



International Cooperation in Horizon 2020

EU and Australia

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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:	Closing the water gap
Topic Identifier:	SC5-33-2017
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/sc5-33-2017.html>

Specific Challenge: Growing water demands, mismanagement of water use and climate change are increasing the stress on water supply, water bodies, and associated ecosystems and existing infrastructures, and emphasise the need to close the water cycle gap, by reconciling water supply and demand in both quantitative and qualitative terms. Research needs to be deployed in a number of scientific fields to improve the knowledge base on water resources availability and use and must be systematically combined with a socio-economic approach investigating the questions of adaptation strategies, participation, behaviour and commitment of stakeholders. This challenge is of European interest and will require a concerted action. To be more effective and increase the added value of related investments, the efforts and strategic research agendas of the many funding networks and organisations existing in Europe need to be integrated to establish transnational and trans-disciplinary research and innovation actions.

Scope: The action will support delivering on priorities identified in the Strategic Research and Innovation Agenda of the Water Joint Programming Initiative (JPI), by pooling together the necessary financial resources from the 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. The joint call should address research and innovation to support the implementation of EU water policy, in particular on the thematic area “Closing the Water Cycle Gap” of the Water JPI Strategic Research and Innovation Agenda, specifically the sub-themes of Enabling Sustainable Management of Water Resources; and Strengthening Socio-economic Approaches to Water Management. Water resources observation and modelling will be required to better understand hydrological processes and to analyse and forecast the effect of management options, in order to support improved decision-making to ensure the long-term viability of water resources and to enable the integrated management of water resources at the national, basin, and global scales. Observation and modelling should also help to mobilise investments into innovation water management and use solutions in line with the objective of creating a circular economy.

In line with the EU's strategy for international cooperation in research and innovation international cooperation with international partners is encouraged. Proposals should

include other joint activities including additional joint call(s) without EU co-funding. The proposal should demonstrate that these co-funded other activities exclude any overlaps with related ongoing actions co-funded by the EC. 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 is encouraged in the joint call as well as in other joint activities including additional joint calls without EU co-funding. 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) for the co-ordination costs of additional activities.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 10 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: Projects are expected to lead to:

- improved use of scarce human and financial resources in the area of water research and innovation;
- reduced fragmentation of water research and innovation efforts across Europe;
- improved synergy, coordination and coherence between national and EU funding in the relevant research fields through transnational collaboration;
- improved implementation of research and innovation programmes in these fields through exchange of good practices;
- strengthened international leadership of European research in this area making the Water JPI, in collaboration with the European Commission, a privileged and attractive partner for global cooperation in research and innovation, in the context of the **Belmont Forum** and other international alliances;
- contribution to the implementation of the objectives of the JPI on Water;
- contribution to the implementation of the Sustainable Development Goals (SDGs), in particular SDG 6 'Ensure availability and sustainable management of water and sanitation for all' and SDG 13 'Take urgent action to combat climate change and its impacts', as well as the conclusions of the COP21 Paris Agreement^[2].

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

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

[2] The Paris Agreement was adopted at the 21st Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change, in Paris on 12 December 2015.

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:	ERA-NET on Climate Services Roadmap: Cross-sector impact assessments (evaluation, comparison and integration)
Topic Identifier:	SC5-30-2017
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/sc5-30-2017.html>

Specific Challenge: Following the outcome of the European Workshop 'Towards a European Market of Climate Services' (18th March, 2014), a European Roadmap for Climate services has been prepared by an independent group of experts and presented in a subsequent European Conference on 17th March 2015. The Roadmap identifies a series of challenges and specific actions that need to be undertaken by various actors in Europe, in order to strengthen the European market of climate services. In the Horizon 2020 Work Programme of 2015 an ERA-NET Cofund action was already launched with the JPI Climate for developing scientific advances in support of climate services, involving mandated governmental research centres in the design of co-aligned actions. The challenge is to support the implementation of the Roadmap, building upon the layer of activities already launched, in order to support knowledge-based decision making, both in the public and private sector, to avoid risks and seize opportunities towards sustainable development. This requires cross-sectoral and robust impact assessments that nest climate change information into others socio-economic changes, as well as taken into account adaptation policies to reduce vulnerabilities and increase resilience in future.

