Memorandum of Understanding

THIS MEMORANDUM OF UNDERSTANDING (MOU) IS MADE AND ENTERED INTO BETWEEN

- 1 Department of Earth Sciences, Environment and Resources, University of Naples Federico II, hereinafter referred to as "DISTAR", having its head office at Largo San Marcellino, 10, I-80138 Naples, Italy, and being represented by Prof. Domenico Calcaterra, Head of Department
- 2 Department of Physics "Ettore Pancini", University of Naples Federico II, hereinafter referred to as "DF", having its head office at Complesso Universitario di Monte Sant'Angelo, Via Cinthia, I-80126, Naples, Italy, and being represented by Prof. Leonardo Merola, Head of Department

AND

- 1 Faculty of Civil and Environmental Engineering, Tarbiat Modares University, hereinafter referred to as "FCEE", having its head office at Intersection of Chamran and Al-e-Ahmad Highways, Tehran, P. O. Box 14155-397, I.R. of Iran, and being represented by Prof. Hamzeh Shakib, Dean of Faculty
- 2 Department of Earthquake Engineering, Tarbiat Modares University, hereinafter referred to as "DEE", having its head office at Intersection of Chamran and Al-e-Ahmad Highways, Tehran, P. O. Box 14155-397, I.R. of Iran, and being represented by Prof. Abbas Ali Tasnimi, Head of Department.

All hereinafter referred to as the "Parties" collectively or "Party" individually,

PREAMBLE:

Whereas the Parties are convinced that expansion and development of cooperation between the Parties will contribute to the further consolidation of scientific and technological cooperation between Iran and Italy, in consideration of the mutual covenants and conditions contained herein, Parties agree as follows:

Article 1: Purpose

The purpose of this MOU is to define the means of cooperation between DISTAR, DF, FCEE, and DEE, to facilitate the exchange of scientific and technological information, and to define and implement cooperation on priority subjects defined by the two Parties.

Article 2: Action for the Joint Scientific and Technological Cooperation

1. The Parties will have regular and/or occasional meetings to discuss possible subjects for future cooperation, to review the state of current cooperative projects, and to decide on the joint seminars and the implementation of joint cooperation on priority subjects.

- 2. When the Parties agree on a proposition that leads to mutual benefit based upon this MOU, the Parties will jointly work on its implementation.
- 3. When the activities under this MOU proceed to a specific research project (hereinafter referred to as "Joint Research"), the Parties shall agree in writing on any necessary matters in specific such as financial arrangement, work plan, staffing requirements, obligations and conditions which are not described in this MOU. These written agreements shall be set forth in the Project Annex to this MOU and shall be signed by the delegates designated by the duly authorized representative of each Party. In case of any inconsistency between the terms of this MOU and the Project Annex hereto, the terms of this MOU shall prevail.

Article 3: Administration

Administration and management of this MOU will be coordinated for DISTAR and DF by their Administration Offices, for FCEE and DEE by International Affairs Office.

Article 4: Confidentiality

The Parties shall keep confidential the items defined as Confidential Information in Annex A, and shall not provide or disclose Confidential Information to any third party without the other Party's written consent. Confidential Information shall remain confidential for an additional one (1) year after the termination of this MOU.

Article 5: Publications

When either Party announces publicly the results of the Joint Research or technical information and documents created in the course of the Joint Research or cooperative activities pursuant to this MOU, that Party shall observe the confidentiality terms set forth in the foregoing Article, shall disclose to the other Party the contents of the announcement in advance, and shall obtain prior written consent of the other Party. The terms of this Article shall remain valid for one (1) year after the termination of this MOU.

Article 6: Intellectual Property Rights

- 1. Intellectual Property Rights as used in this MOU means the following:
- a) Any and all world-wide intellectual property rights, including but not limited to, patent right, utility model right, design right, trademark right, copyright, and right to obtain these rights.
- b) Know-how, including but not limited to, technical information, experimentation data, sample materials, and drawings, which is of concealable and proprietary nature and is designated through consultation between the Parties.

2. Ownership

a) The Intellectual Property Rights related to an invention made independently by a researcher of either Party shall be owned solely by such Party.

b) The Intellectual Property Rights related to an invention made jointly by researchers of both Parties ("Jointly-Owned Intellectual Property Rights") shall be owned jointly by the Parties with the extent of the ownership to be determined through consultation between the Parties, taking into consideration the contributions made by each Party.

3. Application and Maintenance

Parties shall be responsible for the application and maintenance expenses of the Jointly-Owned Intellectual Property Rights proportionate to their respective holdings.

4. Royalty Sharing

Unless otherwise agreed to by the Parties, any payment, including but not limited to royalties and initial payment or lump sum payments, resulting from any Jointly-Owned Intellectual Property Rights invented or created during the Joint Research or cooperative activities pursuant to this MOU shall be shared by the Parties in proportion to the ownership.

