

accordance with the rates prescribed by the Central Labour Commissioner from time to time. He further clarified that any revision in these rates by the authority will be duly applicable. Additionally, he stated that as per the revised Schedule of Charges, statutory payments such as EPF, etc., if borne by the agency, will be reimbursed upon submission of valid supporting documents.

The PSC observed that two projects have been sanctioned to OMC and, in view of previous delays in execution of its exploration projects, expressed concern regarding timely completion of the newly sanctioned projects. In response, OMC stated that the earlier delays were primarily due to pending forest clearances; however, for the Betajhar and Kenamenta blocks, the required forest permissions have already been obtained from the Forest Department, and the agency will strictly adhere to the stipulated timelines.

Decision of PSC: PSC approved 19 exploration projects, as mentioned against the respective NPEAs in Table-5, with a total cost of Rs. 24.62 crore and deferred 01 project at Sl. No. 4.

Agenda 8.6: Approval for procurement of Time Domain Electromagnetic Survey Data Processing and Inversion Software

PSC was apprised that the Geological Survey of India is carrying out heliborne TDEM and magnetic surveys over selected blocks identified from NAGMP survey and legacy datasets over ~3,354 sq. km with 24,595 line km through an outsourced agency. Apart from that, Atomic Minerals Directorate for Exploration and Research and Central Ground Water Board have also shared TDEM data covering various parts of the country including Rajasthan, Gujarat, Haryana etc. with GSI.

Accordingly, GSI has submitted a proposal for procurement of a dedicated software to process and interpret the Heliborne TDEM data so that sub-surface conductivity models for improved geological interpretation, mineral targeting and resource evaluation can be carried out, with a timeline of one year.

The details of the software are given below:

| Sl. No. | Description | Cost in Rs. |
|----------------|---|---|
| 1 | Basic software with one-year mandatory warranty (excluding tax) | 1,00,98,200/- |
| 2 | 3 years additional extended warranty (excluding tax) | 66,85,400/- |
| 3 | Statutory tax (18% GST) | 30,21,084/- |
| | Total cost | 1,98,04,684/- (Rs. 1.98 Cr.) |

Shri N. K. Panda, Regional Director, Southern Region, AMD enquired about the name of the software for carrying out inversion of TDEM data. In response, Shri Anindya Bhattacharya, DDG, RSAS Bengaluru replied that Workbench software will be procured for carrying out inversion of TDEM data.

Decision of PSC: PSC approved the procurement of time domain electromagnetic survey data processing and inversion software with a total cost of Rs. 1.98 crore, as mentioned in table-6, with a timeline of 6 months. PSC further directed GSI to include the name of the software in all future references.

Agenda 8.7: Approval of cost revision of ongoing exploration projects

PSC was apprised that TCC-1 has recommended cost revision in respect of 02 projects for approval of PSC.

| S. No. | Block/Project | Agency | Approved cost (Rs.) (in lakh) | Revised cost (Rs.) (in lakh) | Change in Cost (Rs.) (in lakh) | Remarks | Decision of PSC |
|---------------|---|---------------|--------------------------------------|-------------------------------------|---------------------------------------|--|------------------------|
| 1 | Undertaking of Geo-chemical Analysis of mine samples by IBM through NMEDT fund [93 rd TCC-1] | IBM | 1280.49 | 818.57 | (-) 461.92 | Cost revised as the number of samples for chemical analyses were reduced and accordingly sampler man days and labor days were also reduced. Approval also sought for analysis of 213 samples for analysis of silver as an additional | Approved |

Note # 1

Proposal for the Procurement of Time Domain Electromagnetic Survey Data Processing and Inversion Software to be submitted to National Mineral Exploration and Development Trust

A. Introduction

RSAS, GSI is carrying out Heliborne Time Domain Electromagnetic (TDEM) & Magnetic surveys in different part of India over areas identified from the interpretation of regional aero-geophysical acquired through NAGMP project and from the available legacy data. Under this project high resolution TDEM data will be acquired over a total area of 3500 sq. km. with 25,545 line km. The project is being executed by the outsourced agency M/s Xcalibur McPhar Pvt. Ltd (PIA). The final processed data will be delivered by the PIA at the end of the project.

AMD, Hyderabad is also carrying out Heliborne TDEM and Magnetic surveys in various parts of India. So far, they have covered huge area in over 42 Blocks. GSI has entered into an agreement with AMD for mutually sharing aero-geophysical data with each other. Till date, AMD has shared TDEM data of 10 different areas covering 30,000 sq km area. The data of other areas will also be shared with GSI in future.

CGWB is also carrying out Heliborne TDEM and Magnetic surveys over parts of Rajasthan, Gujrat and Haryana. The raw TDEM data of this survey have been shared with GSI in October, 2025.

To further process and analyse all the Heliborne TDEM data presently available at RSAS dedicated software for airborne TDEM data processing and modelling is required. Inversion and modelling are crucial tools for unlocking the full potential of Heliborne TDEM data in mineral exploration. By providing quantitative conductivity models and guiding interpretations, they enable targeted exploration, improve resource evaluation, and ultimately contribute to successful mineral discoveries. To maximize the value of this data and extract crucial insights for geological interpretations, the acquisition of **specialized software for processing and inversion is essential.**

B. Necessity of Dedicated Software

Dedicated software offers several advantages:

1. QA-QC of the acquired TDEM data.
2. Advanced Processing Techniques: sophisticated filtering, noise reduction and data editing tools.
3. Forward modelling to compare simulated responses with measured data.
4. 2D or 3D inversion of the EM field data to create conductivity models.
5. Calculating quantitative parameters like depths, thicknesses, geometry of resistive/conductive layers and in very detailed analysis chargeability.
6. Precise Inversions: Specialized algorithms extract detailed subsurface conductivity/resistivity models, leading to more accurate interpretations.
7. Improved Visualization: 3D visualizations and interactive tools enhance understanding of subsurface features.

