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Horizon 2020
Work Programmes 2014/15

Opportunities for Researchers from the Socio-economic Sciences and Humanities (SSH)

Analysis of SSH-relevant Topics

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Introduction

This document lists current funding opportunities with relevance to Socio-economic Sciences and Humanities (SSH) in various research areas within Horizon 2020.

Horizon 2020 aims at fully integrating SSH in each of its pillars and specific objectives. The framework regulation states that "In relation to the societal challenges, social sciences and humanities are mainstreamed as an essential element of the activities needed to tackle each of the societal challenges to enhance their impact." SSH is therefore a cross-cutting issue and embedded in the whole framework programme. While SSH research aspects are particularly present in the societal challenge 'Europe in a changing world: Inclusive, innovative and reflective societies', which has the specific objective of supporting social sciences and humanities research, they are also present in all other challenges and in other parts of Horizon 2020.

To assist SSH researchers in identifying funding opportunities, the European Commission (EC) has established a new search engine within its online "Participant Portal".

Certain topics with substantial SSH aspects have been "flagged" by the EC as SSH relevant topics. The search engine offers the possibility to directly search for these SSH "flagged" topics. It also allows for keyword and full-text searches.

This document compiles the "SSH flagged topics" and – in addition – also presents the funding opportunities in other parts of Horizon 2020, such as the ERC. It is based on an analysis of SSH relevant topics carried out in the unit of the EC Directorate-General for Research and Innovation that is responsible for Socio-economic Sciences and Humanities.

The document serves as a guideline and is meant to demonstrate the wealth of possibilities for scientists in Socio-economic Sciences and Humanities within Horizon 2020. Included are topics that contain SSH related topics with substantial relevance to the SSH community. SSH aspects of the topics are indicated by bold text. Some topics where SSH research aspects dominate the text can be regarded as "SSH dedicated topics" and they are labelled accordingly. In addition to the information on dedicated SSH topics or topics with substantial SSH research aspects, short information (titles and link to the Participant Portal) on topics with minor SSH aspects are included. The first Horizon 2020 Work Programme is bi-annual and covers the years 2014 and 2015. This document includes information on topics for both years. But while 2014 topics are included in length, information on 2015 topics is limited to the topic title and the link to the Participant Portal.

Topics that clearly address e.g. research funding agencies and not researcher, such as ERA-Net topics, were not included.

Researchers are strongly encouraged to screen the Work Programmes themselves, in order not to lose out on research opportunities offered to their specific interest. In any case, the Work Programmes need to be read in more detail to be aware about the overall approach of the Theme, the context of the topics, rules of participation and other specific requirements. At the same time, the topic texts may include footnotes with more information, which could not be included in the compiled topic texts within this document.

Of special importance are the "type of action" and the eligibility criteria connected to it. These and any other relevant information can be found in the specific "Work Programme" chapter and the specific call documents". All the relevant documents can be downloaded from the "Participant Portal". The specific links are provided for every call and topic in the respective chapters.

DISCLAIMER

Information on calls might be subject to change. Researchers need to consult the Participant Portal for receiving the latest information on calls. Due to the launching phase of Horizon

2020, parts of the Work Programme that relate to 2015 (topics, dates) are provided at this stage on an indicative basis only. Such Work Programme parts will be decided during 2014.

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1.   **Horizon 2020 Priority: Societal Challenges**

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1.1   **Societal Challenge 1 Health, Demographic change and Wellbeing**

Call – "Personalising health and care"

Call Identifier: H2020-PHC-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics

The Call "Personalising health and care (H2020-PHC-2014-2015)" is divided into several "sub-calls". The call identifier and the URL link to information on the participant portal are listed under the individual topics.

<u>**Topics with SSH relevance in 2014:**</u>

PHC 1 – 2014: Understanding health, ageing and disease: determinants, risk factors and pathways

<u>Specific challenge</u>: **The development and preservation of good health**, and the occurrence and evolution of common diseases and disabilities result from varying degrees of interaction between the genetic make-up of individual human beings and **behavioural, environmental, occupational, nutritional and other modifiable lifestyle factors**. This applies from the earliest stages of development throughout life.

Understanding these factors, their interactions and the extent to which they contribute to health preservation and/or to disease development is important for the development of preventive and therapeutic measures supporting good health, prolonged active independence and a productive working life, not least in the context of changing demographic patterns and the ageing of the European population. In particular, proposals should contribute to improving risk identification and validation, and will allow better diagnosis, risk-based prevention strategies and policies.

<u>Scope</u>:

EITHER:

i.   **The identification of health trends and determinants, their validation, and the validation of risk factors for disease and disability, through the generation, integration and validation of data derived from relevant disciplines (e.g. molecular, behavioural, nutritional, clinical, social and environmental epidemiology; exposure sciences; genetics, epigenetics, etc.).** This should involve the exploitation of existing cohorts and longitudinal studies and the assessment of the necessity to establish new ones, as well as where relevant, the valorisation of knowledge gained from population-based bio-banks.

OR:

ii.   **The identification of determinants and pathways characteristic of healthy and active ageing (from early stages of development onwards) and of health deterioration**

caused by time, disease accumulation and the abovementioned risk factors and their interactions.

In both cases, sex and gender differences should be taken into account.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 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: In both cases, proposals should provide a better understanding of the combined effects of factors causing health and disease, with the knowledge generated underpinning the future development of evidence based prevention, diagnostic, therapeutic and other strategies.

For option:

i.   This should provide evidence for risk identification, underpinning future preventive, diagnostic and therapeutic strategies and policies

For option:

ii.   This should provide a better understanding of pathways of healthy ageing, underpinning future strategies for the promotion of healthy ageing, targeted disease prevention and clinical interventions

Type of action: Research and innovation actions

Deadline: Stage 1 – 11th March 2014 at 17.00.00 Brussels time; Stage 2 – 19th August 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-two-stage

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-two-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2258-phc-01-2014.html

PHC 5 – 2014: Health promotion and disease prevention: translating 'omics' into stratified approaches

Specific challenge: 'Omics' research (including but not limited to genomics, epi-genomics, meta-genomics and proteomics) is moving at a breath-taking pace. A major challenge for the next decade is to determine when and how this wealth of 'omics' information can be usefully applied by both the public and private sectors for the development of personalised /stratified approaches in health promotion and disease prevention.

Scope: Proposals should address all of the following elements:

Develop and assess a personalised / stratified health promotion or disease prevention programme, taking into account the 'omics' characteristics of individuals, complemented by environmental and/or lifestyle factors;

Include the development of tools and methods for the use of 'omics' data in such programmes;

Include a multi-disciplinary approach to assess the validity and utility of 'omics' data in preventive medicine or in prevention programmes targeting specific population groups. This should include:

- The assessment of the predictive value of such programmes in identifying at-risk groups throughout their lives, as compared with conventional methods;

- The assessment of the usefulness of 'omics' data for improving the health of individuals or populations;

- The assessment should include account age and gender aspects where appropriate.

- **The assessment of the behavioural, ethical, legal, regulatory and social implications, as well as of the cost-effectiveness of the programme;**

Include risk-benefit communication to various groups involved in such a programme, including individuals, policy makers and regulators.

Preference will be given to proposals focusing on diseases with either high prevalence or which present a high risk to the individual, or a high cost to society.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 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: This should provide:

- Evidence on the validity, utility and cost-effectiveness of 'omics' based health promotion and disease prevention programmes, allowing informed decisions on the organisation of health and care systems.

Type of action: Research and innovation actions

Deadline: Stage 1 – 11th March 2014 at 17.00.00 Brussels time; Stage 2 – 19th August 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-two-stage

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-two-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2259-phc-05-2014.html

PHC 6 – 2014: Evaluating existing screening and prevention programmes

Specific challenge: Some existing population based screening and disease prevention programmes have not been assessed for their effectiveness, or vary in terms of their application within and across countries throughout Europe. This may result in inappropriate interventions, delayed provision of the correct treatment, increased disease burden, health inequities and increased costs for health and care systems.

Such programmes therefore need systematic evaluation for their impact on health outcomes, cost effectiveness and health equity.

Scope: Proposals should **assess existing screening and disease prevention strategies and programmes, on the basis of health outcomes, quality-of-life, equity and cost-effectiveness and ethical considerations,** at the level of the individual or stratified

population groups and across Europe. The gender dimension should be taken into account where relevant.

Comparison between different countries and regions, demographic groups and cultures should be made in order to identify specific contextual links as well as to identify opportunities for exchange of knowledge and experience between countries and regions.

Proposals should include the **development of new methods or the adaptation of existing ones for this type of assessment. These methods and tools (including self-assessment tools) should be applied in different health systems and organisational infrastructures to test their applicability in different political, economic and societal contexts**.

Due attention should be paid from the outset to the further development and dissemination of methodological expertise, including capacity building across Europe, in order that the expertise generated is fully exploited.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 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: This should provide:

- Evidence for the increased use, or discontinuation of, existing screening and prevention programmes allowing informed decisions by policymakers

- Capacity building in the assessment of such screening and prevention programmes

- Improved health outcomes, greater health equity and cost effectiveness based on the implementation of effective screening and prevention programmes.

Type of action: Research and innovation actions

Deadline: Stage 1 – 11th March 2014 at 17.00.00 Brussels time; Stage 2 – 19th August 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-two-stage

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-two-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2260-phc-06-2014.html

PHC 17 – 2014: Comparing the effectiveness of existing healthcare interventions in the elderly

Specific challenge: Effective health care for the rapidly growing elderly population in Europe is challenging and complex. This population is subject to frequent and numerous comorbidities, associated poly-pharmacy and impaired hepatic and renal function, as well as problems linked to access to care and compliance. In addition, while the elderly are overrepresented in terms of patient numbers, this group is underrepresented or even excluded from many clinical trials that generate the evidence-base for health care interventions.

<u>Scope</u>: Proposals should compare the use of currently available (pharmacological as well as non-pharmacological) healthcare interventions in the elderly (> 65 year) population (or subgroups thereof).

While there is no restriction on the diseases or interventions to be the focus of proposals, preference will be given to proposals focusing on interventions with high public health relevance, i.e. interventions addressing conditions that are particularly frequent, have a high negative impact on the quality of life of the individual and/or are associated with significant costs or where savings can be achieved.

Issues of particular relevance for the target populations, for example, poly-pharmacy, vaccine efficacy, compliance, and under-diagnosed or untreated pain should be taken into account. Given the focus on existing interventions, **proposals will aim to contribute to decisions about the discontinuation of interventions that are less effective or cost-effective than others.**

A comprehensive array of clinical and safety parameters, as well as health and socio-economic outcomes (e.g. quality of life, patient mortality, morbidity, costs, and performance of the health system) for chosen populations should be assessed. Agreed core outcome sets (CSO) should be used as endpoints in conditions where they already exist, in other cases efforts should be made to agree on such COS.

Randomised controlled trials, pragmatic trials, observational studies, large scale databases and meta-analyses may be considered for this topic. The study population should address gender balance where relevant.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

<u>Expected impact</u>:

- Evidence base for more effective and safer interventions, and for enhanced compliance, in the elderly population, and the use of health technology assessment methodology in this target group. In particular:

- Improvement of individual patient outcomes and health outcome predictability through tailoring of interventions

- Improvement of guideline development for diseases and the management of comorbidities

- Support to regulatory guidance in this population and provision of more accurate information to patients and prescribers

<u>Type of action</u>: Research and innovation actions

<u>Deadline</u>: Stage 1 – 11th March 2014 at 17.00.00 Brussels time; Stage 2 – 19th August 2014 at 17.00.00 Brussels time

<u>Call identifier</u>: H2020-PHC-2014-two-stage

<u>Call information</u>:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-two-stage.html

<u>Topic information</u>:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2263-phc-17-2014.html

PHC 19 – 2014: Advancing active and healthy ageing with ICT: Service robotics within assisted living environments

Specific challenge: Citizens in an ageing European population are at greater risk of cognitive impairment, frailty and social exclusion with considerable negative consequences for their independence, quality of life, that of those who care for them, and for the sustainability of health and care systems.

The challenge is to develop new breakthroughs for active and assisted living based on advanced ICT solutions.

Scope: Proposals should focus on service robotics in assisted living environments which can help an ageing population to remain active and independent for longer. **Proposals should build on advances in this domain, and should combine multi-disciplinary research involving behavioural, sociological, health and other relevant disciplines. Characteristics of the solutions developed should be their modularity, cost-effectiveness, reliability, flexibility in being able to meet a range of needs and societal expectations, applicability to realistic settings, safety and acceptability to end-users.** Gender and ethical issues should be paid due attention.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 4 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:

- Evidence for the benefits of service robotics developed, based on proof of concept and involvement of relevant stakeholders

- Reduction of admissions and days spent in care institutions, and prolongation of time spent living in own home when ageing with emerging functional impairments.

- Improvement in quality of life of older persons and of their carers

- Global leadership in advanced solutions supporting active and healthy ageing

Type of action: Research and innovation actions

Deadline: Single stage – 15th April 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-single-stage

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-single-stage.html]

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2253-phc-19-2014.html

PHC 23 – 2014: Developing and comparing new models for safe and efficient, prevention oriented health and care systems:

Specific challenge: Public health, biomedical, social and behavioural research have provided evidence for new approaches to prevention, primary care and treatment. Their integration into health services requires cooperation across sectors and between stakeholders, and challenges the current boundaries of healthcare and established norms of operation.

EU Member States have thus far had different responses to the need for reform, presenting an opportunity to learn how best to react to preserve and promote population health, mitigate the effects of the economic crisis and avoid increases in health inequalities.

Scope: As action oriented research, **proposals should develop new, or improve on existing, models for health systems, in order to make these systems more patient-centred, prevention oriented, efficient, resilient to crises, safe and sustainable**.

The models' applicability and adaptation to different European health systems and EU regions should be assessed, and their value, including individual and societal benefits, demonstrated.

Models may apply to different levels within the health system (micro – the patient interaction level, meso- the health care organization and community level, and macro - the policy level). They must be compared with alternatives (including existing models), capitalising on Europe's diversity. **Views of relevant stakeholders such as policy makers and citizens should be taken into account in the design of and evaluation of these models.** The gender dimension should be duly addressed. Capacity building and awareness raising activities for the adoption and further use of models developed should be included.

Proposals should address the related challenge of ensuring appropriate and sufficient resources (human, financial, infrastructural, equipment (or consumables) and technology) for these new models and develop adequate governance mechanisms. **Proposals may include methodological work in the field of health technology assessment, health systems performance assessment, health workforce analysis as well as indicators and measures to describe and monitor the quality of life of European citizens adequately, taking into account the diverse socio-demographic groups and cultural backgrounds, and should track costs.**

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 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:

- On the basis of quantitative and qualitative indicators, evidence for new or improved patient-centred, prevention oriented, safe and efficient models for health care systems and services.

- Evidence to be used by policy makers and decision makers in making improvements to health and care systems, health and other policies.

Type of action: Research and innovation actions

Deadline: Stage 1 – 11th March 2014 at 17.00.00 Brussels time; Stage 2 – 19th August 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-two-stage

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-two-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2264-phc-23-2014.html

PHC 26 – 2014: Self-management of health and disease: citizen engagement and mHealth

Specific challenge: Empowering citizens to manage their own health and disease will result in more cost-effective healthcare systems by improving utilisation of healthcare, enabling the management of chronic diseases outside institutions, improving health outcomes, and by encouraging healthy citizens to remain so.

Several clinical situations would be prevented or better monitored and managed with the participation of the patient him or herself. Care sciences may complement the medical perspective without increasing the cost. **This requires research into socio-economic and environmental factors, dietary impact and cultural values, behavioural and social models, attitudes and aspirations in relation to personalised health technologies**, mobile and/or portable and other new tools, co-operative ICTs, new diagnostics, sensors and devices (including software) for monitoring and personalised services and interventions which promote a healthy lifestyle, wellbeing, mental health, prevention and self-care, improved citizen/healthcare professional interaction and personalised programmes for disease management. Support for knowledge infrastructures is also required, as well as the combination of predictive personalised models with personal health systems and other sources of data.

Scope: Proposals may focus on patients or healthy persons or both. Health management should be addressed in a holistic approach, from healthy lifestyle, dietary habits interlinked with disease management, and adherence to medical plans, placing the patient in the centre and putting increased emphasis on health education, patient empowerment, secondary prevention and self-management of individual conditions, including co-morbidities and frailty. Implementation of programs or applications for different target populations to capture gender- and age-dependent differences in health, behaviour and handling of devices should be included.

Proposals are invited which address this specific challenge by focusing on only one of the two elements below:

(i) citizen engagement in health, wellbeing and prevention of diseases.

Proposals shall enable individuals to become co-managers of their health and wellbeing (including physical and mental wellbeing, equality, health literacy, life style factors such as nutrition and smoking) with the help of ICT, tools and personalised services. The focus should be on the following elements:

- The creation of a supportive environment for healthy behaviour including support to behavioural change e.g., mathematical, dynamic modelling of behaviour with quantitative, testable models especially in real world settings and application of the sciences in designing interventions or game based physical training with motion tracking based feedback;

- **Health promotion, health literacy and disease prevention**;

- The development of a multi-stakeholder ecosystem (of health and care professionals, patients, nutrition - and pharmaceutical industries, public healthcare authorities, health IT, mHealth actors, health insurers and regulators, etc…) to develop a 'co-production of health' business model – an evidence based, general, alternative way of creating and augmenting personalised health, supported by information exchange and utilisation and;

- A migration path towards comprehensive solutions that could be incorporated into health care processes.

(ii) mHealth applications for disease management

Proposals should focus their research on application development for disease management with the following characteristics:

- Strong emphasis on co-designing and user needs as a key driver;

- Knowledge management systems to analyse and compile the data collected by applications on individuals' health and activities in order for such information to be used by the persons themselves, health professionals and public health monitoring authorities;

- Guidance for patients, care-givers, families and patients' social environment on chronic disease management supported by mHealth;

- Patient adherence to and compliance with medical recommendations

- **Economic aspects** of encouraging secondary prevention and addressing avoidable negative health and wellbeing outcomes;

- Screening for pre-frailty states

- Public health or health promotion interventions addressed to large sectors of population through mHealth applications and;

- Co-operative ICTs to support co-operative management of health and disease among patients and eco-health systems.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 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: In both cases (i) and (ii)

- Improved self-management of health, disease prevention, management of diseases and/or expenditure.

- Strengthened evidence base on health outcomes, quality of life, care efficiency gains and economic benefits from the use of ICT in new care models, in compliance with data protection requirements.

- Increased confidence in decision support systems for wellbeing and disease / patient management.

- Strengthened evidence and improved knowledge about individuals' behaviour related to wellbeing, disease prevention or management facilitating the creation of new personalised behavioural health interventions.

For (i) only

- Validated programmes for health promotion and disease prevention

- Ecosystem and new business models for promotion and co-production of health

For (ii) only

- Improved service offering and business concepts and models

- Impact in several of the following facets of mHealth e.g., patient safety, contribution to or revision of (guidelines of) relevant legal frameworks, medical guidelines, harmonisation (across borders), standards, co-ordination of therapies, recognition of mHealth as a reimbursable cost, improved accessibility, liability, inter-operability, more reliable connectivity, patient empowerment, improved patient-health professional interaction, maturing personalised health systems, sustainability, usability and user-acceptance.

- Improved interaction between patients, their relatives and care givers, facilitating more active participation of patients and relatives in care processes.

- Improving the management of disease by reducing the number of severe episodes and complications.

- Increased level of education and acceptance by patients and care givers of ICT solutions for personalised care.

Type of action: Research and innovation actions

Deadline: Single stage – 15th April 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-single-stage

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-single-stage.html]

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2255-phc-26-2014.html

PHC 31 – 2014: Foresight for health policy development and regulation

Specific challenge: The complex interactions between multiple determinants of health and wellbeing are not well understood. These include but are not limited to air quality, climate change, traffic and congestion, ambient noise, built environment, urban sprawl, sustainable food systems, waste, lifestyle, behaviour, occupation, demographic change, cultural characteristics, socio-economic factors, globalisation of exchanges of goods and people and so on.

Adding to the complexity, currently used measures and indicators of health status and quality of life are inadequate to capture the effect of these interactions and there is a lack of comparable health related data as produced by different health information systems. Furthermore, the co-existence of a multitude of analytical frameworks, often not multi-factorial in nature, limits the comprehensiveness of the assessment.

Foresight is a powerful tool in providing a systematic and structured approach for understanding stress factors and facilitators affecting health and wellbeing, analysing the range of possible outcomes and for helping to define policy options

Scope: **Proposals should identify key driving forces- (external and internal to the health systems) likely to influence health and wellbeing in Europe and beyond in the future. Proposals should contribute to the understanding of the inter-relationships between these factors; analyse their economic and social impact and suggest alternative policy options to respond to the challenges they pose**. Proposals should present a comprehensive, structured and participatory framework of analysis, integrating and quantifying key factors impacting health, health inequalities and demand for health services taking Europe's diversity into account. Use of Copernicus data, products and information may be considered where relevant.

Use should be made of current techniques for foresight such as horizon scanning, trend monitoring, and analysis based on epidemiological surveillance (of health and health determinants), weak signal analysis, expert opinion (to create collective intelligence), scenario development, back-casting and wildcards (to help define alternative futures).

Proposals should include quantitative analysis, such as environment, health, economic and other modelling and sensitivity analysis to measure variation in impact of different factors.

Proposals should include the identification and validation of relevant measures & indicators and the development of (common) standards. Proposals should capitalise on existing good practice in Europe as well as international level experiences.

The usefulness of current health data and statistics for these modelling exercises should be assessed and suggestions for improvement made. Proposals should also include networking between centres with existing expertise in (health) foresight, both public and private, and partnerships with centres aspiring to develop this expertise.

If more than one proposal is successful, proposals should collaborate and this should be indicated in the proposal.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 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:

- Through the use of a validated analytical framework with a robust set of standardised indicators, the ability to model and track the impact of various factors (internal and external to the health systems) on population health should be improved.

- A basis for policy dialogue, facilitating timely decision making in the EU MS and beyond with regards to health sector reform and guide investments in health care to improve population health.

- Guidance for future health research

Type of action: Research and innovation actions

Deadline: Single stage – 15th April 2014 at 17.00.00 Brussels time

Call identifier: H2020-PHC-2014-single-stage

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-phc-2014-single-stage.html]

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2256-phc-31-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of the call H2020-PHC-2014-2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

PHC 4 – 2015: Health promotion and disease prevention: improved inter-sector co-operation for environment and health based interventions

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2276-phc-04-2015.html

PHC 21 – 2015: Advancing active and healthy ageing with ICT: Early risk detection and intervention

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2268-phc-21-2015.html

PHC 22 – 2015: Promoting mental wellbeing in the ageing population

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2281-phc-22-2015.html

PHC 24 – 2015: Piloting personalised medicine in health and care systems

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2282-phc-24-2015.html

PHC 25 – 2015: Advanced ICT systems and services for Integrated Care

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2269-phc-25-2015.html

PHC 27 – 2015: Self-management of health and disease and patient empowerment supported by ICT

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2270-phc-27-2015.html

Call – "Co-ordination activities"

Call Identifier: H2020-HCO-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics.

The Call "Co-ordination activities (H2020-HCO-2014-2015)" is divided into several "sub-calls". The call identifier and the URL link to information on the participant portal are listed under the individual topics.

Topics with SSH relevance in 2014:

HCO 5 – 2014: Global Alliance for Chronic Diseases: prevention and treatment of type 2 diabetes

Specific challenge: In the past twenty years the global death rate from diabetes has doubled and the World Health Organisation (WHO) is predicting that this will increase by two thirds by 2030. It is currently estimated that 347 million people worldwide suffer from diabetes with more than 80% from low-and middle-income countries. Of those suffering from diabetes, type 2 comprises 90% of this population around the world. Halting the rise in prevalence of diabetes has been identified as one of the 9 WHO non communicable diseases global voluntary targets to be met by Member States by 2025

With the burden of this chronic non-communicable disease ever-increasing the Global Alliance for Chronic Diseases (GACD) partnership, of which the Commission is a member, has agreed to launch a call for proposals on the prevention and treatment of type 2 diabetes, with a focus on implementation and intervention research in low- and middle-income countries and in vulnerable populations in high income countries.

Scope: Proposals must focus on type 2 diabetes. Proposals should generate new knowledge on interventions and their implementation for the prevention and treatment of type 2 diabetes in low and middle income countries, and in vulnerable populations in high income countries. Proposals must focus on existing approaches to prevention and control of type 2 diabetes rather than development of new treatments. Proposals may address prevention or treatment of specific complications of type 2 diabetes.

Proposals may **focus on a wide range of prevention and/or treatment strategies. This may include programmes addressing (one of or combinations of):**

- **Changes to lifestyle and behaviour resulting from the provision of an environment that supports and promotes better health.** This may include community-wide approaches, or other strategies targeting individuals at high risk. For example, population prevention strategies designed to address unhealthy diets and physical inactivity as risk factors for diabetes;

- **Structural interventions or policies designed to promote improved health outcomes.** For example, evaluating the contribution of public policies to diabetes prevention efforts, or monitoring the potential effects of such policies if adopted and implemented;

- Delivery of relevant health care and health interventions;

- Approaches to implementing accessibility of or adherence to, pharmaceutical, nutritional or other promising or proven interventions.

Proposals should focus on implementation research, to examine what works, for whom and under what contextual circumstances, and how interventions can be adapted and scaled up in ways that are accessible and equitable. Proposals may address prevention or treatment of specific complications of type 2 diabetes. Proposals may also focus on gestational diabetes. Proposals may focus on specific societal groups but a clear justification should be provided as to why the group has been chosen and how the choice will assist the funders in delivering their aim to address health inequities at a local and/or global level. Proposal should focus on implementation research into interventions for prevention and treatment of type 2 diabetes that are applicable in low resource settings. However, in some settings, proposals may incorporate work to establish baseline data on prevalence of diabetes and its risk factors to evaluate the impact of the intervention. Proposals may include these aspects if they do not duplicate existing evidence available.

All proposals should:

- Focus on research into implementation of prevention and/or treatment strategies derived from existing knowledge and research.

- Develop an improved understanding of the key barriers and facilitators at local and national levels that affect the prevention and treatment of type 2 diabetes.

- Include an assessment of equity and gender gaps in diabetes prevention and treatment.

- Demonstrate a sound understanding of the local health system context.

- Provide evidence of a health economics dimension such as cost effectiveness of the proposed intervention and its scalability.

- Describe a clear proposed pathway to embedding the intervention into policy and practice after the study which addresses how:
    - Local and/or national policy makers will be engaged both at the start of the project as well as the end.
    - The project outcomes/evidence will be utilised for the scaling up of the intervention on a local, national and international level.
    - Future scaled-up implementations will fit within the local social, cultural and economic context.
    - Identify obstacles such as inequities and equity gaps including gender that will be taken into account in the design of an implementation strategy.
- Be proposed by a multidisciplinary project team, including local researchers as co-investigators where applicable.
- Include local stakeholders such as patient groups or community groups.
- Proposals shall not include:
    - Replication of effectiveness studies and clinical trials testing the efficacy or effectiveness of new or established pharmacological agents (or combination of agents) which have wider effects than those relating to type 2 diabetes.
    - Aetiological or mechanistic studies of type 2 diabetes.
    - Phase I or Phase IIa trials.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 to 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:

- Reducing health inequalities and inequities, including gender, in the prevention and treatment of type 2 diabetes in both a local and global context.
- Pursuing knowledge translation and exchange approaches that are designed to maximize the public health benefits of research findings within different health contexts.
- Providing evidence to inform local health service providers, policy and decision makers on the effective scaling up of the interventions at the local, national and regional levels. For example, applicants could address affordability for users and the financial implications for implementing organisations and funders or might assess scalability to various socio-political contexts.
- Contribute to the Global Alliance for Chronic Diseases.
- Appropriate leveraging of existing programmes and platforms (e.g. research, data, and delivery platforms).
- Contribute to the WHO Global Action Plan on NCDs (2013-2020) as proposals will demonstrate alignment with international and/or national commitments to halt the rise in prevalence of type 2 diabetes.
- Contribute to the United Nations Millennium Development Goals.

The GACD aims to develop a network of researchers that can enhance cumulative learning across individual projects, and work towards understanding how socio-economic, cultural, geopolitical and policy contexts have influenced results and how findings might be adapted and applied in different settings. The funded researchers should meet annually to discuss

their research and share information and data in order to develop approaches to standardise data collection, and wherever feasible to use these standardised approaches in their respective projects

Type of action: Research and innovation actions

Deadline: 15th April 2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-hco-2014.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2212-hco-05-2014.html

HCO 14 – 2014: Bridging the divide in European health research and innovation

Specific challenge: The research and innovation potential of the Member States remain very different, with large gaps between "innovation leaders" and "modest innovators". This divide is equally present in European health research and innovation.

Two major European instruments – the Research Framework Programme and the Structural Funds – attempt to address this issue, albeit from distinct perspectives, but with the same strategic goals of serving the Europe2020 strategy for smart, sustainable and inclusive growth.

There is no one-size-fits-all solution. Therefore, new approaches specific to health research and innovation are needed that take into account the individual differences of the less performing RDI regions and provide tailor-made recommendations.

Scope: To tackle successfully the divide in European health research, both evidence based analysis and remedial actions are needed. Proposals may address either analysis or remedial actions, or both.

Proposals should examine the current health research activities in the less performing RDI regions/countries, looking into determinants influencing the health R&I performance. Strategies of these regions (RIS3 – Research and Innovation Strategies for Smart Specialisation) can be studied, and specific indicators can be identified to measure development. Proposals should reveal the factors underlying the divide; identify common patterns and individual differences within these regions. Outcomes should include suggested European and local actions to alleviate differences in health R&I.

For remedial actions, proposals should develop new approaches to unlock excellence in those regions.

Proposals should create a networking platform where companies, research organisations, universities, national authorities and managers of H2020 and structural funds can talk to each other to identify the needs, obstacles, best practice, opportunities.

The Commission considers that proposals requesting a contribution from the EU of up to EUR 500.000 would allow this specific challenge to be addressed appropriately. Nonetheless this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Within the health R&I domain, the action(s) should contribute to three important Horizon 2020 goals:

- Widening participation

- Bridging the innovation divide
- Synergies between H2020 and Structural Funds

Type of action: Coordination and support actions

Deadline: 15th April 2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-hco-2014.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2217-hco-14-2014.html

HCO 15 – 2014: Mobilisation and mutual learning action plan

Specific challenge: Ensuring that research and innovation in this societal challenge is not only excellent, but also relevant and responsive to the needs of all is important, not least in ensuring the uptake of results.

Scope: Mobilisation and Mutual Learning Action Plans (MML) are one means of ensuring the engagement of all relevant groups and aim to tackle research and innovation related challenges by creating partnerships with a variety of perspectives, knowledge and experience.

MMLs are Coordination and Support Actions (CSA) with at least 10 countries that allow discussion and cooperation between science and society at different stages of the research and innovation process. MMLs comprise at least one of each of the following types of partners: research performing or funding organisations, industry/businesses, policy makers, Civil Society Organisations. The consortium may also include media, education establishments, science academies, museums, science centres, etc. Ensuring a balanced distribution of roles and responsibilities between the different types of participants shall be evaluated under evaluation criterion 2.

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 MML should contribute to the implementation of 'Science with and for Society' issues (public engagement, ethics, gender perspectives, science education, communication and access to and dissemination of scientific information) in the area of health. It should develop a common communication and implementation strategy to further the implementation of the MML outcomes and recommendations. It should contribute to relevant EU related initiatives and policy developments at local, national and European levels.

Type of action: Coordination and support actions

Deadline: 15th April 2014 at 17.00.00 Brussels time

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-hco-2014.html

Topic Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2218-hco-15-2014.html

1.2 Societal Challenge 2 - Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

Call – "Sustainable Food Security"

Call Identifier: H2020-SFS-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics

The Call "Sustainable Food Security (H2020-SFS-2014-2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

SFS-1-2014/2015: Sustainable terrestrial livestock production:

This topic will be divided into three sub-topics: "SFS-01a-2014: Genetics and nutrition and alternative feed sources for terrestrial livestock production", "SFS-01b-2014: Tackling losses from terrestrial animal diseases", and "SFS-01c-2015: Assessing sustainability of terrestrial livestock production".

