

MEMORANDUM OF UNDERSTANDING

BETWEEN

**JOINT STOCK COMPANY ROSGEOLOGIA (ROS GEO)
A LEGAL ENTITY INCORPORATED UNDER THE LAWS OF THE
RUSSIAN FEDERATION**

AND

**GEOLOGICAL SURVEY OF INDIA (GSI)
MINISTRY OF MINES,
THE GOVERNMENT OF THE REPUBLIC OF INDIA**

ON

COOPERATION IN FIELD OF GEOSCIENCE

1st December - 2021

18/11/21

MEMORANDUM OF UNDERSTANDING ON COOPERATION IN FIELD OF GEOSCIENCES BETWEEN THE JOINT STOCK COMPANY ROSGEOLOGIA (ROSGEO), A LEGAL ENTITY INCORPORATED UNDER THE LAWS OF THE RUSSIAN FEDERATION AND THE GEOLOGICAL SURVEY OF INDIA (GSI), MINISTRY OF MINES OF THE REPUBLIC OF INDIA

The **JOINT STOCK COMPANY ROSGEOLOGIA**, a legal entity incorporated under the laws of the Russian Federation (referred to as ROSGEO) and the **GEOLOGICAL SURVEY OF INDIA**, Ministry of Mines, the Government of the Republic of India (referred to as GSI) herein after individually referred to as 'Party' and jointly referred to as 'Parties',

CONFIRMING their mutual interest in developing and reinforcing their cooperation in the fields of geoscience;

RECOGNIZING the importance of a framework for cooperation in joint investigations and scientific exchanges concerning the fields of geoscience, on subjects of mutual interest;

DESIRING of developing cooperation in the field of geosciences between Russia and India, with the intent of reinforcing and strengthening the scientific link between the two countries,

AND BELIEVING that such co-operation shall further strengthen the existing friendly relations between the Parties

Have reached the following understanding:

**ARTICLE 1
DEFINITION**

The following words and expansion should have the meanings set out below:

- a) **MoU**: The present Memorandum of Understanding;
- b) **IPR**: Intellectual Property Rights;
- c) **JWG**: Joint Working Group;
- d) **PARTIES**: Joint stock company Rosgeologia, a legal entity incorporated under the laws of the Russian Federation (referred to as 'Rosgeo') and Geological Survey of India, Ministry of Mines, the Government of the Republic of India (referred to as 'GSI');
- e) **PERIOD**: Three (3) year term from the commencement date of this MoU.



ARTICLE 2
OBJECTIVE

The objectives of cooperation between the Parties include, inter alia, the following:

- a. To explore scientific and technical cooperation in the field of earth sciences and geological study of subsoil.
- b. Long term cooperation in the area of geological onshore and offshore exploration works for solid minerals.
- c. Encouragement for the exchange of scientific experience, information in the field of geology for scientific and technical developments.

ARTICLE 3
AREAS OF COOPERATION

The Parties will promote cooperation, inter alia, in the following areas on priority:

1. Technological collaboration on exploration for deep-seated and / or concealed mineral deposit greater than 400 m with special emphasis in Deccan trap area, India, subsequently other area/s may be considered ;
2. PGE and REE Exploration and Research - To develop integrated field exploration, supporting laboratory based investigations for Ni-PGE and REE deposits;
3. Joint development of the Indian Geoscience Data repository with the Russian state-of-the-art IT, comprising a resource inventory;
4. Mutual Cooperation in analysis and interpretation of the aero-geophysical data (magnetic and radiometric) acquired as part of National Aero-Geophysical Mapping Programme (NAGMP) over 12 blocks and by Twin Otter Aero-geophysical Survey System (TOASS) since 2010, in integration with all available data set (both geological and geophysical), based on the state-of-the-art geophysical inversion and modeling (2D/3D) techniques for mineral prognostication and research. As an outcome of this exercise, GSI is likely to develop an expert group of Geoscientist for analysis and interpretation of Aero-geophysical data acquired by GSI.
5. Assessment and identification of the areas for forecast metallogenic mapping and summary forecast mapping for gold mineralization of the areas identified by GSI.
6. Mutual cooperation between GSI Marine and Coastal Surveys Division and Rosgeo, including boundary mapping of polymetallic nodules and encrustation, identification of the chimneys (active or dead vents) associated with seafloor massive sulphides and the possible seepage locations using sensor surveys,



