



FFG
Forschung wirkt.

**Call Topics for International Cooperation
in Horizon 2020
EU and Third countries**

20.09.2019

Content

- Excellent Science**..... 3
 - Marie Sklodowska-Curie actions 3
 - Research Infrastructures 8

- Industrial Leadership** 16
 - Leadership in enabling and industrial technologies (LEIT)..... 16

- Societal Challenges** 19
 - Health, demographic change and wellbeing..... 19
 - Europe in a changing world - inclusive, innovative and reflective Societies 29

Impressum | Medieninhaberin und Herausgeberin:
Österreichische Forschungsförderungsgesellschaft mbH Tel.: +43 (0)5 77 55 - 0
Sensengasse 1, A - 1090 Wien Fax: +43 (0)5 7755 - 97011
FN: 252263a, Handelsgericht Wien email: office@ffg.at

Excellent Science

Horizon 2020 Pillar:	Excellent Science
Programme:	Marie Skłodowska-Curie actions
Call Title:	Marie Skłodowska-Curie Research and Innovation Staff Exchange
Call Identifier:	h2020-msca-rise-2020
Topic Title:	Research and Innovation Staff Exchange
Topic Identifier:	MSCA-RISE-2020
Type of Action:	MSCA-RISE RISE
Deadline(s):	28.04.2020 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-rise-2020>

Specific Challenges: The RISE scheme promotes international and cross-sector collaboration through exchanging research and innovation staff, and sharing knowledge and ideas from research to market (and vice-versa).

The scheme fosters a shared culture of research and innovation that welcomes and rewards creativity and entrepreneurship and helps to turn creative ideas into innovative products, services or processes.

Scope: RISE involves organisations from the academic and non-academic sectors (in particular SMEs), based in Europe (EU Member States and Horizon 2020 Associated Countries) and outside Europe (**third countries**).

Support is provided for the development of partnerships in the form of a joint research and innovation project. This is aimed at knowledge sharing via international as well as intersectoral mobility, based on secondments of research and innovation staff (exchanges) with an in-built return mechanism.

The organisations constituting the partnership contribute directly to the implementation of a joint research and innovation project by seconding and/or hosting eligible staff members. Secondments shall always take place between legal entities independent from each other^[1].

RISE should exploit complementary competences of the participating organisations, as well as other synergies, and enable networking activities, organisation of workshops and conferences to facilitate sharing of knowledge, new skills acquisition and career development for research and innovation staff members.

RISE proposals can focus either on one dimension of mobility (intersectoral / international), or include a combination of both.

Exchanges can be for both early-stage and experienced researchers and can also include administrative, managerial and technical staff directly involved in the research and innovation activities of the proposal.

Support for the exchanges between institutions within Europe (EU Member States and Horizon 2020 Associated Countries) covers only intersectoral secondments.

Exchanges with institutions from and to **third countries** can be intersectoral as well as within the same sector.

Secondments between institutions established in **third countries** or within the same EU Member State or Horizon 2020 Associated Country will not be supported.

Expected Impact:

At staff member level:

- Increased set of skills, both research-related and transferable ones, leading to improved employability and career prospects both in and outside academia
- Increase in higher impact R&I output, more knowledge and ideas converted into products and services
- Greater contribution to the knowledge-based economy and society

At organisation level:

- Enhanced cooperation and transfer of knowledge between sectors and disciplines
- Strengthening of international and intersectoral collaborative networks
- Boosting of R&I capacity among participating organisations

At system level:

- Increase in international, interdisciplinary and intersectoral mobility of researchers in Europe
- Strengthening of Europe's human capital base in R&I
- Increase in Europe's attractiveness as a leading destination for R&I
- Better quality R&I contributing to Europe's competitiveness and growth

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

[1] Independence in the meaning of Article 8 of the Horizon 2020 Rules for Participation.

Horizon 2020 Pillar: Excellent Science

Programme: Marie Skłodowska-Curie actions

Call Title: Marie Skłodowska-Curie Individual Fellowships

Call Identifier: h2020-msca-if-2020

Topic Title: Individual Fellowships

Topic Identifier: MSCA-IF-2020

Type of Action: MSCA-IF-GF Global Fellowships, MSCA-IF-EF-ST Standard European Fellowships, MSCA-IF-EF-SE Society and Enterprise panel, MSCA-IF-EF-RI Reintegration panel, MSCA-IF-EF-CAR Career Restart panel

Deadline(s): 09.09.2020 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-if-2020>

Specific Challenges: The goal of the Individual Fellowships is to enhance the creative and innovative potential of experienced researchers, wishing to diversify their individual competence in terms of skill acquisition through advanced training, international and intersectoral mobility.

Individual Fellowships provide opportunities to researchers of any nationality to acquire and transfer new knowledge and to work on research and innovation in Europe (EU Member States and Horizon 2020 Associated Countries) and beyond. The scheme particularly supports the return and (re)integration of European researchers from outside Europe and those who have previously worked here, as well as researchers displaced by conflict outside the EU and Horizon 2020 Associated Countries. It also promotes the career restart of individual researchers who show great potential.

Scope: Support is foreseen for individual, trans-national fellowships awarded to the best or most promising researchers of any nationality, for employment in EU Member States or Horizon 2020 Associated Countries. It is based on an application made jointly by the researcher and the beneficiary in the academic or non-academic sectors.

Only one proposal per individual researcher per call will be evaluated.

Fellowships take the form of European Fellowships or Global Fellowships.