Article 7: Duration

This MOU shall remain in effect for three (3) years from November 1, 2016. It may be amended or extended by a prior written agreement between both Parties hereto. The Parties agree that this present MOU shall replace the Cooperation Agreements upon the execution of this MOU, by which the Cooperation Agreements shall lose its effect.

Article 8: Compliance with Export Controls and Regulations

- 1. If goods and/or technology are transferred, Parties shall comply with the export control laws and regulations of Italy and Iran.
- 2. The Parties shall obtain export licenses for goods and/or technology to be transferred for Joint Research or cooperative activities conducted under this MOU when such export licenses are required by the export control laws and regulations of Italy or Iran. Each Party is responsible for its own compliance with such laws.
- 3. The Parties represent and warrant that they shall not use or allow any third party to use any goods and/or technology or their replicas obtained under this MOU for the purpose of developing or manufacturing nuclear, chemical or biological weapons, or missiles to deliver any such weapons.

Article 9: Dispute Resolution and legal obligations

- 1. The Parties agree that if any of the terms herein are subject to questions of intent or interpretation, or if the Parties identify other issues that are not addressed in this MOU, the Parties shall enter into good faith negotiations to resolve such issues, and the resolution shall be incorporated as written amendments to this MOU.
- 2. This MOU is not intended to create any legal obligations under international laws.
- 3. This MOU shall be carried out within the framework of the respective laws and regulations of the two countries and subject to the availability of appropriate funds and

personnel of the Parties.

Article 10: Assignment

Neither Party may assign, transfer or dispose of this MOU in whole or in part or any right or obligation hereunder to any individual, firm, institution or corporation without obtaining prior written consent from the other Party; and such consent shall not be unreasonably withheld.

Article 11: Distribution

This agreement is written in 4 pages that include two Annexes: a one page Annex A for "Confidential Information Definition" and a three-page Annex B for the 'Joint Project'. Two original and identical copies have been made and signed by Parties. Each Party received an original copy.

IN WITNESS WHEREOF, the Parties have executed this MOU on November 1, 2016 by their duly authorized representatives.

Department of Earth Sciences, Environment and Resources, University of Naples Federico II (DISTAR), University of Naples Federico II, Naples, ITALY By:
Department of Physics "Ettore Pancini" (DF), University of Naples Federico II, Naples,
ITALY
By: Rue Le
Prof. Leonardo Merola
Head of Department of Physics "Ettore Pancini"
Faculty of Civil and Environmental Engineering (FCEE), Tarbiat Modares University,
Tehran, IRAN
By:
Prof. Hamzeh Shakib
Dean of Faculty of Civil and Environmental Engineering
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Department of Earthquake Engineering (DEE), Tarbiat Modares University, Tehran, IRAN

By: Prof. Abbas Ali Tasnimi

Head of Department of Earthquake Engineering

Tarbiat Modares University

ANNEX A

Definition:

Confidential Information

- 1. "Confidential Information" as used in this MOU means the following:
- a) Technical information and documents and marketing information provided or disclosed by the other Party (hereinafter in this Article to include researchers of the other Party) in connection with this MOU, which were disclosed in writing and/or marked with an appropriate confidentiality legend by the other Party at the time of provision or disclosure, or which were disclosed with an oral confidential designation at the time of disclosure and subsequently reduced to writing and marked with an appropriate confidential legend to the other Party within thirty (30) days of the disclosure; or
- b) All technological achievements such as Intellectual Property Rights like Know-how and inventions generated from Joint Research and/or any activities conducted pursuant to this MOU, which the Parties agree to designate as confidential promptly after its creation.
- 2. The provisions of Article 4 shall not apply to Confidential Information which falls under any of the following:
- a) Information which was in the public domain at the time of disclosure or thereafter enters the public domain other than through a breach of the receiving Party;
- b) Information that is lawfully obtained from a third party under circumstances permitting the receiving Party to use or disclose the information without restrictions;
- c) Information which is in the possession of the receiving Party prior to its receipt from the disclosing Party;
- d) Information that can be proven in writing to have been developed independently by the receiving Party without using information received from the disclosing Party, or
- e) Information which is required to be disclosed as a result of governmental or judicial order.

