

D1.1. Project Management Plan

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Annex: SERA Consortium Agreement

Summary

This document is the first deliverable of SERA (D1.1) and it contains the Project Management Plan. It has been elaborated by WP1 and reviewed by the Management Board.

Broadly, the scope of the Project Management Plan is to describe the tools set up for the execution of SERA so that the project can produce the expected outcomes with the best quality, manage time and costs correctly, and ensure a smooth communication amongst all project participants.

This approach has to be applied to each work-package individually, but also globally, since SERA strives to integrate its outputs in EPOS (European Plate Observing System, a European Research Infrastructure Consortium for solid Earth services in Europe under implementation). The Project Management Plan pays special attention to the coordination with the EPOS team, to the participation of different research communities – in fact, this is one of the project main strengths – and to the presence of four different activity types (Networking, Virtual Access, Transnational Access, Joint Research Activities). For that matter, SERA includes different project boards and a SERA Project Office at ETH, in charge of supporting the partners and the Coordinator in the execution of the project.

This deliverable is structured in two parts. Part 1 (Project Description) highlights the main project features that were taking into account for designing the Project Management Plan such as the project Governance structure, Partnership, Consortium Agreement (in the Annex), Breakdown structure, Deliverables, Schedule and Resources. Part 2 (Project Management) deals specifically with the management approach, and describes the Role of the governance structure in managing SERA, the Management tools and procedures, Financial management and Risk management, all designed according to the provisions of the SERA Grant Agreement and the SERA Consortium Agreement, both in force.

This deliverable will be complemented by another document of relevance for the management of SERA: D2.1. Concept for internal and external communication and stakeholder dialogue (due at month 4).

1. Project Description

1.1 Overview

SERA – Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe – is an infrastructure project awarded in the Horizon 2020 call for Integrating Activities for Advanced Communities (INFRAIA-01-2016-2017). SERA started on May $1^{\rm st}$ 2017, and the project will run for 3 years.

Building up on previous projects like NERA, SHARE, NERIES, SERIES, etc., SERA has the overall goal of reducing the exposure to risks associated to natural and anthropogenic earthquakes. This is achieved by increasing access to data, services and research infrastructures, and through developing innovative solutions in seismology and earthquake engineering. For example, SERA will revise the European Seismic Hazard reference model and generate inputs for the current revision of the European code on Seismic Design of Buildings (Eurocode 8); Also, SERA will develop the first

comprehensive framework for seismic risk modelling at European scale, and define new standards for future experimental observations and instruments for earthquake engineering and seismology.

To that aim, SERA is engaging 31 institutions across Europe with leading expertise in the operation of research facilities, monitoring infrastructures, data repositories and experimental facilities in the fields of seismology, anthropogenic hazards and earthquake engineering.

SERA comprises 26 activities, including 5 Networking Activities (NA) to improve the availability and access of data through enhanced community coordination and pooling of resources, 6 Joint Research Activities (JRA) aimed at creating new European standards for the optimal use of the data collected by the European infrastructures, Virtual Access (VA) to the 5 main European services for seismology and engineering seismology, and Trans-national Access (TA) to 10 high-class experimental facilities for earthquake engineering and seismology in Europe. In fact, around 50% of the SERA resources will be dedicated to virtual and transnational access.

SERA and EPOS (European Plate Observing System, a European Research Infrastructure Consortium for solid Earth services in Europe) will be developed in parallel, giving SERA the capacity to develop building blocks for EPOS in the areas of seismology, anthropogenic hazards and seismic engineering. For example, new virtual access tools, new anthropogenic hazards products, expanded access to waveform data, etc. In addition, services developed and validated in SERA will be produced in a way that is compatible for integration in EPOS (Figure 1).

In terms of resources, SERA will engage 907 persons-month, and mobilise resources for 11'090'779.01 Euro, of which 10'000'000 Euro are provided as direct EC funding and the rest are contributed in kind by 24 of the 31 parties. SERA outputs are structured around 100 deliverables, including reports, data bases, workshops and software tools.

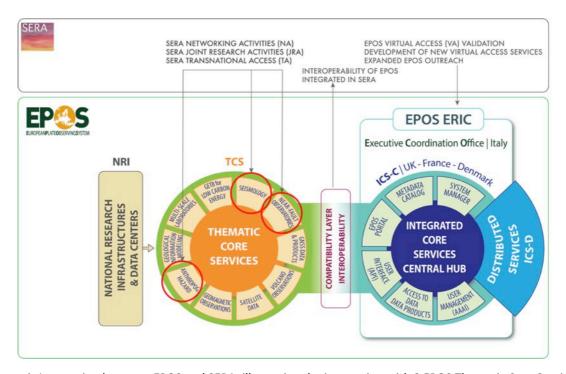


Figure 1. Integration between EPOS and SERA, illustrating the interaction with 3 EPOS Thematic Core Services, with the EPOS interoperability layer and with the provision of services to the EPOS Integrated Core Services.

1.2 Governance structure

The SERA organisation was defined in the proposal phase and it is summarised in Figure 2. It follows a similar structure to that of past projects (NERIES, NERA, SERIES, EPOS-PP), and ensures that all project areas (scientific and technical, contractual, administration, ethical) are identified in the project structure.

On the one hand, the SERA governance is assured by the General Assembly (GA), the project Coordinator, the Management Board (MB) and the Executive Committee (ExeCom).

On the other hand, the SERA implementation is supported by the Scientific Advisory Board (SAB), the Virtual Access Evaluation Panel (VA-EP) and the Transnational Access Selection and Evaluation Panel (TA-SEP).

The management of the project relies on the SERA Project Office, at ETH Zurich.

The **Project Coordinator**, Prof. Domenico Giardini (ETH) is responsible for the global coordination and organization of the activities, for overseeing the technical, scientific, legal and financial issues, and for the reporting of SERA activities to the General Assembly. Prof. Domenico Giardini has extensive experience in European cooperation and science management. He was the Coordinator of the EU projects NERIES, NERA, SHARE and STREST, and is leader of the EPOS-IP WP5 Thematic Core Services Financial Framework. The Project Coordinator will be supported by the SERA Project Office described in section 2 of this report.

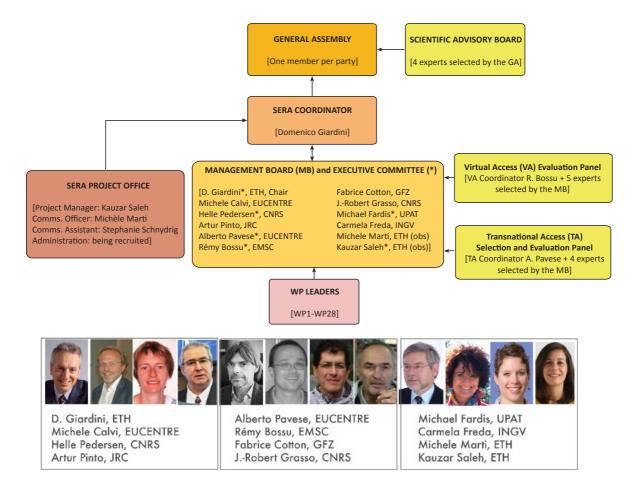


Figure 2. SERA Organisation structure

The Management Board (MB) is in charge of the operational management (decision process, risk assessment, information flows) of the SERA implementation and of ensuring the cohesion of the whole SERA community. It will operate according to this Project Management Plan and will maintain and monitor the project risks. The MB composition was approved by the General Assembly at its first meeting on June 1st 2017. It is composed of the Coordinator, representatives of the EPOS and earthquake engineering community, WP leaders and representatives of the NA (Networking Activities), JRA (Joint Research Activities), TA (Transnational Access) and VA (Virtual Access) activities. Namely, these are D. Giardini (Coordinator, chair), M. Calvi (EUCE, earthquake engineering integration), H. Pedersen (CNRS, NA and EPOS integration), L. Freda (INGV, EPOS integration), A. Pinto (JRC, NA), A. Pavese (EUCE, TA coordinator), R. Bossu (EMSC, VA coordinator), F. Cotton (GFZ, JRA seismology), J.-R. Grasso (CNRS, JRA anthropogenic seismicity), M. Fardis (UPAT, JRA earthquake engineering), the Communication Officer (M. Marti, with no vote) and the SERA Manager (K. Saleh, with no vote).

A subgroup of the Management Board will form the **Executive Committee**, in charge of supporting the Coordinator in the timely implementation of the activities and their deliverables and milestones. The designated Executive Committee is composed of D. Giardini (Coordinator), K. Saleh (SERA Manager), H. Pedersen (CNRS, NA), R. Bossu (EMSC, VA Coordinator), A. Pavese (EUCE, TA Coordinator) and M. Fardis (UPAT, JRA).

The **General Assembly (GA)** is composed of one representative of each Consortium member (31 parties in total). It is the ultimately responsible body for the project and it will maintain the overview SERA and its progress according to the Grant Agreement and the Consortium Agreement (Annexed to this report). It will decide on issues concerning the Grant Agreement and associated relationships with the European Commission through the Coordinator and it will establish appropriate guidelines for assessing and monitor the project achievements. Prof. Michele Calvi (EUCE) was elected as GA Chair at the first GA meeting on June 1st 2017.

The **Scientific Advisory Board (SAB)** is appointed by the GA as an advisory body in charge of overseeing the project development progress and all outreach and dissemination activities, assessing and monitoring the integration with EPOS and the overall impact of SERA, as well as evaluating ethical issues of relevance for SERA. The SAB includes experts from the Seismology and Earthquake Engineering community. The MB has nominated on a number of potential candidates, and their availability is currently being checked. The list will be presented to the GA by approval.

SERA will offer Virtual Access to five key infrastructures in seismology, engineering seismology and anthropogenic seismicity. A single Virtual Access Evaluation Panel (VA-EP) will be charged to periodically review the services offered to the scientific community, review the data and products offered for access, the mechanisms for accessing them, and the use of the data and products by the community. The VA-EP composition was approved by the Management Board and it includes the VA coordinator (Rémy Bossu, EMSC), Paul Earle (NEIC/USGS), John Douglas (University of Strathclyde), Hong Kie Thio (AECOM), J. Wassermann (Univ. Munich) and Marcelo Assumpçao (Univ. of São Paulo). The VA-EP will nominate its chair.

Finally, SERA will offer Transnational Access to ten key infrastructures in earthquake engineering and seismology. A single **Transnational Access Selection and Evaluation Panel (TA-SEP)** will be charged to review the applications, select the winning applications and the hosting facilities. The TA-SEP, as approved by the Management Board, is composed of four experts, Peter Fajfar (U. Ljubljana), Eduardo C. Carvalho (ex EC8 chairman), Alain Pecker (École Nationale de Ponts et Chaussées), Alberto Michelini (INGV-Rome), in addition to the TA Coordinator (Alberto Pavese). The TA-SEP will elect its chair.

1.3 Partnership

The relationship between the SERA parties is established through the SERA Grant Agreement (No. 730900, in force), and through supplementary binding commitments established in the SERA Consortium Agreement (No. 170522, in force).

a. Parties

SERA involves 31 parties from 16 countries (Table 1, A; Figure 3), in addition to 8 linked third parties. On specific cases, additional experts can also participate in the project according to the Grant Agreement.

b. Third parties

In order to fulfil the tasks described in the SERA Grant Agreement, there are third parties involved in the project. These are listed in the Grant Agreement Annex 1 (part B), and regulations for adding/removing third parties have also been included in the Consortium Agreement.

More specifically, three parties (CNRS, INGV, IGPAS) have incorporated eight linked third parties who will be fulfilling project tasks. Linked third parties will have the same obligations towards SERA as the project parties.

Also, UNINA foresees to subcontract some activities in work-packages (WP) 23 and 28.

Moreover, some of the EUCE activities will be provided in kind and free of charge by the University of Pavia and the Institute for Advanced Study of Pavia, in virtue of agreements between these institutions and EUCE. The activities are part of the EUCE engagements in WP1, WP2, WP9, WP26.

Finally, to ensure SERA can benefit from the largest expertise, external experts might participate in the action on an ad hoc basis (e.g. attending specific meetings, with only related travel and subsistence costs being eligible under the project).