AUV etc., or by Underwater Hyperspectral Imaging, performing deep-water geophysical and seismic surveys for tectonic evaluation of Back Arc spreading of Andaman Basin including nature and effect of back arc rifting on mantle wedge melting/arc magmatism in the Andaman Sea and drilling the seamounts and platforms in verifying the subsurface continuity of reported phosphorite /phosphates in the Bay of Bengal seafloor.

7. Cooperation in the field of deep seismic and Magneto Telluric surveys;
8. Adaptive sweep surveys of formations above 50 km
9. Mutual Cooperation in prospecting for economic minerals through Regional Geochemical Mapping
10. Research, development and creation of databases on geology.
11. Scientific personnel training and capacity building.
12. Technology & knowledge sharing in the field of drilling, sampling and laboratory analysis to achieve data accuracy, and cost optimization.
13. Other areas of cooperation of mutual interest to be decided by both Parties, falling within the scope of this MoU.

ARTICLE 4 FORMS OF COOPERATION

Co-operation between the Parties in the field of geology may be given effect by means of:

1. Exchange of scientists, experts, delegations and training of personnel.
2. Joint organization of workshops, seminars and symposia.
3. Exchange of scientific knowledge, expertise and experiences, including professional training and qualification improvement of Indian specialists courses based on joint scientific programs of Sergo Ordzhonikidze Russian State University for geological prospecting.
4. Cooperation in the field of research.
5. Other forms of cooperation that may be mutually agreed between the Parties.



ARTICLE 5
CENTRAL AUTHORITY

The organizations responsible for implementation and execution of the present MOU shall be:

- a. Joint stock company Rosgeologia, (referred to as 'Rosgeo'), and
- b. Geological Survey of India, Ministry of Mines, the Government of the Republic of India (referred to as 'GSI').

ARTICLE 6
IMPLEMENTATION AND JOINT WORKING GROUP

- a. The competent authorities shall be responsible for the identification of programmes and implementing agencies, review of progress, evaluation of results to consider any other aspect relevant to the promotion of bilateral co-operation.
- b. The activities that will be carried out by each Party will be based on individual agreements on a project or program through a specific agreement concluded between the Parties, including detailed information on the financial mechanisms and general conditions of this individual project or program. Each specific agreement will include specific work plans relating to staffing requirements, cost estimates, sources of funding and other obligations, or conditions not included in this MoU. For every specific project, which the Parties deem of mutual interest, the Parties will establish the appropriate technical scheme of cooperation in accordance with the rules and procedures of the GSI and local laws, whether a legal entity or otherwise. In the event of any inconsistency between this MoU and the specific agreement thereto, the terms of the specific agreement will prevail.
- c. Cooperation of the Parties under this MoU shall be specified in and carried out under respective agreement, which may be concluded by the Parties and/or their affiliated entities.
- d. In order to implement the cooperation of this MoU, the Parties may constitute a Joint Working Group (JWG) which will identify, study and evaluate specific projects of mutual interest and conduct periodical meetings and reviews annually. Meetings of JWG will primarily be held virtually. This JWG will take all necessary actions and measures, which are required for the implementation of the present MoU.
- e. The venue, agenda and date of the meetings of the JWG shall be determined mutually by the Parties.



**ARTICLE 7
THIRD PARTY**

Should any Party request cooperation beyond the capacity of the other Party, the Party may involve any third party subject to the mutual written consent of the other Party.

