

**GOVERNMENT OF INDIA
MINISTRY OF MINES**



**NATIONAL MINERAL EXPLORATION TRUST (NMET)
EXECUTIVE COMMITTEE MEMORANDUM FOR
TS-QC CONSULTANT OF THE PROJECT
“MULTI-SENSOR AEROGEOPHYSICAL SURVEYS
OVER OBVIOUS GEOLOGICAL POTENTIAL
AND ADJOINING AREAS (BLOCKS 5 TO 12)”
FOR GEOLOGICAL SURVEY OF INDIA**

**Geological Survey of India
APRIL, 2019**

**PROPOSAL TO EXECUTIVE COMMITTEE OF NATIONAL MINERAL EXPLORATION TRUST
(NMET) FOR THE PROJECT “MULTI-SENSOR AEROGEOPHYSICAL SURVEYS OVER
OBVIOUS GEOLOGICAL POTENTIAL AND ADJOINING AREAS FOR
ENGAGING OF TS-QC CONSULTANT FOR BLOCKS 5 TO 12”**

Introduction:

Geological Survey of India has identified an area of around 8.13 lakh 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. Multi-sensor aerogeophysical 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 multi-sensor aerogeophysical surveys.

Under this proposal, the OGP areas will be covered in two Phases. In the Phase-1, 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 Phase-2, high resolution detailed surveys will be carried out over the target blocks identified after the Phase-1 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), Expression of Interest (EOI) document and tender management to identify Project Implementing Agencies (PIAs). The DPR was approved by the Ministry of Mines in September, 2016.

During first stage of Phase-1, an area of 1,94,131 Sq. Km (7,11,813 Line 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 (PIAs) through a global tender process during October, 2016. The PIAs are responsible for acquiring, processing, interpretation of the aerogeophysical data, preparation of the final maps, and submission of reports and identification of target blocks for mineral prognostication within the stipulated time period. This project is in the final stage of completion.

During First stage of Phase-1, an internationally recognised Technical Supervision cum Quality Control (TS-QC) consultant for OGP Blocks 1 to 4 was engaged during October, 2017 through global tender, to monitor overall activities and ensure the highest quality of data acquisition, processing, analysis, compilation/integration and interpretation leading to identify the target blocks. Ratification of data collected by PIA over OGP block-3 and monitoring corrections/modifications of draft reports and deliverables pertaining to Blocks 1, 2 & 4 are in the final stage of submission to GSI.

During the Second stage of Phase-I of the project (OGP Blocks 5 to 8), three Project Implementing Agencies (PIAs) were selected to carry out the aerogeophysical surveys over 3,11,846 Sq. Km area (11,43,435 Line Km) in four identified blocks (Block-5, Block-6, Block-7 and Block-8). Due to legal implication, the Director General, GSI has kindly accorded approval for cancellation of OGP Block-5 Tender and to be included in the IA, already filed for cancellation of Tender for OGP Blocks 6 to 8 in the Honourable High Court of Karnataka.

During the Third stage of Phase-I of the project (Blocks 9 to 12), two Project Implementing Agencies (PIAs) were selected through global tender floated in April, 2018 to carry out the aerogeophysical surveys over an area of 2,86,268 Sq. Km (10,49,649 Line Km) spread over four identified blocks (Block-9, Block-10, Block-11 and Block-12). The PIAs are responsible for acquiring, processing, interpretation of the aerogeophysical data, preparation of the final maps, and submission of reports and identification of target blocks for mineral prognostication within the stipulated time period. The PIA for Blocks 9 & 11 has started some calibrations from Nagpur Airport from 25th March, 2019 and remaining calibrations from Puttaparthi Air Base from 5th April, 2019. Survey production over OGP Block-11 likely to commence in the 3rd week of April, 2019.

