Ministry of Mines

Inauguration of Multi-Sensor Aero-Geophysical Surveys over Obvious Geological Potential (OGP) Areas Engaging International Agencies by Shri Piyush Goyal Tomorrow

Posted On: 06 APR 2017 4:05PM by PIB Delhi

Shri Piyush Goyal **@PiyushGoyal**, Minister of State (Independent Charge) for Power **@MinOfPower**, Coal **@CoalMinistry**, New and Renewable Energy **@mnreindia** and Mines **@MinesMinIndia**, will inaugurate the multisensory aero-geophysical survey of the Obvious Geological Potential (OGP) and adjoining areas of the country through video conferencing in the Constitution Club New Delhi tomorrow i.e. 7 April 2017. Two aircrafts equipped with geophysical sensors belonging to a consortium of service providers led by M/s McPhar International (India) with partners EON Geosciences Inc. (Canada) and Kiwi Air Ltd. (New Zealand) and brought from New-Zealand will be launched from Dr. Babsaheb Ambedkar International Airport, Nagpur for the aero-geophysical data acquisition.

The other two selected agencies i.e. M/s Scientific Production Centre GEOKEN Ltd Liability Partnership (Kazakhstan) with Helica s.r.l (Italy) and Secon Pvt. Ltd. (India) and M/s IIC Technologies Ltd (India) along with Geophysique GPR International Inc. (Canada) and Goldak Airborne Surveys (Canada) will start their operations in the third week of April 2017. The Mines Minister will also release a brochure of GSI on the Multi-sensor Aero-Geophysical Surveys over Obvious Geological Potential and adjoining areas.

With the exhaustion of conventional geological methods for mineral exploration based on surface manifestations in hard rock areas, necessity has arisen for search of concealed mineral deposits based on multi-thematic earth science (geological, geochemical, geophysical and remote sensing) data. The regional multi-sensor aero-geophysical surveys are considered worldwide as an important tool to scan large areas to demarcate favourable geological environments for hidden mineral resources in a short span of time. High quality aero-geophysical data are available over most of the already explored areas of many parts of the world such as Australia, Canada etc. and has resulted in locating many new concealed mineral deposits.

Geological Survey of India **@GeologyIndia** [#GSI] has been carrying out multi-sensor aero-geophysical surveys in different geological terrains of India since 1965. About **24 lakh square kilometres** area with about 15 lakh line km has been covered with various survey specifications under different projects until date. The study of aero-geophysical surveys has led to the discovery of number of mineral deposits like Kayar (Zn-Pb, 9.2 million tonnes), Aladahalli (massive sulphides, 4.5 million tonnes) in Karnataka and Golapalle (Pb-Zn, 14 million tonnes) in Andhra Pradesh. In addition to this, survey has also delineated significant Uranium anomaly in Nalgonda, Andhra Pradesh.

The National Mineral Exploration Policy NMEP unveiled in July 2016 has provisioned the implementation of a national geophysical mapping programme for acquiring baseline geoscience data in order to target **concealed and deep-seated mineral deposits**.

GSI has planned for multi-sensor Aero-geophysical Surveys over OGP and its adjoining areas by engaging international agencies through global tender process. Under this project, around **8.13 lakh sq. km. area** divided into 12 blocks is planned to be covered with **line spacing of 300 m** and at an **altitude of 80 m** above ground level. Initially four blocks have been taken up for the multisensory survey as a pilot project. In the first phase, GSI has taken up Magnetic-Gradiometric and Radiometric surveys by engaging Project Implementing Agencies (PIAs) for data acquisition, processing, integration and interpretation. The promising areas of mineral potential once identified by this project, further high resolution Electromagnetic, Gravity, Gravity-Gradiometric and Magnetic surveys will be done in selected smaller blocks. GSI has selected a consultant for the Technical Supervision and Quality Control (TS-QC) by global tender process for the completion of the pilot project to cover four identified blocks during 2017. The National Mineral Exploration Trust (NMET) is wholly funding the project and these surveys will be completed by December 2017.

Three PIAs are selected to carry out the multisensory survey. A consortium led by M/s McPhar International (India) with partners EON Geosciences Inc. (Canada) and Kiwi Air Ltd. (New Zealand) will cover two blocks, 59,111 sq. km. area (Block-1) falling in Barmer, Jodhpur, Pali, Jalore and Sirohi districts of Rajasthan and Palanpur district, Gujarat and 48,052 sq. km. area (Block-4) in Bhandara distict, Maharashtra and Balaghat, Rajnandgaon, Durg & Raipur districts, Chhattisgarh. The consortium led by M/s Scientific Production Centre GEOKEN Ltd Liability Partnership (Kazakhstan) with Helica s.r.l (Italy) and Secon Pvt. Ltd. (India) will cover 59,409 sq. km. area (Block-2) falling in Gwalior, Morena, Datia, Shivpuri, Tikamgarh, Chhatrapur & Panna districts of Madhya Pradesh and Hamirpur, Fatehpur , Banda, Orai, Lalitpur & Jhansi districts of Uttar Pradesh. M/s IIC Technologies Ltd (India) along with Geophysique GPR International Inc. (Canada) and Goldak Airborne Surveys (Canada) will cover 39,452 sq. km. area (Block-3) falling in Mirzapur district, U.P., Satna, Rewa districts, M.P. and Aurangabad, Sasaram & Daltungunj districts, Bihar.

M/s IDP Geosciences Services Pvt. Ltd. UK, a consortium of M/s Paterson, Grant & Watson Ltd. (Canada), International Geoscience Services Ltd (UK) and Datacode (India) has been appointed as TS-QC consultant. The geoscientists of the GSI will also be imparted hands on training by these international experts during each phase of the project implementation. **The total cost of the project including the TS-QC consultancy is estimated as Rs 111.34 Crore**.

The Government believes that this will not only help in identifying mineral potential areas of the country but with the release of the acquired geophysical data private investment will be attracted in the mineral exploration sector.

* * *

YSK/Uma