



Delibera n. 265/2021

20 Dicembre 2021

Allegato P al Verbale n. 07/2021

Oggetto: RESEARCH COLLABORATION AGREEMENT BETWEEN THE INSTITUTO GEOFÍSICO DE LA ESCUELA POLITÉCNICA NACIONAL (IG-EPN) (ECUADOR) AND THE ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA (INGV) (ITALY)

IL CONSIGLIO DI AMMINISTRAZIONE

VISTO il Decreto legislativo 29 settembre 1999, n. 381, concernente la costituzione dell'Istituto Nazionale di Geofisica e Vulcanologia (INGV);

VISTO il Decreto Leg.vo 25/11/2016, n. 218, concernente "Semplificazione delle attività degli Enti Pubblici di Ricerca ai sensi dell'art. 13 della Legge 7/08/2015, n. 124";

VISTO lo Statuto dell'INGV, approvato con Delibera del Consiglio di Amministrazione n. 114/2020 del 19 giugno 2020, emanato con Decreto del Presidente n. 78/2020 del 27/10/2020, pubblicato sul Sito WEB istituzionale - Avviso di emanazione di cui al Comunicato su Gazzetta Ufficiale della Repubblica Italiana - Serie generale - n. 264 del 24 ottobre 2020, in particolare, l'art. 8, comma 6, lettera f), il quale prevede che il CdA *"omissis....delibera la partecipazione a società, fondazione e consorzi, nonché la stipulazione di accordi con organismi nazionali, europei e internazionali"*;

VISTO il Regolamento di Organizzazione e Funzionamento dell'INGV, emanato con Decreto del Presidente n. 36/2020 del 22/04/2020, pubblicato sul Sito WEB istituzionale e in particolare, l'art. 29 il quale disciplina le *Collaborazioni con soggetti esterni*, stabilendo al primo comma che: *"I rapporti di collaborazione nell'attività di ricerca tra l'Ente e soggetti pubblici e privati, italiani e stranieri sono regolati attraverso contratti aventi come riferimento di massima la seguente tipologia: protocolli d'intesa, accordi di programma quadro, convenzioni operative"*;

VISTO il Regolamento del Personale, emanato con Decreto del Presidente n. 12/2021 del 25/02/2021, pubblicato sul Sito WEB istituzionale;

VISTO il Regolamento di Amministrazione, Contabilità e Finanza, adottato con Delibera del Consiglio di Amministrazione n. 145/2020 del 22 luglio 2020, ed emanato con Decreto del Presidente n. 75/2020 del 21 ottobre 2020;

VISTO lo schema del RESEARCH COLLABORATION AGREEMENT BETWEEN THE INSTITUTO GEOFÍSICO DE LA ESCUELA POLITÉCNICA NACIONAL (IG-EPN) (ECUADOR) AND THE ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA (INGV) (ITALY);

RITENUTO opportuno per l'INGV procedere alla sottoscrizione del predetto Agreement, avente lo scopo d'instaurare un rapporto di reciproca collaborazione



scientifica orientato all'attivazione della ricerca collaborativa nell'ambito del Reliance Project e al miglioramento dell'interpretazione dei segnali geofisici monitorati dei vulcani attivi attraverso la realizzazione di studi e attività di monitoraggio, l'ottimizzazione delle risorse disponibili e l'offerta di nuovi servizi di ricerca;

CONSIDERATO che la predetta collaborazione internazionale ha anche l'obiettivo di disseminare le informazioni a livello nazionale e internazionale e la pubblicazione congiunta di articoli e documentazione per il progresso scientifico; VISTA la copertura finanziaria dell'importo totale di euro 5.000,00 che grava sui fondi di Bilancio contraddistinti da C.R.A: 1.08 (ONT) – Capitolo Altre spese 1.03.02.99.999.01, trovandone la necessaria disponibilità;

VISTO il parere favorevole del Direttore di Sezione e del Direttore di Dipartimento;

su proposta del Presidente,

DELIBERA

L'approvazione dello schema del RESEARCH COLLABORATION AGREEMENT BETWEEN THE INSTITUTO GEOFÍSICO DE LA ESCUELA POLITÉCNICA NACIONAL (IG-EPN) (ECUADOR) AND THE ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA (INGV) (ITALY), allegato alla presente quale parte integrante e sostanziale (all.1).