A. Parties	Country
1. Eidgenössische Technische Hochschule Zürich (ETH)	Switzerland
2. Centro Europeo di Formazione e Ricerca in Ingegneria Sismica (EUCE)	Italy
3. Joint Research Centre – European Commission (JRC)	Belgium
4. Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA)	France
5. Laboratório Nacional de Engenharia Civil (LNEC)	Portugal
6. University of Patras (UPAT)	Greece
7. University of Bristol (UBRI)	United Kingdom
8. Inst. of Earthquake Eng. and Engi. Seismology SS Cyril and Methodius University Skopje	Former Yugoslav Rep. of
9. The Chancellor, Masters and Scholars of the University of Cambridge (UCAM)	United Kingdom
10. Università degli Studi di Trento (UNITN)	Italy
11. Universidade de Porto (UPORTO)	Portugal
12. Universidad Politécnica de Madrid (UPM)	Spain
13. Bogazici Universitesi (BOUN)	Turkey
14. Aristotelio Panepistimio Thessalonikis (AUTH)	Greece
15. Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum (GFZ)	Germany
16. Koninklijk Nederlands Meteorologisch Instituut (KNMI)	Netherlands
17. Institut National de Cercetare-Dezvoltare Pentru Fizica Pamantului (INFP)	Romania
18. National Observatory of Athens (NOA)	Greece
19. Uppsala Universitet (UU)	Sweden
20. Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC)	Spain
21. Natural Environment Research Council (NERC)	United Kingdom
22. Euro-Mediterranean Seismological Centre (EMSC)	France
23. Università degli Studi di Napoli Federico II (UNINA), Italy	Italy
24. Centre National de la Recherche Scientifique (CNRS)	France
25. Analisi e Monitoraggio del Rischio Ambientale Scarl (AMRA)	Italy
26. Stiftelsen NORSAR (NORSAR)	Norway
27. Instytut Geofizyki Polskiej Akademii Nauk (IGPAS)	Poland
28. Istituto Nazionale di Geofisica e Vulcanologia (INGV)	Italy
29. Instituto Superior Técnico (IST)	Portugal
30. Bureau de Recherches Géologiques et Minières (BRGM)	France
31. Universitetet i Bergen (UiB)	Norway
B. Linked third parties	
Université Grenoble Alpes (UGA) to 24. CNRS	France
Institut de Recherche pour le Développement (IRD) to 24. CNRS	France
Institut Français des Sciences et Tech., des Transports, de l'Aménagement et des réseaux (IFSTTAR) to 24. CNRS	France
Observatoire de la Côte d'Azur (OCA) to 24. CNRS	France
Université Nice Sophia Antipolis (UNS) to 24. CNRS	France
Institut de Physique du Globe de Paris (IPGP) to 24. CNRS	France
AGH University of Science and Technology in Krakow (AGH / AGH-UST) to 27. IGPAS	Poland
Istituto Nazionale di Oceanografia e Geofisica Sperimentale – OGS to 28. INGV	Italy
C. Other third parties	
University of Pavia, Institute for Advanced Study of Pavia, in kind to 2. EUCE	Italy
D. Associated third parties	Ad-hoc
E. Subcontracts	
To be requested by 23. UNINA	Italy

 Table 1. List of SERA participating institutions



Figure 3. Country of origin of the 31 SERA parties

c. Consortium Agreement

The Consortium Agreement (CA) specifies the relationship among the parties, in particular concerning the organisation of the work, the management of the project and the rights and obligations of the parties regarding inter alia liability, access rights and dispute resolution. Legally, the CA is subordinated to the Grant Agreement provisions. The CA establishes also the rules for proposing modifications to the GA. Below is an outline of the sections included in the CA:

Section 1: Definitions

Section 2: Purpose

Section 3: Entry into force, duration and termination

Section 4: Responsibilities of Parties

Section 5: Liability towards each other

Section 6: Governance structure (including operational procedures for all Consortium bodies

(appointment, representation, preparation of meetings, decisions, voting rules, reporting)

Section 7: Financial provisions

Section 8: Results (including ownership of results, transfer of results, publications)

Section 9: Access rights (including those of affiliated parties)

Section 10: Non-disclosure of information

Section 11: Miscellaneous (such as settlement of disputes, language, etc.)

Section 12: Signatures (of the 31 SERA parties)

Attachment 1: Background included (of each party)

Attachment 2: Accession document (template for new parties)

Attachment 3: List of Third Parties (matching those of Table 1, B)

Attachment 4: Identified affiliated entities (only CNRS entities of Table 1, B)

1.4 Breakdown Structure: work-packages

SERA comprises 28 work-packages (WP), grouped by types of activity, namely: WP1 – Management; WP2 – Communication, Outreach and Dissemination; NA – Networking activities; TA – Transnational Access activities; VA – Virtual Access activities; JRA – Joint Research Activities (JRA). Each WP is under the lead of a designated institution (Table 2).

#	WP name	Institutions	WP leader
1	Management	ETH , INGV, EUCE, JRC, UPAT, GFZ, EMSC, CNRS	Ms K. Saleh
2	Communication, Outreach, Dissemination	ETH, EUCE, JRC, EMSC, UPAT	Ms M. Marti
3	NA1: Networking Seismo@school outreach programs	<u>NERC</u> , <u>ETH</u> , <u>CNRS</u> , <u>NOA</u> , UBRI, AUTH, INFP, EMSC, IST	Mr. P. Denton
4	NA2: Expanding access to the European seismic monitoring infrastructure	KNMI, ETH, INFP, CNRS, NOA, GFZ	Mr. R. Sleeman
5	NA3: Networking Deep Seismic Sounding data and products	<u>UU</u> , <u>CSIC</u> , UiB	Mr.R. Roberts
6	NA4: Networking experimental seismic engineering databases (SERIES)	JRC, UPAT, UIB	Mr.P. Pegon
7	NA5: Networking databases of site and station characterization	CNRS, ETH, AUTH, INGV	Ms.C. Cornou
8	TA1: Access to ELSA reaction wall	JRC	Mr.G. Tsionis
9	TA2: Access to shaking table and Bearing Tester System	EUCE	Mr.A. Pavese
10	TA3: Access to AZALEE shaking table at TAMARIS	CEA	Ms.E. Foerster
11	TA4: Access to LNEC-3D shaking table	LNEC	Mr.A. Araújo
12	TA5: Access to STRULAB reaction wall	UPAT	Mr.S. Bousias
13	TA6: Access to EQUALS shaking table	UBRI	Mr.G. Mylonakis
14	TA7: Access to DYNLAB shaking table	IZIIS	Mr.M. Garevski
15	TA8: Access to centrifuge testing	UCAM	Mr.G. Madabhushi
16	TA9: Access to EUROSEISTEST and EUROPROTEAS	AUTH	Mr.K. Pitilakis
17	TA10: Access to array seismology	NORSAR	Mr.J. Schweitzer
18	VA1: Access to seismological products and information	EMSC	Mr.R. Bossu
19	VA2: Access to seismic waveforms at ORFEUS/KNMI	KNMI	Mr.R. Sleeman
20	VA3: Access to data and services for engineering seismology	INGV	Ms.L. Luzi
21	VA4: Access to earthquake hazard and risk products at EFEHR	ETH	Mr.L. Danciu
22	VA5: Access to data and products of anthropogenic seismicity	IGPAS	Mr.S. Lasocki
23	JRA1: Physics of the earthquake initiation	<u>CNRS</u> , <u>UNINA</u> , <u>INGV</u> , ETH, GFZ, IGPAS	Mr.P. Bernard
24	JRA2: Characterizing the activity rates of induced and natural earthquakes	GFZ, ETH, CNRS, AMRA, IGPAS, INGV	Mr.F. Cotton
25	JRA3: Updating and extending the European Seismic Hazard Model	ETH, EUCE, GFZ, LNEC, UPAT, BOUN, AUTH, CNRS, INGV, IST, BRGM	Mr.S. Wiemer
26	JRA4: Risk Modelling Framework for Europe	EUCE, ETH, UPOR, BOUN, AUTH, BRG, LNEC, UNITN	Ms.H. Crowley
27	JRA5: Innovative testing methodologies for component/system resilience	<u>UNITN</u> , <u>LNEC, UBRI</u> , ETH, JRC, UPAT, UPM, BOUN, UIB	Mr.O. Bursi
28	JRA6: Real-time earthquake shaking	UNINA, ETH, GFZ, CNRS, INGV INFP, NOA,	Mr.A. Zollo

Table 2. List of SERA WPs and participating institutions (WP leader in bold, task leaders underlined)

1.5 Deliverables and milestones

SERA outputs are organised in 100 deliverables (80 reports, 2 stakeholder workshops, 1 project website, 4 updated databases, and 13 deliverables containing computing and visualisation tools and models). These are detailed in the Grant Agreement Annex 1 – part A and Figure 4.

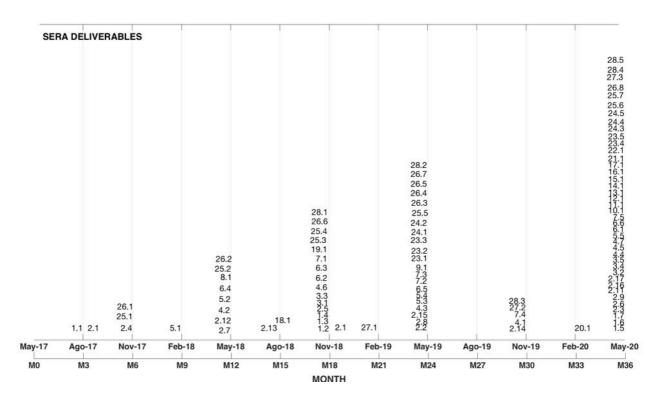


Figure 4. SERA list of deliverables (label is for WP.deliverable number)

From a management perspective, SERA includes 7 formal deliverables under WP1:

- D1.1. Project Management Plan (ETH, month 3)
- D1.2. Mid-term report, including impact assessment and risk register (ETH, month 18)
- D1.3. Strategic interaction of SERA activities with EPOS-IP (INGV, month 18)
- D1.4. Mid-term report of the Scientific Advisory Board (ETH, month 18)
- D1.5. Implementation of SERA services in EPOS (INGV, month 36)
- D1.6. Final report of the Scientific Advisory Board (ETH, month 36)
- D1.7. Final project report, including impact assessment (ETH, month 36)

In addition, WP2 on Communication, Outreach and Dissemination contains also a number of deliverables relevant for the management of the project:

- D2.1. Concept for internal and external communication and stakeholder dialogue (ETH, month 4)
- D2.4. Principal website content (ETH, month 6)

Finally, a number of deliverables require special coordination across WPs since they are elaborated from the inputs of various WPs. These are specific deliverables associated to Transnational Access and Virtual Access:

- D8.1, D9.1, D10.1. Technical reports on SERA Transnational Access activities (EUCE, months 12, 24, 36, with inputs from WP8 to WP17)
- D17.1. Overall summary of TA for public outreach (EUCE, month 36 with inputs from WP8 to WP17)
- D18.1, D20.1. Report on access statistics and service provision of VA1-VA5 M16 (EMSC, months 16, 34 with inputs from WP18 to WP22)

Figure 5 illustrates the project milestones, for which means of verification are defined in the Grant Agreement Annex 1 – part A. The milestones associated to WP1 management are:

- SERA Boards nominated (SAB, TA-SEP, VA-EP), due in month 1 by ETH
- Project website established, due in month 1 by ETH (www.sera-eu.org)
- Project management plan, due in month 3 by ETH
- Plan for dissemination and exploitation of results, due in month 12 by ETH
- Successful mid-term evaluation by SAB, due in month 18 by ETH
- Successful final evaluation by SAB, due in month 36 by ETH

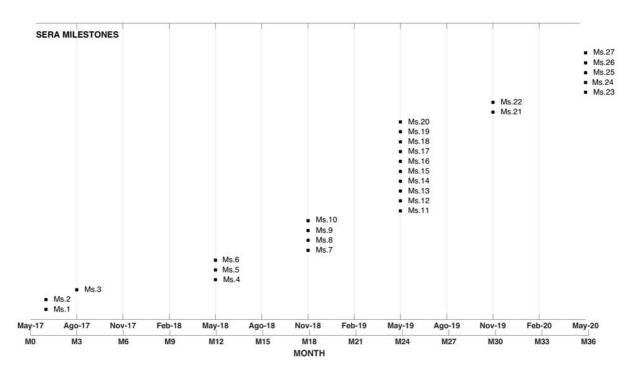


Figure 5. SERA milestones

List of milestones

- Ms.1 WP1: SERA Boards nominated completed for TA-SEP, VA-EP; SAB nomination started
- Ms.2 WP1: Project website established completed, full content in October 2017
- Ms.3 WP1: Project management plan completed
- Ms.4 WP2: Plan for dissemination and exploitation of results

- Ms.5 WP2: Data Management Plan
- Ms.6 WP5: DDSS community agrees to integration with EPOS
- Ms.7 WP1: Successful mid-term evaluation by SAB
- Ms.8 WP8-22: Mid-term TA and VA access according to plan, in quality and offered units
- Ms.9 WP25: Updated seismic source and GMPE models for Europe
- Ms.10 WP27: Socio-economic vulnerability and resilience assessment
- Ms.11 WP23: First test-bed validation of tools for the physical character. of earthquake sequences
- Ms.12 WP24: First test-bed validation of tools for the statistical character. of earthquake sequences
- Ms.13 WP6: Roadmap for the integration of data and services from seismic eng. and seismology
- Ms.14 WP7: Roadmap and best practice for strong motion and site characterization in Europe
- Ms.15 WP4,19: Expansion of the seismological data coverage in Europe
- Ms.16 WP25: ESHM18 delivered for implementation in Eurocode 8 and GEM
- Ms.17 WP21-25: New hazard data, models and documentation available on VA4
- Ms.18 WP22: 10 new episodes of induced seismicity accessed in VA5
- Ms.19 WP5-7: NA3-5 ready for pre-operational phase
- Ms.20 WP27: Assessment of RI for smart-city laboratory applications
- Ms.21 WP3: Successful expansion of seismo@school
- Ms.22 WP21,26: Delivery of first European risk model for inclusion in GEM and VA distribution
- Ms.23 WP4: Future seismological network design
- Ms.24 WP8-22: Final TA and VA access according to plan, in quality and offered units
- Ms.25 WP5-7: NA3-5 complete pre-operational validation for inclusion in EPOS operational phase
- Ms.26 WP18-22: VA1-5 complete pre-operational validation for inclusion in EPOS operational phase
- Ms.27 WP1-28: Successful final evaluation by SAB

1.6 Schedule

This section provides an overall view of key project dates organised by topics (Figure 6).

