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Call Topics for International Cooperation in Horizon 2020

EU and Cuba

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Content

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Excellent Science

Horizon 2020 Pillar: Excellent Science

Programme: Future and Emerging Technologies

Call Title: FET Proactive – High Performance Computing

Call Identifier: h2020-fethpc-2018-2020

Topic Title: International Cooperation on HPC

Topic Identifier: FETHPC-04-2020

Type of Action: CSA Coordination and support action

Deadline(s): 22.04.2020 (single-stage)

Participant Portal Weblink:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/fethpc-04-2020

Specific Challenges: The aim is to develop a strategic partnership in HPC with **Latin America** enabling closer research cooperation in HPC.

Scope:

- Develop a roadmap for increased future research cooperation in HPC
- Identify key HPC application areas and hardware/system requirements per Latin-American country
- Identify relevant national, regional and international funding schemes of HPC in **Latin America**
- Organise meetings, thematic workshops and summer schools in areas of common interest
- Promote the exchange of best practices between the European and Latin-American HPC research communities
- Improve links between the European and Latin-American HPC research communities

The Commission considers that proposals requesting a contribution from the EU of up to EUR 0.50 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:

- Development of a realistic HPC research cooperation roadmap with clearly identified application areas, hardware/system requirements and funding schemes

- Improved international cooperation of EU and **Latin American** research and industrial communities on advanced HPC application development.
- Improved sharing of information and expertise to solve common societal problems with the use of advanced computing.

Cross-cutting Priorities: International cooperation

Industrial Leadership

Horizon 2020 Pillar:	Industrial Leadership
Programme:	Leadership in enabling and industrial technologies (LEIT)
Call Title:	Competitive, low carbon and circular industries
Call Identifier:	h2020-low-carbon-circular-industries-2020
Topic Title:	ERA-NET on materials, supporting the circular economy and Sustainable Development Goals
Topic Identifier:	CE-NMBP-41-2020
Type of Action:	ERA-NET-Cofund ERA-NET Cofund
Deadline(s):	05.02.2020 (single-stage)

Participant Portal Weblink:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ce-nmbp-41-2020

Specific Challenges: Maintaining Europe's position in research related to materials science and engineering requires concentrated action on common European research priorities in view of implementing joint initiatives.

The M-ERA.NET 2 network has successfully targeted the Low Carbon Energy Technologies addressed by the SET Plan. Now the scope should on one hand guarantee some continuation, and on the other hand become more ambitious and underline the commitment of the EU regarding the circular economy and Sustainable Development Goals.

The European Commission has adopted an ambitious new Circular Economy Package to help European businesses and consumers to make the transition to a stronger and more circular economy. Moreover, in 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development came into force. They aim to end poverty, protect the planet, ensure prosperity and tackle climate change. The EU is fully committed to be a frontrunner in implementing the 2030 Agenda and SDGs. Finally, the Commission launched the Battery Alliance initiative in 2017.

Materials research is a relevant field for addressing these overall challenges and for making substantial contributions to achieving the specific objectives.

Global challenges call for co-operation on a global scale to build capacity in science, technology and innovation (STI) at both national and international levels. A strategic and industrially relevant approach is needed that cover the entire research and innovation chain by pooling national research and innovation capacities, thereby mobilising European infrastructure networks as well as promoting education and training in materials research and innovation.

Scope: The proposed ERA-NET aims at coordinating the research efforts of the participating Member States, Associated States and Regions in the field of materials, continuing the activities started by M-ERA.NET, for materials research and innovation, especially targeting the circular economy and Sustainable Development Goals (such as Goal 7 – "Affordable and clean energy", by enabling electromobility through sustainable energy storage technology or Goal 9 "Industrial innovation and infrastructure", by enhancing scientific research and upgrading the technological capabilities of industrial sectors). Proposals should pool the necessary financial resources from participating national or regional research programmes by implementing a joint transnational call for proposals (resulting mainly in grants to third parties) with EU co-funding to fund multinational innovative research initiatives in this domain, including support to the large scale research initiative on future battery technologies launched under the H2020-LC-BAT-2019-2020 Call[1].