Viene dato mandato al Presidente dell'INGV alla sottoscrizione definitiva dell'atto in questione.

Firmato il 29/12/2021

Depositato presso la Segreteria del Consiglio in data 29/12/2021

La segretaria verbalizzante
(Dott.ssa Maria Valeria INTINI)

IL PRESIDENTE
(Prof. Carlo DOGLIONI)



**RESEARCH COLLABORATION AGREEMENT BETWEEN
THE INSTITUTO GEOFÍSICO DE LA ESCUELA POLITÉCNICA NACIONAL
(IG-EPN)(ECUADOR)
AND
THE ISTITUTO NAZIONALE DI GEOFISICA
E VULCANOLOGIA (INGV)(ITALY)**

The Instituto Geofisico de la Escuela Politécnica Nacional (IG-EPN), located on Calle Ladrón de Guevara E11-253, in Quito Ecuador, represented by its Rector Dr. Florinella Muñoz, and the Istituto Nazionale di Geofisica e Vulcanologia (INGV), located at via di Vigna Murata 605, 00143 Rome, Italy, represented by its President, Prof. Carlo Doglioni.

CONSIDERING THAT

1. IG-EPN conducts studies, research, and monitoring activities on volcanoes located in Ecuador.
2. INGV promotes studies in all fields of Earth Sciences, developing research, and monitoring activities in volcanology, seismicity, and the environment. In particular, INGV performs remote sensing data analysis and modeling of volcanic, seismic, and other natural hazards.
3. There is a common interest in jointly exploring and developing scientific and technical activities between IG-EPN and INGV.
4. There is a mutual convenience in promoting exchange programs involving professors, researchers, and technicians engaged in scientific activities to enhance the specialization of human resources.
5. IG-EPN is the Ecuadorian Volcanoes Supersite Coordinating Institution (Patricia Mothes, MSc. is the coordinator) within the GEO-GSNL (Geohazard Supersite and National Laboratories) global initiative, promoted by GEO. At the same time, INGV is the coordinator of two Supersites (Campi-Flegrei/Vesuvius and Mount Etna). The Scientific Coordinator of the GEO-GSNL initiative of INGV-ONT is Dr. Stefano Salvi. He has worked closely with the Ecuadorian Volcanoes Supersite.
6. There is a collaborative effort within the framework of the USGS-VDAP (Volcanic Disaster Assistance Program) since 2018, which includes training from INGV to young Latin American scientists, including those from IG-EPN (in 2018, 2019, and 2020). Likewise, two IG-EPN scientists visited INGV in 2019 to conduct collaborative research on remote sensing data and modeling related to Ecuadorian volcanoes.
7. IG-EPN contributed to demonstrating and disseminating the EVER-EST 2015-2018 European project, of which INGV was a partner.
8. INGV is a partner of the recently funded European Project Reliance 2021-2022 (the lead scientist is Dr. Elisa Trasatti). It offers services to discover and analyze satellite-based remote sensing data, and IG-EPN has been asked to demonstrate the use of the services provided.

**THEY AGREE ON THE FOLLOWING****ART. 1**

IG-EPN and INGV, under this Agreement, will establish a relationship of mutual scientific collaboration oriented toward the activation of collaborative research in the framework of the Reliance Project and the improvement of the interpretation of the monitored geophysical signals of active volcanoes by carrying out studies and monitoring activities, optimizing their available resources and offering new research services. Likewise, the dissemination of information at national and international levels and the joint publication of articles and documentation for scientific progress is one of the main objectives of the Agreement.