Scope: The action will support the implementation of the roadmap for climate services and align actions of the various national entities of Member States and Associated Countries active in climate services and climate research by developing, evaluating, and integrating impact assessments, methodologies, and models while adding to the development of Shared Socioeconomic Pathways (SSP). It requires transdisciplinary research – co-designed with key stakeholders – across key economic/societal sectors, including food, water, energy, health, finance, investment, equity and security. This action should be implemented through a close cooperation with Member States grouped around the JPI Climate, should take into account relevant actions already carried out in the first Horizon 2020 programming cycle and within other relevant JPIs, and should benefit from cooperation with advanced programmes and projects on climate regional modelling and knowledge gaps, such as the one foreseen in this work programme for 2016 (SC5-2, SC5-3). Furthermore, in line with the strategy for EU international cooperation in research and innovation (COM(2012)497), it should open

cooperation at international level with other key initiatives such as the **Belmont Forum** or at regional level in Latin America and/or Africa.

The proposal should pool the necessary financial resources from the participating national (or 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 may include, in addition, publicly-funded research performing organisations that will contribute with their own resources (in-kind contributions from their institutional funding). In this case the joint call should include a separate topic for the participating research performing organisations. They will carry out the transnational projects resulting from this topic themselves. Their participation in the ERA-NET Cofund action must be mandated by the national/regional authorities in charge (normally the responsible Ministry).

Proposals should include other joint activities including additional joint calls without EU co-funding, while demonstrating at the same time that activities exclude any contextual or financial overlaps with related ongoing actions co-funded by the EC. 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, including from **Belmont Forum** members and/or Latin America or Africa, is encouraged in the joint call as well as in other joint activities including additional joint calls without EU co-funding. 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) for the coordination costs of additional activities.

The Commission considers that a proposal requesting a contribution from the EU in the range of EUR 13 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 results of the projects launched through this ERA-NET are expected to:

- substantially increase the capability of quantifying the impacts of climate change at local/regional level in a cross sectoral risk-assessment framework including better quantification of uncertainties;
- increase the potential of using climate impact data in operational climate services;
- increase the integration of economic and impact model assessments in support of adaptation and mitigation decisions;
- align public funding on actions in support to the development of climate services within the JPI Climate member countries and beyond, including others relevant JPIs;
- support a network of key European research performing organizations;
- strengthen international leadership of European research, in particular its contribution to the Global Framework for Climate Services (WMO-GFCS), the Inter-Sectoral Impact Model Intercomparison Project (WCRP/ISI-MIP) and the Future Earth Programme, and eventually to IPCC assessments, UN-SDGs and the **Belmont Forum**;
- contribute to implementing the Sustainable Development Goals (SDGs), in particular SDG 13 'Take urgent action to combat climate change and its impacts', as well as the conclusions of the COP21 Paris Agreement.

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

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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:	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 Asia -Pacific as a strategic region for Europe
Topic Identifier:	ENG-GLOBALLY-06-2017
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-06-2017.html>

Specific Challenge: The **Asia-Pacific** is a large and diverse region, encompassing **Industrialised Countries**, Emerging Economies and developing countries. Perhaps due to this diversity, and save a few specific cases, the European Union has lacked a strategic approach towards the region, despite strong economic interests and heightened security concerns in the area. Several EU Member States have adopted an active bilateral approach towards key partners, but the European Union has mostly failed to speak with one voice in relevant fora. Nowadays the multiple and complex challenges shared by the two regions, ranging from climate change and sustainable development to conventional and non-conventional security challenges, are opening up new opportunities for the EU to become more involved in the region beyond economic cooperation although differences remain in areas like human rights or democratic governance. In order to re-think its role and strategy for the **Asia-Pacific**, and to fully tap the potential for action at European level, the European Union needs to be supported by sound research showing the concrete implications of further engaging with and in the region in a number of sectorial and geographic areas.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1. Regional integration in South-East Asia and its consequences for Europe