European Fellowships are held in EU Member States or Horizon 2020 Associated Countries and are open to researchers either coming to Europe from any country

in the world or moving within Europe. The researcher must comply with the rules of mobility in the country where the European Fellowship is held.

Direct return to and long-term reintegration of researchers in Europe, including in their country of origin, is supported via a separate multi-disciplinary reintegration panel of the European Fellowships. For the reintegration panel, there must be direct mobility to the country of the beneficiary in Europe from a **third country** (compulsory national service and/or short stays such as holidays are not taken into account).

Support to individuals to resume research in Europe after a career break, e.g. after parental leave or due to recent migration, is ensured via a separate multi-disciplinary career restart panel of the European Fellowships. To qualify for the career restart panel, researchers must not have been active in research for a continuous period of at least 12 months within the 18 months immediately prior to the deadline for submission.

Researchers seeking to work on research and innovation projects in an organisation from the non-academic sector will be supported via a separate multi-disciplinary society and enterprise panel of the European Fellowships. The objective of this panel is to facilitate career moves between the academic and non-academic sectors, to stimulate innovation, and to open attractive career opportunities for researchers outside academia.

The Widening Fellowships implemented through Work Programme part 15, Spreading Excellence and Widening Participation, provide specific support to researchers to undertake their fellowship in a widening country^[1]. This will help spread excellence and close the still apparent research and innovation gap within Europe.

Global Fellowships are based on a secondment to a **third country** and a mandatory 12 month return period to a European host. The researcher must comply with the rules of mobility in the country where the Global Fellowship secondment takes place, not for the country of the return phase.

Researchers receiving an Individual Fellowship may opt to include a secondment phase in Europe, notably in the non-academic sector, within the overall duration of their fellowship. For a fellowship of 18 months or less, the secondment phase may last up to three months. For a fellowship of more than 18 months, the secondment phase may last up to six months. The secondment phase can be a single period or be divided into shorter mobility periods. The secondment should significantly add to the impact of the fellowship. In the Global Fellowships, such a secondment can also take place at the start of the action at the beneficiary or a partner organisation in Europe for a maximum of 3 months, allowing the researcher to spend time there before moving on to a partner organisation in a **third country**.

A Career Development Plan should be established jointly by the supervisor(s) and the researcher. In addition to research or innovation objectives, this plan comprises the researcher's training and career needs, including training on transferable skills, teaching, planning for publications and participation in conferences.

Researchers participating in the Individual Fellowships may opt to work part-time in order to pursue supplementary activities. These might include creating a company, or engaging in advanced studies not related to the MSCA grant. Any supplementary activities carried out part-time in parallel with the MSCA action must be agreed upon by the researcher and the beneficiary.

Expected Impact:

At researcher level:

- Increased set of skills, both research-related and transferable ones, leading to improved employability and career prospects both in and outside academia
- Increase in higher impact R&I output, more knowledge and ideas converted into products and services
- Greater contribution to the knowledge-based economy and society

At organisation level:

- Enhanced cooperation and stronger networks
- Better transfer of knowledge between sectors and disciplines
- Boosting of R&I capacity among participating organisations

At system level:

- Increase in international, interdisciplinary and intersectoral mobility of researchers in Europe
- Strengthening of Europe's human capital base in R&I with more entrepreneurial and better trained researchers
- Better communication of R&I results to society
- Increase in Europe's attractiveness as a leading destination for R&I
- Better quality research and innovation contributing to Europe's competitiveness and growth

Cross-cutting Priorities: International cooperation, RRI, Open Science

[1] These countries are aligned with Work Programme part 15, Spreading Excellence and Widening Participation.

Horizon 2020 Pillar:	Excellent Science
Programme:	Research Infrastructures
Call Title:	Integrating and opening research infrastructures of European interest
Call Identifier:	h2020-infraia-2018-2020
Topic Title:	Integrating Activities for Starting Communities
Topic Identifier:	INFRAIA-02-2020
Type of Action:	RIA Research and Innovation action
Deadline(s):	17.03.2020 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/infraia-02-2020>

Specific Challenges: European researchers need effective and convenient access to the best research infrastructures in order to conduct research for the advancement of knowledge and technology. The aim of this action is to bring together, integrate on European scale, and open up key national and regional research infrastructures to all European researchers, from both academia and industry, ensuring their optimal use and joint development.

Scope: A 'Starting Community' has never been supported for the integration of its infrastructures under FP7 or Horizon 2020 calls, in particular within an integrating activity.

An Integrating Activity will mobilise a comprehensive consortium of several key research infrastructures in a given field as well as other stakeholders (e.g. public authorities, technological partners, research institutions) from different Member States, Associated Countries and other **third countries**^[1] when appropriate, in particular when they offer complementary or more advanced services than those available in Europe.

Funding will be provided to support, in particular, the trans-national and virtual access provided to European researchers (and to researchers from **Third countries** under certain conditions^[2]), the cooperation between research infrastructures, scientific communities, industry and other stakeholders, the improvement of the services the infrastructures provide, the harmonisation, optimisation and improvement of access procedures and interfaces. Proposals should adopt the guidelines and principles of the European Charter for Access to Research Infrastructures.

To this extent, an Integrating Activity shall combine, in a closely co-ordinated manner:

- (i) Networking activities, to foster a culture of co-operation between research infrastructures, scientific communities, industries and other stakeholders as appropriate, and to help develop a more efficient and attractive European Research Area;
- (ii) Trans-national access or virtual access activities, to support scientific communities in their access to the identified key research infrastructures;
- (iii) Joint research activities, to improve, in quality and/or quantity, the integrated services provided at European level by the infrastructures.

