FRAMEWORK COLLABORATION AGREEMENT

REFERENCE KN 6472

(THE "AGREEMENT")

BETWEEN: THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH ("CERN"), an Intergovernmental Organization having its seat in Geneva, Switzerland,

AND: THE INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS (The National Institute for Space Research – "INPE"), a research unit of the Brazilian Ministry of Science, Technology and Innovation (hereinafter: "MCTI"), registered with CNPJ/MF n° 01.263.896/0005-98, established at 1758, Av. dos Astronautas, São José dos Campos, São Paulo, Brazil,

Hereinafter individually referred to as a "Party" and collectively as the "Parties",

CONSIDERING:

That CERN, an Intergovernmental Organization, is a leading global laboratory in particle physics, providing for collaboration of a pure scientific and fundamental character, with participation by scientific institutes from all over the world;

That INPE conducts scientific research, technological development, operational activities, and training of human resources in the fields of Space Science and Atmosphere, Earth Observation, Weather Forecast and Climate Studies, Space Engineering and Technology and related areas of knowledge, according to the policy defined by the MCTI and INPE;

That the Parties wish to, *inter alia*, collaborate on development and application of data-storage technology;

The mutual benefit that the Parties would derive from collaboration between them;

AGREE AS FOLLOWS:

Article 1 Purpose

- 1.1 This Agreement establishes the framework for collaboration between the Parties in applications of CERN data storage solutions for large-scale data sharing in environmental sciences and in any other area of mutual interest.
- 1.2 The implementation of this Agreement by the Parties shall be subject to the availability of resources at the Parties.
- 1.3 The Parties shall use the results of their collaboration for non-military purposes only.

Article 2 Project(s)

- 2.1 Each Party's contribution to a specific collaboration ("Project"), including, where applicable, the required resources, the duration of the activities and any deliverables, milestones, acceptance procedures and the management of the Project shall be set out in an Addendum to this Agreement. The Project shall be subject to the provisions of this Agreement, varied, where applicable, through the provisions of the Addendum.
- 2.2 Except as agreed otherwise by the Parties, each Party shall bear the cost of its participation in the collaboration and the Project(s).

Article 3 Experts

- 3.1 Each Party shall ensure the selection of experts with the necessary skills and competence to execute each Project on its behalf, taking into account the nature and the environment of the activities.
- 3.2 Where CERN acts as a host Party in the execution of a Project or otherwise receives INPE experts in the execution of this Agreement, the INPE experts may be appointed as associated members of the personnel pursuant to the conditions set out in the CERN Staff Rules and Regulations from which it follows that, for the duration of their association with CERN (i) the INPE experts shall have a legal link with INPE, (ii) INPE shall be responsible for their social insurance, (iii) the INPE experts shall maintain medical insurance cover adequate in Switzerland and France for themselves and accompanying family members, which shall include cover for occupational illness and accidents for the INPE experts, (iv) such medical insurance shall also cover for any duty travel required as part of a Project and (v) the INPE experts shall have adequate financial resources to support themselves and accompanying family members. INPE shall hold CERN free and harmless from liability in connection with the subject matter of this Article.
- 3.3 As the home institution of the INPE experts, INPE shall comply with the obligations set out in the <u>Handbook of key legal responsibilities of home institutions in respect of their personnel at CERN</u>.

Article 4 Conduct and safety

- 4.1 The experts shall comply with the rules of conduct and safety in force at the host Party.
- 4.2 Any activity, equipment or other item contributed by a Party to the collaboration shall conform to the safety rules, including any specific safety requirements, in force at the host Party where such activity will be performed or such equipment or other item will be installed and operated.

Article 5 Data privacy

All personal data processed by the Parties under this Agreement shall be processed in accordance with their respective legal frameworks.

Article 6 Intellectual property

- 6.1 The disclosure of information under this Agreement does not create any proprietary right for the receiving Party.
- 6.2 Title in intellectual property developed by a Party in the execution of this Agreement shall be vested in that Party, who hereby grants the other Party a free, non-exclusive license for the use of such intellectual property in the execution of its scientific programme by itself or through its partners and contractors.
- 6.3 Where intellectual property is developed jointly by the Parties and title is therefore vested in them jointly, they hereby grant each other a free, non-exclusive license for the use of such intellectual property in the execution of their scientific programmes by themselves or through their partners and contractors.
- 6.4 The providing Party provides no warranty in respect of intellectual property made available by it under this Agreement, and the receiving Party shall hold it free and harmless from any liability arising from its use (including, where applicable, by its partners and contractors) of such intellectual property.

Article 7 Publications

- 7.1 The Parties shall strive to jointly publish the results of the Projects as Open Access publications.
- 7.2 Insofar as the Parties do not jointly publish the results of a Project, publications by one Party involving results developed by the other Party shall be subject to the latter's prior written approval, which shall not be withheld unreasonably.
- 7.3 Publications shall acknowledge the collaboration between the Parties including, whenever appropriate, the experts having taken part in the development of the results covered by the publication.
- 7.4 If a Party wishes to issue any video testimony, press release, public announcement or any other type of communication (other than internal communication) in relation to a Project, it shall seek the prior written approval of the other Party. Any use by Party of the other Party's name, acronym and/or logo shall be subject to the latter's prior written approval.