South-East Asia has seen, since 1967, the most ambitious project of regional integration outside of Europe, pursued through the Association of Southeast Asian Nations (ASEAN). It has followed a different integration path to Europe, based on dialogue and non-interference rather than convergence and law. The region has an immense social, cultural and economic potential, but it still faces the challenge of developing a regional identity with both an internal dimension (how to nourish a sense of belonging) and an external dimension (how to engage with foreign powers, such as China, India, the United States, Japan and the EU). The process of nation-building in the ten ASEAN countries and other non-ASEAN countries is incomplete or nascent. It is also confronted with widespread

poverty, disruptive migration flows, inter-ethnic conflicts and even territorial disputes. For the EU to engage effectively in South-East Asia and manage the variety of countries and cultures present in the region, it is necessary to understand what ‘region’ means to the peoples of these countries within and beyond the ASEAN context. Research is thus necessary on the mobility of people, knowledge, ideologies, cultures, goods and capital within the region and their influence on the emergence of a South-East Asian identity which would help the EU and its Member States to forge coherent, adapted and culturally relevant foreign policies with all countries in the region.

To that effect, research should also underpin the implementation of the Joint Communication on EU-ASEAN relations in the different sectors and in particular in the field of sectorial cooperation.^[1]

2. Governance in and of the **Pacific** as a challenge for Europe

One of the major strategic challenges in the Asia-**Pacific** region relates to the governance of the **Pacific** itself (including Overseas Countries and Territories). The **Pacific** Islands region represents a unique diversity of nation-state formations and regional and intergovernmental mechanisms, which is experiencing major challenges regarding the protection of its exceptional natural environment, threatened in particular by climate change. The small islands developing states (SIDS) of the **Pacific** therefore have a central role in the contestation over, competition for, and conservation of some of the world’s key resources, far surpassing their modest size in terms of land mass and population. As the second largest donor of development assistance to the region, the EU’s interests and activities in the **Pacific** are highly significant and hold important potential for the future. However, the region’s new geopolitical currency is a willingness to seriously engage with emerging definitions of an equal, two-way partnership relation in **Pacific** terms that expands beyond the monetary dimension of cooperation. The EU is thus at a cross-road in its engagement with the **Pacific**. Research should examine the emerging governance structures in the region, in terms of sovereignty, state-making, policy autonomy and aid dependency, by paying close attention to issues such as trade and transport, fisheries management, climate change, biodiversity, social inclusion, democracy, blue/green growth and and political CFSP aspects. Research should also comparatively analyse the role and impact of external actors in the region, prominently focussing on the European Union and its Member States but also take account of the influence of, and the interplay with global (China, USA) and regional (**Australia**, New Zealand) powers in the region. Building on existing research, lessons should be drawn from the **Pacific** experience for devising new approaches, as well as on how Europe can effectively respond to the strategic challenge posed by the **Pacific**.

The participation of partners from third countries and regions in the targeted geographic areas in proposals submitted to this topic is strongly encouraged.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 2.5 million for each dimension 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 is expected to provide a comprehensive overview of the strategic challenges that Europe faces in the various zones of the Asia-**Pacific** region, and on a range of relevant subjects. Based on this, it will inform different foreign policy actors, processes and initiatives at EU and Member State-level either with a sectorial or geographic focus, especially by providing essential insights on the legal, cultural and socio-economic aspects surrounding their implementation.

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

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[1] JOIN(2015)22 Joint Communication to the European Parliament and the Council - The EU and ASEAN: a partnership with a strategic purpose.

Horizon 2020 Pillar:	Societal Challenges
Programme:	Health, demographic change and wellbeing
Call Title:	Personalised Medicine
Call Identifier:	H2020-SC1-2016-2017
Topic Title:	Global Alliance for Chronic Diseases (GACD) prevention and management of mental disorders
Topic Identifier:	SC1-HCO-07-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	11-04-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-hco-07-2017.html>

Specific Challenge: The Global Alliance for Chronic Diseases^[1] (GACD) call will focus on implementation research proposals on child, adolescent and adult age onset mental disorders^[2] including, but not limited to, dementia, depression, schizophrenia, bipolar disorders, alcohol- and drug-use disorders, etc., in low- and middle-income countries (LMIC) and/or in vulnerable populations^[3] in **High Income Countries** (HIC).

Mental health is an integral part of health as underlined in the World Health Organisation (WHO) definition of health as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'.

Mental disorders represent an ever-increasing burden, to all ages of the population, challenging mental health and health systems. Depression affects 350 million people in all communities across the world and represents the third leading contributor to the global disease burden^[4]. Dementia affects 47.5 million people worldwide with 58% of people living with dementia in low- and middle-income countries^[5]. Global costs associated with mental disorders were estimated to € 2.2 trillion in 2010 and are expected to rise to € 5.3 trillion by 2030^[6].

Mental disorders place a heavy burden on individuals, families, communities and societies. They also increase the risk of co-morbidities and social exclusion. There are obstacles to achieving effective prevention, early identification and management of mental disorders and to ensuring patients' adherence to therapies. Effective management approaches exist but their implementation in LMIC and vulnerable groups in HIC is hampered by socioeconomic and contextual factors: gender; the stigma associated with mental disorders at work, in health care and communities; the role of traditional medicine in dealing with mental health including trauma; and barriers to accessing care. There is a need to strengthen the evidence base for the contextual scalability of interventions of promising or proven effectiveness for the promotion of mental health and the early identification and management of patients, taking into account the needs of different population groups across the life course.

Scope: Proposals must focus on mental disorders as defined by the WHO (see above), and must focus on implementation research in LMIC, and/or in vulnerable populations in HIC.

Proposals must build on interventions with promising or proven effectiveness (including cost-effectiveness) for the respective population groups under defined contextual circumstances. Gender-responsive interventions should be addressed, wherever relevant.

The aim should be to adapt and upscale the implementation of these intervention(s) in accessible, affordable and equitable ways in order to improve the prevention and management of mental disorders in the community in medical health care, psychosocial, and public health and other settings and fields. Interventions should meet conditions and requirements of the local health and social system context and address any other contextual factors identified as possible barriers. When economic factors prevent access to effective, low-cost appropriate medication and other management and treatment modalities, proactive policy and strategies should be encouraged to ensure the availability of such medication or other management/treatment modality or means should be found to overcome these barriers.

Each proposal should:

- Focus on implementation research addressing prevention, and/or early identification and/or management strategies derived from existing knowledge about effective interventions.
- Include a strategy to test the proposed model of intervention and to address the socioeconomic and contextual factors of relevance to the targeted region and community.
- Lead to better understanding of key barriers and facilitators at local, national and international level that affect the prevention and management of mental disorders.
- Include health economics assessments as an integral part of the proposed research, including considerations of scalability and equity.
- Propose a pathway to embed the intervention into policy and practice addressing:
 - A strategy to include policy makers and local authorities (possibly by being part of the consortium), as well as other relevant stakeholders such as community groups, patient groups, formal and informal carers and any other group, where ever relevant from the beginning of the project, which will contribute to the sustainability of the intervention, after the end of project.
 - Relevance of project outcomes/evidence for scaling up the intervention at local, national and international level and then scaled-up appropriateness with respect to the local social, cultural and economic context.
 - Aspects of stigmatisation and potential equity gaps e.g. due to gender or age.

Proposal must address one of or combinations of the following items:

- Structural interventions or evidence based policies designed to improve mental health outcomes;
- Early case detection and other secondary or tertiary prevention strategies as well as modalities of treatment, care and access to care which are amenable to scale-up. Prevention, early identification and treatment may include validated pharmacological, psychotherapeutic, psychosocial support and other approaches of relevance to mental disorders such as accessibility to and enhancing compliance with the intervention, also considering cultural context. Wherever relevant, comorbidities and their impacts on prevention and treatment strategies should be taken into account;
- Ways to empower people with mental health problems as well as professional and informal care-givers like families according to the context are also relevant;
- Exploring the scale-up of family/community engagement in patient treatment and care, without pre-empting their living.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 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: (one of or combinations of)

- Advance prevention strategies and implementation of mental health interventions, alleviating global burden of mental disorders;
- Establish the contextual effectiveness of mental health intervention(s), including at health systems level;
- Improve tailored prevention and treatment; Develop affordable management and treatment modalities for mental disorders and expand access to care;
- Inform health service providers, policy and decision makers on effective scaling up of mental health interventions at local, national and regional levels, including affordability aspects for users and health providers;
- Reduce health inequalities and inequities, including due consideration of gender and age issues where relevant, in the prevention, treatment and care of mental disorders at both local and global levels;
- Maximise the use of existing relevant programmes and platforms (e.g. research, data, and delivery platforms);
- Contribute to the United Nations' Sustainable Development Goals 3^[7], the Global Action Against Dementia and the First World Health Organisation (WHO) Ministerial Conference on Dementia^[8], the WHO Mental Health Action Plan 2013-2020^[9], and/or the 2015 European Council Conclusions on dementia^[10].

The GACD aims to coordinate research on chronic diseases at global level in order to enhance knowledge exchange across individual projects, and to better understand the impact of socio-economic, cultural, geopolitical and policy on research findings, so as to appropriately adapt health interventions to different geographical, economic and cultural settings. Research under GACD involves regular exchange of research findings and information across participating projects by means of cross-project working groups and annual joint meetings. Wherever feasible, projects should harmonise and standardise their data collection and exchange data.

Applicants must budget for annual costs of having two team members participate in one annual face-to-face meeting of the Global Research Network (location to vary annually). Attendance at this meeting is mandatory for 2 team members, with at least one participant from the LMIC team where relevant. Teams are strongly encouraged to include one junior team member in each annual meeting.

Cross-cutting Priorities: International cooperation, Gender

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- [1] <http://www.gacd.org>
- [2] Mental and behavioural disorders (F00-F99) of WHO's International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10): <http://apps.who.int/classifications/icd10/browse/2016/en#/V>
- [3] Applicants must demonstrate that the proposed population under investigation in HIC is considered as vulnerable.
- [4] WHO Fact sheet nr 369, 2012
- [5] WHO Fact sheet nr 362, 2015

- [6] Bloom, D.E., Cafiero, E.T., Jané-Llopis, E., Abrahams-Gessel, S., Bloom, L.R., Fathima, S., Feigl, A.B., Gaziano, T., Mowafi, M., Pandya, A., Prettner, K., Rosenberg, L., Seligman, B., Stein, A.Z., & Weinstein, C. (2011). The Global Economic Burden of Noncommunicable Diseases. Geneva: World Economic Forum.
- [7] <http://www.who.int/topics/sustainable-development-goals/targets/en>
- [8] <http://www.who.int/mediacentre/events/meetings/2015/global-action-against-dementia/en>
- [9] WHO Mental Health Action Plan 2013-2020, in particular Objective 2, global target 2 or Objective 3, global target 3: http://www.who.int/mental_health/action_plan_2013/en;
- [10] 2015 European Council Conclusions on dementia: 'Living with dementia: improving care policies and practices': http://www.consilium.europa.eu/en/meetings/epsco/2015/12/st14968_en15_pdf

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:	Geological storage pilots
Topic Identifier:	LCE-30-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	05-01-2017 (single-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-30-2017.html>

Specific Challenge: The EU is committed to an overall reduction of greenhouse gas emissions of at least 80% by 2050. Nonetheless, fossil fuels will continue to be used in Europe's power generation as well as in other industrial processes for decades to come. Therefore, the 2050 target can only be achieved if the emissions from fossil fuel combustion in the power generation sector and energy intensive industries are eliminated from the system. This will require the application of Carbon Capture and Storage (CCS). A key challenge in the short-term for driving CCS to deployment is the development of geological storage.

Scope: Projects should enable, under "real life" conditions, the development and demonstration of best practices for the entire storage cycle, from site characterisation to operation, including key components of CO₂ transport infrastructure, monitoring and mitigation/remediation of leakage, and including education and training.

Focus should be on progressing technologies that already reached TRL 4-5 to TRL 6 (please see part G of the General Annexes).

Knowledge sharing with a wide range of stakeholders, as well as early and sustained engagement and involvement of concerned communities through targeted information and dissemination activities, is essential.

In this particular context, new types of interactions between societal actors are encouraged. Projects should identify the key drivers and influencers of public attitude, identify distorted perceptions and develop sound arguments to address them.

International cooperation is encouraged, in particular activities between EU project(s) under this topic and non-EU projects (e.g. from **Australia** and/or North-America).

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 9 to 16 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: Demonstration of safe and environmentally sound CO₂ storage will play a key role in optimising the safe operation of storage sites and in fine-tuning regulatory issues, in promoting confidence in CO₂ storage and building public awareness of CCS. Pilot-scale demonstration projects should contribute to accelerating the development and deployment of CCS through an enhanced and effective cooperation in research and innovation between various stakeholders and Member States/Associated Countries, thereby allowing a more efficient use and stronger leverage of financial resources and promoting knowledge sharing.

Cross-cutting Priorities: International cooperation

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:	Protection of all road users in crashes
Topic Identifier:	MG-3.2-2017
Type of Action:	RIA Research and Innovation action
Deadline(s):	26-01-2017, 19-10-2017 (two-stage)

Participant Portal Weblink:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-3.2-2017.html>

Specific Challenge: The continued introduction of active safety systems has the potential to reduce accidents. Nevertheless, the risk of collision and particular crash situations will still remain. An approach will be needed that will ensure improved crash safety in those circumstances. A number of societal trends add to this challenge such as the ageing population, an increase in the number of powered and non-powered two-wheelers and the introduction of green, light, sub-compact cars.

An important step forward will be to develop fully integrated safety systems and deploy them so that they provide better protection for all road users. Emerging new vehicle types and the possible use of Cooperative Intelligent Transport Systems (C-ITS) would need to be considered. The application of advanced safety features and the development of personal safety equipment can also be seen as ways to reduce fatalities and injuries to pedestrians, cyclists and riders of Powered Two Wheelers (PTWs). In addition, simulation tools (including new virtual human body models) will need to be developed to assess new safety systems and determine their effectiveness and potential impact.

With respect to competitiveness, user protection has been an area where European industry has exhibited technology leadership, but this is now being increasingly challenged worldwide.

Scope: Proposals should focus on one or several of the following aspects:

- Vehicle based systems such as: solutions for improved crash compatibility; optimisation of restraint systems by including pre-crash information; and methods and requirements to assess safety performance in traffic of extremely low-mass vehicles.
- Personal protection such as: development and testing of focused personal safety equipment for various road user categories, to warn them adequately and/or protect them in the most safety critical situations; and integrated assessment methods for the overall safety of road users and solutions that enhance their protection.
- Crash simulation such as: computationally efficient and robust crash simulation tools; implementation of virtual testing; and development of virtual human body models of road users and situations not currently available.

Proposed actions should focus on fully integrated safety systems.

Consideration should be taken of gender aspects such as body structure and stature and other demographic factors such as the disabled (persons of reduced mobility), ageing, obesity, etc.

Participation of SMEs with proven experience in these areas is encouraged.

Links with Member State initiatives in this area are encouraged.

In line with the strategy for EU international cooperation in research and innovation^[1], international cooperation is encouraged, in particular with **Industrialised Countries** (i.e. US, Japan, Canada, **Australia**) and Emerging Economies (primarily China, India, Brazil). Proposals should foresee twinning with entities participating in projects funded by US DOT^[2] to exchange knowledge and experience and exploit synergies.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 9 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: By providing an integrated approach to safety systems, actions are expected to make a direct contribution to the reduction of fatalities and severity of injuries, as well as the number of injured persons. They will deliver measures that will make the 'triangle' of European road users, vehicles and infrastructure safer. In this way, actions are expected to contribute to important savings in the health system linked with the reduction of accidents and injuries.

Proposers are expected to demonstrate how the project results will have a significant impact on road safety casualties and injuries and how they will make an effective contribution to the standardisation of products and testing techniques.

A credible strategy is expected to demonstrate the future full scale manufacturing of critical products developed in the project in Europe.

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

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[1] COM(2012)497

[2] United States Department of Transportation (<http://www.dot.gov>).