All three categories of activities are mandatory as synergistic effects are expected from these different components.

Access should be provided only to key research infrastructures of European interest, i.e., those infrastructures able to attract significant numbers of users from countries other than the country where they are located. Other national and regional infrastructures in Europe can be involved, in particular in the networking activities, for the exchange of best practices, without necessarily being beneficiaries in the proposal.

The research infrastructures of a 'Starting Community' usually show a limited degree of coordination and networking at present. The strongest impact of an integrating activity is expected typically to arise from a focus on networking, standardisation and establishing a common access procedure for trans-national and/or virtual access provision.

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), Integrating Activities should, whenever appropriate, pay due attention to any related international initiative (i.e. outside the EU) and foster the use and deployment of global standards.

Integrating Activities should also organise the efficient curation, preservation and provision of access to the data collected or produced under the project, defining a data management plan, even when they opt out of the extended Pilot on Open Research Data. Data management (including ethics and privacy issues), interoperability, as well as advanced data and computing services should be addressed where relevant. To this extent, proposals should build upon the state of the art in ICT and e-infrastructures for data, computing and networking, and ensure connection to the European Open Science Cloud.

Integrating Activities should, when relevant, contribute to fostering the potential for innovation, including social innovation, of research infrastructures by reinforcing the partnership with industry, public administrations and/or other stakeholders, through e.g. transfer of knowledge and other dissemination activities, activities to promote the use of research infrastructures by industrial researchers or policy-makers, involvement of industrial associations and other stakeholders in consortia or in advisory bodies.

Integrating Activities are expected to duly take into account all relevant ESFRI and other world-class research infrastructures to exploit synergies, to reflect on

sustainability and to ensure complementarity and coherence with the existing European Infrastructures landscape.

Proposals should include clear indicators allowing the assessment of the progress towards the general and specific objectives, other than the access provision.

As the scope of an integrating activity is to ensure coordination and integration between all the key European infrastructures in a given field and to avoid duplication of effort, at most one proposal per field is expected to be submitted.

Further conditions and requirements that applicants should fulfil when drafting a proposal are given in part D of the section “Specific features for Research Infrastructures”. Compliance with these provisions will be taken into account during evaluation.

Integrating activities for starting communities range across all areas of science and technology. Proposals should not restrict their services to too narrow research fields and should address the wider scientific communities, even multidisciplinary ones, which can be served by the involved sets of research infrastructures.

The Commission considers that proposals requesting a contribution from the EU of up to EUR 5 million would allow this topic to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

- Researchers will have wider, simplified, and more efficient access to the best research infrastructures they require to conduct their research, irrespective of location. They benefit from an increased focus on user needs.
- New or more advanced research infrastructure services, enabling leading-edge or multidisciplinary research, are made available to a wider user community.
- Operators of related infrastructures develop synergies and complementary capabilities, leading to improved and harmonised services. , . Economies of scale and improved use of resources across Europe are also realised due to less duplication of services, common development and the optimisation of operations.
- When applicable, innovation is fostered through a reinforced partnership of research infrastructures with industry.
- A new generation of researchers is educated that is ready to optimally exploit all the essential tools for their research.
- Closer interactions between larger number of researchers active in and around a number of infrastructures facilitate cross-disciplinary fertilisations and a wider sharing of information, knowledge and technologies across fields and between academia and non-academic stakeholders, including industry.
- The integration of major scientific equipment or sets of instruments and of knowledge-based resources (collections, archives, structured scientific information, data infrastructures, etc.) leads to a better management of the continuous flow of data collected or produced by these facilities and resources.

- When applicable, the integrated and harmonised access to resources at European level can facilitate the use beyond research and contribute to evidence-based policy making.
- When applicable, the socio-economic impact of past investments in research infrastructures from the European Structural and Investment Funds is enhanced.

Cross-cutting Priorities: International cooperation, Gender, Blue Growth, Socio-economic science and humanities, Open Science

[1] See the Eligibility and admissibility conditions for this call.

[2] See part D of the section “Specific features for Research Infrastructures”.

Horizon 2020 Pillar: Excellent Science

Programme: Research Infrastructures

Call Title: Integrating and opening research infrastructures of European interest

Call Identifier: h2020-infraia-2018-2020

Topic Title: Pilot for a new model of Integrating Activities

Topic Identifier: INFRAIA-03-2020

Type of Action: RIA Research and Innovation action

Deadline(s): 17.03.2020 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/infraia-03-2020>

Specific Challenges: European researchers need effective and convenient access to the best research infrastructures in order to conduct research for the advancement of knowledge and technology. The aim of this action is to facilitate access to the best research infrastructures of different but close communities gathered in larger domains, ensuring their optimal use and the common improvement of their services.

Scope: The main objective of this topic is the provision of access to research infrastructures and the harmonisation of national and European procedures for providing access. Proposals will mobilise a comprehensive group of several key research infrastructures in a given large domain as well as other stakeholders (e.g. public authorities, funding agencies, technological partners, research institutions) from different Member States, Associated Countries and other **third countries**^[1] when appropriate, in particular when they offer complementary or more advanced services than those available in Europe.

Proposals should include a plan and effective commitment towards the optimum integration of the research infrastructure services of the different but close communities under the Pilot scheme, as well as activities to monitor the related progress. This integration will be an element of the evaluation of the Pilot scheme and will help developing this scheme in Horizon Europe.