Proposers are also requested to implement other joint activities and, additional joint calls without EU co-funding. The proposal should demonstrate that these additional joint calls exclude any overlaps with related on-going actions co-funded by the EU under NMBP.

Proposals should demonstrate the expected impact on national and transnational programmes as well as the leverage effect on European research and competitiveness, and should plan the development of key indicators for supporting this.

Participation of legal entities from **third countries**, and/or regions including those not automatically eligible for funding in accordance with General Annex A is encouraged in the joint call as well as in other joint activities including additional joint calls without EU co-funding. Participants from countries not listed in General Annex A are eligible for EU funding under this topic and may request a Union contribution (on the basis of the ERA-NET unit cost) only for the coordination costs of additional activities.

The Commission considers that proposals requesting a contribution from the EU 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. EUR 5 million of the requested contribution from the EU should be used as support to transnational projects, co-funded by the Commission, on future battery technologies, fostering synergy between European, national and regional initiatives and promoting broader partnerships between the European stakeholders in future battery technologies.

Expected Impact:

- synergies with international, national and regional programmes that support research and innovation;
- synergies but no overlap with the topics of Horizon 2020 and with related European Partnership initiatives and be open to adapt to future coming initiatives of Horizon Europe;
- leverage of national, regional and European funding;
- contribution to meeting Global Challenges through Better Governance: International Co-operation in Science, Technology and Innovation;

- relevant contribution to the SDGs, including sustainable battery based energy storage technology;
- relevant contribution towards a circular economy.

Cross-cutting Priorities: ERA-NET

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[1] http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-cc-activities_en.pdf

Societal Challenges

Horizon 2020 Pillar: Societal Challenges

Programme: Health, demographic change and wellbeing

Call Title: Better Health and care, economic growth and sustainable health systems

Call Identifier: h2020-sc1-bhc-2018-2020

Topic Title: Actions in support of the International Consortium for Personalised Medicine

Topic Identifier: SC1-HCO-01-2018-2019-2020

Type of Action: CSA Coordination and support action

Deadline(s): 07.04.2020 (single-stage)

Participant Portal Weblink:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-hco-01-2018-2019-2020

Specific Challenges: Personalised Medicine is a very broad and multifaceted area where success relies on a well-functioning collaboration between several disciplines and different actors. While great advances have been made in some fields of medicine, in particular in stratification of cancer patients and in addressing rare diseases, most of today's healthcare protocols do not include personalised approaches apart from occasional division into broad age groups (children/adults/elderly), sex or ethnicity. Furthermore the prevention aspect of personalised medicine, i.e. identifying individuals prone to develop certain diseases, is largely isolated from treatment options. As is the case for a relatively nascent field there is a need for standardisation of approaches, including for sampling, data storage, interpretation and data exchange and also for clinical trials design and reimbursement models. European countries with their social model of healthcare along with (in several cases) centralised cost reimbursement, are ideally placed to lead the way for an integrated health management system. Many needs for coordination and support activities have been identified by ICPerMed[1], an EU Member States led initiative which includes representatives from most EU countries along with several other European countries, Brazil and Canada. The EC currently supports ICPerMed with a grant to operate its secretariat until October 2020[2]. Wider internationalisation of ICPerMed can be underpinned by coordinating networking activities with **third countries**.

Scope: Each action should focus on one of the following fields:

- International aspect: The action should focus on building links with **third countries** by analysing the potential and advantages of collaboration in personalised medicine (PM) with those countries, studying areas of interest for Europe in PM collaboration and promoting international standards in the field. In particular the uptake of personalised approaches in health systems and healthcare should be addressed, taking into account social, cultural, ethical and legal aspects, health economy issues and equitable healthcare. For the 2018 call, the project should focus on CELAC[3] as a group of countries, and for the 2019 call on China. For the 2020 call, the project should focus on countries in Africa[4], linking also into the EU-AU (African Union) policy dialogue and taking into account the new Africa-Europa Alliance for Sustainable investment and Jobs[5]. Alignment with activities of the Global Alliance for Chronic Diseases (GACD) and The European and Developing Countries Clinical Trials Partnership (EDCTP) activities should be explored. Special attention should be given to prediction and prevention, and to promoting well-being for all at all ages. Furthermore, the project should seek to integrate local knowledge and practice. Data safety and privacy should be addressed in line with existing standards and legislation. The project should have a duration of at least four years and address sustainability beyond that to ensure longer term structuring effect. Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals shall include at least one participant based in the international partner region; Africa (2020 call).
- Regional aspect: The action should establish and support networking between regions and interregional cooperation in different European countries, in particular linking remote or sparsely populated regions with regions harbouring critical mass of medical and PM expertise while taking into account broader socio-economic and cultural aspects. The focus of the action can include aspects of genomic analysis, me-Health (mobile and electronic Health), telemedicine etc. but should aim at structuring PM application at regional level. Linkage to existing inter-regional projects (financed by INTERREG programmes) or interregional partnerships of Thematic Smart Specialisation Platforms will be actively encouraged. (2018 call).
- Healthcare- and pharma-economic models for personalised medicine, interlinking European public health approaches with medical practice and financing. The action should carry out studies in support of research in and development of new health- and pharma economic models for PM, including prevention, to capture value and to develop relevant health financing models. Analysing mid- and long-term impacts of innovative products designated for sub-sets of patient populations on the patients themselves and on public health systems. Assessing the benefits of personalised medicine development for citizens and their broader social environment while ensuring patient safety, access, equity, solidarity, data safety and financial sustainability of public health systems in the EU. The action should involve different relevant stakeholders and take into account work being carried out by other EU funded initiatives, such as EUnetHTA[6]. SME participation is encouraged. Results of the studies and workshops should be actively disseminated to a wider

audience, including relevant authorities, professionals and the wider public. (2018 call).

- Standardisation for clinical study design. Establishment of innovative clinical trial design methodology for PM, including guidelines for research and reflection papers. The action should take into account sex/gender differences as well as the work done by relevant stakeholders and authorities such as EMA[7] and the HMA network[8], as well as the European legal framework[9]. SME participation is encouraged. The results of the studies and workshops should be actively disseminated to a wider audience, including, industry, researchers and other professionals. (2019 call).
- ICPerMed secretariat: The project should continue the work done by the secretariat for ICPerMed, e.g. maintenance of existing services, organising the meetings of the ICPerMed Executive Committee, convening dedicated workshops and preparing and issuing updates of the ICPerMed Action Plan. Furthermore maintaining the network of policy makers and funders gathered in ICPerMed and expanding the membership to new interested and complementary partners as well as maintaining communication with all EC funded activities related to ICPerMed (2020 call).

For grants awarded under this topic for Coordination and Support Actions it is expected that results could contribute to European or international standards. Therefore, the respective option of Article 28.2 of the Model Grant Agreement will be applied.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2 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: Contributing to the implementation and reach of the ICPerMed initiative; furthermore:

- International aspect: Integrating the country/group of countries into ICPerMed activities. Support wider adoption of standards developed in Europe. Support the EU-AU policy dialogues relevant to research and health (2020 call). Contribute towards the UN Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages.
- Regional aspect: Strengthened links between European regions setting up or planning personalised medicine healthcare approaches. Aligning research funding with ongoing and foreseen investments e.g. from Structural Funds. Recommendations on best practice in implementing PM at regional level.
- Healthcare- and pharma-economic models: Increased understanding of personalised medicine perspectives on how to capture value, develop institutional support and design relevant payment models. Recommendations for faster translation from discovery to patients'/citizens' access. Contributing to understanding of trends and dynamics in the pharmaceutical markets in relation to increased emphasis of research and development efforts on PM. Suggestions on how savings through prevention can be included in payment and reward models and contribute to the sustainability of public health

systems in the EU. Improved knowledge and understanding among healthcare professionals and the wider public of potential benefits of PM approaches.

- Standardisation for clinical study design: Contribute to standardisation of PM clinical trial design. Demonstrate feasibility and importance of PM approaches. Underpin accelerated market uptake. Improved knowledge and understanding among healthcare professionals, regulatory authorities and industry how best to adapt clinical trials designs to stratified patient populations.
- ICPerMed secretariat (2020 Call): Ensure continuity of the operations of ICPerMed beyond 2020. Increase the visibility of the consortium and ensure openness of the structure. Provide harmonised vision for the further development of personalised medicine. Contribute to the convergence of members' approaches to personalised medicine and further alignment of research efforts in the field.