8. Increased Productivity: Automating repetitive tasks frees up time for interpretation and further analysis.

C. Benefits for GSI Operations

1. Quality control for acquired EM data and inverted EM data with visualization for accurate data analysis and accurate target selection.
2. Quantitative characterization: Provides numerical values for subsurface conductivity, aiding resource estimation and target assessment.
3. Improved targeting: Precise conductivity models pinpoint potential mineralized zones for further investigation.
4. Reduced ambiguity: Differentiates between various geological features with similar EM responses.
5. Cost-effectiveness: Guides drilling programs by prioritizing high-potential targets, saving time and resources.

D. The minimum specifications required for the Time Domain EM Data processing, Inversion and interpretation software are furnished in the below table:

| Sl. No | Specifications | | Justification/Remarks |
|--------|-----------------------|---|---|
| 1 | Data import formats | Should have the capacity to import data in ascii or XYZ format from all available HEM and TEM datasets. | For universal capability to import from all present and future Airborne EM data acquisition systems. |
| 2 | Data export formats | Should have the capability to export the imported (processed/raw) datasets, models (2D or 3D), grids etc in XYZ, ASCII, Raster formats (*.jpg, *.bmp, *.tif etc). | Export the processed data to some other format like JPG, TIF, ASCII, XYZ file etc for visualization of the output in any other equivalent software. |
| 3 | Coordinate projection | Should have the capacity to import datasets with various internationally recognised projections such as UTM, Kaliyanpur 1962, 1975 etc. | The software should be capable to import datasets with various globally accepted coordinates projection systems. |
| 4 | EM data processing | Should have the capability to filter data with Sign filters, Slope filters, | The software should be capable of filtering outliers with variable |

| | | | |
|----|---|--|--|
| | | altitude filters, trapezoidal shape filters, etc | lengths w.r.t depth and sign whichever is applicable for processing of raw EM data. |
| 5 | Conductivity depth Images | CDI displays in bars and interpolated formats. | The software should have the capability to display raw and processed data as CDIs and to export it in raster image formats such as .jpg and .bmp for quality control and qualitative interpretation. |
| 6 | Importing external grids | The software should have the capability to import external grids. | Required for DEMs and other relevant grids to be imported to aid in processing, visualization and inversion of the imported datasets. |
| 7 | GIS Interface | The software should have a GIS interface inbuilt. | Required to visualize and display all the relevant datasets and grids in a common window. |
| 8 | Accurate modelling of airborne systems. | The software should have the capability to model the airborne system accurately w.r.t transmitter receiver heights, shape of transmitter loop, transmitter waveform etc. | Required to have a precision model after inversion of datasets. |
| 9 | Inversion | The software should have the capability of laterally and spatially constrained inversions. | Required to have quasi 2D and quasi 3D inversions to negate the discontinuous nature of 1D inversion results of EM data in noisy environments. |
| 10 | Data Gridding | The software should have the capability to make 2d and 3d grids. | Required for inbuilt capability to grid and visualize the data obtained after inversion. |
| 11 | Inversion | The software should have the capability of smooth inversions, block inversions, sharp inversions and layered inversions. | Required so that the individual mode of inversions can be applied for different conditions. |
| 12 | DOI Estimates. | The software should have the capability to calculate the DOI for inverted datasets. | Required to have a knowledge of reliance of the quality of inverted model till a specific depth. |
| 13 | Constraining the model. | The software should have the capability to add prior constrains before inversion. | Required to constrain the EM inversion with another datasets such as borehole data etc. |

| | | | |
|----|------------------------------|--|---|
| 14 | IP Inversion | Should have capability to extract Cole-Cole parameters. | Required to extract IP effects from airborne EM datasets to have an additional information of the subsurface. |
| 14 | Feature extraction | Should have the capability to extract features from the inverted models which can be displayed as depth/elevation slides, point themes, interpolated grids and images. | Required to extract features such as Resistivity/ Conductivity, thickness of layer, low resistive layers etc. |
| 15 | Warranty | 1 years; On-site- OEM warranty | NA |
| 16 | Installation & Commissioning | Installation, Testing Commissioning and extensive Training and hands on practice of Geoscientist of RSAS, GSI for 14 days at user OEM location/ location of RSAS, GSI, Bengaluru. | NA |
| 17 | Hardware & OS | The bidder should provide minimum Hardware and Operating System requirement to install the supplied software. | NA |
| 18 | Terms & Conditions | <ol style="list-style-type: none"> 1. The supplied software should be from branded OEM Company. (OEM authorisation Certificate should be submitted with the Technical Bid). 2. Demonstration: If desired by GSI, RSAS will ask for demonstration during technical evaluation of the bid. The bidder then must arrange the demonstration within 15 days of such intimation. 3. The warranty of supplied product should be 1 year from the day of successful installation & commissioning at RSAS, GSI, Bengaluru. 4. Dedicated/Toll free number for service support need to | NA |

| | | | |
|--|--|--|--|
| | | <p>be provided with the technical bid.</p> <p>5. The provided software should have all the above listed requirements in a single package. Providing a bundle of software for specific purposes as defined above will not be allowed.</p> | |
|--|--|--|--|

E. Estimated cost

A market survey was done for the current industry standard TDEM currently available. A vendor M/s Datacode pvt. Ltd Nagpur was contacted for a quotation to estimate the price. The quotation was received from the vendor and price estimation was done for procurement. The estimated price as per the quotation for the above-mentioned software was estimated as Rs 1,19,15,876/- .

Approval is being sought from DDG & HoD, RSAS, Bengaluru to conduct RAC for above mentioned procurement.

