

**GOVERNMENT OF INDIA
MINISTRY OF MINES**



**NATIONAL MINERAL EXPLORATION TRUST (NMET)
EXECUTIVE COMMITTEE MEMORANDUM FOR
BLOCK-1 OF THE PILOT PROJECT
“MULTISENSOR AEROGEOPHYSICAL SURVEYS
OVER OBVIOUS GEOLOGICAL POTENTIAL
AND ADJOINING AREAS OF INDIA”
FOR GEOLOGICAL SURVEY OF INDIA**

**Geological Survey of India
March, 2018**

**PROPOSAL TO EXECUTIVE COMMITTEE OF NATIONAL MINERAL EXPLORATION TRUST (NMET) FOR THE PILOT PROJECT “MULTISENSOR AEROGEOPHYSICAL SURVEYS OVER OBVIOUS GEOLOGICAL POTENTIAL AREAS OF INDIA, BLOCK-1”
FOR GEOLOGICAL SURVEY OF INDIA**

Introduction:

Geological Survey of India has identified an area of around 8.13 lac sq.km mainly in hard rock areas of the country as Obvious Geological Potential (OGP) areas for prioritisation of mineral search. With the speedy exhaustion of surface and near surface mineral wealth discovered through available expertise and resources, the focus of mineral exploration is now shifted to unravelling concealed and deep seated mineral deposits. Multisensor aero geophysical surveys are considered as one of the primary tools for locating these deposits. Hence it was proposed by GSI in the first governing body meeting of the National Mineral Exploration Trust (NMET) on 20th November, 2015 to cover the OGP and adjoining areas of India by multisensory airborne geophysical surveys.

Under this proposal, the OGP areas will be covered in two phases. In the 1st phase regional surveys will be carried out over the OGP and adjoining areas covering 8.13 lakh sq km using Magnetic Gradiometry and Spectrometric sensors at fixed height of 80 m and line spacing of 300 m in a span of three years. In the 2nd phase, high resolution detailed surveys will be carried out over the potential areas identified after the 1st phase of surveys using suitable geophysical sensors (Electromagnetic, Gravity, Gravity Gradiometry etc).

A Consultant was engaged during April, 2016 through a global tender process to prepare a detailed project report (DPR), EOI document and tender management to identify project implementing agencies (PIA). The DPR was approved by the Ministry of Mines in September, 2016.

As a pilot project of Phase 1, an area of 2,06,024 sq km spread over four identified blocks (Block-1, Block-2, Block-3 and Block-4) in western, central and eastern Indian cratonic areas is taken up during the first year, engaging project implementing agencies (PIA). The PIAs are selected through global tendering process. They will be responsible for acquiring, processing, interpretation of the aero geophysical data, preparation of the final maps, and submission of reports and identification of target blocks for mineral prognostication within the stipulated time period.

An expert third party independent consultant is engaged for technical supervision and quality control (TS-QC) of the entire project to maintain international standards. The TS-QC consultant was selected through global tender.

A Global tender was floated on 21st October, 2016 for selection of the Project Implementing Agencies(PIA) to carry out the aero geophysical survey over 2,06,024 sq km area (7,55,421 lkm) in four identified blocks during the first year. A Memorandum of Agreement (MOA) with the selected PIAs was signed by Director General, GSI on 17th January, 2017. The project was inaugurated by the Minister, MoM, on 7th April, 2017.

The current proposal is for **Block-1** of the OGP project.

