



International Cooperation in Horizon 2020

EU and Third Countries

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Excellent Science

Horizon 2020 Pillar:	Excellent Science
Programme:	Marie Skłodowska-Curie actions
Call Title:	Marie Skłodowska-Curie Individual Fellowships
Call Identifier:	H2020-MSCA-IF-2017
Topic Title:	Individual Fellowships
Topic Identifier:	MSCA-IF-2017
Type of Action:	MSCA-IF-EF-CAR Career Restart panel , MSCA-IF-EF-RI Reintegration panel, MSCA-IF-EF-SE Society and Enterprise panel, MSCA-IF-EF-ST Standard EF, MSCA-IF-GF Global Fellowships
Deadline(s):	14-09-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-if-2017.html>

Specific Challenge: 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 acquire and transfer new knowledge and to work on research and innovation in a European context (EU Member States and Associated Countries) or outside Europe. The scheme particularly supports the return and reintegration of researchers from outside Europe who have previously worked here. It also develops or helps to restart the careers of individual researchers that show great potential, considering their experience.

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 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 will be evaluated.

Fellowships take the form of European Fellowships or Global Fellowships. European Fellowships are held in EU Member States or 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.

Return and reintegration of researchers into a longer term research position 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 shall be mobility into Europe.

Support to individuals to resume research in Europe after a career break, e.g. after parental leave, 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 at least 12 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 and to open attractive career opportunities for researchers outside academia.

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.

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, planning for publications and participation in conferences.

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: Socio-economic science and humanities, Gender, International cooperation

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-2017
Topic Title:	Research and Innovation Staff Exchange
Topic Identifier:	MSCA-RISE-2017
Type of Action:	MSCA-RISE RISE
Deadline(s):	05-04-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-rise-2017.html>

Objective: The RISE scheme will promote international and inter-sector collaboration through research and innovation staff exchanges, and sharing of 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 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 projects 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' levels 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 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 located in **third countries** or within the same EU Member State or 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, Gender, International cooperation

[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:	Trans-national cooperation among Marie Skłodowska-Curie National Contact Points
Call Identifier:	H2020-MSCA-NCP-2017
Topic Title:	MSCA National Contact Points
Topic Identifier:	MSCA-NCP-2017
Type of Action:	CSA Coordination and support action
Deadline(s):	04-05-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-ncp-2017.html>

Objective: Facilitate trans-national co-operation between National Contact Points (NCPs) for the Marie Skłodowska-Curie actions (MSCA), with a view to identifying and sharing good practices and raising the general standard of support to applicants, taking into account the diversity of actors.

Scope: Support will be given to a consortium of formally nominated NCPs in the area of MSCA. The activities will be tailored according to the nature of the area, and the priorities of the NCPs concerned. Various mechanisms may be included, such as benchmarking, joint workshops, enhanced cross-border brokerage events, training sessions linked to MSCA as well as to Responsible Research and Innovation, twinning schemes, etc. Special attention will be given to enhancing the competence of MSCA NCPs, including helping less experienced NCPs rapidly acquire the know-how accumulated in other countries. It will also be encouraged to build up cooperation with other networks to increase visibility to potential beneficiaries, especially in the non-academic sector.

The focus throughout should be on issues specific to MSCA and should not duplicate actions foreseen in the NCP network for quality standards and horizontal issues under 'Science with and for Society'.

Only NCP organisations from EU Member States, Associated Countries, and **third countries** which have been officially appointed by the relevant national authorities are eligible to participate in and receive funding for this action.

The consortium should have a good representation of experienced and less experienced NCPs.

Submission of a single proposal is encouraged. NCPs from EU Member States, Associated Countries or **third countries** choosing not to participate as a member of the consortium are nevertheless invited and encouraged to participate in the project activities (e.g. workshops), and the costs incurred by the consortium for such participation (e.g. travel costs paid by the consortium) may be included in the estimated budget and be eligible for funding by the Commission.

The Commission will only fund one proposal under this topic. The maximum duration of support will be three years from the starting date specified in the grant agreement.

Expected Impact:

- An improved and professionalised NCP service across Europe, therefore helping simplify access to Horizon 2020 calls, lowering the entry barriers for newcomers, and raising the average quality of submitted proposals.
- A more consistent level of NCP support services across Europe.

Cross-cutting Priorities: International cooperation

Industrial Leadership

Horizon 2020 Pillar:	Industrial Leadership
Programme:	Leadership in enabling and industrial technologies (LEIT)
Call Title:	Competitiveness of the European Space Sector: Technology and Science
Call Identifier:	H2020-COMPET-2017
Topic Title:	Space Weather
Topic Identifier:	COMPET-5-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	01-03-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/compet-5-2017.html>

Specific Challenge: Space weather services exist already today in Europe and in several countries outside the EU. New services are also being developed (e.g. in ESA's SSA programme and in EU Seventh Framework Programme projects). Their goal is to observe and to predict a range of solar events that may impact the near Earth environment including orbiting satellites and ground based systems. However there is a lack of understanding of the effects of space weather on space systems including spacecrafts, payloads and living organisms in space as well as on ground-based infrastructure.

Scope: Exploratory work studying space weather with a view to enhancing the understanding of space weather and its impact. Proposals can cover the full range of space weather phenomena from the solar cycle, flares and coronal mass ejections to the effects of the solar wind in the near-earth environment and the evolution in between. There is scope for cooperation with international partners with relevant expertise (entities from **third countries** could benefit from EU funding under this topic).

This activity shall address space weather and its effects, impacts and mitigation techniques with application to aerospace and ground systems.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 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: Proposals are expected to improve the understanding of Space Weather phenomena and their impact on space systems and terrestrial infrastructure, and are also expected to analyse viable mitigation strategies, and to demonstrate how these add value compared to existing mitigation strategies.