The file is submitted to Director (GP), Technical Cordination for necessary action

[Revised Quotation for Workbench GSI RSAS.pdf](#)

12/01/2026 04:32 PM

ANSUMAN BAKSHI
Senior Geophysicist

Note # 2

RSAS वर्तमान में भारत भर में फैले 10 चिह्नित ब्लॉकों में लगभग 3500 वर्ग किलोमीटर क्षेत्र में उच्च रिज़ॉल्यूशन वाले हेलीकॉप्टर-आधारित टाइम डोमेन ईएम सर्वेक्षण कर रहा है। RSAS भविष्य में NAGMP ब्लॉकों में से चिह्नित कुछ उपयुक्त ब्लॉकों में भी ऐसे सर्वेक्षण करने की योजना है।

इसके अतिरिक्त, RSAS ने AMD (30,000 वर्ग किलोमीटर क्षेत्र) और CGWB द्वारा प्राप्त हेलीकॉप्टर-आधारित TDEM डेटा भी प्राप्त किया है।

इन विशाल TDEM डेटा सेटों को आगे संसाधित और विश्लेषण करने के लिए, RSAS के पास वर्तमान में कोई उपयुक्त सॉफ्टवेयर नहीं है।

विस्तृत औचित्य, समर्पित ईएम डेटा प्रोसेसिंग और व्याख्या सॉफ्टवेयर की खरीद में GSI को होने वाले लाभ और सॉफ्टवेयर के सामान्य तकनीकी विनिर्देश नोट #1 में उल्लिखित हैं। एक संभावित विक्रेता से प्राप्त सॉफ्टवेयर की अनुमानित लागत का कोटेशन पिछले नोट में संलग्न है।

डीडीजी, जीपी से अनुरोध है कि वे डीडीजी और विभागाध्यक्ष, आरएसएस से लगभग 1,19,15,876/- रुपये की लागत पर ईएम डेटा प्रोसेसिंग की खरीद के लिए आरएसी आयोजित करने हेतु अनुमोदन प्राप्त करें।

RSAS is presently carrying out high resolution Heliborne Time Domain EM surveys in 10 identified blocks spread across India covering about 3500 sq. km. area. RSAS also has plans to carry out such surveys in future over certain suitable blocks identified from the ongoing NAGMP Blocks.

Additionally RSAS also has obtained heliborne TDEM data acquired by AMD (30,000 sq. km. area) and CGWB.

To further process and analyse this huge TDEM data sets, RSAS presently has no suitable software.

The detailed justification, benefits to GSI in procuring a dedicated EM data processing and interpretation software and also the generalised technical specifications of software is mentioned in Note#1. A quotation for the approximate cost of the software obtained from one probable vendor is attached in the previous note.

DDG, GP is requested to obtain approval for conducting RAC for the procurement of EM data processing at an approximate cost of Rs 1,19,15,876/- from DDG & HoD, RSAS.

12/01/2026 04:50 PM

H RAJARAM
Director

Note # 3

Reference Note #1

नोट सं. # 1 एवं 2 के आलोक में, बड़े TDEM डाटा सेट्स के प्रसंस्करण एवं विश्लेषण हेतु आवश्यक सॉफ्टवेयर की विस्तृत आवश्यकताएँ प्रस्तुत की गई हैं। वर्तमान में, भूभौतिकी प्रभाग, आरएसएस, जीएसआई में इस उद्देश्य हेतु कोई उपयुक्त सॉफ्टवेयर उपलब्ध नहीं है।

अतः, उप महानिदेशक (भू), एवं विभागाध्यक्ष, आरएसएस, जीएसआई से अनुरोध है कि वे उपर्युक्त सॉफ्टवेयर की खरीद हेतु ₹1,19,15,876/- (रुपये एक करोड़ उन्नीस लाख पंद्रह हजार आठ सौ छिहत्तर मात्र) की अनुमानित लागत पर प्रशासनिक स्वीकृति प्रदान करने तथा उक्त सॉफ्टवेयर की खरीद के लिए RAS आयोजित करने की स्वीकृति प्रदान करने की कृपा करें।

In view of Note Nos. 1# 2, the detailed requirements of software for processing and analysing large TDEM datasets have been projected. At present, no suitable software for this purpose is available in the Geophysics Division, RSAS, GSI.

Accordingly, Dy. DG(G) & HoD, RSAS, GSI is requested to kindly accord Administrative Approval for procurement of the said software at a tentative cost of ₹1,19,15,876/- (Rupees One Crore Nineteen Lakh Fifteen Thousand Eight Hundred and Seventy-Six only), along with approval for conducting the RAS for procurement of the above-mentioned software.

13/01/2026 10:13 AM

CHATTER SAIN VERMA
Deputy Director General

Note # 4

1. ₹1,19,15,876/- (रुपये एक करोड़ उन्नीस लाख पंद्रह हजार आठ सौ छिहत्तर) की अस्थायी लागत पर एक समर्पित ईएम डेटा प्रोसेसिंग और व्याख्या सॉफ्टवेयर की खरीद के लिए प्रशासनिक मंजूरी दी गई है।/Administrative Approval is accorded for procurement of a dedicated EM data processing and interpretation software at a tentative cost of ₹1,19,15,876/- (Rupees One Crore Nineteen Lakh Fifteen Thousand Eight Hundred and Seventy-Six only).
2. उपर्युक्त सॉफ्टवेयर की खरीद हेतु आरएसी आयोजित करने हेतु अनुमोदन प्रदान किया जाता है।/Approval is accorded for conducting the RAC for procurement of the above-mentioned software.

उपर्युक्त सॉफ्टवेयर के लिए आरएसी आयोजित करने के लिए फ़ाइल एपीएमडी, आरएसएस को भेज दी गई है।/The file is forwarded to APMD, RSAS for conducting RAC for the above mentioned software.

निदेशक एवं ओआईसी, एपीएमडी कृपया

13/01/2026 05:04 PM

ANINDYA BHATTACHARYA
Deputy Director General

Note # 5

RAC आज (यानी 16 जनवरी 2026) किया गया, n/a के लिए फॉरवर्ड किया गया।

डायरेक्टर, GP, RSAS कृपया

RAC done today (i.e 16th Jan 2026), forwarded for n/a.