**ARTICLE 8
FINANCIAL ARRANGEMENT**

Each Party will cover their own expenses in carrying out cooperative projects, including participation in the meetings of JWG contemplated in this MoU, unless otherwise mutually agreed to in writing by the Parties. Activities pursuant to this MoU are subject to the availability of funds and personnel.

**ARTICLE 9
PROTECTION OF INTELLECTUAL PROPERTY RIGHTS (IPR)**

- a) The Parties will share and jointly publish the scientific and technical results of cooperative projects conducted under this MoU in English and Russian languages or hold in confidence in accordance with the specific provisions identified in the associated collaborative projects. The Parties undertake the obligation to keep each other informed on any issues related to the subject matter of this MoU. The use of the name, logo and/ or official emblem of the Parties on any publication, document and/or paper will require prior written permission of both the Parties. It may however be ensured that the official emblem and logo is not misused.
- b) Subject to the applicable laws, rules and regulations of the Parties, information, including derived data, maps and reports arising from collaborative activities undertaken under this MoU may only be released to third Party on the written consent of both Parties. Any intellectual property rights (IPR) jointly produced by Parties will respect the background IPR of the Parties contributing, however, the foreground IPR will be the joint property of both Parties subject to separate mutual written MoU regarding apportionment of jointly created IPR.
- c) The Intellectual Property Rights of all background IPR including, but not limited to, information, maps, reports and all data in analogue or electronic forms supplied by the either Party for the purposes of this MoU is and will remain vested with the owning Party.
- d) Both Parties grant the other Party a license to use their background IPR as reasonably required for the sole purpose of this MoU. Any other usage of either Party's background IPR will be subject to separate license arrangements being agreed with the other Party, no transfer of the ownership of either Party's background IPR arises from or is implied under this MoU.
- e) Each Party will ensure appropriate protection of Intellectual Property Rights generated from cooperation pursuant to MoU, consistent with their respective laws, rules and regulations and multilateral MoU to which countries of both Parties are party to.



f) In case of research results obtained through joint activities under this MoU both Parties will apply as co-applicant for the protection of intellectual property rights subject to exclusive rights of both the Party to commercialize the technology in their respective countries. Commercialization in any other country shall be done jointly through a separate MoU.

g) The provisions of this MOU will not contradict the rights and obligations of the Parties, with respect to existing international treaties/agreements to which they are parties to.

ARTICLE 10 PROTECTION OF CONFIDENTIAL INFORMATION

- a) All information and documents to be exchanged pursuant to the MoU will be kept confidential by the Parties and will be used subject to such terms as each Party may specify. The Parties will not share such information with third parties or use the information for purposes other than that specified, without the prior written consent of the other Party.
- b) All confidential information (information duly deemed as confidential in accordance with applicable regulations in the corresponding techno-administrative jurisdictions of the Parties) shall remain the exclusive property of the disclosing Party. The Parties agree that this MoU and the disclosure of the confidential information do not grant or imply any license, interest or right to the receiving Party in respect to any intellectual property right of the other Party.
- c) Unpublished information, whether oral, in writing or otherwise, discovered or conceived by the scientists or technicians and exchanged under the provisions of this MoU will not be transmitted to a third party, unless otherwise agreed by the Parties in writing.
- d) The receiving Party shall not disclose, transfer, provide access or grant permission for use of the confidential information to the third parties except of receiving Party's Representatives in absence of prior written consent of the disclosing Party. The receiving Party shall procure that prior to gaining access to the confidential information such third parties would have provided written undertakings on non-disclosure of the confidential information, provided that such undertakings shall not be less than similar undertakings hereto.
- e) The confidential information might be disclosed upon legitimate request by the state authority if such disclosure complies with the applicable Russian and/or Indian legislation. The receiving Party shall duly notify the disclosing Party in writing on such disclosure describing the volume and content of the disclosed data.



f) Transfer of the data storage with the confidential information shall be executed through a transfer act (this act shall be the document that shall specify the type of confidential information, the data carrier on which it is transmitted, the date and place of transmission, the full name, position and signature of authorized representatives of the parties. There is no rigid form of such an act, the parties shall develop it through their mutual concurrence) signed by the Parties' representatives with a cover letter attached.

g) Transfer of the data storage with the confidential information shall be executed by registered mail, Russian/Indian state federal couriers or by the authorized Parties' employees.

h) Transfer of the confidential information via open channels including fax and Internet is prohibited in absence of security measures satisfactory for both Parties.