Specific Challenge: Due to the increasing demand for animal derived food and the mounting pressure over land use, further intensification and expansion of animal production is expected. Development of the livestock sector at EU and global level is challenging as it puts pressure on the environment, human health and the welfare of animals within the systems. Climate change is an additional pressure to the sustainability (e.g. productivity, health) of livestock systems. Increasing efficiency is required, while decreasing the environmental footprint and increasing quality, e.g. nutritional value. Livestock farming systems generate valuable products for human consumption including some from resources that cannot otherwise be converted into food (e.g. grass-based systems). They support the development of rural communities. Extensive livestock systems can contribute to the management and maintenance of ecosystems and may increase biodiversity.

Means to improve sustainability and productivity of terrestrial livestock systems need to be sought through breeding, nutrition and health. New phenotypes linked to sustainable animal productivity could be developed and integrated into breeding schemes. Precision feeding could increase production efficiency by adapting accurately the needs and the delivery of feed to individual animals. The development of new or alternative feeds, in particular as protein sources, has the potential to minimise reliance on imports and increase European self-sufficiency. Livestock diseases reduce the efficiency of animal production and they have a major impact in terms of economic costs and animal welfare. Vaccination can be an

efficient way to control diseases and to reduce the use of antimicrobials. Deeper knowledge is required to develop safer, cheaper, novel, multivalent and more efficient vaccines.

Farming systems need to be (re)designed in a holistic manner to best reconcile the various demands concerning productivity, sustainability and societal values, for now and the future.

Scope: Proposals should address one of the following issues:

A. [2014] Genetics and nutrition and alternative feed sources for terrestrial livestock production (SFS-01a-2014)

Proposals should address the diversity of production types. New traits linked to feed conversion efficiency and to sustainability (e.g. robustness) should be investigated and phenotypes should be used for modelling biological functions and develop predictive approaches of performances. Precision feeding including new management systems should be developed in order to fulfil the need of individual animals, taking into account their physiological, health and welfare status, and their genetic make-up. Activities should also investigate diversifying feed sources, in particular as protein inputs, including industry by-products, organic waste and alternative crops, and better use of local resources (e.g. pastures and forage crops). The potential of the new technologies, including their influence on food quality should be assessed. Demonstration activities of the most promising solutions should be organised. Involvement of the livestock industry is expected. **This call also involves socio-economic aspects as new business models and management systems are needed for specific production systems**. In line with the objectives of the EU strategy for international cooperation in research and innovation and in particular with the implementation of the EU-China dialogue, proposals are encouraged to include third country participants, especially those established in China. Proposals should fall under the concept of 'multi-actor approach'.

B. [2014] Tackling losses from terrestrial animal diseases (SFS-01b-2014)

The goal is to better understand the interaction between the immune system of swine, poultry and ruminants and their specific pathogens, in particular pathogens associated with high production losses and to develop innovative and multivalent vaccines taking into account the individual variability in vaccine responsiveness and different developmental stages. Both the use of current and new vaccine vectors (including DNA & DIVA vaccines) could be foreseen together with novel and easy-to-use delivery systems and efficient adjuvants with the aim of fostering an earlier onset of protection and a longer duration of immunity. New biomarkers and phenotypes would be valuable to help breeding strategies for increased disease resistance.

Proposals should develop at least two vaccines at the demonstration level and address at least poultry and/or swine, and/or ruminants. Involvement of the animal pharmaceutical industry is expected to translate the finding into marketable products. Significant SME involvement should be ensured. In line with the objectives of the EU strategy for international cooperation in research and innovation and in particular with the implementation of the EU-China dialogue, proposals are encouraged to include third country participants, especially those established in China.

C. [2015] Assessing sustainability of terrestrial livestock production

Proposals should undertake **an assessment of the sustainability and potential delivery of ecosystem services, social services, resilience, competitiveness and possible trade-offs of diverse EU animal production systems.** The assessment should be holistic, encompass the main facets of the concerned systems, including international trade, extend to the dimensions of supply chains and territories and elaborate necessary indicators. **Proposals should extend to socio-geographic and demographic changes** of the concerned farming community and projections, **as well as the expected place of animal products in the society and diets in the future**, looking across the whole food chain.

Proposals should establish a farm-level observatory and knowledge exchange networks on the sustainability of livestock linking with the European Innovation Partnership with a focus on innovative system solutions for short and long-term needs. Proposals should combine socio-economic work and case studies and sketch a roadmap for further research and policy making. Proposals should fall under the concept of 'multi-actor approach'.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 7–9 million for (A) 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 should show how some, or all, of the following impacts will be achieved:

- New efficiency traits to be incorporated into breeding schemes of various farm species enabling selection of animals more adapted to environmental changes

- Make Europe frontrunner in re-use of by-products and protein rich resources for feed

- Minimize risk to public health by preventing and controlling animal diseases and reducing the use of antibiotics in the "One health" perspective

- Increased level of animal welfare

- Increased efficiency and profitability of animal agriculture

- Improved overall sustainability and innovative capacity of the livestock sector

- **Increased societal acceptance**

Type of action: Research and innovation actions

Information on SFS-01a-2014: Genetics and nutrition and alternative feed sources for terrestrial livestock production:

Deadlines: Stage 1 - 12/03/2014 17:00:00 (Brussels local time), Stage 2 - 26/06/2014 17:00:00 (Brussels local time)

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2014-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2320-sfs-01a-2014.html

Information on SFS-01b-2014: Tackling losses from terrestrial animal diseases:

Deadlines: Stage 1 - 12/03/2014 17:00:00 (Brussels local time), Stage 2 - 26/06/2014 17:00:00 (Brussels local time)

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2014-2.html

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2333-sfs-01b-2014.html

Information on SFS-01c-2015: Assessing sustainability of terrestrial livestock production

Deadline: Stage 1: 24/02/2015, 17:00:00 (Brussels local time), Stage 2: 11/06/2015, 17:00:00 (Brussels local time)

Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2015-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2336-sfs-01c-2015.html

SFS-11-2014/2015: Implementation of an Ecosystem-based approach for European aquaculture

This topic will be divided into two sub-topics: "SFS-11a-2014: Optimizing space availability for European Aquaculture" and "SFS-11b-2015: Consolidating the environmental sustainability of European aquaculture". The first one is listed below; the second one is listed under the topics for 2015.

SFS-11a-2014: Optimizing space availability for European Aquaculture

Specific challenge: Access to space and high quality water are essential for European aquaculture operators. In particular, the lack of spatial planning is considered as one of the factors hindering the expansion of European aquaculture. Therefore, establishment of reliable (inland, coastal and offshore) spatial plans should be crucial for facilitating investment and development of the sector. Aquaculture also needs a high quality aquatic environment for ensuring the production of safe and nutritious seafood products. Subsequently, human activities, including operations of some specific aquaculture segments, that might affect negatively (e.g. through the impact of chemical, antibiotics, organic wastes, etc.) fresh water and marine ecosystems might also compromise the sustainability of European aquaculture. Therefore, ensuring the environmental sustainability of aquaculture practices is essential not only for guaranteeing compliance with the existing regulatory framework but also for improving the image of the European aquaculture sector. **This should ultimately secure that the maximum economic potential of growth and employment is reached by the sector.**

Scope: Proposals should address one of the following issues (A):

A. [2014] Optimizing space availability for European Aquaculture (SFS-11a-2014)

Proposals should provide operational tools for spatial planning (including Geographic Information Systems, remote sensing and mapping for data management, analysis and modelling, decision-support tools) to **support national administrations and business operators in identifying the potential for aquaculture to expand in Europe** in terms of space requirements and conflicts with other users. Proposals should also focus on the **development of innovative applications allowing promotion of these tools and training** of all the potential end users. The development of these tools should take into account specificities of different European aquaculture segments, while covering the regional diversity of the European aquaculture sector.

B. [2015] Consolidating the environmental sustainability of European aquaculture (SFS-11b-2015)

Proposals should compile existing and develop new tools for predicting and assessing the carrying capacity of the ecosystems at different geographic scales, taking into account specificities of the main European aquaculture segments and diversity of ecosystems in the

main producing regions. They should also focus on improving existing and/or developing new integrated operational tools for the timely and cost-efficient environmental impact assessment of aquaculture production, in line with the requirements for the allocation of licenses for aquaculture businesses in the main producing European countries, as well as, for the implementation of the requirements set by the Marine Strategy Framework Directive in relation to aquaculture operations. They should also develop cost-efficient management tools and practices for improving the environmental sustainability of European aquaculture, including forecasting and modelling tools that can support and inform decision support systems, in situ observation technologies and early sensing and alarming systems. They should also develop adequate methodologies and assess the environmental and ecological services that different segments of the sector might provide.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 3 million for (A) and EUR 7.5 million for (B) would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

<u>Expected impact</u>: Proposals should show how some, or all, of the following impacts will be achieved:

- **Support the Member States in establishing a coherent and efficient regulatory framework**, implementing the Strategic Guidelines for the sustainable development of European Aquaculture and delivering a framework for sustainable growth.

- Support the development and implementation of coastal and marine spatial planning.

- Availability of new and efficient operational tools allowing national administrations to reduce the cost and time for delivering licenses for aquaculture operators.

- Contribution in creating enabling conditions for facilitating investments in European aquaculture through the provision of better observation, forecasting and decision support technologies.

- Availability of tools for reliable prediction and monitoring of environmental impacts of aquaculture operations.

- Strengthening the environmental sustainability of the aquaculture sector and enhancement of its image.

- Availability of tools for quantification of environmental services provided by the aquaculture sector

<u>Type of action</u>: Research and innovation actions

Information on SFS-11a-2015: Optimizing space availability for European Aquaculture

<u>Deadline</u>: Stage 1 - 12/03/2014 17:00:00 (Brussels local time), Stage 2 - 26/06/2014 17:00:00 (Brussels local time)

<u>Call information</u>:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2014-2.html

<u>Topic information</u>:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2327-sfs-11a-2014.html

Information on SFS-11b-2015: Consolidating the environmental sustainability of European aquaculture:

<u>Deadline</u>: Stage 1: 24/02/2015, 17:00:00 (Brussels local time), Stage 2: 11/06/2015, 17:00:00 (Brussels local time)

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2015-2.html

Topic information:

 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2341-sfs-11b-2015.html

SFS-15-2014: Proteins of the future

Specific challenge: The growing demand for meat and other protein-rich food sources, in many parts of the world, is of increasing concern in the light of growing population figures, environmental sustainability issues and land-use and food security concerns. Questions related to optimal production and processing methods, location (EU or other), health effects, environmental impact, **and legal issues** remain unanswered. Consumer acceptance of new and/or improved sustainable protein sources, as well as other factors related to market uptake, require further clarification if global food security together with environmental and **socio-economic sustainability** is to be ensured.

Scope: A multidisciplinary approach, covering the whole food supply chain (from production to consumption) of new and/or existing protein sources should be taken. The **market potential** for the producer and **added value for the consumer** should be considered, together with food safety and quality parameters, **regulatory issues**, health and diet-related risks and benefits (including gendered safety tests), **and gender issues**. Appropriate dissemination and knowledge uptake activities should be included, as well as industry participation with a specific focus on SMEs. In line with the objectives of the EU strategy for international cooperation in research and innovation, proposals are encouraged to include participants established in third countries. A sustainability assessment in line with the ILCD handbook should be conducted. Proposals should be focused on how new and/or adapted protein sources can provide innovative, cost-effective and resource-efficient alternatives to traditional sources, with more positive impacts on human health, the environment and biodiversity.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 9 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:

- A significant increase in the quality of proteins and of the sustainability of their production and processing.

- A support to EU policies on agriculture, nutrition, health, environment, development and sustainable food security by increased market uptake of existing and/or new proteins that contribute to a healthy diet.

- A strengthening of international research, industrial cooperation and the **EU economy**, with a specific focus on SMEs and small-scale food processing.

- **An increase in new market opportunities, in the short and medium term, as measured in terms of market share, turnover, employment and intellectual property**.

- **A clear contribution to social innovation due to Fair Trade/fairer trade, as well as an increase in socio-economic and environmental sustainability**.

Type of action: Research and innovation actions

Deadline: Stage 1 - 12/03/2014 17:00:00 (Brussels local time), Stage 2 - 26/06/2014 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2014-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2330-sfs-15-2014.html

SFS-19-2014: Sustainable food and nutrition security through evidence based EU agro-food policy

Specific challenge: The EU agro-food sector has considerable potential in addressing the various multifaceted challenges on food and nutrition security (FNS). **Demographic, dietary and income trends, the broader economic and policy context**, climate change and environmental sustainability as well as technological change are perceived as major drivers that shape FNS. Furthermore, as EU agriculture itself operates within a complex policy environment involving a plethora of domestic, EU and international policies (themselves being subject to change), a comprehensive understanding is required with regards to the combined implications of the numerous and multidisciplinary factors, including considerations on their future developments. Such an assessment should encompass the role of EU fisheries and aquaculture.

Scope: Proposals should address one of the following issues (A) or (B) or both, and should clearly indicate to which they refer.

A. [2014] Strengthening the analytical capacity on food and nutrition security

A holistic approach is needed to capture the various socio-economic, environmental, climatic and territorial factors impacting on the EU agro-food sector along with their inter-linkages. **Attention should be given to the implications of various policies and drivers of change affecting different actors along the supply chain** (e.g. health and nutrition policies are gaining increasing importance for FNS) and to distinguish between long-term consumption trends (including their main **socio-economic drivers**) and **consumer reactions to short-term shocks** (e.g. **economic**, food scares, etc.). Research should develop indicators and analytical tools that improve the monitoring of EU FNS at various geographical scales (including at sub-regional level) and develop capacities for short-term forecasts and early warning systems for the most relevant agricultural commodities. It should also deliver **improved quantitative modelling tools integrating socio-economic** and bio-physical **models**, reflecting prevailing factors driving supply and demand at different geographic scales and a broad scope of agricultural products. Foresight exercises should contribute to the formulation of alternative future scenarios.

B. [2014] Understanding relevant issues impacting the agro-food sector

Specific analyses should address the following issues: 1) **Potential role of financial markets on commodity price formation and their potential benefits for farmers** (including the conditions for access of farmers) for risk management; 2) **Conditions of farmers' access to credit, especially young farmers, in a context of economic uncertainty and increasing capital intensity of production**; 3) **Mapping the web of policy requirements applicable to farmers at EU,** national and regional levels and **developing tools to assess their implications on farming across the EU**, including an extensive review and comparison of agro-food standards in the EU and important third countries and **assessment of their impacts on cost and competitiveness or on access**

to markets; 4) Developing approaches to better take account of the functioning of the food supply chain, measuring implications of unfair business practices along the chain and developing solutions to address discrepancies, including the potential role of ICT to increase market transparency.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 5 million for (A) or (B) respectively 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 should show how some, or all, of the following impacts will be achieved:

- provide an assessment of the state of EU FNS at sub-regional level (including the implications of fisheries and aquaculture)

- **improve the capacity of policy makers to monitor its development, to carry out short-term projections and evidence-based risk assessments** and to implement quantitative modelling of alternative future scenarios to aid the design and formulation of longer term agro-food policies

- bring about foresight and identify long-term challenges to FNS and the role of the EU agro-food sector, thus improving the capacity of related policies to provide appropriate answers.

Type of action: Research and innovation actions

Deadline: Stage 1 - 12/03/2014 17:00:00 (Brussels local time), Stage 2 - 26/06/2014 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2014-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2332-sfs-19-2014.html

Topics with minor SSH relevance:

SFS-06-2014: Sustainable intensification pathways of agro-food systems in Africa

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2319-sfs-06-2014.html

SFS-09-2014: Towards a gradual elimination of discards in European fisheries

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2325-sfs-09-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of the call H2020-SFS-2014-2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

SFS-16-2015: Tackling malnutrition in the elderly

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2343-sfs-16-2015.html

SFS-18-2015: Small farms but global markets: the role of small and family farms in food and nutrition security

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2344-sfs-18-2015.html

SFS-20-2015: Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2345-sfs-20-2015.html

Call - "Blue Growth: Unlocking the potential of Seas and Oceans"

Call Identifier: H2020-BG-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics

The Call "Blue Growth: Unlocking the potential of Seas and Oceans (H2020-BG-2014/2015)" is divided into several "sub-calls". The URL Link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

BG-5-2014: Preparing for the future innovative offshore economy

Specific challenge: Economic activities in Europe' seas and coasts are expected to intensify, diversify and expand further offshore driven by the competition for space on coastal areas and the increased exploitation of marine (renewable) energy, biological and mineral resources in the deep sea.

The development of large scale activities offshore and in deep sea areas requires overcoming a series of technological and operational challenges related to, among others, surface support facilities, control systems, fluid and solid transport or remotely operated robots/vehicles. Economic considerations are also central in the expansion of the Blue growth sectors. This is why there is a need to **assess the most promising and sustainable business models and identify the corresponding technological and environmental challenges** to allow these offshore developments to happen. Finally non-technological

challenges such as grid connections, conflicts for use of the marine space and licensing in the context of marine spatial planning, must also be taken into account. One way to make use of our seas in a smarter, more sustainable and potentially less disruptive manner is to combine different, complementary and synergistic activities at sea at the same location (e.g. energy production and storage, fisheries and aquaculture, transport & logistics hubs, observation and monitoring), with multi-use offshore platforms. There is a need to review the work undertaken in this area to assess related business models.

Scope: **Proposals should analyse and identify the social and economic developments in the offshore economy and the most promising, environmentally sustainable and economically feasible business models**. This should include a review of marine renewable energy farms (both wind and ocean energy), offshore aquaculture facilities, multi-use offshore platforms projects and their business models, as well as issues of competing access to marine space between different activities and, more broadly, all social and environmental impacts (including impacts on coastal areas). Proposals should also set-up a mechanism associating key stakeholders interested in the development of the Blue Economy, with a view to covering all the following objectives:

- identify the technological, challenges to be overcome to make these business models operational and define a shared research and technology agenda

- investigate solutions to overcome the non-technological challenges such as the infrastructure and grid development within the relevant EU legislative framework (in particular the maritime spatial planning and existing coastal and planning systems)

- propose large scale pilot initiative(s) to be launched in European seas which should demonstrate the feasibility of the most promising business models.

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

Expected impact:

- Prepare the ground for demonstration activities of most promising offshore business models;

- Significantly increase investments by the key European level maritime stakeholders (industrial, scientific communities) in the offshore economy;

- Support the EU Blue Growth and maritime spatial planning policy objectives.

Type of action: Coordination and support actions

Deadline: 26/06/2014 at 17.00.00 Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bg-2014-1.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2454-bg-05-2014.html

BG-10-2014: Consolidating the economic sustainability and competitiveness of European fisheries and aquaculture sectors to reap the potential of seafood markets

Specific challenge: Control of the production process, biological and environmental sustainability is necessary but not sufficient to ensure the economic sustainability of a seafood production enterprise. Fisheries and aquaculture sectors face competition in the global marketplace, both for inputs and for outputs. In addition, the limited availability of appropriate production and socio-economic data hampers the development of reliable models and prediction tools. Meeting these challenges is necessary for ensuring the long term economic sustainability of European fisheries and aquaculture sectors (marine and freshwater).

Scope: **Proposals should focus on the economic sustainability of European fisheries and aquaculture** (marine and freshwater), which is defined as the long term economic viability of the sector. Proposals should **study and analyse production segments, systems and products, taking into account supply chains and markets as well as attempts to increase social awareness of health claims and acceptance of aquaculture products**. They should consider and analyse the effects of several factors, including production costs, productivity growth, market development, supply chain, demand and supply characteristics, international trade price fluctuations, innovation and product development, etc. In addition, the impact of different regulatory systems on the profitability and growth of these sectors should be evaluated.

Proposals should also focus on the **trends and dynamics of European and global seafood markets and explore the competitive potential of European fisheries and aquaculture products in this context**. They should also investigate the interaction between European fisheries and aquaculture products in local and global markets. They should identify and analyse successful seafood products, investigate market niches as well as the potential of existing marketing tools promoting responsible practices (labels, certification schemes etc.) to boost the competitiveness of the European fishing and aquaculture industry. Finally, they should compile and quantify non market values of fisheries and aquaculture.

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

Expected impact:

- Consolidation of the economic sustainability of European fisheries and aquaculture sectors (marine and freshwater).

- Scientific support to fishermen and aquaculture producers to better understand and benefit from the functioning of their markets.

- Availability of tools for production planning and development of novel products and markets, taking into account trends in the local and global seafood value chain and consumers preferences.

- Better understanding of the value chain organisation and of prices cycles, including in particular the 'boom and bust' cycles, and availability of solutions for predicting and avoiding similar situations in the future.

- Boosting the competitiveness of European seafood products by identifying the added value of existing marketing tools and their potential in steering European consumers' choices.

Type of action: Research and innovation actions

Deadline: First stage 12/03/2014 at 17.00.00 Brussels time, second stage 26/06/2014 at 17.00.00 Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bg-2014-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2465-bg-10-2014.html

Topics with minor SSH relevance:

BG-13-2014 Ocean literacy – Engaging with society – Social Innovation

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2456-bg-13-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of the call H2020-BG-2014-2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

BG-1-2015: Improving the preservation and sustainable exploitation of Atlantic marine ecosystems (minor relevance)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2466-bg-01-2015.html

BG-2-2015: Forecasting and anticipating effects of climate change on fisheries and aquaculture (minor relevance)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2467-bg-02-2015.html

Call – "Innovative, Sustainable and Inclusive Bioeconomy"

Call Identifier: H2020-ISIB-2014-2015

Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-isib-2014-1.html

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-isib-2014-2.html

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics.

The Call "Innovative, Sustainable and Inclusive Bioeconomy (H2020-ISIB-2014-2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

ISIB-1-2014: Provision of public goods by EU agriculture and forestry: Putting the concept into practice

Specific challenge: Traditionally, agricultural and forestry activities have been the provider of manifold – often underappreciated – public goods including ecosystem services. In view of the expected rise in primary production and more intensive production methods, the provision of public goods by agriculture and forestry is threatened, the more since these are considered to be 'non-excludable', 'non-rival' and therefore without market value. Although the term 'public goods' is widely used, the concept lacks an operational framework and a common understanding as regards the wider societal and non-market benefits of agriculture and forestry activities – in particular in the context of dynamic changes in land use and farming systems. Thorough evidence on the nature, extent and function of public goods provided by agriculture and forestry – including those of global nature - is required to identify demand as well as to create effective incentives and policy options for their continued provision.

Scope: Proposals should develop a systematic and operational framework to map, characterize and quantify the variety of public goods provided by agricultural and forestry ecosystems throughout Europe. This will include **identifying links between economic activities in the primary production sectors and the delivery of public goods** (including conflicting demands) as well as important 'disservices' of agriculture resulting in trade-offs as regards the provision of public goods. Proposals should take into account various temporal and spatial scales, different types of cropping, husbandry and forest management systems as well as the diversity and dynamics of climatic, natural, cultural and socio-economic conditions all over the EU. Furthermore, proposals should consider ways in which to **valorise and establish effective support measures (policies, incentives, public services) for the delivery of public goods** in response to societal expectations. Information and dissemination activities should target a wide range of stakeholders including from policy making, the farming and forestry sectors and allow for their active participation.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 2–3 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:

- increased understanding of the nature of management and other processes that influence the delivery of public goods by different types of farming and forestry systems in Europe (e.g. by means of a solid inventory)

- development of robust mechanisms and tools for a) measuring and valorising public goods (including in terms of value streams, as relevant) as well as for b) establishing the contributions of the agricultural and forestry sectors to the sustained delivery of these goods

- formulation of appropriate policies, incentives, service models and win-win scenarios to reduce conflicts between productivity objectives in primary production and the delivery of ecosystems services and other public goods

- overall, increased sustainability of primary production by reducing the negative impacts and enhancing the positive contributions of the agriculture and forestry sectors to public goods

Type of action: Research and innovation actions

Deadline: First stage 12/03/2014 at 17.00.00 Brussels time, second stage 26/06/2014 at 17.00.00 Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-isib-2014-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2292-isib-01-2014.html

ISIB-8-2014: Towards an innovative and responsible bioeconomy

(ISIB-08a-2014: Engaging society, reaching end users and linking with policy makers for a participative governance of the bioeconomy, ISIB-08b-2014: Bridging research and innovation efforts for a sustainable bioeconomy)

Specific challenge: The bioeconomy encompasses the production of renewable biological resources and the conversion of these resources and waste streams into value added products, such as food, feed, bio-based products and bioenergy. It cuts across many different sectors and research and innovation fields, and has a wide range of socio-economic implications. Addressing comprehensively inter-connected societal challenges related to the bioeconomy requires: 1. **Ensuring a responsible and participative governance, by overcoming the current lack of information and public debate on the bioeconomy**, while responding to citizens' needs and concerns, by providing adequate support to new promising markets, and by reconciling conflicting policies and ethical concerns; and 2. Integrating efforts undertaken throughout all steps of the research and innovation chain, to facilitate the flow from discovery to market applications and to speed up the innovation process.

Scope: Proposals should address one of the following issues (A) or (B), and should clearly indicate to which one they refer.

A. Engaging society, reaching end users and linking with policy makers for a participative governance of the bioeconomy

Proposals should foresee high impact information, awareness raising, educational and debate activities on the bioeconomy. They should **address the creation of national or**

regional multi-stakeholder bioeconomy platforms, for informed debates involving policy makers, the various stakeholders (scientists, business, non-governmental organisations, etc.) and citizens, building on existing tools (such as the Bioeconomy Observatory) and scientific studies (such as foresight). These platforms should also facilitate the development of balanced and informed national and regional bioeconomy strategies.

B. Bridging research and innovation efforts for a sustainable bioeconomy

Proposals should **create links among various bioeconomy-related research and innovation activities carried out under different parts of Horizon 2020 and of the Seventh Framework Programme.** This should foster knowledge transfer of best practice in sustainable process and technologies and facilitate the flow from discovery to further research and innovation (e.g. through twinning, networking, exchanges) and help discoveries to reach the market faster.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 1–2 million for (A) or (B) respectively 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 should show how some, or all, of the following impacts will be achieved:

- Engage the public to develop an understanding of the bioeconomy and its consequences and benefits.

- Improve the availability and quality of information on bioeconomy products and processes, including their social, economic and environmental impacts and the related ethical concerns, and foster future-oriented multi-stakeholders dialogues

- Facilitate the development and acceptability of regional and national bioeconomy strategies

- Speed up the pace of innovation, by bridging the gap between discovery and market, through closer ties between activities throughout the research and innovation chain

- Contribute to increasing the number of innovative products and processes reaching the market, and increasing the number of new companies and new jobs created from EU-funded research and innovation projects. Impacts could also be important on standards and policy development.

Type of action: Coordination and support actions

Deadline:

ISIB-8a-2014, ISIB-8b-2014 : 26/06/2014 at 17.00.00 Brussels time

Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-isib-2014-1.html

Topic Information:

ISIB-8a-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2286-isib-08a-2014.html

ISIB-8b-2014:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2290-isib-08b-2014.html

Topics with minor SSH relevance:

ISIB-5-2014: Renewable oil crops as a source of bio-based products

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2294-isib-05-2014.html

Topics with SSH relevance in 2015:

(This topic may refer to a different sub-call of the call H2020-ISIB-2014-2015, with a different deadline. Please check the link to the Participant Portal under the topic for more details.)

ISIB-3-2015: Unlocking the growth potential of rural areas through enhanced governance and social innovation

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2301-isib-03-2015.html

1.3   Societal Challenge 3 - Secure, clean and efficient energy

Call – "Energy Efficiency"

Call Identifier: H2020-EE-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics

The Call "Energy Efficiency (H2020-EE-2014-2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

EE 7 – 2014/2015: Enhancing the Capacity of Public Authorities to Plan and Implement Sustainable Energy Policies and Measures

Specific Challenge: Public authorities play a key role in the reduction of EU energy consumption and the increase of renewable energy capacity. For instance Member States must produce and implement National Energy Efficiency Action Plans (NEEAPs) and National Renewable Energy Action Plans. They also have the obligation to produce detailed action plans in specific sectors such as the renovation of buildings or the application of high-efficiency cogeneration and efficient district heating and cooling systems. Local and regional

authorities are also developing plans at their own level and other public authorities play an important role too; national energy regulatory authorities for instance should provide incentives for grid operators (heat, cold, and electricity) to enable network users to produce renewable energies and implement energy efficiency measures.

Doing this requires multidisciplinary skills to e.g. assess different cross-sector sustainable energy options, according to technical, environmental, economic and social criteria. It also requires skills to engage stakeholders in both the definition and implementation of the solutions, and to secure funding.

The situation regarding the availability of these skills varies from country to country; e.g. while certain public authorities have a long tradition of using energy performance contracting, others have not tried yet; or while a few Member States oblige large cities to develop urban mobility plans, such plans are not common practice in other countries.

Scope: Proposals **empowering public authorities to develop, finance and implement ambitious sustainable energy policies and plans (for instance under the Covenant of Mayors initiative), on the basis of reliable data and analyses.** Public actors should be encouraged to look at sectors with high energy saving potential such as buildings, industry and urban mobility. The geographical coverage should be well justified on the basis of European added-value. Capacity building should be an integral part of project proposals.

The following actions are part of the scope:

- Raising the capacity of Member States to fulfil their obligation under the new Energy Efficiency Directive.

- Enabling national energy regulatory authorities to address demand issues (e.g. demand response, tariff design, assessment of generation adequacy assessment).

- Capacity building on integrated energy, transport mobility and land-use planning at community and city-level.

- Supporting public authorities in better linking up local, regional and national levels for delivering integrated sustainable energy action planning and projects to achieve synergies and economies of scale.

- Establishing new or exploiting existing networks and other mechanisms to spread knowledge and facilitating the exchange of experiences and best practice on sustainable energy.

- Large-scale capacity building on innovative financing to specific groups of public authorities, such as national, local and regional authorities, energy agencies, structural and cohesion funds managing authorities.

- Defining and implementing standard energy saving packages for households, public sector and industry in particular under Article 7 of the Energy Efficiency Directive.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Impacts must be measured in terms of number of public officers influenced and number of new or improved policies and plans. The number of final consumers impacted should also be measured in millions of people. In addition, proposals targeting governments should also demonstrate that they accelerate the implementation of the new Energy Efficiency Directive.

Type of action: Coordination and Support Actions

Deadline: 5/6/2014 at 17.00.00 Brussels time and [10/06/2015 at 17.00.00 Brussels time]

Call identifier: H2020-EE-2014-3-MarketUptake

Call information (2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2014-3-marketuptake.html

Topic information (2014)

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2357-ee-07-2014.html

Call information (2015):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2015-3_marketuptake.html

Topic information (2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2372-ee-07-2015.html

EE 8 – 2014: Public Procurement of Innovative Sustainable Energy Solutions

Specific challenge: Considering the large volume of public spending (19% of EU GDP, or roughly EUR 2,200 billion in 2009), the public sector constitute an important driver to stimulate market transformation towards more sustainable energy products, buildings and services. To this regard, the recent Energy Efficiency Directive requires for instance that central governments purchase only products, services and buildings with high energy-efficiency performance. However, there are many operational barriers related to sustainable energy public spending such as the lack of knowledge, practical training and tailored guidelines; the lack of willingness to change procurement habits; or perceived legal uncertainties.

Scope:

- Proposals improving the capacity of **public authorities and national/regional/local procurement authorities in purchasing best available sustainable energy products, buildings or services. Project proposals should address the lack of professional procurement training, the lack of experience in implementing sustainable procurement practices and strategies, and/or the lack of sharing and co-operation among procurers. They should where appropriate rely on the use of cost – benefit analysis (e.g. using a life-cycle approach).** Actions should include sharing of best practices and involve large multipliers such as central purchasing organisations.

- Support public authorities in procuring fast-evolving information and communication technologies such as Green Data Centres. Project proposals should consider the risks associated to rapid technological evolution, a dynamic industry, scalability and the need for tailored (i.e. not off the shelf) solutions by suppliers. Activities to support networking of public procurers or the use of PPI (Public Procurement of Innovative solutions) or PCP (Pre-commercial Procurement) are to be included.

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: Every million Euro of EU support is expected to trigger the launch of public tenders for the purchase of sustainable energy products, buildings or services resulting in savings of more than 25 GWh per year of energy savings and/or renewable energy

production. Proposals should also increase the skills of public procurers and the market uptake of innovative solutions.