PROJECT ANNEX B TO THE MEMORANDAM OF UNDERSTANDING

BETWEEN

DEPARTMENT OF EARTH SCIENCES, ENVIRONMENT AND RESOURCES (DISTAR)
UNIVERSITY OF NAPLES FEDERICO II

DEPARTMENT OF PHYSICS "ETTORE PANCINI" (DF)
UNIVERSITY OF NAPLES FEDERICO II

AND

FACULTY OF CIVIL AND ENVIRONMENTAL ENGINEERING (FCEE)
TARBIAT MODARES UNIVERSITY

DEPARTMENT OF EARTHQUAKE ENGINEERING (DEE)
TARBIAT MODARES UNIVERSITY

COLLABORATION ON GEOPHYSICS AND SEISMOLOGY

The Department of Earth Sciences, Environment and Resources, University of Naples Federico II (hereinafter referred to as "DISTAR"), the Department of Physics "Ettore Pancini", University of Naples Federico II (hereinafter referred to as "DF") and the Faculty of Civil and Environmental Engineering, Tarbiat Modares University (hereinafter referred to as "FCEE"), the Department of Earthquake Engineering, Tarbiat Modares University (hereinafter referred to as "DEE") hereby agree to cooperate in the activities set forth in this Project Annex (hereinafter referred to as "PA"), pursuant to and subject to the Memorandum of Understanding signed by the Parties.

I. SCOPE

The parties intend to carry out cooperative research activities on GEOPHYSICS AND SEISMOLOGY.

II. AREA OF COOPERATION

In principle, research cooperation will be conducted in the following subjects:

- 1) Study of seismic source parameters
- 2) Numerical simulation of seismic wave propagation in heterogeneous media
- 3) Kinematic/Dynamic models of the earthquake source

III. PROJECT COORDINATION

The Parties herewith agree on the nomination of:

Prof. Rosa Di Maio from Department of Earth Sciences, Environment and Resources (DISTAR), University of Naples Federico II

Dr Antonio Emolo from Department of Physics "Ettore Pancini" (DF), University of Naples Federico II

Prof. Naser Khaji from Department of Earthquake Engineering, Tarbiat Modares University,

as coordinators in charge of this PA with the mandate of:

- 1) Possible proposing plans for the exchange and training of young scientists (i.e. Postdocs and PhD students, technologists, graduate students) through available fellowships and dedicated grants;
- 2) Possible setting-up research proposals for projects to submit to national and international funding agencies and/or to carry out on the basis of institutional funding;
- 3) Providing opportunities for researchers and graduate students to participate in conferences, symposium and international meetings of both Parties.

IV. WORK PLAN

The Parties hereby establish a relationship of various types of scientific collaboration aimed at the initiation of research projects, exchange of researchers, organization of joint seminars and dissemination of information at national and international levels about studies in various fields. The collaboration may include all activities of common interest with the aim of benefiting from the synergy of the know-how and expertise of the Parties. To this end, the Parties will provide own laboratories with instrumentation, research infrastructures and, in general, all resources necessary for the realization of the projects agreed herein, including exchange of personnel for long periods.

V. FUNDING ARRANGEMENTS

Subject to University of Naples Federico II and Tarbiat Modares University laws and regulations along with the availability of funds, each Party shall cover its own expenses of visiting scientists. Emergency expenses shall be covered by an insurance policy contracted by each visiting scientist or by the sending Party. Each Party shall provide research facilities and assistance for visiting scientists participating in this project.

VI. ADMINISTRATIVE ARRANGEMENTS

- A. The Participants shall assign personnel to the project in accordance with applicable laws, regulations, and policies of their respective parties.
- B. Changes or modification to this PA shall be made through written documents and be signed by the personnel duly authorized by the Parties.
- C. Upon request of either Party regarding any matter relating to the terms of the PA, the Parties shall endeavor to resolve any problem or misunderstanding through consultation between the Parties in a spirit of cooperation and mutual trust.

VII. **DURATION OF THE PROJECT**

This PA will become effective upon signature by both Parties, and will remain in effect for three (3) years, at which time it may be extended by mutual written consent of the both Parties, provided that the MOU remains in force. It may be terminated by either Party upon ninety (90) days written notice to the other Parties.

Done in three identical copies in English with each copy being authenticated by their delegates designated by the duly authorized representatives of the Parties to the Memorandum of Understanding.

Department of Earth Sciences, Environment and Resources (DISTAR) University of Naples Federico II

Department of Physics "Ettore Pancini" (DF) University of Naples Federico II

Signature:

Signature:

Name: Prof. Domenico Calcaterra

Title: Head of DISTAR

Date: 12/01/2017

Name: Prof. Leonardo Merola

Title: Head of DF

Date: 49/04/201

Department of Earthquake Engineering

(DEE)

Tarbiat Modares University

Signature

Faculty of Civil and Environmental

Engineering (FCEE)

Tarbiat Modares University

Signature: 9 Market

Name: Prof. Abbas Ali Tasnimi

Title: Head of DEE

Date: 31/01/2017

Name: Prof. Hamzeh Shakib

Title: Dean of FCEE