Cross-cutting Priorities: Gender, International cooperation, Socio-economic science and humanities

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[1] http://icpermed.eu

[2] H2020 Grant Agreement 731366

[3] Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Grenada, Guyana, Jamaica, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela

[4] African Union Member States

[5] https://www.africa-eu-partnership.org/en/stay-informed/news/european-commission-unveils-new-africa-europe-alliance-sustainable-investment-and

[6] European Network for Health Technology Assessment: http://www.eunethta.eu/

[7] European Medicines Agency: https://www.ema.europa.eu

[8] Heads of Medicines Agencies: http://www.hma.eu/

[9] Especially the clinical trials regulation (EU) No 536/2014 and the data protection regulation (EU) 2016/679

Horizon 2020 Pillar: Societal Challenges

Programme: Food security, sustainable agriculture and forestry, marine and maritime and inland water research

Call Title: Rural Renaissance

Call Identifier: h2020-rur-2018-2020

Topic Title: Closing nutrient cycles

Topic Identifier: CE-RUR-08-2018-2019-2020

Type of Action: IA Innovation action

Deadline(s): 22.01.2020 (single-stage)

Participant Portal Weblink:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ce-rur-08-2018-2019-2020

Specific Challenges: The EU depends strongly on external sources for the supply of key fertilisers used in agriculture. Resource depletion and an increasing global demand for mineral fertilisers may, in the long term, lead to price tensions with an impact on food security. Mineral-based fertilisation also poses significant environmental problems, linked e.g. to the amounts of fossil energy needed to produce and transport these fertilisers. At the same time, large amounts of minerals are being dispersed in the environment through a large variety of organic waste streams, resulting in soil, water and air pollution. Agri-food specialisation has led to regional imbalances: whilst in some regions a nutrient overabundance is causing severe environmental impacts (e.g. nitrate pollution), other are experiencing nutrient deficits. These contrasting effects may also be observed between locations within the same region.

Several technologies are being developed to recover and re-use nutrients from organic by-products and waste streams, but many are insufficiently mature and the characteristics of end-products do not always match end-user preferences. It is expected that the EU 'circular economy package' will boost the emergence and commercialisation of such new fertilisers, hence it is important to understand their agronomic and environmental performance in order to establish adequate policies, guidelines and application rules.

Scope: Proposals shall address inter-regional and intra-regional imbalances through effective nutrient recovery from by-products of the agri-food or forestry sectors, or from waste water and sewage sludge, and conversion into novel fertilisers.

Proposals should address only one of the following sub-topics:

C.[2020] Bio-based fertilisers from by-products of the agri-food, fisheries, aquaculture or forestry sectors (IA)

Projects shall demonstrate processes for recovery of mineral nutrients and production of novel fertilisers from by-products of the agri-food, fisheries, aquaculture or forestry sectors, excluding animal manure, water and sewage sludge (covered in scopes B and D). Proposals should demonstrate that the activities proposed go beyond past or ongoing research, without overlaps. Technologies that are currently under development should be further improved, and possibly integrated, to produce high quality end-products[6]. Proposals shall address end product marketability, safety, sustainability including emissions of greenhouse gasses and pollutants, and compliance with relevant EU regulations. Their suitability and acceptability under the organic farming regulatory framework should also be analysed. An integrated assessment of the business model (economic, agronomic, social and environmental) shall be performed. The whole value chain shall be demonstrated to a near-commercial scale (TRL 6-7). Proposals shall fall under the concept of the 'multi-actor approach'[5], including relevant actors such as agri-food industries, technology providers, research centres, end-users (farmers and farmer associations), or public administration.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 6 million for sub-topic A and D and EUR 8 million for sub-topics B and C would allow this specific challenge to be addressed appropriately. Nonetheless this does not preclude the submission and selection of proposals requesting other amounts. Proposals for sub-topics A, B and C should include a task to cluster with other projects financed under this topic, under topic SFS-39-2019 and - if possible - with other relevant projects in the field funded by Horizon 2020 (including under the BBI JU). For sub-topics B and C, participation of partners from **CELAC** countries[9] is encouraged.