Type of action: Coordination and Support Actions

Deadline: 5/6/2014 at 17.00.00 Brussels time and [10/06/2015 at 17.00.00 Brussels time]

Call identifier: H2020-EE-2014-3-MarketUptake

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2014-3-marketuptake.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2358-ee-08-2014.html

EE9– 2014/2015: Empowering Stakeholders to Assist Public Authorities in the Definition and Implementation of Sustainable Energy Policies and Measures

Specific challenge: While public authorities have an important role to play to develop energy efficiency policies and plans, the latter require the full involvement of private stakeholders and the civil society for their effective implementation. However there is a general lack of capacity and coordination among those stakeholders to guarantee their full involvement and to effectively convert policies and plans into concrete actions.

Scope: **Proposals should target specific actors among a wide spectrum of stakeholders (utilities, industry, financing institutions, non-governmental organisations, consumer associations, interest groups, trade unions, etc.). They should provide large-scale capacity building or engagement activities to those specific groups playing a key role in the definition and/or implementation of sustainable energy policies and measures initiated by public authorities.** Proposals should demonstrate a strong European added value and put in place mechanisms ensuring the continuation of the activities beyond the project duration.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Each project must prove to influence hundreds of stakeholders playing a key role in the definition and successful implementation of national, regional or local policies. As a result the number of final consumers impacted should be measured in thousands of people.

Type of action: Coordination and Support Actions

Deadline: 5/6/2014 at 17.00.00 Brussels time and [10/06/2015 at 17.00.00 Brussels time]

Call identifier: H2020-EE-2014-3-MarketUptake

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2014-3-marketuptake.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2359-ee-09-2014.html

EE 10 – 2014/2015: Consumer engagement for sustainable energy

Specific challenge: Residential use of energy is responsible for 28% of EU energy consumption. The barriers to consumer energy saving have been known for more than 30 years but are still present, in particular split incentives (e.g. tenants vs. landlords), lack of information, high initial investment in energy-efficient equipment and habits of energy users. Likewise, while awareness of the existence of renewable energies has improved considerably in the last years, there is still a lack of understanding of how to use them in practice.

Scope: Project proposals should focus on changing the behaviour of consumers in their everyday life (e.g. at home, at work, at school), using market segmentation and focussing on 'action', the last step of the AIDA (Awareness – Interest – Desire – Action) framework. Equipment responsible for main energy consumption (e.g. heating and cooling, lighting, domestic appliances, and consumer electronics) as well as products from the small scale renewable energy market should be addressed in priority. Educational activities or tools (such as comparative ones) may be necessary, e.g. to help consumers read and understand their energy bills or labels; to help them take advantage of ICT devices and tools to monitor and analyse their energy use; to increase trust in individual smart meters or energy audits; or to help them participate in community renewable energy projects (e.g. RES consumer cooperatives, community-owned projects, etc.). Actions should take gender issues into account when relevant and involve manufacturers, retailers and consumer associations when these can play a decisive role. **The use of social innovations and innovative technologies (e.g. smart meters/appliances/ICT) should be considered when it brings added value, especially when addressing the younger generation. More fundamental activities aimed at a better understanding of consumers' and other stakeholders' perception, motivation and behaviour are part of the scope (e.g. understanding of product labels and building certificates, difference in patterns of consumption for women and men)** provided their results can directly lead to improvements in the effectiveness of consumer-driven initiatives.

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: Bigger market share of the most energy-efficient products (from the highest energy class) and/or of high quality renewable energy products. For example, each million € of EU support in energy efficiency actions is expected to deliver annual energy savings of around 10% for at least 5,000 households (around 8 GWh/year of savings). In any case proposals should demonstrate significant impacts in terms of number of people changing their behaviour and taking informed investment decisions

Type of action: Coordination and Support Actions

Deadline: 5/6/2014 at 17.00.00 Brussels time and [10/06/2015 at 17.00.00 Brussels time]

Call identifier: H2020-EE-2014-3-MarketUptake

Call information (2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2014-3-marketuptake.html

Topic information (2014)

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2360-ee-10-2014.html

Call information (2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2015-3_marketuptake.html

Topic information (2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2374-ee-10-2015.html

EE 12 – 2014: Socioeconomic Research on Energy Efficiency

(SSH dedicated topic)

Specific challenge: Energy efficiency is playing a growing role in local, national and European policy development. It is a complex issue spanning different disciplines including engineering and social sciences. To formulate long-term strategies and define cost-effective policies, policy makers need to better understand the macroeconomic impacts of energy efficiency, and, at the microeconomic level, the evolution of energy (and where appropriate exergy) efficiency, the influence of consumer behaviour, the influence of institutional factors, and the implications of trends in society and technologies.

Scope: **Foresight socio-economic activities informing the debate on the development and monitoring of energy efficiency strategies, taking a forward looking approach to the horizon of 2030 and beyond. Proposals may also research the multiple benefits of energy efficiency or look at the evolution of social, economic, cultural and educational barriers. They may also study major trends in society and their implications, or advance knowledge of consumer behaviour (e.g. rebound effect) and the impact of institutional factors**. They can either adopt a cross-sectorial approach or be specific to certain relevant sectors. Proposals may feed the development of energy efficiency strategies, policies and programmes at all governance levels. Where appropriate, they should take gender issues into account as well as existing macroeconomic and microeconomic models and results of socio-economic sciences and humanities. A specific priority will be given to the development of micro-economic analysis of the latest energy efficiency measures.

The Commission considers that proposals requesting a contribution from the EU of around 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: Positive impacts on energy efficiency policy development, evidenced for example by references to impact assessments, strategy papers or other policy documents.

Type of action: Research & Innovation Actions

Deadline: 5/6/2014 at 17.00.00 Brussels time

Call identifier: H2020-EE-2014-2-RIA

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2014-2-ria.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2064-ee-12-2014.html

EE 19 – 2014/2015: Improving the Financeability and Attractiveness of Sustainable Energy Investments

<u>Specific challenge:</u> Sub-optimal levels of investment in sustainable energy (in particular energy efficiency) are linked to a lack of trust of investors and financiers in the financial viability of sustainable energy measures, a lack of capacity in the public and private sectors to structure their projects, split incentives (e.g. rental buildings), and a lack of large-scale successful flagship projects. New bank capital requirements have decreased banks´ lending capacity and willingness to invest in the sustainable energy sector, which is still deemed by many to be risky.

The financial sector needs to be convinced to develop new financing products and practices that can respond to the constraints of the market.

<u>Scope:</u> **Project proposals and activities should foster dialogue with and between financial market actors, standardisation and valuation entities, industry, public authorities, consumers and property owners. They should lead to the development of new business models and financial products, ensuring synergies between public and private finance.**

- Proposals focusing on the development of frameworks for the standardisation and benchmarking of investments, such as labelling and standardisation of sustainable energy investments / portfolios, or valuation techniques integrating the 'green value' of buildings. Proposals integrated in a broader approach such as socially responsible investment or 'green buildings' should focus on the energy component.

- Proposals targeting public institutional investors (e.g. public or semi-public pension schemes) in order to increase the share of their funds invested in sustainable energy, or to develop specific funds or investment products.

- Proposals aiming to create EU and national sustainable energy financing platforms to organise dialogue with the relevant stakeholders and (among others) develop roadmaps, propose improvements in the legal frameworks and develop template documents and contracts leading to a better understanding of the market. Proposals must include a clear action plan to communicate across Europe towards potential replicators. The mechanism for knowledge sharing between countries will be established by the Commission services.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

For all proposals, at least three legal entities must participate in the action; each of the three legal entities shall be established in a different eligible country; and all three legal entities shall be independent of each other. However, proposals aiming to create national sustainable energy financing platforms may be submitted by one entity.

<u>Expected impact:</u> Proposals should lead to reduced uncertainty as regards investments into sustainable energy in terms of increased investors' confidence and trust. Further, relevant projects should deliver innovative (and relevant) asset valuation methodologies agreed by the market and/or standardised descriptions of sustainable energy investments or measures/contracts and/or labelling schemes or harmonised frameworks for sustainable energy investments and/or National strategies for financing sustainable energy investments.

<u>Type of action:</u> Coordination and Support Actions

<u>Deadline:</u> 5/6/2014 at 17.00.00 Brussels time and [10/06/2015 at 17.00.00 Brussels time]

<u>Call identifier:</u> H2020-EE-2014-3-MarketUptake

<u>Call information (2014):</u>
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2014-3-marketuptake.html

Topic information (2014)

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2364-ee-19-2014.html

Call information (2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2015-3_marketuptake.html

Topic information (2015)

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2379-ee-19-2015.html

Topics with minor SSH relevance:

EE3-2014: Energy Strategies and Solutions for Deep Renovation of Historic Buildings

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2067-ee-03-2014.html

EE4-2014: Construction Skills

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2355-ee-04-2014.html

EE 11 – 2014/2015- New ICT-based Solutions for Energy Efficiency

Topic information (2014)

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2063-ee-11-2014.html

Topic information (2015)

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2369-ee-11-2015.html

EE 14 - 2014/2015: Removing Market Barriers to the Uptake of Efficient Heating and Cooling Solutions

Topic information (2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2361-ee-14-2014.html

Topic information (2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2375-ee-14-2015.html

EE 15 – 2014/2015: Ensuring Effective Implementation of EU Product Efficiency Legislation

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2362-ee-15-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2376-ee-15-2015.html

EE 20 – 2014/2015: Project development assistance for innovative bankable and aggregated sustainable energy investment schemes and projects

Topic information (2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2069-ee-20-2014.html

Topic information (2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2381-ee-20-2015.html

EE 21 – 2014/2015: Development and Market roll-out of Innovative Energy Services and Financial Schemes for Sustainable Energy

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2365-ee-21-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2380-ee-21-2015.html

Call - "Competitive low-carbon energy"

Call Identifier: H2020-LCE-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadline listed under the individual topics

The Call "Competitive low-carbon energy (H2020-LCE-2014-2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

LCE 3 – 2014/2015: Demonstration of renewable electricity and heating/cooling technologies -minor

Specific challenge: Complementing the global challenges outlined above, the following technology-specific challenges have to be addressed in 2014:

a. **Photovoltaics**: Accelerating the development of the EU Inorganic Thin-Film (TF) industry – Inorganic TF technologies offer new application possibilities and additional benefits, such as flexibility, low weight, partial transparency, better low-irradiance performance, short energy pay-back time, and integrated manufacturing. To fully benefit from these, however, TF technologies need to achieve module efficiencies higher than 12-16% (depending on the technology) while developing low-cost, high-volume manufacturing routes.

b. **Concentrated Solar Power** (CSP): Improving the flexibility and predictability of CSP generation – The major asset of the CSP technology is to be able to produce predictable power, which provides the flexibility to adapt the demand from the grid. Only a few CSP technologies allowing this predictability have reached commercial maturity. The challenge is to demonstrate solutions that can significantly improve the dispatchability of CSP plants.

c. **Wind energy**: Demonstrating and testing of new nacelle and rotor prototypes - There is a need for demonstration and testing of new nacelle and rotor prototypes with a significant lower mass and material intensity and applicable to several types of large-scale wind turbines.

d. **Ocean energy**: Demonstration of ocean energy technologies - Demonstrate advanced full scale devices in real world conditions in order to gain further understanding and certainty over installation, operations and decommissioning costs, as well as of high levels of reliability and survivability.

e. **Renewable Heating and Cooling**

   i. Shallow geothermal energy: Improved vertical borehole drilling technologies to enhance safety and reduce costs – Shallow geothermal energy systems are ideally suited to meet the ambitious energy saving targets of the EU. They can provide heating and/or cooling or both. Further improvement of the efficiency of shallow geothermal systems and reduction of installation costs are needed to increase deployment of these geothermal systems for the heating & cooling market.

In 2015, the following technology-specific challenges have to be addressed:

a. **Photovoltaics**: PV integrated in the built environment – Building integrated photovoltaic (BIPV) systems will become essential elements in future net zero energy buildings provided a number of challenges are solved, e.g. integration with other functional building components, flexibility in system design, architectural and aesthetic considerations and standardisation, smart interaction with the grid, extension of the lifetime of system components, and cost reduction.

b. **Wind energy**: Demonstrating innovative substructure and floating concepts - There is a need for i) demonstration of innovative bottom-fixed substructure concepts for water depths of 30 to 50m capable of reducing costs; and ii) demonstration of innovative floating wind turbine concepts.

c. **Ocean energy**: Demonstration of ocean energy technologies - Demonstrate advanced full scale devices in real world conditions in order to gain further understanding and certainty over installation, operations and decommissioning costs, as well as of high levels of reliability and survivability.

d. **Deep geothermal energy**: Testing of enhanced geothermal systems in different geological environments – Widespread deployment of enhanced geothermal systems (EGS) needs new and improved models and innovative solutions are needed to routinely create EGS reservoirs with sufficient permeability, fracture orientation and spacing. Cross-fertilisation with hydrothermal fields and cross-fertilisation with tight oil and gas fields can be explored.

e. **Renewable Heating and Cooling**:

   i. Demonstration of solar technologies for residential and non-residential buildings - The use of solar energy for the production of domestic hot water and for space heating needs to increase to make full use of this renewable energy source. Innovative and cost-effective solutions in terms of components and system design and with a higher share of heating supplied by solar energy need to be demonstrated.

Scope: The proposals should address one or more of the specific technology challenges described above bringing the proposed technology solutions to a higher TRL level, aiming at "demonstration" of these solutions, accompanied, where appropriate, by supporting research activities and activities targeting market uptake. The proposals should bring the proposed technology solutions from TRL 5-6 to TRL 6-7 (please see part G of the General Annexes).

Technical issues, synergies between technologies, regional approaches, socio-economic and environmental aspects from a life-cycle perspective (including public acceptance, business cases, pre-normative and legal issues, pollution and recycling) need to be appropriately addressed where relevant.

Environment, health and safety issues should be considered in all demonstrations and appropriately addressed.

An important element for the entire area of renewables will be the need for an increased understanding of risks in each area (whether technological, in business processes, for particular business cases, or otherwise), risk ownership, and possible risk mitigation. Proposals shall therefore include appropriate work packages on this matter.

Proposals shall explicitly address performance and cost targets together with relevant key performance indicators and expected impacts. Industrial involvement in the consortia and explicit exploitation plans are a prerequisite. **All proposals will have to include a work package on 'the business case' of the technology solution being addressed. This work package has to demonstrate the business case of the technology solution and has to identify potential issues of public acceptance, market and regulatory barriers including standardisation needs, financing and other supply-side issues of relevance. It should also address, where appropriate, synergies between technologies (including those for storage), regional approaches and other socio-economic and environmental aspects from a life-cycle perspective (e.g. pollution and recycling**). The current Manufacturing Readiness Level (MRL, see Appendix to this work programme) and the activities needed to keep the MRL aligned with the advances in the TRL that will be undertaken in the proposal should also be indicated to ensure the potential for exploitation.

Opening the project's test sites, pilot and demonstration facilities, or research infrastructures for practice oriented education, training or knowledge exchange is encouraged.

The Commission considers that proposals requesting a contribution from the EU of between EUR 5 to 20 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Technological innovation related to the integration of renewable generation in the industrial and residential sectors can be addressed in the Energy Efficiency call or Smart Cities and Communities call. Improving the energy efficiency of district heating and cooling networks is addressed in the Energy Efficiency call.

Expected impact: The proposals are expected to have one or more of the general impacts listed below:

- Bringing costs of renewable energy down by increasing technology performance, decreasing costs of production, installation time and costs, decreasing of operation and maintenance costs, and increasing reliability and lifetime.

- Reducing life-cycle environmental impact.

- Improving EU energy security.

- Making variable renewable electricity generation more predictable and grid friendly, thereby allowing larger amounts of variable output renewable sources in the grid.

- Increasing the attractiveness of renewable heating and cooling technologies by improving cost-competitiveness, reducing complexity and increasing reliability.

- Nurturing the development of the industrial capacity to produce components and systems and opening of new opportunities.

- Strengthening the European industrial technology base, thereby creating growth and jobs in Europe.

- Contributing to solving the global climate and energy challenges.

Type of action: Innovation Actions

Deadline: For 2014: Single stage: 10/09/2014 at 17.00 Brussels time. For 2015: Single stage: 03/03/2015 at 17.00 Brussels time.

Call identifier (for 2014): H2020-LCE-2014-2

Call information (for 2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2014-2.html

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1127-lce-03-2014.html

Call information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2015-2.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1142-lce-03-2015.html

LCE 4 – 2014/2015: Market uptake of existing and emerging renewable electricity, heating and cooling technologies

Specific challenge: The legal framework established by the Renewable Energy Directive (2009/28/EC, 'RES Directive')) sets binding targets for all Member States to contribute to the overall 20% target for renewable energy in the EU final energy consumption by 2020, and the 'Energy Roadmap 2050' shows that renewables will have to play a much greater role in all future scenarios beyond 2020. As well as putting in place legal obligations, the RES Directive also makes recommendations for specific actions to be taken by the public and private sectors across the EU. However, in many areas, it leaves open the ways in which Member States may implement policies and support measures aiming to increase use of renewable energy at national, regional and local level.

Consequently, although some Member States have already made good progress in incentivising renewable energy, there are still many opportunities for common learning and sharing of best practices on the cost-effective mobilisation of new investments in renewable energy across the EU. Moreover, such investments contribute to the European 2020 strategy for growth, job creation, industrial innovation, and technological leadership as well as reducing emissions, improving the security of energy supplies and reducing EU's energy import dependence.

Since the adoption of RES Directive in 2009, most Member States have experienced significant growth in renewable energy consumption. However, currently, we are seeing a deceleration of this growth, partly due to the economic crisis, but also because there are a number of market uptake barriers that remain or persist for both established and innovative renewable energy technologies.

Scope: **To ensure the level of growth needed to deliver the EU targets for renewable energy, and to create the appropriate business environment for EU industrial leadership in low-carbon energy technologies, a number of important market-uptake challenges still need to be addressed, notably**:

- Ensuring sustained public acceptance of renewable energy projects and renewable energy overall, while taking into account the implications of the substantial increase in RES share in the final energy consumption;

- **Ensuring speedy and user friendly permitting procedures;**

- **Implementing renewable energy policies, codes and legislations at EU, national, regional and local levels in a coordinated manner using best practice examples with significant replication potential**;

- **Capacity building and contributing to the further development of renewable energy policy, legislation and regulation, and informing the debate on post-2020 horizons;**

- **Capacity building and facilitating the deployment of improved business models and innovative financing schemes for mobilising investments in innovative and established renewable energy systems and services**.

Proposals should address one or several of the challenges mentioned above for technologies and systems which are at TRL 7-9 (please see part G of the General Annexes). Regional specificities, socio-economic, spatial and environmental aspects from a life-cycle perspective shall be considered. For all actions, the consortia should involve and/or engage relevant stakeholders and market actors who are committed to adopting/implementing the results.

For RES electricity, actions which address exchanges of information or cooperation among different actors (e.g. on future business models for aggregators), must demonstrate that they are promoting best practices. Actions which are developing new recommendations or which are contributing to the debate on costs and benefits of specific options must provide quantified indicators of the market impacts of future policy options.

For RES heating and cooling, proposals must demonstrate that they are adopting an integrated approach which fully respects the requirements and recommendations given in the energy efficiency and EPBD directives. Actions aimed at promoting the use of geothermal, bio and/or solar heating for individual, industrial or district heating applications must involve / engage with the responsible policy makers and regulators as well as industry and potential financing bodies, and must include relevant capacity building and adoption of best practices.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 to 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Increasing the share of renewable electricity, heating and cooling in the final energy consumption. Reductions in the time taken to authorise the construction of renewable energy plants and related infrastructure. Substantial and measurable reductions in the transaction costs for project developers as well as for the permitting authorities, whilst still fully addressing the needs for environmental impact assessments and public acceptance. Development of better policy, regulatory, market support and financing frameworks, including at regional and local level.

Type of action: Coordination and Support Actions

Deadline: For 2014: Single stage: 07/05/2014 at 17.00 Brussels time. For 2015: Single stage: 03/03/2015 at 17.00 Brussels time.

Call identifier (for 2014): H2020-LCE-2014-3

Call information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2014-3.html

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1131-lce-04-2014.html

Call information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2015-3.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1146-lce-04-2015.html

LCE 7 – 2014: Distribution grid and retail market

Specific challenge: Demonstration in real user environments are needed in system integration, services, tools, network synchronisation, co-ordination schemes, business models, cost-benefit analyses, market architectures and rules and in regulatory regimes to plan, build, monitor, control and safely operate end-to-end networks which have increased operational flexibility that allow for a cost-effective integration of intermittent distributed generation and active demand. Smart grids and smart metering require the support from an ICT infrastructure with stringent requirements on e.g. availability and low latency. Different options are possible, in particular whether to exploit as much as possible the telecommunication infrastructure and its future developments, or whether to develop specific telecommunication infrastructure to cover parts of the architecture. In both cases, important investments need to be made and cost-effectiveness should be one of the main drivers. There is no conclusive analysis of the various options and whether dual-use of telecommunication networks would allow savings for consumers versus deploying a parallel infrastructure. The challenge also covers synergies with other types of energy networks (gas, and heating or cooling).

Interoperability is critical for a robust and sustainable grid architecture and needs to be demonstrated (e.g. through standards, protocols, regulatory framework).

Scope: Integrating and validating solutions to grid challenges concentrating on field demonstration of system integration. Preparing first replication of the solutions in different contexts and/or cities integrating retail markets, distributed renewable energy, demand response, new business models, advanced ICT. **Appropriate market models, business cases, user and general public engagement, regulatory, market up-take, social, environmental and resource efficiency aspects should be included. Opening up demonstration facilities for targeted practice-oriented education and training is encouraged. Life Cycle Analysis and economic assessments should be refined.**

Preparing the development of the next generation ICT infrastructure for smart metering and smart grids, **analysing capital costs, operational costs, business models and benefits of different options**. The analysis has to be done in the context of the present regulatory frameworks (both for energy and telecommunications) in the Member States.

The Innovation Actions should focus on:

1. Development of ICT tools, and integration and innovative use of ICT for smart grid services to be provided in an open and competitive electricity market. This includes services for next generation distributed renewable energy integration and demand

response systems. **Particular attention is to be given to new market entrants, including ESCOs, aggregators, etc. and to validation of new business models.** The Commission considers that a contribution from the EU in the range of 2.5 to 3 million Euro per proposal would allow this specific challenge to be addressed appropriately. It is expected that 3 to 4 proposals could be supported. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

2. Demonstration of innovative solutions (innovative integration of existing technologies into the system) offering services to all actors in the retail markets of the electricity system. The projects should improve medium and low voltage network monitoring and control (intelligent active control, of active/reactive power flows, fault and outage management, automatic control concepts, network synchronisation using for example European GNSS (Galileo) active loads and eventually distributed storage integration) in a secure and economic way. The projects should validate innovative models for local dispatching of distributed generation, and methods and tools for grid asset maintenance and management to mitigate the costs of grid maintenance, replacement and development in the presence of a very large share of renewable generation. **The projects should validate distributed renewable energy and demand response systems offering advanced services to all actors in the retail markets of the electricity system (including ESCOs, aggregators, etc.) in order to ensure that all consumers (industry and citizens) will benefit from cheaper prices, more secure, stable grids and low carbon electricity supply. The demand response should be demonstrated in action in the real world, with longer term monitoring in order to validate these new business models.** The Commission considers that a contribution from the EU in the range of 9 to 12 million Euro per proposal would allow this specific challenge to be addressed appropriately. It is expected that 3 to 4 proposal could be supported. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

3. Deployment of a flexible architecture for smart metering systems decoupling the metrology part from user functionalities and allowing for smart grid functionalities to be added during system exploitation in a plug and play way. Connection to building management systems (BMS), intelligent appliances, local generation and storage shall also be included**. The solutions have to be such that the costs for a prosumer (mono-phased meter + end user functionalities + service provisioning) shall not exceed 100 €for large quantities (such as 10.000 orders).** The Commission considers that a contribution from the EU in the range of 2.5 to 3 million Euro per proposal would allow this specific challenge to be addressed appropriately. It is expected that 3 to 5 proposal could be supported. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

All proposals addressing 1, 2 and 3 shall include a part of market uptake measures accelerating the implementation of new policies, market rules, legislation and/or incentives schemes, various tariffs, which shall reduce the overall costs of supplying renewable electricity to end users. Societal research needs to be integrated into the market uptake part, addressing concerns about data security, public acceptance and ensure that citizens see the clear financial benefit.

The Coordination and Support Action: Support from an appropriate ICT infrastructure with stringent requirements on e.g. availability and low latency is essential for large scale deployment of smart grid and smart metering. Different options are possible, in particular whether to exploit as much as possible the telecommunication infrastructure and its future developments, or whether to develop specific telecommunication infrastructure to cover parts of the architecture. In both cases, important investments need to be made. There is however no conclusive analysis on the various options and on whether dual-use of telecommunication

networks would allow savings for consumers versus deploying a parallel infrastructure. In this context, the Coordination and Support Action **focusses on the cost benefit analysis of deployment options for smart grids ICT infrastructure. Elements to be considered are reduction of both capital and operational costs, including also innovative business models and benefits for different actors. The analysis should be done in the context of the present regulatory frameworks (both for energy and telecommunications) in the EU Member States and should examine possible distortions in current compensations and incentives towards the different options**. The Commission considers that one proposal with a contribution from the EU in the range of 1 million Euro would allow this specific challenge to be addressed appropriately.

Expected impact: The proposals are expected to:

- Demonstrate active demand response in real world environments in commercial operation with active involvement of consumers, aggregators, ESCOs, etc. based on new business models

- Deliver innovative ICT-based services and tools for even more advanced and high performance solutions

- Substantially increase the share of micro-generation and renewable generation within the local grid.

- Opening up new markets for advanced grid technologies and system architectures to foster European industries' competitiveness.

- Active participation of prosumers, and new players in energy markets.

- Mitigating capital and operational costs of the grid modernisation required for the energy transition, and minimising environmental impact, thus ensuring lower electricity prices for all. New benefits shall be generated; these benefits be shared in a fair way between all actors, from aggregators to industrial end-users and citizens.

- Better using scarce resources by maximising the up-scaling and replication of lessons learned from demonstration projects in different Member States and by sharing of knowledge and practices.

- Accelerating the implementation of new policies, market rules, legislation and/or incentives schemes for smart grids infrastructure

- Accelerating the deployment of innovations in the electricity grids to lower the cost of smart metering and smart grids deployment and to respond in a timely way to the challenges facing grid operators and users in view of the agreed 2020 objectives.

- Enabling an open market for services deployment.

- Developing generic techniques and better using scarce resources by maximising the up-scaling and replication of lessons learned from demonstration projects in different Member States and by sharing of knowledge and practices.

Type of action: Innovation Actions, Coordination and Support Action

Deadline: Single stage: 07/05/2014 at 17.00 Brussels time.

Call identifier: H2020-LCE-2014-3

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2014-3.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1132-lce-07-2014.html

LCE 10 – 2014: Next generation technologies for energy storage

Specific challenge: There is a need to develop new or improved storage technologies with higher performance, availability, durability, performance, safety and **lower costs**. These new and enhanced storage technologies have to contribute to the **cost-efficient integration** of distributed and variable renewable energy sources.

In addition, **life cycle assessment and economic modelling for use of energy storage technologies needs to be refined. Generally, energy storage has to progress in the innovation chain** so that the barriers associated with new storage concepts are reduced. This would include adaptation of new materials and developments for improved safety.

Scope: Activities should focus on developing the next generation of storage technologies by bringing them from TRL 2 or above towards TRL 5 (please see part G of the General Annexes). They cover storage technologies of all sizes relevant to energy applications and all types of locations.

The activities need to take into account grid interfaces and, when appropriate, use synergies between technologies. Research should also address environmental, **economic and public acceptance** issues or develop recommendations for future energy policy.

The Commission considers that proposals requesting a contribution from the EU of between EUR 6 to 9 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 proposals are expected to cover the general impacts listed below that are relevant for the proposed R&D:

- Enlarging the portfolio of effective storage technologies with potential for European wide usage.

- Lowering the cost, increasing the efficiency and durability, lower the environmental impact and reducing location constraints on energy storage systems.

- Contributing to solutions for high penetration rates of distributed energy resources and intermittent renewable energy.

- Integrate storage into the management of the distribution grids to provide increased grid security and stability, e.g. through appropriate integration with ICT tools for the control and management of electricity networks.

- Defer investments of grid reinforcement and lower the societal costs associated with high penetration of variable renewable energy sources.

- The impacts are expected to be linked to either large scale energy balancing or improved grid congestion management or self-consumption at local level.

Type of action: Research & Innovation Actions

Deadline: Single stage: 07/05/2014 at 17.00 Brussels time.

Call identifier: H2020-LCE-2014-3

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2014-3.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1134-lce-10-2014.html

LCE 14 – 2014/2015: Market uptake of existing and emerging sustainable bioenergy

Specific challenge: Actions are still needed to foster the development of the bioenergy sector and to ensure its sustainability (Renewable Energy Progress Report [COM(2013)175]). One way to do it is to use more and sustainable bioenergy. However, the EU needs to expand the supply of bioenergy produced in the EU, by encouraging the EU farmers and foresters to produce also energy and energy intermediaries.

In the short- and medium-term perspective, sustainable bioenergy in all its forms is expected to be the main contributor to the de-carbonisation. In order to achieve the EU targets set out in the RES and Fuel Quality Directives, and to address concerns regarding indirect and direct environmental impacts, sustainable bioenergy technologies (both existing and emerging) need to further penetrate the market.

Scope: Proposals should address one or several of the following bullet points using technologies and systems which are already at TRL 7-9 (please see part G of the General Annexes):

- **Setting up or strengthening sustainable local bioenergy supply chains that meet highest environmental criteria and quality standards, including consideration for indirect impacts and energy balances;**

- **Ensuring development and / or implementation of quality and sustainability standards for bioenergy in all its forms;**

- **Creating a market for sustainable intermediate bioenergy carriers to enable better technology competitiveness through economies of scale;**

- **Encouraging European farmers and foresters to produce non-food bioenergy or bioenergy carriers alongside food, feed and other products.**

- Development of methodologies for the traceability of biomass feedstocks from which bioenergy is produced (e.g. to distinguish first-generation from advanced biofuels);

- **Removing non-technical barriers to widespread production and use of biogas/biomethane from manure and other wastes as one of the most sustainable fuels available today for use in transport and for incorporation into the grid;**

- **Ensuring sustained public acceptance of sustainable advanced biofuels;**

- Exchange of information on best practices for bioenergy policy, regulations and support schemes to allow the most sustainable and energy efficient use of bio-resources.

- **Cooperation between different policy areas** at national / regional level (e.g. energy, agriculture, environment, waste, transport, etc.) needs to be increased to optimise the regulatory framework and implementing measures for the bioeconomy through exchange of information and best practices;

- **All Member States must possess the necessary capacity to enact the EU legislation, while the businesses must make full use of the opportunities that these new markets create for them. Therefore specific capacity building activities targeting the main stakeholders (e.g. biomass suppliers and users, decision makers, financial institutions, auditors and verification bodies) are needed.**

- **Tailored financing schemes for supporting investments in innovative and established bioenergy technologies must be implemented, and the most successful schemes replicated.**

Regional specificities, socio-economic and environmental aspects from a life-cycle perspective shall be considered.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 to 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Increasing the share of sustainable bioenergy in the final energy consumption. Substantial and measurable reductions in the transaction costs for project developers as well as for the permitting authorities, whilst still fully addressing the needs for environmental impact assessments, including considerations for indirect impacts and energy balance, and public engagement. Development of better policy, market support and financial frameworks, notably at national, regional and local level.

Type of action: Coordination and Support Actions

Deadline: Single stage: 07/05/2014 at 17.00 Brussels time. For 2015: Single stage: 03/03/2015 at 17.00 Brussels time.

Call information (for 2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2014-3.html

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1135-lce-14-2014.html

Call information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2015-3.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1150-lce-14-2015.html

LCE 20 – 2014: The human factor in the energy system

(SSH dedicated topic)

Specific challenge: To better understand the human factor: Managing the transition to a more sustainable energy system is a challenging task, going beyond mere technological aspects**. Consumer's and other actor's awareness, attitudes, risk perception, consumption behaviour and investment decisions have a strong influence on the development of our energy system and are a crucial factor in the dissemination of energy relevant technologies, but are on the other hand shaped by the social environment. We need to explore the factors triggering the behaviour of the different stakeholders, including consumers, policy makers, industrial strategists, regulators, technology developers, investors, etc.. This includes the question, whether gender aspects play a significant role in the development of the energy system. Furthermore we need to develop appropriate means to facilitate and actively stimulate the public engagement in transforming our energy system and to foster the dialogue with the public on this matter.**

Developing the skills needed: The ambitious goals of the SET-Plan require the mobilisation of appropriate resources. This applies in particular to the availability of skilled workforce. As recommended by the SET-Plan Education and Training Roadmap we need to foster European cooperation in this area by building European networks, both in the university based education sector and in the vocational education and training sector, establishing close links to business and research.