The Director,GP,RSAS please

16/01/2026 11:39 AM

Kalyanam V S S Krishna
Director

Note # 6

Please prepare the procurement indent and resubmit

16/01/2026 05:32 PM

H RAJARAM
Director

Note # 7

नोट संख्या 4 के अनुसार, टाइम डोमेन इलेक्ट्रोमैग्नेटिक (टीडीईएम) सर्वेक्षण डेटा प्रोसेसिंग और इनवर्जन सॉफ्टवेयर की खरीद के लिए 16.01.2026 को आरएसी (RAC) आयोजित की गई थी। इस सॉफ्टवेयर का उपयोग टीडीईएम डेटा के क्यूए-क्यूसी कार्य, चालकता मॉडल तैयार करने के लिए ईएम डेटा के 2डी/3डी इनवर्जन, और प्रतिरोधक/चालक परतों की गहराई, मोटाई, ज्यामिति जैसे मात्रात्मक मापदंडों की गणना और चार्ज करने की क्षमता के विस्तृत विश्लेषण के लिए किया जाना था। हस्ताक्षरित आरएसी कार्यवाही विवरण आपकी जानकारी के लिए फाइल में रखा गया है। / As per Note No. 4, the RAC was conducted on 16.01.2026 for the procurement of Time Domain Electromagnetic (TDEM) Survey Data Processing and Inversion Software for carrying out QA-QC work of TDEM data, 2D/3D inversion of EM data to generate conductivity models, and for calculating quantitative parameters such as depths, thicknesses, geometry of resistive/conductive layers, and detailed analysis of chargeability. The signed RAC minutes are placed in the file for your kind information.

इस संबंध में, विक्रेता से प्राप्त विस्तृत प्रस्ताव, स्व-निहित नोट और अनुमान को डीजी, जीएसआई, कोलकाता से अनुमोदन प्राप्त करने हेतु फाइल में रखा गया है। यदि अनुमोदित हो जाता है, तो प्रस्ताव और स्व-निहित नोट को एनएमईटी को भेजा जा सकता है ताकि हेलीबोर्न सर्वे परियोजना के लिए टाइम डोमेन ईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रेटेशन सॉफ्टवेयर की खरीद, संबंधित स्थापना, प्रशिक्षण, अनिवार्य एक वर्षीय वारंटी और अतिरिक्त तीन वर्षीय विस्तारित वारंटी के लिए अनुमानित लागत 1,98,04,648/- रुपये (एक करोड़ 98 लाख 4608 रुपये मात्र), जिसमें 18% जीएसटी शामिल है, के लिए प्रशासनिक अनुमोदन प्राप्त किया जा सके।

/ In this regard, the detailed proposal, Self-Contained Note, and estimate received from the vendor are placed in the file for obtaining approval from DG, GSI, Kolkata. If approved, the proposal and Self-Contained Note may be forwarded to NMET to obtain administrative approval for the estimated cost of Rs. 1,98,04,648/- (Rupees One Crore Ninety-Eight Lakhs Four Thousand Six Hundred Forty-Eight Only), inclusive of 18% GST, for procurement of the Time Domain EM Data Processing, Inversion, and Interpretation Software, along with associated installation, training, mandatory one-year warranty, and an additional three-year extended warranty for the Heliborne Surveys Project.

निम्नलिखित के लिए अनुमोदन आवश्यक है:/ Approval is required for:

1. टाइम डोमेन ईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रेटेशन सॉफ्टवेयर की खरीद के लिए मसौदा प्रस्ताव और स्व-निहित नोट का अनुमोदन। / Approval of draft proposal and self-contained note for

procurement of the Time Domain EM Data Processing, Inversion, and Interpretation Software.

2. टाइम डोमेन ईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए एनएमईडीटी, मोम, नई दिल्ली से निधि प्राप्त करने हेतु प्रस्ताव और एससीएन को एनएमईडीटी, मोम, नई दिल्ली को प्रस्तुत करने का अनुमोदन। / Approval for submitting the proposal and SCN to NMEDT, MoM, New Delhi to obtain the funding from NMEDT for procurement of the Time Domain EM Data Processing, Inversion, and Interpretation Software.

कृपया आगे की आवश्यक कार्रवाई के लिए फाइल निदेशक (जीपी), जीपी-सीटी को प्रस्तुत की जाती है। / The file is submitted to Director (GP), GP-CT, for further necessary action, please.

[Proposal for procurement of TDEM data processing software.docx](#)

[SCN for procurement of TDEM data processing software.docx](#)

[RAC minutes for procurement of Geophysical Processing Software.pdf](#)

[Revised Quotation for Workbench GSI RSAS Jan 2026 .pdf](#)

12/02/2026 10:32 AM

ANTONY SELIN RAJ

Director

Note # 8

RSAS वर्तमान में 10 चिन्हित ब्लॉकों पर हेलीकॉप्टर आधारित टाइम डोमेन ईएम (टीडीईएम) सर्वेक्षण कर रहा है। डेटा की गुणवत्ता की जांच और प्रमाणीकरण के लिए एक टीएस-क्यूसी (डेटा गुणवत्ता नियंत्रण) टीम नियुक्त की गई है। हालांकि, RSAS के पास फिलहाल टीडीईएम डेटा की जांच, प्रसंस्करण और व्याख्या करने के लिए कोई विशेष सॉफ्टवेयर नहीं है।

जीएसआई और एएमडी के बीच पारस्परिक डेटा साझाकरण समझौते के अनुसार, एएमडी द्वारा प्राप्त हेलीबोर्न टीडीईएम डेटा जीएसआई के साथ साझा किया जा रहा है। सीजीडब्ल्यूबी ने भी अपने द्वारा प्राप्त हेलीबोर्न टीडीईएम डेटा को जीएसआई के साथ साझा किया है।

अतः, आरएसएस के पास उपलब्ध सभी टीडीईएम डेटा के लाभकारी उपयोग को देखते हुए, टीडीईएम डेटा के प्रसंस्करण और व्याख्या के लिए एक समर्पित सॉफ्टवेयर की खरीद आवश्यक है। इस संबंध में बाजार सर्वेक्षण किया गया और संभावित आपूर्तिकर्ता से कोटेशन प्राप्त किए गए। खरीद के लिए आरएसी (अनुरोध समिति) 16-01-2026 को आरएसएस, बेंगलुरु में आयोजित की गई (कार्यवाही विवरण नोट #7 में संलग्न है)।