Article 8 Confidentiality

The Parties agree to execute the Projects in a spirit of openness. However, where, exceptionally, confidentiality is required, the following provisions shall apply:

8.1 Each Party shall treat as confidential any information provided to it by the other Party that is designated as confidential. Except as agreed otherwise in writing, this obligation shall continue for a period of five (5) years from the date of termination of this Agreement.

8.2 The receiving Party shall:

- (i) not use confidential information for any other purpose than for the execution of this Agreement;
- (ii) limit the circle of recipients of such confidential information on a need-to-know basis and ensure that the recipients are aware of and comply with the obligations as specified in this Article.
- 8.3 No confidentiality obligation shall apply to information which:
 - (i) the receiving Party demonstrates was in the public domain prior to its communication by the disclosing Party;
 - (ii) became part of the public domain after such communication but not through any fault of the receiving Party;
 - (iii) was already in possession of the receiving Party at the time of signature of this Agreement;
 - (iv) has been lawfully received by the receiving Party from a third party without any confidentiality obligation; or
 - (v) has been developed by the receiving Party independently and outside the scope of this Agreement.

Article 9 Liability

- 9.1 Except as provided in Articles 3.2, 6.4 and in this Article 9, each Party shall bear its own loss and damage in connection with this Agreement.
- 9.2 Subject to Article 9.3, the responsible Party shall indemnify the other Party for its loss and damage resulting from gross negligence or willful misconduct by the responsible Party, or a violation by the responsible Party of the rules of conduct and safety in force at the host Party.
- 9.3 Notwithstanding the foregoing, the Parties shall in no event be liable to each other for any consequential loss or damage, such as loss of income or of availability of data or installations.

Article 10 Entry into force, duration and termination

- 10.1 This Agreement shall enter into force on the date of signature by the last Party to sign. It shall remain in force for the duration of the collaboration, unless terminated by joint agreement, or by one Party giving at least three (3) months prior written notification to the other Party. Except as otherwise agreed by the Parties, termination of this Agreement shall be without prejudice to the completion of outstanding Projects set out in Addenda to this Agreement.
- 10.2 In case of a substantial breach by a Party of its obligations under an Addendum to this Agreement, the other Party may terminate that Addendum in whole or in part if no corrective action satisfactory to the other Party is taken within one (1) month of the issue of a letter of notice by the other Party to the breaching Party.

10.3 Articles 3.2, 6, 8, 9, 10.3 and 11 of this Agreement shall survive its termination, howsoever caused.

Article 11 Governing law and dispute resolution

- 11.1 The provisions of this Agreement shall be interpreted in accordance with their true meaning and effect. Without prejudice to CERN's status as an intergovernmental organization, reference shall be made to Swiss substantive law where:
 - a matter is not specifically covered by the Agreement; or
 - an Agreement provision is ambiguous or unclear.

Such reference shall be made exclusively for the matter or the Agreement provision concerned, and shall in no event apply to the other provisions of the Agreement.

11.2 The Parties shall settle any difference concerning this Agreement amicably. Where this is not possible, the dispute shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce of Paris. Unless agreed otherwise in writing by the Parties, the ICC Expedited Procedure Provisions shall not apply, any dispute shall be settled by three arbitrators, in English and take place in Geneva. Notwithstanding reference of the dispute to arbitration, the Parties shall continue to perform their obligations under this Agreement.

Article 12 Coordination

The Parties shall each nominate a technical coordinator, who together shall coordinate the overall execution of this Agreement. Their names and contact details are set out in <u>Annex 1</u>. It is understood that the Parties may decide to nominate a different technical coordinator for each specific Project, whose name and contact details shall be set out in the relevant Addendum.

Article 13 Amendments

Any amendment to this Agreement shall be made in writing and signed by the authorized representatives of the Parties.

Thus drawn up in the English language and signed by the authorised representatives of the Parties who, in so signing, represent and warrant that they are duly authorised and have legal capacity to sign this Agreement and bind the respective Party.

The European Organization
for Nuclear Research (CERN)

The National Institute
for Space Research (INPE)

Assinado por:

Lutorio Miguel Vicira Monteiro
Technology Department

The National Institute
for Space Research (INPE)

Assinado por:

Lutorio Miguel Vicira Monteiro
Antonio Miguel Vicira Monteiro
Director of INPE

Signed on: 16 may 2025

Signed on: 23 may 2025

ANNEX 1: Coordinators

For CERN:

Salvatore Mele, Senior Advisor for International Relations Salvatore.Mele@cern.ch

For INPE:

Dr. Paulo Nobre, Researcher and Coordinator of the SIPEC Program paulo.nobre@inpe.br

ADDENDUM NO. 1 KN 6482/IT TO FRAMEWORK COLLABORATION AGREEMENT KN 6472

BETWEEN: THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH ("CERN"), an Intergovernmental Organization having its seat in Geneva, Switzerland, duly represented by Enrica Porcari, Head of the Information Technology Department,