Scope: Proposals should cover one or several of the following aspects:

- Awareness, perceptions, **behaviour and attitudes to energy relevant technologies (including nuclear) and to transition pathways to a low carbon economy of actors in the energy system, including perception of risks and benefits. Analysis of the role and the significance of gender aspects related to energy and its consequences for the development of an efficient and reliable low carbon energy system.**

- of a) vocational education and training networks in domains with **Public engagement in the transformation process to a more efficient, low carbon energy system. Development of measures, methods and tools to launch and stimulate a dialogue with the public on energy policy and energy innovation on European level.**

- Development and support potential shortages/domains needing new or upgrade of existing competences or b) networks linking relevant actors in the field of energy related education and training such as universities, other research institutions, business etc. to address knowledge, skills and competences needs and gaps. Both types of networks need to be in line with the scope described in the SET-Plan Education and Training Roadmap and need to involve the relevant stakeholders along the technology value chain. (appropriate instrument: Coordination and Support Action)

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 to 4 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: Support to the implementation of the SET-Plan by better understanding the complex links, interdependencies and interactions of the various actors in the energy system, their motivation, attitudes and perceptions. Development of options and strategies to address these factors with a view to facilitate and support the transition towards a sustainable energy system.

Development of strategies and measures to enhance public engagement in this transformation process and to establish a structured dialogue with the public on this matter including Europeanization of existing national energy dialogues.

Support the provision of appropriately skilled workforce to implement the SET-Plan by identification of needs and gaps, and by improving and accelerating the existing education and training activities in the vocational and in the university sector.

Type of action: Research & Innovation Actions, Coordination and Support Actions

Deadline: Single stage: 10/09/2014 at 17.00 Brussels time

Call identifier: H2020-LCE-2014-2

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2014-2.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1130-lce-20-2014.html

Topics with minor SSH relevance:

LCE 2 – 2014/2015: Developing the next generation technologies of renewable electricity and heating/cooling

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1123-lce-02-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1138-lce-02-2015.html

LCE 8 – 2014: Local / small-scale storage

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1133-lce-08-2014.html

LCE 11 – 2014/2015: Developing next generation technologies for biofuels and sustainable alternative fuels

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1124-lce-11-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1139-lce-11-2015.html

LCE 12 – 2014/2015: Demonstrating advanced biofuel technologies

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1128-lce-12-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1143-lce-12-2015.html

Topics with SSH relevance in 2015:
(These topics may refer to different sub-calls of the call H2020-LCE-2014-2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

LCE 5 – 2015: Meshed off-shore grids in the Northern Seas (minor relevance)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1147-lce-05-2015.html

LCE 6 – 2015: Transmission grid and wholesale market:

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1148-lce-06-2015.html

LCE 9 – 2015: Large scale energy storage

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1149-lce-09-2015.html

LCE 13 – 2015: Partnering with Brazil on advanced biofuels- (minor relevance)

This topic is subject to completion of an agreement with the Brazilian government and thus the text may still change.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1152-lce-13-2015.html

LCE 21 – 2015: Modelling and analysing the energy system, its transformation and impacts

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1145-lce-21-2015.html

Call – "Smart cities and communities"

Call Identifier: H2020-SCC-2014/2015 – open in 2014: sub call H2020-SCC-2014

Call Information:

For the 2014 call H2020-SCC-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-scc-2014.html

Publication date: 11/12/2013

Deadlines: please see the deadline listed under the individual topics

Topics with SSH relevance in 2014:

SCC 2 – 2014: Developing a framework for common, transparent data collection and performance measurement to allow comparability and replication between solutions and best-practice identification

Scope: To develop a framework for common data and performance measurement collection system which should be open, transparent and allow comparability of solutions. It should consider KPI on energy, ICT and transport matters as well as joint indicators to measure **possible rebound effects and systemic values**. Work has to build on results from CONCERTO, CIVITAS, the Green Digital Charter as well as the ICT-PSP pilots and could embrace other initiatives as the Green Button of the DoE in the US and 'The Social Energy

Collective' in the Netherlands. In addition to methodologies and tools proposals should establish a framework for **cities' cooperation to exchange best practices and compare achievements.**

Performance measurements should consider the solution's impact on greenhouse gas emission reductions, **improved energy efficiency and increased integration of RES into a city's energy mix. Moreover quantification of economic, and possibly even social, performance of the solution at hand has to be included to evaluate the potential value for money and consumer engagement**. In short, key performance indicators are to be developed at least along the environmental and economic dimensions of sustainability.

The work has to consider existing European initiatives such as the Reference Framework for sustainable Cities and the international dimension, notably the CityProtocol and ITU (International Telecommunication Union) initiatives.

The Commission considers that proposals requesting a contribution from the EU of between EUR 0.5 to 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:

- Involvement of society in data management processes of cities according to the value of information and improvement of level of trust of citizens.

- Stimulate market for data-enabled services/solutions (supporting entrepreneurship).

- Improved territorial knowledge for smart city planning.

- Recommendations to policy makers for collecting new sources of data and possibly form the basis for policy recommendations for a 'smart city index'.

Type of action: Coordination and Support Actions

Deadline: Single stage: 07/05/2014 at 17.00 Brussels time

Call Information (for 2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-scc-2014.html

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2146-scc-02-2014.html

Topics with minor SSH relevance:

SCC 1 – 2014/2015: Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of the kind) projects

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2145-scc-01-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2148-scc-01-2015.html

SCC 4 – 2014: Establishing networks of public procurers in local administrations on smart city solutions

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2147-scc-04-2014.html

1.4 Societal Challenge 4 Smart, green and integrated transport

Call – "Mobility for Growth"

Call Identifier: H2020-MG-2014-2015

Publication date: 11/12/2013

Deadlines: please see the deadline listed under the individual topics

The Call "Mobility for Growth (H2020-MG-2014-2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

MG.1.6-2014. Improving skills and knowledge base in European aviation

Specific challenge: The European aviation sector should have access to a highly skilled workforce which can rely on a strong scientific knowledge base to be able to properly address the environmental and competitiveness challenges facing both the aeronautics and the air transport sectors. Two specific domains have to be addressed:

1. To **analyse and define the evolving skill needs** of the sector and **propose changes to the education** of aviation engineers accordingly, and to attract more young people to aviation careers.

2. To reduce the fragmentation in the dissemination of scientific and technical knowledge in Europe and enhance its global impact.

Scope: Proposals should address fully one of the two following domains:

1. Regarding the education of aviation engineers in Europe, the scope of the action is to **identify the skill needs** in the sector**, propose improvements including on gender issue and further contribute to the harmonisation of the content of the curricula for aviation engineers** towards the creation of a Europe wide system. The action should also develop and share outreach material and organise **events to attract young people to studies** leading to aviation careers. The initiative should build on existing mechanisms and associations. The consortium should include representatives from the aviation industry, research establishments and education institutions so that the proposed solutions can acquire recognition and support from these different stakeholders.

2. Regarding the dissemination of scientific and technical knowledge, the scope of the action is to create a Europe wide coordination mechanism gathering a representative group of associations active in the field of aviation to harmonise and rationalise conferences, events and publications. The action will contribute to enhance the

impact and accessibility of publications relevant to European aviation, in particular those issued from EU funded projects. The actions should aim at being self-supportable after the end of the project.

Expected impact:

Regarding domain 1, the proposed actions will demonstrate their capacity to contribute to increase the attractiveness, quality, coherence and relevance of the curricula, enhance teaching methods and the profile of engineers matching the evolving and growing needs of the sector. The potential impact should be expressed in the light of the number of engineers which could benefit from the improvements and time / manpower savings when compared to the extra time young engineers need to adapt / train under the current situation before they can be operational.

Regarding domain 2, the proposed actions will contribute to raise the impact and visibility of European conferences and events, to optimise the number and the yearly calendar of events and enhance the impact factor of scientific publications, their availability and access, in particular for those created in EU funded projects. The impact should be expressed in terms of: the time that could be saved for scientists / researchers when participating to conferences resulting from an optimised calendar of events, the time that could be saved in the search of information resulting from a centralised and structured approach to publications repository and the potential gain in impact factor resulting from an organised approach to EU-based journals. The gain of attractiveness of the European scientific dissemination system (compared to the US or other regions of the world) should be assessed qualitatively.

Type of action: Coordination and Support Actions

Deadline: 27/03/2014, 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_singlestage_a.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2610-mg-1.6-2014.html

MG.1.7-2014. Support to European aviation research and innovation policy

Specific challenge: The Strategic Research and Innovation Agenda (SRIA) of the Advisory Council for Aviation Research and Innovation in Europe (ACARE) identified a number of domains where policy support is needed. The following two domains call for urgent actions:

1. Door-to-door travel involving air transport is currently far from being seamless and therefore, based on the analysis of the current system, conceptual foundations of a novel system should be studied and proposed.

2. Certification, which is a key element to guarantee the safety of the air transport system, can be time consuming and costly; in addition, new approaches to certification have to be found to cope with novel technologies never used before. Therefore, innovative approaches to this process should be envisaged and studied.

Scope: Proposals should address fully one of the two following domains:

1. Regarding seamless door to door travel involving air transport, the proposed actions **should investigate the profile of customers and better understand their expectations, needs and requirements by collecting data and analysing the current European air transport system and its connections from a user's**

perspective. The current **effectiveness of traffic flows should be assessed and metrics developed in order to identify the main areas to be improved** (information to passengers, luggage handling, predictability, etc.) as well as the **drivers and choice parameters such as infrastructure, connectivity, income level, regional aspects, etc. which influence the travel behaviour**. On this basis, the action should then **develop a concept** for a system that is capable of providing a door-to-door service to the customers, establish the broad lines of the architecture of this system, **assess the feasibility and economic viability** of the concept (cost-benefit analysis) and propose key performance indicators.

2. Regarding certification, the proposed actions should aim to **review the current existing approaches** (i.e. including outside of Europe) and identify **which new tools and new methods could be used to accelerate the certification process** (e.g. alternative means of compliance, adaptability to new concepts or technologies), lower its costs while ensuring the requested level of safety. The action requires the involvement of the key stakeholders who have authority and the capacity to act on the certification process, notably EASA (this does not necessarily require that these stakeholders are participants to the Proposal).

Expected impact: The proposed actions will pave the way for future research and innovation actions contributing to the following high level goals for the 2050 time horizon:

1. 90% of the travellers within Europe are able to complete their journey within 4 hours door to door. In order to guarantee its impact, the proposal should give indication on the methods and sources of data that are planned to be used to study customer profiles and traffic flows and assess the statistical representativeness. It should also present a sound dissemination plan, demonstrate that the results will be communicated to the appropriate stakeholders and, in particular to the potential partners that would be needed to initiate the first research and innovation actions.

2. The certification process is time efficient, its costs have been reduced by 50% (with reference to year 2000) while ensuring the required levels of safety and gaining global acceptance. In order to guarantee its impact, the proposal should demonstrate that the results will be communicated to the appropriate stakeholders and that the dissemination mechanism is capable of gaining endorsement and commitment at high level.

Type of action: Coordination and Support Actions

Deadline: 27/03/2014, 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_singlestage_a.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2611-mg-1.7-2014.html

MG.3.4-2014: Traffic safety analysis and integrated approach towards the safety of Vulnerable Road Users

Specific challenge: Despite the improvement in road safety in recent years, road accidents and their consequences remain a serious social problem – on average 75 people lose their lives every day on European roads and 750 are seriously injured. Pedestrians, cyclists, motorbike and moped riders represent a particularly serious safety concern, since they account for a disproportionately high percentage of the total number of road fatalities and

serious injuries. At the same time, measures aimed at improving safety often imply significant economic cost, and tend to become more incremental over time. The challenge is therefore to **assess the societal benefits of such measures**, to improve the safety of Vulnerable Road Users (riders of Powered Two Wheelers, cyclists, pedestrians, children, the elderly and Persons with Reduced Mobility and their vehicles) and to update existing knowledge of accident causation in Europe for all road users.

Scope: Proposals should address one or both of the following:

- Advanced safety measures involving vehicles, infrastructure and its environment, protective systems, **training and development of behavioural knowledge** to reduce the number and severity of accidents involving Vulnerable Road Users. All proposals should include **assessment of the effectiveness, and demonstration of relevant technologies, in real-life conditions.**

- Developing an **in-depth understanding of road accident causation for all road users,** covering all aspects of road safety (vehicle, **driver** and infrastructure) together with appropriate actions for their prevention and mitigation. This shall include **methods for conducting a comprehensive assessment of socio-economic costs related to road accidents,** taking into consideration secondary costs related to congestion, material damage, vehicle uptime etc. as a basis for robust **cost-benefit analysis** of safety countermeasures at a transport system level.

Research will fill knowledge gaps at both European and national levels, and take into account **regional differences**. International cooperation is strongly encouraged. In line with the Union's strategy for international cooperation in research and innovation international cooperation is encouraged.

The Commission considers that proposals requesting a contribution from the EU of between EUR 5 to 7 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: Research in this area will contribute to delivering essential knowledge for the design and implementation of an efficient strategy to make European road users (particularly Vulnerable Road Users), vehicles and infrastructure safer, and so promote the development of the European Road Safety Observatory. Overall, research will contribute to the achievement of the European policy objective of halving road deaths by 2020, and, in the longer term, to the Transport White Paper's "Vision Zero" objective.

Type of action: Research and Innovation Actions

Deadline: First stage: 18/03/2014 at 17.00.00 Brussels time, Second stage: 28/08/2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_twostages.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2631-mg-3.4-2014.html

MG.4.4-2014. Advancing innovation in the Inland Waterways Transport (IWT) sector

Specific challenge: The maritime and inland waterways sectors have different dynamics as regards policy developments and policy-making cycles. The Inland Waterways Transport (IWT) sector cannot benefit from the same economies of scale as the maritime sector, also

because it is largely dominated by SMEs. The global dimension is practically absent; the sector has a stronger regional focus, is more driven by EU legislation and is more integrated into the internal market. Moreover, IWT is affected by climate change effects in terms of water levels.

New priorities for inland navigation policy have emerged, including those coming from the NAIADES II action programme, which require RDI support as a key building block for exploiting synergies and bringing about an integrated, comprehensive, and sustainable waterborne transport system. This will improve the competitive position of IWT and give it a better environmental performance.

Scope: In order to drive an innovation agenda for the sector (covering vessels, infrastructure, and modal links and integration), proposals should address the following three issues together:

- Support a massive introduction of a range of alternative energy concepts and technologies for a more efficient energy use and for emission reductions in IWT. New technological solutions are to be developed and deployed (also as retrofitting solutions), which aim at achieving emission levels in IWT that reflect the state of the art and are at least similar to those of road transport. **Research and innovation efforts should focus on new concepts that are tested through real-life pilot deployments which are accompanied by a thorough assessment of operational and environmental performance, including cost-efficiency.** The certification of solutions should be addressed in order to stimulate widespread take-up. Experience acquired in this innovative field must be made available to ship owners wishing to green their vessels.

- Establishment of a testing and monitoring regime for the application of strict emission limits to various categories of existing vessels/engines, including certification, implementation and type approval of retrofit solutions, appropriate test cycles and procedures for compliance monitoring.

- Develop digital, including simulator-based, **tools for education/training and cost-efficient navigation following inter alia, the assessment of manning and training/qualification requirements** with regard to vessel operation and cargo handling (including modal links).

As inland navigation in Europe also affects non-EU and non-EEA countries, international co-operation aspects in research and deployment of results should be addressed. Inputs to standardisation efforts should be made in terms of technical requirements for navigation and qualifications.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 to 6 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: Major progress will be made regarding the environmental performance and the energy efficiency of the IWT sector, improving its competitiveness as part of the Single European Transport Area.

New qualifications should allow for a more mobile and up-skilled work force.

Type of action: Research and Innovation Actions

Deadline: First stage: 18/03/2014 at 17.00.00 Brussels time, Second stage: 28/08/2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_twostages.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2635-mg-4.4-2014.html

MG.5.1-2014. Transforming the use of conventionally fuelled vehicles in urban areas

Specific challenge: Significantly reducing the use of fossil fuels in urban mobility, whilst improving air quality and increasing the accessibility and attractiveness of urban areas will, in addition to advances in vehicle technology, require new, cost effective policy measures and tools. In particular the increased use of non-conventionally fuelled vehicles for passenger and freight transport in urban areas is a key challenge. Special attention should be paid to issues related to vulnerable groups of citizens and gender issues.

Scope: Proposals should address one of the following domains:

- Comparing innovative policies, measures and tools that will, inter alia, halve the use of conventionally fuelled vehicles in cities, while increasing accessibility of urban areas and improve air quality and road safety. This could include:

  o **Assessing the role of regulatory measures, demand side measures, innovative mobility services and the promotion of alternative modes** as part of wider package of technologies, policy-based and soft measures with a strong potential for replication. The related consensus building, information and communication activities should be fully integrated in the work.

  o **Exploring how changes in mobility behaviour, individual choices, and social norms can be catalysed, accelerated and guided towards modal shift, changing vehicle use or ownership, reducing the need for travel, new mobility patterns, or their combination. Relevant drivers and barriers could be identified. The research should gather, evaluate and disseminate techniques that can be employed, including approaches that use social media.**

- **Exploring policy frameworks and measures** to ensure the uptake of alternative fuelled vehicle fleets in urban areas. This could include:

  o Assessing the opportunities for large scale deployment of alternative fuel distribution infrastructure, including for electric vehicle recharging. This could include a **comparative assessment of deployment approaches** combined with the adequate vehicles. **Research on partnerships, business models and planning/rollout approaches** could be undertaken and standardisation aspects could form part of the work. Pre-commercial procurement initiatives could be facilitated.

  o Analysing the potentials for upgrading and/or regenerating electric public transport systems (i.e. trolleybus, tram, light rail and metro) while ensuring the safe integration of electric vehicles into infrastructure, in line with the trend towards electromobility. This could include the **evaluation of costs and benefits** of development schemes, also addressing noise aspects, as well as knowledge transfer, exchange of experience and preparing policy recommendations. Activities to improve the operational potential and energy performance of electric public transport may be included.

This topic complements topic GV.8 of this work programme as well as work under the 'Smart Cities and Communities' Call of the Energy Challenge.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 to 6 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 project(s) should lead to increased knowledge and awareness of cost effective strategies, policies and approaches contributing to halving the use of conventionally fuelled vehicles in different types of cities through a variety of approaches. This should result, through increased acceptance by users, operators and policy makers, in their accelerated rollout. Clear commitments from participants, and leadership for an ambitious Europe-wide take up and rollout of results during and following the project(s) are expected.

Type of action: Research and Innovation Actions

Deadline: First stage: 18/03/2014 at 17.00.00 Brussels time, Second stage: 28/08/2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_twostages.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2636-mg-5.1-2014.html

MG.5.2-2014. Reducing impacts and costs of freight and service trips in urban areas

Specific challenge: In addition to advances in vehicle technology, achieving essentially CO_2-free city logistics will require significant improvements in the efficiency of goods, waste and service trips to reduce negative impacts (including on safety) and costs. This will require, among others, an improved knowledge and understanding of freight distribution and service trips and the development of best practice guidance on innovative approaches and how to replicate them.

Scope: Proposals should address one or several of the following aspects:

- **Improving basic knowledge and understanding on freight distribution and service trips in urban areas**. This could address research on indicators, measurement and data (e.g. delivery/service characteristics, operators, movements, and impacts); **economic and behavioural modelling; impacts of urban planning; effects of logistics sprawl (e.g. impact of decentralisation of logistics facilities on transport movements); freight mitigation strategies; effectiveness of partnerships and stakeholder engagement; and comparative analyses and evaluation of policies and experiments.**

- **Assessing innovative policies and solutions to ensure a better use of infrastructure (e.g. delivery spaces, off peak deliveries, non-road modes, urban waterways) and vehicles (types, load factors**); improve network management; **address demand side measures, innovative use of transport modes, new ways of stakeholder collaboration; and provide policy frameworks that allow sustainable business models for urban logistics solutions.**

- **Assessing innovative policies and solutions on consolidation and distribution centres in urban areas,** including design (e.g. cross-docking); **business models** for consolidation schemes (including fleet and freight sharing and pooling and adequate collaboration frameworks); integration of direct and reverse logistics; tools to identify and measure consolidation opportunities; and **governance models**.

This topic complements the work under topic MG.6.1 of this work programme.

In line with the Union's strategy for international cooperation in research and innovation[1] international cooperation is encouraged, in particular with the United States.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 to 4 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: Actions will result in a clear understanding of cost effective (non-vehicle technology based) strategies, measures and tools to achieve essentially zero emission city logistics in urban centres by 2030. Particular attention will be paid to significantly increased load factors and reduced vehicle movements resulting in cost and emission benefits. Practical guidance will result in a better integration of city logistics in urban policies. Clear commitments from participants, and leadership for an ambitious Europe-wide take up and rollout of results during and following the project(s) are expected.

Type of action: Research and Innovation Actions

Deadline: First stage: 18/03/2014 at 17.00.00 Brussels time, Second stage: 28/08/2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_twostages.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2637-mg-5.2-2014.html

MG.5.3-2014. Tackling urban road congestion

Specific challenge: Significantly reducing urban road congestion and improving the financial and environmental sustainability of urban transport will bring major benefits for the economy, the attractiveness of cities and citizens' wellbeing. This requires an improved understanding of measures to reduce urban road congestion whilst increasing urban accessibility for passengers and freight and contribute to the achievement of broader sustainable urban transport policy objectives. It also requires new thinking and **innovative business models and service concepts** for public transport, walking and (safe) cycling, adapted to increasingly limited public budgets. **Special attention should be paid to issues related to vulnerable groups of citizens and gender issues.**

Scope: Proposals should address one of the following domains:

- **Analysing measures and tools to understand and secure a long term reduction in urban road congestion**. This should include sub-urban and peri-urban areas. In particular the links with other aspects of urban mobility, e.g. public transport services; mobility management and **travel awareness**, cycling and walking strategies; parking management and information; traffic and travel avoidance; reallocation or multimodal use of road space; infrastructure development including integration of underused links; capacity management; and access or road user charging could be addressed.

- **Exploring how a favourable environment can be created for a significant growth in public transport at limited extra costs.** The research should provide **an overview and analysis of innovative approaches in areas such as fares, taxes and levies; infrastructure investment; rolling-stock renewal; customer**

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[1]   COM(2012)497

orientation; operational service concepts; synergies with other modes; demand management; organisational setup; and regulatory frameworks. Recommendations, tools and guidance material could be developed and tested to support operators and authorities in developing business models that match their needs and circumstances. The work could be accompanied by a platform with stakeholders from different organisational, economic and social contexts.

- **Assessing how the role of walking and (safe) cycling in the urban modal split can be increased, for example through awareness raising activities, financial/tax incentives, allocation of infrastructure space, planning approaches/provisions, service concepts, intermodal links, and human-centred environments.** The role of partnerships and the active involvement and commitment of public administrations require special attention. Recommendations, tools and guidance material could be developed and tested.

This topic complements work under several topics of the Road and the Intelligent Transport Systems areas of this work programme.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 to 4 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: Actions will result in improved understanding of proven policy measures and tools and technology options that can contribute to a significant reduction of congestion whilst improving mobility and access. They will also produce insights on the feasibility of new public transport business models with long term financial sustainability. The action(s) on walking and cycling will produce new insights on impacts, success factors and benefits. Clear commitments from participants, and leadership for an ambitious Europe-wide take up and rollout of results during and following the projects are expected.

Type of action: Research and Innovation Actions

Deadline: First stage: 18/03/2014 at 17.00.00 Brussels time, Second stage: 28/08/2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_twostages.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2638-mg-5.3-2014.html

MG.9.2-2014. User behaviour and mobility patterns in the context of major societal trends

(SSH dedicated topic)

Specific challenge: There is a lack of understanding of the role of user behaviour in modal choice and mobility patterns. For example, it is not clear which factors influence user behaviour and with what intensity. In addition, it is not clear how major societal trends, such as ageing or urbanisation, or trends in family composition, working and living patterns, impact on user behaviour. A better understanding of these issues and their complex interactions and impacts will support the development of innovative transport products and services. It will also underpin policy geared towards sustainable mobility at different spatial levels.

Scope: Proposals should build on existing knowledge and aim at establishing and progressing the state of the art in research on transport behaviour and its implications for modal choice and mobility patterns. Existing and possible future research and innovation avenues should be mapped. The work should rely as much as possible on available data. Proposals should at least address the following aspects:

- The factors that influence user behaviour in relation to the use of private and public transport, covering all transport modes as well as 'new modes' such as car sharing, bike sharing and tram-trains. The analysis should take into account the characteristics and specific needs of the various user groups (elderly, young, single parents, women, employed and unemployed, immigrants, etc.) in order to obtain insight on the relations between socio-economic conditions and mobility attitudes.

- The evolving mobility patterns at different spatial levels, taking into account the main socio-economic conditions and trends in Europe. Compare mobility patterns in different parts of Europe and/or different spatial levels (e.g. urban, peri-urban, rural, regional, national, European, etc.). The impacts on the requirements of the current and future European transport system should be considered.

- Taking into account the main societal trends, the possible ways to cater for future mobility needs through the provision of new or adapted transport products and services, including the assessment of the related business models, organisational models and identification of the appropriate policy context. The implications for the various user groups and on staff requirements and working conditions should be considered.

- The role of emerging information and communication technologies, including the opportunities provided by cloud computing, in collecting data on user behaviour and mobility patterns and in offering new, user-friendly products and services that may influence user behaviour through information provision, transport system management and changes in working and living locations.

Expected impact:

- The work is expected to collect and generate new knowledge on user behaviour and its impact on transport and mobility patterns, in the light of societal trends and the evolving user expectations; and to help facilitate acceptance of innovative more sustainable mobility options

- This will also enable transport policy makers, authorities and public and private product and service providers at various levels to design more effective and viable solutions, with a view to a more sustainable and user friendly transport system.

Type of action: Coordination and Support Actions

Deadline: 27/03/2014, 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_singlestage_a.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2613-mg-9.2-2014.html

MG.9.3-2014. Analysis of funding schemes for transport infrastructure

(SSH dedicated)

Specific challenge: Transport infrastructure has been traditionally considered as a precondition for economic development at various geographical levels (local, regional, national, European). At the same time the reduced capability of public budgets to fund directly transport infrastructure has led in recent years to the adoption of funding schemes involving private funds and contractual models known as public-private partnerships (PPP). These schemes have been in operation across Europe for several years already, in different arrangements and with varying degrees of success in each case.

This action should provide a comprehensive analysis of alternative funding schemes (public, PPP or other) based on the existing experiences in different transport sectors and geographical areas, and assess their impact with regard to economic development, value for public money, user benefits, life-cycle investment (including maintenance), efficiency, governance and procurement modalities, etc.

Scope: Proposals should address the following aspects:

- Drawing the lessons to be learned from the actual experience of different forms of PPP and other procurement practices for funding infrastructure projects across the different transport sectors and parts of Europe.

- Identify and analyse possible limitations of PPP and other funding schemes (such as: lack of flexibility, dependence on the banking sector, risk sharing, pricing and social acceptance, etc.) and suggest solutions in order to overcome them.

- Analyse the effects of the recent economic and financial crisis on funding transport infrastructure (including its operation and maintenance) throughout Europe and their impact on the different funding schemes.

- Assess the potential of transport investments and the related funding schemes, including innovative procurement schemes still in a pilot phase, to contribute to economic recovery, growth and employment, in view of future infrastructure needs with a 2050 horizon.

Expected impact: The work is expected to give policy makers and providers of funding extensive comparative information on the advantages and limitations of different funding schemes for transport infrastructure projects, including innovative schemes still in exploratory phase, thus facilitating decision making on the design and implementation of future infrastructure projects.

It is also expected to improve the awareness of policy makers on the needs for projects serving an efficient and performing transport infrastructure network with the horizon 2050 and their potential contribution to economic recovery, growth and employment.

Type of action: Coordination and Support Actions

Deadline: 27/03/2014, 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_singlestage_a.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2614-mg-9.3-2014.html

*** MG.9.4-2014. Research, technology development and market prospects for the European transport industries***

Specific challenge: European transport industries across different sectors are well positioned in the global market. However, they are faced with new challenges stemming from the need to move to smart, green and sustainable transport technologies and systems within a relatively short period of time as well as from increasing international competition, changes in mobility demand and development in the European workforce. The challenge is to provide an overview of research, technology development and innovation capacities and strategies of the European transport industries, and identify present and emerging market prospects at a global scale, making use of diverse data and information sources.

Scope: Proposals should address the following aspects:

- Analyse the investment trends, productivity levels, technology choices and options, industrial strategies, research and technology development capabilities and funding efforts of the European producers of transport means, including manufacturers of vehicles, equipment, components and systems, in the automotive, aeronautical, ship-building, rail vehicle industries and transport service industries. In doing so, the analysis should build on existing knowledge, including previous Seventh Framework Programme projects.

- Assess the competitive advantages and disadvantages of those industries in relation to their main competitors world-wide; project their global market share prospects and consider the resulting employment impacts in terms of quantity and quality.

- Analyse the economic potential of new technologies, products, services and markets and their role in the determination of the industrial and commercial strategies of the major European players; and assess the success factors of those strategies.

- Consider the incidence of legislatory and regulatory frameworks at national and supranational level on industrial practices, innovation potential and global competitiveness of European industries.

- Explore the specific areas and conditions under which targeted international cooperation activities can be usefully pursued in a way that is compatible with European industry's needs, competition rules and the European interest.

Expected impact:

- The work is expected to provide a comprehensive picture of the research and technology development capabilities, innovation challenges and market prospects of the European transport industries, taking into account the heterogeneous nature and future demand and employment trends of the transport sector.

- It will enable stakeholders and policy makers to identify possible gaps in the research, technology development and innovation capacities and strategies of the European transport industries, particularly with regard to emerging market prospects, and elaborate appropriate measures at a corporate and policy level.

Type of action: Coordination and Support Action

Deadline: 27/03/2014, 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_singlestage_a.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2615-mg-9.4-2014.html

MG.9.7-2014. Innovation awards for students and researchers in the context of the Transport Research Arena conference - TRA 2016

Specific challenge: To promote the interest of students and researchers on research and innovation in the transport sector, by rewarding the best innovative ideas and research achievements in this field.

Scope: The objective of this action is to organise two competitions for transport research and innovation awards to be announced at the TRA conference in 2016:

- A competition for students and young researchers with the goal of stimulating the interest among young researchers/students in the field of transport.

- A competition for senior researchers in the field of **innovative transport concepts** based on results from EU-funded projects only.

- Both competitions will cover all transport modes **and cross-cutting issues in line with the EU policy objectives for smart, green and integrated transport**. The organisation of these awards should ensure high-quality competition and very good media coverage before, during and after the TRA conference.

The action should give particular attention to gender issues.

Expected impact: This action is expected to increase the attractiveness of transport related studies and reinforce the pursuit of excellence in European transport research and innovation, by giving recognition and visibility to the best achievements. The TRA conference is expected to efficiently disseminate knowledge and results of European and national research projects in the area of transport and thus improve the development and deployment of innovative solutions for transport in Europe.

Type of action: Coordination and Support Actions

Deadline: 27/03/2014, 17:00:00 (Brussels local time)

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2014_singlestage_a.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2616-mg-9.7-2014.html

Topics with minor SSH relevance:

MG.1.1-2014: Competitiveness of European aviation through cost efficiency and innovation

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2622-mg-1.1-2014.html

MG.1.3-2014:Seamless and customer oriented air mobility

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2623-mg-1.3-2014.html

MG.1.4-2014: Coordinated research and innovation actions targeting the highest levels of safety for European aviation

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2609-mg-1.4-2014.html

MG.1.5-2014: Breakthrough innovation for European aviation

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2624-mg-1.5-2014.html

MG.2.2-2014: Smart rail services

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2626-mg-2.2-2014.html

MG.2.3-2014: New generation of rail vehicles (minor)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2627-mg-2.3-2014.html

MG.4.2-2014: Safer and more efficient waterborne operations through new technologies and smarter traffic management

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2634-mg-4.2-2014.html

MG.6.1-2014: Fostering synergies alongside the supply chain (including e.commerce)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2639-mg-6.1-2014.html

MG.6.2-2014: De-stressing the supply chain

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2640-mg-6.2-2014.html

MG.7.1-2014: Connectivity and information sharing for intelligent mobility

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2641-mg-7.1-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

MG.3.6-2015: Safe and connected automation in road transport (minor relevance)

Topic information for MG-3.6a-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2700-mg-3.6a-2015.html

Topic information for MG-3.6b-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2648-mg-3.6b-2015.html

MG.5.4-2015: Strengthening the knowledge and capacities of local authorities

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2702-mg-5.4-2015.html

MG.5.5-2015: Demonstrating and testing innovative solutions for cleaner and better urban transport and mobility

Topic information for MG-5.5a-2015:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2703-mg-5.5a-2015.html

Topic information for MG-5.5b-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2649-mg-5.5b-2015.html

MG.9.1-2015: Transport societal drivers

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2645-mg-9.1-2015.html

Call - "Green Vehicles"

Call Identifier: H2020-GV-2014/2015

Publication date: 11/12/2013

The Call "Green Vehicles (H2020-GV-2014/2015)" is divided into several "sub-calls". Please refer to the URL Link to the participant portal under the listed topic for more information (deadline etc.).

