



## Legal and Technical Commission

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Item 9 of the provisional agenda\*

### Consideration of applications for approval of plans of work for exploration

## Application for approval of a plan of work for exploration for cobalt-rich ferromanganese crusts by Earth System Science Organisation – Ministry of Earth Sciences, Government of India

### Executive summary<sup>1</sup>

1. On 18 January 2024, the Secretary-General of the International Seabed Authority received an application for approval of a plan of work for exploration for Cobalt-rich ferromanganese crusts in the Afanasy Nikitin Seamount (ANS) in the Central Indian Ocean submitted by Earth System Science Organisation (ESSO) - Ministry of Earth Sciences, Government of India, pursuant to the regulations on prospecting and exploration for cobalt-rich ferromanganese crusts in the Area (ISBA/18/A/11).
2. According to the application, ESSO is a government entity, and the application is sponsored by the Government of India. Its place of registration and principal place of business is New Delhi, and it is subject to the jurisdiction of India.
3. ESSO elects to offer an equity interest in a joint venture arrangement in accordance with Regulation 19.
4. The total area covered by the ESSO's application is 3,000 km<sup>2</sup>, located in the Central Indian Ocean and consists of 150 blocks, with none exceeding 20 km<sup>2</sup> in area. These blocks are organized and grouped into 6 Clusters, each containing from 12 to 50 blocks. The application area covering the 6 clusters is enveloped within an area measuring not more than 550 km by 550 km.
5. A breakdown of the clusters and the number of blocks contained in each cluster is as follows: Cluster A – 20 blocks; Cluster B – 30 blocks; Cluster C – 13 blocks; Cluster D – 50 blocks; Cluster E – 12 blocks; and Cluster F – 25 blocks.

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\* [ISBA/29/LTC/L.1](#)

<sup>1</sup> Submitted by the applicant.

6. In accordance with Regulation 21, ESSO has paid the application fee of \$500,000 to the International Seabed Authority.<sup>2</sup>
7. ESSO has submitted a programme of activities for the first five-year period.
8. The overall objectives of ESSO is to develop the exploration activities of cobalt-rich ferromanganese crusts by conducting an extensive geophysical, geological, biological, oceanographic, and environmental study in the proposed application area. The contractor will carry out the exploration activities in the proposed area considering the long-term plan covering a period of 15 years. The proposed work plan for the exploration of cobalt-rich crust at ANS will be accomplished in three main phases (Phase-I: 1 to 5 years, Phase-II: 6 to 10 years, and Phase-III: 11 to 15 years). The outcomes of the exploration activities carried out under Phase-I will further inform the planning of activities to be carried out in Phases II and III.
9. During Phase I, it is envisaged that exploration activities will take place in the proposed area covering 150 blocks with a view to identify the cobalt-rich ferromanganese crusts potential. Exploration surveys at sea up to 30 days per year are planned to conduct geophysical, geological, biological, oceanographic, and environmental studies. The results from geological and geochemical surveys will be used to demarcate the potential cobalt-rich ferromanganese crust blocks and to carry out focussed reconnaissance spot sampling using the available or fabricated sampling instruments to study the distribution of cobalt-rich ferromanganese crust and thickness. Further, training programs (on-land and at sea) for candidates selected by the International Seabed Authority will be implemented for a minimum of ten (10) trainees.

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<sup>2</sup> The Authority received the payment on 18 January 2024