An internationally recognised Technical Supervision cum Quality Control (TS-QC) consultant for OGP Blocks 5 to 12 has been selected through global tendering process to monitor the overall activities of PIAs and ensure the highest quality of data acquisition, processing, analysis, compilation/integration and interpretation leading to identify the target blocks. The current proposal is for TS-QC consultant for OGP Blocks 5 to 12 (Figure -1).

Project Details for TS-QC consultant:

Project Implementing Agency	M/s MAGSPEC Airborne Survey (Consortium of M/s MAGSPEC Airborne Survey, Australia, M/s Geophysique Camille St-Hilaire Inc., Canada and M/s Think India Hospitality Private Limited, India)
Area	5,98,114 Sq. Km (Blocks - 5 to 12)
Total Line Km	21,93,084 Line Km (Blocks - 5 to 12) (Table-1)
Project Cost	US Dollar 2625140.324 (including 18% GST)
Duration of the Project	20 Months
Project Initiation	The block-wise work order will be issued to the TS-QC Consultant after obtaining the financial sanction from NMET and signing of MoA between GSI & TS-QC Consultant.
Project status	TS-QC Consultant has been selected through global tender. Work order to be issued after financial sanction from NMET.
Earlier approvals	<p>(i) Office Memorandum with revised expenditure sanction of Rs.108,30,45,422/- (Rupees One Hundred and Eight Crore Thirty Lakh Forty Five Thousand Four Hundred and Twenty Two only) was accorded by Ministry of Mines vide F.No.6/4/2015-NMET/632 dated 19-04-2018 for implementation of the pilot project “Multi-sensor Aerogeophysical Surveys over Obvious Geological Potential and adjoining areas of India” for OGP Survey over Blocks 1 to 4 and TS-QC Consultant work for OGP Blocks 1 to 4. It was conveyed that the expenditure involved will be met from the funds available with National Mineral Exploration Trust.</p> <p>(ii) Revised Office Memorandum with expenditure sanction of Rs.1,55,62,75,157/- (Rupees One hundred and Fifty Five Crore Sixty Two Lakh Seventy Five Thousand One Hundred and Fifty Seven only) was accorded by Ministry of Mines vide F.No.6/2/2015-NMET dated 20-08-2018 for implementation of Multisensor Aerogeophysical Surveys over Blocks- 5 and 9 to 12.</p>

	(iii) Revised Office Memorandum with expenditure sanction of Rs.3,37,90,251/- (Rupees Three Crore Thirty Seven Lakh Ninety Thousand Two Hundred and Fifty One only) was accorded by Ministry of Mines vide F.No.6/2/2015-NMET dated 20-08-2018 for implementation of engaging a Consultant to identify the heliborne geophysical survey blocks, suitable sensors to be used, survey parameters to be employed, identify the PIAs and to ensure acquisition of high quality, purpose oriented geo-scientific data.
Approval sought	Approval of an estimated cost of US Dollar 2625140.324 (including 18% GST) towards engaging the TS-QC Consultant over OGP Blocks 5 to 12.

Table-1: Block-wise details of Area, Line Km, Cost including GST for OGP Blocks 5 to 12

Block No.	Block Area in Sq. Km	Block Line km	Cost in US Dollar	GST (18%) in US Dollar	Total Cost including GST in US Dollar
5	91,219	3,34,470	331125.300	59602.554	390727.854
6	76,049	2,78,846	284422.920	51196.1256	335619.0456
7	56,664	2,07,768	220234.080	39642.1344	259876.2144
8	87,914	3,22,351	319127.490	57442.9482	376570.4382
9	71,132	2,60,817	276466.020	49763.8836	326229.9036
10	91,801	3,36,604	333237.960	59982.8328	393220.7928
11	89,583	3,28,471	325186.290	58533.5322	383719.8222
12	33,752	1,23,757	134895.130	24281.1234	159176.2534
Total	5,98,114	21,93,084	2224695.190	400445.134	2625140.324