जीएसआई के महानिदेशक ने तीसरी विभागाध्यक्ष बैठक के दौरान एनएमईडीटी के माध्यम से ईएम डेटा प्रोसेसिंग सॉफ्टवेयर की खरीद के लिए जल्द से जल्द प्रस्ताव प्रस्तुत करने का निर्देश दिया है।

तदनुसार, टीडीईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए एक प्रस्ताव तैयार किया गया है, जिसमें संबंधित स्थापना, प्रशिक्षण, अनिवार्य एक वर्षीय वारंटी और अतिरिक्त तीन वर्षीय विस्तारित वारंटी शामिल है। इसकी अनुमानित लागत 1,98,04,648/- रुपये (एक करोड़ 98 लाख 400 648 रुपये मात्र) है,

जिसमें 18% जीएसटी शामिल है। यह प्रस्ताव सभी आवश्यक सहायक दस्तावेजों के साथ फाइल में रखा गया है (नोट #7 संलग्न)।

कृपया निम्नलिखित के लिए महानिदेशक, जीएसआई से अनुमोदन प्राप्त करें:

1. टाइम डोमेन ईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए मसौदा प्रस्ताव और स्व-निहित नोट।
2. टीडीईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए प्रशासनिक अनुमोदन प्राप्त करने हेतु प्रस्ताव को एनएमईडीटी को भेजना।

RSAS is presently carrying out Heliborne Time Domain EM (TDEM) surveys over 10 identified Blocks. A TS-QC is engaged to check and certify the Data quality. However, RSAS presently has not dedicated software to check, process and interpret the TDEM data.

As per the mutual data sharing agreement between GSI and AMD, Heliborne TDEM data acquired by AMD is being shared with GSI. CGWB has also shared Heliborne TDEM data acquired by them with GSI.

Hence in view of gainful utilization all the TDEM data available with RSAS a dedicated Software for processing and interpreting TDEM data has needs to be procured.

In this regard market survey was carried out and quotation from probable supplier has been obtained. RAC for procurement was conducted on 16-01-2026 (Minutes attached @ Note#7) at RSAS, Bengaluru.

DG, GSI during 3rd HoD meeting has instructed for submitting a proposal for the procurement of EM data processing software through NMEDT at the earliest.

Accordingly, a proposal for procurement of the TDEM Data Processing, Inversion, and Interpretation Software, along with associated installation, training, mandatory one-year warranty, and an additional three-year extended warranty at an estimated cost of Rs. 1,98,04,648/- (Rupees One Crore Ninety-Eight Lakhs Four Thousand Six Hundred Forty-Eight Only), inclusive of 18% GST, has been prepared and placed in the file along with all necessary supporting documents (attached @ Note#7).

Approval may please be obtained from DG, GSI for the following:

1. Draft proposal and self-contained note for procurement of the Time Domain EM Data Processing, Inversion, and Interpretation Software.
2. For sending the proposal to NMEDT for to obtaining administrative approval for procurement of the TDEM Data Processing, Inversion, and Interpretation Software.

12/02/2026 12:06 PM

H RAJARAM
Director

Note # 9

Reference Note # 7

नोट क्रमांक 7 एवं 8 के संदर्भ में, निम्नलिखित बिंदुओं पर महानिदेशक, जीएसआई की कृपया स्वीकृति प्राप्त की जाए:

1. टाइम डोमेन ईएम (TDEM) डाटा प्रोसेसिंग, इनवर्जन एवं इंटरप्रीटेशन सॉफ्टवेयर की खरीद हेतु प्रारूप प्रस्ताव एवं स्व-निहित टिप्पणी (नोट क्रमांक 7 पर संलग्न)।
2. उपर्युक्त TDEM डाटा प्रोसेसिंग, इनवर्जन एवं इंटरप्रीटेशन सॉफ्टवेयर की खरीद के लिए प्रशासनिक स्वीकृति प्राप्त करने हेतु प्रस्ताव को NMEDT, खान मंत्रालय, नई दिल्ली को प्रेषित करने की अनुमति। आवश्यक सभी सहायक दस्तावेज नोट क्रमांक 7 पर संदर्भ हेतु संलग्न हैं।

In view of the Note # 7 & 8, approval may please be obtained from DG, GSI for the following:

1. Draft proposal and self-contained note for procurement of the Time Domain EM Data Processing, Inversion, and Interpretation Software (Attached at Note # 7).
2. For sending the proposal to NMEDT , Ministry of Mines, New Delhi for to obtaining administrative approval for procurement of the TDEM Data Processing, Inversion, and Interpretation Software.All necessary supporting documents are attached @ Note#7 for ready reference.

13/02/2026 10:02 AM

CHATTER SAIN VERMA
Deputy Director General

Note # 10

- आरएसएस वर्तमान में 10 चिन्हित ब्लॉकों पर हेलिबोर्न टाइम डोमेन ईएम (टीडीईएम) सर्वेक्षण कर रहा है। आरएसएस के पास वर्तमान में टीडीईएम डेटा की जांच, प्रसंस्करण और व्याख्या करने के लिए कोई समर्पित सॉफ्टवेयर नहीं है। RSAS is presently carrying out Heliborne Time Domain EM (TDEM) surveys over 10 identified Blocks. RSAS presently do not have a dedicated software to check, process and interpret the TDEM data.
- जीएसआई और एएमडी के बीच आपसी डेटा साझाकरण समझौते के अनुसार, एएमडी द्वारा प्राप्त हेलिबोर्न टीडीईएम डेटा को जीएसआई के साथ साझा किया जा रहा है।/As per the mutual data sharing agreement between GSI and AMD, Heliborne TDEM data acquired by AMD is being shared with GSI.
- सीजीडब्ल्यूबी ने उनके द्वारा प्राप्त हेलिबोर्न टीडीईएम डेटा को जीएसआई के साथ भी साझा किया है।/CGWB has also shared Heliborne TDEM data acquired by them with GSI.
- उपलब्ध टीडीईएम डेटा के प्रस्तावक मूल्यांकन, व्याख्या और उपयोग के लिए टीडीईएम डेटा के प्रसंस्करण और व्याख्या के लिए एक समर्पित सॉफ्टवेयर खरीदने की आवश्यकता है।For proposer assessment, interpretation and utilization of the available TDEM data a dedicated Software for processing and interpreting TDEM data needs to be procured.
- बाजार सर्वेक्षण किया गया और संभावित आपूर्तिकर्ता से कोटेशन प्राप्त किया गया है।Market survey was carried out and quotation from probable supplier has been obtained.

