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Application for approval of a plan of work for exploration for polymetallic nodules in the Area by China Minmetals Corporation

Executive summary*

I. Introduction

1. China Minmetals Corporation is pleased to submit an application for approval of a plan of work for exploration, pursuant to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (ISBA/19/C/17, annex). The Corporation is a State-owned enterprise established under the legal framework of China. It is mainly engaged in exploration, smelting, processing, trade, the mining of mineral resources and the development of metallurgical technology.

2. As a State-owned enterprise in the largest developing country in the world, China Minmetals Corporation strongly supports the principle of the common heritage of mankind and believes that all activities carried out in the international seabed area should benefit mankind as a whole. The Corporation upholds the idea of developing green and advanced technology and commits itself to deepening human knowledge of the deep sea, utilizing its resources sustainably and ensuring the effective protection and preservation of the marine environment.

3. As a member of the Global Compact LEAD platform of the United Nations, China Minmetals Corporation works in accordance with the Blueprint for Corporate Sustainability Leadership, integrates the principles of sustainable development into corporate governance and strives to ensure that its corporate growth brings about tangible, sustainable economic and social benefits.

* Submitted by the applicant.



II. Sponsorship

4. China sponsors the application of China Minmetals Corporation for approval of a plan of work for exploration for polymetallic nodules.

III. Application area

5. The application of China Minmetals Corporation covers an area of 72,740 km² within the reserved area in the Clarion-Clipperton Fracture Zone of the Pacific Ocean. The area comprises eight blocks in total.

IV. Financial capability

6. A financial statement signed by the Minister of Finance of China, Lou Jiwei, as a representative of the sponsoring State, certifies that China Minmetals Corporation has the financial resources necessary to meet the estimated costs of the proposed plan of work for exploration and to fulfil its financial obligation to the International Seabed Authority.

V. Technical capability

7. China Minmetals Corporation has been undertaking research in mining, ore dressing and metallurgical processing technology of ocean polymetallic nodules since the 1980s and runs the most important State-owned laboratory of deep-sea mineral resource development and utilization technology. The Corporation has carried out a long-term technical cooperation with institutes and experts in the field of ocean mining and metallurgical processing around the world and has accumulated extensive experience in this area.

8. China Minmetals Corporation employs a group of highly experienced professionals in the field of land resource exploration, including mineral resource appraisers and mineral reserve appraisers, certified public accountants and certified cost engineers, who can present independent reports on mineral exploration assessment, mineral resources and ore reserves, feasibility studies for mining projects and related public reports. These experts will contribute to the successful implementation of the proposed plan of work for exploration.

9. China Minmetals Corporation cooperates closely with the Second Institute of Oceanography and the Guangzhou Marine Geological Survey, which have technical capabilities and extensive experience in the exploration for and environmental surveys of the international seabed resources.

VI. Proposed plan of work

10. China Minmetals Corporation will carry out the proposed plan for exploration by using the knowledge and skills it has accumulated over the years during its research in mining and metallurgical processing technology for ocean minerals, as well as its experience in exploration for on-land mineral resources, together with the

capabilities and experience that the institutes it cooperates with have in the field of seabed polymetallic nodules.

11. The proposed exploration programme is set up as a long-term plan covering a period of 15 years. The activities covered in the plan of work for exploration include:

(a) Conducting survey cruises and analyses in the application area to obtain basic information and data for mineral and environmental assessment, as well as for designing and validating the mining and metallurgical processing system;

(b) Evaluating the quantity, quality, distribution and economic value of polymetallic nodules in the application area, in order to delineate and evaluate mine sites for commercial exploitation;

(c) Building environmental baselines in the application area and its adjacent areas, studying the biological diversity and the distribution characteristics of the communities and species in the application area, and evaluating the potential environmental impact of polymetallic nodule mining;

(d) Carrying out research in and the validation of the key technologies of mining and metallurgical processing; providing basic data for the technical and economic viability analysis through the validation of separate mining equipment and the integrated mining system; developing the technology for large-scale offshore engineering; focusing on the development of new methods of metallurgical processing of the polymetallic nodules, including new methods for the direct use of polymetallic nodules and new technology for the comprehensive utilization thereof; carrying out scoping studies and pre-feasibility studies if market situations are favourable; and estimating mineral reserves.

12. The proposed environmental survey will focus initially on setting environmental baselines for physical oceanography, biology, chemical oceanography and geology in the application area and adjacent areas, as well as for biological diversity by means of water extraction, biological sampling, sediment sampling and deep-sea video. Once the initial commercial recovery target site has been identified through the exploration surveys, the environmental baseline study will be expanded to address more localized parameters. China Minmetals Corporation will endeavour to integrate new baseline data with similar data of other contractors across the Clarion-Clipperton Fracture Zone in order to maximize the regional insights.

13. China Minmetals Corporation undertakes to comply strictly with the applicable international law and rules, including the United Nations Convention on the Law of the Sea, the 1994 Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, the rules, regulations and procedures of the Authority, the decisions of the relevant organs of the Authority and the terms of its contract with the Authority, and to implement the plan of work faithfully.¹

¹ China Minmetals Corporation has noticed that the Authority organized an international workshop on polymetallic nodules resources classification and another on taxonomic methods and standardization of macrofauna in the Clarion-Clipperton Fracture Zone. The Corporation will contribute to the formulation of rules, regulations and procedures of the Authority based on its own experience in exploration. It will carry out the plan of work for exploration in accordance with rules, regulations and procedures issued by the Authority.

VII. Environmental protection

14. China Minmetals Corporation is committed to a high-end, green and innovative development, applying a precautionary approach and best environmental practices to protect the environment and biodiversity. Based on the extensive experience in safety and environment management that it has gained during previous mineral resource development, and utilizing international expertise in ocean operation safety and marine environmental protection, the Corporation will take the measures necessary to prevent, minimize and control pollution and other hazards to the marine environment that may arise from its implementation of the proposed exploration programme, as far as reasonably possible.

15. In its implementation of the plan of work, China Minmetals Corporation will take measures to protect and preserve the environment in strict compliance with the United Nations Convention on the Law of the Sea, the Agreement of 1994, the rules, regulations and procedures of the Authority, the decisions of the relevant organs of the Authority, such as the 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](#)) and the Environmental Management Plan for the Clarion-Clipperton Fracture Zone ([ISBA/17/LTC/7](#)), and the terms of its contract with the Authority.

VIII. Training programme

16. China Minmetals Corporation, as an enterprise from a developing country, gives high priority to capacity-building. As part of the contract with the Authority, the Corporation will provide three separate training programmes to trainees from the Authority and developing countries. In the initial five years, the programme will offer 10 trainees the opportunity to expand their professional knowledge in such areas as geological surveying, environmental surveying, geophysical surveying, marine geology, biological and environmental research, mining, processing and metallurgical technology, recycling technology, marine science, environmental management and marine environmental protection.

IX. International cooperation and advancing science

17. China Minmetals Corporation has extensive experience in international cooperation and, in its implementation of the plan of work for exploration for polymetallic nodules, invites any institute or organization interested in the exploration for and development of seabed mineral resources to cooperate.

18. China Minmetals Corporation is committed to the advancement of science through implementing the plan of work for exploration. In compliance with the relevant regulations and requirements of the Authority, the Corporation will submit reports on its environmental data and findings to the Authority in a timely manner and share scientific information with the public and the international community, so as to facilitate scientific communication and improve the international community's understanding of the deep seabed.