Topic with SSH relevance in 2014:

GV.5-2014: Electric two-wheelers and new light vehicle concepts (minor relevance)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2605-gv-5-2014.html

1.5 Societal Challenge 5 - Climate action, environment, resource efficiency and raw materials

Call – "Waste: A resource to recycle, reuse and recover raw materials"

Call Identifier: H2020-WASTE-2014/2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics

The Call "Waste: A resource to recycle, reuse and recover raw materials (H2020-WASTE-2014/2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

WASTE-1-2014: Moving towards a circular economy through industrial symbiosis

Specific challenge: Growing prosperity leads to the extraction and use of more resources and to the production of more waste. The EU is committed to implement the principles of the waste hierarchy, which implies the prevention of waste, its reuse and recycling where it is not prevented, and its energy recovery as sub-optimal option. This calls for eco-innovative solutions and resource-efficient products, processes and services, and their uptake which will be facilitated by new sustainable lifestyles and consumption behaviour.

Industrial symbiosis, whereby different actors derive mutual benefit from sharing utilities and waste materials, requires large-scale systemic innovation with the aim of turning waste from one industry into useful feedstock for another one. The management of waste material flows coming from different sectors calls for reliable and harmonised data for the estimation of composition, patterns of supply and quantity of wastes generated over the year(s), in order to achieve reliable and predictable feed-stocks of secondary raw materials for industrial plants. Industrial symbiosis needs ample coordination between a variety of stakeholders, such as industry, research, civil society organisations, public authorities and policy makers, and an increased awareness of producer responsibility for waste production, which is essential in consideration of the central role of businesses in the economic and societal transformation.

Industrial symbiosis has been identified by the SPIRE PPP as one of the solutions to be addressed to achieve more efficient processing, resource and energy efficient systems for the process industry.

Scope: Proposals should aim to demonstrate and analyse, with a life cycle perspective, **innovative processes and services, including organisational and management systems and business models**, or a combination thereof, that increase product life-spans, enable product and material reuse, recycling, recovery, with an upgrading cascading approach for recovered materials and products, and reduce generation of waste along product chains in different production processes as well as reduce the utilisation of feedstock materials and the emission of harmful substances. Proposals may also address design for repairability and recyclability, and should either focus on a specific production value chain, or have a cross-sectoral approach establishing industrial symbiosis leading to closed-loop processes, or combine both.

Proposals should give a significant role to SMEs, as far as possible. **Opportunities for social innovation, encouraging more sustainable consumption behaviour and lifestyle change, and involving civil society, should be considered, with appropriate attention to the gender dimension and to the barriers to raising awareness of eco-innovative solutions and their market, household and community penetration.**

Systemic and cost-effective solutions will benefit from innovative ICT solutions for waste traceability, waste material flow management, and the estimation of the availability, composition and quality of waste.

The Commission considers that proposals requesting a contribution from the EU of between EUR 8 and 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: Measurable reduction of waste generation and resource use in the medium term. Significant gains in productivity against the state of the art for waste treatment plants and in material and energy efficiency, with reduction of greenhouse gas and other pollutants emissions in the short term. Contribution to standards validated by industrial players and identification of best available techniques and emerging techniques under the Industrial Emissions Directive. Significant increase in European and global market up-take and replicability of eco-innovation solutions, measured by qualitative and quantitative indicators, contributing to an important reinforcement of the eco-industry landscape in Europe in the short term, and to the adoption of more sustainable consumption behaviour and lifestyle in the medium term. Support, where appropriate, to the implementation and evaluation of technology verification schemes, also from a gender perspective, including the EU Environmental Technology Verification (ETV) Pilot programme . Support to the implementation of the roadmap of the SPIRE PPP.

Type of action: Innovation actions

Deadline: First stage: 08/04/2014 at 17.00.00 Brussels time, Second stage: 16/09/2014 at 17.00.00 Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-waste-2014-two-stage.html

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2111-waste-1-2014.html

WASTE-2-2014: A systems approach for the reduction, recycling and reuse of food waste

Specific challenge: Food waste has taken on disquieting proportions worldwide in all steps of the food production and supply chain but especially at consumer level**. Before defining measures to reduce such waste at all stages it is necessary to develop a better understanding of business and consumer behaviour in relation to waste generation, handling, reuse and by-product valorisation.** Technologies for the collection, sorting/grading, stabilisation and valorisation of food waste, by-products and packaging material need improvement or development. The aim is to optimise the performance of the whole food system, including packaging, catering and consumers, and achieve a secure and sustainable food supply, also for the poor.

Scope: Proposals should both address approaches to reducing food waste and packaging materials generated at relevant stages of the food system and investigate ways of converting

food waste into value-added by-products. **A comprehensive methodology for evaluating food waste in all its components should be developed addressing quality, safety, sustainability, legislation and costs. Inter-disciplinary research methods include practical, close-to-market approaches for characterising possible new foods and feeds and identifying the risks and benefits related to the new production processes.** A database/inventory should be developed of recyclable materials, valuable molecules, substances and materials originating from waste and by-products, also in view of future life cycle assessments (LCAs). **Solid involvement of social sciences and humanities and civil society is a prerequisite to better understanding the socio-economic, cultural and environmental dimension of food waste and promoting change in the business and consumer environment for social innovation,** while the use of ICT tools is expected to accelerate this. In line with the objectives of the EU's strategy for international cooperation in research and innovation and in particular with the implementation of the EU-China dialogue, proposals are encouraged to include third country participants, especially those established in China.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 9 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:

- A significant contribution to achieving the European policy target of reducing food waste by 50% by 2030, including at the consumer level.

- A reduction in waste management costs, and in environmental impacts, including emission of greenhouse gases.

- Supporting a harmonised approach to EU food waste legislation and improved national implementation, and contribution to new standards.

- An increase in the competitiveness of the European food and drink and chemical industry, in particular SMEs, as measured in terms of market share, turnover, cost effectiveness, employment and intellectual property, through the development of innovative applications of food waste.

- Progress towards sustainable food consumption patterns leading to healthier consumers and as a result reduced national health costs.

Type of action: Research and innovation actions

Deadline:

First stage: 08/04/2014 at 17.00.00 Brussels time, Second stage: 16/09/2014 at 17.00.00 Brussels time

Call information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-waste-2014-two-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2112-waste-2-2014.html

WASTE-4-2014/2015: Towards near-zero waste at European and global level 8

Specific Challenge: The complexity and heterogeneity of waste streams require coordination and networking between researchers, entrepreneurs and public authorities to harmonise

technologies, processes and services, to profit from benchmarking, sharing best practices, and gender mainstreaming, and to use or develop standards. Insufficient cooperation between different value chain players in several raw materials sectors results in lower recycling rates or suboptimal use of raw materials from an environmental and socio-economic point of view. Improved cooperation within or along different value chains and among stakeholders, including a participatory role of citizens, representing the wider society, and civil society organisations, can lead to more efficient use of raw materials and to waste reduction.

The global nature of the waste management challenge requires coordination, pooling of resources and support to the definition of global objectives and strategies, and holds a potential for export of eco-innovative solutions and seizing new markets. Dissemination at international level of knowledge on waste management, including environmental regulations and standards, can contribute to turning waste into a resource at global level and to setting up resource efficient waste management systems and technologies and services, particularly in developing countries and emerging economies. To this end, enhanced forms of participatory processes for all stakeholders are needed.

Scope: Proposals shall address only one of the following issues:

a) [2014] An EU near-zero waste stakeholder platform : Creation of a stakeholder platform for defining an integrated strategic research and innovation agenda, including systemic eco-innovation and business models, for waste prevention and management in the EU, defining areas of waste technologies to be clustered, and proposing actions for strengthening links between research funding programmes across the EU. Synergies with relevant EU Initiatives on waste should be considered. Roadmaps addressing specific waste streams, including the electronic waste coming from the ICT sector, should be developed. Proposals should help foster synergies between relevant stakeholders and value chains while identifying new market opportunities. **They should provide for participatory and proactive social engagement of citizens and education as well as gender balance and sensitivity specific issues.**

b) [2014] Global waste dimension **: Development of a strategy for global dissemination and uptake of European waste management best practices, benchmarks and standards, thereby raising awareness on behavioural, social, political, cultural and institutional aspects in solid waste management, and paving the way to new market opportunities.** In line with the EU's strategy for international cooperation in research and innovation actions will contribute to the commitments of Rio+20 and UNEP's Global Partnership on Waste Management and will follow up on the on-going international activities such as the EU-Africa pilot project on waste, aiming at developing a roadmap of potential joint European-African research and innovation actions, including knowledge transfer in the field of waste management'.

c) [2014] Secondary raw materials inventory: Establishment of an EU network of relevant institutions (such as environmental agencies, research organisations, etc.) for enhancing knowledge in order to improve the sustainable supply of raw materials through an inventory component of an EU knowledge base with data and information on secondary raw materials, in particular critical raw materials, and their flows, maps and evaluation of European stocks. It should improve data collection on secondary raw materials from different types of waste (such as mining waste, wood-based, industrial, municipal waste, waste electrical and electronic equipment (WEEE) and others) at national and regional level in the EU and Associated Countries and subsequent access to data, and help identify the need for additional EU-wide waste statistics. Compatibility with relevant EU or global standards and interoperability with national databases and other relevant databases (e.g. from Seventh Framework Programme projects) should be ensured. Close cooperation with other on-going activities related to the EU knowledge base should be provided. If appropriate, the development of new standards should be examined. The action shall support implementation of the European Innovation Partnership (EIP) on Raw Materials.

For sub-topic c, the Commission considers that proposals requesting a contribution from the EU of up to EUR 2.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

d) [2015] Raw materials partnerships: Creation of a common multi-stakeholder platform focused on a limited number of key raw materials across their whole value chain. This should involve partners from across the value chain, including mining, processing, recycling, application, public sectors (national/regional/local) and civil society, while respecting the conditions of each value chain. The action shall support implementation of the EIP on Raw Materials.

Expected impact:

a) and b) Improved knowledge and metrics of specific waste streams and waste management methods and technologies in Europe, and a coordinated and integrated strategic research and innovation agenda, contributing to harmonised and optimised innovative waste management systems, best practices and standards and increased recycling rates in the medium term. Significant improvement in the knowledge of costs and performances along value chains, informing a pricing policy for waste management in line with the waste hierarchy. Support to the implementation of the Waste Framework Directive (Dir. 2008/98/EC) and achievement of Europe 2020 strategy reduction targets for greenhouse gas emissions. Support to the implementation of the outcome of Rio+20 and the UNEP's Global Partnership on Waste Management and to the implementation of environmentally sound waste management systems, in line with the Basel Convention. New market opportunities for European businesses.

c) and d) In the medium term, better-informed decision-making at EU and national level as well as by industry. Increased EU raw materials knowledge and transparency of EU raw materials information, for the benefit of various stakeholders. Boosting the raw material sector through an interdisciplinary and transnational cooperation allowing matching the supply and demand from the EU downstream industries. In the longer term, improving availability of key raw materials, while creating greater added value to the economy and more jobs. Facilitation of exchange of information and increased knowledge and use of the most advanced, economically effective and innovative technologies in the whole value chain of raw materials. Contribution to the implementation of the EIP on Raw Materials.

Type of action: Coordination and support actions

Deadline:

For WASTE-4a-2014, WASTE-4b-2014, WASTE-4c-2014: 08/04/2014 at 17.00.00 Brussels time; for WASTE-4d-2015: [10/03/2015 at 17.00.00 Brussels time]

Call information (for WASTE-4a-2014, WASTE-4b-2014, WASTE-4c-2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-waste-2014-one-stage.html

Call information (for WASTE-4d-2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-waste-2015-one-stage.html

Topic information:

for WASTE-4a-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2107-waste-4a-2014.html

for WASTE-4b-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2109-waste-4b-2014.html

for WASTE-4c-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2110-waste-4c-2014.html

for WASTE-4d-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2113-waste-4d-2015.html

Topics with SSH relevance in 2015:

(This topic may refer to a different sub-call of the call H2020-WASTE-2014/2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

WASTE-6-2015: Promoting eco-innovative waste management and prevention as part of sustainable urban development

Topic information for WASTE-6a-2015 ("Eco-innovative solutions"):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2114-waste-6a-2015.html

Topic information for WASTE-6b-2015 ("Eco-innovative strategies"):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2116-waste-6b-2015.html

Call - "Water Innovation: Boosting its value for Europe"

Call Identifier: H2020-WATER-2014/2015

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics.

The Call "Water Innovation: Boosting its value for Europe (H2020-WATER-2014/2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

Topics with minor SSH relevance:

WATER-1-2014/2015: Bridging the gap: from innovative water solutions to market replication

Topic information for WATER-1a-2014 ("First application and market replication"):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2577-water-1a-2014.html

Topic information for WATER-1b-2015 ("Demonstration/pilot activities"):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2582-water-1b-2015.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of the call H2020-WATER-2014/2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

WATER-2-2014/2015: Integrated approaches to water and climate change (sub-topic WATER-2b-2015: Integrated approaches to food security, low-carbon energy, sustainable water management and climate change mitigation)

Topic information on WATER-2b-2015

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2583-water-2b-2015.html

WATER-5-2014/2015: Strengthening international R&I cooperation in the field of water (sub-topic WATER-5c-2015: Development of water supply and sanitation technology, systems and tools, and/or methodologies)

Topic information on WATER-5c-2015

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2584-water-5c-2015.html

Call – "Growing a Low Carbon, Resource Efficient Economy with a Sustainable Supply of Raw Materials"

Call Identifier: H2020-SC5-2014/2015

Publication date: 11/12/2013

Deadlines: please see the deadline listed under the individual topics

The Call "Growing a Low Carbon, Resource Efficient Economy with a Sustainable Supply of Raw Materials (H2020-SC5-2014/2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

SC5-3-2014: The economics of climate change and linkages with sustainable development

Specific Challenge: Policy makers face societal and economic challenges when addressing climate change, including the need to bring climate action into the wider agenda of economic welfare and sustainable development. Decision-making processes require robust estimates of the costs and benefits, as well as risks and opportunities associated with different mitigation pathways against a background of uncertainty about the future climate and its impacts. It is also necessary to explicitly address the links between the development of low-emission and climate-resilient strategies and other policies to promote sustainable development, and to understand how both the mitigation of and adaptation to climate change is connected to issues such as eradication of energy poverty, increased well-being and welfare, air quality improvement, technology innovation, and food and water availability. To respond effectively to climate change and simultaneously meet sustainable development goals, radical transformations are needed to enable the transition to a clean, low-carbon, sustainable and resilient society, at the national, regional and global levels.

Scope: Proposals shall address only one of the following:

a) **developing a comprehensive economic assessment of climate change. The assessment should consider different mitigation and adaptation strategies, focusing on the low-carbon transformation of the economy, and evaluate as well the costs of inaction. Actions should quantify the costs, benefits and risks of different technological and societal transitional changes of the energy system, examine the impacts on green growth, innovation dynamics, job creation and social cohesion, and develop tools and methodologies in support of evidence-based decision making**.

The Commission considers that proposals requesting a contribution from the EU of between EUR 6 and 8 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

b) examining the link between climate change actions and sustainable development through international research collaboration efforts and developing a science dialogue between the EU and international partner countries, with a focus on G20 countries. Proposals should develop technological and **socio-economic mitigation pathways and adaptation strategies in the context of wider sustainable development goals, examine actual and prospective mitigation and adaptation policies in various countries to support evidence-based policy making for climate action in the context of sustainable development**, and undertake international collaboration with scientists with insights into the local challenges and opportunities. In line with the EU's strategy for international cooperation in research and innovation proposals should contribute to provide support for capacity-building and knowledge-sharing goals under the UNFCCC and contribute to major international scientific assessments (e.g. IPCC).

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 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:

a) Support for technological, institutional and socio-economic innovation in the area of climate action. Reduction already in the short-term of the uncertainties in assessing and computing the costs, benefits and economic values of mitigation options. Facilitation of EU and global climate policy goals and mainstreaming of climate change mitigation options across multiple scales and sectors, providing scientific underpinning for the implementation and review of the 'Roadmap for moving to a low-carbon economy by 2050' . Contribution to major international scientific assessment (e.g. IPCC).

b) Increased collaboration and cooperation in scientific research between the EU and key target countries in the area of climate action. Support for capacity-building and knowledge-sharing goals under the UNFCCC. Integration of climate action in the broader development

agendas for developing countries. Accelerated transfer of low-carbon and adaptation technologies and knowledge to emerging and developing countries. Contribution to major international scientific assessments (e.g. IPCC).

Type of action: Research and innovation actions

Deadline: First stage: 08/04/2014 at 17.00.00 Brussels time; Second stage: 16/09/2014 at 17.00.00 Brussels time

Call information (Call identifier: H2020-SC5-2014-two-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2014-two-stage.html

Topic information for SC5-03a-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2198-sc5-03a-2014.html

Topic information for SC5-03b-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2201-sc5-03b-2014.html

SC5-5-2014/2015: Coordinating and supporting research and innovation for climate action

Specific challenge: The pace of current developments and uncertainties surrounding likely future trends requires further steps to maintain and strengthen the evidence base to ensure that policy makers, businesses and citizens in the EU can continue to draw on a sound understanding of the state of the climate and the wider environment, the possible response options and their consequences in social, economic and environmental terms.

Better integration and coordination of on-going and future climate change research and innovation initiatives within the EU and beyond is needed, accompanied by timely and open exchange of information and research results to enhance the impact of research and ensure a more efficient use of resources and scientific developments.

Scope: Creation of EU climate change networks to facilitate dialogue among the relevant scientific communities, funding bodies and user communities in the EU throughout the duration of Horizon 2020 and enhance effective communication and dissemination activities targeting different stakeholders, to maximise the impacts of the research and innovation initiatives and increase public awareness about climate science and research results. Proposals should cover activities such as clustering, co-ordinating and creating synergies between international, EU and nationally funded climate change research and innovation actions, developing joint programmes and projects, creating links with related international programmes, forward looking analysis to establish emerging needs, and effective mechanisms to strengthen science-policy interface. **This requires genuinely cross-disciplinary, integrated and systemic approach - including the socio-economic dimension-, as well as the engagement and collaboration between the climate science and the broader stakeholder communities.**

Proposals shall address only one of the following issues:

a) [2014] Climate change mitigation options: establishment of a comprehensive mapping and assessment of climate change mitigation options, policies and related technologies in the EU Member States and Associated Countries, taking into account their costs and opportunities. It should include analyses of the potential for international cooperation/co-development with emerging economies and developing countries, with the aim of ensuring synergies amongst research projects, foster collaboration with national and international research programmes

and maximise impacts and outreach of EU-funded activities, also in view of accelerating technology transfer. Furthermore, **the risks, benefits and socio-economic aspects of negative emission technologies (including geo-engineering) should also be addressed, together with new approaches for linking research on impacts and adaptation with those on mitigation options and economic costs.** In line with the EU's strategy for international cooperation in research and innovation international cooperation is encouraged, in particular with emerging economies and developing countries.

b) Earth-system modelling and climate services [2015] : parallel development of an Europe-wide climate modelling and service framework to enable and encourage open exchange of knowledge, expertise and data in order to more accurately simulate climate evolution, and to improve the reliability of science based climate information at local, regional and global scales. It should integrate the European climate modelling, observations and service infrastructure initiatives and provide a science-stakeholder communication platform to better manage European resources, reduce fragmentation and improve synergies between national, European and international activities.

Expected impact: Evidence-based policy and appropriate, cost-effective management, planning and adaptation decisions by the public sector, businesses, industry and society through the provision and effective communication of trustworthy and timely science-based information. Enhanced impact of research and innovation activities through better identification of climate change R&I priorities, improved coordination of European, Member States' research and innovation programmes and funded activities, and synergies with international research and innovation programmes and actions.

In addition, the following specific impacts are expected:

a) Better coordination of relevant research and innovation in the EU, including cooperation with the European Institute of Innovation and Technology (EIT). Enhanced implementation of the EU 2050 Roadmap and relevant initiatives through improved dissemination of key research findings.

b) European society's improved resilience to climate change and mitigation of the risk of dangerous climate change.

Type of action: Coordination and support actions

Deadline: For SC5-5a-2014: 08/04/2014 at 17.00.00 Brussels time; for SC5-5b-2015: [10/03/2015 at 17.00.00 Brussels time]

Call information for SC5-5a-2014 (Call identifier H2020-SC5-2014-one-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2014-one-stage.html

Topic information for SC5-5a-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2050-sc5-05a-2014.html

Call information for SC5-5b-2015 (Call identifier H2020-SC5-2015-one-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2015-one-stage.html

Topic information for SC5-5b-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2151-sc5-05b-2015.html

SC5-6-2014: Biodiversity and ecosystem services: drivers of change and causalities

Specific Challenge: Biodiversity provides ecosystem services (provisioning, regulating, maintaining and cultural) crucial for human well-being. However, knowledge gaps remain in understanding the causality relationships between drivers/pressures (individually and collectively) and changes in biodiversity, ecosystem functions and ecosystem services and their societal impacts.

Since biodiversity is declining rapidly, leading to declines in ecosystem service provision, there is an urgent need to both document and evaluate the effects of drivers of change on all relevant levels of biological organisation, to better understand the links between biological diversity, ecosystem functions and resilience, and in turn to ecosystem service provision, so as to ensure effective policy and sustainable development.

Scope: Through a systematic approach and **within an integrated socio-economic-ecological framework**, while building as far as possible on existing knowledge, proposals should cover all of the following aspects:

- assess the causalities between biodiversity and ecosystem functions and services;

- assess the impacts of direct, indirect and emerging drivers of change, separately and in combination and interaction, on status and trends of biodiversity and ecosystem function (at all relevant scales), resilience and service provision;

- provide forecasting methodologies to predict future variation in drivers of change, their expected impact on biodiversity and the ensuing consequences of ecosystem service delivery;

- develop and refine sound and cost-effective indicators on biodiversity, ecosystem function/resilience and ecosystem service **which capture all the relevant ecological and socio-economic dimensions** and are widely applicable;

- develop **innovative ecosystem service oriented management concepts (including participatory initiatives), common frameworks and tools for the conservation and sustainable management** of biodiversity and ecosystem services.

The Commission considers that proposals requesting a contribution from the EU of between EUR 5 and 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: In the mid-term, enhanced predictive capacity concerning causalities between biodiversity and ecosystem function/service provision on the one hand and the drivers of change and biodiversity/ecosystem services on the other is expected. In the short to long term, this action should lead to more cost-effective environmental monitoring and enhanced evidence- and science-based policy, management and business models within a sustainable environmental and socio- economic context, enhanced citizen awareness and participation; as well as contribute to the achievement of EU and international biodiversity targets (EU 2020 Biodiversity Strategy , Convention on Biological Diversity, Rio+20) and link in with international efforts and fora on biodiversity and ecosystem services.

Type of action: Research and innovation actions

Deadline: First stage: 08/04/2014 at 17.00.00 Brussels time; second stage: 16/09/2014 at 17.00.00 Brussels time

Call information (Call identifier H2020-SC5-2014-one-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2014-one-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2199-sc5-06-2014.html

SC5-10-2014/2015: Coordinating and supporting research and innovation for the management of natural resources

Specific Challenge: The pace of current developments and uncertainties surrounding likely future trends in ecosystems and their services requires further steps to maintain and strengthen the evidence base to ensure that policy makers, businesses and citizens in the EU and Associated Countries can continue to draw on a sound understanding of the state of natural resources and the wider environment, the possible impact of response options and their consequences in social, economic and environmental terms.

Better coordination of often fragmented research and innovation actions within Europe and beyond is needed, accompanied by timely and open exchange of information and research results to enhance the impact of research and ensure a more efficient use of resources and scientific developments.

Innovative ways are required to mobilise all relevant actors, increase policy coherence, resolve trade-offs, manage conflicting interests, increase participation of citizens in decision-making and improve public awareness and business uptake of research results.

Scope: Creation of European networks to facilitate dialogue among the relevant scientific communities, funding bodies and user communities in Europe throughout the duration of Horizon 2020. Proposals should cover activities such as clustering, coordinating and creating synergies between international, European and nationally funded research and innovation actions, developing joint programmes and projects, creating links with related international programmes, **forward looking analysis to establish emerging needs, communication and dissemination activities for an improved science-policy interface, and aligning research with decision-making requirements. This requires cross-disciplinary interaction and an integrated, systemic approach, especially between socio-economic and environmental sciences.**

Proposals shall address only one of the following issues:

a) [2014] Enhancing mapping ecosystems and their services: developing a flexible methodology that permits consistent aggregation and comparison across scales for coordination of a transparent, comparable and evidence-based mapping and assessment of ecosystems and their services, including multiple ones, across the entire EU (including the outermost regions) and at national and regional level in order **to guide policy- and decision-making**. It should also analyse their interdependency, inter-linkages, synergies and potential trade-offs and **value their multi-functionality for human well-being,** building on the outcomes of the Millennium Ecosystem Assessment (MA) work and the Economics of Ecosystems and Biodiversity (TEEB) studies.

b) [2014] Structuring research on soil, land-use and land management in Europe: a network of funding agencies and other key players in Europe (and possibly beyond) to scope national funded research activities, develop a joint vision and design a strategic research agenda (SRA) for activities on soil, **land-use and land management** that should be implemented through future joint calls. Examples of relevant issues are: land-use change impacts and trends, including the ones related to bioenergy/bioeconomy resources, spatial planning, soil threats, sustainable use of the soil-sediment-water system, impacts at global level and effects on trading partners, **integrating socio-economic research and identifying elements linking to relevant policy domains and multilateral environmental agreements.**

c) [2015] An EU support mechanism for evidence-based policy on biodiversity & ecosystems services: setting up **an innovative, self-sustainable governance mechanism with a long-term perspective extending beyond the life of the project to enhance effective and efficient interactions between science, society and policy** related to biodiversity and

ecosystems services in the EU. This should build on existing science-policy interfaces and include all EU Member States, Associated or Accession Countries and should be open to observers.

Expected impact: Evidence-based policy and appropriate, cost-effective management, planning and adaptation decisions by the public sector, businesses, industry and society through the provision and effective communication of trustworthy and timely science-based information. Enhanced impact of research and innovation activities through better identification of R&I priorities, improved coordination of EU and Member State/Associated Country research and innovation programmes and funded activities, and synergies with international research and innovation programmes.

In addition, the following specific impacts are expected:

a) In the short term (1-3 years), an enhanced capacity and more consistent approach of Member States, through leveraging and complementing their actions, to carry out their obligations in line with the EU 2020 Biodiversity Strategy and national requirements.

b) In the short-term establish a jointly agreed vision and SRA and a network of funding agencies determined to implement it through a joint call in a follow-up phase. Enhance synergies and collaboration between national research programmes in the domain. Medium to long-term, improved evidence-based policy making in domains such as agriculture, environment, climate action, spatial planning, energy transition, drinking water production, resource efficiency and cohesion, and for implementing the Rio+20 pledge to achieve a 'land-degradation neutral' world.

c) Swift response to scientific and technical needs resulting from EU research and innovation and environmental policies in the short term (1-3 years) and further improvements in the medium term (3-10 years). Long-term positive impact on policy- and decision-making to address local, regional, cross-border or pan-European challenges through the provision of knowledge assessments, advice and science-based options and link in with international efforts and fora on biodiversity and ecosystem services.

Type of action: Coordination and support actions

Deadline: For SC5-10a-2014, SC5-10b-2014: 08/04/2014 at 17.00.00 Brussels time, for SC5-10c-2015: [10/03/2015 at 17.00.00 Brussels time]

Call information for SC5-10a-2014, SC5-10b-2014 (Call identifier H2020-SC5-2014-one-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2014-one-stage.html

Call information for SC5-10c-2015 (Call identifier H2020-SC5-2015-one-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2015-one-stage.html

Topic information for SC5-10a-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2053-sc5-10a-2014.html

Topic information for SC5-10b-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2060-sc5-10b-2014.html

Topic information for SC5-10c-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2152-sc5-10c-2015.html

SC5-14-2014: Consolidating global knowledge on the green economy in support of sustainable development objectives in the EU and internationally

Specific challenge: Global challenges in the areas of climate change, environment, resource efficiency and raw materials require global solutions. Research and innovation can make an important contribution to the EU's involvement in multilateral processes and implementation of international commitments in these areas. Following Rio+20 there is a need to support the emerging sustainability framework post-2015, and reconcile it with the green economy agenda, also with the involvement of civil society. At the same time, the challenge is to harness the opportunities provided by existing, new and emerging markets to increase the EU's global competitiveness.

Innovative ways are required to mobilise all relevant global actors, exchange best practices, resolve trade-offs, manage conflicting interests, addressing in-context specificities, including cultural aspects, increase participation of citizens in decision-making and improve both public awareness and business uptake of research results beyond the borders of the EU.

Scope: Creation of networks to facilitate dialogue among the relevant scientific communities in the EU and beyond throughout the duration of Horizon 2020. Proposals should cover activities such as clustering, coordinating and creating links and synergies between international and European research and innovation programmes and other initiatives in the area of climate action, environment, resource efficiency and raw materials, and communication and dissemination activities for an improved science-policy interface in response to decision-making requirements. Network activities between stakeholders should contribute to consolidating European experience and research findings that are relevant to the green economy, including on systemic eco-innovation. **This requires cross-disciplinary interaction and an integrated, systemic approach, especially between socio-economic and environmental sciences to support European initiatives for a green economy**, in which global aspects are taken into due consideration.

In line with the EU's strategy for international cooperation in research and innovation proposals should contribute to **establish effective links to relevant international networks and initiatives, particularly those supporting the Rio+20 follow up and the green economy agenda at international level. Examples of areas of activity include: sustainable consumption and production, greening global value chains, green growth and jobs, green behaviour, climate resilience, economic and environmental policies** etc. Proposals should be geared towards supporting the development and implementation of sustainable development goals.

Proposals should include a sufficient number of international partners from the target region(s) to ensure adequate scale and scope of cooperation.

Expected impact: Enhanced impact of EU research and innovation activities through evident synergies with relevant international research and innovation programmes and other initiatives. Greater EU influence in multilateral processes and better support to implementation of international commitments. Significant contribution to evidence-based policy and appropriate, cost-effective management, planning and adaptation decisions by the public sector, businesses, industry and society addressing global challenges in the EU and beyond through the provision and effective communication of trustworthy science-based information. Increased coordination between different actors and stakeholders to minimise the risk of overlaps and duplication of efforts. Strengthened synergies on green economy and sustainability issues and increased awareness of both technologically and socially eco-innovative solutions. Demonstrated improved science-based evidence in support of sustainability decision making at national, regional and global level and for the implementation of sustainable development goals. Demonstrated increased multi-stakeholder participation as well as general public and private sector engagement in support of the transition to a green economy.

