



Call for Projects 2022

SCO France / European Union & ESA countries

Managed by SCO France with European partners

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CLOSING OF THE CALL FOR PROJECTS

NOVEMBER 15, 2021

ANNOUNCEMENT OF THE RESULTS

JANUARY 2022

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CONTEXT OF THE SCO EUROPE 2022 CALL FOR PROJECTS

The Space Climate Observatory is an international initiative of the One Planet Summit, officially launched in June 2019 by President Macron. It brings together space agencies from around the world and international organizations (UNDP, ESA, UNEP, UNOOSA) and aims to develop projects for local decision makers to help them adapt to climate change. The projects monitor the impacts on the specific areas using satellite data, in situ data and local socio-economic data. The SCO is in line with the international agreements of Paris, the 2030 Agenda for Sustainable Development, the United Nations Framework Convention on Climate Change (UNFCCC) and the strategies developed by the WMO and the Global Climate Observing System (GCOS). It is also a Community Activity of the Group on Earth Observation, and works closely with the Copernicus ECMWF services.

The **SCO France**¹ is the national declination of the international initiative. It is a national network

¹ Inter Agency Committee including 22 public institutions : ADEME, BRGM, CEA, CEREMA, CIRAD, CNES, CNRS-INSU, CSTB, IDDRI, IFREMER, IGN, INERIS, INRIA, IRD, MESRI, METEOFRACTANCE, MTE, OFB, ONERA, SHOM, INRAE, ONF

whose vocation is to bring together the scientific community, public authorities, and companies around the objectives of the SCO International and the study of the impacts of climate change. It aims to support projects led by French actors that meet the same objectives. The projects, led by consortia, are selected through calls for projects like this one.

The **primary objective of the SCO** is to propose decision support tools to observe, evaluate and anticipate the impacts of climate change. This involves historical analysis of data, development of impact scenarios, and projections of changes in specific areas and their consequences on the populations in order to help decision-makers respond to the challenges of adaptation. Based on the pooling of existing data produced by international programs (Copernicus, NOAA, Eumetsat, etc.) and existing national climate services (DRIAS, etc.), the SCO will promote the interoperability of local socio-economic data (population, urbanization, protected areas, agriculture, linear and local infrastructures, etc.) in order to provide decision-makers with key data for the precise analysis of the vulnerability of their land to climate change. This is a unique initiative that provides concrete assistance to specific areas by enhancing the use of satellite data.

The second objective is to adapt and transpose the methodologies and tools to other areas in the world in order to have an exhaustive and quantified assessment, and thus contribute to the adaptation component of the Paris Agreement in a coordinated manner at the international level with common metrics for the sectors where this is relevant. Tools that can be adapted to national and local scales by taking advantage of digital innovations, such as Artificial Intelligence.

Finally, a long-term objective is to contribute to providing policy makers in all countries with the same set of tools and to build internationally recognized models, allowing for an objective assessment of the impact of public policies in the fight against climate change at the relevant scales.

The Charter of the SCO France is available on the website

<http://www.spaceclimateobservatory.org/fr/sco-france>

This call for project for proposals is managed by SCO France with European partners.

WHAT IS A SCO PROJECT?

A SCO project should meet the following 6 criteria:

1. Choose an issue that addresses the needs of the specific areas,
2. To propose an operational tool at the end of the project,
3. Make the best use of available satellite, environmental, climatic and socio-economic data, at a resolution adapted to the problem,
4. Rely on research, production and data availability infrastructures (Data Terra, Geoportal and PNDB for France, Copernicus, DIAS, existing GIS platforms, etc.) as well as on operational services (Copernicus, etc.)
5. Allow the duplication/adaptation of tools in several areas (shift to the relevant scale for each area), whether in France, Europe or elsewhere in the world,
6. Meet SCO community return criteria,

and as much as possible, to the following criteria:

7. To federate a consortium of scientists, private companies and public authorities capable of producing new knowledge, generating innovative and efficient methodological cores, but also practical tools for decision support,
8. Promote a methodology based on an updated state of the art including the latest developments in artificial intelligence and related computing infrastructures,
9. Encourage the use of open-source data and tools and move towards an open end tool,
10. Propose a method of financing projects that involves the end user for the initial phase of the project, and defines the scope of recourse to the private sector for future developments,
11. Integrate work on the development of the associated economic model,
12. Integrate the international cooperation approach in the service of countries benefiting from development aid.