Cross-cutting Priorities: Open Science

Science with and for Society

Horizon 2020 Pillar:	Science with and for Society
Programme:	Encourage citizens to engage in science, Make scientific and technological careers attractive for young people, Anticipating and assessing potential environmental, health and safety impacts, Improve knowledge on science communication, Develop the accessibility and the use of the results of publicly-funded research, Promote gender equality in research and innovation, Develop the governance for the advancement of responsible research and innovation, Integrate society in science and innovation
Call Title:	Science with and for Society
Call Identifier:	H2020-SWAFS-2016-17
Topic Title:	A Linked-up Global World of RRI
Topic Identifier:	SwafS-14-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	30-08-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/swafs-14-2017.html>

Specific Challenge: At the moment, 'a linked-up global world of RRI', is a future, and speculative, perspective. But the world is definitely linked-up, and there is recurrent mention of, and occasional work on, RRI-type issues all over the world. In the field of nanotechnology, for some time (since the early 2000s) there were platforms and spaces for dialogue. What is the role of regulation and of civil society in a linked-up global society? What is the role of industry, with the dynamics of firms wanting to appear as 'good firms' rather than the contrary? Similarly, what is the role of nation states and international organizations in this global world?

One might actually consider that RRI could become a competitive advantage, definitely for Europe and directly contribute to Europe's jobs and growth agenda. That possibility will be one element of this topic. It is important to give industry's 'ethical behaviour' a concrete foothold, and not to leave it to abstract deliberations. To this end, domain and case studies in key areas, such as Digital Single Market and Energy Union, supporting the Commission's agenda^[1] for jobs, growth, fairness and democratic change will be relevant. Other sectors of activities can be considered as case studies as well (e.g. bio-economy, waste management) provided that they yield significant insight into the possible rise of the global world of RRI.

Scope: There are interesting projects already that can be built on for the present topic. The EU-funded ProGRess project^[2], aims to promote a European approach to Responsible Research and Innovation (RRI) through a global network, including partners and advisers from Europe, the US, China, Japan, India, Australia and South Africa, and involvement of relevant stakeholders

from academia, international organisations, industry, SME research, NGOs, policy advisors and research funders. The GEST (Global Ethics in Science and Technology) project^[2], which has recently led to a major publication on Science and Technology Governance and Ethics, comparing Europe, China and India, is another example.

The present topic spans at least over three overlapping foci:

- Identification and analysis of platforms and spaces for RRI-type issues
- Comparative studies of major and minor players, taking into account differences especially the situation of developing countries
- Advantages (up to competitiveness) of RRI, and ethical behaviour in general.

It is also important to locate these questions and trends in current and emerging governance frameworks.

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, including with **third countries** beyond Associated Countries.

To address this specific challenge, proposals should have a wide geographical coverage. It is therefore expected that consortia would include at least entities from 10 different Member States or Associated Countries, although smaller consortia will also be eligible and may be selected.

The Commission considers that proposals requesting a contribution from the EU of 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.

This action allows for the provision of financial support to third parties in line with the conditions set out in Part K of the General Annexes.

Expected Impact: Better understanding of the dynamics of a 'linked-up global world of RRI' will allow benchmarking European RRI initiatives and integrating good practices from other contexts. It will help industry, civil society and policy makers to take decisions based on evidence. It will produce formal knowledge, easing the dissemination of good practices and improving existing training material.

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

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[1] <http://www.eesc.europa.eu/resources/docs/jean-claude-juncker---political-guidelines.pdf>

[2] <http://www.progressproject.eu>
http://www.uclan.ac.uk/research/explore/projects/global_ethics_science_technology.php

Societal Challenges

Horizon 2020 Pillar:	Societal Challenges
Programme:	Climate action, environment, resource efficiency and raw materials
Call Title:	Greening the Economy
Call Identifier:	H2020-SC5-2016-2017
Topic Title:	Biodiversity scenarios
Topic Identifier:	SC5-32-2017
Type of Action:	ERA-NET-Cofund ERA-NET Cofund
Deadline(s):	07-03-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-32-2017.html>

- Specific Challenge:** Evaluating and improving the sustainability of the management of biodiversity and ecosystem services is a major challenge of our time all over the world. Scenarios of biodiversity and ecosystem services have been a key component of forward-looking decision making as they contribute to
- i) better understanding and synthesizing a broad range of observations,
 - ii) informing decision makers about future impacts of global changes such as climate change, land use change, resource overuse, invasive alien species or pollution,
 - iii) providing decision support by developing adaptive management strategies, and
 - iv) evaluating the implications of alternative social-economic development pathways and policy options.

Development of scenarios for biodiversity and ecosystem services, based on the understanding and modelling of their dynamics and the evaluation and reanalysis of past changes, is beginning to receive high priority in the research policy of the majority of countries worldwide. In this context, aligning research agendas and implementing them through international calls will promote synergies and optimal use of the available expertise and resources, avoiding duplication and ensuring robust outcomes of global relevance. To attain this, BiodivERSA is opening to **third country** partners and the Belmont Forum provides an excellent platform for international collaboration.

- Scope:** Proposals should pool the necessary financial resources from the participating national (and as needed local and regional) research programmes with a view to implementing a joint call for proposals with EU co-funding resulting in grants to third parties. The proposal should include other joint and follow-up activities, including possibly additional joint call(s) without EU co-funding. The proposal should demonstrate that these co-funded other activities exclude any overlaps with ongoing actions of this ERA-NET co-funded by the EC. Actions should build on the strategic roadmap of BiodivERSA ERA-NET Cofund and launch at least one international call on biodiversity and ecosystem services scenarios in collaboration with the

Belmont Forum specifically to promote trans-continental collaboration. Cooperation and coordination with other ERA-NETs and/or JPIs to increase synergies on cross-cutting issues, where appropriate, is encouraged.