Type of action: Coordination and support actions

Deadline: 08/04/2014 at 17.00.00 Brussels time

Call information (Call identifier: H2020-SC5-2014-one-stage):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc5-2014-one-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2057-sc5-14-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of the call H2020-SC5-2014/2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

SC5-7-2015: More effective ecosystem restoration in the EU

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2195-sc5-07-2015.html

SC5-17-2015: Demonstrating the concept of 'Citizen Observatories'

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2196-sc5-17-2015.html

SC5-19-2014/2015: Coordinating and supporting research and innovation in the area of climate action, environment, resource efficiency and raw materials (sub-topic SC5-19b-2015: Mapping Member State research and innovation in climate change, environment, resource efficiency and raw materials)

Topic information on SC5-19b-2015:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2158-sc5-19b-2015.html

1.6 Societal Challenge 6 - Europe in a changing world – inclusive, innovative and reflective Societies

Call – "Overcoming the Crisis: New Ideas, Strategies and Governance Structures for Europe"

Call Identifier: H2020-EURO-2014/2015,

Sub-Call for 2014 Topics: H2020-EURO-SOCIETY-2014

Call Information (H2020-EURO-SOCIETY-2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-euro-society-2014.html

Publication date: 11/12/2013

Deadlines: 03/06/2014 at 17.00.00 Brussels time (for 2014 Topics)

Topics with SSH relevance in 2014:

EURO-1-2014: Resilient and sustainable economic and monetary union in Europe
(SSH dedicated topic)

Specific challenge: Economic and monetary integration in Europe, underpinned by the creation of the euro, has changed the landscape of international monetary relations with far reaching impacts both for the EU and its external partners. However, the financial and economic crisis has demonstrated that this process is not complete and it still has a number of important shortcomings that undermine the stability of the European financial system and the European economy as a whole.

These deficiencies are related to the ineffective mechanisms of fiscal policy coordination and supervision, and the lack of a coherent regulatory framework for the financial sector, despite its growing impact on the real economy. With mounting public debt, the crisis has also highlighted the importance of sustainable fiscal revenues. Also, despite significant efforts over the years to increase economic convergence in the EU, substantial macroeconomic imbalances remained and were even exacerbated by the crisis. Furthermore, the Blueprint for a deep and genuine EMU underlined the need to progress towards developing some stabilisation tools and a fiscal capacity.

These imbalances, both globally, and within the EU, have also been often mentioned as one of the important factors at the roots of the crisis itself. Due to this, it is crucial for an effective crisis recovery and the long-term sustainability of the European economic and financial system that the economic and monetary integration process is completed, with effective mechanisms put in place to address all of these deficiencies at the same time, in a comprehensive way.

Scope: The research to address this challenge should in particular focus on the following key dimensions (proposals do not need to cover all dimensions and may include additional aspects which are relevant to the specific challenge):

1)   Effective mechanisms of fiscal policy coordination in the EU

Research should explore the problem of fiscal sustainability in the EU, also in comparison with other major world economies, as well as investigate what degree of fiscal policy

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coordination at the EU level is needed to ensure long-term sustainability and the effective stabilisation of the economy, notably in case of asymmetric shocks and if the different mechanisms already put in place form a sufficient framework to achieve this. In this context, different potential models of a fiscal union for Europe should be explored and comprehensively assessed, including potential stabilising effects of different forms of shock-absorption mechanisms at the central level as outlined in the Van Rompuy Report, their institutional characteristics, political feasibility and socio-cultural impact as well as the potential to further enhance the economic stabilisation of the European economy . Research should also investigate the practical aspects of fiscal policy coordination, fiscal rules and supervision in the EU, including the role and interplay of different national and European institutions as well as the political and cultural context of enforcing fiscal discipline, in order to identify potential loopholes that still need to be addressed.

2)   Fair and sustainable taxation

Research should make a comparative study of European and non-European taxation systems taking into account factors like, for example, objects of taxation, tax base, tax level, redistributive effects, complexity, control systems and legitimacy. The compatibility of the European tax systems and the broader impacts of the different tax regimes at the European level should be assessed, including the implications for economic development as well as widening socio-economic and gender inequalities. The analysis should also cover the potential of further steps of European tax harmonization including the perspective of true own resources for the EU budget. Due consideration should also be given to ethics, environmental and climatic sustainability, as well as values prevailing across the EU regarding fair taxation.

3)   The impact of macroeconomic and social imbalances on economic stability

Research should analyse the main features of macroeconomic, social and financial imbalances within and between the EU Member States and how they evolved throughout the history of European integration as well as what their implications are, in particular for long-term growth as well as economic and financial stability. A particular attention should be given to the analysis of spill over mechanisms from such imbalances from one Member State to another. It should also be investigated how to more effectively address macroeconomic and social imbalances in the EU and whether the current mechanisms, such as the Macroeconomic Imbalances Procedure and the Excessive Imbalance Procedure, provide an effective and robust framework to deal with this challenge.

4)   The global impacts of the crisis in Europe and the international monetary relations

Research will review the evolution of the global monetary system in the last decades, with particular emphasis on the consequences of the introduction of the euro. It should explore the impacts of the crisis on global power shifts, including the role of different currencies in international trade, capital flows and monetary reserves. The strategies of monetary authorities and their implications at the EU and world level should be analysed with respect to economic activities, including trade, employment, growth and financial flows. Research also needs to investigate the growing global interdependences of the financial and monetary systems and their implications for effective economic policies, including the rising challenges for global governance and international organisations. The activities should also consider different scenarios of the future evolution of international monetary relations and their implications for Europe.

The research is expected to comprehensively address one, or possibly a combination of, the above-mentioned dimensions. In so doing, proposals may also cover other issues relevant for building a more resilient and sustainable economic and monetary union in Europe. Proposals should in particular take stock of the relevant past and existing research projects funded at the EU level.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 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: Research is expected to advance theoretical and practical debates on a comprehensive framework for a more resilient and sustainable economic and monetary union in Europe. It will provide a critical assessment of the different concepts about effective economic governance in the EU and their practical implications, as well as of the mechanisms already put in place. These activities will contribute to a better understanding of the challenges facing the EU governance system currently and in the future, from the economic, political and technical point of view, taking into account both internal and external challenges. In exploring different possible solutions and scenarios, projects are expected to develop a comprehensive and coherent vision on how to ensure the long-term sustainability and resilience of the European economic system. New concepts, methodologies and tools developed by research will support European decision makers and practitioners in the setting-up and implementation of a reinforced governance architecture in the EU.

Type of action: Research and innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2077-euro-1-2014.html

EURO-2-2014: The European growth agenda

(SSH dedicated topic)

Specific challenge: The impacts of the economic crisis have been far reaching on the ability of the EU economy to innovate, grow and create jobs. In response, the EU has proposed a new growth strategy 'Europe 2020' which aims at tackling common European challenges and boosting economic growth and quality employment through smart, sustainable and inclusive growth. However, to ensure conditions for a successful economic recovery we need to better understand the broader contexts of growth in Europe.

Over the last decades different national systemic models, each embodying a different set of economic, social, legal and cultural orders (institutional arrangements) have evolved in Europe. These national systemic models performed very differently in the crisis and their abilities to overcome long-term, structural problems have significant implications for a successful economic recovery.

Increasing global connectivity has accelerated trends towards delocalisation and relocalisation of industry, services and R&D both within Europe and globally. The emergence of new economic actors, driven by low labour costs, but investing more and more in modern technologies, puts further pressure on the European economy and its competitiveness.

European competitiveness can be driven by innovation, but most countries severely hit by the crisis also lack innovation dynamism. However, innovation, growth and employment are interlinked in a complex way. Due to this, on the one hand it is essential to understand better the conditions under which innovation fosters growth that benefits the whole society through high quality jobs and reducing inequalities. On the other hand, a broad range of factors that stimulate innovation need to be explored.

Scope: The research to address this challenge should in particular focus on the following key dimensions (proposals do not need to cover all dimensions and may include additional aspects which are relevant to the specific challenge):

1)   Reform management for economic recovery

The research should provide an explanatory framework in order to describe and assess the politico-socio-economic models (institutional arrangements: political system, administrative system, social welfare system, legal framework, economic system, innovation system) in those EU Member States which have been most severely hit by the crisis and the trajectories of national development that led to it. It should also assess policy responses, in particular concerning the quality of public expenditure and consolidation efforts, taking into account the types of expenditure affected the most and the distribution of the consolidation burden in the society. It should also analyse how the governance systems of these countries allow and enable innovative change in order to explain the reasons for the perseverance of long-term structural problems and to assess the obstacles to institutional reforms. Finally, an assessment of policy proposals on how to overcome the underlying long-term structural problems should be made in the context of benchmarking these countries in terms of socio-economic competitiveness.

2)   Innovation-based growth strategy for Europe

Research should analyse the effectiveness of the innovation-based 'Europe 2020' growth strategy regarding employment creation, quality of jobs, inclusiveness and tackling increasing inequalities. The need for supporting policies should be assessed, as innovations both create jobs and destroy jobs, while the net balance depends on many factors such as the type of innovations and their substitution or compensation effects in the economy. The differences across sectors should be explored considering in what way the specific institutional conditions shape this balance, including the effects of public sector investments. Research should also explore policy trade-offs between fostering growth and employment through innovation/technological change and income inequality and how to effectively remedy the potential negative welfare effects. An improvement of the existing, comparative data as well the creation of new high quality comparative data may also be needed.

3)   Global production and innovation networks – costs and benefits for Europe

Research should analyse the costs and benefits of globalisation of production and innovation for the EU, Member States, firms and citizens, including constraints and opportunities for industries (Global Value Chain analysis). It should inspect how strategic decisions for (re)location are made by firms taking into account economic, financial, cultural, social and political aspects, including the new European agenda of Corporate Social Responsibility. The research should also investigate the potential for a better coordinated EU industrial policy, providing different scenarios of European international smart, sustainable and inclusive specialisation, including at Member States' and sectoral level. It should assess the different politically, economically and socially feasible steps of such specialisation(s) including in terms of growth and jobs created, taking into account variations between sectors and geographical areas. In this regard, new modes of and tools for cooperation between Member States should be envisaged.

4)   Migration, prosperity and growth

Research should make a comprehensive analysis of how migrants can contribute to the EU economy and society, including an assessment of the benefits and costs of immigration to the EU, considering both short-term and long term effects. From the labour market perspective, it is important to investigate how migrants can complement native worker productivity and what the success factors and inhibitors in migrants' careers are, including the gender-specific factors. Further analysis of the link between migration and innovation and competitiveness is also needed, in particular of the role of high- and medium-skilled migration in fostering innovation. Comparative analysis of Europe's strengths and weaknesses versus other regions, including their immigration policies, should identify approaches for making Europe more attractive to highly-skilled migrants, while protecting domestic labour, as a potentially important factor of economic dynamism and competitiveness of the EU.

The research is expected to comprehensively address one, or possibly a combination of, the above-mentioned dimensions. In so doing, proposals may also cover other issues relevant for fostering growth in Europe (cf. NORFACE Research Programme on Migration).

Activities aimed at the analysis of the economic impact of the Innovation Union and its commitments are targeted under a dedicated topic 'The economic impact of the Innovation Union' published in the Call on New forms of innovation (H2020-INSO-2014/2015) and are therefore outside the scope of this topic.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 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: This research is expected to contribute to the scientific base for policies aimed at successful economic recovery in line with the objectives of the 'Europe 2020' growth strategy. It will provide insights into establishing durable foundations for growth and employment through more effective forms of governance at national and European level. In particular, it will contribute to a better understanding of the policy instruments designed to tackle the challenges facing the EU in the era of globalisation and will provide new ideas for fostering its international competitiveness. The research is expected to close important knowledge gaps in economic foundations regarding the conditions for and outcomes of innovation-based growth with respect to employment and overcoming inequalities. This new knowledge will help to improve the effectiveness of the European growth and employment strategy both in individual Member States and at the EU level and will contribute to an effective implementation of the Innovation Union.

Activities under this topic will also develop tools for a better assessment of the socio-economic evolution of national economies in general as well as for the analysis of policy options and decision making mechanisms to overcome the current economic and financial crisis.

Type of action: Research and innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2078-euro-2-2014.html

EURO-3-2014: European societies after the crisis

(SSH dedicated topic)

Specific Challenge: The crisis has strongly impacted European societies. Many people lost their jobs or part of their income as a result of salary cuts. Uncertainty about the future has risen. European citizens demonstrate an increasing lack of confidence and trust in relation to the governance of financial institutions, companies and the free market overall but also in relation to democratic institutions and politics at European, national or local levels. At the same time, the crisis has pushed the EU to advance the integration process in order to make the European economy more resilient and sustainable.

The fall of trust and confidence caused various antagonisms to (re-)emerge, both between European nations and ethnic groups, as inter alia evidenced by the rise of populist movements and parties. This has highlighted the urgency to find 'Unity in Diversity', posing a challenge, which requires apart from innovative political and governmental responses, a reflective reappraisal of Europe's intellectual foundation. Whilst the EU celebrates its (cultural) diversity as a defining feature, this very diversity is also frequently regarded as an

impediment to the formation of a meaningful European identity as well as a European public sphere.

Social protection and inclusion policies are also undergoing continuous reform in the light of financial pressures as well as of governance changes. The distribution of responsibilities between private actors, public actors as well as the third sector is shifting and being reorganised, which may have a significant impact on citizens, arousing further public discontent. The Social Investment Package, adopted by the European Commission on 20 February 2013, provides an integrated strategic framework for social policy reform and the modernisation of social protection systems and services, structured around a social investment approach. This should help individuals, families and society at large to adapt to current and future societal challenges and should help Member States to use their social budgets more effectively and efficiently.

Scope: The research to address this challenge should in particular focus on the following key dimensions (proposals do not need to cover all dimensions and may include additional aspects which are relevant to the specific challenge):

1)   Individual reactions to the crisis and challenges to European solidarity

At the levels of individuals and society, research will explore the links between the meta-social frameworks and the meta-psychic frameworks in modern societies in Europe in the context of the crisis. It should combine theoretical and empirical work in this endeavour, taking explicitly into account the gender dimension as well as spatial justice. Research should also explore solidarity both as an intellectual concept and in its more practical expressions. It will explore the links between the psychological effects of the crisis and perceptions of solidarity and will assess and test the conditions of acts of solidarity by individuals and investigate to what extent the crisis has influenced people's preparedness to show solidarity with others. Finally, it will provide a critical assessment of what kind of policy responses have in the past undermined European solidarity and will develop a coherent vision of policy responses which are prone to instilling solidarity.

2)   Unity in diversity: prospects of a European identity and public sphere

Research should identify and pioneer ways in which European society can critically reflect upon itself, including its historical, cultural roots, collective memory and social imaginaries. Inquiry into Europe's intellectual base should consider the emergence of a European public sphere which facilitates these reflective discourses at the European level. Research should be transdisciplinary and address whether and how Europe's pluralism and cultural diversity as well as a richness of potentially multiple identities, can be understood as an asset of the European project, which may engender rather than undermine cohesion and serve as a resource for finding ways to ameliorate the crisis at a social level. Research should also investigate the conceptual strength of innovative, genuinely supranational approaches to identity, which are based on values, institutions, legal procedures and discourses. The analysis should draw on existing examples of supranational identities as well as identify the values and social bonds underlying them. Finally, research should consider the emergence of a transnational communicative sphere in Europe and what kind of policy and legal initiatives might facilitate it.

3)   Innovative social investment approaches for the modernisation of social policies and services

The research should identify innovative and strategic approaches to social welfare reform at various levels. It should consider the distribution of the policy, social and managerial roles between public, private and third sectors. Special attention should be paid to the legal framework and the interaction and complementarity of the functions of social welfare policies in the medium to long term. The research should also pay attention to the policy evaluation of social outcomes, social returns and effectiveness of interventions for the various actors, contributors and beneficiaries concerned. Consideration should be given to different types of expenditures, to an optimal distribution of costs and benefits, including those non-financial,

and to the most effective means of public investment, including in public administration and public services. Attention should be paid to the gender dimension of social policies as well as generational justices and the challenge to develop sustainable pension schemes. Comparative and multidisciplinary research on social investment at global level could also bring added value.

The research is expected to comprehensively address one, or possibly a combination of, the above-mentioned dimensions. In so doing, proposals may also cover other areas related to the social dimension of the crisis.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 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: Research projects under this topic are expected to contribute to enhancing European society's resilience by identifying common ground which may serve as a facilitator for a renewed resolve to foster European integration.

In particular, research is envisaged to expand and deepen the knowledge base on the discontent expressed by individuals in modern societies and on the ways in which their sense of identity is shaped. It should help to point to the cultural shifts that combine social and psychological transformations which would be necessary in order to address the deepest manifestations of crisis in Europe. Research is also expected to support European efforts to enhance a sense of solidarity among citizens. It will also contribute to debates on policy initiatives aimed at strengthening the public sphere to allow for more open and more rigorous debate on European topics within national media.

Multidisciplinary research under this topic is also expected to identify the potential for innovative ways of implementing and financing social welfare systems, including through third and private sector contributions complementing public investments in this area and take into account social rights aspects. The envisaged research is expected to contribute to the effective implementation of the Social Investment Package's priorities in general and to the building of the future knowledge bank on social policies in particular.

Proposals should involve relevant stakeholders with a view to integrating their insights into both the empirical and theoretical inquiry and to establish a dialogue on the issues covered by this topic.

Type of action: Research and innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2079-euro-3-2014.html

EURO-4-2014: Political challenges for Europe

(SSH dedicated topic)

Specific challenge: Europe's crisis has triggered a renewed European-wide debate on the future of European integration and the political system of the EU. The crisis has revealed structural flaws of European integration adding a political and social dimension to the crisis. Europe's values, the rule of law, considerations for economic, social and territorial cohesion and solidarity, as well as the legitimacy of its institutions have come under strain. Unsurprisingly, the number of protests against European integration increases in periods of a downturn in the economy, and the notion of the European Union's democratic deficit seems

to be confirmed. Even more so, trust and confidence in national politics, politicians and political parties, in general, has also fallen considerably across Europe resulting in growing nationalism and populism. The crisis has raised questions about the capacities of political leadership at the EU and national levels to manage the crisis and formulate adequate solutions.

Consequently, although often not new, ideas such as the pooling of more sovereignty in a Political Union, developing a European public space, strengthening the EU parliamentary system and political parties or the use of more flexible integration mechanisms ('differentiated integration'), departing from the 'Community method', including the creation of new institutions, are reconsidered in the light of the crisis. In Member States the crisis has highlighted the limits of the current systems of parliamentary democracy. The reconciliation of finding appropriate solutions to the crisis with re-gaining trust and accountability in democratic practices, institutions and politicians is one of the big challenges for Europe.

Scope: The research to address this challenge should in particular focus on the following key dimensions (proposals do not need to cover all dimensions and may include additional aspects which are relevant to the specific challenge):

1)   The future of European integration - 'More Europe – less Europe?'

Research should include the evaluation of the costs of no further European integration as well as a critical assessment of the effectiveness and legitimacy of European integration. It should also investigate the link between the crisis and EU discourses at national level and the impact of that for defining and pursuing EU politics. The potential vertical and horizontal power shifts and the dynamics (e.g. in terms of competition, coordination) between EU-level and national institutions should be analysed, including an assessment of the appropriate level of and instruments for decision-making. Research should examine the perceptions of European integration by citizens as well as the role of constitutional courts, national parliaments, and other actors. Research should address the pros and cons of various integration modes, including differentiated integration, study how primary-law and secondary-law differentiation have interacted, unveil the effects of differentiation on policy-making and problem-solving, and elaborate the role of differentiated integration in the EU's external dimension.

2)   Challenges to democratic practices and parties in Europe in the context of the crisis

Research should address the extent to which democratic practices are constrained, the impact of economic imbalances across Europe on democracy, new ways of citizens' participation and mobilisation, and the impact of the crisis on national parliaments and party systems, including the extent to which and the reasons why eurosceptical parties benefit from the crisis. The way private actors exercise power on governments should also be investigated. Besides, research should assess the legitimacy of political decision-making and of 'technocratic', non-elected, actors (e.g. ECB, ESM, IMF or other bodies at national level) in crises situations, including the relationship between the growing lack of legitimacy of political decisions, political trust and nationalism. It should look at the options for the democratisation of EU institutions and the relationship between the EU's 'democratic deficit' and the crisis, including the impact of reinforced euroscepticism. Structural obstacles that hinder the development of successful alternatives to democratic stagnation should also be identified as well as actions to overcome those.

3)   Political leadership in times of economic, political and social crisis

Research should analyse how political leaders diagnose problems, prescribe solutions, and mobilize followers. Proposals should take into account the barriers to crisis recognition, the communication of crisis situations, decision-making under uncertainty, and the development of the relationship between leaders and followers. Given the importance of cultural, political, socio-economic, and legal structures globally and within states, research should investigate the role political leaders actually play and how causally significant their contributions in bringing about political outcomes are. There is also a need to analyse the beliefs, values,

power relations, and ethical/unethical attitudes and actions of leaders. The analysis should consider the gender dimension, the historical-cultural traditions of leadership, and the historical contexts of different crisis situations.

The research is expected to comprehensively address one, or possibly a combination of, the above-mentioned dimensions. In so doing, proposals may also cover other issues relevant for addressing political challenges in Europe.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 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: Research under this Topic is expected to generate in-depth insights into the political, institutional and ideational roots of the crisis and its behavioural effects as well as on the impacts of the crisis on democratic practices, systems, and institutions. It will critically assess the effectiveness and legitimacy of European integration in terms of process, actors, instruments and results as well as in terms of the concepts and theories of European integration and their practical implications. These activities will contribute to a better understanding of the challenges for the future of European integration and the EU's political system and will have a learning effect for future policy-making and crisis management. In exploring different possible solutions and scenarios, research is expected to develop a comprehensive and coherent forward-looking view on how to build an EU political and governance system attractive for the European citizen and how to formulate political strategies and actions for a strong European democracy.

Type of action: Research and innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2080-euro-4-2014.html

Topics with SSH relevance in 2015:

(This topic may refer to a different sub-call of H2020-EURO-2014/2015, with a different deadline. Please check the link to the Participant Portal under the topic for more details.)

EURO-6-2015: Meeting new societal needs by using emerging technologies in the public sector

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2093-euro-6-2015.html

Call – "The Young Generation in an Innovative, Inclusive and Sustainable Europe"

Call Identifier: H2020-YOUNG-2014/2015

Sub-Call for 2014 Topics: H2020-YOUNG-SOCIETY-2014

Call Information (H2020-YOUNG-SOCIETY-2014):
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-young-society-2014.html

Publication date: 11/12/2013

Deadlines: 03/06/2014 at 17.00.00 Brussels time (for 2014 Topics)

Topics with SSH relevance in 2014:

YOUNG-1-2014: Early job insecurity and labour market exclusion

(SSH dedicated topic)

Specific challenge: Unemployment among young people in the EU has risen very sharply since the breakout of the financial crisis in 2008, reaching unprecedented levels. However, for over a decade the unemployment rate of young people in the EU remained approximately at double the rate of the overall unemployment in the economy while, at the same time, the use of flexible, fixed-term contacts and alternative forms of employment has been increasing.

This has resulted in growing job insecurity and systematic labour market and social exclusion of young people at the very beginning of their professional careers with many of them moving directly from education to unemployment or taking up temporary jobs below their qualifications. The crisis has exacerbated this trend raising the threat of a 'lost generation' in particular in some European countries, as social disadvantages of young unemployed are multi-faceted, including for example higher risk of poverty, precarity and social exclusion, disaffection, insecurity, higher propensity towards offence and crime, as well as health problems. This concerns both EU citizens as well as third country nationals or second generation migrants. A comprehensive understanding of the long-term consequences of these developments is therefore crucial for successful economic, social and labour market policies that could address in a comprehensive way this problem now and in the future.

Scope: The research will make a profound analysis of the situation of young people in the labour market across the EU in a comparative perspective. In particular, research should investigate the important differences in the performance of the labour markets, anticipatory social work and youth services measures that exist across Member States and their underlying factors, especially from the young people point of view, in order to identify the most effective ways of labour market organisation and improving the education systems and social policy. Taking specifically into account the gender perspective and most vulnerable groups of young people, research will also investigate the economic, social, personal and psychological consequences of early job insecurity, labour market and social exclusion in the short, medium and long term. This could include for example such issues as income situation throughout the life course, establishing an independent household, family formation, physical and mental health and wellbeing as well as the effects of preventive social work with the youth, focused on the most disadvantaged groups. In this context, research could take into account the experiences of past generations which were exposed to high unemployment and job insecurity in their youth.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 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: Research is expected to provide a comprehensive analysis of the short- and long-term consequences of job insecurity and unemployment of young people and to identify their impact on the economy, society and politics. These activities will contribute to an effective anticipation of the potential challenges facing the EU in the future allowing for an early policy response. Through a better understanding of the mechanisms driving the labour market, this research should lead to a more robust and inclusive labour market policy in the EU as well as to a better evidence-based economic, social and education policies. Activities under this topic will also shed light on broader societal questions related, for example, to poverty dynamics, demographic developments, consequences of migration, population ageing, inclusion of young people from particularly vulnerable groups, health and wellbeing, as well as the potential of economic development in the EU, both from the historical and the forward-looking perspective.

Type of action: Research and innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2095-young-1-2014.html

YOUNG-2-2014: Youth mobility: opportunities, impacts, policies

(SSH dedicated topic)

Specific challenge: Since the beginning of European integration, free movement of workers and of persons has been one of the fundamental freedoms of the EC/EU. At the same time, the lack of internal mobility on the European labour market is often quoted as one of the flaws that impede a good functioning of the EU Internal Market and the Economic and Monetary Union. In the context of Europe's enlargement, mobility from (future) new Member States has been a fairly important feature on Europe's labour market. Young people are usually the ones who are most likely to take risks and to move abroad.

In addition, for over 25 years the EU has actively promoted mobility of its students, researchers and citizens: students from the EU and the associated countries initially and gradually many other groups of young people have participated in a mobility scheme. Likewise, bilateral exchanges, cross-border internships and regional cooperation have become more regular - at an organised institutional level, but also upon purely individual initiative.

As currently job opportunities for young people are very bleak in some countries, the European internal market may offer better perspectives in other countries – sometimes not very distant from their own. This has the potential for realising a more integrated and better functioning European labour market. However, while some may gladly move or seek a job abroad – in Europe or beyond – others may be forced to migrate. This may be disruptive for families, countries and European societies. At the same time, intra-European migration might not only alleviate regional shocks, but it could conversely intensify regional crises and economic downturn.

Scope: The research should look into different patterns and types of mobility of young people within the EU according to their purpose, length of stay, motivation, as well as characteristics of people moving abroad or moving to Europe, including differences between men and

women as well as people with different types of impairment or of different geographical and socio-economic backgrounds. It should analyse their selection and recruitment processes, the role of information and support services, as well as more problematic issues abroad and/or at home regarding language, integration, finding a settlement, organisation of a new life, etc.

The research should also analyse the skills acquisition and recognition (formal and informal), longer-term social and employment impacts such as career tracks, bonding, settlement, welfare effects. Research should also address the psychological perspective including European identity formation and impact of mobility and involuntary migration on mental health. Research should focus on the conditions under which European mobility and migration reduces or aggravates regional labour market disparities, including brain drain issues. Comparisons with past mobility experiences or the impact of solidarity networks within and among Member States could also be very interesting in terms of policies as well as individual experiences.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 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: Research is expected to provide a comprehensive analysis of the circumstances accompanying mobility of young people in Europe. Through a better understanding of the mechanisms driving this phenomenon, research will contribute to policy development regarding interventions to facilitate and improve mobility and integration across Europe. The research output will further assist regions facing emigration of young workers to cope with these challenges. These activities will also contribute to formulating recommendations for flanking policies to tackle barriers and obstacles to short-term mobility and longer-term integration.

Type of action: Research and innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2096-young-2-2014.html

YOUNG-5-2014: Societal and political engagement of young people and their perspectives on Europe

(SSH dedicated topic)

Specific challenge: Since its creation, the European Union has been constantly changing, shaped by European citizens, and young people represent both its present and its future. Consequently, exploring the perspectives of young people on Europe and the ways in which they engage in shaping its future is crucial for the long-term success of the European project. However, according to the recent findings of the Eurobarometer (Standard EB 77, spring 2012), half of the young people tend to distrust the European Union and this percentage has constantly increased in the aftermath of the crisis, rising to 50% in 2012. Also, almost 50% of them consider that things are going in the wrong direction in the EU. Despite that, according to the Eurobarometer Flash 'European Youth: participation in democratic life' 2013 (n°375), young people are more active in non-governmental and local associations than in political parties, even though most of them generally vote in elections at different levels.

The EU Youth Strategy (2010-2018) aims to encourage young people to be active citizens and participate in society in order to ensure that they have a say in the democratic processes

that shape Europe's future. In this context it is important to understand how young people participate in the society under unequal regional conditions and expectations, express their views (also in terms of language, meaning and media) and advocate their interests which may involve new forms of political and civic actions, mixing traditional and new forms of engagement such as through the use of digital media inter alia and creative practices, and reconsider socially innovative problem solving process.

It is also important to show how public authorities establish a broad engagement with young people not just in democratic processes, but in all public sector processes, in order to increase trust in and accountability of public authorities. Previous eParticipation projects focused on the use of ICT for citizen involvement in political decisions and public policy making at local, national and European level. Open participation, open processes and open engagement allow young, connected people to become active actors in all decision-making processes and activities of the public sector.

Scope:

a) Research will analyse the reasons for the declining trust and examine qualitatively how the values and interest in common objectives of the young people, often influenced by cross-border mobility experiences, compare with the general social dynamics at the EU level. It will also examine how best to stimulate the societal and political engagement of young people to strengthen the European project and how they understand their role in shaping the European history, especially when they have to build on political commitments of past generations.

Research should also consider how to improve the representation of young people in all areas which affect their lives in order to ensure that their concerns and visions are integrated in decisions made at all relevant levels, thus shaping new forms of democracy in Europe. This should take into account the different ways, traditional and novel, in which young people engage in society, exploring the socio-cultural and generational contexts of the different forms of engagement. Research could also look into the means and styles of communication by and for young people as well as into the linguistic dimension.

In addition, research should explore which of these forms have been successful in achieving societal goals through the analysis of specific cases (for example community projects, solidarity networks, etc.).

Activities under this topic should take into account the characteristics, approaches and needs of young people coming from different cultural and socio-economic backgrounds, including the gender context.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1.5 and 2.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

b) The foreseen innovation actions on open participation and open engagement shall develop reusable service components, methods and applications to enable public authorities to quickly open their decision-making processes. Project must demonstrate how open engagement needs to be firmly embedded within, and part of public sector processes and identify the key barriers for wide scale deployment. The services need to be open and should take into consideration political, organisational, social, linguistic and cultural differences across the EU. Cross-border as well as privacy, data protection and security features are to be addressed.

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:

a) Through a better understanding of the different factors influencing the perspectives of young people on Europe and of the ways in which young people engage in society, activities under this topic will help tackle the challenge of bringing the European Union closer to its citizens.

Through exploring ideas and tools to integrate young people's perceptions into various areas of policy-making, these activities will also help to boost the participation of young people in society, increasing the democratic accountability of the decisions taken at the EU level and consequently building public support for EU policies.

b) Through the use of the preferred communication channel of the young their engagement in public administrations' activities and decision-making processes should increase their trust and interest in political activities.

Through the development of reusable components, public authorities throughout the Union will be able to quickly offer tools to their citizens to participate in the decision-making process.

Type of action: a) Research and innovation actions, b) Innovation actions

Deadline: 03/06/2014 at 17.00.00 Brussels time

Topic information for YOUNG-5a-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2097-young-5a-2014.html

Topic information for YOUNG-5b-2014:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2098-young-5b-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of H2020-YOUNG-2014/2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

YOUNG-3-2015: Lifelong learning for young adults: better policies for growth and inclusion in Europe

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2099-young-3-2015.html

YOUNG-4-2015: The young as a driver of social change

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2100-young-4-2015.html

Call – "Reflective Societies: Cultural Heritage and European Identities"

Call Identifier: H2020-REFLECTIVE-2014/2015

Relevant Sub-call: H2020-REFLECTIVE-SOCIETY-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-reflective-society-2014.html

Publication date: 11/12/2013

Deadlines: 03/06/2014 at 17.00.00 Brussels time (for the 2014 Topic listed below)

Topics with SSH relevance in 2014:

REFLECTIVE-9-2014: Social Platform on Reflective Societies

(SSH dedicated topic)

Specific challenge: Europe has a very rich intellectual, historical and cultural basis with many European and non-European influences that have shaped it over the centuries and continue to do so today. The societal challenge 'Europe in a changing world – inclusive, innovative and reflective societies' gives a prominent position to the European cultural heritage and creative expression as well as the diversity of its society which creates a potentially very vast research agenda.

Research on the European history, culture, its peoples and their identities, performative practices and lifestyles is crucial particularly in the light of European integration, as well as of growing diversity within European societies.

Since this is a broad and complex domain with a long research tradition, it appears appropriate to establish a social platform of researchers, stakeholders and policy-makers to address these issues in a comprehensive way.