Funding will be provided to support, in particular, the trans-national and virtual access provided to European researchers (and to researchers from **Third countries** under certain conditions^[2]) including training for the users, if required, as well as some joint activities to facilitate and integrate the access procedures, to improve the services the infrastructures provide and to further develop on-

line services. Data management (including ethics issues), interoperability, as well as advanced data and computing services should then be addressed where relevant. Synergistic effects are expected from these different components. Proposals should adopt the guidelines and principles of the European Charter for Access to Research Infrastructures. They should define a data management plan, even when they opt out of the extended Pilot on Open Research Data. When they address the curation, preservation and provision of access to the data collected or produced under the project, proposals should build upon the state of the art in ICT and e-infrastructures for data, computing and networking, and ensure connection to the European Open Science Cloud.

Access should be provided only to research infrastructures of European interest, i.e., those infrastructures able to attract users from countries other than the country where they are located (or group of countries in case of distributed infrastructures). Research infrastructures can be involved as beneficiaries or as third parties, the latter usually structured under a national access provision coordinator or a pan-European research infrastructure. The services they open for trans-national and virtual access under the project and, when relevant, the amount of units of access they make available, must be included in the catalogue of services to which the project will offer access. Projects are encouraged to extend their catalogues under their lifetime, selecting, on the basis of the excellence of their offer of access provision, new research infrastructures of European interest to be involved in the grant. The new research infrastructures should specify, for each of their installations, the services offered and their quality level. In addition for trans-national access, they should also indicate the unit of access, the number of users to be served and the amount of units to be provided to them as well as the related access costs and users' travel and subsistence costs for visiting the infrastructure. The selected research infrastructures can be included in the grants through amendments. To this extent proposals should describe the procedure to select the new infrastructures and earmark appropriate resources.

Proposals should also map and analyse the access modalities adopted by different infrastructures and different countries, and develop and trial models, mechanisms and practices to establish the optimal conditions for the long-term engagement of funders in making trans-national access sustainable beyond the EU funding.

In particular, in line with the excellence-driven access defined in the European Charter for Access to Research Infrastructures, the research infrastructures offering access under the proposals and/or their funding agencies, should aim at adapting their national calls for access (if they launch such calls) to the same excellence based selection procedure used, at European level, in the project.

As the main objective of this topic is the provision of access, at least 60% of the contribution from the EU should be used to cover the related costs (access costs and travel and subsistence of selected users).

Projects shall publicise widely the access offered under the grant to ensure that researchers who might wish to have access to these infrastructures are made aware of the possibilities open to them and, for trans-national access, open

specific calls to invite applications for access to all the installations listed in the catalogue. Trans-national and virtual access provision shall follow the rules specified for integrating activities under point (ii) “Trans-national and/or virtual access activities” in part D of the section “Specific features for Research Infrastructures”. Compliance with these provisions will be taken into account during evaluation.

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), proposals should, whenever appropriate, pay due attention to any related international initiative (i.e. outside the EU) and foster the use and deployment of global standards.

Proposals are expected to duly take into account all relevant ESFRI and other world-class research infrastructures as well as relevant major European initiatives, to exploit synergies, to reflect on sustainability and to ensure complementarity and coherence with the existing European Infrastructures landscape.

Proposals should include clear indicators allowing the assessment of the progress towards the general and specific objectives, other than the access provision.

As the scope of this topic is to ensure integration and access to key European infrastructures in a given domain and to avoid duplication of effort, at most one proposal per domain is expected to be submitted.

On the basis of a multiannual plan drafted taking also into account the assessment and the timing of previous grants, this work programme invites proposals addressing the following three domains.

Facilities for research on Atmosphere This activity aims to provide integrated access to and improve the services, included on-line services, of state-of-the-art European ground-based stations for long term observations of aerosols, clouds and short lived gases, key observation and monitoring infrastructures for non-CO₂ gas, and instrumented environmental chambers for atmospheric simulation.

Research infrastructures for research in micro-nano technologies for materials. This activity aims to provide integrated access to and improve the services, included on-line services, of key infrastructures (e.g. experimental installations for micro- and nanofabrication, analytical and modelling/simulation facilities) for research in material nanoscience and nanotechnology, ranging from synthesis and nanolithography to advanced characterization and theoretical modelling/numerical simulation. Safety issues of nanoparticles should be taken into account.

Research Infrastructures for advanced optical/IR and radio astronomy. This activity aims to provide integrated access to and improve the services, included on-line services, of the key research infrastructures in Europe for optical/infrared astronomy and advanced radio astronomy, including Very Long Baseline Interferometry.

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

Expected Impact:

- Harmonisation of national and European procedures for providing access and coordination of national and European funders for the provision of trans-national access to research infrastructures is fostered.
- Models, mechanisms and practices to establish the optimal conditions for the long-term engagement of funders in making trans-national access sustainable beyond the EU funding are assessed, tested and/or developed
- Researchers will have simplified and more efficient trans-national access to a wider and integrated set of advanced research infrastructure services, from different but close communities, to conduct leading-edge, multidisciplinary research. They benefit from an increased focus on user needs.
- Operators of related infrastructures develop synergies and complementary capabilities, leading to improved and harmonised services. Economies of scale and improved use of resources across Europe are also realised due to less duplication of services, common development and the optimisation of operations.
- A new generation of researchers is educated that is ready to optimally exploit all the essential tools for their research.
- Closer interactions between larger number of researchers active in and around a number of research infrastructures, in different but close fields, facilitate cross-disciplinary fertilisations and a wider sharing of information, knowledge and technologies across fields and between academia and industry.
- The integration of major scientific equipment or sets of instruments and of knowledge-based resources (collections, archives, structured scientific information, data infrastructures, etc.) leads to a better management of the continuous flow of data collected or produced by these facilities and resources.
- When applicable, the integrated and harmonised access to resources at European level can facilitate the use beyond research and contribute to evidence-based policy making.
- When applicable, the socio-economic impact of past investments in research infrastructures from the European Structural and Investment Funds is enhanced.