- Management Board (MB) meetings: After the first MB meeting held in Zurich on May 31st, the calendar of MB meetings was also agreed (for a minimum of two meetings per year as specified in the Consortium Agreement). Possibly with the exception of the meetings at month 6 and month 30, all meetings will be face-to-face.
- General Meetings: The SERA kick-off meeting took place in Zurich on May 31st and June 1st 2017, as well as the first General Assembly (GA) meeting. The project tentative dates for the remaining two General Assembly meetings (one ordinary meeting per year, as agreed in the Consortium Agreement) and Science meetings have already been decided, with locations to be determined. The Science meetings will involve all the SERA participants and will serve to discuss the scientific and technical progress of the project.
- Reporting: SERA is bound to report twice to the EC, once after month 18, once after month 36. In addition, the EC will conduct an external review at month 24. An internal financial check also has been introduced at month 30 to verify that the project is on good track for closure at month 36, when the final report is due to the EC.

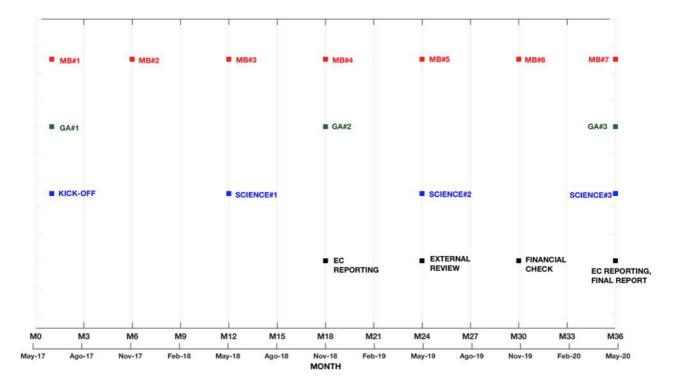


Figure 6. Key project dates (Management Board (MB) meetings, General Assembly (GA) meetings, Science meetings)

• In addition to these meetings, the *Scientific Advisory Board* will meet annually (dates to be defined after the board is formed at the end of month 3). Likewise, the *Virtual Access and Transnational Access panels* will organise their meetings and inform the SERA project office.

1.7 Resources

SERA funding is structured around two main sources: EC funding for 10'000'000 € and in-kind contributions for 1'090'779.02 €. The project relies on personnel efforts for 907 persons-month for WP1, WP2, NA and JRA. Globally, 45% of the EC funding is dedicated to TA and VA, 44% to NA and JRA, and 11% to Management and Communication activities.

The distribution of EC funding per project activity type is shown in Figure 7.

In terms of cost categories, the portion of EC funding is distributed as follows:

- Personnel direct costs for 3'693'990 €
- TA and VA direct costs for 3'616'000 €
- Special workshops for 195'250 € (SERA will organise 20 workshops)
- Other direct costs (travel, equipment, auditing) for 494'760 €
- Indirect costs for 2'000'000 €

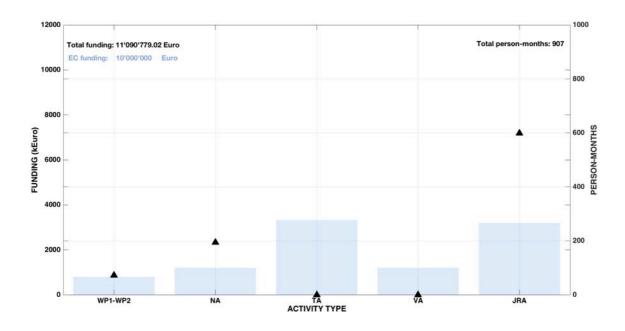


Figure 7. Project funding and person-months, per activity type and totals. EC funding shown in blue bars (left axis), total person-months in triangles (right axis).

2 Project Management

2.1 Overview

The management of SERA aims at contributing to the smooth running of the project and at ensuring that all the contractual, financial, and administrative project commitments are met.

The SERA management includes the SERA Project Office, established at ETH by the SERA Coordinator; the SERA Management Board and Executive Committee; and the project Coordinator.

Management tasks are those related to:

- Setting up the channels for interacting with the SERA parties
- Setting up the channels for interacting with the WP leaders
- Executing the project according to the provisions of the Grant Agreement and the Consortium Agreement
- Guaranteeing the organisation, functioning and communication of the governance boards:
 Management Board, Scientific Advisory Board and General Assembly
- Liaising with the parties on contractual aspects (deliverables, reporting, reviews, finances)
- Liaising with the European Commission on contractual aspects (deliverables, reporting, reviews, finances)
- Monitoring the financial execution of the project (budget control, financial planning, financial eligibility)
- Ensuring the internal and external dissemination of the project

- Monitoring the project risks and finding ways to mitigate them
- Coordinating with the EPOS team on aspects relevant to both projects
- Planning of actions that shall improve the quality of the project

2.2 Roles and procedures

Table 3 provides a list of the main management tasks and responsible person/board.

The **SERA Project Office (PO)** at ETH Zurich is responsible for the operational and financial administration of SERA as well as for the provision of the required documentation to the European Commission. The SERA PO will assist the Coordinator in all his tasks and also provide the secretariat to the Management Board and to the Scientific Advisory Board.

It is composed of the SERA Project Manager, the Communication Officers and an Administrator. The designated SERA Manager and WP1 leader is Dr. Kauzar Saleh, who is already involved in the EPOS-IP WP5 (Thematic Core Services Financial Framework). Her background is in applied physics research (remote sensing) and has been working in the management of different EU scientific programs for the last 8 years. The designated Communication Officer (WP2 Leader) is Ms. Michèle Marti, Head of Communication at the Swiss Seismological Service, who will be supported by Ms. Stephanie Schnydrig from August 1st 2017. An administration officer is currently being recruited and expected to join the SERA PO in September 2017. The SERA PO will dedicate in total 1.5 FTE/year to the management of the project. In addition, the ETH European Grants Access office supports the project office in specific queries related to the execution of the project (H2020 queries, supply of supporting documents, preparation of the Consortium Agreement).

The **Management Board** and **Executive Committee** have an active role in the execution of the project. In addition to the tasks mentioned in section 1.2, this board is also responsible for the approval of official deliverables before submission to the EC as well as technical reports at month 18 and 36 (see also section 2.4).

The SERA PO foresees to employ standard procedures for the management of the project and for the communication with the partners. Below is a list of actions to be performed during the first months of the project.

	Action (with deliverable/milestone number when applicable)	Due date
_	Elaboration of the Project Management Plan (D1.1, Ms.3)	Completed
_	Identification of the project parties (scientific and administration contacts), as well as WP leaders, for day-to-day interaction	Completed
-	Temporary external website (Ms.2)	Completed
_	Document management system accessible to the project members (see 2.3)	Aug. 2017
_	Guidelines for the reimbursement of MB/SAB expenses	Aug. 2017
_	Form for requesting budget modifications (either requiring Grant Agreement	Aug.2017

amendments or not)

_	Templates for the elaboration of project outputs (reports, presentations, websites, graphics)	Sept. 2017
_	Setting up of the agenda with relevant project dates/events (intranet)	Sept. 2017
_	Guidelines for TA and VA	Sept. 2017
_	Full external website (D2.4)	Oct. 2017
_	Guidelines for EC reporting – financial part	Jan. 2018
_	Guidelines for EC reporting – technical part	Jan. 2018

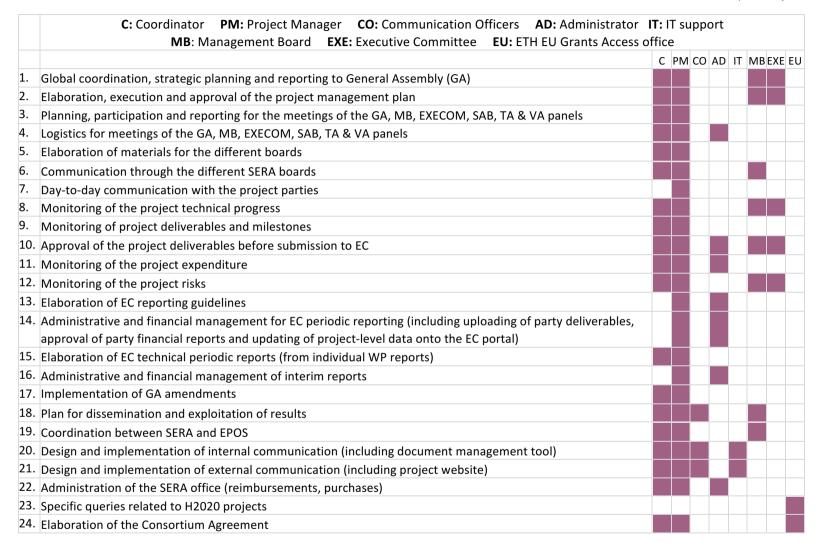


Table 3. List of management tasks and responsible person/board

2.3 Management tools

By management tools we refer to the instruments available to the SERA Project Office for the collection of data and documents from the SERA parties, communication tools, and processing tools for the management of the project information.

Project tools, available to the parties, include the External website, used for sharing relevant project information, dissemination materials and linking to the internal website. The temporary site is already accessible on www.sera-eu.org, and full content will be published in October 2017.

The internal website is being currently developed using Microsoft SharePoint Server 2016 (Figure 8). After a consultation run by the SERA Project Office with the WP leaders, the choice for Sharepoint took into account the desired features, easiness to use and acquisition and maintenance costs.

Sharepoint is a fully web-based, cross-browser, collaborative platform that includes a document management and storage system, and the possibility to add features for collaborative work (agenda, wikipages, websites, granting specific access rights, assigning of tasks to members, etc.). Sharepoint Server is installed at the ETH premises in Zürich, where all the project data will be kept and backed up regularly. Access to the internal website (hosted at http://sera.sp.eth.ch) requires registration by the partners using a Switch edu-ID account (service platform for the Swiss universities), which can be obtained automatically by each user. Project members need to register once and an automatic message is sent to the SERA Project Office who then grants access to the site with the adequate access rights. It is expected to have around 150 authenticated members, each one with a login. Most folders will be visible to all members, but the General Assembly, Management Board and advisory/evaluation panels folders will have the possibility to have access restricted to its members. Those WP wishing to edit documents collaboratively will be able to do so using enabled wikipages. As for e-mailing, it will be handled through external mailing programs. Also, web-conferencing will be arranged independently by each WP, and by the SERA Project Office with the partners when needed.

Internal tools, this is, used by the SERA Project Office, rely on standard packages for different purposes (MS-Office, iTask, Filemaker, Matlab). The nomenclature for the organisation of project documents will be detailed in D2.1. Concept for internal and external communication and stakeholder dialogue (due month 4), and shared with the project members, together with templates for the most common documents and logos (presentations, reports, posters, graphics for websites, etc).



Figure 8. View of the SERA internal website at http://sera.sp.eth.ch (under construction)

..4 Management of deliverables and EC reports

Management Board and presented to the SERA parties during the kick-off meeting. Since the The procedure for the collection and approval of deliverables has been agreed already with the deliverable dates are the actual deadlines for uploading the deliverables onto the EC portal, the WP leaders will be invited to upload their deliverables onto the intranet no later than two weeks before the deadline. As soon as received, the SERA Project Office will conduct a quick check of compliance, and forward the deliverable to a designated person in the Management Board, who will be asked to respond within one week on the suitability of the report to be submitted. Small amendments will be conducted if necessary before the final upload, unless the deliverable had to be delayed (in exceptional cases) if substantial deficiencies were found. Upon green light by the MB reviewer, the SERA Project Office will proceed with uploading the document onto the EC portal.

