



Memorandum of Understanding

Between

The European Plate Observing System European Research Infrastructures Consortium (hereinafter referred to as "EPOS ERIC"), established by Commission Implementing Decision (EU) 2018/1732 of 30 October 2018 (Official Journal of the European Journal, L288/10), having its headquarter and statutory seat at Via di Vigna Murata 605, 00143 Rome, Italy.

on the one hand,

and

The Centro Europeo di Formazione e Ricerca in Ingegneria Sismica (hereinafter referred to as "**EUCENTRE**"), a private Foundation that has its headquarters at via Ferrata 1, 27100 Pavia, Italy.

on the other hand.

EPOS ERIC and EUCENTRE (hereinafter referred to individually as 'the Party" or collectively as "the Parties") have expressed their mutual desire to cooperate in the development of an engineering and risk assessment sector within EPOS ERIC that would foster cross-disciplinary access to and use of engineering data and collaboration on the implementation of risk assessment core services and e-infrastructures. EUCENTRE is entering this collaboration under the auspices and the financial support of the Italian Government. This collaborative framework is regulated by the present Memorandum of Understanding (hereinafter referred to as "MoU

Background

EPOS ERIC, the European Plate Observing System, is the European research infrastructure aimed at ensuring sustainable and universal use and re-use of multidisciplinary solid Earth science data and products fostering state-of-the-art research and innovation. EPOS ERIC brings together Earth scientists, national research infrastructures, ICT experts and decision makers to establish and underpin a sustainable and long-term access to solid Earth science data and services integrating diverse European Research Infrastructures under a common federated framework. EPOS ERIC relies on e-science innovation to foster progress in science for supporting a safe and sustainable society.

EUCENTRE is a private non-profit foundation created in 2005 by the University of Pavia, the University School for Advanced Studies IUSS of Pavia, the Italian Department of Civil Protection, and the National Institute of Geophysics and Volcanology (INGV). Over the past 15 years, EUCENTRE has established itself as a reference research centre for structural and earthquake engineering, featuring a large structural testing infrastructure (including two large shake-tables) and has been involved over the past 15 years in the leading of national and international projects and initiatives on multi-hazard risk. EUCENTRE has been involved in EPOS from its implementation phase, and has played central roles in European projects associated to EPOS, such as NERA, SERA and RISE. EUCENTRE is already involved in the Seismology TCS, being responsible for the European





seismic risk services, including the provision of access to building and infrastructure exposure data, structural/societal/economic vulnerability models, and integrated risk indicators. EUCENTRE is also involved in the Italian EPOS JRU, and has recently coordinated the preparation of the multi-risk assessment work-package of the Geo-INQUIRE proposal submitted as part of the Horizon call for proposals on 'Research infrastructures services advancing frontier knowledge'. EUCENTRE oversaw the creation in 2009, under the mandate of the OECD, of the Global Earthquake Model (GEM) Foundation, which it still hosts.

Purpose

There is a growing societal need to develop multi-hazard and multi-risk engineering services that integrate and leverage on the type of data and products that are currently provided by the EPOS TCS on seismology, faults, geodesy, volcanoes, satellite data, geomagnetic observations, anthropogenic hazards, geology, multi-scale laboratories.

EPOS ERIC and EUCENTRE thus wish to enter into a cooperative relationship for the purpose of exploring the feasibility of developing such a multi-hazard/risk integrative engineering sector, an activity that could certainly be considered as strategic, impactful and innovative, and would be capable of providing added-value to society in general, and civil protection agencies in particular. EUCENTRE is an authoritative organization in the multi-hazard/risk engineering sector and can contribute to fostering the integration of national and international research infrastructures with the ambition to explore the conditions for establishing a candidate TCS. Such a candidate TCS could also facilitate the establishment of stronger links to Horizon Europe.

In the Articles below, except for Articles 3 and 4 which shall be legally binding on the Parties, this MoU is not legally binding and the Parties acknowledge that this MoU does not place them under any obligation to enter into any subsequent agreement or arrangement. This MoU is designed to assist and inform the Parties' ongoing discussions and, other than the binding sections, neither Party wishes for this MoU to give rise to any binding commitment or legal obligation.

Article 1 -Scope of the MoU

In order to fully achieve the purpose of this MoU, which is to explore the feasibility and potential for the future creation of a candidate TCS on structural engineering and multi-hazard risk assessment, the Parties will undertake the following actions:

- Exchange information and other materials (including assistance on a best-endeavours basis); in particular, EPOS ERIC will provide access to information on TCS design and implementation upon specific requests by EUCENTRE;
- Undertake regular meetings, at least semi-annually, ideally on a quarterly basis, where EUCENTRE will
 update EPOS ERIC on progress achieved, and EPOS ERIC will provide EUCENTRE with feedback and
 suggestions;
- EUCENTRE will draft a report on the TCS feasibility study, including long-term development plans and operational steps, of which a first version will be available, for review by EPOS ERIC, 12 months after the start of the present MoU.





