December 15, 2014

Luiz Carlos Moura Miranda
President of the Board of Directors
Fundação de Ciência, Aplicações e Tecnologia Espaciais
Av. Dr. João Guilhermino, 429 – 11º andar Salas 112 a 118 – Centro
CEP: 12210-130 – São José dos Campos São Paulo
Fax: (012) 3941-2829

Grant No TF018566 - Brazil Cerrado Climate Change Mitigation:
Platform of Monitoring and Warning of Forest Fires in the Brazilian Cerrado Biome Project

Dear Sir:

In response to the request for financial assistance made through a letter by the Federative Republic of Brazil on September 18, 2013, on behalf of Fundação de Ciência, Aplicações e Tecnologia Espaciais ("FUNCATE") ("Recipient"), I am pleased to inform you that the International Bank for Reconstruction and Development ("World Bank"), acting as administrator of grant funds provided by the Department for Environment, Food and Rural Affairs of the United Kingdom of Great Britain and Northern Ireland ("Donor") under the Brazil Cerrado Climate Change Mitigation Trust Fund, proposes to extend to the Recipient, for the benefit of the Federative Republic of Brazil ("Member Country"), a grant in an amount not to exceed one million fifty three thousand United States Dollars (U.S.$1,053,000) ("Grant") on the terms and conditions set forth or referred to in this letter agreement ("Agreement"), which includes the attached Annex, to assist in the financing of the project described in the Annex ("Project").

This Grant is funded out of the abovementioned trust fund for which the World Bank receives periodic contributions from the Donor. In accordance with Section 3.02 of the Standard Conditions (as defined in the Annex to this Agreement), the World Bank’s payment obligations in connection with this Agreement are limited to the amount of funds made available to it by the Donors under the abovementioned trust fund, and the Recipient’s right to withdraw the Grant proceeds is subject to the availability of such funds.

The Recipient represents, by confirming its agreement below, that it is authorized to enter into this Agreement and to carry out the Project in accordance with the terms and conditions set forth or referred to in this Agreement.

Please confirm the Recipient’s agreement to the foregoing by having an authorized official of the Recipient sign and date the enclosed copy of this Agreement, and returning it to the World Bank.

This Agreement shall become effective as of the date of its countersignature upon receipt by the World Bank of (a) the countersigned copy of this Agreement; and (b) a copy of
the signed and effective TCA referred to in Section 2.03 (b) of the Annex to this Agreement (Effective Date). The offer of this Agreement shall be deemed withdrawn if the World Bank has not received the countersigned copy of this Agreement within 90 days after the date of signature of this Agreement by the World Bank, unless the World Bank shall have established a later date for such purpose.

Very truly yours,

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

By

Deborah L. Wetzel
Director
Brazil Country Management Unit
Latin America and the Caribbean Region

AGREED:

Fundação de Ciência, Aplicações e Tecnologia Espaciais- FUNCATE

By

Authorized Representative

Name    Luiz Carlos Moura Miranda
Title    Presidente do Conselho Diretor
Date: 09 de março de 2015

Enclosures:

(2) Disbursement Letter of the same date as this Agreement, together with World Bank Disbursement Guidelines for Projects, dated May 1, 2006.
Article I
Standard Conditions; Definitions

1.01. **Standard Conditions.** The Standard Conditions for Grants Made by the World Bank out of Various Funds dated February 15, 2012 ("Standard Conditions") constitute an integral part of this Agreement.

1.02. **Definitions.** Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the Standard Conditions or in this Agreement and the following additional terms have the following meanings.

(a) "BCCCMTF" means Brazil Cerrado Climate Change Mitigation Trust Fund;

(b) "Cerrado Biome" means the territorial area under the Project consisting of a tropical biome covering the Member Country’s states of Maranhão, Tocantins, Piauí and Bahia;

(c) "INPE" means Instituto Nacional de Pesquisas Espaciais, the Member Country’s National Institute for Space Research, or any successor thereto;

(d) "MMA" means Ministério do Meio Ambiente, the Member Country’s Ministry of Environment, or any successor thereto;

(e) "TERRA-MA²-Queimadas" means the computing platform to be used under the Project to facilitate the monitoring, analysis and early detection of forest fires; and

(f) "TCA" means the technical cooperation agreement referred to in paragraph 2.03 (b) of this Annex.

Article II
Project Execution

2.01. **Project Objectives and Description.** The objective of the Project is to facilitate the monitoring, analysis and early detection of forest fires by using the TERRA-MA²-Queimadas to support decision making among environmental managers in the Cerrado Biome.

The Project consists of the following components:

**Component 1: Development of a platform for the monitoring, analysis and early detection of forest fires**

Developing:

(a) the new computer electronic platform for monitoring, analyzing and early detecting forest fire, and
(b) a communication strategy to disseminate the benefits and functions of the new platform in selected institutions, and providing training and technical through the provision of technical assistance for:

(i) the development of beta, provisional and validated versions of the new platform;
(ii) the design and implementation of a communication strategy and campaign to launch and disseminate the new platform to the environmental managers of selected institutions;
(iii) the capacity building of users in handling the platform and in generating reports and fire alerts within selected regions; and
(iv) training on how to make the platform functional in the selected institutions.