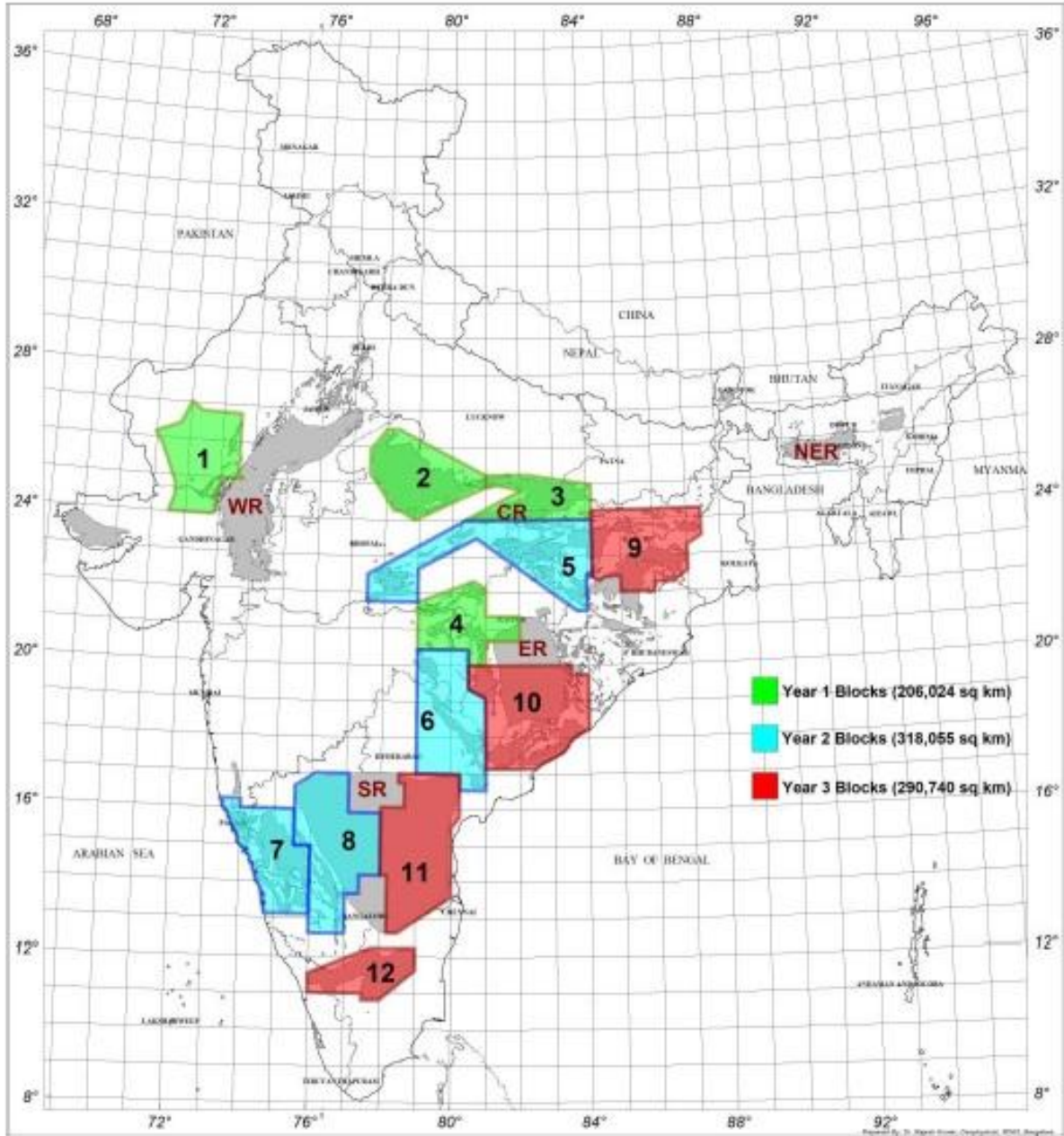


Figure-1. Current survey areas with Block numbers. Grey areas are referred to as areas of Obvious Geological Potential (OGP).