- खरीद के लिए आरएसी 16-01-2026 को आरएसएस, बेंगलुरु में आयोजित की गई थी (नोट#7 पर मिनट संलग्न) IRAC for procurement was conducted on 16-01-2026 (Minutes attached @ Note#7) at RSAS, Bengaluru.
- संबंधित इंस्टॉलेशन, प्रशिक्षण, अनिवार्य एक साल की वारंटी और अतिरिक्त तीन साल की विस्तारित वारंटी के साथ टीडीईएम डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद का प्रस्ताव अनुमानित लागत रु. 1,98,04,648/- (रुपए एक करोड़ अठानवे लाख चार हजार छह सौ अड़तालीस मात्र), 18% जीएसटी सहित, पर तैयार कर लिया गया है और सभी आवश्यक सहायक दस्तावेजों (संलग्न @नोट#7) के साथ फाइल में रख दिया गया है। A proposal for procurement of the TDEM Data Processing, Inversion, and Interpretation Software, along with associated installation, training, mandatory one-year warranty, and an additional three-year extended warranty at an estimated cost of Rs. 1,98,04,648/- (Rupees One Crore Ninety-Eight Lakhs Four Thousand Six Hundred Forty-Eight Only), inclusive of 18% GST, has been prepared and placed in the file along with all necessary supporting documents (attached @ Note#7).

Approval may please be obtained from the Director General, GSI for the following points:

1. रुपये 1,98,04,648/- (रुपए एक करोड़ अठानवे लाख चार हजार छह सौ अड़तालीस मात्र), 18% जीएसटी सहित की अनुमानित लागत पर टाइम डोमेन ईएम डेटा (टीडीईएम) प्रसंस्करण, इनवर्जन और व्याख्या सॉफ्टवेयर की खरीद के लिए मसौदा प्रस्ताव और स्व-निहित नोट को मंजूरी।/Approval for the draft proposal and Self Contained Note for procurement of Time Domain EM Data (TDEM) Processing, Inversion, and Interpretation Software at an estimated cost of Rs. 1,98,04,648/- (Rupees One Crore Ninety-Eight Lakhs Four Thousand Six Hundred Forty-Eight Only), inclusive of 18% GST.
2. टाइम डोमेन ईएम डेटा (टीडीईएम) प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए प्रशासनिक मंजूरी प्राप्त करने के लिए एनएमईडीटी को प्रस्ताव भेजने के लिए भी मंजूरी मांगी गई है।Approval is also sought for sending the proposal to NMEDT for obtaining administrative approval for procurement of Time Domain EM Data (TDEM) Processing, Inversion, and Interpretation Software.

अपर महानिदेशक, पीएसएस कृपया

13/02/2026 10:50 AM

ANINDYA BHATTACHARYA
Deputy Director General

Note # 11

May please examine.

13/02/2026 11:36 AM

JOYESH BAGCHI
Additional Director General

Note # 12

Reference Note #10

TDEM डेटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के संबंध में आरएसएस, बेंगलुरु से प्राप्त प्रस्ताव की पीएसएस-सोमवार 1 में जांच की गई है और टिप्पणियाँ नीचे दी गई हैं।

1. टीडीईएम डाटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए RSAS के प्रस्ताव की RAC, RSAS द्वारा जांच और सिफारिश की गई है। समिति ने विनिर्देश और अनुमानित लागत की भी सिफारिश की है।
2. RSAS ने NMEDT फंडिंग के साथ सॉफ्टवेयर खरीदने का प्रस्ताव किया है।
3. NMEDT को प्रस्ताव प्रस्तुत करने के लिए, प्रभाग ने एक सेल्फ कंटेन्ड नोट (SCN) तैयार किया है और अनुमानित लागत के लिए विनिर्देशों और सहायक दस्तावेजों के साथ एक प्रस्ताव प्रस्तुत किया है।
4. SCN और प्रस्ताव को संशोधित किया गया है और इस नोट के साथ संलग्न किया गया है।
5. संशोधित एससीएन और प्रस्ताव क्रम में हैं।

यदि सहमति हो, तो 1,98,04,648/- रुपये की अनुमानित लागत पर टीडीईएम डाटा प्रोसेसिंग, इनवर्जन और इंटरप्रिटेशन सॉफ्टवेयर की खरीद के लिए उनकी प्रशासनिक मंजूरी के लिए एनएमईडीटी को संलग्न प्रस्ताव और एससीएन प्रस्तुत करने के लिए महानिदेशक, जीएसआई से अनुमोदन प्राप्त किया जा सकता है।

The proposal received from RSAS, Bengaluru regarding procurement of TDEM Data Processing, Inversion, and Interpretation Software has been examined at PSS-Mon1 and the comments are given below.

1. The proposal of RSAS for procurement of TDEM Data Processing, Inversion, and Interpretation Software has been examined and recommended by the RAC, RSAS. The committee also recommended the specification and estimated cost.
2. RSAS proposes to procure the software with NMEDT funding.
3. For submission of the proposal to NMEDT, the division has prepared and submitted a Self-Contained Note (SCN) and a proposal with specifications and supporting documents for the estimated cost.
4. The SCN and proposal has been modified and attached to this note.
5. The modified SCN and proposal are in order.