Component 2: Project management and supervision

Strengthening the Recipient's capacity in managing, administrating, monitoring and evaluating the Project through the acquisition of computers, the carrying out of studies and training, and the provision of technical assistance, all for the carrying out of Project coordination, monitoring and reporting, financial management, procurement, including audits.

2.02. Project Execution Generally. The Recipient declares its commitment to the objectives of the Project. To this end, the Recipient shall carry out the Project with technical collaboration of INPE, all in accordance with the provisions of: (a) Article II of the Standard Conditions; (b) the “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants”, dated October 15, 2006 and revised in January 2011 (“Anti-Corruption Guidelines”); (c) this Article II; and (d) the TCA, all in manner acceptable to the World Bank.

2.03. Institutional and Other Arrangements.

(a) For the purposes of carrying out the Project, the Recipient shall maintain, at all times during Project implementation, adequate staffing and with terms of reference, qualifications and functions acceptable to the World Bank, to perform all Project's related functions including, inter alia, procurement and financial management.

(b) Without limitation upon the provisions of Section 2.02 above and 2.03(a), the Recipient shall, with the coordination support of MMA, enter into a technical cooperation agreement (the “TCA”) with INPE, under terms and conditions satisfactory to the World Bank, therein setting forth the roles and responsibilities of INPE in the implementation of the Project, including, inter alia, the following: (i) the responsibility of the Recipient to hire consultants with technical skills necessary for the development of the computer platform and other project-related activities and make them available to INPE, and to carry out the overall financial and administration management of the Project; and (ii) the responsibility of INPE to carry out the technical aspects of the Project implementation, including the preparation of the terms of reference for the hiring of services of third parties by the Recipient, of the technical specifications of goods needed for the Project and to be acquired by the Recipient, and monitoring and evaluating the Project.
(c) The Recipient shall exercise its rights and carry out its obligations under the TCA in such manner as to protect the interests of the Member Country and of the World Bank and to accomplish the purposes and objectives of the Grant and, except as the World Bank may otherwise agree, the Recipient shall not amend, assign, waive or fail to enforce the TCA or any provision thereof. In case of any conflict between the terms of the TCA and those of this Agreement, the terms of this Agreement shall prevail. The Recipient shall promptly inform the Bank of any condition which interferes or threatens to interfere with the performance of the Recipient respective obligations under such arrangements.

2.04. Project Monitoring, Reporting and Evaluation.

(a) The Recipient shall monitor and evaluate the progress of the Project and prepare Project Reports in collaboration with INPE in accordance with the provisions of Section 2.06 of the Standard Conditions, the BCCCMTF monitoring and evaluation plan to be prepared, established BCCCMTF rules and procedures; and on the basis of the indicators acceptable to the World Bank. Each Project Report shall cover the period of one calendar semester, and shall be furnished to the World Bank not later than one month after the end of the period covered by such report.

(b) The Recipient shall prepare the Completion Report in accordance with the provisions of Section 2.06 of the Standard Conditions. The Completion Report shall be furnished to the World Bank not later than six months after the Closing Date. In order to assist the Recipient in preparing the Completion Report, the Recipient shall employ consultants in accordance with the provisions of Section 2.06 of this Agreement.

2.05. Financial Management.

(a) The Recipient shall ensure that a financial management system is maintained in accordance with the provisions of Section 2.07 of the Standard Conditions.

(b) The Recipient shall ensure that interim unaudited financial reports for the Project are prepared and furnished to the World Bank not later than forty-five days after the end of each calendar quarter, covering the quarter, in form and substance satisfactory to the World Bank.

(c) The Recipient shall have its Financial Statements audited in accordance with the provisions of Section 2.07 (b) of the Standard Conditions. Each such audit of the Financial Statements shall cover the period of one fiscal year of the Recipient. The audited Financial Statements for each such period shall be furnished to the World Bank not later than six months after the end of such period.

2.06. Procurement

(a) General. All goods, works, non-consulting services and consultants’ services required for the Project and to be financed out of the proceeds of the Grant shall be procured in accordance with the requirements set forth or referred to in:

(ii) Sections I and IV of the “Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) ("Consultant Guidelines") in the case of consultants’ services; and

(iii) the provisions of this Section, as the same shall be elaborated in the procurement plan prepared and updated from time to time by the Recipient for the Project in accordance with paragraph 1.18 of the Procurement Guidelines and paragraph 1.25 of the Consultant Guidelines ("Procurement Plan").

(b) Definitions. The capitalized terms used in the following paragraphs of this Section to describe particular procurement methods or methods of review by the World Bank of particular contracts, refer to the corresponding method described in Sections II and III of the Procurement Guidelines, or Sections II, III, IV and V of the Consultant Guidelines, as the case may be.