Project Details of Block-1:

Project Implementing Agency	The consortium of M/s McPhar International (India), M/s EON Geosciences Inc. (Canada) and M/s Kiwi Air Ltd. (New Zealand)
Geological Background	Block-1 covers the western marginal areas of South Delhi Fold Belt in Rajasthan and Gujarat including the major part of the Malani Igneous Complex and Marwar Super group of rocks. This block has potential for polymetallic deposits and rare earth elements (REEs). Recently, REE prospects have been identified in Sarnu-Dandali and Siwana areas of Barmer district.
Area	53,855 sq km
Total Line Km	1,97,468 line km
Project Cost	Rs 27,04,58,446/- (Inclusive of all taxes)
Duration of the Project	One year
Project Initiation	Work order was issued to the PIA on 5 th January, 2017. Survey work initiated after obtaining all the required permissions from DGCA, MOD etc.
Project status	100% of area coverage and data acquisition completed
Amount Paid	Rs 1,62,27,507/- (Paid from the mineral exploration fund of MECL)
Balance Amount to be paid.	Rs 25,42,30,939/-
Earlier approvals	Expenditure sanction of Rs 111,34,14,645/- was accorded by Ministry of Mines vide F.No. 11/68/2011-M.I dated 29-12-2016 for

	implementation of the pilot project – Multisensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India”. It was conveyed that the expenditure involved will be met from the funds available with National Mineral Exploration Trust.
Approval sought	Approval for implementation of the Pilot Project - Multisensor Aerogeophysical Surveys over Block-1 at an estimated cost of Rs. 25,42,30,939/- (Rupees Twenty Five crore Forty Two Lakh Thirty Thousand Nine Hundred and Thirty Nine only).

F. No. 6/4/2015-NMET/632
Ministry of Mines
National Mineral Exploration Trust

New Delhi, the 19th April, 2018

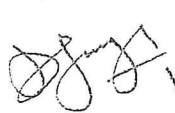
OFFICE MEMORANDUM

Subject: Approval of Multisensor Aero-Geophysical Surveys over OGP and adjoining areas.

As per the decisions of Governing Body and Executive Committee of NMET, GSI had proposed a three-year project to be taken up in phases. In first phase, an area of 2.07 lakh sq. km was to be covered by magneto-gradiometric and gamma-ray surveys. The proposal for exploration four blocks and engaging a consultant for Technical Supervision and Quality Control (TSQC) was approved by Standing Finance Committee (SFC) on 26th December 2016 at an estimated cost of Rs. 111,34,14,645. In pursuance of the approval by the SFC, the work of first phase was started.

2. The total estimated cost of these five components was revised to Rs. 108,30,45,422 as some parts of the original proposal were identified as no-fly zones by Ministry of Defence. An amount of Rs. 9.97 crore with due approval has been paid from Mineral Exploration Fund (MEF) of MECL as the accounting procedure was not finalized.

3. The Executive Committee in its 7th meeting, held on 12th March, 2018 accorded approval of remaining Rs. 98.33 crore for funding from NMET for Multisensor aero-geophysical multisensory surveys in 4 blocks and services of TS-QC consultant (List enclosed).


(Pradeep Singh)
Director, NMET

To
The Director General,
Geological Survey of India,
Central Headquarters,
27, J.L.N. Road, Kolkata- 700 016.

Copy for information to:

1. The Addl. Director General & Head, National Mission Head- IB, Geological Survey of India, Bhu-Bijnan Bhawan, DK-6, Sector-II, Salt Lake, Kolkata- 700 091

Details of Multisensor aero-geophysical survey blocks and TS-QC consultant approved in 7 th E meeting on 12.03.2018				
Sl. No.	Proposal	Approved Project cost (in Rs.)	Payment made under MEF (in Rs.)	Balance payment approved by 7 th EC under NMET (in Rs.)
1.	Pilot Project "Multisensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India, Block-1"	27,04,58,446.00	1,62,27,507.00	25,42,30,939.00
2.	Pilot Project "Multisensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India, Block-2"	24,03,69,718.00	Nil	24,03,69,718.00
3.	Pilot Project "Multisensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India, Block-3"	24,14,37,421.00	Nil	24,14,37,421.00
4.	Pilot Project "Multisensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India, Block-4"	23,31,78,865.00	6,86,99,154.00	16,44,79,711.00
5.	Pilot Project of "Multisensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India, TS-QC Consultant"	9,76,00,952.00	1,48,06,094.00	8,27,94,858.00
	Total	108,30,45,402.00	9,97,32,755.00	98,33,12,647.00