Participation of legal entities from international partner countries and/or regions, particularly from countries participating in the Belmont Forum, is encouraged in the joint call as well as in other joint activities without EU co-funding. For the co-ordination costs of additional activities only, participants from countries which are not automatically eligible for funding^[1] may nonetheless request a Union contribution (on the basis of the ERA-NET unit cost).

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 7 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: Actions are expected to lead to:

- the alignment of research and innovation agendas in the area of scenario development for biodiversity and ecosystem services and co-ordinated streamlining of the implementation of at least one call;
- enhanced excellence and global relevance of research and innovation activities on biodiversity and ecosystem services, improving the relevance and value of advances made in developing socio-economic scenarios and models of global change impacts on the dynamics of biodiversity and ecosystem services for decision makers at multiple scales;
- increased visibility of European biodiversity scientific community and research outcomes at international level;
- strong and lasting alliance with the funding agencies of key international partners for research and innovation actions on biodiversity and ecosystem services (e.g Brazil, China, India, Japan, Mexico, South Africa, USA);
- link with possible assessments as those conducted, e.g., by the IPBES to induce a wider, worldwide and regional use of scenarios to better assess future, plausible trends of biodiversity and ecosystem services and explore the role that nature-based solutions may play;
- contribution to the implementation of the Sustainable Development Goals (SDGs), in particular SDG 15 'Protection, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'.

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

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[1] http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/international-cooperation_en.htm

Horizon 2020 Pillar:	Societal Challenges
Programme:	Climate action, environment, resource efficiency and raw materials
Call Title:	Greening the Economy
Call Identifier:	H2020-SC5-2016-2017
Topic Title:	Raw materials international co-operation
Topic Identifier:	SC5-16-2016-2017
Type of Action:	CSA Coordination and support action
Deadline(s):	07-03-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-16-2016-2017.html>

Specific Challenge: Many countries are facing similar challenges in the field of mineral raw materials as the EU, including dependence on supply of raw material from international markets, shortage of knowledge on raw materials and their flows for decision making by authorities, industry, financial sector etc. Understanding of the global nature of raw materials value chains and ensuring sustainable supply of primary and secondary raw materials for the EU requires knowledge of materials flows at a global level and relevant skills. At present, there is a shortage of specialists in the EU in some areas related to primary and secondary raw materials production and raw materials markets. This is a challenge that needs to be addressed at the EU level together with the relevant countries around the world having expertise in the field. In addition, the global nature of raw materials value chains requires common approach and solutions at a global level in order to ensure fair and unrestricted access to raw materials worldwide. There is therefore a need for a more active involvement of the EU in relevant initiatives and closer collaboration with competent international organisations in the field of raw materials.

Scope: Proposals should create a self-sustainable long-term lasting international network of training centres for professionals. The proposals should involve educational and research institutions in the EU and the leading counterparts in **third countries**, based on specific country expertise in the primary and secondary raw materials sectors. The network should map skills and knowledge in the EU and the **third countries**, identify key knowledge gaps and emerging needs, develop roadmap for improving skills and knowledge, as well as establish common training programmes in the raw materials sectors.

In line with the EU's strategy for international co-operation in research and innovation (COM(2012)497), international collaboration is required. Where appropriate, synergies with the relevant EU Member States initiatives are to be explored and fostered.

The Commission considers that proposals requesting a contribution from the EU of up to EUR 1 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 is expected to contribute to:

- implementation of the Raw Materials Initiative and achieving the objectives of the EIP on Raw Materials, in particular in terms of establishing and maintaining strong and sustainable relationships with the leading training institutions in the relevant countries;
- increasing the EU competence and expertise in the field of the primary and secondary raw materials;
- improved availability of qualified and skilled workforce leading to higher competitiveness of the EU raw materials industry;
- enhancing the possibility for new cross-sectorial innovations.

Cross-cutting Priorities: International cooperation

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	ENGAGING TOGETHER GLOBALLY
Call Identifier:	H2020-SC6-ENG-GLOBALLY-2016-2017
Topic Title:	Migration and asylum systems
Topic Identifier:	ENG-GLOBALLY-10-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	02-02-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-10-2017.html>

Specific Challenge: The pressures currently placed on the Common European Asylum System (CEAS) by the ongoing crises in Syria, Iraq, Central and East Africa, and elsewhere are unlikely to fade away in the near future. The large scale and partially uncontrolled arrival of migrants, notably asylum seekers, in 2015 has put a strain on both European and Member States' asylum systems. It has exposed significant structural weaknesses and shortcomings in both the design and implementation of European asylum and migration policy. The current system places disproportionate responsibility on certain Member States which in fact encourages uncontrolled and irregular migration. In the future a system is needed which provides orderly and safe pathways for **third country** nationals in need of international protection. The specific challenge of this research action is to reassess the CEAS with a view to making any necessary recommendations. The overriding key question is to explore to what extent harmonisation of the CEAS is necessary, desirable, achievable and sustainable.

Scope: Research is needed to comprehensively assess the weaknesses and shortcomings of the CEAS in general and of the Dublin arrangements in particular. Research will clearly differentiate between deficiencies in the legal design of the system and in its implementation. Comparative research will also investigate differences the asylum laws and policies of Member States, including their implementation under stress. In particular, research will investigate, including empirically, how much and what kind of harmonisation is required, sustainable and acceptable, and possibly outline scenarios. The relation between asylum systems and Schengen must be duly taken into consideration. Research should also study the different national political contexts as well as discourses on migration, asylum and borders. Projects will explore the causes and nature of Member States' positions on burden sharing and responsibility, especially in relation to relocation schemes.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 2 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: Findings from this research action will provide insights into the implementation and effectiveness of CEAS^[1]. The research will present alternative scenarios for policy reform (e.g. differing in the extent of harmonisation and convergence) and will pronounce on what the appropriate level of harmonisation of the CEAS should be. This will equip policymakers with a range of options to respond to constantly changing circumstances.