Scope: The social platform will bring together the relevant research communities with stakeholder representatives, such as for example practitioners from the socio-cultural and artistic sectors (galleries, libraries, archives, museums, and other public institutions), as well as policy stakeholders (at European, national and/or local levels). A wide range of views and of stakeholder participation will be encouraged.

Based on a focussed, critical mapping of existing research, the objective of the social platform is to develop an understanding of the challenges and opportunities for research in the context of reflective societies. The future European research agenda in the field should pay particular attention to the policy dimension and its European relevance, taking also into account the issues of data collection and measurement.

The Commission considers that proposals requesting a contribution from the EU in the order of 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: This social platform will support the European Commission in the definition of an innovative and focused research agenda on the reflective societies in Europe, highlighting fundamental research issues and key policy questions in this context. Through research and networking among researchers, stakeholders and policy-makers, this it will advance the knowledge base that underpins the formulation and implementation of relevant

policies and practices in Europe. It will thus also contribute to the development of the European Research Area in this domain.

Type of action: Coordination and support actions

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2102-reflective-9-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls of H2020-REFLECTIVE-2014/2015, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

REFLECTIVE-2-2015: Emergence and transmission of European cultural heritage and Europeanisation

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2088-reflective-2-2015.html

REFLECTIVE-3-2015: European cohesion, regional and urban policies and the perceptions of Europe

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2089-reflective-3-2015.html

REFLECTIVE-4-2015: Cultural opposition in the former socialist countries

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2090-reflective-4-2015.html

REFLECTIVE-5-2015: The cultural heritage of war in contemporary Europe

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2091-reflective-5-2015.html

REFLECTIVE-6-2015: Innovation ecosystems of digital cultural assets

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2104-reflective-6-2015.html

REFLECTIVE-8-2015: Communication and dissemination platform

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2092-reflective-8-2015.html

Call – "Europe as a Global Actor"

Call Identifier: H2020-INT-2014/2015

Relevant Sub-Call: H2020-INT-SOCIETY-2015

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-int-society-2015.html

Publication date: 11/12/2013

Deadlines: Indicative deadline for 2015 topics listed below: 7.1.2013

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

INT-3-2015: Europe's contribution to a value-based global order and its contestants

Topic information:

http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/topics/1055-int-03-2015.html

INT-4-2015: The European Union's contribution to global development: in search of greater policy coherence

Topic information:

http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/topics/1056-int-04-2015.html

INT-5-2015: Rethinking the European Union crisis response mechanism in light of recent conflicts

Topic information:

http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/topics/1057-int-05-2015.html

INT-6-2015: Re-invigorating the partnership between the two shores of the Mediterranean

Topic information:

http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/topics/1058-int-06-2015.html

INT-7-2015: Towards a new geopolitical order in the South and East Mediterranean region

Topic information:

http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/topics/1059-int-07-2015.html

INT-8-2015: The European Union and the Eastern Partnership

Topic information:

http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/topics/1060-int-08-2015.html

INT-9-2015: The European Union, Turkey and its wider neighbourhood: challenges and opportunities

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1061-int-09-2015.html

INT-10-2015: The European Union and integration challenges in the Balkans

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1062-int-10-2015.html

INT-11-2015: European cultural and science diplomacy: exploiting the potential of culture and science in the EU's external relations

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1063-int-11-2015.html

INT-12-2015: The cultural, scientific and social dimension of EU-LAC relations

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1064-int-12-2015.html

Call – "New Forms of Innovation"

Call Identifier: H2020-INSO-2014/2015

Publication date: 11/12/2013

Deadlines: please see the deadline listed under the individual topics

The Call "New Forms of Innovation (H2020-INSO-2014/2015)" is divided into several "sub-calls". The URL links to the relevant call and to further information on the participant portal are listed under the individual topics.

Topics with SSH relevance in 2014:

INSO-1-2014/2015: ICT-enabled open government

Specific challenge: Public administrations need to address the new challenges posed by the evolution of society. Financial constraints are making this task difficult. At the same time, expectations - in terms of burden reduction and efficiency of public services - are growing.

The take-up of new technologies, such as social media and mobile technologies, leads to increased connectivity.

The availability of open data and open services, in an open government setting support the collaborative forms of service design and delivery and they increase transparency.

Personalised public services can arise from enabling and empowering citizens and businesses to directly participate in the design, creation, selection and delivery of some of the public services. Collaboration with users plays an important role in the transformation of public services. Public services delivered or enabled by ICT need to be easy to use and shall increasingly focus on flexible and personalised interactions with public administrations. Given the availability of data, users may be provided more pro-active, higher quality and valuable services. This can make services more attractive and increase collaboration. While creating growth and jobs, M-government can make services effective by adjusting them to the way citizens are communicating and delivering them to a variety of mobile devices in order to accommodate the on-going transition from stationary to mobile.

Transparency is an important element of the open government approach. Open data and information lead to more transparency. Openness and technology tools can also enable monitoring of the public sector and its performance. Transparency helps to increase accountability and trust in administrations.

Scope:

a) Innovation actions

The actions should address at least one of the sub-objectives (i or ii) below, which should be piloted against a set of clearly defined goals:

i) Pilots on personalised and mobile public services which will aim to benefit from one or more of the following:

- Intelligent and innovative use of large volumes of publicly available data for new, smart and mobile public services;

- Using open services and enabling any actors, including users, to create or co-produce new public services;

- Pro-active and personalised citizen-centric public service applications; this can be according to a user profile created and controlled by the user and structured around modular public services;

- **Following changes in user behaviour in accessing and using such services and supporting the organisational and back-office implications, including privacy.**

ii) Pilots on transparency which will aim to benefit from one or more of the following:

- Actions will aim to pilot tools to increase the transparency impact of ICT-based technology platforms of the public sector;

- The transparency tools to be piloted will benefit from open data and could help in monitoring, enhancing accountability and fighting corruption (e.g. through data mining and other tools).

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.

These innovation actions should include an assessment of the effectiveness as well as social and economic impact of using these approaches to deliver the public administrations' goals. The results of these assessments should also provide feedback into a set of recommendations for future use of these approaches to deliver more effective public administration.

b) Coordination and support actions:

The activities should aim at encouraging networking of relevant stakeholders and teams working in these areas and to support constituency building. The dynamic, multidisciplinary network will include social and economic expertise in addition to ICT experts and other relevant stakeholders. Following an assessment of the needs, the network will carry out a gap analysis and identify potential applications for their successful implementation in the public sector. The activities will include the mobilisation of developers and civil servants (through events, hackatons, etc.) and awareness raising among end users in order to increase take-up of relevant newly developed eGovernment applications.

Expected impact:

- Stimulating the creation, delivery and use of new services on a variety of devices, utilising new web technologies, coupled with open public data.

- More personalised public services that better suit the needs of users.

- Reducing the administrative burden of citizens and businesses (e.g. collecting information from citizens only once).

- Increased transparency of and trust in public administrations.

Type of action: a) Innovation actions, b) Coordination and support actions

Deadline: for 2014: 29/04/2014 at 17.00.00 Brussels time; for 2015:

[21/04/2015 at 17.00.00 Brussels time]

Call information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-inso-2014.html

Topic Information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2469-inso-1-2014.html

Call information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-inso-2015-cnect.html

Topic Information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2477-inso-1-2015.html

INSO-3-2014: The economic impact of the Innovation Union

(SSH dedicated topic)

Specific challenge: This topic will gather evidence on the impact of the EU innovation policy on growth and jobs in the EU and its Member States.

Scope: The impact of the 34 IU commitments, both individually and as a whole, needs to be analysed. The analysis should look at the innovation ecosystem, identify the routes through which the 34 commitments impact on economic performance and measure the impacts.

To identify the full economic impact of the IU, the proposals need to take into account the system's interdependences as well as its complex and adaptive characteristics. In line with the IU approach, a broad concept of innovation going beyond R&D needs to be used. The scope is therefore broader than analysing the ability of policies to limit market failures and should cover both direct and dynamic effects of the policies considered. Economic

performance should be measured against (but not be restricted to) GDP, added value, productivity, well-being, net and gross job creation in both skilled and unskilled positions. A methodology that will allow the research to take into account more recent developments of Innovation Policy occurring after the 2010 landmark, with an appropriate cut off point is within scope.

Policy recommendations are out of the scope of this topic. The topic focuses on gathering and presenting evidence showing the relation between the policies and the effects.

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

Expected impact: The evaluation of the impact of innovation policies is of great importance to calibrate on-going actions and plan future ones. Understanding how innovation policy and specifically the EU innovation policy impacts on economic performance can inform future innovation policy design and adaptation of existing measures to increase effectiveness. This action will provide a more comprehensive understanding of the full impact of innovation policy in the economy. This type of assessment will strengthen the evidence base of the IU allowing for a more effective policy design in terms of its impact on economic performance.

Type of action: Research and innovation actions

Deadline: 29/04/2014 at 17.00.00 Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-inso-2014.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2471-inso-3-2014.html

INSO-6-2014: Platform for ICT for Learning and Inclusion

Specific challenge: The aim of this challenge is engage a large number of stakeholders on a dialogue and awareness process over the role, benefits, and issues of concerns on ICT for learning and inclusion.

ICT is crucial to boost the modernization of education and training. The challenge is to reinvent the education ecosystem and re-empower teachers in the digital age. Partnerships and collaboration between public and private stakeholders - including innovative entrepreneurs - more open and innovative practices for richer and more engaging and motivating learning and teaching experiences will be key to facilitate the transformation of the education and training to embrace and fit the challenges of 21st century and to ensure our young people are equipped with the skills for employment.

More than 100 million European citizens are at the risk of digital exclusion - the elderly, unemployed and low educated, migrants, people in need of care, people living in remote or poorer areas, persons with disabilities, homeless.

This challenge contributes to the debate over these issues and opportunities by facilitating an open dialogue on how technological changes and scientific progress impact and accelerate developments, **including social change, determine policy changes, and support new investments,** involving diverse actors with different stakes and agendas.

Scope: Develop and maintain a sustainable platform engaging a large number of key actors, stakeholders and communities of practices on how to improve co-creation and delivery of

digital tools, solutions and services for the **modernization of education and training and for the employability of young people, as well as for tackling the risk of digital exclusion, and thereby socio-economic exclusion.**

The platform should engage - and be open to all - practitioners and stakeholders wishing to contribute to decision making processes, agree on objectives and priorities, **share experiences, policies and practices on the role ICT for better education and training, e-Inclusion and e-Accessibility.**

The Commission considers that proposals requesting a contribution from the EU of 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 action will generate awareness and impact on a wider participation in decision making processes related to the uptake of technologies involved in education, training and inclusion.

Type of action: Coordination and support actions

Deadline: 29/04/2014 at 17.00.00 Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-inso-2014.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2472-inso-6-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

INSO-5-2015: Social innovation Community

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2476-inso-5-2015.html

1.7 Societal Challenge 7 - Secure societies – Protecting freedom and security of Europe and its citizens

Call – "Disaster-resilience: safeguarding and securing society, including adapting to climate change"

Call Identifier: H2020-DRS-2014-2015

Relevant sub-call for 2014 Topics listed below: H2020-DRS-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-drs-2014.html

Publication date: 11/12/2013

The indicative date for the opening of the call is 25 March 2014.

Deadline for 2014 Topics: 28/08/2014 at 17.00.00 Brussels time.

Topics with SSH relevance in 2014:

DRS-20-2014: Ethical/Societal Dimension topic 1: Improving protection of Critical infrastructures from insider threats

(SSH dedicated topic)

Specific Challenge: Critical Infrastructures are crucial assets for the functioning of a society and an economy. Consequently, they can be the target of several threats, in particular terrorist threats.

In this framework, the risk of an insider threat coming from personnel and third party individuals, who have inside knowledge about the infrastructure security practices and/or have access rights to certain key components, data and computer, is particularly high for Critical Infrastructures.

An insider threat particularly difficult to be timely identified is the one brought along by personnel who have undergone a violent radicalisation process that are relevant to identifying an insider threat and, as a consequence of that, intend to affect the normal functioning of the infrastructure or, even, to sabotage it.

In order to prevent the latter, it is important to deepen the current knowledge about the main constituents of the violent radicalisation processes to timely detect them and to prevent resulting insider threats to materialize.

Scope: Proposals in this area should specifically aim at strengthening the focus on determining and analysing the main constituent factors of a violent radicalisation process (including family and social environment, psychological factors, religion and ideology, the internet and social media, socio-economic and political factors) as well as on the conditions that can lead a person from ideas to violent action. The proposed actions should take into consideration past and on-going EU research in this field and include, to the extent possible, real life examples of individuals that underwent a violent radicalisation process.

The development and application of new equipment and systems to support the security practitioners should also be considered by the proposal.

The proposal and the usable results should take into account fundamental rights protection, comparative studies of international laws, ethical and societal impacts, with particular consideration for EU anti-terrorism and Critical Infrastructure Protection (CIP) policies.

Proposals addressing this topic may involve the use of classified background information (EU or national) or the production of security sensitive results. As such, certain project deliverables may require security classification. The final decision on the classification of projects is subject to the security evaluation.

Expected impact: The output of this proposal should be directly applicable to support national and local security practitioners to strengthen the protection of national and European Critical Infrastructures from the insider threats brought by violent radicals.

In particular, the results of the proposed action are expected to contribute to an early detection of violent radicals by shedding light on the violent radicalisation processes and paths and, overall, by raising the awareness of the security practitioners about the possible early indicators that can allow a timely detection of insider threats brought to critical infrastructures by violent radicalised individuals.

The action is expected to proactively target the needs and requirements of users, such as national and local law enforcement agencies.

Type of action: Coordination and Support Actions

Deadline: 28/08/2014 at 17.00.00 Brussels time.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1078-drs-20-2014.html

DRS-21-2014: Ethical/Societal Dimension topic 2: Better understanding the links between culture, risk perception and disaster management

(SSH dedicated topic)

Specific challenge: Culture is the characteristics of a particular group of people, defined by everything from a set of values, history, literature, language, religion to cuisine, social habits or music and arts. Preparedness, response to disasters and after-crisis recovery is always influenced by cultural background of individuals and the society they live in.

To this end, cultural factors play also an important role in determining the way people respond to stress, engage in the crisis management and accept disaster relief in an emergency situation. At the same time lack of cultural understanding, sensitivity and competencies can hamper and even harm the professional response to disaster as it is crucial to understand the cultural background of disaster victims.

Scope: Proposals in this field may focus on the following issues:

- Which cultural factors, important insights, specific communication styles for a given cultural group should be taken into consideration during disaster situations in urban areas?

- How to anticipate and identify solutions to cultural problems that may arise in the event of an emergency?

Proposers are encouraged to analyse how emotional, psychological and social needs, as well as communal strengths and coping skills that arise in disasters can affect the way certain urban communities prepare, respond, engage in restauration and recover from disaster. The gender dimension needs to be fully taken into account.

The proposal should aim at providing an analysis of existing links between disaster and culture, in particular in urban areas taking into account past and on-going EU research.

Expected impact:

- increased effectiveness of those who respond to disasters;

- a more resilient society by ensuring that cities are better prepared for and able to recover from emergencies.

- better meeting the needs of various cultures during disaster relief, thus improving reaction time and reducing fatalities;in order to provide disaster relief.

- providing a framework for improving disasters' policies and practices by taking into consideration every disaster victim's cultural and personal uniqueness. The action is expected to proactively target the needs and requirements of users, such as citizens, first responders, urban communities and local security agencies.

Type of action: Coordination and Support Actions

Deadline: 28/08/2014 at 17.00.00 Brussels time.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1079-drs-21-2014.html

Topics with minor SSH relevance:

DRS-19-2014: Communication technologies and interoperability topic 2: Next generation emergency services

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1077-drs-19-2014.html

Topics with SSH relevance in 2015:

DRS-11-2015: Disaster Resilience & Climate Change topic 3: Mitigating the impacts of climate change and natural hazards on cultural heritage sites, structures and artefacts

Topic information: not yet available on the participant portal.

DRS-14-2015: Critical Infrastructure Protection topic 3: Critical Infrastructure resilience indicator - analysis and development of methods for assessing resilience

Topic information: not yet available on the participant portal.

DRS-15-2015: Critical Infrastructure Protection topic 4: Protecting potentially hazardous and sensitive sites/areas considering multi-sectorial dependencies

Topic information: not yet available on the participant portal.

DRS-22-2015: Ethical/Societal Dimension topic 3: Impact of climate change in third countries on Europe's security

Topic information: not yet available on the participant portal.

Call – "Fight against crime and Terrorism"

Call Identifier: H2020-FCT-2014-2015

Relevant sub-call for 2014 Topics listed below: H2020-FCT-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020-fct-2014.html

Publication date: 11/12/2013

The indicative date for the opening of the call is 25 March 2014.

Deadlines for 2014 topics listed below: 28/08/2014 at 17.00.00 Brussels time.

Topics with SSH relevance in 2014:

FCT-10-2014: Urban security topic 1: Innovative solutions to counter security challenges connected with large urban environment

Specific Challenge: European large urban environments are subject to various challenges and threats to urban security linked to their big size and large population. These challenges have also a strong impact on the security perception of the citizens and, by this, they can impact on the economic development and the quality of life.

Consequently, there is a growing need to go beyond the idea that only the law enforcement and criminal justice systems are tasked to tackle urban security challenges. On the contrary, new approaches and innovative solutions, including sustainable, affordable and transferrable security technologies, are needed to solicit citizens' engagement to prevent, mitigate and recover from the above-mentioned security challenges and to foster their direct participation in the improvement of the urban security conditions.

In this framework, and **upon due consideration for the concerned ethical issues**, recent technological advances and appropriate sensing mechanisms can help to make a city more transparent and readable as well as to empower the citizens in smart cities by ensuring that the main urban dynamics are unveiled and available to the public.

To this end, a bottom-up approach is sought to ensure that the above-mentioned approaches and solutions are satisfactorily responding to the needs of the end-users and of the citizens' community at large. **There is a need for an interdisciplinary approach involving contributions from technological research and socio-economic disciplines, particularly architecture, anthropology, arts, economy, law, linguistics and sociology.**

Scope: The proposed research should focus on the **development of innovative solutions** and technologies **for urban security and resilience** that, at the same time, intend to **reduce the fear of crime and enhance the perception of security of the inhabitants of large urban environments.**

Specific attention should be paid to technologically enhanced platforms that allow citizens both to share information and experiences in real-time streaming and to receive alerts and messages from security command and control centres.

The proposed action should take into account sustainable and low impact solutions and, possibly, rely on already set standards and tools. Modularity security and privacy by design should also be in the backbone.

The proposed research should take into consideration past and on-going EU research in this field. The testing and validation of the results from the proposed research should be carried out in several European cities. Strong synergies may be expected in the fields of 3D mapping, accurate positioning and timing services, GIS analysis functions and environment modelling, simulation and visualisation technologies.

Finally, the consideration for a possible wider integration of new and existing digital technologies into sustainable and innovative security solutions is strongly welcome.

The Commission considers that proposals requesting a contribution from the EU of between €3m and €5m would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact:

- Reduce the fear of crime and enhance the perception of security of the inhabitants of large urban environments.

- Better addressing security challenges in large urban environments.

- Increase the perception of security of citizens by empowering them, fostering their sense of belonging to a greater community.

- Facilitating the engagement of citizens to improve the security conditions of smart cities.

- Providing new market opportunities, especially for SMEs and entrepreneurs, to develop and produce innovative technologies for urban security. The action is expected to proactively target the needs and requirements of users, such as citizens and local police forces. The outcome of the proposal is expected to lead to development up to Technology Readiness Levels (TRL) 5; please see part G of the general Annexes.

Type of action: Research & Innovation Actions

Deadline: 28/08/2014 at 17.00.00 Brussels time.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1108-fct-10-2014.html

FCT-13-2014: Ethical/Societal Dimension Topic 1: Factors affecting (in-) security

(SSH dedicated topic)

Specific challenge: Security has been defined as a subjective phenomenon that changes within society. Information on people's understanding of security issues (e. g. crime, terrorism, natural or man-made disasters), their perception of security as well as the relevant facts about the risks and dangers they face, and perceive may vary according to the level of assessment, be it public or personal (individual). Furthermore, people's feelings of insecurity and their perception of the importance of security can be different in diverse demographic groups. Persons who are amongst best protected and most secure in the society are likely to have expectations of security much higher than poorer, less protected persons.

Scope: The proposal, taking into account past and on-going EU research, should be based on real life examples and address factors affecting the perception of personal (individual) (in)security as well as (in)security perception in spontaneous and more structured groups. Furthermore, this action should aim at collecting and analysing data assessing the elements that influence individual and the group's perception of (in)security. Tools necessary to reduce public and personal perception of insecurity should be examined. Proposers are also encouraged to focus on different demographic groups in order to verify how aspects such as:

gender, age, income, occupation, education or kind of a lifestyle, affects the feeling of (in-) security. Furthermore, the anthropological dimension should also be considered.

Expected impact: The project should aim at:

- Elaborating a number of priority areas and suggestions for policy makers in order to improve the perception of security within targeted groups.

- Identification of different factors influencing public (group) and personal (individual) assessment of (in)security.

- Improving overall strategic security policy making.

- Better understanding of how demographic background influences the feeling of (in)security.

The action is expected to proactively target the needs and requirements of users, such as security planners and policy makers working at different levels.

Type of action: Coordination and Support Actions

Deadline: 28/08/2014 at 17.00.00 Brussels time.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1111-fct-13-2014.html

FCT-14-2014: Ethical/Societal Dimension Topic 2: Enhancing cooperation between law enforcement agencies and citizens - Community policing

(SSH dedicated topic)

Specific challenge: Community policing is a value system followed by a police department, in which the primary organizational goal is working cooperatively with individual citizens, groups of citizens, and both public and private organizations in order to identify and resolve issues which potentially affect the liveability (quality of life) of specific neighbourhoods, areas, or the city as a whole. Police departments which are 'community-based' acknowledge the fact that the police cannot effectively work alone and must partner with others who share a mutual responsibility for resolving problems. Community policing aims at stressing prevention, early identification, timely intervention, as well as better crime reporting, identification of risks, unreported and undiscovered crime. Individual police inspectors are encouraged to spend considerable time and effort in developing and maintaining personal relationships with citizens and different community organizations.

Scope: Proposals in this area should focus on indicating best practices for co-operation between police and citizens (communities at different level). Moreover, the proposed actions, taking into account past and on-going EU research as well as EU prevention policies, are expected to analyse "community policing" as an opportunity to use a community to observe their environment identify risk and exchange information. This concept based on collaboration and coordinated activities should be analysed as a system aimed at facilitating information sharing and trust building. To this end, the proposed research should also take into account the virtual dimension of "community policing" (i.e. the interaction between citizens and police officers through social networking websites) and analyse its underlying social, cultural, legal and ethical dimensions. The proposal should aim to develop a technology (e.g. application of smart phones) which will facilitate, strengthen and accelerate the communication between two groups by making it possible for community representatives to identify the risk and immediately report it to the police forces. Citizen or community representatives should be actively engaged in the research, to ensure that their perspectives are well embedded in the design of new technology and innovation.

In addition to the above, proposers should focus on trainings for law enforcement agents (for instance by means of serious games or simulations), as well as on awareness raising activities about community policing, for both police and citizens. These activities should also take the gender dimension into account. The Commission considers that proposals requesting a contribution from the EU of between €2m and €5m would allow this specific challenge to be addressed appropriately (similar to the FP7 Capability Projects described in the general introduction). Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: Strengthened community policing principles through effective and efficient tools, procedures and approaches. Early identification, timely intervention, as well as better crime reporting, identification of risks, unreported and undiscovered crime through the community. Strengthened and accelerated communication between citizens and police forces. Overall, strengthened community feeling and lower feeling of insecurity. The action is expected to proactively target the needs and requirements of users, such as citizens and national and local law enforcement agencies. The outcome of the action is expected to lead to development up to Technology Readiness Levels (TRL) 6; please see part G of the General Annexes.

Type of action: Research & Innovation Actions

Deadline: 28/08/2014 at 17.00.00 Brussels time.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1112-fct-14-2014.html

Topics with minor SSH relevance:

FCT-12-2014 Urban security topic 3: Minimum intrusion tools for de-escalation during mass gatherings improving citizens' protection

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1110-fct-12-2014.html

Topics with SSH relevance in 2015:

FCT-2-2015. Forensic topic 2: Advanced easy to use in-situ forensic tools at the scene of crime

Topic information: not yet available on the participant portal.

FCT-4-2015: Forensics topic 4: Internet Forensics to combat organized crime

Topic information: not yet available on the participant portal.

FCT-9-2015: Law Enforcement capabilities topic 5: Identity Management

Topic information: not yet available on the participant portal.

FCT-15-2015: Ethical/Societal Dimension Topic 3: Better understanding the role of new social media networks and their use for public security purposes

Topic information: not yet available on the participant portal.

FCT-16-2015: Ethical/Societal Dimension Topic 4 - Investigating the role of social, psychological and economic aspects of the processes that lead to organized crime (including cyber related offenses), and/or terrorist networks and their impact on social cohesion

Topic information: not yet available on the participant portal.

Call – "Border Security and External Security"

Call Identifier: H2020-BES-2014-2015

Relevant sub-call for 2014 Topics listed below: H2020-BES-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bes-2014.html

Publication date: 11/12/2013

The indicative date for the opening of the call is 25 March 2014.

Deadlines for 2014 topics listed below: 28/08/2014 at 17.00.00 Brussels time.

Topics with SSH relevance in 2014:

BES-12-2014: Conflict prevention and peace building topic 1: Enhancing the civilian conflict prevention and peace building capabilities of the EU

Specific challenge: Since the end of the cold war the relative global political stability created through the balance of power between the Soviet Union and the US has considerably decreased. Across the world the new multipolar structure of international politics reopened dormant conflicts and lead to new emerging crisis situations.

Overcoming these new conflicts necessitates **novel approaches on prevention, mediation and peace keeping** to which the occidental world is only insufficiently prepared. Classical stabilisation/intervention operations are often not appropriate anymore, nor do they guarantee any long term stability. Conflicts cannot be overcome solely by military or civilian means alone.

The majority of these conflicts are asymmetrical by nature. This often implies that the primary victims are non-combatants, particularly in civil wars. The humanitarian crises (famines, epidemics, forced migrations) that follow often affect especially women and children. These conflicts represent both a humanitarian obligation for the EU to act, and a liability for the external and internal security of the EU. Economic and political disparities have often proven to be a breeding ground for political extremism, violent radicalisation and terrorism.

These geopolitical changes and challenges are reflected in the articles 42-46 on the Common Security and Defence Policy (CSDP) of the Treaty on European Union: "the Union may use civilian and military means, shall include joint disarmament operations, humanitarian and rescue tasks, military advice and assistance tasks, conflict prevention and

peace-keeping tasks, tasks of combat forces in crisis management, including peace-making and post-conflict stabilisation."

Scope: Research in this field should focus on:

- **Analysing past and on-going civilian and military efforts of the EU, its Member States, Associated Countries and international organisations (UN, OSCE) on conflict prevention and peace building in and between third countries.**

- **Assessing the potential for pooling and sharing of capabilities and technologies for civilian conflict prevention.**

- **Research should go beyond the short term stabilisation/conflict prevention and focus on long-term peace building by civilian means.**

- A **catalogue of best practices and lessons learned** should be developed in the form of a living document.

- **Identifying research priorities on civilian conflict prevention** for Horizon 2020 security research.

- Special attention should be paid **to civilian-military synergies** on an operational level.

Expected impact: Projects resulting from this topic should develop a clear assessment of the capabilities of the EU for external conflict prevention and peace building and identify the best civilian means to enhance these capabilities.

A set of clear policy priorities and technological needs on civilian conflict prevention should be developed, with a focus on the exploitation of civilian-military synergies.

Type of action: Coordination and Support Actions

Deadline: 28/08/2014 at 17.00.00 Brussels time.

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1095-bes-12-2014.html

BES-14-2014: Ethical Societal Dimension topic 1: Human factors in border control

(SSH dedicated topic)

Specific challenge: Border control relies on a number of presumed abilities in those performing it. These include the ability to:

- stay alert from the beginning of a shift to the end;

- distinguish truth from falsity;

- detect malicious intent;

- detect invalid or falsified documents;

- detect hidden goods or humans in vehicles;

- detect behavioural indicators of persons engaged in, or methods used to undertake, illicit activity;

- compare and agree a match or non match between the facial image in the passport with the face of the traveler, irrespective of ethnic background, age difference or normality in the passport image.

<u>Scope</u>: Studies show that in the long term perspective, the task of border management to facilitate legitimate border crossings, while detecting and preventing illicit activities will remain a critical capability, given the expected rising cross-border flows. Border control is likely to face increasing demands for efficiency, which implies a need for technical systems that are user friendly and reliable in operational conditions.

The project should list and carefully analyze the psychological factors which may affect the performance of key border guard tasks and also include a review of the psychological literature relevant to such task.

It should suggest remedies and a strategy for improving performance. The research should help to identify which tasks related to border control could be carried out in a more automated manner, and for which tasks the human factor is indispensable.

The Commission considers that proposals requesting a contribution from the EU of between €2m and €5m would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

<u>Expected impact</u>: This research should make a major contribution in improving the effectiveness of EU border control. It will contribute to the implementation of the Smart borders initiative (and future regulation), reinforcing checks while speeding up border crossing for regular travellers, optimizing procedures and enhancing the security at the moment of the crossing of the EU external borders. The action is expected to proactively target the needs and requirements of users, such as border management decision-makers, border guards and citizens (regular travellers).

<u>Type of action</u>: Research & Innovation Actions

<u>Deadline</u>: 28/08/2014 at 17.00.00 Brussels time.

<u>Topic information</u>:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1096-bes-14-2014.html

Topics with SSH relevance in 2015:

BES-13-2015: Conflict prevention and peace building topic 2: Training curricula for Conflict Prevention and Peace Building personnel

<u>Topic information</u>: not yet available on the participant portal.

Call – "Digital Security: Cybersecurity, Privacy and Trust"

Call Identifier: H2020-DS-2014

Relevant sub-call for 2014 Topics listed below: H2020-DS-2014-2015

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ds-2014-1.html

Publication date: 11/12/2013

Deadlines: please see the deadline listed under the individual topics

Topics with SSH relevance in 2014:

Topics with minor SSH relevance:

DS-1-2014: Privacy

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/99-ds-01-2014.html

2.   Horizon 2020 Priority: Industrial Leadership

2.1   Leadership in Enabling Industrial Technologies

Call - "Nanotechnologies, Advanced Materials and KET support actions" (NMP)

Call Identifier: H2020-NMP 2014/2015

Call Information: [URL Link to the Call on the Participant Portal]

Publication date: 11/12/2013

Deadlines: please see the deadlines listed under the individual topics

The Call "Nanotechnologies, Advanced Materials and KET support actions (H2020-NMP 2014/2015)" is divided into several "sub-calls". The URL links to the relevant call and to further information on the participant portal are listed under the individual topics.

Topics with SSH relevance in 2014:

NMP 21 – 2014: Materials-based solutions for the protection or preservation of European cultural heritage

Specific challenge: Europe has significant cultural diversity together with exceptional ancient architecture, built environment and artefact collections. However time, exposure and environmental changes present significant threats to this cultural heritage (which is one of the assets on which the tourism-related industry relies).

Scope: **Projects should develop one or more functional materials or highly innovative techniques in the restoration and preventive conservation of works of art. These new techniques may be based on a more in-depth knowledge of the degradation mechanisms in the materials used in previous conservation actions. They will ensure long term protection and security of cultural heritage, taking into account environmental and human risk factors. An environmental impact assessment of the new materials is to be included, to ensure development of sustainable and compatible materials and methods. A multidisciplinary approach should allow the development of practicable methodologies. Activities should focus on innovative and long lasting solutions in the conservation of cultural assets with historical and/or artistic value.**

Proof of concept in terms of product and/or process must be delivered within the project, excluding commercially usable prototypes but demonstrating scalability towards industrial needs. Dedicated multiscale modelling, tailored (e.g. interface) characterisation, standardisation and/or the production of (certified) reference materials may also be covered in projects.

For this topic, proposals should include an outline of the initial exploitation and **business plans**. Wherever possible, proposers could actively seek synergies, including possibilities for cumulative funding, with relevant national / regional research and innovation programmes and/or European Structural and Investment Funds in connection with smart specialisation

strategies. Exploitation plans, outline financial arrangements and any follow-up should be developed during the project.

Activities expected to focus on Technology Readiness Level 5-7. A significant participation of SMEs with R&D capacities is encouraged.

