends that the annual reports submitted by contractors be prepared in a format enabling effective project management, monitoring and supervision of their progress vis-à-vis their proposed contract programme of work.

A. Exploration work

78. The Commission recommends that, where activities took place, the contractor should provide details of any information acquired in accordance with the format recommended by the Commission. Where no activity took place in relation with different components of section 10 of annex 4 to the Regulations, this should be indicated.

79. Where the annual report does not contain appropriate information in accordance with section 10 of annex 4 to the Regulations, the Commission recommends that the Secretary-General request the contractors to submit additional information by no later than the date on which the next annual report is due.

80. The Commission also recommends that the contractor supply information on data handling and

processing, including analytical procedures and archiving strategies. The recommendations arising from the 2001 workshop on standardization of environmental data and information should be used as a background guidance document in all sampling and analysis procedures.

81. The Commission further recommends that contractors indicate the degree of completion of this aspect of their contracted effort and furnish outline details of proposed work in this field for the following year.

82. The Commission further notes the importance of including in future annual reports more detailed information on the equipment used to carry out exploration work.

B. Environmental studies

83. The Commission notes that the contractors presented a great diversity of material. Much of the information is of value to the Authority. However, it is also noted that while the standard clauses emphasize the need for the results of environmental monitoring to be presented, they do not deal with the quality of the data to be submitted. The Commission emphasizes the need for contractors to comply with the recommendations for guidance and the standards adopted by the Authority's workshops on environmental guidelines and on standardization. The need for standardization of data is particularly stressed.

84. The Commission also recommends that the Secretary-General cooperate with the contractors to ensure that the results of such programmes are disseminated widely.

C. Mining tests

85. The Commission notes that several contractors gave information on the development of mining and processing technologies. The Commission recommends that the contractors continue to provide this information on a voluntary basis. The Commission finds that all contractors carried out activities relating to the development and testing of mining technology in accordance with their proposed programme of activities.

D. Legal and financial considerations

86. The first annual reports were due to be received no later than 31 March 2002. As the deadline is a contractual obligation, the contractors have to adhere strictly to future deadlines.

87. The Commission recommends that the contractors submit a costed programme of work for each accounting year.

88. Section 10.2 (c) is an important provision for those contractors who intend to claim expenditures for exploration as part of the development costs. The Commission recommends that the actual expenditures for the reporting period be provided in an appropriate audited certificate.

V. Methodology for future evaluation of annual reports

89. The Commission considers that the preliminary evaluation of annual reports carried out by the secretariat was of great value. For the future, however, the Commission recommends that a subcommittee of the Commission be established for this purpose. Its remit will be to help the secretariat prepare a draft evaluation of the annual reports for consideration by the full Commission. It was suggested that such a subcommittee could meet immediately prior to the annual session of the Commission, or in conjunction with the Authority's technical workshops.

90. The Commission also recommends that contractors be given the opportunity to present their annual report if they wish at the meeting of the Commission in order to respond to questions concerning the annual report or to provide further information concerning it.

91. To facilitate reporting by contractors, the Commission recommends that contractors utilize a standardized form of annual report, based on the provisions of the Regulations. A pro forma structure of such a report appears in the annex to the present document. The importance of standardization of data, in accordance with the recommendations of the Authority's workshop on standardization, is also stressed.

Notes

¹ The contractors are: State enterprise Yuzhmoregeologiya (Russian Federation); Interoceanmetal Joint Organization (IOM) (a consortium formed by Bulgaria, Cuba, the Czech Republic, Poland, the Russian Federation and Slovakia); the Republic of Korea; China Ocean Mineral Resources Research and Development Association (COMRA) (China); Deep Ocean Resources Research Ltd. (DORD) (Japan); Institut français de recherche pour l'exploitation de la mer/l'Association française pour l'étude et la recherche des nodules (IFREMER/AFERNOD) (France); Government of India.

² ISBA/6/A/18, annex.

³ *Ibid.*, annex 4, sect. 10.

⁴ ISBA/7/LTC/1/Rev.1.

⁵ ISBA/8/LTC/R.2.

Annex

Format and structure of annual reports

- Annual reports shall be submitted in accordance with the requirements of section 10 of annex 4 to the Regulations.
- Reports should be also submitted in electronic format where possible.
- The contractor should indicate its short-term (one-year), medium-term (five-year) and long-term (10-15 year) objectives. Contractors should be able to modify these objectives at any time taking into account local, regional or global circumstances. The reports should also contain information on project management to enable an overview of progress in implementation of the programme of work and, where applicable, training programmes.

Suggested heading and standardized content list for annual reports

Exploration work

- (a) Information regarding intended programme and its completion intended.
- Operational details of field survey and sampling programmes — surveys (type, duration, date), technical specification of instrumentation used. A comparison of the original work programme for this theme with the work actually carried out should be provided.
- (b) Results obtained and Techniques used.
- Data type(s) acquired (for example, swath bathymetry, sidescan, photography, deep-tow, multi-frequency sonar, seismic grabs, core (box-, piston- or gravity), trawl/dredge, etc); technical specification of equipment, and any calibration of equipment carried out; data volume (e.g., track lengths, if relevant; number of photographic records); chart compilations of data indicating location (survey tracks, deep-tow tracks); data format (e.g., analogue or digital); where chart or data display is relevant, appropriate details of scale, projection, reference system, should be included; for sample stations, locations plotted on appropriate scale charts which can be readily correlated with other data compilations (such as bathymetry); examples of data acquired (selected imagery, photographs) should be included in the report for quality and relevance assessment; operational methodology of all sampling methods should be included; operational methodology of all analytical methods should be included, including tolerances and accuracy estimates. Data analysis techniques, including analytical software programmes and any error margins; summary of quality assessment approach to handling and analysis of the data — not only quantity but also quality of data.
- Quantity by weight of nodule samples recovered.
- Future strategy — in the context of 5, 10 and 15 years. An indication should be given of the plan of activities for future work.

Environmental studies

(a) *Information regarding intended programme and its completion*

- Operational details — locations on charts; a comparison of the original work programme for this theme with the work actually carried out should be provided. Charts should show bathymetry with contour lines according to scale.

(b) *Results obtained and techniques used*

- Results — analytical techniques, number of graphical syntheses. Results should be accompanied with summary graphic representations of data on which the results are based. An indication should be provided to what extent the Authority's paper on recommendation for the guidance of contractors for the assessment of possible environmental impacts arising from exploration for polymetallic nodules (ISBA/7/LTC/1/Rev.1) and the recommendations arising from the Authority's standardization workshop of 2001 have been used in the environmental survey and monitoring. Results, data and their graphic representation should be published by the contractor or made available on open file.
- Future strategy — in the context of 5, 10 and 15 years. An indication should be given of the plan of activities for future work.

Mining tests

- Nature of hardware designed and tested (where applicable and where not equipment design data). Nature and results of experiments (where applicable).

Training programme

- Details of any relevant training programmes carried out.

Financial statement

- Detailed breakdown of expenditures, e.g., days allocated to cruises, number of sampling stations.
- In line with section 10.2 (c), the report should contain a financial statement of the actual and the direct exploration expenditures of the contractors in carrying out the programme of activities during the contractor's accounting year.
