

LC-CLA-20-2020: Supporting the implementation of GEOSS in the Arctic in collaboration with Copernicus

Specific Challenge: In order to gain more insight in the fast rate of climate, ecological and environmental change taking place in the Arctic and to facilitate well-informed decisions, there is a need to develop coordinated Earth observations and information services specifically targeting this region, also building on the essential contribution of indigenous knowledge and community-based monitoring systems. These observations and services need to be delivered in order to support a sustainable development in the Arctic, particularly for responding to the needs of the people who live there. Observations and services are also necessary to improve the monitoring and predicting capabilities on changes that may affect other parts of the planet, and in particular the Northern hemisphere. The challenge and suitable actions to alleviate adverse consequences were identified in the 2nd Arctic Science Ministerial Joint Statement of Ministers.¹

Scope: The action should aim at: (i) advancing the operationalisation of an integrated pan-Arctic Observing System in preparation for a possible future ArcticGEOSS initiative; (ii) improving and extending the terrestrial, marine and cryospheric in-situ measurements and the community-based monitoring systems necessary for the monitoring of the Arctic; (iii) setting up pilot services and implementing the coordinated network of those services necessary for the adaptation to climate change in the region; (iv) contributing to the interoperability of Arctic Data systems; and (v) to make a positive contribution to national, regional and international decision-making processes and science strategies.

The action should help to build an Arctic “window”² of Copernicus by bringing together all Arctic relevant observations deriving from different Copernicus services and promoting access to relevant Copernicus datasets.

The action should coordinate with projects stemming from the NSF's Arctic portfolio, such as the "Navigating the New Arctic" programme, and other actions of the Transatlantic Ocean Research Alliance, by establishing joint operational activities, in order to support the mission and objectives of the international initiative on Arctic observations brought forward by the Sustaining Arctic Observing Networks (SAON).

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, in particular with the countries and Indigenous Peoples organisations participating in the 2nd Arctic Science Ministerial³.

The action should build on the outcomes of previous EU-funded projects in the framework of GEO and Copernicus, create synergies and avoiding un-necessary duplications also by joining the EU Arctic Research Cluster. Likewise, the action should cooperate with relevant projects funded by the

¹ Joint Statement of Ministers, 2nd Arctic Science Ministerial, Berlin 2018, https://www.arcticsscienceministerial.org/files/ASM2_Joint_Statement.pdf

² <https://www.copernicus.eu/en/copernicus-services-information-and-sentinel-products-arctic-region>

³ i.e. the United States of America, Canada, the People's Republic of China, Japan, the Russian Federation, South Korea, New Zealand, India, Singapore, and Greenland; see <https://www.arcticsscienceministerial.org/en/>

ESA Earth Observation Programme. To this end, proposals should foresee a dedicated work package and /or task and earmark the appropriate resources accordingly.

The pilot services should fall into the scope of EuroGEOSS and follow the direction of the EuroGEOSS initiative. Data and services produced through the projects should be registered in the GEOSS Common Infrastructure (GCI).

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 15 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: The project results are expected to contribute to:

- the implementations the GEO-Cold Region Initiative with a specific emphasis on the Arctic, and the initiating of an ArcticGEOSS initiative;
- sound and effective decision-making by policy makers in the Arctic regions through the use of reliable and science-based Earth observation and information;
- supporting of the 2030 Agenda for Sustainable Development, the Paris Agreement and Sendai Framework for Disaster Risk Reduction 2015-2030;
- strengthening Earth observation capacity focused on the European region;
- delivering EuroGEOSS services for the Arctic;
- improved handling, archiving and interoperability of environmental data in polar regions;
- a coherent data management, through the use of GEOSS Data Management Principles and best practices (aligning with INSPIRE).

Type of Action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the Call - Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement

Opening date(s), deadline(s), indicative budget(s):⁴

Opening: 12 Nov 2019				
LC-CLA-21-2020 (CSA)			3.00	13 Feb 2020

⁴ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.
The budget amounts for the 2020 budget are subject to the availability of the appropriations provided for in the draft budget for 2020 after the adoption of the budget 2020 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

LC-CLA-22-2020 (CSA)			3.00	
LC-CLA-23-2020 (CSA)			1.50	
LC-CLA-10-2020 (RIA)			25.00	13 Feb 2020 (First Stage) 03 Sep 2020 (Second Stage)
LC-CLA-11-2020 (IA)			30.00	
LC-CLA-12-2020 (RIA)			22.00	
LC-CLA-13-2020 (RIA)			15.00	
LC-CLA-14-2020 (RIA)			13.00	
LC-CLA-15-2020 (RIA)			10.00	
LC-CLA-16-2020 (RIA)			5.00	
LC-CLA-17-2020 (RIA)			15.00	
LC-CLA-18-2020 (RIA-LS)			22.00	
LC-CLA-19-2020 (RIA)			10.00	
LC-CLA-20-2020 (RIA)			15.00	
Overall indicative budget	123.00	116.00	189.50	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 5 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission.

For two stage procedure:

- Information on the outcome of the evaluation: Maximum 3 months from the final date for submission for the first stage and maximum 5 months from the final date for submission for the second stage; and
- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission of the second stage.