Cross-cutting Priorities: International cooperation, Open Science, Gender

[1] See the Eligibility and admissibility conditions for this call.

[2] See part D of the section "Specific features for Research Infrastructures".

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^[4].

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

[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 ICPeMed^[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 ICPeMed with a grant to operate its secretariat until October 2020^[2]. Wider internationalisation of ICPeMed 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).
- ICPeMed secretariat: The project should continue the work done by the secretariat for ICPeMed, e.g. maintenance of existing services, organising the meetings of the ICPeMed Executive Committee, convening dedicated workshops and preparing and issuing updates of the ICPeMed Action Plan. Furthermore maintaining the network of policy makers and funders gathered in ICPeMed and expanding the membership to new interested and complementary partners as well as maintaining communication with all EC funded activities related to ICPeMed (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 ICPeMed initiative; furthermore:

- International aspect: Integrating the country/group of countries into ICPeMed 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.
- ICPeMed secretariat (2020 Call): Ensure continuity of the operations of ICPeMed 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

[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.eunetha.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:	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:	ERA-NET to support the Joint Programming Initiative on Antimicrobial resistance (JPIAMR)
Topic Identifier:	SC1-HCO-07-2020
Type of Action:	ERA-NET-Cofund ERA-NET Cofund
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-07-2020>

Specific Challenges: Antimicrobial resistance (AMR) is a serious challenge that has reached alarming levels in the EU and globally. There is an urgent need to address this major health threat by actions that should include boosting research and innovation as well as strengthening coordination and cooperation in this area

The Joint Programming Initiative on Antimicrobial resistance (JPIAMR) enables the participating countries that include EU Member States and other countries on five different continents, to address the global threat of AMR. It allows the establishment, alignment and building of national research programmes to increase their effectiveness and the impact of research efforts.

Building on earlier successes in implementing the JPIAMR Strategic Research Agenda, in scaling up research efforts and establishing synergies with Horizon 2020, there is a need to continue and consolidate the successes in defragmentation, better coordination and alignment amongst the countries participating in JPIAMR. In addition to this, there is a need to boost research, development and innovation on AMR and improve global coordination in this area as stated in the European One Health Action Plan against AMR^[1].

Scope: Proposals should pool the necessary financial resources from participating national or regional research programmes in the area of AMR by implementing a transnational joint call for proposals resulting in grants to third parties with EU co-funding. This should scale up the implementation of the JPIAMR Strategic Research Agenda and the European One Health Action Plan against AMR.

Proposals must also implement other joint activities, including additional calls without EU co-funding.

Proposals should take the full One Health approach into account. They should aim at supporting research and innovation for the development and testing of strategies and methodologies to reduce the transmission and spread of AMR. They should also further align national research plans and strategies in Europe and beyond. Proposals should demonstrate the expected impact on national and transnational programmes as well as the leverage effect on European research and competitiveness.

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 proposal should demonstrate that these co-funded other activities exclude any overlaps with related on-going actions co-funded by the EU under Horizon 2020. The Commission considers that proposals requesting a contribution from the EU of minimum EUR 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:

- Funding of research proposals on a topic identified in the JPIAMR Strategic research agenda, which needs to be addressed at European level or wider, and which is complementary to topics of the EC work programmes.
- Leverage transnational excellent research with EU-added value in the area of AMR.
- Increased commitment of participating countries to the implementation of the JPIAMR Strategic research agenda
- Strengthening and supporting the implementation of the European One Health Action Plan against AMR.
- Strengthening alignment of national and regional plans and activities in the area of AMR research.
- Enhancement and/or better exploitation of national or EC-supported activities.

Cross-cutting Priorities: International cooperation, ERA-NET

[1] https://ec.europa.eu/health/amr/sites/amr/files/amr_action_plan_2017_en.pdf

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:	ERA-NET: Sustained collaboration of national and regional programmes in cancer research
Topic Identifier:	SC1-HCO-14-2020
Type of Action:	ERA-NET-Cofund ERA-NET Cofund
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-14-2020>

Specific Challenges: Common challenges in cancer research can only be met by effective transnational cooperation on prioritised efforts, using national, regional and charity-based resources. Important achievements have been obtained by TRANSCAN and TRANSCAN-2.

However, more efforts are warranted to address the potential for sustainable coordination, the access to and sharing of data on cancer research and treatment as well as alignment of national, regional and foundation or charity-based programmes and activities in Member States/Associated States and beyond.

Scope: The successful proposal should align national, regional research funding programmes on translational cancer research by implementing a transnational call with EU co-funding resulting in grants to third parties.

Proposals should pool the necessary financial resources from the participating national (or regional) research programmes as well, where appropriate, leverage resources from pertinent foundations, charities and transnational initiatives, with a view to implementing a joint call for proposals resulting in grants to third parties with EU co-funding in this area. The proposal should overcome hurdles that impede long-term coordination, involving research and innovation and cancer care stakeholders, taking into account relevant cancer research and innovation and cancer care initiatives. The proposal should build on previous EU-funded ERA-NET initiatives in this area.