If agreed, approval from the DG, GSI may be obtained for submission of the attached proposal and SCN to NMEDT for their administrative approval towards procurement of TDEM Data Processing, Inversion, and Interpretation Software at an estimated cost of Rs. 1,98,04,648/-."

[Proposal for procurement of TDEM data processing software.docx](#)

[SCN for procurement of TDEM data processing software.docx](#)

13/02/2026 05:28 PM

A. ANIL KUMAR
Director

Note # 13

Reference Note at #12

Approval may please be accorded for submission of the proposal attached with Note #12 and the self contained note to NMEDT for their administrative approval towards procurement of TDEM Data Processing, Inversion, and Interpretation Software at an estimated cost of Rs. 1,98,04,648/-.

13/02/2026 07:03 PM

JOYESH BAGCHI
Additional Director General

Note # 14

यथा प्रस्तावित अनुमोदित।
Approved as proposed.

16/02/2026 03:10 PM

ASIT SAHA
Director General

Note # 15

कृपया आगे ज़रूरी कार्रवाई करें।

16/02/2026 03:13 PM

JOYESH BAGCHI
Additional Director General

Note # 16

सक्षम प्राधिकारी ने स्वीकृति दे दी है। फाइल को आगे की आवश्यक कार्रवाई के लिए भेज दिया गया है। The competent authority has given approval. The file is forwarded for further necessary action.

निदेशक (भूभौतिकी) कृपया

16/02/2026 03:48 PM

ANINDYA BHATTACHARYA
Deputy Director General

Note # 17

आवश्यक कार्रवाई के लिए अग्रेषित किया गया।

Forwarded for necessary action please

16/02/2026 05:15 PM

H RAJARAM , Director



भारत सरकार / GOVERNMENT OF INDIA
भारतीय भूवैज्ञानिक सर्वेक्षण
GEOLOGICAL SURVEY OF INDIA
सुदूर संवेदन एवं हवाई सर्वेक्षण
REMOTE SENSING AND AERIAL SURVEY
बेंगलुरु / BENGALURU

दूरभाष/ Tele: 080-26662574
फैक्स/ Fax: 080-26662574
ई-मेल/ E-mail: ddggp.rsas@gsi.gov.in

No. RSAS-11016(15)/1/2026-GP_CT-RSAS-RSAS

दिनांक / Date: 19.02.2026

प्रेषक / From

उप-महानिदेशक विभागाध्यक्ष

The Deputy Director General & HoD

सुदूर संवेदन एवं हवाई सर्वेक्षण

Remote Sensing & Aerial Survey

भारतीय भूवैज्ञानिक सर्वेक्षण

Geological Survey of India

वसुधा भवन / Vasudha Bhavan

कुमारस्वामी लेआउट / Kumaraswamy Layout

बेंगलुरु / Bengaluru-560111

सेवा में/ To

उप-सचिव एवं विभागाध्यक्ष

The Deputy Secretary & HoD

राष्ट्रीय खनिज अन्वेषण न्यास

National Mineral Exploration

Development Trust

कक्ष सं. 114, एफ-विंग, प्रथम तल

Room No.114, F-Wing, First Floor

शास्त्री भवन / Shastri Bhawan

डॉ. राजेंद्र प्रसाद रोड

Dr. Rajendra Prasad Road

नई दिल्ली / New Delhi-110001

विषय/ Sub: टाइम डोमेन इलेक्ट्रोमैग्नेटिक (टीडीईएम) डेटा प्रोसेसिंग और इनवर्जन सॉफ्टवेयर की खरीद के लिए प्रशासनिक अनुमोदन हेतु अनुरोध - संबंधित/Request for the administrative approval for the Procurement of Time Domain Electromagnetic (TDEM) Data Processing and Inversion Software - reg.

संदर्भ / Ref: एनएमईडीटी का 17.02.2026 का ईमेल / NMEDT email dated 17.02.2026

महोदय/Sir,

कृपया संलग्न अनुलग्नक-I और II देखें, जो कि एएमडी और सीजीडब्ल्यूबी के उपलब्ध हेलीबोर्न डेटा और आरएसएस, जीएसआई के चल रहे हेलीबोर्न सर्वेक्षण डेटा को संसाधित करने के लिए टाइम डोमेन इलेक्ट्रोमैग्नेटिक (टीडीईएम) डेटा प्रोसेसिंग और इनवर्जन सॉफ्टवेयर की खरीद हेतु विधिवत भरे गए हैं। / Please find attached the duly filled Annexure-I and II for the Procurement of Time Domain Electromagnetic (TDEM) Data Processing and Inversion Software for processing the available heliborne data of AMD & CGWB and ongoing Heliborne Surveys data of RSAS, GSI

यह आपकी जानकारी और आवश्यक / This is for your kind information and necessary action please.

संलग्न/Encl.: यथोपरि/As above

भवदीय / Yours faithfully

(एच. राजाराम /H. Rajaram)

निदेशक (भूभौतिकी) / Director (Geophysics)


कृते उप-महानिदेशक विभागाध्यक्ष / for Deputy Director General & HoD, RSAS

**FORMAT FOR SUBMITTING INFORMATION FOR PROCUREMENT OF
MACHINERY/ EQUIPMENT/ INSTRUMENTS
(To be submitted along with procurement proposal)**