The designated MB reviewers are:

- For WP1 and WP2 deliverables: Carmela Freda (INGV)
- For WP3 to WP7 deliverables: Helle Pedersen (CNRS) with the support of Artur Pinto (JRC) •
- For WP8 to WP17 deliverables: Alberto Pavese (EUCE)
- For WP18 to WP22 deliverables: Rémy Bossu (EMSC)
- For WP23 to WP28 deliverables: Michael Fardis (UPAT) with the support of Fabrice Cotton (GFZ) and Jean-Robert Grasso (CNRS)

In all cases, reviewers will have the possibility to request additional support from other experts if they deem it convenient.

the approach will be similar to the one just described. In this case, the SERA Project Office will have Concerning the management of EC reports (two reporting periods after month 18 and month 36),

weeks to assemble the financial reports (as these are not sent to the MB for review) will then have two weeks to assemble the technical reports and submit them to the EC, and four reviewers listed above, who will be expected to respond in the following two weeks. The SERA Office period. After a quick check by the SERA Project Office, technical reports will be sent to the MB upload their materials onto the intranet no later than one month after the end of the reporting portal. WP leaders (technical report) and financial contacts for each party (financial report) will two months after the reporting period has ended to upload all the relevant documents onto the EC

2.5 Financial management

available for specific queries regarding the financial management of the project. A financial meeting monthly reports of project expenditure, etc.). The ETH European Access Grants office will also be Manager with the support of the SERA Project Office and the Executive Committee, as described in with all parties involved at ETH has already taken place in June 2017. by the SERA Project Office, reimbursement of expenses, certificate of financial statements for ETH, specific tasks (such as release of pre-financing, interim and final payments to the parties requested Task 1.1. (Grant Agreement – Part 1A). Moreover, the ETH Financial Department will be involved in The financial management of the project will be conducted by the Coordinator and the Project

expenses covered by ETH as agreed in the Grant Agreement for MB and SAB members. financial guidelines for cost eligibility and reporting of project costs, iii) template for requesting templates for financial reporting in agreement with the H2020 form C for financial reporting, ii) budget modifications to the SERA Project Office and, iv) template for the reimbursement of travel The SERA Project Office will distribute to the parties a set of financial documents including: i)

the Grant Agreement) will be requested. declared in the Grant Agreement, and the distribution of these resources per WP (not specified in Special attention will be given to the verification of in-kind contributions in the form of personnel

2.6 Risk monitoring

Manager and the Management Board, who will maintain the Risk Register and develop appropriate (D1.2 Mid-term report, including impact assessment and updated risk register). measures to mitigate identified risks. A dedicated deliverable on risks is also foreseen at month 18 The monitoring of the project risks is under the responsibility of the Coordinator, the Project

here (Table 4). The critical implementation risks and mitigation actions were described in the proposal and listed

Nr.	Description of the risk	WP number	Proposed risk-mitigation measures
1	Project duration of 3 years too short, failure to deliver in time and quality	WP1, WP10, WP11, WP12, WP13, WP14, WP15, WP16, WP17, WP18, WP19, WP20, WP21, WP22, WP23, WP24, WP25, WP26, WP27, WP28, WP3, WP4, WP5, WP6, WP7, WP8, WP9	Mature communities and partners; the time available before grant initiation sufficient to secure all required resources; monitor timely delivery implementation status by MB
2	Too strong dependencies between WPs; delayed delivery in one WP hindering progress in other WPs	WP23, WP24, WP25, WP26, WP27, WP28, WP3, WP4, WP5, WP6, WP7	Not present in the NA and limited to two dependencies in JRA; Monitor timely delivery implementation Status by MB.
3	Underestimation of required resources for scientific developments; scientific contributions fail to be integrated or tested or distributed	WP23, WP24, WP25, WP26, WP27, WP28	SERA design based on the experience of past successful projects of comparable class; verify spending and the availability of offered in-kind contributions
4	Available resources spread too thinly, with too many WPs and beneficiaries; failure in maintaining the planned workflow and timeline	WP23, WP24, WP25, WP26, WP27, WP28, WP3, WP4, WP5, WP6, WP7	SERA design based on the experience of past successful projects of comparable class; guarantee efficient and appropriate management
5	Failure to successfully integrate the SERA services and access in the EPOS TCS; SERA service and access are not aligned with EPOS TCS timeline or ICS technical design	WP10, WP11, WP12, WP13, WP14, WP15, WP16, WP17, WP18, WP19, WP20, WP21, WP22, WP8, WP9	SERA design done in close coordination with EPOS-IP, with common activity and TCS leaders; TCS-ICS integrator directly involved in SERA development
6	Failure in integrating the earthquake engineering community in SERA and EPOS; the proposed infrastructure does not meet the user needs; poor impact of the new infrastructure	WP1, WP10, WP11, WP12, WP13, WP14, WP15, WP16, WP17, WP18, WP19, WP2, WP20, WP21, WP22, WP23, WP24, WP25, WP26, WP27, WP28, WP3, WP4, WP5, WP6, WP7, WP8, WP9	Revise and check Communication Plan; improve impact of dissemination; check impact assessment and science cases
7	Failure to deliver the offered Transnational Access; Poor access to infrastructures and/or poor quality of data and services	WP10, WP11, WP12, WP13, WP14, WP15, WP16, WP17, WP8, WP9	Monitor access; improve the facility access and the attractiveness of the offered infrastructure; increase communication on the access offered
8	Failure to deliver the planned Virtual Access, Poor service access to data and/or poor quality of data offered	WP18, WP19, WP20, WP21, WP22	Monitor access; improve the attractiveness of the offered data; increase communication on the Access offered
9	Failure of EPOS to secure the timely ERIC signature and full implementation; SERA services and Access cannot be integrated with other EPOS domains	WP1, WP10, WP11, WP12, WP13, WP14, WP15, WP16, WP17, WP18, WP19, WP20, WP21, WP22, WP23, WP24, WP25, WP26, WP27, WP28, WP3, WP4, WP5, WP6, WP7, WP8, WP9	Strong impact of the services and Access offered by SERA for users and stakeholders also without EPOS
10	Failure to timely identify and mitigate risks; potential risks are	WP1	Benefit from experience of past projects; update regularly the Risk Register by the MB;

	discovered too late to enable efficient recovery		monitor mitigation measures
11	Underestimate ethical risks; improper use of data and products for geohazards and georesources applications	WP1	Rigorous application of the ethical standards and guidelines of Horizon2020; monitor by MB and SAB
12	Over-dependence on key individuals; lack of community building; poor involvement of partners	WP1	Adopt a management plan tailored to the complexity of the project and of the integration in EPOS
13	Reduced visibility and impact; failure in maximizing the impact	WP2	Verify and strengthen communication and dissemination strategy and activities; guarantee the full exploitation of results

Table 4. Critical implementation risks and mitigation actions

During the project execution, these risks as well as other identified during the execution will be updated in a Risk Register presented at each MB meeting and GA meeting. The MB will have the possibility to add new risks to the register, and will propose mitigating actions for the identified ones.

The SERA Project Office will make a proposal to the MB for approval (Table 5), based on a description of each risk, impact, status, trend and magnitude (based on likelihood and risk severity levels).

Nr.	Identified risk	Reason	Impact	Mitigation	Risk status	Risk magnitude	Trend
Nr	Text	Text	Text	Text	Open, Closed	S, M, H	↑ = ↓

Impact				
Very high	М	Н	Н	Н
High	М	М	Н	Н
Medium	М	M	M	Н
Low	S	S	M	M
Likelihood	Low	Moderate	High	Very high

Table 5. Risk Register template and magnitude scale (Small, Medium, High, to be approved by MB)

2.7 Ethics and security

The SERA partners are bound to ethical and research integrity principles (Art.34 of the Grant Agreement), which will be rigorously applied, regardless of the country in which the action is carried out.

SERA will also undertake actions to prevent misuse associated with access to data and services in seismology, earthquake engineering and anthropogenic seismicity, by (i) ensuring proper cyber-infrastructure security, (ii) where appropriate, adopting access policies to data, services and facilities that will require registration, authentication and/or authorization (including licensing and respecting Intellectual Property Rights), (iii) implementing appropriate IT solutions approaches for data curation and preservation.

From a governance perspective, the Scientific Advisory Board will advise the General Assembly on ethical issues of relevance to SERA, including the above listed as well as conflicts of interest that may arise during the project execution.

As external project members, the SAB is bound to sign a non-disclosure agreement to ensure the confidentiality of the information presented at the board.

CONSORTIUM AGREEMENT

for the H2020 INFRAIA-01-2016-2017 Action

Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe

in short

SERA

Grant Agreement No 730900

This Consortium Agreement is based on the ©DESCA - Horizon 2020 Model Consortium Agreement (www.DESCA-2020.eu),

Version 1.2, February 2016

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CONSORTIUM AGREEMENT

THIS CONSORTIUM AGREEMENT is based upon REGULATION (EU) No 1290/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 laying down the rules for the participation and dissemination in "Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020)" (hereinafter referred to as "Rules for Participation"), and the European Commission Multi-beneficiary General Model Grant Agreement and its Annexes, and is made on 1.5.2017, hereinafter referred to as the Effective Date

BETWEEN:

- 1. Eidgenössische Technische Hochschule Zürich (ETH) Switzerland
- 2. Centro Europeo di Formazione e Ricerca in Ingegneria Sismica (EUCE) Italy
- 3. Joint Research Centre European Commission (JRC) Belgium
- 4. Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA) France
- 5. Laboratório Nacional de Engenharia Civil (LNEC) Portugal
- 6. University of Patras (UPAT) Greece
- 7. University of Bristol (UBRI) United Kingdom
- 8. Institute of Earthquake Engineering and Engineering Seismology SS Cyril and Methodius University Skopje (IZIIS) Former Yugoslav Rep. of Macedonia
- 9. The Chancellor, Masters and Scholars of the University of Cambridge (UCAM) United Kingdom
- 10. Università degli Studi di Trento (UNITN) Italy
- 11. Universidade de Porto (UPORTO) Portugal
- 12. Universidad Politecnica de Madrid (UPM) Spain
- 13. Bogazici Universitesi (BOUN) Turkey
- 14. Aristotelio Panepistimio Thessalonikis (AUTH) Greece
- 15. Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum (GFZ) Germany
- 16. Koninklijk Nederlands Meteorologisch Instituut (KNMI) Netherlands
- 17. Institut National de Cercetare-Dezvoltare Pentru Fizica Pamantului (INFP) Romania
- 18. National Observatory of Athens (NOA) Greece
- 19. Uppsala Universitet (UU) Sweden
- 20. Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC) Spain
- 21. Natural Environment Research Council (NERC) United Kingdom
- 22. Euro-Mediterranean Seismological Centre (EMSC) France
- 23. Università degli Studi di Napoli Federico II (UNINA) Italy
- 24. Centre National de la Recherche Scientifique (CNRS) France
- 25. Analisi e Monitoraggio del Rischio Ambientale Scarl (AMRA) Italy
- 26. Stiftelsen NORSAR (NORSAR) Norway
- 27. Instytut Geofizyki Polskiej Akademii Nauk (IGPAS) Poland
- 28. Istituto Nazionale di Geofisica e Vulcanologia (INGV) Italy
- 29. Instituto Superior Técnico (IST) Portugal
- 30. Bureau de Recherches Géologiques et Minières (BRGM) France
- 31. Universitetet i Bergen (UiB) Norway

hereinafter, jointly or individually, referred to as "Parties" or "Party"

relating to the Action entitled

Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe

in short

SERA

hereinafter referred to as "Project"

WHEREAS:

The Parties, having considerable experience in the field concerned, have submitted a proposal for the Project to the Funding Authority as part of the Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020).

The Parties wish to specify or supplement binding commitments among themselves in addition to the provisions of the specific Grant Agreement to be signed by the Parties and the Funding Authority (hereinafter "Grant Agreement").

The Parties are aware that this Consortium Agreement is based upon the DESCA model consortium agreement.

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

Section 1: Definitions

1.1 Definitions

Words beginning with a capital letter shall have the meaning defined either herein or in the Rules for Participation or in the Grant Agreement including its Annexes.

1.2 Additional Definitions

"Consortium Body"

Consortium Body means any management body described in the Governance Structure section of this Consortium Agreement.

"Funding Authority"

Funding Authority means the body awarding the grant for the Project.

"General Assembly"

General Assembly means the Consortium Body established in accordance with Section 6.3.1 of this Agreement.

"Defaulting Party"

Defaulting Party means a Party which the General Assembly has identified to be in breach of this Consortium Agreement and/or the Grant Agreement as specified in Section 4.2 of this Consortium Agreement.

"Needed"

means:

For the implementation of the Project:

Access Rights are Needed if, without the grant of such Access Rights, carrying out the tasks assigned to the recipient Party would be technically or legally impossible, significantly delayed, or require significant additional financial or human resources.

For exploitation of own Results:

Access Rights are Needed if, without the grant of such Access Rights, the Exploitation of own Results would be technically or legally impossible.

"Software"

Software means sequences of instructions to carry out a process in, or convertible into, a form executable by a computer and fixed in any tangible medium of expression.

Section 2: Purpose

The purpose of this Consortium Agreement is to specify with respect to the Project the relationship among the Parties, in particular concerning the organisation of the work between the Parties, the management of the Project and the rights and obligations of the Parties concerning inter alia liability, Access Rights and dispute resolution.

Section 3: Entry into force, duration and termination

3.1 Entry into force

An entity becomes a Party to this Consortium Agreement upon signature of this Consortium Agreement by a duly authorised representative.

This Consortium Agreement shall have effect from the Effective Date identified at the beginning of this Consortium Agreement.

A new entity becomes a Party to the Consortium Agreement upon signature of the accession document (Attachment 2) by the new Party and the Coordinator after approval of all Parties according to Section 6.3.1.2. Such accession shall have effect from the date identified in the accession document.

3.2 Duration and termination

This Consortium Agreement shall continue in full force and effect until complete fulfilment of all obligations undertaken by the Parties under the Grant Agreement and under this Consortium Agreement.

However, this Consortium Agreement or the participation of one or more Parties to it may be terminated in accordance with the terms of this Consortium Agreement.

If the Grant Agreement is not signed by the Funding Authority or a Party, or if the Grant Agreement is terminated, or if a Party's participation in the Grant Agreement is terminated, this Consortium Agreement shall automatically terminate in respect of the affected Party/ies, subject to the provisions surviving the expiration or termination under Section 3.3 of this Consortium Agreement.

3.3 Survival of rights and obligations

The provisions relating to Access Rights, Dissemination and confidentiality, for the time period mentioned therein, as well as for liability, applicable law and settlement of disputes shall survive the expiration or termination of this Consortium Agreement.

Termination shall not affect any rights or obligations of a Party leaving the Consortium incurred prior to the date of termination, unless otherwise agreed between the General Assembly and the leaving Party. This includes the obligation to provide all input, deliverables and documents for the period of its participation.

Section 4: Responsibilities of Parties

4.1 General principles

Each Party undertakes to take part in the efficient implementation of the Project, and to cooperate, perform and fulfil, promptly and on time, all of its obligations under the Grant Agreement and this Consortium Agreement as may be reasonably required from it and in a manner of good faith as prescribed by Belgian law.