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

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[1] COM(2016)197 Communication from the Commission to the European Parliament and the Council "Towards a Reform of the Common European Asylum System and Enhancing Legal Avenues to Europe".

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	ENGAGING TOGETHER GLOBALLY
Call Identifier:	H2020-SC6-ENG-GLOBALLY-2016-2017
Topic Title:	Science diplomacy for EU neighbourhood policies
Topic Identifier:	ENG-GLOBALLY-04-2017
Type of Action:	CSA Coordination and support action
Deadline(s):	02-02-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-04-2017.html>

Specific Challenge: The European Union's neighbouring regions are, in various ways and for a number of reasons, in turmoil. To the East, the Eastern partnership has been called into question, especially by the long-standing crisis in Ukraine and difficult and uncertain relations with Russia. In the South-East, the EU's relationship with Turkey has increasingly come under strain, while at Turkey's border the conflict in Syria and the ravage of Islamic State armies have created high degrees of instability. In the Western Balkans, the accession processes of several candidate countries remain challenging. Finally, the East and South Mediterranean region has been the theatre of profound and intricate transformations ever since the "Arab revolutions" of 2010/11.

Against this backdrop, it is fair to observe that the aim of the European Neighbourhood Policy (ENP) to develop closer relations between the EU and its neighbours, to avoid the emergence of new dividing lines and to strengthen the prosperity, stability and security of all, remains unfulfilled. More than ten years after its inception, the European Neighbourhood Policy (ENP)^[1] is under review in 2015^[2].

The challenge is therefore to coordinate all available scientific information on these countries in order to better inform the definition and implementation of the new ENP and develop concrete actions for cultural and science diplomacy as an instrument for reinforcing co-ownership and shared understanding with and within the EU Neighbourhood. Considering the protracted conflicts both in the East and in the South, it is expected that science diplomacy can help build bridges across borders and cultures, particularly where other mechanisms are not feasible or less effective.

Scope: This coordination and support action should provide a stock-taking and critical review of all available research results on the European Union's neighbouring regions, including on science diplomacy related actions^[3]. It should synthesise knowledge regarding each of the neighbouring countries and regions, taking full account of the diversities of the studied entities, and compare transformation experiences both from an EU and a **third country** perspective, across time. In so doing, it should understand the success and failures of diplomatic efforts in the regions. It should also consider relevant results of international

cooperation projects involving neighbourhood countries and all relevant existing legal instruments in various policy areas (e.g. energy), take into account the role of other state (e.g. US, Russia, and neighbours of the neighbours) and non-state actors in the various neighbouring regions.

On this basis, this coordination and support action should analyse the role science diplomacy can play and where it could be best deployed in contributing to stability, security and prosperity. It should identify concrete obstacles for science diplomacy in the concerned regions (e.g. the issue of reduced academic mobility due to on-going or frozen conflicts, visa restrictions and security controls, etc. which leads to very limited opportunities for visiting scientists and scholars). It should also provide insights into the role and relevance of the neighbours of the neighbours and non-state actors in the various neighbouring regions as well as to whether science diplomacy should be `silent diplomacy` (low profile) or could be more effective with more visibility. Supplementary research could be envisaged in order to cover the internal-external policies nexus and the role of science diplomacy in tackling some of the most urgent common challenges e.g. conflict prevention and management, job creation and migration, food and energy security, environment and climate change, radicalisation, health pandemics.

Based on lessons learnt, first elements of policy recommendations should be provided.

It should liaise between projects, provide fora for debate and discussion, and disseminate project findings to relevant stakeholders, including policy-makers, social partners and civil society organizations in Europe and **third countries**. It should draw lessons and provide policy-making recommendations that combine general observations about the Union's neighbourhood strategies and policies with regional and country-specific scenarios. The differences and similarities between the studied regions and their historical ties with Europe and the EU Member States should be duly accounted for.

Wider participation of the targeted region/s is encouraged, including practitioners from the fields of diplomacy, policy making and media.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1.5 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 coordination and support action will result in a consolidated corpus of knowledge on science diplomacy in service of the European Neighbourhood Policy as well as research insights in how it could be best deployed in the challenging context of the EU Neighbourhood. It will put together a set of recommendations for EU science diplomacy strategies, policies and concrete actions in these regions and provide an assessment of these activities against criteria that it will develop. Based on these policy-relevant insights, the coordination and support action will feed research insights into the future development of EU science diplomacy in the neighbourhood with an eye to reinforcing stability, promoting democracy and prosperity in its near abroad. It will ensure a wide dissemination of these results to the relevant stakeholders including policy-makers.

Delegation Exception Footnote: This activity directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

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

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[1] The European Neighbourhood Policy covers Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, the Republic of Moldova, Morocco, Palestine (this designation does not entail any recognition of Palestine as a state and is without

prejudice to positions on the recognition of Palestine as a state), Syria, Tunisia and Ukraine.

- [2] See the results of the consultation on the future of the ENP:
http://ec.europa.eu/enlargement/neighbourhood/consultation/index_en.htm
- [3] For EU research, see, for instance, FP7 projects CASCADE (<http://www.cascade-caucasus.eu>) and ISSICEU (<http://www.issiceu.eu>) on the Caucasus and ARAB-TRANS (<http://www.arabtrans.eu>), SAHWA (<http://www.sahwa.eu>), POWER2YOUTH (<http://www.power2youth.eu>) on the Mediterranean; the call "Europe as a Global Actor" under the Societal Challenge 6 Work Programme 2014/2015; Research and Innovation in support of the European Neighbourhood Policy" (http://ec.europa.eu/research/iscp/pdf/publications/neighbourhood_policy.pdf) and other relevant initiative such as PRIMA (Partnership in Research and Innovation in the Mediterranean Area - the Commission is in the process of launching the preparatory stages for legislative proposal to assess an initiative under Article 185 TFEU).

