



Legal and Technical Commission

Advance Unedited Version
9 February 2024

English only

Twenty-ninth session

Legal and Technical Commission, part I
Kingston, 4-15 March 2024

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 polymetallic massive sulphides by Earth System Science Organization – Ministry of Earth Sciences, Government of India

Executive summary¹

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 polymetallic sulphides in Carlsberg Ridge in the Indian Ocean Ridge submitted by Earth System Science Organisation (ESSO) - Ministry of Earth Sciences, Government of India pursuant to the regulations on prospecting and exploration for polymetallic sulphides in the Area (ISBA/16/A/Rev.1).
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 ESSO is 10,000 km² area, located in the Central Indian Ocean and consists of 100 blocks, each of 10km by 10km, with none exceeding 100 km² in area. These blocks are organized and grouped into 11 Clusters, each containing from 5 to 18 blocks. The application area covering the 11 clusters is enveloped within a rectangular area not exceeding 300,000 km² in size where the longest side does not exceed 1,000 km in length.
5. A breakdown of the clusters and the number of blocks contained in each cluster is as follows: Cluster A – 18 blocks; Cluster B – 15 blocks; Cluster C – 8 blocks; Cluster

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

¹ Submitted by the applicant.

D – 7 blocks; Cluster E – 16 blocks; Cluster F – 5 blocks; Cluster G – 5 blocks; Cluster H – 6 blocks; Cluster I – 5 blocks; Cluster J – 7 blocks; and Cluster K – 8 blocks;.

6. In accordance with Regulation 21 of the Regulations, ESSO has paid the application fee of \$500,000 to the International Seabed Authority.²

7. ESSO has submitted a programme of activities for the first five-year period.

8. The overall objective of ESSO is to explore regions of the Carlsberg Ridge with the purpose of locating hydrothermal vent fields that host massive sulphide deposits. The plan of work relating to exploration for hydrothermal sulphides is envisaged to be undertaken in three seamlessly continuous phases, Phase I, Phase II and Phase III corresponding to the year 1 to 5, year 6 to 10 and year 11 to 15 respectively from the date of approval of plan of work. The plans of work for the three phases have distinct but related objectives and the plans of work for Phase II and Phase III will be based on the outcomes of work emerging from Phase I and the technological advancement/innovations available progressively during the period.

9. The specific objectives of Phase I are to: (i) conduct preliminary exploration activities covering the entire 100 blocks leading to identification of potential blocks for hydrothermal sulphide mineralisation in the form of hydrothermal vent fields, and (ii) establish oceanographic and environmental baselines to allow precautionary assessment of impact on benthic and pelagic environment arising out of disturbances originating from exploration activities. ESSO will draw up a training programme in consultation with the Authority in accordance with regulation 29 and section 8 of Annex 4 to the Regulations for submission to the Authority for approval.

² The Authority received the payments on 18 January 2024.