Each Party undertakes to notify promptly, in accordance with the governance structure of the Project, any significant information, fact, problem or delay likely to affect the Project.

Each Party shall promptly provide all information reasonably required by a Consortium Body or by the Coordinator to carry out its tasks.

Each Party shall take reasonable measures to ensure the accuracy of any information or materials it supplies to the other Parties.

4.2 Breach

In the event that a responsible Consortium Body or any Party identifies a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement (e.g. improper implementation of the project), the Coordinator or, if the Coordinator is in breach of its obligations, the Party appointed by the General Assembly, will give formal notice to such Party requiring that such breach will be remedied within 30 calendar days from the date of receipt of the written notice by the Party.

If such breach is substantial and is not remedied within that period or is not capable of remedy, the General Assembly may decide to declare the Party to be a Defaulting Party and to decide on the consequences thereof, which may include termination of its participation.

4.3 Involvement of third parties

A Party that enters into a subcontract or otherwise involves third parties in the Project remains responsible for carrying out its relevant part of the Project and for such third party's compliance with the provisions of this Consortium Agreement and of the Grant Agreement. That party has to ensure that the involvement of third parties does not affect the rights and obligations of the other Parties under this Consortium Agreement and the Grant Agreement.

Any involvement of third parties not already included in the Grant Agreement must be approved by the General Assembly and included in Attachment III of this CA.

Section 5: Liability towards each other

5.1 No warranties

In respect of any information and/or knowledge, in any form whatsoever, whether patentable or not, and/or whether actually patented or not, and all the related rights or materials (incl. Results and Background) supplied by one Party to another under the Project, no warranty or representation of any kind is made, given or implied as to the sufficiency or fitness for purpose nor as to the absence of any infringement of any proprietary rights of third parties.

Therefore.

- the recipient Party shall in all cases be entirely and solely liable for the use to which it puts such information and materials, and
- no Party granting Access Rights shall be liable in case of infringement of proprietary rights of a third party resulting from any other Party exercising its Access Rights.

5.2 Limitations of contractual liability

No Party shall be responsible to any other Party for any indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a wilful act, gross negligence.

For any remaining contractual liability a Party's aggregate liability towards the other Parties collectively shall be limited to once the Party's share of the total costs of the Project as identified in Annex 2 of the Grant Agreement provided such damage was not caused by a wilful act or gross negligence.

The terms of this Consortium Agreement shall not be construed to amend or limit any Party's statutory liability.

5.3 Damage caused to third parties

Each Party shall be solely liable for any loss, damage or injury to third parties resulting from the performance of the said Party's obligations by it or on its behalf under this Consortium Agreement or from its use of Results or Background.

5.4 Force Majeure

No Party shall be considered to be in breach of this Consortium Agreement if it is prevented from fulfilling its obligations under the Consortium Agreement by Force Majeure.

Each Party will notify the competent Consortium Bodies of any Force Majeure without undue delay. If the consequences of Force Majeure for the Project are not overcome within 6 weeks after such notification, the transfer of tasks - if any - shall be decided by the competent Consortium Bodies.

Section 6: Governance structure

6.1 General structure

The organisational structure of the Consortium shall comprise the following Consortium Bodies:

- General Assembly as the ultimate decision-making body of the consortium
- Management Board as operational management body
- Executive Committee as a subgroup of the Management Board supporting the Cordinator in the timely implementation of the SERA activities

The Coordinator is the legal entity acting as the intermediary between the Parties and the Funding Authority. The Coordinator shall, in addition to its responsibilities as a Party, perform the tasks assigned to it as described in the Grant Agreement and this Consortium Agreement.

6.2 General operational procedures for all Consortium Bodies

6.2.1 Representation in meetings

Any Party which is a member of a Consortium Body (hereinafter referred to as "Member"):

- should be present or represented at any meeting of such Consortium Body;
- may appoint a substitute or a proxy to attend and vote at any meeting;
- shall participate in a cooperative manner in the meetings.

6.2.2 Preparation and organisation of meetings

6.2.2.1 Convening meetings:

The chairperson of a Consortium Body shall convene meetings of that Consortium Body.

	Ordinary meeting	Extraordinary meeting
General Assembly	At least once a year	At any time upon written request of the Management Board or 1/3 of the Members of the General Assembly
Management Board	At least twice a year	At any time upon written request of any Member of the Management Board

6.2.2.2 Notice of a meeting:

The chairperson of a Consortium Body shall give notice in writing of a meeting to each Member of that Consortium Body as soon as possible and no later than the minimum number of days preceding the meeting as indicated below.

	Ordinary meeting	Extraordinary meeting
General Assembly	45 calendar days	15 calendar days
Management Board	14 calendar days	7 calendar days

6.2.2.3 Sending the agenda:

The chairperson of a Consortium Body shall prepare and send each Member of that Consortium Body a written (original) agenda no later than the minimum number of days preceding the meeting as indicated below.

General Assembly	21 calendar days, 10 calendar days for an extraordinary meeting
Management Board	7 calendar days

6.2.2.4 Adding agenda items:

Any agenda item requiring a decision by the Members of a Consortium Body must be identified as such on the agenda.

Any Member of a Consortium Body may add an item to the original agenda by written notification to all of the other Members of that Consortium Body up to the minimum number of days preceding the meeting as indicated below.

General Assembly	14 calendar days, 7 calendar days for an extraordinary meeting
Management Board	2 calendar days

- 6.2.2.5 During a meeting the Members of a Consortium Body present or represented can unanimously agree to add a new item to the original agenda.
- 6.2.2.6 Meetings of each Consortium Body may also be held by teleconference or other telecommunication means.
- 6.2.2.7 Decisions will only be binding once the relevant part of the Minutes has been accepted according to Section 6.2.5.
- 6.2.2.8 Any decision may also be taken without a meeting if the Coordinator circulates to all Members of the Consortium Body a written document, which is then agreed by the defined majority (see Section 6.2.3) of all Members of the Consortium Body. Such document shall include the deadline for responses and for exercising a veto right in accordance with Section 6.2.4. The Coordinator shall thereafter inform all the Parties of the outcome of the vote and send them the

corresponding draft minutes. The decisions will be binding after the chairperson sends to all Members of the Consortium Body and to the Coordinator a written notification of this acceptance.

Decisions taken without a meeting shall be considered as accepted if, within the period set out in article 6.2.4.4, no Member has sent an objection in writing to the chairperson. The decisions will be binding after the chairperson sends to all Members of the Consortium Body and to the Coordinator a written notification of this acceptance.

6.2.3 Voting rules and quorum

6.2.3.1 Each Consortium Body shall not deliberate and decide validly unless two-thirds (2/3) of its Members are present or represented (quorum).

If the quorum is not reached, the chairperson of the Consortium Body shall convene another ordinary meeting within 15 calendar days. If in this meeting the quorum is not reached once more, the chairperson shall convene an extraordinary meeting, which shall be entitled to decide even if less than the quorum of Members are present or represented.

- 6.2.3.2 Each Member of a Consortium Body present or represented in the meeting shall have one vote.
- 6.2.3.3 A Party which the General Assembly has declared according to Section 4.2 to be a Defaulting Party may not vote.
- 6.2.3.4 Decisions shall be taken by a majority of two thirds (2/3) of the votes cast with the exception of the following decisions, which shall require a unanimous vote of the votes cast:
- entry of a new Party;
- any proposed amendment to the Grant Agreement;
- the exclusion of a Party (except the Party concerned)
- the decision (except the Party concerned) to declare a Party to be a Defaulting Party and on the consequences thereof.

6.2.4 Veto rights

6.2.4.1 A Party which can reasonably show that its own work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of a Consortium Body may exercise a veto with respect to the corresponding decision or relevant part of the decision.

6.2.4.2 (void)

6.2.4.3 When a decision has been taken a Party may veto such decision during the meeting or within 15 calendar days after the draft minutes of the meeting are sent to its Members. A Party

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that is not a Member of a particular Consortium Body may veto a decision within the same number of calendar days after the draft minutes of the meeting are sent.

- 6.2.4.4 When a decision has been taken without a meeting a Member may veto such decision within 15 calendar days after written notification by the chairperson of the outcome of the vote.
- 6.2.4.5 In case of exercise of veto, the Members of the related Consortium Body shall make every effort to resolve the matter which occasioned the veto to the general satisfaction of all its Members.
- 6.2.4.6 A Party may neither veto decisions relating to its identification to be in breach of its obligations nor to its identification as a Defaulting Party. The Defaulting Party may not veto decisions relating to its participation and termination in the consortium or the consequences of them.
- 6.2.4.7 A Party requesting to leave the consortium may not veto decisions relating thereto.
- 6.2.5 Minutes of meetings
- 6.2.5.1 The chairperson of a Consortium Body shall produce written minutes of each meeting which shall be the formal record of all decisions taken. She/He shall send the draft minutes to all Members within 10 calendar days of the meeting.
- 6.2.5.2 The minutes shall be considered as accepted if, within 15 calendar days from sending, no Member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.
- 6.2.5.3 The chairperson shall send the accepted minutes to all the Members of the Consortium Body and to the Coordinator, who shall safeguard them.

If requested the Coordinator shall provide authenticated duplicates to Parties.

6.3 Specific operational procedures for the Consortium Bodies

6.3.1 General Assembly

In addition to the rules described in Section 6.2, the following rules apply:

- 6.3.1.1 Members
- 6.3.1.1.1 The General Assembly shall consist of one representative of each Party (hereinafter General Assembly Member).
- 6.3.1.1.2 Each General Assembly Member shall be deemed to be duly authorised to deliberate, negotiate and decide on all matters listed in Section 6.3.1.2. of this Consortium Agreement.
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6.3.1.1.3 The General Assembly will elect its Chairperson in the first Assembly.

6.3.1.1.4 The Parties agree to abide by all decisions of the General Assembly.

This does not prevent the Parties to submit a dispute to resolution in accordance with the provisions of Settlement of disputes in Section 11.8.

6.3.1.2 Decisions

The General Assembly shall be free to act on its own initiative to formulate proposals and take decisions in accordance with the procedures set out herein. In addition, all proposals made by the Management Board shall also be considered and decided upon by the General Assembly.

The following decisions shall be taken by the General Assembly:

Content, finances and intellectual property rights

- Proposals for changes to Annexes 1 and 2 of the Grant Agreement to be agreed by the Funding Authority
- Changes to the Grant Agreement
- Modifications to Attachment 1 (Background Included) according to 9.1.2. below
- Additions to Attachment 3 (List of Third Parties for simplified transfer according to Section 8.3.2)
- Additions to Attachment 4 (Identified affiliated entities)

Evolution of the consortium

- Entry of a new Party to the consortium and approval of the settlement on the conditions of the accession of such a new Party
- Withdrawal of a Party from the consortium and the approval of the settlement on the conditions of the withdrawal
- Identification of a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement
- Declaration of a Party to be a Defaulting Party
- Remedies to be performed by a Defaulting Party
- Termination of a Defaulting Party's participation in the consortium and measures relating thereto
- Proposal to the Funding Authority for a change of the Coordinator
- Proposal to the Funding Authority for suspension of all or part of the Project
- Proposal to the Funding Authority for termination of the Project and the Consortium Agreement

Appointments

On the basis of the Grant Agreement, the appointment if necessary of: Management Board Members

6.3.2 Management Board

In addition to the rules in Section 6.2, the following rules shall apply:

6.3.2.1 Members

The Management Board shall consist of the Coordinator and the Parties mentioned in Grant Agreement.

The Coordinator shall chair all meetings of the Management Board, unless decided otherwise by a majority of two-thirds.

6.3.2.2 Minutes of meetings

Minutes of Management Board meetings, once accepted, shall be sent by the Coordinator to the General Assembly Members for information.

6.3.2.3 Tasks

- 6.3.2.3.1 The Management Board shall prepare the meetings, propose decisions and prepare the agenda of the General Assembly according to Section 6.3.1.2.
- 6.3.2.3.2 The Management Board shall seek a consensus among the Parties.
- 6.3.2.3.3 The Management Board shall be responsible for the proper execution and implementation of the decisions of the General Assembly.
- 6.3.2.3.4 The Management Board shall monitor the effective and efficient implementation of the Project.
- 6.3.2.3.5 In addition, the Management Board shall collect information at least every 6 months on the progress of the Project, examine that information to assess the compliance of the Project with the Grant Agreement and, if necessary, propose modifications of the Grant Agreement to the General Assembly.

6.3.2.3.6 The Management Board shall:

- appoint the Members of the Executive Commitee, upon a proposal by the Coordinator
- support the Coordinator in preparing meetings with the Funding Authority and in preparing related data and deliverables

 prepare the content and timing of press releases and joint publications by the consortium or proposed by the Funding Authority in respect of the procedures of the Grant Agreement Article 29.

-

6.3.2.3.7 In the case of abolished tasks as a result of a decision of the General Assembly, the Management Board shall advise the General Assembly on ways to rearrange tasks and budgets of the Parties concerned. Such rearrangement shall take into consideration the legitimate commitments taken prior to the decisions, which cannot be cancelled.

6.4 Coordinator

6.4.1 The Coordinator shall be the intermediary between the Parties and the Funding Authority and shall perform all tasks assigned to it as described in the Grant Agreement and in this Consortium Agreement.