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	ENGAGING TOGETHER GLOBALLY
Call Identifier:	H2020-SC6-ENG-GLOBALLY-2016-2017
Topic Title:	The European Union and the global challenge of migration
Topic Identifier:	ENG-GLOBALLY-03-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	02-02-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-03-2017.html>

Specific Challenge: Migration is a central and common phenomenon in human history. The international migrant population in Europe^[1] is expected to increase in the future, due to economic and demographic factors, political unrest, conflicts and climate change. One aspect that has become increasingly clear in recent years is that, if the EU wants to successfully manage immigration flows at home, it needs to strengthen its cooperation with **third countries** of origin and transit of migrants, by fully addressing the root causes of migration and exploiting the potential of migration as a development enabler. In this vein, the European Council conclusions of June 2014 stress that migration policies need to become a stronger integral part of the Union's external and development policies through intensifying cooperation with **third countries**, while also calling for improving the link between the EU's internal and external policies. Particular account should be taken of the European Agenda on Migration^[2], the European Council Conclusions of 23 April 2015 and 25/26 June 2015, and the proposal to establish a new Partnership Framework with **third countries**^[3].

The migration crisis in the Mediterranean has put the spotlight on immediate needs. But it has also revealed much about the structural limitations of EU migration policy and the tools at its disposal. This is an opportunity for the EU to face up to the need to strike the right balance in its migration policy and send a clear message to citizens that migration can be better managed collectively by all EU actors. In recent years, important steps have been taken in this direction but their success, in areas like asylum/international protection, treatment of refugees, visas, control of borders or detention regimes, remains contested. It is thus essential that the EU continues to engage in a broad debate on the links between its migration policies and other policies with an external dimensions including, but not limited to its foreign and development policies. The European policy for asylum, refugees, visas, external border regime, detention centres should be assessed. Research should also make recommendations on how to tackle migrant smuggling and those who profit from it.

Scope: The research to address this challenge should focus on one or two dimensions that have to be comprehensively addressed. The research may also cover other issues relevant for addressing the specific challenge.

1. An integrated approach to migration and development

Building on existing studies, research should further elucidate the complex interrelation between and the implications of demographic trends, socio-economic development, environment and good governance on the one hand, and migration flows on the other, both in **third countries** of origin and transit of migrants, refugees and asylum seekers.

Research should cover existing migration management experiences in origin and transit countries focussing on compared practices and policy solutions for effective migration management including the gender dimension. In this perspective, cultural and religious traditions, local knowledge and practices that may affect attitudes to and practices of migration should also be taken into account.

Consortia are encouraged to target geographic areas of current and future strategic relevance for the EU, including those most likely to generate irregular flows. Researchers should be careful to capture the two-way relation between migration determinants and the impact of migration on the broader socio-economic infrastructure and processes of transformation in the sending countries. Given its increasing relevance, climate change and its effects, as well as other or environment-related reasons for migration, could also feature in the analysis of drivers of migration when relevant.

2. EU policy coherence and migration

Research should focus on the interplay between the Global Approach on Migration and Mobility (GAMM) and the deployment of EU foreign policy tools and processes and other European policies with an external dimension, in particular the European development, humanitarian and neighbourhood policies. Research should examine and clarify the links between the existing legislative framework developed by the EU concerning non-EU migration and the increasing use of new types of policy tools to achieve migration management related goals as well as their legal consequences for involved parties. The analysis will encompass the implementation of these policies in selected geographic areas of interest for the EU and the combined effects that such policies have on countries of origin and transit of migrants. Pre-departure policies, programmes and related activities could be the object of specific attention, along with other tools promoting mobility and descent treatment of migrants, in a legal and secure environment. Finally, the effectiveness and coherence of the overall EU approach to third-country cooperation on migration will be assessed, including aspects of inter- and intra-Member States cooperation and coordination, along with areas where further synergies are needed to create greater leverage effects between different EU policies (e.g. trade and labour markets, agriculture and fisheries). In selected cases, consortia should look at the role of bilateral migration policies conducted by Member States vis-à-vis **third countries** and their complementarity with EU level actions.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

The results of research under this topic, with its focus on sending and transit countries, should enhance policy coherence on migration between the EU and its member states. Research is thus expected to bring about greater policy coherence and effectiveness in the field of migration management and relations with **third countries** by clearly identifying and depicting good practices and effective ways to manage incoming and transiting migration at the benefit of local communities and immigrants. It should also allow a better understanding of the root causes of migration, their interplay with other determinants and the two way interaction between migration and development processes. Research will give EU and national policy-makers stronger conceptual tools to better interpret the role of the EU and its Member States as global actors in the field of migration.