THE SCO LABEL

Obtaining the SCO label for a project means adhering to the values of the SCO, and benefiting from international recognition, the SCO label awarded by the SCO France labeling committee being worth recognition by the SCO International.

The SCO label will allow privileged access to funding obtained within the framework of institutional agreements between the SCO and international or European agencies, as well as to those that may be dedicated to the SCO projects by institutions belonging to SCO France.

The awarding of the label allows the consortia to be supported by the SCO: they can thus be promoted at various national or international events, and benefit from the deployment on other scales of technical solutions that they have implemented locally.

THEMATIC AND GEOGRAPHIC FIELDS

All themes related to the impacts of climate change and meeting the criteria of a SCO project are eligible. Securely funded projects could also benefit from the SCO label. There are no restrictions on the geographical location of projects.

WHO CAN SUBMIT?

A SCO project is intended to bring together several families of actors:

- i. **The scientific community** whose research work feeds concrete solutions based on analysis and modeling from available data and the production of algorithms needed to develop innovative solutions for projects
- ii. National and local **public authorities**, local communities, because they will have to manage this adaptation as close as possible to the people
- iii. **Local engineering actors** who have technical expertise applied to specific areas

- iv. **Companies, engineering firms, associations** with the capacity to provide an industrial and operational response between scientists, data, and populations.

Any entity belonging to these families of actors can therefore submit projects; however, a partnership approach should be favored.

The call for projects 2022 is open to applications from consortia from European countries.

THE SELECTION PROCESS

The process takes place in 2 steps:

- On the basis of the standardized project sheet accompanying this call for proposals, the project will be submitted to the **Labeling Committee**, which will meet after the submission deadline. The committee will decide whether or not to award the label.
- The selected consortia then have **2 months to finalize their proposal**, respond to any comments from the labeling committee, and ensure that they meet the labeling requirements.
At the end of these 2 months, if all the necessary requirements are accepted, the project will be definitively labelled.

EVALUATION CRITERIA AND COMMUNITY FEEDBACK

A project will only be eligible for labelling if it meets the criteria mentioned previously.

The labeling committee will judge the **strategic environment of the project**, including the following aspects:

- Articulation with other projects,
- Use of computing/data infrastructures,
- Local application,
- Involvement of users and local stakeholders
- Funding opportunities,
- ...

and the **scientific and technical environment of the project**

- Presence of scientific laboratories in the consortium,
- Existence of proofs of concept or first developments,
- Technical solidity,
- Initial TRL level desired between 5 and 6 and final between 6 and 7 or more,
- ...

Labeled projects join the SCO community and agree to contribute to its enrichment for the benefit of all. They define their contribution in their labeling file, and this point can also be completed later in their various annual reports, as the economic models linked to the use of the project's productions are refined.

This return is preferably made up of all the data, algorithms or various technical components that can be reused in another context. Exceptions to this principle of openness must be limited, justified, and give rise to other forms of community feedback: international cooperation and capacity building for example, offer of expertise, technology watch, etc. A discussion with the SCO France could help projects to develop the forms that these returns could take.

The consortia that carry the projects undertake to respond kindly to requests from the SCO France to contribute to the promotion and development of the SCO, to participate in feedback or to provide their testimony.

CALENDAR

01/09/2021: Opening of the 2022 call for projects

15/11/2021: Closing of the call for projects 2022

01/2022: Announcement of the SCO 2022 labelled projects

CONTACTS - SENDING PROJECT SHEETS

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The project sheets will be sent to: seminairesco.fr@capgemini.com and if necessary to the **SCO correspondents of the European countries concerned, members of the SCO**

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