6.4.2 In particular, the Coordinator shall be responsible for:

- monitoring compliance by the Parties with their obligations
- keeping the address list of Members and other contact persons updated and available
- collecting, reviewing to verify consistency and submitting reports, other deliverables (including financial statements and related certifications) and specific requested documents to the Funding Authority
- transmitting documents and information connected with the Project to any other Parties concerned
- administering the financial contribution of the Funding Authority and fulfilling the financial tasks described in Section 7.3
- providing, upon request, the Parties with official copies or originals of documents that are in the sole possession of the Coordinator when such copies or originals are necessary for the Parties to present claims.

If one or more of the Parties is late in submission of any project deliverable, the Coordinator may nevertheless submit the other Parties' project deliverables and all other documents required by the Grant Agreement to the Funding Authority in time.

- 6.4.3 If the Coordinator fails in its coordination tasks, the General Assembly may propose to the Funding Authority to change the Coordinator.
- 6.4.4 The Coordinator shall not be entitled to act or to make legally binding declarations on behalf of any other Party or of the consortium, unless explicitly stated otherwise in the Grant Agreement or this Consortium Agreement
- 6.4.5 The Coordinator shall not enlarge its role beyond the tasks specified in this Consortium Agreement and in the Grant Agreement.

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6.5 Executive Committee

The Executive Committee shall be proposed by the Coordinator. It shall be appointed by the Management Board and shall assist and facilitate the work of the Management Board and the Coordinator for executing the decisions of the General Assembly as well as the day-to-day management of the Project.

6.6 Scientific Advisory Board (SAB)

A Scientific Advisory Board (SAB) will be appointed and steered by the Management Board. The SAB shall assist and facilitate the decisions made by the General Assembly. The Coordinator will ensure that a non-disclosure agreement, is executed between all the Parties and each SAB member. Its terms shall be not less stringent than those stipulated in this Consortium Agreement and it shall be concluded no later than 30 calendar days after their nomination or before any confidential information will be exchanged, whichever date is earlier. The Coordinator shall write the minutes of the SAB meetings and prepare the implementation of the SAB's suggestions. The SAB members shall be allowed to participate in General Assembly meetings upon invitation but have not any voting rights.

Section 7: Financial provisions

7.1 General Principles

7.1.1 Distribution of Financial Contribution

The financial contribution of the Funding Authority to the Project shall be distributed by the Coordinator according to:

- the Grant Agreement
- the approval of reports by the Funding Authority, and
- the provisions of payment in Section 7.3.

A Party shall be funded only for its tasks carried out in accordance with the Grant Agreement.

7.1.2 Justifying Costs

In accordance with its own usual accounting and management principles and practices, each Party shall be solely responsible for justifying its costs with respect to the Project towards the Funding Authority. Neither the Coordinator nor any of the other Parties shall be in any way liable or responsible for such justification of costs towards the Funding Authority.

7.1.3 Funding Principles

A Party that spends less than its allocated share of the budget as set out in the Grant Agreement or – in case of reimbursement via unit costs - implements less units than foreseen in the Grant Agreement will be funded in accordance with its actual duly justified eligible costs only.

A Party that spends more than its allocated share of the budget as set out in the Grant Agreement will be funded only in respect of duly justified eligible costs up to an amount not exceeding that share.

7.1.4 Return of excess payments; receipts

7.1.4.1 In any case of a Party having received excess payments, the Party has to return the relevant amount to the Coordinator without undue delay.

7.1.4.2 In case a Party earns any receipt that is deductible from the total funding as set out in the Grant Agreement, the deduction is only directed toward the Party earning such income. The other Parties' financial share of the budget shall not be affected by one Party's receipt. In case the relevant receipt is more than the allocated share of the Party as set out in the Grant Agreement, the Party shall reimburse the funding reduction suffered by other Parties.

7.1.5 Financial Consequences of the termination of the participation of a Party

A Party leaving the consortium shall refund all payments it has received except the amount of contribution accepted by the Funding Authority. Furthermore a Defaulting Party shall, within the limits specified in Section 5.2 of this Consortium Agreement, bear any reasonable and justifiable additional costs occurring to the other Parties in order to perform its and their tasks.

7.2 Budgeting

The budget set out in the Grant Agreement shall be valued in accordance with the usual accounting and management principles and practices of the respective Parties.

7.3 Payments

7.3.1 Payments to Parties are the exclusive tasks of the Coordinator.

In particular, the Coordinator shall:

- notify the Party concerned promptly of the date and composition of the amount transferred to its bank account, giving the relevant references
- perform diligently its tasks in the proper administration of any funds and in maintaining financial accounts
- undertake to keep the Funding Authority's financial contribution to the Project separated from its normal business accounts, its own assets and property, except if the Coordinator is a Public Body or is not entitled to do so due to statutory legislation.
- With reference to Articles 21.2 and 21.3.2 of the Grant Agreement, no Party shall before the end of the Project receive more than its allocated share of the maximum grant amount from which the amounts retained by the Funding Authority for the Guarantee Fund and for the final payment have been deducted.

7.3.2 The payment schedule, which contains the transfer of pre-financing and interim payments to Parties, will be handled according to the following:

Funding of costs included in the Grant Agreement will be paid to Parties after receipt from the Funding Authority without undue delay and in conformity with the provisions of the Grant Agreement. Costs accepted by the Funding Authority will be paid to the Party concerned.

The Coordinator is entitled to recover any payments already paid to a Defaulting Party. The Coordinator is equally entitled to withhold payments to a Party only when this is suggested by or agreed with the Funding Authority.

7.3.3 After approval of the periodic reports interim payments will follow and will be calculated on the basis of the accepted eligible costs and the corresponding reimbursement rates as indicated in Art. 21 of the Grant Agreement. The amounts paid for interim payments will correspond to the accepted EC contribution.

As 15% of the total EU contribution will always be kept by the Commission (10% retention + 5% guarantee fund) until the date of the last payment, the total amount of interim payments + pre-financing will be limited to 85% of each beneficiary's maximum EC contribution. This may imply that in some cases payment for the interim periods may be reduced in order to respect this limit.

7.3.4 Because of its particular status as a Commission Directorate-General, the Joint Research Centre – participating in this project through its Directorate E. Space, Security & Migration – signs an Administrative Arrangement with Directorate-General Research and Innovation. This Administrative Arrangement is an annex to the Grant Agreement and regulates relations within the Commission including inter-Commission payments.

Section 8: Results

8.1 Ownership of Results

Results are owned by the Party that generates them.

8.2 Joint ownership

Joint ownership is governed by Grant Agreement Article 26.2 with the following additions:

Unless otherwise agreed:

- each of the joint owners shall be entitled to use their jointly owned Results for non-commercial research and educational activities on a royalty-free basis, and without requiring the prior consent of the other joint owner(s), and
- each of the joint owners shall be entitled to otherwise Exploit the jointly owned Results and to grant non-exclusive licenses to third parties(without any right to sub-license), if the other joint owners are given:
- (a) at least 45 calendar days advance notice; and
- (b) Fair and Reasonable compensation.

The joint owners shall agree on all protection measures and the division of related cost in advance.

8.3 Transfer of Results

- 8.3.1 Each Party may transfer ownership of its own Results following the procedures of the Grant Agreement Article 30.
- 8.3.2 It may identify specific third parties it intends to transfer the ownership of its Results to in Attachment (3) to this Consortium Agreement. The other Parties hereby waive their right to prior notice and their right to object to a transfer to listed third parties according to the Grant Agreement Article 30.1.
- 8.3.3 The transferring Party shall, however, at the time of the transfer, inform the other Parties of such transfer and shall ensure that the rights of the other Parties will not be affected by such transfer.

Any addition to Attachment (3) after signature of this Agreement requires a decision of the General Assembly.

- 8.3.4 The Parties recognize that in the framework of a merger or an acquisition of an important part of its assets, it may be impossible under applicable EU and national laws on mergers and acquisitions for a Party to give the full 45 calendar days prior notice for the transfer as foreseen in the Grant Agreement.
- 8.3.5 The obligations above apply only for as long as other Parties still have or still may request Access Rights to the Results.

8.4 Dissemination

8.4.1 For the avoidance of doubt, nothing in Art.8.4 has impact on the confidentiality obligations set out in Section 10.

8.4.2 Dissemination of own Results

8.4.2.1 During the Project and for a period of 1 year after the end of the Project, the dissemination of own Results by one or several Parties including but not restricted to publications and presentations, shall be governed by the procedure of Article 29.1 of the Grant Agreement subject to the following provisions.

Prior notice of any planned publication shall be given to the other Parties concerned at least 45 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the Party or Parties proposing the dissemination within 30 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.

8.4.2.2 An objection is justified if

- (a) the protection of the objecting Party's Results, Background, IPR or secrecy would be adversely affected
- (b) the objecting Party's legitimate interests in relation to the Results or Background would be significantly harmed.

The objection has to include a precise request for necessary modifications.

8.4.2.3 If an objection has been raised the involved Parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting Party shall not unreasonably continue the opposition if appropriate measures are taken following the discussion.

The objecting Party can request a publication delay of not more than 90 calendar days from the time it raises such an objection. After 90 calendar days the publication is permitted.

8.4.3 Dissemination of another Party's unpublished Results or Background

A Party shall not include in any dissemination activity another Party's Results or Background without obtaining the owning Party's prior written approval, unless they are already.

8.4.4 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree that includes their Results or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

8.4.5 Use of names, logos or trademarks

Nothing in this Consortium Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of any of the Parties or any of their logos or trademarks without their prior written approval of such Party.

8.4.6. Exclusive licenses

Where a Party wishes to grant an exclusive licence to its Results and seeks the written waiver of the other Parties pursuant to Grant Agreement Article 30.2, the other Parties shall respond to the requesting Party within 45 calendar days of the request. Any Party's failure to respond (whether in the negative or the positive) to the request within such 45 calendar days shall be deemed to constitute written approval of the waiver by the non-responding Party.

Section 9: Access Rights

9.1 Background included

9.1.1 In Attachment 1, the Parties have identified and agreed on the Background for the Project and have also, where relevant, informed each other that Access to specific Background is subject to legal restrictions or limits.

Anything not identified in Attachment 1 shall not be the object of Access Right obligations regarding Background.

9.1.2 Any Party may add further own Background to Attachment 1 during the Project by written notice to the other Parties. However, approval of the General Assembly is needed should a Party wish to modify or withdraw its Background in Attachment 1.

9.2 General Principles

- 9.2.1 Each Party shall implement its tasks in accordance with the Grant Agreement and shall bear sole responsibility for ensuring that its acts within the Project do not knowingly infringe third party property rights.
- 9.2.2 Any Access Rights granted expressly exclude any rights to sublicense unless expressly stated otherwise and with the exception of Parties which are research organisations and non-profit organisations, which shall have the right to sub-license as of right, under conditions to be determined in a separate written agreement.
- 9.2.3 Access Rights shall be free of any administrative transfer costs.
- 9.2.4 Access Rights are granted on a non-exclusive basis.
- 9.2.5 Results and Background shall be used only for the purposes for which Access Rights to it have been granted.
- 9.2.6 All requests for Access Rights shall be made in writing.

The granting of Access Rights may be made conditional on the acceptance of specific conditions aimed at ensuring that these rights will be used only for the intended purpose and that appropriate confidentiality obligations are in place.

9.2.7 The requesting Party must show that the Access Rights are Needed.

9.3 Access Rights for implementation

Access Rights to Results and Background Needed for the performance of the own work of a Party under the Project shall be granted on a royalty-free basis, unless otherwise agreed for Background in Attachment 1.

9.4 Access Rights for Exploitation

9.4.1 Access Rights to Results if Needed for Exploitation of a Party's own Results, including for research on behalf of a third party, shall be granted on Fair and Reasonable conditions and upon written bilateral agreement.

Access rights to Results for internal research and educational activities shall be granted on a royalty-free basis.

- 9.4.2 Access Rights to Background if Needed for Exploitation of a Party's own Results, including for research on behalf of a third party, shall be granted on Fair and Reasonable conditions and upon written bilateral agreement.
- 9.4.3 A request for Access Rights may be made up to twelve months after the end of the Project or, in the case of Section 9.6.2.1.2, after the termination of the requesting Party's participation in the Project.

9.5 Additional Access Rights

For the avoidance of doubt any grant of Access Rights not covered by the Grant Agreement or this Consortium Agreement shall be at the absolute discretion of the owning Party and subject to such terms and conditions as may be agreed between the owning and receiving Parties.

9.6 Access Rights for Parties entering or leaving the consortium

9.6.1 New Parties entering the consortium

As regards Results developed before the accession of the new Party, the new Party will be granted Access Rights on the conditions applying for Access Rights to Background.

- 9.6.2 Parties leaving the consortium
- 9.6.2.1 Access Rights granted to a leaving Party
- 9.6.2.1.1 Defaulting Party

Access Rights granted to a Defaulting Party and such Party's right to request Access Rights shall cease immediately upon receipt by the Defaulting Party of the formal notice of the decision of the General Assembly to terminate its participation in the consortium.

9.6.2.1.2 Non-defaulting Party

A non-defaulting Party leaving voluntarily and with the other Parties' consent shall have Access Rights to the Results developed until the date of the termination of its participation.

It may request Access Rights within the period of time specified in Section 9.4.3.

9.6.2.2 Access Rights to be granted by any leaving Party

Any Party leaving the Project shall continue to grant Access Rights pursuant to the Grant Agreement and this Consortium Agreement as if it had remained a Party for the whole duration of the Project.

9.7 Access Rights for affiliated entities

Access Rights for affiliated entities

Affiliated Entities have Access Rights under the conditions of the Grant Agreement Articles 25.4 and 31.4. if they are identified in Attachment 4 (Identified affiliated entities) to this Consortium Agreement.