(c) Particular Methods of Procurement of Goods, Works and Non-consulting Services

(i) Except as otherwise provided in sub-paragraph (ii) below, goods and non-consulting services shall be procured under contracts awarded on the basis of National Competitive Bidding.

(ii) The following methods, other than National Competitive Bidding, may be used for procurement of goods, works and non-consulting services for those contracts which are specified in the Procurement Plan: (A) Shopping; and (B) Direct Contracting.

(iii) In addition, for off-the-shelf goods and readily available non-consultants services, the method known as “pregão eletrônico”, as provided in Brazil’s Law No. 10520, of July 17, 2002, under “COMPRASNET”, the Federal procurement portal (or any other e-procurement system approved by the Bank), may be used in replacement for National Competitive Bidding and Shopping, subject to the following additional procedure, namely, that the bidding documents shall be acceptable to the Bank.

(d) Particular Methods of Procurement of Consultants’ Services

(i) Except as otherwise provided in item (ii) below, consultants’ services shall be selected under contracts awarded on the basis of Quality- and Cost-based Selection.
(ii) The following methods, other than Quality- and Cost-based Selection, may be used for the selection of consultants’ services from firms for those assignments which are specified in the Procurement Plan: (A) Quality-based Selection; (B) Selection under a Fixed Budget; (C) Least Cost Selection; (D) Selection based on Consultants’ Qualifications; (E) Single-source Selection of consulting firms.

(iii) Individual consultants shall be selected in accordance with the procedures of Section V of the Consultant Guidelines.

(e) Review by the World Bank of Procurement Decisions. The Procurement Plan shall set forth those contracts which shall be subject to the World Bank’s Prior Review. All other contracts shall be subject to Post Review by the World Bank.

**Article III**

**Withdrawal of Grant Proceeds**

3.01. **Eligible Expenditures.** The Recipient may withdraw the proceeds of the Grant in accordance with the provisions of: (a) the Standard Conditions; (b) this Section; and (c) such additional instructions as the World Bank may specify by notice to the Recipient (including the “World Bank Disbursement Guidelines for Projects” dated May 2006, as revised from time to time by the World Bank and as made applicable to this Agreement pursuant to such instructions), to finance Eligible Expenditures as set forth in the following table. The table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Grant (“Category”), the allocations of the amounts of the Grant to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Grant Allocated (expressed in USD)</th>
<th>Percentage of Expenditures to be Financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Goods, works, non-consulting services, consultants’ services and Training under the Project</td>
<td>931,000</td>
<td>100%</td>
</tr>
<tr>
<td>(2) Operating Costs</td>
<td>122,000</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL AMOUNT</td>
<td>1,053,000</td>
<td></td>
</tr>
</tbody>
</table>
For purposes of this paragraph, the term:

(a) “Operating Costs” means the operating costs incurred for the purposes of project implementation, including: (i) operation and maintenance of vehicles; (ii) incremental office equipment and supplies; (iii) shipment costs (whenever these costs are not included in the cost of goods); (iv) office supplies; (v) rent for office facilities; (vi) utilities; (vii) travel and per diem costs for technical staff carrying out supervisory and quality control activities; (viii) communication costs, including advertisement for procurement purposes; (ix) administrative and operational support staff; and (x) auditing.

(b) “Training” means the costs associated with the preparation and carrying out of seminars and workshops, including event logistics, transportation, catering, material preparation, course enrollment fees, per diems and other costs directly related to the preparation and implementation of seminars and workshops.

3.02. **Withdrawal Conditions.** Notwithstanding the provisions of Section 3.01 of this Agreement, no withdrawal shall be made for payments made prior to the date of countersignature of this Agreement by the Recipient, except that withdrawals up to an aggregate amount not to exceed $100,000 equivalent may be made for payments made prior to the date of this Agreement but on or after December 15, 2013, for Eligible Expenditures under Categories (1) and (2).

3.03. **Withdrawal Period.** The Closing Date referred to in Section 3.06 (c) of the Standard Conditions is December 31, 2017.

**Article IV**

**Recipient’s Representative; Addresses**

4.01. **Recipient’s Representative.** The Recipient’s Representative referred to in Section 7.02 of the Standard Conditions is its President of its Board of Directors.

4.02. **Recipient’s Address.** The Recipient’s Address referred to in Section 7.01 of the Standard Conditions is:

Luiz Carlos Moura Miranda  
President of the Board of Directors  
Fundação de Ciência, Aplicações e Tecnologia Espaciais - FUNCATE  
Av. Dr. João Guilhermino, 429 – 11º andar Salas 112 a 118 – Centro  
São José dos Campos São Paulo -12210-130  
Phone: (012) 3925-1344  
Fax: (012) 3941-2829

4.03. **World Bank’s Address.** The World Bank’s Address referred to in Section 7.01 of the Standard Conditions is:

International Bank for Reconstruction and Development/International Development Association
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Cable: INTBAFRAD
Telex: INDEVAS
Facsimile: 248423 (MCI) or 64145 (MCI)

1-202-477-6391