The proposal should also demonstrate potential impact at national, regional and transnational research and innovation programmes as well as a leverage effect on national and European research and competitiveness using key indicators. Other joint activities may include: analyses of research and innovation funding and impact, dissemination, communication towards citizens, training, and are requested to include other additional joint transnational calls (without EU co-funding).

The proposal should demonstrate that these co-funded other activities exclude any overlaps with related on-going actions co-funded by the EU under Horizon 2020 SC1.

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 proposal should demonstrate that these co-funded other activities exclude any overlaps with related on-going actions co-funded by the EU under Horizon 2020

The ERA-Net should envisage a duration which is appropriate to the ambition and complexity of the proposed topic. The Commission considers that proposals requesting a contribution from the EU of a minimum of EUR 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:

- Identification of common research and innovation priorities, taking into account international developments where relevant.
- Leveraged funding, through transnational collaborative research and innovation on cancer, based on a common strategic research agenda.
- Streamlined national, regional and foundation or charity-based practices in organising research and innovation funding.
- Demonstrated sharing of data and analyses of funded cancer research and their impact.

Cross-cutting Priorities: ERA-NET, International cooperation

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:	ERA-NET: Sustained collaboration of national and regional programmes in research on brain-related diseases and disorders of the nervous system
Topic Identifier:	SC1-HCO-16-2020
Type of Action:	ERA-NET-Cofund ERA-NET Cofund
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-16-2020>

Specific Challenges: Cooperation at transnational level in the area of brain-related diseases has successfully been established but can be further enhanced and sustained through synergies between projects coming out from individual ERA-Net calls as well as pertinent partners beyond the ERA-Network itself.

Specific challenges include providing the necessary critical mass and resources to address commonly identified clinical needs. In particular, data sharing across funded projects should be enhanced. The overall aim is to nurture further collaboration amongst research funders as well as the projects in this field while extending its activities towards the intensification of cross projects collaborations within and beyond the ERANET projects.

Scope: Proposals should demonstrate the potential to coordinate in a sustained manner national and regional research programmes in the area of brain-related diseases, excluding neurodegenerative diseases, by implementing transnational calls with EU co-funding resulting in grants to third parties.

Proposed activities should promote wider collaboration between funded ERA-Net projects stemming from the same transnational call but also with relevant projects from other ERA-Net calls and pertinent H2020-funded projects and international partners active in this field of research.

More comprehensive and wider data sharing and early consideration of translational pathways should be inherent requirements for the translational calls to be launched by the ERA-Net.

Proposals should pool the necessary financial resources from the participating national (or regional) research programmes as well, where appropriate, leverage resources from pertinent foundations, charities and transnational initiatives, with a view to implementing a joint call for proposals resulting in grants to third parties with EU co-funding in this area..

Proposals are requested to implement other joint activities including additional joint calls without EU co-funding. The proposal should demonstrate that these co-funded other activities exclude any overlaps with related on-going actions co-funded by the EU under Horizon 2020 SC1. Proposals should engage with key stakeholders, including complementary ERA-Nets, competence partners on regulatory and guidelines issues. Collaboration with the EU funded European Brain Research Area Coordination and Support Action should be foreseen and integrated into the joint programming concept pursued by the funded ERA-Net project.

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 proposal should demonstrate that these co-funded other activities exclude any overlaps with related on-going actions co-funded by the EU under Horizon 2020

The ERA-Net should envisage a duration which is appropriate to the ambition and complexity of the proposed topic. The Commission considers that proposals requesting a contribution from the EU a minimum of EUR 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:

- Joint investment of national and regional programmes in the area of brain-related neurological diseases;
- Increased common activities of national research programmes and projects;
- Leveraging synergies with other pertinent key players in Europe;
- Contribution to the establishment of Brain research ERA by addressing issues related for example to administrative hurdles, IPR management and different practices regarding resource sharing.

Cross-cutting Priorities: International cooperation, Open Science, ERA-NET

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	Governance for the Future
Call Identifier:	h2020-sc6-governance-2018-2019-2020
Topic Title:	Centres/Networks of European research and innovation
Topic Identifier:	GOVERNANCE-20-2020
Type of Action:	CSA Coordination and support action
Deadline(s):	12.03.2020 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/governance-20-2020>

Specific Challenges: To extend the network of (currently three) centres in the world's most dynamic and innovative countries and regions that connect and support European researchers and entrepreneurs globally, in order to establish their presence in **third countries** and strengthen the position of Europe as a science, technology and innovation leader.

This call topic builds on the results of the 2016 Call topic ENG-GLOBALLY-09-2016, focusing specifically on innovation.

Scope: To establish new centres, or networks of centres, in close cooperation with local technology and innovation structures located in **third countries** and regions.

A maximum of three proposals will be supported including one for India and one for Africa. These centres/networks will engage in activities with a focus depending on the country/region addressed, including activities such as:

- Providing services such as incubator co-working space, advice and support directly to European innovators that want to soft-land in the partner country/region and/or to engage in co-creation with local innovators;
- Building/linking to an eco-system of stakeholders including early adopters, potential customers, partners etc. in the country/region;
- Supporting the transfer and internationalisation of demonstrated technologies and know-how, both to and from the country/region;
- Launching local market development programmes to deploy European technology;
- Offering mentorship, training and promoting staff exchange to increase capacities of innovators;

- Leveraging private and public investors' resources to sustain the activities of the centre(s).

The proposed work should seek to establish the centres/networks in cooperation with local actors based on a sound business plan that is expected to include clear commitments from multiple funding sources, such as corporates, investors, or local governments making available soft-landing spaces. The business plan and the intended governance (including type of legal entity to be established) shall be presented as part of the proposal. The involvement of European and local incubators or accelerators must be described.