| Sl. No. | Particular | Particulars |
|----------------|--|---|
| 1 | Name of the agency | 1. M/s Datacode Geoscience Pvt. Ltd. 2. M/s Aditi Infotech |
| 2 | Address of the agency | 1. K-26, 2ndFloor Kinkhede Layout, Opp L.I.T. Bharat Nagar Nagpur- 440 033 Phone: +91 712 2530092 Email:admin@datacodeintl.com 2. B-1, First Floor, Swapnil Apartment,, Abhyankar Marg, Dhantoli, Nagpur, Maharashtra 440012 Phone: +91 8830-763-438 Email:aditiinfotech1@gmail.com |
| 3 | Status of the agency (Central Government Organization/ State DMG/DGMs/ CPSUs) | Both are Private Organization |
| 4 | Description of machinery/ equipment/ instruments to be purchased | Procurement of Time Domain Electromagnetic (TDEM) Data Processing and Inversion Software |
| 5 | Estimated basic purchase price of the item to be procured (excluding taxes, customs duty etc.) (Pl. enclose supporting document) | Rs. 1,00,98,200/- (Rupees One Crore Ninety Eight Thousand Two Hundred Only). Single Software with one year OEM warranty. (Quotation received from the Vendor is attached) |
| 6 | No. of items to be procured | Single Software Licence for Time Domain Electromagnetic (TDEM) Data Processing and Inversion Software |
| 7 | Total estimated basic purchase price of the item to be procured (excluding taxes, customs duty etc.) | Rs. 1,00,98,200/- including 18%GST for single licence software with 1-year mandatory OEM warranty |
| 8 | Add: Customs duty (in case of items to be procured from outside India) | NA |
| 9 | Add: Cost of transportation/ insurance/ installation etc., if applicable | NA |
| 10 | Add: Statutory taxes like GST/IGST etc. | Included 18% GST i.e. Rs. 30,21,084/- |
| 11 | Add: Any other type of cost/inclusion | Rs. 66,85,400/- excluding 18% GST for additional three years warranty |
| 12 | Gross total estimated procurement price of the item to be procured | Rs. 1,98,04,648/- Single Software with one year OEM warranty along with another three years extended warranty |
| 13 | Whether above estimated price includes warranty/AMC (yes/no) (if yes, period of warranty/AMC in no. of years) | Yes warranty 1 year + 3-year additional warranty |
| 14 | Post warranty/AMC charges (Separate for each year) | Rs.22,28,466.66/- excluding 18% GST |
| 15 | Pl. state source of procurement (Indian origin/outside India) | Procured through the authorised dealer of M/s Datacode Geoscience Pvt. Ltd., K-26, 2ndFloor Kinkhede Layout, Opp L.I.T. Bharat Nagar Nagpur, India from the OEM is Bentley Systems (UK) Ltd 9 th Floor, Reading Bridge House, George St, UK. |

| | | |
|----|---|---|
| 16 | If source of procurement from outside India, pl. state whether make in India Exemption/Global Tender Enquiry permission is required | It will be procured through the Indian Partner i.e. M/s Datacode Geoscience Pvt. Ltd. in compliance with MII. |
| 17 | Pl. attach the copy of purchase order/invoice of the same item procured by some other agency in India | 5 software licenses procured during 2025 by CGWB, and 2 software licenses procured by NGRI |
| 18 | Name & contact number of the nodal officer | |
| 19 | Whether pre-bid deliberations have been held (Yes/No) | No, not yet floated the tender. |

Date: 19-02-2026

Signature: 

Name: H. Rajaram

Designation: Director

एच. राजाराम / H. RAJARAM
निदेशक (भूभौतिकी) / Director (Geophysics)
दु.सं.ह.स. / RSAS
भारतीय भूवैज्ञानिक सर्वेक्षण / Geological Survey of India
बेंगलूरु / Bengaluru-560111

Operational Requirements for procurement

Following details are to be submitted mandatory by the agencies along with the procurement proposals.

1. What is the justification for procuring this instrument /software?

A dedicated software is essentially required for airborne Time Domain EM data processing and modelling to process and analyse all the Heliborne TDEM data presently available (Data from AMD & CGWB) at RSAS. Heliborne TDEM data is also being presently being acquired by RSAS, GSI. Inversion and modelling are crucial tools for unlocking the full potential of Heliborne TDEM data in mineral exploration.

2. How will this instrument/ software contribute to enhancing mineral exploration activities over the next five years.

1. Quality control for acquired EM data and inverted EM data with visualization for accurate data analysis and accurate target selection.
2. Quantitative characterization: Provides numerical values for subsurface conductivity, aiding resource estimation and target assessment.
3. Improved targeting: Precise conductivity models pinpoint potential mineralized zones for further investigation.
4. Reduced ambiguity: Differentiates between various geological features with similar EM responses.
5. Cost-effectiveness: Guides drilling programs by prioritizing high-potential targets, saving time and resources.

3. Whether any older version of proposed instrument/ software is presently available with the agency? If so, how does this new instrument/ software compare with the instrument/ software /technologies currently being used?

At present there is no software available at RSAS, GSI to process and interpret airborne TDEM data.

4. Which other organisation in the country have this instrument/ software? Whether the possibility of utilising the instrument/ software available in the other organisation has been considered?

CGWB, Faridabad is having this software. It is not possible to utilise the software available with CGWB.

5. What infrastructure and manpower are required to operate this instrument/ software effectively? Does the agency have adequately skilled personnel to handle its operation, and if not, what measures will be taken to ensure its proper functioning?

Existing manpower and infrastructure available at RSAS, GSI is sufficient to effectively utilise this software.

6. Will this instrument/ software be made available for use by other States/Agencies/Institutions under collaborative arrangements?

Yes, it can be made available in any collaborative projects signed with other agency.

7. Are there any ongoing/planned projects where this instrument/ software can be immediately deployed?


This software will be utilised for processing and interpreting the TDEM data being acquired in the ongoing heliborne surveys and the heliborne survey data from AMD & CGWB available with RSAS, GSI.

8. How will data generated from this instrument/ software be integrated with national databases or exploration programmes?

Finalised processed and interpreted data generated with this software will be uploaded in NGDR portal and also based on the outcome follow up exploration programmes will be taken up.

9. How will the concerned agency (Central agencies/State DGMs/DMGs) ensure running & operational cost, proper maintenance, including AMC/CAMC and regular servicing, of the instrument/ software?

Cost of the software includes mandatory one-year warranty plus three-year extended warranty by the OEM.


19/2/2026
एच. राजाराम / H. RAJARAM
निदेशक (भूभौतिकी) / Director (Geophysics)
सु.सं.ह.स. / RSAS
भारतीय भूवैज्ञानिक सर्वेक्षण / Geological Survey of India
बैंगलूरु / Bengaluru-560111