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

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- [1] According to EUROSTAT on 1 January 2015, the number of people living in the EU-28 who were citizens of non-member countries was 19.8 million. Also, 34.3 million persons living in the EU-28 were born outside the EU-28.
- [2] COM(2015)240 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A European Agenda on Migration.
- [3] COM(2016)385 Communication from the Commission to the European Parliament, the European Council, the Council and the European Investment Bank on establishing a new Partnership Framework with **third countries** under the European Agenda on Migration

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	ENGAGING TOGETHER GLOBALLY
Call Identifier:	H2020-SC6-ENG-GLOBALLY-2016-2017
Topic Title:	Shifting global geopolitics and Europe's preparedness for managing risks, mitigation actions and fostering peace
Topic Identifier:	ENG-GLOBALLY-02-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	02-02-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-02-2017.html>

Specific Challenge: Europe's strategic and geopolitical environment is evolving rapidly, will always be an area of change, and in a manner that increasingly raises concerns. In recent years, violent conflicts have agitated the planet, many of them located in Europe's immediate neighbouring regions. These developments take place at a time when global geopolitics is undergoing long-term transformations challenging the traditional predominance of the West, while policies of economic austerity oblige EU Member States to manage scarce resources more effectively. These trends seriously challenge the Union's capacity for guaranteeing its citizens' security - one of its principal *raison d'être* - while also jeopardizing its aspiration of promoting European values and interests abroad. In order to evaluate and promote its preparedness for playing its role as an effective security provider, to prevent escalation, to manage and understand risks and mitigation strategies for peace beyond its borders, the EU needs to understand the implications of recent global developments and assess them against its own capacities and willingness to make synergetic use of them.

Scope: The research to address this challenge should focus on one or two dimensions that have to be comprehensively addressed. The research may also cover other issues relevant for addressing the specific challenge.

1. Recent global geopolitical developments and their implications for the European Union
 Research under this dimension should adopt a comprehensive understanding of security and explore uncertainty. Based on this, it should identify and investigate long-standing and novel - global and regional - external risks facing the EU and its Member States, in connection with ongoing initiatives and programmes for risk identification and early warning. Crises in its neighbourhood (in particular East Europe and the southern Mediterranean), such as the rise of radical Islamic groups exemplified by the expansion of the "Islamic State" in Syria and Iraq, but also conflicts and risks in other regions of the world such as in South Asia (e.g. Afghanistan) and Sub-Saharan Africa (e.g. Mali) should be examined. Research should identify the most pressing risks and areas of uncertainty

and unravel the causes, expressions and security-relevant consequences of such instable contexts.

It should examine possible inter-linkages between various geographically limited conflict situations as well as their embeddedness into regional and overarching global geopolitical developments. This necessitates a sound understanding of the political, socioeconomic, cultural and military contexts in which patterns of insecurity and uncertainty emerge, also from a historical and philosophical perspective. An inventory of contemporary risks should form the basis for identifying their implications for Europe and its security needs. Research should examine how potential risks, mitigation strategies and opportunities are perceived, and how they can, do and even should become part of novel approaches and policies in the EU, its Member States and its partners in geostrategic matters. It should investigate how the EU, its Member States and other relevant partners can act to better anticipate, prevent and respond to the identified risks, mitigation strategies and opportunities, and develop scenarios on possible EU activities using a range of policy actions and instruments, including diplomatic, economic, civilian and, if needed, military means.

2. European Union's preparedness for managing risks and opportunities, fostering peace in a crisis-ridden context

Research under this dimension should comprehensively examine the European Union's and its Member States' willingness, capacities, instruments and channels for anticipating and responding to a large array of external threats. It should contrast the EU's legal basis for external security policies, including risk analysis and management, conflict prevention and resolution, post-conflict management and peace-building, to the actual practice, both prior to and after the onset of the economic and financial crises. Analyses should draw on comparative case studies from the EU's handling of various conflicts and crises (including humanitarian ones) across the globe. Research should develop criteria for effective security cooperation in the EU, distinguishing between objectives and instruments, whether military or non-military, and contribute to the ongoing development of early-warning systems to identify emerging risks. It should also identify the political, socio-economic, technological and cultural conditions that enable or hinder the emergence of effective security cooperation in the EU. Based on this evidence, research should develop information sharing and decision support systems that facilitate cooperation, identify gaps and align the interests of diverse actors towards effective EU security policies, especially in the framework of its Common Foreign and Security Policy (CFSP). It should also provide insights on whether and how the EU can work synergistically together with individual **third countries** or international institutions like NATO.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: Research under this topic will lead to an up-to-date appraisal of global and regional risks and, as such, of Europe's evolving security agenda in the light of recent geopolitical developments affecting its neighbouring regions (in particular East Europe and the southern Mediterranean), and the entire globe. It will generate critical and forward-looking evidence of Europe's preparedness for effectively facing these threats, guaranteeing its citizens' security while managing risks and fostering peace abroad. Based on this evidence, it will provide recommendations on how to improve the EU's effectiveness as a domestic and global security provider.

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

Horizon 2020 Pillar:	Societal Challenges
Programme:	Europe in a changing world - inclusive, innovative and reflective Societies
Call Title:	UNDERSTANDING EUROPE - PROMOTING THE EUROPEAN PUBLIC AND CULTURAL SPACE
Call Identifier:	H2020-SC6-CULT-COOP-2016-2017
Topic Title:	The significance of cultural and core values for the migration challenge
Topic Identifier:	CULT-COOP-12-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	02-02-2017, 13-09-2017 (two-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-12-2017.html>

Specific Challenge: The fundamental values forming the foundation of the European Union are stated in and ensured by the Charter of Fundamental Rights of the European Union under the headings of dignity, freedoms, equality, solidarity, citizens' rights and justice. Reactions and responses to the increased flows of migrants, including refugees arriving in Europe, combined with the backdrop of the economic crisis, have put these fundamental values and the ideal of a Europe 'united in diversity' under pressure.

Migration to Europe triggers concerns about its socio-economic but also its cultural impact on European societies. Simultaneously, it raises debates about what the European core values are, what challenges them and even whether core values exist or ought to exist. Recent developments have led to escalating tensions between nationalism and Europeanisation. At the same time, civil movements have arisen across Europe, for example to assist migrants, and notably refugees, with entering and integrating into European societies. Values, be they political, philosophical, cultural, educational or religious are by nature fluid and changeable, subject to processes of historical developments, external influences, and continuous negotiation and contestation^[1]. Meanwhile, values may be experienced and expressed as fixed, sacred, absolute and non-negotiable and may be instrumentalised.