Each proposal shall target one country or region that is an emerging or developing technology or innovation partner; proposals addressing India and all or part of Africa are strongly encouraged without excluding other countries with similar characteristics.

For India, the centre(s) should target mature start-ups and SMEs from both Europe and India and promote matchmaking for adaptation of European technologies and innovative solutions to the Indian context.

For Africa the centre(s) with the network of incubators and accelerators should target at least five sub-Saharan African countries, build on existing local incubators and accelerators, and focus on technology transfer/adaptation (from Europe to Africa or vice-versa), staff exchanges and training.

Consortia are expected to include business development as well as technology expertise in the target country or region and ensure adequate involvement of European stakeholders from existing structures in the addressed countries/regions. Proposals should build on previous work of bilateral and regional international cooperation projects where appropriate.

The Commission considers that proposals requesting an EU contribution of around EUR 2-3 million for a duration of 3-4 years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

Eligibility and admissibility conditions: Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

Expected Impact:

- Reinforced cooperation between European innovators and those of the Union's international partners;
- Higher visibility and prestige for European research and innovation and its actors in international partner countries/regions;
- Stronger presence of European organisations in the innovation environment of the partner country/region;
- Enhanced impact of results from research and innovation projects, including those under Horizon 2020, through increased access to excellence and to markets across the world.

Cross-cutting Priorities: Open Innovation, International cooperation

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	Governance for the Future
Call Identifier:	h2020-sc6-governance-2018-2019-2020
Topic Title:	The Common Foreign and Security Policy and the expanding scope of the EU`s external engagement
Topic Identifier:	SU-GOVERNANCE-07-2020
Type of Action:	RIA Research and Innovation action
Deadline(s):	12.03.2022 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/su-governance-07-2020>

Specific Challenges: There is a pressing need for the EU to improve its capacities and capabilities for conflict resolution, prevention and mediation. As highlighted by the EU's Global Strategy and the European Defence Action Plan, a key challenge is to accommodate multiple action domains, including traditionally internal policy areas, in a joined-up external action alongside the Common Security and Defence Policy. An integral challenge is to ensure that the EU external policy and the foreign policies of Member States are coordinated when engaging with strategic global partners.

Scope: Proposals should ascertain what governance structures are needed for ensuring an effective EU foreign and security policy as well as a coherent and sustainable external action. They should develop assessment criteria for effective defence, security and intelligence cooperation in the EU, distinguishing between objectives and instruments. Results should take account of the previous calls 'Europe as a Global Actor' (Work Programme 2014/15) and 'Engaging together globally' (Work Programme 2016/17). Proposals should engage with the growing diversification of international relations, e.g. the E3/EU on Iran and regional integration strategies with neighbourhood regions. Cooperation with partners from **third countries** is encouraged in order to have comparative perspectives that would be an important value added for the projects. Research should analyse perceptions and the political acceptability of an enhanced EU common defence policy among Member States and citizens. Crucially, projects must thoroughly investigate the burgeoning peripheral and sectoral diplomacies in

traditionally internal policy areas and assess how these could be brought within the joint-up frame of a coherent EU external action.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: Actions will inform policymakers on the governance structures needed to ensure joined-up and sustainable EU diplomatic action and international cooperation. They will contribute to the advancement of the Common Security and Defence Policy and to increased coherence between the EU foreign policy and Member States' foreign policies.

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

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	Governance for the Future
Call Identifier:	h2020-sc6-governance-2018-2019-2020
Topic Title:	Developing deliberative and participatory democracies through experimentation
Topic Identifier:	SU-GOVERNANCE-21-2020
Type of Action:	RIA Research and Innovation action
Deadline(s):	12.03.2023 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/su-governance-21-2020>

Specific Challenges: Liberal democracies have come under pressure in recent times. Political distrust, polarizing discourses, lower electoral participation and populist narratives that reject the idea of an open society manifest themselves in Europe and beyond, with very strong support. The challenge therefore is to examine whether and how deliberative and participatory approaches – theoretically and practically – can fulfil the promise of greater and more enlightened participation in the present context and reach out to include those alienated from the political process. The difficulties deliberative and participatory approaches may face are also important to appraise.

In the last two decades deliberative and participative democracy has become increasingly prominent as a response to the challenges besetting liberal representative democracies. Premised on notions of direct democracy, active citizenship and decisions reached through argumentation, these new practices of democracy has in theory the potential to revive democratic legitimacy and help close the gap between citizens and political elites, who are often perceived as representing powerful interest groups.

Scope: Research should elucidate the complex links between political discourses and identities (including populist standpoints), dialogue guided by reasoned argumentation and the potential for achieving consensus on policy choices. Projects should also consider issues pertaining to effective participation in deliberative and participatory processes (especially as regards vulnerable groups and the politically less active) and as to how effectively these are translated by governments and institutions into concrete action. Research should equally

examine how deliberative and participatory processes relate to polarisation and how (or if) it can assist in reaching mutual understanding among citizens with different views and positions. Lastly, attention should be paid to how deliberative and participatory democracy can best complement representative institutions. Issues of coordination, complementarity, scaling up (of such practices) but also opening up more traditional representative institutions should be examined.

The impacts of technology need to be further illuminated. Re-evaluating and re-assessing the contribution of digital technology in implementing deliberative, participatory (and by extension direct) democracy is needed. Projects should offer exhaustive assessments of experiments and innovations in deliberative and participatory processes highlighting success and failure factors. The role of the internet should equally be examined (also in connection to social media) in light of recent trends, which have cast doubt on its capacity to act as a platform of rational communication between equal participants.

