

INTERNATIONAL COOPERATION AGREEMENT

BETWEEN

THE GEOLOGICAL SURVEY OF BRAZIL WITHIN  
THE MINISTRY OF MINES AND ENERGY OF THE  
FEDERATIVE REPUBLIC OF BRAZIL

AND

THE FEDERAL INSTITUTE OF GEOSCIENCE AND NATURAL RESOURCES OF  
THE FEDERAL REPUBLIC OF GERMANY

This Cooperation Agreement (hereinafter AGREEMENT) is entered into between the GEOLOGICAL SERVICE OF BRASIL, hereinafter referred to as SGB, a public company headquartered at Setor Bancário Norte - SBN Quadra 02, Bloco H - Asa Norte, Edifício Central Brasília, DF - Brasil - CEP: 70040-904, registered with the CNPJ/MF under no. 00.091.652/0001-89, hereby represented by its DIRECTORS, on the one hand, and the GERMAN AGENCY OF MINERAL RESOURCES, hereinafter referred to as DERA, linked to the FEDERAL INSTITUTE FOR GEOSCIENCES AND NATURAL RESOURCES, hereinafter referred to as BGR, a geoscientific organization and public technology headquartered at Stilleweg, 2, 30655, Hanover, Germany, being represented by its President Prof. doctor RALPH WATZEL, on the other side. Hereinafter, SGB and BGR are also referred to individually as the PARTY and collectively as the PARTIES.

RECOGNIZING the purpose of this Agreement to provide a basis for the exchange of scientific and technical knowledge and the enhancement of technical-scientific capacities, exchange of information, as a result of joint cooperation studies, on subjects of mutual interest in the Geosciences, including Environment;

WHEREAS the Ministry of Economy and Energy of the Federal Republic of Germany created DERA in Berlin, within the sphere of the BGR in October 2010, based in Hannover, to support German industry in ensuring the supply of raw materials through increasing market transparency and identifying potential commodities and possibilities for action;

WHEREAS DERA is the German central information agency and consultancy platform for non-renewable resources (metals, minerals and energy resources) - it is responsible for carrying out BGR's activities in the area of mineral commodities (continental deposits), providing the government with a long-term framework for commodity supply that is not heavily affected by economic cycles and technical and economic infrastructure information for the industry;

WHEREAS the PARTIES are mutually interested in continuing the technical-scientific cooperation in Geosciences, continuing the Memorandum of Understanding signed by the Parties on September 20, 2016.

WHEREAS each PARTY may disclose valuable information to the other PARTY during the course of communication and discussions, or while working together, some of the information or data may be considered confidential. To this end, the parties may sign a separate written confidentiality agreement to regulate the way in which this information is handled;

BASED ON the principles of equality, reciprocity, mutual benefit and mutual trust between the PARTIES, through joint interest, agree to develop this Agreement in accordance with the following Terms and Conditions:

#### CLAUSE 1: SCOPE AND OBJECTIVES

The PARTIES agree to carry out activities with the main objective of allowing a two-way flow of knowledge, information and collaborative research. The PARTIES will benefit from the cooperation and exchange of information and technical-scientific personnel, through joint studies and research on topics of mutual interest in the field of Geosciences.

For cooperation that may extend to matters outside the competences of the SGB and the BGR, the PARTIES may, with mutual written consent, within the limits permitted by Brazilian and German laws and policies, attempt to include the participation of other Brazilian or German companies in the development of activities within the scope of this instrument. Said participation will take place through the execution of addendum terms to this instrument, or in case of need to establish other needs that are formalized separately instruments, based on this agreement.

#### CLAUSE 2: FORMS OF COOPERATION

The forms of cooperation within the scope of this AGREEMENT may consist of the exchange of technical and scientific information and may be carried out in the following ways:

- Exchange of visits by specialists and scientists;
- Exchange of scientific and technical information including samples and standards;
- Capacity building and skills development;
- Development of cooperative research consistent with ongoing programs by the PARTIES;
- Joint organization of seminars, symposia, conferences and workshops;
- Joint production of publications;
- Other forms of cooperation that may be mutually agreed between the PARTIES.



### CLAUSE 3: AREAS OF COOPERATION

Areas initially identified as having potential for cooperation project may include, but are not limited to:

- (I) Economic Geology comprising:
  - Mineral resource assessment, interpretation and estimation;
  - Research mineral deposits;
  - Geochemistry and geophysics applied to mineral exploration; and
  - Development of mineral processing techniques.
- (II) Laboratory support and exchange of experiences; and
- (III) Other areas of cooperation that may interest the PARTIES.

### CLAUSE 4: FUNDING SOURCES

The cooperation activities under this AGREEMENT will be subject and dependent on the availability of financial and human resources of both PARTIES.

There are no financial obligations implied in this AGREEMENT for each of the PARTIES. Cooperation activities, within the scope of this instrument, are subject to the availability of resources and personnel of each of the PARTIES. In general terms, each PARTY will cover its own costs incurred in carrying out cooperative studies. Any other financial arrangements will be agreed by the PARTIES in writing.