Expected Impact: Proposals are expected to provide the technologies needed to develop a new generation of commercial, sustainable and safe fertilisers based on organic by-products, and the scientific knowledge needed to frame their use. This will help to:

- replace non-renewable mineral fertilisers, hence reducing external dependence and risks related to depletion (sub-topics A, B, C and D);
- balance nutrient concentrations between or within regions, thus increasing resource efficiency (sub-topics A, B and C);
- reduce the environmental impacts linked to the dispersion of nutrients present in waste flows, to the emissions of greenhouse gases, or to the production of fossil-based fertilisers (sub-topics A, B, C and D);
- develop new business models creating value from agri-food, fisheries, aquaculture or forestry by-products (sub-topics B and C) and from water sector and the industrial sector subject to waste water treatment, including desalination or demineralisation plants (sub-topic D).

In the long term, this should contribute to a thriving, sustainable and circular bio-economy, the development of new business models that are synergic with other economic sectors, and therefore to the creation of wealth and quality jobs in rural areas.

Cross-cutting Priorities: Blue Growth, RRI, Socio-economic science and humanities

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[5] See definition of the 'multi-actor approach' in the introduction to this Work Programme part.

[6] These can be mineral-type (i.e. with low organic matter content), or advanced organic fertilisers (e.g. through improved composting processes).

[8] Water desalination or demineralisation plants may include, for example, plants treating wastewater in food or pulp & paper industries.

[9] Community of **Latin American and Caribbean** States

Horizon 2020 Pillar: Societal Challenges

Programme: Smart, green and integrated transport

Call Title: Building a low-carbon, climate resilient future: Green Vehicles

Call Identifier: h2020-lc-gv-2018-2019-2020

Topic Title: Setting up a common European research and innovation strategy for the future of road transport

Topic Identifier: LC-GV-09-2020

Type of Action: CSA Coordination and support action

Deadline(s): 21.04.2020 (single-stage)

Participant Portal Weblink:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-gv-09-2020

Specific Challenges: The objective of this topic is to define R&D roadmaps for a sustainable and efficient road transport system in Europe. It calls for a Coordination and Support Action to support ERTRAC (the European Technology Platform for Road Transport), future Partnerships relevant to road transport in Horizon Europe and the European Commission in defining the research needs for their upcoming research and innovation programmes, and by then helping to achieve the targets set at EU and global level (EU Transport White Paper, COP21 for decarbonisation, etc.).

International cooperation with developing and emerging economies should also be developed in order to increase efficient mobility for all, reduce local (air and noise) and CO2 emissions, and tackle health and safety issues, and increase attractiveness and competitiveness in particular in urban areas.

Scope: Proposals should take a comprehensive approach ranging from components up to system integration, and include enabling technologies where relevant. Both passenger mobility and freight transport should be addressed and covering urban mobility as well as inter-urban and long-distance transport. They should address all the following aspects:

- Updating of research agendas and roadmaps developed by the European Technology Platform ERTRAC (European Road Transport Research Advisory Council) and supporting the definition of research priorities of future Horizon Europe Partnerships relevant to road transport, covering all transport research fields.
- Facilitating cooperation between cities in Europe, Asia, **Latin America** and Africa. Actively support policy and knowledge exchange and establish a peer-

to-peer exchange and capacity building programme that takes advantage of the results of a large number of relevant cities. Cooperation between EU and international projects on urban mobility. Develop implementation concepts for sustainable mobility including shared private vehicles (e.g. light-duty vehicles and 2-, and 3-wheelers), logistics (e.g. e-Trucks, cargo bikes), public transport systems (e.g. Bus Rapid Transit Systems, buses, soft modes) and new mobility services.

- Liaise with international financing institutions to foster the take-up and implementation of the concepts developed, support the European Commission in international discussions and specialised sectorial Fora related to Mobility for All, Climate Change and the New Urban Agenda. Track global progress on urban electric mobility and support UN activities, such as the Urban Electric Mobility Initiative (UEMI).