Scope: Research should explore normatively as well as empirically how migration, in particular the refugee challenge, and the response to it have impacted core values in Europe. This can include analysing how values are defined, framed, agreed upon and translated into practice in integration policies and initiatives (e.g. in citizenship tests, in cultural orientation courses in contracts and agreements with newly arrived migrants) as well as assessing the concrete effects of these practices on integration outcomes and social cohesion. The framing of values in political and public discourses should also be addressed. Insights from existing public opinion surveys should be included and additional surveys may be conducted as needed. Research should explore what values are considered core and fundamental to people, to what extent these values are shared in Europe and how they are justified politically,

culturally, religiously or otherwise. It should also explore the (perceived) role of these values in the integration process.^[2] Research should also study the historical and philosophical development, the legal foundations, the artistic representations, and the contemporary contestations and re-conceptualisations of these core values and ideals. Furthermore, research should focus on the impact of cultural and human encounters on core values and traditions as well as on the ongoing re-interpretations of these. A particular attention should be dedicated to cultural memory that may become at the same time more intangible and more essential for people whose historical heritage has been deliberately destroyed. The gender dimension should be an integral part of this part of the research.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: The research is expected to improve the knowledge base on the impact of migration, and in particular the refugee challenge, on core values in Europe. It will provide knowledge on what are considered core values across Europe, what core values are shared and to what extent, which core values are contested, and how core values are transmitted in a modern society. The research will provide evidence on the long-term implications of the impact of the refugee challenge on core values in Europe and how these may evolve in the future, also taking into account the cosmopolitisation of European societies.

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

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[1] See HERA Cultural Encounters Joint Research Programme - <http://heranet.info/dimecce/index>

[2] As addressed in COM(2016) 377 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Action Plan on the integration of **third country** nationals.

Horizon 2020 Pillar:	Societal Challenges
Programme:	Secure, clean and efficient energy
Call Title:	COMPETITIVE LOW-CARBON ENERGY
Call Identifier:	H2020-LCE-2016-2017
Topic Title:	Joint Actions to foster innovative energy solutions in renewable energy technologies
Topic Identifier:	LCE-35-2017
Type of Action:	ERA-NET-Cofund ERA-NET Cofund
Deadline(s):	16-02-2017, 07-09-2017 (multiple cut-off)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-35-2017.html>

Specific Challenge: The EU needs to accelerate the transformation of its energy system by bridging the gap between research and the market with innovative solutions to obstacles in the development of low carbon technologies.

Bridging this gap often requires substantial volumes of investment which cannot be allocated by individual countries or by the European Commission on their own. European Union funding is only a limited part of the total funding available across Europe. In such cases, mobilising the necessary investment can only be achieved by pooling together financial resources from multiple countries, the Commission, and the private sector. This is a challenge because the funding landscape is complex.

One of the objectives of the SET Plan is to create funding synergies on such a big scale by organising joint programming actions between the entities responsible for public funding programmes and the Commission. ERA-NETs are the main instrument for joint programming actions within the SET Plan, and they also contribute to achieving the objectives of the European Research Area (ERA). In addition, they can play a key role in achieving the goal of the Energy Union of moving away from a fragmented system characterised by uncoordinated national policies and towards an integrated European R&I approach which accelerates the transformation of the energy system. It is therefore politically important to support ERA-NETs and to facilitate their existence as much as possible.

Topics suitable for ERA-NETs will be identified and discussed in close collaboration with Member States'/Associated Countries' representatives through the SET Plan governance bodies, and with representatives of the Energy configuration of the H2020 Programme Committee.

Scope: Proposals should aim at coordinating the research and demonstration efforts of the participating Member States, Associated Countries and Regions in the areas and challenges targeted in the 'Renewable Energy Technologies' sections of the Competitive Low-Carbon Energy (LCE) call.

Proposals should pool the necessary financial resources from participating national or regional research programmes with a view to implementing a joint call for proposals resulting in grants to third parties with EU co-funding in this area. Proposers are encouraged to implement other joint activities, including additional joint calls without EU co-funding.

Participation of legal entities from **third countries** is encouraged in the joint call as well as in additional joint activities, on the basis of common interest and mutual benefit.

Expected Impact: It is expected that this action will help to:

- Establish long-lasting joint programming research efforts between Member States/Associated Countries in areas of common interest.
- Accelerate the time to market of affordable, cost-effective and resource-efficient technology solutions which decarbonise the energy system in a sustainable way.
- Encourage industrial participation and leverage private sector investment.
- Strengthen the European industrial technology base, thereby creating economic growth and jobs in Europe.
- Reduce the environmental impact of the energy system.
- Make a measurable contribution to the political objectives of the Energy Union, the SET Plan, and the European Research Area.

Delegation Exception Footnote: This activity directly aimed at supporting public-public partnerships with Member States and Associated Countries, technology platforms with industrial partners is excluded from the delegation to INEA and will be implemented by the Commission services.

Horizon 2020 Pillar:	Societal Challenges
Programme:	Smart, green and integrated transport
Call Title:	2016-2017 Mobility for Growth
Call Identifier:	H2020-MG-2016-2017
Topic Title:	Identification of gaps, barriers and needs in the aviation research
Topic Identifier:	MG-1-5-2016-2017
Type of Action:	CSA Coordination and support action
Deadline(s):	01-02-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-1-5-2016-2017.html>

Specific Challenge: The Advisory Council for Aviation Research and Innovation in Europe (ACARE) has developed in 2012 a new Strategic Research and Innovation Agenda that describes the actions needed to meet the highly ambitious goals set by Flightpath 2050. In order to ensure the achievement of these goals, regular assessment of progress, gaps and barriers is necessary and strong collaboration between all European stakeholders is required. In 2017 attention will also be paid to collaborations with non-European stakeholders where relevant, in order to solve common challenges, leverage resources, mitigate risks and establish long-term relationships.