AND: THE INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS (The National Institute for Space Research - "INPE"), a research unit of the Brazilian Ministry of Science, Technology and Innovation (hereinafter: "MCTI"), registered with CNPJ/MF n° 01.263.896/0005-98, established at 1758, Av. dos Astronautas, São José dos Campos, São Paulo, Brazil, Zip Code 12.227-010, duly represented by Antonio Miguel Vieira Monteiro, Director of institute,

Hereinafter each individually referred to as a "Party" and collectively as the "Parties",

CONSIDERING THAT:

Framework Collaboration Agreement KN 6472 (the "Agreement") concluded between the Parties defines the framework applicable to collaboration between them in domains of mutual interest:

Article 2.1 of the Agreement provides that the scope, each Party's contributions and all other details of each specific Project shall be set out in Addenda to the Agreement;

The Parties have identified the collaborative project set out below, which shall be covered by the provisions of this Addendum No. 1 KN 6482/IT (the "Addendum"),

AGREE AS FOLLOWS:

Article 1 Scope

- 1.1 Under the terms of this Addendum, the Parties shall collaborate in leveraging CERN's high-performance storage technologies to support large-scale data sharing in space science. The aim of the Project is to build capacity towards establishing a large-scale data federation in Brazil, based on CERN's advanced distributed storage system (EOS), enabling large-scale data sharing for research in environmental sciences, pollution monitoring and climate change.
- 1.2 Except as agreed in this Addendum, each Party shall bear the cost of its participation in the Project.
- 1.3 This Addendum shall be subject to the provisions of the Agreement, it being understood that in case of divergence the provisions of this Addendum shall prevail.

Article 2 Duration of the Project

The Project shall commence no later than September 2025 and shall be completed no later than April 2026.

Article 3 INPE's contribution

INPE shall contribute to the Project through 2 qualified expert(s) (the "INPE Expert(s)"). The INPE Experts will be seconded to CERN for a duration of 6 months each. INPE will bear all costs related to this secondment. The INPE Experts will work with the CERN Information Technology Department to execute the work packages (WP) detailed below:

- WP1 (Duration approximately 3 months): Support to CERN's Storage Operations. The INPE Experts will be embedded in the CERN Storage Operation team, in the Physics Data Service Section of the Storage and Data Management group. They will acquire hands-on experience on the EOS system configuration, monitoring and maintenance, including through participation in daily operational duties, incident handling and system troubleshooting. They will be engaged in service rota, learning real-time operational response procedures and user supports. They will aim to develop best practices for large-scale storage management.
- WP2 (Duration approximately 3 months, subsequent to completion of WP1): Advanced Training and Independent Operations. The INPE Experts will take responsibility for automation tasks, system optimizations and preparation of documentation. They will participate in planning and execution of system upgrades and maintenance tasks.
- WP3 (Duration approximately 3 months, in parallel to WP3): Strategic design of EOS deployment for environmental monitoring in Brazil. With support from CERN personnel in CERN's Storage Operation team designated by CERN Technical Coordinator, the INPE Experts will develop an operational strategy for the deployment and configuration of EOS systems for environmental monitoring in Brazil, and lay the foundation of bilateral contacts for continued future collaboration.

On completion of each WP, and in accordance with the agreed milestones, the INPE Experts shall provide a report of the tasks performed. Each report shall include an assessment on the knowledge transferred and suggestions on future cooperation between the Parties in the scope of the Project.

Article 4 CERN's contribution

CERN shall contribute to the Project by making available office facilities on the CERN site as required for the execution of the Project. CERN shall provide the INPE Experts with the appropriate guidance and training on EOS system configuration, monitoring and maintenance to meet the objectives of WP1 as described in Article 3.1.

Article 5 Technical coordination

The Parties shall each nominate a technical coordinator, who together shall coordinate the technical execution of the Project, as well as a designated safety coordinator. Their names and contact details are set out in Annex 1.

Article 6 Status of Personnel

During their stay at CERN, the INPE Experts shall be appointed as Cooperation Associates in accordance with Article 3 of the Agreement and CERN's Staff Rules and Regulations.

Article 7 Amendments

Any amendment to this Addendum shall be made in writing and signed by the authorized representatives of the Parties.

Thus drawn up in the English language and signed by the authorised representatives of the Parties who, in so signing, represent and warrant that they are duly authorised and have legal capacity to sign this Agreement and bind the respective Party.

ANNEX 1 Technical and Safety Coordinators

CERN's Technical Coordinator will be:

Luca Mascetti Tel: +41 22 767 88 47 Luca.Mascetti@cern.ch

INPE's Technical Coordinator will be:

Jorge Luis Gomes Tel: +55 12 98171 6694 jorge.gomes@inpe.br

CERN's Safety Coordinator will be:

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INPE's Safety Coordinator will be:

Jorge Luis Gomes Tel: +55 12 98171 6694 jorge.gomes@inpe.br