Such Access Rights must be requested by the affiliated entity from the Party that holds the Background or Results. Alternatively, the Party granting the Access Rights may individually agree with the Party requesting the Access Rights to have the Access Rights include the right to sublicense to the latter's Affiliated Entities listed in Attachment 4. Access Rights to affiliated entities shall be granted on Fair and Reasonable conditions and upon written bilateral agreement.

Affiliated entities which obtain Access Rights in return fulfil all confidentiality and other obligations accepted by the Parties under the Grant Agreement or this Consortium Agreement as if such Affiliated Entities were Parties.

Access Rights may be refused to affiliated entities if such granting is contrary to the legitimate interests of the Party which owns the Background or the Results.

Access Rights granted to any affiliated entity are subject to the continuation of the Access Rights of the Party to which it is affiliated, and shall automatically terminate upon termination of the Access Rights granted to such Party.

Upon cessation of the status as an affiliated entity, any Access Rights granted to such former Affiliated Entity shall lapse.

Further arrangements with affiliated entities may be negotiated in separate agreements.

9.8 Specific Provisions for Access Rights to Software

For the avoidance of doubt, the general provisions for Access Rights provided for in this Section 9 are applicable also to Software.

Parties' Access Rights to Software do not include any right to receive source code or object code ported to a certain hardware platform or any right to receive respective Software documentation in any particular form or detail, but only as available from the Party granting the Access Rights.

Section 10: Non-disclosure of information

10.1 All information in whatever form or mode of communication, which is disclosed by a Party (the "Disclosing Party") to any other Party (the "Recipient") in connection with the Project during its implementation and which has been explicitly marked as "confidential" at the time of disclosure, or when disclosed orally has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within 15 calendar days from oral disclosure at the latest as confidential information by the Disclosing Party, is "Confidential Information".

10.2 The Recipients hereby undertake in addition and without prejudice to any commitment of non-disclosure under the Grant Agreement, for a period of 4 years after the end of the Project:

- not to use Confidential Information otherwise than for the purpose for which it was disclosed;
- not to disclose Confidential Information without the prior written consent by the Disclosing Party;
- to ensure that internal distribution of Confidential Information by a Recipient to its employees or third parties (subcontractors, etc.) shall take place on a strict need-to-know basis; and
- to return to the Disclosing Party, or destroy on request all Confidential Information that has been disclosed to the Recipients including all copies thereof and to delete all information stored in a machine readable form to the extent prartically possible. The Recipients may keep a copy to the extent it is required to keep, archive or store such Confidential Information because of compliance with applicable laws and regulations or for the proof of on-going obligations provided that the Recipient comply with the confidentiality obligations herein contained with respect to such copy for as long as the copy is retained.

10.3 The Recipients shall be responsible for the fulfilment of the above obligations on the part of their employees or third parties involved in the Project and shall ensure that they remain so obliged, as far as legally possible, during and after the end of the Project and/or after the termination of the contractual relationship with the employee or third party.

10.4 The above shall not apply for disclosure or use of Confidential Information, if and in so far as the Recipient can show that:

- the Confidential Information has become or becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;
- the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
- the Confidential Information is communicated to the Recipient without any obligation of confidentiality by a third party who is to the best knowledge of the Recipient in lawful possession thereof and under no obligation of confidence to the Disclosing Party;
- the disclosure or communication of the Confidential Information is foreseen by provisions of the Grant Agreement;
- the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party;

- the Confidential Information was already known to the Recipient prior to disclosure; or
- the Recipient is required to disclose the Confidential Information in order to comply with applicable laws or regulations, including without limitation the law governing the right of public access to documents and environmental information or with a court or administrative order, subject to the provision Section 10.7 hereunder.
- **10.5** The Recipient shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the Project as with its own confidential and/or proprietary information, but in no case less than reasonable care.
- **10.6** Each Party shall promptly advise the other Party in writing of any unauthorised disclosure, misappropriation or misuse of Confidential Information after it becomes aware of such unauthorised disclosure, misappropriation or misuse.
- **10.7** If any Party becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure
- notify the Disclosing Party, and
- comply with the Disclosing Party's reasonable instructions to protect the confidentiality of the information.

Section 11: Miscellaneous

11.1 Attachments, inconsistencies and severability

This Consortium Agreement consists of this core text and

Attachment 1 (Background included)

Attachment 2 (Accession document)

Attachment 3 (List of Third Parties for simplified transfer according to Section 8.3.2)

Attachment 4 (Identified affiliated Entities)

In case the terms of this Consortium Agreement are in conflict with the terms of the Grant Agreement, the terms of the latter shall prevail. In case of conflicts between the attachments and the core text of this Consortium Agreement, the latter shall prevail.

Should any provision of this Consortium Agreement become invalid, illegal or unenforceable, it shall not affect the validity of the remaining provisions of this Consortium Agreement. In such a case, the Parties concerned shall be entitled to request that a valid and practicable provision be negotiated that fulfils the purpose of the original provision.

This Consortium Agreement and the Grant Agreement constitute the entire agreement between the Parties in respect of the Project and supersede all previous negotiations, commitments and writings between the Parties.

11.2 No representation, partnership or agency

Except as otherwise provided in Section 6.4.4, no Party shall be entitled to act or to make legally binding declarations on behalf of any other Party or of the consortium. Nothing in this Consortium Agreement shall be deemed to constitute a joint venture, agency, partnership, interest grouping or any other kind of formal business grouping or entity between the Parties.

11.3 Notices and other communication

Any notice to be given under this Consortium Agreement shall be in writing to the addresses and recipients as listed in the most current address list kept by the Coordinator.

Formal notices:

If it is required in this Consortium Agreement (Sections 4.2, 9.6.2.1.1, and 11.4) that a formal notice, consent or approval shall be given, such notice shall be signed by an authorised representative of a Party and shall either be served personally or sent by mail with recorded delivery or telefax with receipt acknowledgement.

Other communication:

Other communication between the Parties may also be effected by other means such as e-mail with acknowledgement of receipt, which fulfils the conditions of written form.

Any change of persons or contact details shall be notified immediately by the respective Party to the Coordinator. The address list shall be accessible to all Parties.

11.4 Assignment and amendments

Except as set out in Section 8.3 of this agreement, no rights or obligations of the Parties arising from this Consortium Agreement may be assigned or transferred, in whole or in part, to any third party without the other Parties' prior formal approval.

Amendments and modifications to the text of this Consortium Agreement require a separate written agreement to be signed between all Parties.

11.5 Mandatory national law

Nothing in this Consortium Agreement shall be deemed to require a Party to breach any mandatory statutory law under which the Party is operating.

11.6 Language

This Consortium Agreement is drawn up in English, which language shall govern all documents, notices, meetings, arbitral proceedings and processes relative thereto.

11.7 Applicable law

This Consortium Agreement shall be construed in accordance with and governed by the laws of Belgium excluding its conflict of law provisions.

11.8 Settlement of disputes

The parties shall endeavour to settle their disputes amicably.

Any dispute, controversy or claim arising under, out of or relating to this contract and any subsequent amendments of this contract, including, without limitation, its formation, validity, binding effect, interpretation, performance, breach or termination, as well as non-contractual claims, shall be submitted to mediation in accordance with the WIPO Mediation Rules. The place of mediation shall be Brussels unless otherwise agreed upon. The language to be used in the mediation shall be English unless otherwise agreed upon.

If, and to the extent that, any such dispute, controversy or claim has not been settled pursuant to the mediation within 60 calendar days of the commencement of the mediation, each Party is entitled to submit the dispute, controversy or claim to the sole competent courts of Brussels.

Section 12: Signatures

AS WITNESS:

The Parties have caused this Consortium Agreement to be duly signed by the undersigned authorised representatives in separate signature pages the day and year first above written.

1. Eidgenoessische Technische Hochschule Zuerich

Signature(s)

p.p. Agatha Keller

Name(s)

Prof Dr Detlef Günther

Title(s) Date Vice President Research and Corporate Relations

23. MAI 2017



2. Centro Europeo di Formazione e Ricerca in Ingegneria Sismica

Signature(s)

Name(s)

Prof Riccardo Pietrabissa

Title(s) President of the Eucentre Foundation

Date

22/05/2017

3. Joint Research Centre - European Commission

Signature(s)

Name(s)) Dan Claudiu Chirondojan

Title(s) Director of Directorate E. Space, Security & Migration

Date 26.05.2017

4. Commissariat à l'Energie Atomique et aux Energies Alternatives

Signature(s)

Name(s) Title(s)

Date

Sylvestre PIVET

Director of Innovation and Nuclear Support

20A 106/21

5. Laboratório Nacional de Engenharia Civil

Signature(s)

Name(s) Title(s) Maria de Lurdes Antunes Vogal do Conselho Directivo

trudes BeAstaues

Date

6. University of Patras

Signature(s)

Name(s) DELLOSTHENES Title(s) VICE RECTOR

FOR RESEARCH & DEVELOPMENT

Date

VICE RECTOR FOR 22/05/2017

7. University of Bristol

Signature(s)

he coombs uty faculty financial controller

Date 31.05.17



8. Institute of Earthquake Engineering and Engineering Seismology SS Cyril and Methodius University Skopje

Signature(s)

Name(s)

Mihail Garevski

Title(s)

Director of Institute of Eartquake Engineering and Engineering Seismology

Date

03.07.2017

9. The Chancellor, Masters and Scholars of the University of Cambridge

Alex Høllander

Name(s)
Senior Contracts Manager

Date [12]

Inc. [14]

10. Università degli Studi di Trento

Signature(s)

Name(s)

Paolo Collini

Title(s)

Rector

Date

2 3 MAG 2017

11. Universidade de Porto

Signature(s)

António Mendes Ferreira Vogat do Conselho Executivo da FEUP No uso de competência delegada

Name(s) Autonio JOACOVIN N. FERREIRA

Title(s) Vice Prosided of the Scherific Board (FEUP)

Date 31/05/2017

12. Universidad Politecnica de Madrid

Signature(s)

Name(s)

Title(s) 23 MAYO

Date

ASUNCIÓN GÓMEZ-PÉREZ Universidad Politécnica do Madrid

Vice-Rector for Research, Innovation and Dectoral Studies

13. Bogazici Universitesi

Signature(s)

Name(s) Prof. Dr. Aysin Ertuzun

Title(s) Vice Rector

Date 30 May 2017

14. Aristotelio Panepistimio Thessalonikis

Signature(s)

Name(s)

Theodore La pouls

Title(s)

Date for Research and Coordination of AUTH

Legal Support office

Kalliopi Nakou

Attorney At Law

15. Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum

Signature(s) Iffun Ihork

Name(s)

Dr. St. Schwartze

Title(s)
Date

3 0. MAI. 2017

HELMHOLTZ CENTRE POTSDAM
GFZ GERMAN RESEARCH CENTRE
FOR GEOSCIENCES
Administrative Executive Circular
Telegrafenberg
14473 Potsdam

16. Koninklijk Nederlands Meteorologisch Instituut

Signature(s)

Name(s)

PROF. DR. GERARD VAN DER STEENHOVEN

Title(s)

DIRECTOR GENERAL

Date

02-06-2017

17. Institut National de Cercetare-Dezvoltare Pentru Fizica Pamantului

Signature(s)

Name(s) Dr. Constantin IONESCU

Title(s) General Director

Date 22.05.2017

18. National Observatory of Athens

Signature(s)

Name(s) Prof. Employed Plionis

Title(s) Director of Not and President of the BoD

Date 12 06 2017

19. Uppsala Universitet

Signature(s)

Name(s)

Katarina Bjelke

Title(s)

University Director

Date

29 May, 2017

20. Agencia Estatal Consejo Superior de Investigaciones Cientificas

Signature(s)

Title(s)

L. he la time to

Name(s) Cristina de la Puente

Vice-President for Scientific and Technological Research

Date 2 5 MAY 2017

21. Natural Environment Research Council

Signature(s) Head of Intellectual Property

& Legal Services

Name(s)

British Geological Survey/NERC

Title(s)
Date

351 may , 2017

22. Euro-Mediterranean Seismological Centre

Signature(s) Centre Sismologique Euro-Méditerranéen

Name(s)

REMY BOSSU

Title(s)

SECRETARY GENERAL

Date

22/05/2017

23. Università degli Studi di Napoli Federico II

Signature(s)

Name(s) Title(s) IL DIRETTORE Prof. Leonardo Merola

Date

JUNE 12, 2014



24. Centre National de la Recherche Scientifique

Signature(s)



Pour le Président du CNRS et par délégation

Karine ARGENTO

Name(s): Karine Argento.

Title(s) : Déléguée Régionale par interim de la circonscription Alpes du CNRS.

Date: 22th May 2017.

25. Analisi e Monitoraggio del Rischio Ambientale Scarl

Signature(s)

Name(s) PIERO PACATINO

Title(s) PREPIDENT

Date 12/06/2017

26. Stiftelsen NORSAR

Signature(s)

Aune Svennun Lidle Name(s) Anne Strømmen Lycke

Title(s)

CEO

Date

22 May 2017



27. Instytut Geofizyki Polskiej Akademii Nauk Director of the Institute of Geophysics Polish Academy of Sciences

Signature(s)

Name(s) Assoc. Prof. Beata Orlecka-Sikora

Title(s) Director of Institute of Geophysics Polish Academy of Sciences

Date

25.05.2017

28. Istituto Nazionale di Geofisica e Vulcanologia

Signature(s)

Name(s) Title(s)

PROCESTE NEEDER

Date

2 9 MAG. 2017

29. Instituto Superior Técnico

Signature(s)

Arlindo Oliver.

AREA

DE PROJECTOS

Name(s)

Title(s)

Date

30. Bureau de Recherches Géologiques et Minières

Signature(s)

Name(s) Hélène Pauwels Title(s) Deputy Head, Development Division Date 30/05/2017 BRGM
3 avenue Claude Guillemin
BP 36009
45060 ORLÉANS Cedex 2
Tél.: 02 38 64 34 34

31. Universitetet i Bergen (UiB) Norway

Signature

Name

Inger Gjesdahl

Title

Assistant Director, Division of Research Administration

Date

30.05.2017

Voyer Cysidely

Read and agree by Department of Earth Science

Signature

Name

Gunn Mangerud

Title

Head of Department

Date

[Attachment 1: Background included]

According to the Grant Agreement (Article 24) Background is defined as "data, know-how or information (...) that is needed to implement the action or exploit the results". Because of this need, Access Rights have to be granted in principle, but Parties must identify and agree amongst them on the Background for the project. This is the purpose of this attachment.

Party 1

As to **Eidgenoessische Technische Hochschule Zürich (ETH), Switzerland,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Eidgenoessische Technische Hochschule Zuerich shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 2

As to Centro Europeo di Formazione e Ricerca in Ingegneria Sismica (EUCE),Italy, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Centro Europeo di Formazione e Ricerca in Ingegneria Sismica shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 3

As to **Joint Research Centre – European Commission (JRC), Belgium,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Joint Research Centre – European Commission shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 4

As to Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA), France, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Commissariat à l'Energie Atomique et aux Energies Alternatives shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 5

As to Laboratório Nacional de Engenharia Civil (LNEC), Portugal, it is agreed between the Parties that, to the best of their knowledge no data, know-how or information of Laboratório Nacional de Engenharia Civil shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

The work to be carried out by Laboratório Nacional de Engenharia Civil researchers lacks contributions requiring protection or any special requirements with respect to the Industrial property.

This represents the status at the time of signature of this Consortium Agreement.

Party 6

As to **University of Patras (UPAT), Greece,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of University of Patras shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 7

As to **University of Bristol (UBRI), United Kingdom,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of University of Bristol shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 8

As to Institute of Earthquake Engineering and Engineering Seismology SS Cyril and Methodius University Skopje (IZIIS), Former Yugoslav Rep. of Macedonia, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Institute of Earthquake Engineering and Engineering Seismology SS Cyril and Methodius University Skopje shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 9

As to The Chancellor, Masters and Scholars of the University of Cambridge (UCAM), United Kingdom, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of The Chancellor, Masters and Scholars of the University of Cambridge shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 10

As to **Università degli Studi di Trento (UNITN)**, **Italy**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Università degli Studi di Trento shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 11

As to **Universidade de Porto (UPORTO)**, **Portugal**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Universidade de Porto shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 12

As to **Universidad Politecnica de Madrid (UPM), Spain,** it is agreed between the Parties that, the following background is hereby identified and agreed upon for the Project. Specific limitations and/or conditions, shall be as mentioned hereunder:

Describe Background	Specific limitations and/or conditions for implementation (Article 25.2 Grant Agreement)	Specific limitations and/or conditions for Exploitation (Article 25.3 Grant Agreement)
Paper: A. Benavent-Climent. An energy-based damage model for seismic response of steel structures. Earthquake Engng. Struct. Dyn. 2007;36(8): 1049-1064.	None	None
Paper: A. Benavent-Climent. A brace-type seismic damper based on yielding the walls of hollow structural sections. Engng. Struct.2010;32(4):1113-1122	None	None
Paper: A. Benavent-Climent, Leandro Morillas, Juan M. Vico. A study on using wide-flange section web under out-of plane flexure for passive energy dissipation. Earthquake Engng. Struct. Dyn. 2011; 40:473–490.	None	None
Paper: A. Benavent-Climent, D. Escolano-Margarit. Shaking table tests of structures with hysteretic dampers: experimental results vs. prediction using non-linear static methods. Bulletin of	None	None

Earthquake Engng. 2012;10: 1857–1883.		
Paper: A. Benavent-Climent, L. Morillas, D. Escolano. Seismic performance and damage evaluation of a reinforced concrete frame with hysteretic dampers through shake-table tests. Earthquake Engng. Struct. Dyn. 2014;43(15):2399–2417.	None.	None
Data know-how or information that has been gerenated by the Group of Earthquake Engineering: Dynamics of Soils and Structures of the UPM	Access for implementation is only granted to the extent it is Needed for the Parties concerned to carry out their tasks in the Project and provided that group of research Earthquake Engineering: Dynamics of Soils and Structures (UPM) is able to grant Access Rights to said Background, including legal restrictions or limits, including those imposed by third parties. Access Rights are subject to written request.	Access for exploitation is only granted to the extent it is Needed to exploit its own Results and provided that group of research Earthquake Engineering: Dynamics of Soils and Structures (UPM is able to grant Access Rights to said Background, including legal restrictions or limits, including those imposed by third parties. Access Rights are subject to written request and under fair and rasoinable conditions.

This represents the status at the time of signature of this Consortium Agreement.

Party 13

As to **Bogazici Universitesi (BOUN), Turkey,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Bogazici Universitesi shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 14

As to **Aristotelio Panepistimio Thessalonikis (AUTH)**, **Greece**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Aristotelio Panepistimio Thessalonikis shall be Needed by another Party for implementation of the Project

(Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 15

As to **Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum (GFZ), Germany,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 16

As to **Koninklijk Nederlands Meteorologisch Instituut (KNMI) Netherlands**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Koninklijk Nederlands Meteorologisch Instituut shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 17

As to Institut National de Cercetare-Dezvoltare Pentru Fizica Pamantului (INFP), Romania, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Institut National de Cercetare-Dezvoltare Pentru Fizica Pamantului shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 18

As to **National Observatory of Athens (NOA), Greece**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of National Observatory of Athens shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Partv 19

As to **Uppsala Universitet (UU)**, **Sweden**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Uppsala Universitet (UU) Sweden shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

Party 20

As to **Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC), Spain,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Agencia Estatal Consejo Superior de Investigaciones Cientificas shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 21

As to **Natural Environment Research Council (NERC), United Kingdom,** it is agreed between the Parties that, to the best of their knowledge (*please choose*) The following background is hereby identified and agreed upon for the Project. Specific limitations and/or conditions, shall be as mentioned hereunder:

Describe Background	Specific limitations and/or conditions for implementation (Article 25.2 Grant Agreement)	Specific limitations and/or conditions for Exploitation (Article 25.3 Grant Agreement)
All Background directly related to the Project which is owned by NERC and which is <u>public</u> , is included, and these have no limitations or conditions; all other background is excluded.		

This represents the status at the time of signature of this Consortium Agreement.

Party 22

As to Euro-Mediterranean Seismological Centre (EMSC), France, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Euro-Mediterranean Seismological Centre shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 23

As to **Università degli Studi di Napoli Federico II (UNINA)**, **Italy**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of

Università degli Studi di Napoli Federico II shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

Party 24

As to **CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)**, **France**, it is agreed between the Parties that, to the best of their knowledge, the following background is hereby identified and agreed upon for the Project. Specific limitations and/or conditions, shall be as mentioned hereunder:

Describe Background	Specific limitations and/or conditions for implementation (Article 25.2 Grant Agreement)	Specific limitations and/or conditions for Exploitation (Article 25.3 Grant Agreement)
Background of the CNRS is all know-how generated within the departement of :		
Françoise Courboulex and Bertrand Delouis at the CNRS		
GEOAZUR (UMR 7329) as far as needed to duly perform our work in the Project;		
CNRS - GEOAZUR hereby includes Access Rights to all Background that has been created by the Research Team headed by Françoise Courboulex and Bertrand Delouis and that is specifically needed for the implementation of the SERA project.		

Except for the Background described here above, Background generated by personnel and/or students of the CNRS other than those participating in the SERA Project, as well as Background generated in collaboration with entities that are not Beneficiary to this Agreement and from whom the CNRS needs permission in order to grant Access Rights, is excluded. More specifically, the CNRS excludes access to all Background that has not been developed or is not owned by the members of the research teams directly involved in the carrying-out of the Project, unless expressly agreed by CNRS in a separate agreement.

This represents the status at the time of signature of this Consortium Agreement.

Party 25

As to Analisi e Monitoraggio del Rischio Ambientale Scarl (AMRA), Italy, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of

Analisi e Monitoraggio del Rischio Ambientale Scarl shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

Party 26

As to **Stiftelsen NORSAR** (**NORSAR**), **Norway**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Stiftelsen NORSAR shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 27

As to Instytut Geofizyki Polskiej Akademii Nauk (IGPAS), Poland, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Instytut Geofizyki Polskiej Akademii Nauk shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 28

As to **Istituto Nazionale di Geofisica e Vulcanologia (INGV)**, **Italy**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Istituto Nazionale di Geofisica e Vulcanologia shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 29

As to **Instituto Superior Técnico (IST), Portugal,** it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Instituto Superior Técnico shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

This represents the status at the time of signature of this Consortium Agreement.

Party 30

As to **Bureau de Recherches Géologiques et Minières (BRGM), France**, it is agreed between the Parties that, to the best of their knowledge, no data, know-how or information of Bureau de Recherches Géologiques et Minières shall be Needed by another Party for implementation of the Project (Article 25.2 Grant Agreement) or Exploitation of that other Party's Results (Article 25.3 Grant Agreement).

Party 31
As to Universitetet i Bergen it is agreed between the parties that, to the best of their knowledge, the following background is hereby identified and agreed upon for the Project. Specific limitations and/or conditions shall be as mentioned hereunder:

Describe Background	Specific limitations and/or conditions for implementation (Article 25.2 Grant Agreement)	Specific limitations and/or conditions for exploitation (Article 25.3 Grant Agreement)
Data, biological samples, methodologies and know-how which are generated in the fields related to the objective and activities of the Project	Only if needed for the implementation of the Project and provided that the University of Bergen is free to provide such Background, including legal restrictions or limits, including those imposed by third parties.	Only if needed to exploit its own results and provided that University of Bergen is free to provide such Background, including legal restrictions or limits, including those imposed by third parties.
Only databases and software which are generated in fields related to the objective and activities of the Project	Only if needed for the implementation of the Project and provided that the University of Bergen is free to provide such Background, including legal restrictions or limits, including those imposed by third parties	Only if needed to exploit its own Results of the Project and provided that the University of Bergen is free to provide such Background, including legal restrictions or limits, including those imposed by third parties.
Background resulting from research carried out Prof. Kuvvet Atakan, and his team, which was funded in full or in part by industrial, charitable, military or government sponsors	Access to Background for implementation is subject to that the University of Bergen is able to grant such Access rights for implementation under the agreements with such sponsors or cooperation parties in such sponsored research, and where the University of Bergen does not need to get permission to grant Access rights for Implementation.	Access to Background for Exploitation is subject to that the University of Bergen is able to grant such Access rights for Exploitation under the agreements with such sponsors or cooperation parties in such sponsored research, and where the University of Bergen does not need to get permission to grant Access rights for Exploitation.

[Attachment 2: Accession document]

ACCESSION

of a new Party to

[Acronym of the Project] Consortium Agreement, version [..., YYYY-MM-DD]

[OFFICIAL NAME OF THE NEW PARTY AS IDENTIFIED IN THE Grant Agreement]

hereby consents to become a Party to the Consortium Agreement identified above and accepts all the rights and obligations of a Party starting [date].

[OFFICIAL NAME OF THE COORDINATOR AS IDENTIFIED IN THE Grant Agreement]

hereby certifies that the consortium has accepted in the meeting held on [date] the accession of [the name of the new Party] to the consortium starting [date].

This Accession document has been done in 2 originals to be duly signed by the undersigned authorised representatives.

[Date and Place]

[INSERT NAME OF THE NEW PARTY] Signature(s)

Name(s)

Title(s)

[Date and Place]

[INSERT NAME OF THE COORDINATOR]

Signature(s)

Name(s)

Title(s)

[Attachment 3: List of Third Parties for simplified transfer according to Section 8.3.2.]

PARTY 24 - CNRS

Université Grenoble Alpes (UGA)

Institut De Recherche pour le Développement (IRD)

Institut Français des Sciences ET TechnologiES, des Transports, de l'Aménagement et des réseaux (IFSTTAR)

Observatoire de la Côte d'Azur (OCA)

Université Nice Sophia Antipolis (UNS)

Institut de Physique du Globe de Paris (IPGP)

PARTY 27 - IGPAS

AGH University of Science and Technology in Krakow (AGH / AGH-UST)

PARTY 28 - INGV

Istituto Nazionale di Oceanografia e Geofisica Sperimentale – OGS

Attachement 4: Indentified affiliated entities

PARTY 24 - CNRS

Université Grenoble Alpes (UGA)

Institut De Recherche pour le Développement (IRD)

Institut Français des Sciences ET TechnologiES, des Transports, de l'Aménagement et des réseaux (IFSTTAR)

Observatoire de la Côte d'Azur (OCA)

Université Nice Sophia Antipolis (UNS)

Institut de Physique du Globe de Paris (IPGP)