Article 2 - Financing

- 2.1 The collaboration envisaged through this MoU does not involve exchange of funding, either in the form of reimbursement or contribution of funds between the Parties: the Parties agree that each shall bear their own costs for any work under this MoU, save and except as separately agreed in writing. Neither Party shall have any obligation to make any financial, in-kind or effort contribution unless separately agreed in writing.
- 2.2 This document is neither a fiscal nor a funds obligation document, nor does it supplement existing statutory authorities of the signatories.

Article 3 - Confidentiality

- 3.1 The Parties agree and undertake to keep confidential any information or data that may be exchanged, acquired, disclosed, or shared in connection with any activity conducted pursuant to this MoU save where such information is already in the public domain or is required to be disclosed by any applicable law or regulations, or where the extent of such disclosure is authorised in writing by the other. In case of disclosing confidential information to a third party, the third party shall commit to respect such confidentiality obligation by signing an agreement with the provisions set in the MoU. The obligations of the Parties under this Article shall continue following the expiry or termination of this MoU.
- 3.2 It is acknowledged that various types of restrictions may exist in relation to confidentiality, such as legislative stipulations and contractual obligations, which may govern the use of data and other materials provided by the Parties.
- 3.3 All requests from third parties for data or other material shall be handled on a case by case basis in a separate agreement in accordance with EPOS ERIC best practice and EUCENTRE.
- 3.5 It is acknowledged that the parties are subject to Freedom of Information legislation ("Legislation") which may require a Party to make certain information available to members of the public on request. Wherever possible, and in accordance with any applicable Code of Practice issued with the Legislation, the Parties will consult with each other before making any disclosure pursuant to the Legislation.
- 3.6 All future work which makes use of, is derived from (in part of in whole), or relies on, information or data provided under this MoU shall also be considered confidential, as per clause 3.1.

Article 4 – Intellectual Property

- 4.1 All Intellectual Property Rights, background technology, know-how, assets and resources deposited with EPOS ERIC or EUCENTRE under this MoU shall and will remain vested in the owning Party.
- 4.2 Each Party shall ensure that any Intellectual Property Right has not resulted from the infringement of any third party's legitimate rights. Further, the concerned Party shall be liable for any claim made by any third party on the ownership and legality of the use of the Intellectual Property Right which is brought in by that Party for the implementation of the activities under this MOU.





- 4.3 Any information derived or created from the information and materials supplied shall be owned by the generating Party or owned jointly in the case of joint generation.
- 4.4 Each Party shall enjoy, on a royalty-free basis, access rights to background IP of the other Partner which is brought to the collaboration and is directly related and necessary to the activity carried out under this MoU.
- 4.5 Copyright on any publication resulting from activities under this MoU shall belong to the Party of the first author, unless agreed otherwise. Other Parties contributing to the publication will be granted the right to reproduce the material for their own purposes.
- 4.6 Termination of this MoU shall not affect the rights and/or obligations with respect to Intellectual Property Rights, ownership of any patent, copyright of any publication, and 'right to use' arrangements.

Article 5 - Entry into Force and Duration

- 5.1 This MoU shall enter into force on the date of its signature by the last Party and will have effect for a period of 3 (three) years from said date. This MoU shall be renewed by signing a new MoU for a new 3 (three) year period under the same conditions. Renewal does not imply any modification or deferment of existing obligations.
- 5.2 Either Party may terminate this MoU at any time upon 3 (three) months prior written notice to the other Party giving justifiable reasons for doing so. Activities in progress on the date of such written notice and the rights and obligations ensuing from them shall proceed to completion, unless the Parties otherwise agree in writing.
- 5.3 The Parties shall evaluate the implementation of this MoU after it has been in force for 3 (three) years. On the basis of this evaluation, the Parties may make modifications for the purpose of better fulfilling the objective of this MoU. Any amendment to this MoU shall be the subject of a written agreement signed by the duly authorised representatives of both Parties.

Article 6 - Nominated Personnel

General communication between the Parties for the purposes of this MoU shall be addressed to:

EPOS ERIC

Lilli Freda

EPOS ERIC Executive Director

E-mail: executive.director@epos-eric.eu

EUCENTRE

Fabio Germagnoli

EUCENTRE Foundation General Manager

E-mail: fabio.germagnoli@eucentre.it



Date and Signatures



Article 7 - General Provisions

- 7.1 A Party may not assign the rights and obligations arising from this MoU, in whole or in part, without the prior and express written agreement of the other Party.
- 7.2 In case any provision of this MoU is or becomes void, this does not affect the validity of the other provisions of this MoU or the MoU as a whole. The Parties will undertake to replace the ineffective provision by an effective provision which comes as close as possible to the purpose of the ineffective provision.
- 7.3 Nothing in this MoU will be construed as creating a partnership or joint venture.
- 7.4 In case of any dispute or difference of opinion between the Parties arising out of or in connection with this MoU, the Parties hereto shall settle it by mutual agreement. Such effort shall be deemed to have failed when one of the Parties so notifies the other in writing. In that case, this MoU shall be governed and construed in accordance with the substantive law of Italy.

For and on behalf of EPOS ERIC	Date	
For and on hehalf of FLICENTRE	Date	