In the EU context, the notion of the public sphere, as a key deliberative element, should be reconsidered both conceptually and empirically in view of the economic, social and political crises and developments of recent years. This includes a reappraisal of the question whether there is, could, or should be a European public sphere, which could enrich the democratic quality and the liberal character of the EU, in a context where supra-national European institutions are often perceived as insufficiently democratic and transparent.

Research should examine how the concept of deliberative and participatory democracy could be used and adapted to facilitate such a process and whether and how it is compatible with polarization tendencies, which have been prevalent in recent years. It needs to be investigated whether these new trends contribute to social justice, how societies can be made not only more inclusive but also more reflective, and how critical capacity and attitudes can be developed which revive deliberative democratic discourses. In this context, the contribution of the education system needs to be worked out. Connections should be made with questions of (European) identity, whereby the focus should not lie on an essentialist conception of identity, but reflexive identity, which signifies a critical and transformative self-understanding. Research should investigate how to create arenas or spaces open to citizens which are conducive to collective decisions made through public deliberation. Cooperation with partners from **third countries**, from both established and emerging democracies, is encouraged in order to have comparative perspectives that would be an important value added for the impact of the project.

A set of concrete actions could look at experimental and participative approaches to civic and social life, and suggest pathways for strengthening democracies at all levels, in terms of concrete actions, pilot projects and experimentation. They could build on previous results of international, European and other projects in these areas. In a context where citizen involvement and citizen participation in research and innovation is strongly stressed for Horizon Europe, this proposal could help to lay the groundwork.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: This action will move to another level our understanding of deliberative and participatory democratic processes and identify ways of how they can be improved in practice. Research should make this action on how to create arenas or spaces open to citizens which are conducive to collective decisions made through public deliberation. Proposals should outline methods and policies by which democratic practices can be strengthened in order to rebuild trust in political, economic and social institutions.

Cross-cutting Priorities: Socio-economic science and humanities

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	Socioeconomic and Cultural Transformations in the Context of the Fourth Industrial Revolution
Call Identifier:	h2020-sc6-transformations-2018-2019-2020
Topic Title:	Technological transformations, skills and globalization - future challenges for shared prosperity
Topic Identifier:	TRANSFORMATIONS-18-2020
Type of Action:	RIA Research and Innovation action
Deadline(s):	12.03.2024 (single-stage)

Participant Portal Weblink:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/transformations-18-2020>

Specific Challenges: The combined effects of technological transformations, of trade and globalisation have created winners and losers in Europe and in the rest of the world. European economies are confronted with the co-existence of skill shortages, high unemployment, increased inequalities in income and wealth, asymmetrical labour mobility within Europe, as well as emigration and immigration. These structural imbalances need to be addressed, because political concerns in the Western world, and in particular in the European Union, relating to future challenges for shared prosperity are growing, in a context of uncertain futures. Following the assessment of the impact of technological progress, trade and globalisation on skills, employment, inequalities in income and wages and on labour mobility and migration in the EU, realistic and accurate projections into the future on the combined effects of technological progress and globalisation are needed to prepare our economies, societies and policies for what is to come and to build up capacities for influencing these changes.

Scope: Proposals should first measure impact of technological progress, trade and globalisation on skills, employment, inequalities in income and wages and on labour mobility and migration in the EU. It should then project how the interactions between technological change and globalisation will transform the current EU and international structure of labour markets and trade in commodities and services in existing and emerging sectors and their impact on income distribution and social inequalities. Particular attention should be paid to skill-biased, capital-biased, talent-biased and gender biased technical change and

to possible trajectories for low-skilled work in the European and international context. The analysis should take into account the evolution of the processes through which technological change is integrated in the human world. This includes economic, institutional, political and socio-cultural contexts, needs and obstacles. The future volume and quality of work should be addressed in relation to skills, education, development, migration and mobility, demographic changes and the analysis of economic convergence and divergence within Europe and with the rest of the world. The challenges of competition, cooperation or conflict with emerging and developing countries need to be considered. Both demand and supply side issues, including global value chains, off-shoring and their distributive effects, should be addressed in this topic.

Proposals should produce a comprehensive set of scenarios based on data from national and international agencies, from databases on labour markets, inequalities, globalisation, productivity and growth, and from other relevant official sources as needed (no specific/ad-hoc surveys should be used). The analysis should have a strong focus on disentangling the processes of technological change and of globalisation in important sectors of the economy to assess their impacts on inequalities, and their implications on the development of skills and competences that need to be strengthened in Europe, in order to reduce the uncertainty facing large sections of the population. In addition, proposals should identify priority areas and content for policies that would make share the benefits of technological change and globalisation more equally and widely. For instance, proposals could map pathways for adapting working populations and their flows to trends in the international production and consumption structure. Paradigm changes needed in education, skill and talent development could be anticipated. Due to the specific challenge of this topic, participation of relevant partners from **third countries**, including developed, emerging and developing countries, is encouraged. This participation would enable a balanced discussion on competing points of view that are critical for the impact of the project. A solid dissemination strategy should be foreseen for bringing findings to the attention of policymakers and into the public domain.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 3 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: Results will contribute to inclusive and evidence based policy choices and informed public debates, especially on methods and processes of upgrading skills, mobility and labour markets. It will propose policies on the areas discussed above for different levels of national and international governance and the means of achieving multilateral cooperation on these objectives.

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