Scope: The actions should address one of the two following areas:

1. Provide on an annual basis a review of the state of the art of research and innovation including international benchmarking, identify gaps in the research landscape, bottlenecks to innovation (regulation, financing) and formulate recommendations to address those. The actions should address one or several of the following research domains of the ACARE Strategic Research and Innovation Agenda:
 - Mobility
 - Competitiveness
 - Environment and energy
 - Safety and security

A close cooperation with the relevant ACARE Working Groups and involvement of all main relevant stakeholders should be ensured. The actions should take into consideration R&D synergies with other sectors (e.g. batteries, composites, product lifecycle management). Special attention should be paid on the economic, environmental and mobility aspects of the long distance traveling.

2. Set up an open platform between EU and relevant **third countries** to reach out to research and innovation stakeholders (industry, research establishments and academia) and aviation research and innovation funding authorities in order to facilitate and increase collaboration along common research and innovation roadmaps. Proposers should take into account achievements of past and on-going cooperation initiatives such as the H2020 coordinated calls with Canada, China and Japan, and previous support actions^[1]. Proposals can include organisation of workshops and studies to identify win-win opportunities, areas of common interest, barriers and solutions for improved cooperation in research and technology development as well as recommendations for future actions. Proposers should demonstrate relevant background in aviation research cooperation with **third countries**.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 to 2 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: The actions will support to reach the goals set by the aviation sector in a more efficient and optimal way thorough assessment of the progress towards Flightpath 2050 goals^[2], identification of future needs, gaps and barriers, and make recommendations for further actions. The actions will result also in providing solutions for improved research infrastructure for the European aviation sector adapted to the needs for achieving the long term goals. The actions will support also a more efficient use of the available research capabilities in Europe through creating new links between the stakeholders of EU Member States, Associated Countries and **third countries**, stimulating the creation of transnational cooperation mechanisms in the aviation research.

Delegation Exception Footnote: The 2017 part of this activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders is excluded from the delegation to the Innovation and Networks Executive Agency (INEA) and will be implemented by the Commission services.

Cross-cutting Priorities: International cooperation

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[1] Seventh Framework Programme support actions with Canada(CANNAPE), Brazil - Latin America (Coopair-LA), Japan (SUNJET), China (e.g. Aerochina, GRAIN2), South Africa (AeroAfrica-EU), Ukraine (AeroUkraine) and **United States of America** (Cooperate**US**) & EU-**US** Memorandum of Cooperation on civil aviation research in addition to the multinational aviation research forum (IFARs).

[2] <http://www.acare4europe.org/sria/flightpath-2050-goals>

Societal Challenges, Industrial Leadership

Horizon 2020 Pillar:	Societal Challenges, Industrial Leadership
Programme:	Food security, sustainable agriculture and forestry, marine and maritime and inland water research, Climate action, environment, resource efficiency and raw materials, Leadership in enabling and industrial technologies (LEIT)
Call Title:	Sustainable Food Security – Resilient and resource-efficient value chains
Call Identifier:	H2020-SFS-2016-2017
Topic Title:	Advancing basic biological knowledge and improving management tools for commercially important fish and other seafood species
Topic Identifier:	SFS-21-2016-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	14-02-2017, 13-09-2017 (two-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-21-2016-2017.html>

Specific Challenge: More efficient fisheries management, based on science, is needed to support the continued SFS-20-2017 need to manage European fisheries, the global rise in seafood demand and the need to maximise fish production sustainably. Our understanding of the biology and ecology of several fish and other seafood species is far from complete for stocks fished in European seas and in particular for multi-species fisheries. This also applies in some areas outside EU waters where EU fleets fish. Relevant stocks include species in international waters or in the waters of **third countries** with which the EU has signed sustainable fisheries partnership agreements. For species fished outside EU waters, the challenge often extends beyond gathering knowledge of biological characteristics to include research on management tools and appropriate stock assessment models.

Scope: Proposals should focus on an identified number of fisheries that are important for the fishing fleets of multiple EU countries and should respond to the priorities of Regional Fisheries Management Organisations (RFMOs) and of the Common Fisheries Policy (CFP). The proposals should review existing knowledge and perform multidisciplinary research to help close important knowledge gaps that have a significant impact on the management of key target and by-catch species and that currently limit the advice that relevant bodies can give. Research results should be able to be applied immediately to provide a more solid knowledge base and advice on fisheries management.

Proposals should cover one of the following geographical scopes:

Strengthening the knowledge base for resilient and resource-efficient fisheries in EU waters and in international waters covered by the North-East Atlantic Fisheries Commission and the General Fisheries Commission for the Mediterranean.

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

Projects funded under this topic will by default participate in the Pilot on Open Research Data in Horizon 2020, with the option to opt-out, as described in the introduction.

Expected Impact: To improve fisheries management under the Common Fisheries Policy, including outside of EU waters, proposals should:

- Increase the knowledge base, share new findings, provide new tools and promote their uptake by end-users to more efficiently manage fish stocks of interest to the EU, both inside and outside EU waters.
- Increase the long-term profitability of the EU fleet and increase the number of jobs in the fishing sector.
- Improve market supply and food security in Europe through a significant, predictable and sustainable provision of seafood from all areas in which EU vessels operate.
- Contribute to adjusting fishing exploitation to levels that ensure the maximum sustainable yield.
- Improve the professional skills and competences of those working and being trained to work within the blue economy.

Cross-cutting Priorities: International cooperation