The implementation requires close collaboration with the leading European stakeholders in transport research, including vehicles manufacturers, supply industry, and research and engineering organisations, as well as strong links with other relevant European initiatives and associations. In line with the strategy for EU international cooperation in research and innovation, international cooperation is encouraged with key emerging countries, in particular with Asia, **Latin America** and Africa.

The Commission considers that proposals requesting a contribution from the EU of between EUR 0.8 to 1 million each would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: This action will bring together the leading European stakeholders in road transport research to develop roadmaps and support international cooperation. It will contribute to a further harmonisation of research and innovation, and therefore contribute to the European Research Area, in particular also in the view of innovation, as well as to the European strategies for a future transport system.

Proposals are expected to contribute to:

- The objective of the European Union for climate action and sustainable development.
- The objectives set by the Paris Agreement (COP21) and the New Urban Agenda.
- The fulfilment of post 2020 emission targets in road transport (at least 30% by 2030 compared to 2021)
- The EU's long-term goal of moving close to zero fatalities and serious injuries by 2050 ("Vision Zero")
- UN's Sustainable Development Goals 11 "Sustainable cities and communities" (with particular attention to 11.2) and 13 "Climate Action"
- Strengthening the collaboration of the European Union with Asia, **Latin America** and Africa.

Horizon 2020 Pillar:	Societal Challenges
Programme:	Climate action, environment, resource efficiency and raw materials
Call Title:	Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement
Call Identifier:	h2020-lc-cla-2018-2019-2020
Topic Title:	Towards a comprehensive European mountain research strategy
Topic Identifier:	LC-CLA-23-2020
Type of Action:	CSA Coordination and support action
Deadline(s):	13.02.2020 (single-stage)

Participant Portal Weblink:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-cla-23-2020

Specific Challenges: European mountain regions play a central role for the well-being of many highly populated European regions for instance for water and energy supply, weather regimes, recreation and tourism. European mountain regions are home to a high degree of biodiversity, including many endemic species that occur nowhere else. However, mountain regions are expected to react far more sensitively to global change than other parts of the world. Therefore, research on sustainability of these regions is important not only for the population living there and the many tourists visiting them (e.g. 150 Millions/year for the Alps) but for a significant part of Europe's population. European countries operate excellent research infrastructures in mountain regions and are leading in many fields concerning climate, ecosystems, life in extreme environments, pollution monitoring and other aspects. Making the most efficient use of these resources and the latest scientific developments for addressing the abovementioned challenges, while contributing to climate change mitigation efforts targeted at this specific ecosystem, requires a high degree of coordination within Europe and beyond. Hence, a prominent challenge for this topic is to support and coordinate research and innovation to advance the understanding of current changes in mountain areas derived from climate changes, the synergies with other human–related forcing, the prediction of potential changes in these regions, and to foster observations for a sound monitoring of the regions.

Scope: The action should coordinate and support mountain regions research in Europe and develop a comprehensive European Mountain Research Strategy building on existing European activities. This strategy should aim to support the development of services necessary for the adaption to climate change and the improvement and extension of observations, in particular in-situ ones, for the monitoring of the mountain regions. In line with Responsible Research and Innovation (RRI), citizens, civil society organisations and other relevant stakeholders should be involved in the co-design of the research strategy. This initiative strives for enhanced coordination with international research organisations and programmes related to mountain regions research (e.g. WMO, ESA, GEO, NEMOR and JPI 'Climate') as well as with relevant operational services including Copernicus. This action should support the implementation of the EU Strategy for the Alpine Region – EUSALP (https://www.alpine-region.eu/) and the GEO global Network for Observation and information in Mountain Environment – GEO-GNOME (http://earthobservations.org/geoss_wp.php), and take advantage of other regional and thematic networks initiatives that are being developed in Europe.

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, in particular with countries such as Canada, China, India, Russia, United States, and **Latin American** countries.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 1.5 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:

- substantially raising the scale and ambition of inter-disciplinary mountain regions research policy in Europe;
- improved coherent and efficient use of European resources for mountain research;
- significant extension of the Copernicus and EuroGEOSS services and products to the mountain regions;
- step change in the domain of open data access, quality control and interoperability for mountain region monitoring and adapting to climate change.

Cross-cutting Priorities: International cooperation