If there is a need to transfer resources, they will be entered into through Addendum Terms or other instruments to meet this purpose.

### CLAUSE 5: INTELLECTUAL PROPERTY AND SECURITY OBLIGATIONS

The provisions for the protection, commercialization and distribution of intellectual property originated or transmitted in the course of cooperation activities within the scope of this AGREEMENT will be formalized in writing, by means of a specific amendment instrument to deal with the matter.

### CLAUSE 6: CONFIDENTIALITY AND VALUATION OF INFORMATION

The scientific and technical results developed jointly are the property of both PARTIES and may be published or kept confidential under the specific conditions agreed by the PARTIES in this document.

In the case of results susceptible to economic valuation, the PARTIES shall decide by mutual agreement, through addenda, on the forms of protection, valuation and exploitation of said results.

The procedures for negotiating such terms must be regulated by an Addendum, previously negotiated by the PARTIES.

### CLAUSE 7: LEGAL NOTICE

The information transmitted from one PARTY to another, within the scope of this instrument, shall be accurate to the best knowledge of the transmitting PARTY,



although it does not guarantee the suitability of such transmitted information for any specific use or application by the receiving PARTY or any other third party.

#### CLAUSE 8: MEETINGS

The PARTIES undertake to promote, annually, at the initiative of either of the PARTIES, meetings to:

- (i) To the extent possible, become aware of any problem relating to the application of this instrument or related to research activities;
- (ii) Evaluate the results obtained by the cooperation; and
- (iii) Define and adjust the provisions to be taken to ensure, under the best conditions, the continuation of ongoing actions and the eventual implementation of new actions.

The date and place of these meetings will take place alternately in Germany and Brazil or in other places where the joint project activities are being carried out.

These meetings will be decided, by mutual agreement, through a written proposal of one of the PARTIES, inviting the other and, by means of the presentation of the proposal of prior approval of the other PARTY involved. All information related to such meetings will be exchanged at least 60 days in advance.

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#### CLAUSE 9: PROJECTS TO BE DEVELOPED

Any exchange of technical information or visits by people can be foreseen, provided that such activities are described in Work Plans, which, once agreed, become part of this AGREEMENT in the form of an ANNEX.

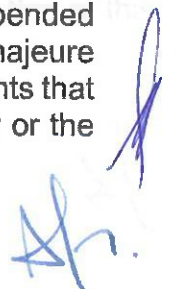
THE WORK PLAN also describes the work objectives, personnel needs, cost estimates, funding sources and any obligations or commitments not specified in this AGREEMENT. The scientific and technical results of the related projects carried out under this AGREEMENT will be in the public domain and published, if resources allow, by mutual written agreement between the PARTIES.

ANNEX I, an integral part of this AGREEMENT, refers to the development of the Bioprolat Project - Recovery of cobalt and lateritic nickel by reductive bioprocessing in Brazil between the SGB and the BGR.

If a PARTY requests cooperation beyond the capacity of the other PARTY, the PARTIES, by mutual written agreement, may try to involve another organization in the activities under this AGREEMENT with the main focus on the development of projects that can attract investments for Brazilian mining, technological and industrial sectors, in accordance with Clause 1.

#### CLAUSE 10: FORCE MAJEURE

If any of the PARTIES is unable, due to force majeure, to perform their responsibilities under this AGREEMENT, these responsibilities will be suspended during the period of permanence of such impossibility. The term force majeure means war, civil disturbances, natural disasters, strikes and other similar events that are not caused by or under the control of the Federal Republic of Germany or the



**CLAUSE 14: OMISSIONS AND CONFLICT RESOLUTION**

Situations not provided for in this instrument will be resolved by mutual agreement, in writing, between the Participants, whose direction must aim to fully comply with the provisions of the object.


In the event that controversies and/or disputes arising from this Cooperation Agreement arise, including with regard to its interpretation, execution or non-execution, notably rights and obligations stipulated herein, the Participants irrevocably and irreversibly undertake to constitute a joint commission with members of all the institutions involved to, through direct negotiation or by exchange of correspondence, obtain a definitive solution to the dispute.

**CLAUSE 15: PUBLICATION**

The SGB/CPRM will provide, as a condition of effectiveness, the publication of the extract of this Instrument in the Official Gazette of the Union.

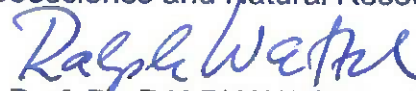
Confirming their AGREEMENT, the PARTIES sign this AGREEMENT in four original copies, two in Portuguese and two in English, each of the versions of equal content and form, attesting. In the event that any dispute arises regarding the interpretation of this Instrument, the English language version will prevail.

By SGB/CPRM:

  
CASSIANO DE SOUZA ALVES  
Interim Director President

  
PAULO AFONSO ROMANO  
Director for Geological Infrastructure

By the Federal Institute of Geoscience and Natural Resources:

  
Prof. Dr. RALPH WATZEL  
President

Witnesses:

By SGB/CPRM:

By BGR:



Place and date:

