



EuroGEOSS Request 2018

Fields marked with * are mandatory.

Request for Expressions of Intent to scale-up and showcase EuroGEOSS Pilot Applications

EuroGEOSS is a regional initiative launched in October 2017 by the European countries, the European Commission and organizations participating to the Group on Earth Observations (GEO). From 2018 onwards, the EuroGEOSS initiative plans to launch periodic Requests for Expressions of Intent. All organizations located in European GEO member countries which are involved in developing, promoting or deploying innovative EO derived solutions are invited to come forward with voluntary Expressions of Intents for networking with other stakeholders along the value chain and scaling-up their activities within a timeframe of maximum three years.

This EuroGEOSS Request provides the online form to submit your Expression of Intent to the EuroGEOSS initiative. Submissions are accepted until 30 June 2018.

Why to submit an Expression of Intent?

- To share good practice, benchmark experiences and scale them up across different local contexts and across the EU;
- To network including with users and other stakeholders not yet involved in European Research and innovation EO activities;
- To get high visibility and recognition - including in GEO and Copernicus events - and take part in a more strategic dissemination at European and international level under the EuroGEOSS flag;
- To benefit from EuroGEOSS as a regional gateway to GEO;
- To link with important EO projects and programmes in Europe including Copernicus, Horizon 2020 and its follow-up programme after 2020;
- To benefit from and contribute to a reinforced European EO marketplace;
- To get regularly informed on funding opportunities;

- To participate in a European-wide, lasting partnership where shared competences, resources and skills are combined.

The Expressions of Intent should build upon the combination of existing funded developments. They must address the EuroGEOSS scoping priorities and selection criteria annexed to the text of the EuroGEOSS Request 2018.

All Expressions of Intent submitted online to the EuroGEOSS Request 2018 will be analyzed by the EuroGEOSS Coordination Group.

Action Groups will be established for each of those application areas where critical mass and market potential is identified from the submitted Expressions of Intent. Being selected for an Action Group is the prime mechanism to get your activity labelled as a EuroGEOSS activity. Each Action Groups shall facilitate upscaling of a specific EO applications characterized by a Technology Readiness Levels (TRLs) equal or above 5.

The Action Groups are not subject to a contractual basis. They represent ad hoc voluntary partnerships aiming at advancing the EuroGEOSS innovation agenda on a best effort basis and for a period of maximum three years.

For more information on this survey - including the EuroGEOSS selection criteria - see the *"Request 2018 for Expressions of Intent"* and the related *Frequently Asked Questions (FAQ)* available from the [EuroGEOSS](#) web site. You can also send your eventual questions to RTD-EUROGEOSS@ec.europa.eu.

Disclaimer

The European Commission is not responsible for the content of questionnaires created using the EUSurvey service - it remains the sole responsibility of the form creator and manager. The use of EUSurvey service does not imply a recommendation or endorsement, by the European Commission, of the views expressed within them.

Data protection related to this survey: *personal data protection will be ensured (please click [here](#) for further information).*

Specific Privacy Statement: *is available [here](#).*

DEADLINE FOR SUBMISSIONS: 30 June 2018

FEEDBACK BY EMAIL TO CONTRIBUTORS: end August 2018

LAUNCH OF SELECTED ACTION GROUPS: mid September 2018

1 PARTNERSHIP SUPPORTING THE EXPRESSION OF INTENT

1.1 LEAD ORGANISATION

* Lead organisation name

100 character(s) maximum

National Observatory of Athens–Inst. for Astronomy Astrophysics Space Applications & Remote Sensing

* Lead organisation address (Address, city, country)

100 character(s) maximum

Vas. Pavlou & I. Metaxa, 15236 Penteli, Greece

* Lead organisation URL/website

100 character(s) maximum

www.noa.gr
www.astro.noa.gr

Lead organisation profile in relation to GEO and/or Copernicus

If applicable, please describe briefly the links between your organisation and the GEO initiative and/or the Copernicus programme.

1000 character(s) maximum

IAASARS/NOA is coordinating GEO-CRADLE (<http://geocradle.eu/>), upgraded to a GEO Work Programme Community Activity. It coordinates and integrates state-of-the-art EO capacities in North Africa, Middle East, and Balkans in support to the implementation of GEOSS and Copernicus in the regions. GEO-CRADLE addresses priorities in relation to Climate, Food Security, Raw Materials, and Energy, sustains a Networking Platform with >300 stakeholders and operates a Regional Data Hub fully interoperable with the GEOSS portal. IAASARS/NOA operates several DataHubs, federated with the Integrated Ground Segment of Copernicus namely the Hellenic Mirror Site (<https://sentinels.space.noa.gr/>), the IntHub, the CollHub, the DIASHub, and the TmpHub, providing Sentinel data to the global EO stakeholder community. IAASARS /NOA supports the EMS and EFFIS components of Copernicus CS, and hosts the Greek GEO Office (www.greekgeo.noa.gr/), the focal point of Greece in GEO to coordinate relevant activities.

* Contact person (Name and firstname)

50 character(s) maximum

Dr. Charalampos (Haris) Kontoes

* Contact person e-mail

kontoes@noa.gr

1.2 OTHER ORGANISATIONS

Name of other organisations (Please include the name and country of the other organisations separated by comma.)

1000 character(s) maximum

Consiglio Nazionale delle Ricerche-Istituto di Metodologie per l'Analisi Ambientale, Istituto Nazionale di Geofisica e Vulcanologia, ILMATIETEEEN LAITOS, CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS, VEDURSTOFA ISLANDS, CIMA RESEARCH FOUNDATION, Consiglio Nazionale delle Ricerche- Institute of Atmospheric Pollution Research, The Geological Surveys of Europe, Planetek Italia s.r.l., NEUROPUBLIC AE PLIROFORIKIS & EPIKOINONION, European Union Satellite Centre, International Institute for Applied Systems Analysis

Types of organisations (Please select all types of organisations participating in your coalition)

- International organisation
- Public authority
- Research
- Business
- Non-governmental organisation
- Interest group
- Other (please specify below)

Are you looking for additional, specific expertise along the value chain?

- Yes
- No

2 YOUR EXPRESSION OF INTENT

* Descriptive title

200 character(s) maximum

Disaster Resilience Showcase under H2020 call GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) Topic: SC5-15-2018

Acronym (optional)

20 character(s) maximum

Disaster Resilience

* Abstract/executive summary (including the overall description of the intended EuroGEOSS pilot application)

2000 character(s) maximum

The Disasters Resilience showcase deals with a portfolio of natural and human induced disasters (geo-hazards, extreme weather, fires, floods, etc.) for the protection of citizens, economies and ecosystems in line with the priorities and the goals set by the Sendai Framework on Disaster Risk Reduction and SDG2 and SDG 11. It builds around three pilots: Resilient Cities and Critical Infrastructures against extreme weather events and geo-hazards, Resilient Ecosystems including the protection of natural environment, protected sites but also agricultural production and food, and Resilience of Businesses and Continuity of Businesses impacted by natural disasters. Following a cross-sector and multi-disciplined co-design and co-creation approach, a set of innovative user centric services are proposed. They abide by the GEO and GEO Open Data Sharing principles, and the Open Innovation, Open Science, and Open to the World EU research priorities. They build on leveraging and scaling up existing EO applications of high TRL resulted from outstanding activity in previous projects e.g. BEYOND, RASOR, DRIHM, PanGeo, TerraFirma, SAFER, LinkER, GEO-CRADLE, while exploiting synergies with GEO, Copernicus, and existing cloud based data and service oriented platforms (e.g. GEOSS portal, EMS, CAMS, DIAS, NextGEOSS, etc.). Focusing on the innovative integration of citizen data, and exploiting advanced analytics methods for big satellite data (e.g. from Sentinels) and research infrastructures (e.g. ACTRIS, EPOS Supersites, etc.), it creates a framework of cooperation between researchers, value adders and stakeholders for a long-term sustainability and operational deployment of pilots. The disasters showcase addresses priorities of GEO flagships and initiatives including GEO-EVOLVE, DARMA, GWIS, GEOGLAM, GEOGLOWS, GDIS, EU Urban Agenda, GSNL, and GEO Communities for Geohazards, Land Degradation, Environmental Monitoring, Space and Security.

EXPECTED INNOVATION OUTCOMES

(to tick one or several options from the form)

* What main EuroGEOSS innovation outcomes?

- Real life, user-driven demonstrated EO applications
- Reviews of user-related experience and questions
- Catalogues of good practices available in different languages
- Strategies for scaling-up new services including critical success factors
- Guidelines for business models, evidences on return on investment
- Innovative procurements of interoperable innovative solutions
- Innovation deals in the field of service solutions
- Reference site with high potential for replication in Europe
- Inter-regional cooperation
- Cooperation with H2020 projects
- Awareness raising campaigns
- Emerging themes of novel interest for European research & innovation.
- Education and training modules, including for trainers
- Other (please specify below)

EuroGEOSS POLICY PRIORITIES ADDRESSED BY YOUR INTENT (to tick relevant options from the form)

* **EuroGEOSS priorities**

- | | |
|--|---|
| <input checked="" type="checkbox"/> SDG2: Zero hunger | <input checked="" type="checkbox"/> SDG 14: Life below water / SDG 15: Life on land |
| <input type="checkbox"/> SDG 3: Good health and well-being | <input type="checkbox"/> SDG 13: Climate action - Paris agreement |

- SDG 6: Clean water and sanitation
- SDG 7: Affordable and clean energy
- SDG 9: Industry innovation and infrastructure
- SDG 11: Sustainable cities and communities
- SDG 13: climate action Paris agreement
- Sendai Framework
- EU policies

*** Link to GEO SBAs**

- Food sustainability and sustainable agriculture
- Public health surveillance
- Water resources management
- Energy and mineral resource management
- Infrastructure and transport management
- Sustainable urban development
- Biodiversity and ecosystem sustainability
- Crosscutting: climate change and impact
- Disaster resilience

Is your Intent supporting directly the implementation of a specific EU policy?

- Yes
- No

EO application domains

- EO for sustainable agriculture
- EO for public health surveillance
- EO for sustainable water management
- EO for renewable energies and energy efficiency
- EO tracking human settlement
- EO for resilient cities
- EO for nature conservation
- EO for climate services
- EO for disaster risk reduction

*** End user dimension (Who are the end users? How are they involved? How consolidated are the user needs?)**

1500 character(s) maximum

The Disasters Resilience showcase includes two levels of end users: 1st level of Core Co-Designers, actual partners that ensure a user-centric approach & the associated partners which are any entity interested in contributing to the project.

For the 1st Pilot (EO Data for Detection, Discrimination and Distribution (4D) of Volcanic ash), the principal co-designer of this project is Zentralanstalt für Meteorologie und Geodynamik, providing support to airlines in their service management and rerouting.

For the 2nd pilot 1st App (Geoss for Disasters in UrBan Environment) the Core Co-designers are: 1) Italian Civil Protection Department; 2) ARPAL – Agenzia Regionale per la Protezione dell'Ambiente Ligure; 3) Autorita di Bacino dei Fiumi Isonzo, Tagliamento, Livenza, Piave, Brenta-Bacchiglione.

For the 2nd pilot 2nd App (Assessing geo-hazard vulnerability of Cities and Critical Infrastructures) the core co-designers are: 1) Centre Tecnològic de Telecomunicacions de Catalunya; 2) Italian & 3) Spain Civil Protection; 4) Geological Survey of Denmark; 5) Energy Resource Environment Holdings; 6) Acea SpA - Italian energy and water supply company.

For the 3rd pilot (Resilient and sustainable ecosystems including agriculture and food) the Core Co-designers are: 1) GAIA EPICHEIRIN association of farmers (80000 members); 2) INTERAMERICAN, insurance company having business interests in the agriculture market; 3) GRNET which is having vast experience on wide broadband transfer of EO data

*** Market potential (Please document the level of already established market/uptake potential?)**

1000 character(s) maximum

One of the main objectives of this project is to promote the uptake of pilots at national and international scale, across vertical markets (private and public) and amongst key user communities. This will be achieved, for each pilot, based on the cooperation of teams of scientists, IT developers, user uptake specialists and business experts who will work closely together with users to design and develop services that can be incorporated in their operational workflows. Thus, through this iterative co-design approach, the Disasters Resilience showcase project will develop a suite of 3 user-driven pilots that can bring significant socio-economic and environmental benefits to the respective user communities. To that end, the uptake of the pilots will focus across three main inter-connected dimensions: Sectorial uptake; National/regional uptake; & International uptake. This will be guided by a comprehensive user uptake strategy, involving key organizations, initiatives and user communities.

* Targeted Technology Readiness Level (TRL) (What level of service demonstration/validation have you achieved /do you aim to achieve?)

1000 character(s) maximum

All pilots of the Disasters Resilience showcase will engineer the design and implementation of the different pilots (with initial TRLs ranging from 5 to 8) following a neutral approach in terms of solutions. Even if the different components that each pilot is bringing in are having high TRL level (8-9), thus the integration of different components along with the development activities that are needed to tailor the pilots to users' needs are decreasing the initial pilots' TRL level.

* Description of planned upscaling activities (e.g. wider user base, extended service quality with additional data sources, transnational deployment in Europe, closer-to-market activity, service replication/incubation, other upscaling activity?)

1500 character(s) maximum

An important objective of the project is to enable the long-term sustainability of the pilots, their penetration in public and private markets and support their upscaling. The sustainable uptake and exploitation of the provided pilots in different markets serving public/government and private users is of paramount importance. Thus, a number of necessary tools (business plan support, IPR advice, market intelligence, investment readiness, on-line market presence) will be introduced in order to boost the sustainability potential of the pilots.

Our aim is to establish a long-term mechanism – the “sustainability booster”, which will support the commercialization/exploitation and upscaling of EO solutions developed within the Disaster Resilience showcase and carrying its operation beyond the project. A dynamic online market trends observatory will provide SMEs and potential spinouts with market intelligence, coupled with a dedicated EuroGEOSS Showcases eMALL Gallery that will be created, offering a powerful «window to the market»

Last but not least, the penetration of pilots in public and private markets will be further supported by dedicated socio-economic analyses based on an EO value tree helping to raise awareness on the complex benefits of European GEOSS actions to policy makers, public organisations and commercial downstream markets.

* Link to GEO and GEOSS (How do you intend to take advantage of GEOSS data/GEO activities?)

800 character(s) maximum

All pilots are going to be registered to the GEOSS portal and use as much as possible links with GEO activities and open data that will support the interoperability and replicability of the services. Additionally, it is critical to exploit the IT capabilities and the wealth of data made available through DIAS, GEOSS platform, NextGEOSS, EOSC, in-situ observatories (as organized in ENVRI plus), citizen observatories and any other existing hubs or platforms.

* Leveraging Copernicus (How about exploiting existing data/services/platforms/resources from the Copernicus programme?)

1000 character(s) maximum

The Disaster Resilience Showcase pilots will use all Sentinel products (S1A-1B-2A-3A) along with meteo data and existing in-situ networks whose partners and co-designers are bringing in. Additionally, Copernicus and other existing services will be also used such as CAMS, CEMS, EFAS, Copernicus Land Management Service. Usage of GEO brokering approach and GEOSS Common Infrastructure-GCI. Also, Citizen scientists' observational networks, social media.

Duration(starting from September 2018)

- One-year duration
- Two-year duration
- Three-year duration

* Funding resources (Reference to existing/upcoming funding resources or projects supporting your Expression of Intent)

50 character(s) maximum

Upcoming funding resources from H2020 call GREENIN

Comments (optional)

1000 character(s) maximum

3 ABOUT THE EuroGEOSS REQUEST 2018

* How did you learn about this EuroGEOSS Request?

300 character(s) maximum

Proposal Coordinator (ARMINES) informed us to submit for each showcase one expression for intend

Suggestions in view of future EuroGEOSS Requests (optional).

We would like to give you the opportunity to comment on this survey.

This will be taken into account for subsequent EuroGEOSS Requests after 2018.

1000 character(s) maximum

THANK YOU FOR YOUR COOPERATION.

Background Documents

[EuroGEOSS Request 2018 for Expressions of Intent.pdf](#)

[EuroGEOSS concept paper.pdf](#)

[FAQ](#)

[SpecificPrivacyStatement - EuroGEOSS 2018.pdf](#)

Contact

RTD-EUROGEOSS@ec.europa.eu