ARTICLE 11

SETTLEMENT OF DISPUTES

- a. This MoU is not binding or legally enforceable, imposes no enforceable obligations upon the Parties and does not grant any rights (except of the provisions of Article 10 hereto regarding confidentiality of the information); is not a preliminary contract. However, the Parties shall utilize this MoU as the framework for MoUs and contracts, which will be concluded by the Parties or their affiliates in their cooperation in future.
- b. This MoU is decided with the aim of expanding and developing cooperation between participants and is not an agreement binding on the Republic of India and the Russian Federation in accordance with international law. None of the provisions of this MoU will be interpreted and implemented as creating legal rights or obligations for the Republic of India and the Russian Federation.
- c. The implementation of this MoU shall be in accordance with the Laws and Regulations applicable in the respective Parties' jurisdictions. This MoU does not create legal relations between the Parties. The provisions of this MoU shall be without prejudice to any other treaties or agreements to which both sides are parties.
- d. Any dispute between the Parties arising out of the interpretation or implementation of this MoU shall be settled amicably through consultation or negotiation between the Parties to the dispute.
- e. Activities pursuant to this MoU shall be governed and construed in accordance with laws and regulations of the respective country of the Party where activities are taking place.



ARTICLE 12
REVISION AND AMENDMENT

This MoU may be amended at any time by mutual written consent of the Parties through an exchange of Notes between the Parties through the diplomatic channels.

ARTICLE 13
ENTRY INTO FORCE, DURATION AND TERMINATION

- a. This MoU shall enter into force on the date of its signing thereof by the duly authorized representatives of the "Parties".
- b. The MoU shall remain in force for a period of three (3) years. Thereafter, it will be extended automatically for a subsequent period of three years. Either of the Parties may declare by a written notice to the other Party its intention to terminate this MoU through diplomatic channels, by giving three (3) months advance notice in writing. In such a case the MoU shall terminate on completion of three months period.
- c. The termination of this MoU shall not affect the completion of any unfulfilled obligation at the moment of its termination, unless otherwise agreed by the parties.
- d. The notices under this MoU shall be deemed effective when delivered to the following addresses:

For the Joint Stock Company Rosgeologia (ROSGEO),
Khersonskaya str. 43, bld. 3, Moscow, the Russian Federation, 117246.
To the attention of: Mrs. N. A. Kuchmanova, Acting Deputy CEO – International
Cooperation
Tel: +7 (495) 988 58 07;
e-mail: info@rusgeology.ru



For the Geological Survey of India (GSI);
Geological Survey of India, 27 J.L. Nehru Road, Kolkata-700016, West Bengal, India,
To the attention of: The Director General, GSI
Tel: +91(33) 2252 1779; Fax: +91(33) 2252 1714
e-mail: dg.gsi@gov.in



All notification under this MoU shall be conducted in writing and each Party notified by registered mail or courier at their offices as indicated above, or sent by e-mail. Daily communication between the Parties may be conducted by e-mail.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this MOU.

Done at _____ on 1st day of December, 2021 in two originals, each in the Hindi, English and Russian languages, all texts being equally authentic. In case of divergence in interpretation, the English text shall prevail.

For the Joint Stock Company (ROSGEO)	For the GEOLOGICAL SURVEY OF INDIA (GSI)
 Mrs. Natalia A. Kuchmanova Acting Deputy CEO – International Cooperation	 Mr. Rajendra Singh Garkhal Director General GSI



18/11/21