ART. 2

The following scientific objectives and activities are identified:

- Analysis of remote sensing data, in particular SAR data, for monitoring active deformation in Ecuadorian Supersite and other volcanoes (e.g., the Galapagos Islands) using virtual machines and the services offered by Reliance;
- Modeling and interpretation of geodetic signals using different optimization tools, including those provided by Reliance, and comparison of results;
- Collaboration in the interpretation of deformation processes and their relationships with volcanic and seismic activity in different geodynamic environments (silicic and basaltic volcanoes) in Ecuador;
- Massive remote sensing analysis using Reliance services as geodetic surveillance and risk mitigation tools;
- Production of Research Objects containing data, models, or bibliographic resources using Reliance services;
- Comparison of tools and procedures between INGV and IG-EPN;
- Communication and dissemination activities to jointly promote and organize conferences and meetings to share knowledge and enhance collaborations that can go beyond remote sensing analysis. These activities may include all the disciplines of Earth sciences developed by both INGV and IG-EPN.

ART. 3

For the fulfillment of the objectives described in the previous article, INGV and IG-EPN will collaborate to:

- a) Exchange scientific and technical information in the field of remote sensing, geodesy, volcanology, seismology, and geochemistry;
- b) Design and implement cooperative research programs in the field of seismology, geodesy, remote sensing, petrology, geochemistry and volcanology, geological hazards and risk assessment, technological developments, and networking;
- c) Define the organization and logistics for carrying out joint research activities with own funds, optimizing the available resources of both institutions;



- d) Encourage direct contact between researchers;
- e) Propose training activities for young scientists and technicians;
- f) Propose the organization of conferences and seminars in both countries;
- g) Encourage the joint publication of research results and scientific dissemination documents.

ART. 4

Collaboration can include all activities of common interest to benefit from the synergy and experience of both INGV and IG-EPN. To this end, INGV and IG-EPN will jointly provide laboratories, instrumentation, and, in general, all the necessary resources to realize the agreed projects and exchange personnel during the appropriate periods.

The collaboration includes: a) joint participation in programs promoted by international institutions and foundations and b) joint organization of conferences, meetings, seminars, and field activities.

The cooperation agreement is also another possibility to organize joint training and educational activities to benefit students pursuing undergraduate and doctoral courses and young scientists working in the Parties to the Cooperation Agreement.

ART. 5

Both parties, within the framework of their activity, will use the results of the studies. If the results can be published, the parties will define their specific contribution.

ART. 6

INGV and IG-EPN indicate the following as the scientific officers responsible for the activities carried out within the framework of this cooperation agreement

INGV-ONT: Dra. Elisa Trasatti

IG-EPN: MSc. Patricia Mothes

The scientists and directors of both institutions mentioned above constitute a joint committee for the supervision and implementation of the Agreement.

ART. 7

The parties to this cooperation agreement seek, jointly or separately, funds to carry out research activities of mutual interest, applying to calls for project funding in national and international research programs and Ecuador-Italy bilateral research programs.



To support the activities of IG-EPN in the Reliance project, INGV will transfer, within three months from the effective date of this Agreement, an amount of (five thousand) 5000 Euros to IG-EPN. Before October 2022, IG-EPN will send INGV a report detailing the scientific activities and a justification of the expenses.

ART. 8

This Agreement has a three year duration from the date of signing and may be renewed in writing following both parties' will.

ART. 9

The Parties shall make all reasonable efforts to amicably resolve any dispute concerning the interpretation or application of this collaboration through consultations or negotiations between both Parties.

ART. 10

Matters not provided for in this Agreement shall be determined by mutual consultation and an agreement between the Parties.

The Parties shall respect the principle of equal opportunity and non-discrimination, per their laws and regulations, in the administration of this collaboration and the exchange of researchers, scientists, teachers, students, and technical personnel.

DRAWN UP IN TWO ORIGINAL DOCUMENTS IN ENGLISH. Both documents are equally authentic.

Read and signed by the parties on 5 of November 2021 on behalf of

Firmado electrónicamente por:

**FLORINELLA
MUNOZ**

INGV

Prof. Carlo Doglioni

IG-EPN

Florinella Muñoz, PhD