The Commission considers that proposals requesting a contribution from the EU between EUR 4 and 8 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:

Practical and affordable solutions in terms of cost and/or complexity of operation by those who will use the materials and techniques developed;

Contribution to achieving EU policies, in line with the Lisbon Treaty recommendation to take actions on a global scale to ensure that Europe's cultural heritage is conserved, safeguarded and enhanced (Article 3).

Type of action: Innovation Actions

Deadline: First stage: 06/05/2014 at.17.00 Brussels time, Second stage: 07/10/2014 at 17.00 Brussels time.

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-nmp-2014-two-stage.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2515-nmp-21-2014.html

NMP 34 – 2014: Networking and sharing of best practices in management of new advanced materials through the eco-design of products, eco-innovation, and product life cycle management

Specific challenge: The production, distribution, use and end-of-life management of materials is associated both with costs and important impacts on the environment, such as consumption of energy, (raw and other) materials and resources consumption, waste generation, emissions and possible generation/management of hazardous substances. It is estimated that approximately 80% of all product-related environmental impacts are determined during the design phase of a product (Aldersgate Group). Eco-design aims at reducing the environmental impact of products, including the energy consumption throughout their entire life cycle.

Scope: Projects should network actors (such as enterprises, academia and research institutions) to:

share knowledge and practices on eco-design, eco-innovative solutions for manufacturing processes and **eco-innovative business models in line with the Commission Communication "Innovation for a sustainable Future – The Eco-Innovation Action Plan" (COM(2011)899), minimise use of material, identify product life cycle scenarios that maximise the number of consecutive cycles of reuse, remanufacturing, or recycling, and/or the time in each cycle, diversify reuse across the value chain, or extend product or component longevity and thus increase advanced material productivity and profitability with final economic benefits for the European industrial economy as a whole; and**

provide models to decouple economic growth from resource constraints. Eco-design principles, recyclability, required materials performance and cost-effectiveness could be part of the study. Life cycle assessment, including cost effectiveness aspects, should be used to justify proposed solutions, where appropriate.

The Commission considers that proposals requesting a contribution from the EU between EUR 1 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. No more than one proposal will be funded.

Expected impact: Better focusing of further Horizon 2020 work programmes targeting the sustainability and competitiveness of European industry through understanding of how improved design principles will reduce consumption of energy and resources, while generating economic growth and creating jobs;

Contributions to a circular economy approach by fostering product design that facilitates recycling and reuse;

Contribute to achieving EU policy on Ecodesign, 'Innovation for a sustainable Future - The Eco-innovation Action Plan (Eco-AP)', COM(2011)899.

Type of action: Coordination and Support Action

Deadline: Single stage 06/05/2014 at 17.00.Brussels time

Call information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-nmp-csa-2014.html

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2527-nmp-34-2014.html

Topics with minor SSH relevance:

NMP 18 – 2014: Materials solutions for use in the creative industry sector

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2513-nmp-18-2014.html

NMP 26 – 2014: Joint EU & MS activity on the next phase of research in support of regulation "NANOREG II"

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2516-nmp-26-2014.html

NMP 28 – 2014: Assessment of environmental fate of nanomaterials

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2517-nmp-28-2014.html

NMP 31 – 2014: Novel visualisation tools for enhanced nanotechnology awareness

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2521-nmp-31-2014.html

NMP 33 – 2014: The Materials "Common House"

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2522-nmp-33-2014.html

NMP 35 – 2014: Business models with new supply chains for sustainable customer-driven small series production

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2518-nmp-35-2014.html

NMP 36 – 2014: Facilitating knowledge management, networking and coordination in NMP

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2523-nmp-36-2014.html

NMP 37 – 2014: Practical experience and facilitating combined funding for large-scale RDI initiatives

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2524-nmp-37-2014.html

Topics with SSH relevance in 2015:

(This topic may refer to a different sub-call, with different deadline. Please check the link to the Participant Portal under the topic for more details.)

NMP 32 – 2015: Societal engagement on responsible nanotechnology (minor relevance)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2533-nmp-32-2015.html

Call for "FoF – Factories of the Future" (NMP)

Call Identifier: H2020-FoF-2014-2015

Relevant Sub-call: H2020-FoF-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-fof-2014.html

Publication date: 11/12/2013

Deadline: 20/03/2014 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

FoF 4 – 2014: Developing smart factories that are attractive to workers

Specific challenge: In a very competitive environment, manufacturing enterprises will need to be attractive to potential workers. This will require new thinking both on scheduling of work and design of attractive and safe workplaces, taking into account the ageing workforce. The aim is to demonstrate the operation of a real smart factory, focusing on the interconnection between organisation, workforce, management and technology. This interconnection must be supported by new models for optimisation and utilisation of production systems to ensure efficient transfer of knowledge and information. This requires new ways of using new technologies (e.g. augmented reality), which are highly adaptable and able to address the task holistically. The new models must be able to support the workers' tacit knowledge in the process of both controlling the production line and controlling advanced machinery. This will enhance synergy in the interaction between humans, technology and the organisation.

Scope: **Demonstration activities should be multi-disciplinary, involving in particular as appropriate disciplines of Social Sciences and Humanities,** and address all of the following areas:

- Methodologies and tools for efficient design or re-adaptation of production facilities based on co-evolving product-process-production systems considering simultaneously productivity aspects and the **wellbeing and autonomy of the workers**, through the integration of technologies.

- New methods and technologies for an optimised take-up and use of workers' knowledge**, to stimulate team interactions and to enhance work related satisfaction** taking into consideration safety and ergonomics of the working areas.

- Integration of innovative production technologies supporting increased productivity and flexibility.

- Incorporating aspects linked to **education, workers' training and attractiveness to the young and the elderly** (e.g. in-factory teaching, 'factory-lab' concepts).

Attractive research will support manufacturing enterprises in Europe in their respective efforts for talents to be employed in attractive manufacturing jobs. Proof of concept in terms of at least one industrial pilot demonstrator should be delivered before the end of the project, convincingly demonstrating a solution to industrial needs.

For this topic, proposals should include an outline of the initial exploitation and business plans. Wherever possible, proposers could actively seek synergies, including possibilities for cumulative funding, with relevant national / regional research and innovation programmes and/or European Structural and Investment Funds in connection with smart specialisation

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strategies. Exploitation plans, outline financial arrangements and any follow-up should be developed during the project.

Activities expected to focus on Technology Readiness Level 5-7. A significant participation of SMEs with R&D capacities is encouraged.

This topic is particularly suitable for collaboration at international level, particularly under the IMS scheme. Project partnerships that include independent organisations from at least three IMS regions are therefore encouraged.

The Commission considers that proposals requesting a contribution from the EU between EUR 4 and 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:

The impact on the areas of application of the projects is expected to be:

- In social terms, an improvement in the working conditions in factories and in the attractiveness of the working environments in particular for young people.

- Improved work satisfaction of employees within the factories of the future.

- In economic terms, an increase of 10% in productivity due to an increased commitment of people, better organisation of work and by increasing the pool of potential workers through widening the skill profile.

- Strengthened global position of European manufacturing industry through the introduction of the new technologies.

Type of action: Innovation Actions.

Deadline: 20/03/2014 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2183-fof-04-2014.html

Call – "Information and Communication Technologies Calls" (ICT) -

Call Identifier for 2014: H2020-ICT-2014

Relevant sub-call for topics listed below: H2020-ICT-2014-1

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ict-2014-1.html

Publication date: 11/12/2013

Deadline: 23/04/2014, 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

ICT 17 – 2014: Cracking the language barrier

Specific Challenge: This topic aims to facilitate multilingual online communication for the benefit of the digital single market which is still fragmented by language barriers that hamper a wide penetration of cross-border commerce, social communication and exchange of cultural content. Current machine translation solutions typically perform well only for a limited number of target languages, and for a given text type.

The aim of this challenge is to launch **interdisciplinary** work leading to a new paradigm in overcoming the language barrier and progressively, to reach high quality for all language combinations and translation directions, and cater for the most demanded text types and use contexts. Systems and solutions that are intended to overcome the language barriers, are expected to deal with huge volumes, high variety of languages and text styles, and deliver results in reasonable time (in most cases, instantly). Where the methods require automatic learning from language resources, the availability and suitability of the latter need to be addressed. Special focus is on the 21 EU languages (both as source and target languages) that have "fragmentary" or "weak/no" machine translation support according to the META-net language white papers.

Scope:

a.   Research & Innovation Actions **to kick off a multidisciplinary research path to develop a new paradigm leading to radically improved quality and coverage** (in terms of languages and text types) of machine translation. Special focus is on issues where current methods fall short in quality or fail to adapt to different languages and different needs of translation, or where further improvement with current methods becomes very expensive or requires such amounts of training data that are not available. The projects should use existing and emerging structures (in particular, those developed under action c) below) for testing, validating and evaluating the novel methods against agreed benchmarks.

b.   Innovative Actions in view of optimizing translation quality and language/topical coverage in demanding, **realistic use situations arising from well documented market needs**, for example in pan-European online services. The pilots should focus on areas where multilingualism contributes to competitiveness and user-friendliness and optimize, evaluate and test performance improvements with languages that are poorly served by current machine translation systems. The pilots should make use of and contribute to existing and emerging platforms and infrastructures for pooling, building, and adding value to language resources and tools.

c.   Coordination actions to promote benchmarking and competitive evaluation of machine translation, as well as the optimal use of language resources from various sources, in view of federating the sources and repositories towards a single access mechanism, respecting appropriate standards of interoperability and metadata.

Expected impact:

- Initiating a programme of ground-breaking actions that will deliver, by 2025, an online EU internal market free of language barriers, delivering automated translation quality, equal to currently best performing language pair/direction, in most relevant use situations and for at least 90% of the EU official languages.

- Significantly improving the quality, coverage and technical maturity of automatic translation for at least half of the 21 EU languages that currently have "weak or no support" or "fragmentary support" of machine translation solutions, according to the META-NET Language White Papers referenced before.

- Attracting a community of hundreds of contributors of language resources and language technology tools (from all EU Member States and Associated Countries) to adopt and support a single platform for sharing, maintaining and making use of language resources and tools; establishing widely agreed benchmarks for machine translation quality and stimulating competition between methods and systems.

Types of action:

a.   Research & Innovation Actions – Proposals requesting a Small contribution are expected

b.   Innovation Actions – Proposals requesting a Small contribution are expected

c.   Coordination and Support Actions

Deadline: 23/04/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/88-ict-17-2014.html

ICT 21 –   2014: Advanced digital gaming/gamification technologies

Specific Challenge: Digital games and gamification mechanics applied in non-leisure contexts is an important but scattered industry that can bring high pay-offs and lead to the emergence of a prospering market. Digital games can also make a real change in the life of a large number of targeted excluded groups, enhancing their better integration in society. This requires however the development of new methodologies and tools to produce, apply and use digital games and gamification techniques in non-leisure contexts, as well as building scientific evidence on their benefits - for governments, enterprises and individuals.

Scope:

a.   Research & Innovation actions: Multidisciplinary research experimentations and collaboration on advanced digital gaming technologies and components (including game engines, **emergent narrative, virtual characters, interaction systems and alternative human-machine interfaces,** 3D, textures, models for simulations, game design, learner profiles, **emotional models**, etc.) produced by and for the traditional digital game industry but applied into wider scenario of use in non-leisure contexts. Activities must lead to the creation of a repository of core reusable, open components to enable publishers and game producers as well as user organisations and individual programmers to build specific games applications in non-leisure contexts. Application scenarios will focus on **learning and skills acquisition in formal and informal education, in workplace learning and in policy making and collective social and public processes**.

b.   Innovation actions: Stimulate technology transfer and new non-leisure applications by SMEs traditionally working on digital games through coordinating and incubating small scale experiments, thus underpinning new market developments on digital games for learning and skills acquisition, and for empowerment and social inclusion. The activities should also allow the accumulation of scientific evidence of the effectiveness of such approaches for specific target groups or problems.

Expected impact:

- Increase the number of collaborations between traditional digital game industry players and a broader research community (neurosciences, educational physiology, pedagogy, etc.), intermediaries (teachers, trainers) and users from a wide area of application contexts.

- Increase the effectiveness of digital games for professionals and researchers, intermediaries and social actors dealing with people with disabilities or at risk of exclusion (socially, physically or technologically disadvantaged groups) and of those who consider themselves unsuited for education.

Types of action:

a.   Research & Innovation Actions – Proposals requesting a Large contribution are expected

b.   Innovation Actions – Proposals requesting a Small contribution are expected

Deadline: 23/04/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/90-ict-21-2014.html

ICT 22 –   2014: Multimodal and Natural computer interaction

Specific Challenge: As devices and systems are becoming increasingly powerful, the **interface between human and computer** is often lagging behind and constitutes a bottleneck for seamless and efficient use. Leveraging on **multidisciplinary expertise combining knowledge from both the technological and human sciences**, new technologies need to offer interactions which are closer to the communication patterns of human beings and allow a simple, intuitive and hence more "natural" communication with the system.

Scope: The topic will be addressed by the following focused actions:

a.   Research & Innovation Actions: Provide interactive information retrieval systems with more efficient and **natural ways of delivering answers to users' queries** especially in unexpected and/or difficult circumstances. This should be supported by research on **knowledge-based autonomous human-like social agents** that can handle and learn from conversational spoken and multimodal interaction as well as react proactively to new communicative situations. Systems should cope with **spontaneous spoken dialogue and gestural interaction, in multiple languages, and exhibit adequate communicative, conversational, affective and social capabilities in relation to the domain/task under consideration and the needs and abilities of the user**. Technologies should be designed to match multiple delivery platforms and be demonstrated in real environments, while research is expected to be based on and/or produce freely available and re-usable resources.

b.   Research & Innovation Actions: Develop novel multi-modal, adaptive interfaces, including Brain Computer Interfaces, assisting people with disabilities. Research should explore: **how users interact and cooperate with (intelligent) systems, including user modelling aspects** for the identification of necessary abilities for different functions and environments; **how to detect behaviours, emotions and intentions of the user**; how to sense and understand the environment and other context factors; how multimodal (including nonverbal) interaction is used in ambient environments. Activities may cover also interoperability standards (for software and devices) as well as interaction and cooperation between machine intelligence in environments and human intelligence.

c.   Innovation Actions: Develop and validate innovative multimodal interfaces to provide more efficient and natural ways of interacting with computers and improve users' experience. Leveraging on one or multiple smart devices and sensors with capabilities such as scene analysis, voice recognition, human position, gestures and body language detection capabilities, such systems must provide non-intrusive interaction with human where real and virtual content are blended. Built with a user centric approach, solutions should be cost effective; address clear market needs and be validated in domains such as those of the creative industries fields.

Expected impact:

a.   Research & Innovation Actions

- Improve multilingual speech processing and bridging the gap between recognition and synthesis, exploiting metadata and other contextual data.

- Increase the automatic inferences capacities from rich context thanks to improved language understanding, sensed environments/objects, use of social media and agent's experience.

b.   Research & Innovation Actions

- Advance the capacity of human-machine interaction technologies to enable disabled and elderly people to fully participate in society.

c.   Innovation Actions

- Enable better uses of ICT technologies within the creative industries by providing directly usable solutions addressing their specific needs.

- Provide a large spill over of the knowledge acquired to a maximum of European industries.

- Improve the competitive position of the European industries through the provision of cost effective, innovative and high-value products and services.

Types of action:

a.   Research & Innovation Actions – Proposals requesting a Small contribution are expected

b.   Research & Innovation Actions – Proposals requesting a Small contribution are expected

c.   Innovation Actions – Proposals requesting a Small contribution are expected

Deadline: 23/04/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/91-ict-22-2014.html

ICT 31 –   2014: Human-centric Digital Age

(SSH dedicated topic)

Specific Challenge: Technologies, networks and new digital and social media are changing the way people behave, think, interact and socialize as persons, citizens, workers and consumers. Understanding the nature and consequences of these changes in order to better shape the digital future is a key success factor for the values and competitiveness of the European society. There is a need for exploring the two-way interactions between technology and society in order to lay foundations for future thinking in ICT and for future regulatory and policy-making activities in the DAE areas.

Scope:

a.   The Research & Innovation Actions should aim at in-depth exploration of the development of fundamental notions such as identity, privacy, relationships, culture, reputation, motivations, responsibility, attention, safety and fairness, in the hyper-connected age where the limits between offline and online are blurred in numerous ways. Gender, generational and cultural differences in behaviours should also be considered where relevant.

Examples of relevant research topics include:

- How do humans cope with information overload and attention scarcity? How do ICT environments and processes affect the ways individuals deal with information flows and focus their attention?

- How does the blurring between online and offline world affect the way people experience their different settings (work, leisure, family)? How can smart and connected environments support individuals and society?

- What are the norms and behaviours that should be considered for behaving ethically and being fair to each other in a hyper-connected digital world? How should their adoption in the digital culture be fostered?

b.   The coordination and support activities should facilitate community building between ICT developers, researchers in SSH and other disciplines, and stakeholders for responsible research and innovation. They should provide concrete incentives and motivations for cross-disciplinary collaborations. Coordination actions are invited to coordinate and support responsible research and innovation through ICT and within ICT R&D&I areas on different parts of the H2020 Work programme, notably by efficient exchange of results between SSH research, on-going R&D&I projects and relevant areas of policy making and regulatory activities.

Deadline: 23/04/2014, 17:00:00 (Brussels local time)

Expected impact:

a.   The Research & Innovation Actions supported under this objective are expected to:

- provide new knowledge of the ways by which individuals and communities work, think, learn, behave, and interact in the new hyper-connected environments and of how these new developments affect people's perceptions of self, services, entrepreneurship, democracy, and governance.

- provide well-founded transferable results, including innovative concepts and proved functional models, which can be exploited in the future research, policy and regulatory agendas.

b.   The coordination and support activities are expected to

- provide support to the ongoing and future ICT projects by establishing an efficient and effective collaboration ground between ICT developers, researchers in multiple disciplines, and a broad stakeholder base (including society, industry, policy makers).

- provide support for take-up and establish best practices for responsible research and innovation in different areas of ICT Work programme.

All successful projects should establish broad and durable constituencies, which support results take up and further work beyond the lifetime of the project.

Types of action:

a.   Research & Innovation Actions – Proposals requesting a Small contribution are expected

b.   Coordination and Support Actions

Deadline: 23/04/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/95-ict-31-2014.html

Topics with minor SSH relevance:

ICT 5 – 2014: Smart Networks and novel Internet Architectures

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/81-ict-05-2014.html

Topics with SSH relevance in 2015:

ICT 10 – 2015: Collective Awareness Platforms for Sustainability and Social Innovation

ICT 19 – 2015: Technologies for creative industries, social media and convergence

ICT 20 – 2015: Technologies for better human learning and teaching

ICT 30 – 2015: Internet of Things and Platforms for Connected Smart Objects

Topics for 2015 will be part of the announced call "H2020-ICT-2015". This call will be published on 15 October 2015. There are currently no links to the call or the different topics on the participant portal. Details on the topics are available from the Work Programme 2014/15 (chapter 5i) which can be downloaded here:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ict-2014-1.html#tab2

Call – "Earth Observation" (Space)

Call Identifier: H2020-EO-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-eo-2014.html

Publication date: 11/12/2013

Deadlines: 26/03/2014, 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

Topics with minor SSH relevance:

EO-1-2014: New ideas for Earth-relevant space applications

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2445-eo-1-2014.html

Call – "Competitiveness of the European Space Sector: Technology and Science"

Call Identifier: H2020-COMPET-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-compet-2014.html

Publication date: 11/12/2013

Deadlines: 26/03/2014, 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

Topics with minor SSH relevance:

COMPET-10-2014: Outreach through education

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2437-compet-10-2014.html

3. **Horizon 2020 Priority: Scientific Excellence**

3.1 **European Research Council**

The ERC funds excellent frontier research. It follows a bottom-up approach.

For the Starting, Consolidator and Advanced Grant calls the ERC Scientific Council has established the following indicative percentage budgets for each of the three main research domains:

Physical Sciences & Engineering   *44%*

Life Sciences   *39%*

Social Sciences & Humanities   ***17%***

Call – ERC Starting Grant

Call Identifier: ERC-2014-StG

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/erc-2014-stg.html

Publication date: 11 December 2013

Deadline: 24 March 2014

Objectives

ERC Starting Grants are designed to support excellent Principal Investigators at the career stage at which they are starting their own independent research team or programme. Applicant Principal Investigators must demonstrate the ground breaking nature, ambition and feasibility of their scientific proposal.

Size of ERC Starting Grants

Starting Grants may be awarded up to a maximum of EUR 1 500 000 for a period of 5 years. However, up to an additional EUR 500 000 can be requested in the proposal to cover (a) eligible "start-up" costs for Principal Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving the ERC grant and/or (b) the purchase of major equipment and/or (c) access to large facilities.

Profile of the ERC Starting Grant Principal Investigator

The Principal Investigator shall have been awarded their first PhD at least 2 and up to 7 years prior to the publication date of the call for proposals of the ERC Starting Grant. The effective elapsed time since the award of the first PhD can be reduced in certain properly documented circumstances.
A competitive Starting Grant Principal Investigator must have already shown the potential for research independence and evidence of maturity. For example, it is expected that applicants

will have produced at least one important publication without the participation of their PhD supervisor.

Principal Investigators funded through the ERC Starting Grants shall spend a minimum 50% of their total working time on the ERC project and a minimum of 50% of their total working time in an EU Member State or Associated Country. Principal Investigators shall ensure a sufficient time commitment and presence throughout the course of the project to guarantee its proper execution.

Call – ERC Consolidator Grant

Call Identifier: ERC-2014-CoG

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/erc-2014-cog.html

Publication date: 11 December 2013

Deadline: 20 May 2014

Objectives

ERC Consolidator Grants are designed to support excellent Principal Investigators at the career stage at which they may still be consolidating their own independent research team or programme. Applicant Principal Investigators must demonstrate the ground breaking nature, ambition and feasibility of their scientific proposal.

Size of ERC Consolidator Grants

Consolidator Grants may be awarded up to a maximum of EUR 2 000 000 for a period of 5 years. However, up to an additional EUR 750 000 can be requested in the proposal to cover (a) eligible "start-up" costs for Principal Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving the ERC grant and/or (b) the purchase of major equipment and/or (c) access to large facilities**.**
Profile of the ERC Consolidator Grant Principal Investigator

Same applies as for the ERC starting Grant.

Call – ERC Proof of Concept Grant

Call Identifier: ERC-2014-PoC

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/erc-2014-poc.html

Publication date: 11 December 2013

Deadlines: 1 April 2014 / 1 October 2014

Objectives

Frontier research often generates unexpected or new opportunities for commercial or societal application. The ERC Proof of Concept Grants aim to maximise the value of the excellent research that the ERC funds, by funding further work (i.e. activities which were not scheduled to be funded by the original ERC frontier research grant) to verify the innovation potential of ideas arising from ERC funded projects. Proof of Concept Grants, are therefore on offer only to Principal Investigators whose proposals draw substantially on their ERC funded research.

Eligibility Criteria

The content of the proposal must relate to the objectives and to the grant type set out in the call, as defined in this work programme. A proposal will only be deemed ineligible on grounds of 'scope' in clear-cut cases.

More than one Proof of Concept Grant may be awarded per ERC funded frontier research project but only one Proof of Concept project may be running at any one time for the same ERC frontier research project.

Maximum size of grant and grant assessment

The financial contribution will be up to a maximum of EUR 150 000 for a period of 18 months. The ERC expects that normally, proof of concept projects should be completed within 12 months. However, to allow for those projects that require more preparation time, projects will be signed for 18 months. Given this initial flexibility, extensions of the duration of proof of concept projects may be granted only exceptionally.

The Union financial contribution will take the form of the reimbursement of up to 100% of the total eligible and approved direct costs and of flat-rate financing of indirect costs of a maximum of 25% of the total eligible direct costs.

Evaluation Criteria

A single-step submission and evaluation procedure will be used. The evaluation will be conducted by peer reviewers. These experts may work remotely and may if necessary meet as an evaluation panel as set out below on the application of the evaluation criteria.

Proof of Concept Grants are not ERC frontier research grants and may be evaluated against other evaluation criteria than excellence. The evaluation criteria for selection of proposals for Proof of Concept Grants are excellence, impact and quality and efficiency of the implementation.

Forthcoming Calls

Call – ERC Advanced Grant

Call Identifier: ERC-2014-AdG

Publication date: 17 June 2013

Deadlines: 21 October 2014

3.2 Marie Skłodowska-Curie Actions

Call – Marie Skłodowska-Curie Innovative Training Networks (ITN)

Call Identifier: H2020-MSCA-ITN-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-itn-2014.html

Publication date: 11 December 2013

Deadlines: 09 April 2014 at 17.00.00 Brussels time

Objective:

The Innovative Training Networks (ITN) aim to train a new generation of creative, entrepreneurial and innovative early-stage researchers, able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit.

ITN will raise excellence and structure research and doctoral training, extending the traditional academic research training setting, and equipping researchers with the right combination of research-related and transferable competences. It will provide enhanced career perspectives in both the academic and non-academic sectors through international, interdisciplinary and intersectoral mobility combined with an innovation-oriented mind-set.

Scope:

ITN supports competitively selected joint research training and/or doctoral programmes, implemented by partnerships of universities, research institutions, research infrastructures, businesses, SMEs, and other socio-economic actors from different countries across Europe and beyond.

Partnerships take the form of collaborative European Training Networks (ETN), European Industrial Doctorates (EID) or European Joint Doctorates (EJD).

Each programme should have a clearly identified supervisory board co-ordinating network wide training and establishing active and continuous communication and exchange of best practice among the partners to maximise the benefits of the partnership.

The programme should exploit complementary competences of the participants, and enable networking activities, the organisation of workshops and conferences to facilitate sharing of knowledge, new skills acquisition and the career development of researchers.

Training responds to well identified needs in defined research areas, with appropriate references to interdisciplinary fields. It should be primarily focused on scientific and technological knowledge through research on individual, personalised projects.

In order to increase the employability of the researchers, the research training should be complemented by the meaningful exposure of each researcher to the non-academic sector and by substantial training modules addressing key transferable skills common to all fields (e.g. entrepreneurship, management and financing of research activities and programmes, management of intellectual property rights, other exploitation methods of research results, ethical aspects, communication, standardisation and societal outreach). The training follows the EU Principles for Innovative Doctoral Training2.

In EID and EJD, enrolment in a doctoral programme and the creation of a joint governance structure - with joint admission (EJD only), selection, supervision, monitoring and assessment procedures - is mandatory. In the case of EJD, the successful completion of the programme must result in the award of joint, double or multiple doctoral degrees.

Attention is paid to the quality of supervision and mentoring arrangements as well as career guidance. Joint supervision of the researchers is mandatory for EJD and for EID, and encouraged in ETN. In EID, the joint supervision of the researcher must be ensured by at least one supervisor from the academic sector and one supervisor from the non-academic sector.

A Career Development Plan should be established jointly by the supervisor(s) and the early stage researcher recruited by the selected network. In addition to research objectives, this plan comprises the researcher's training and career needs, including planning for publications and participation in conferences.

Expected impact:

- ITN will create and contribute to high-quality innovative research and doctoral training, build capacity, and have a structuring effect throughout Europe and beyond.

- Through research training provided by the institutions from different countries, sectors and disciplines, this action will trigger cooperation between organisations from the academic and non-academic sectors.

- It will enhance skills development and knowledge-sharing, enhancing researchers' employability and providing them with new career perspectives.

- ITN will shape future generations of entrepreneurial researchers capable of contributing effectively to the knowledge-based economy and society.

- In the long term, it will also raise the attractiveness of research careers and encourage young people to embark on this career path.

Type of action: Marie Skłodowska-Curie action.

Call – Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)

Call Identifier: H2020-MSCA-RISE-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-rise-2014.html

Publication date: 11 December 2013

Deadlines: 24 April 2014 at 17.00.00 Brussels time

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) for the advancement of science and the development of innovation.

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 joint research and innovation activities between the participants. 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 the joint research and innovation activities by seconding and/or hosting eligible staff members.

The proposed research and innovation activities should exploit complementary competences of the participants, 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.

Activities 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 supporting the research and innovation activities of the proposal.

Support for the exchanges between institutions in the EU Member States and Associated Countries covers only intersectoral secondments.

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

No secondments between institutions located in third countries or within the same EU

Member State or Associated Country can be supported.

Expected impact:
• Research and innovation activities under RISE are expected to build or enhance new and existing networks of international and intersectoral cooperation. They will significantly strengthen the interaction between organisations in the academic and non-academic sectors, and between Europe and third countries.
• In terms of knowledge sharing and broad skills development, they will better align different cultures and expectations, with a view to a more effective contribution of research and innovation to Europe's knowledge economy and society.
Type of action: Marie Skłodowska-Curie action.

Forthcoming Calls

Call – Marie Skłodowska-Curie Individual Fellowships (IF)

Call Identifier: H2020-MSCA-IF-2014

Publication date: 12 March 2014

Deadlines: 11 September 2014 at 17.00.00 Brussels time

Call – Marie Skłodowska-Curie Co-funding of regional, national and international programmes (COFUND)

Call Identifier: H2020-MSCA-COFUND-2014

Publication date: 10 April 2014

Deadlines: 02 October 2014 at 17.00.00 Brussels time

3.3   Future and Emerging Technologies (FET)

FET funds interdisciplinary collaborations that seek genuine cross-fertilisation and deep synergies between the broadest range of advanced sciences (physical sciences, information sciences, life sciences, environmental sciences, social sciences, humanities,…) and cutting-edge engineering disciplines (chemical, physical, biological, computational, geospatial, …) in order to turn new knowledge and high-risk ideas into a viable basis for radically new technologies.

Call – "FET-Proactive – Emerging Themes and Communities"

Call Identifier: H2020-FETPROACT-2014

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-fetproact-2014.html

Publication date: 11 December 2013

Deadlines: 01/04/2014 at 17.00.00 Brussels time

Topics with SSH relevance in 2014:

FETPROACT-1-2014: Global Systems Science (GSS)

Specific challenge: The ambition is to improve the way scientific knowledge can help inform and evaluate policy and societal responses to global challenges like climate change, **global financial crises**, global pandemics, and **growth of cities – urbanisation and migration patterns**. These challenges entangle actions across different sectors of policy and society and must be addressed by radically novel ideas and thinking for producing, delivering, and embedding scientific evidence into the policy and societal processes.

GSS will put to full use the abundance of **data on social, economic, financial**, technological, and ecological systems available today. GSS emphasises systems thinking and the need to integrate/link data, models, and policies across all policy sectors with all societal actors. GSS will build on results from, among others, Complex Systems Science, Network Science, Mathematics of Big Data, the life sciences, **social sciences and humanities, behavioural sciences,** statistics, econophysics, etc.

Scope: Proposals must address all of the below elements, necessary to successfully embed scientific evidence in the policy processes for tackling global challenges:

- Research grounded in theoretical foundations of, among others, **systemic risk, decision making under uncertainty or conflicting evidence**, mathematics and computer science for Big Data (including their characteristics), algorithmic game theory, cascading/escalating effects in networks, integration and visualisation of Big Data.

- Contributions to solving real world problems in one selected problem area - for instance tackling **systemic risk in finance/economics, managing growth of cities and migration, or global pandemics – and in particular to tackle cross-cutting policy dependencies and interactions** affecting the area of choice.

- Novel ideas and technologies to generate and better communicate the scientific evidence-base: advanced simulation of highly interconnected systems; mathematical and tools for analysing (often unstructured) Big Data; integration of the whole spectrum of structure and unstructured data; methods to deal with conflicting data and modeling results; novel data visualisation tools.

- Society/human-centred technologies, for instance, **new approaches to allow citizens to actively participate in the policy process, to collectively gather and integrate data, analyse evidence, and novel methods to better judge and use scientific evidence: methods,** e.g. games, gamification, and narratives to clearly and consistently convey data and modeling results and thereby to stimulate societal responses.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 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:

- Level to which research proposed is rooted in policy needs, promotes system thinking, and is delivering consistent messages from conflicting data and model results.

- Level of use/uptake of GSS tools and methods in the policy and societal processes, including in EC policies.

- Capacity of GSS to help integrate societal responses across policy domains and cross-cutting authorities by development of a system-wide integrated evidence base of data and models.

Type of action: Research and Innovation Actions

Deadline: 01/04/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2074-fetproact-1-2014.html

FETPROACT-2-2014: Knowing, doing, being: cognition beyond problem solving

Specific challenge: This initiative addresses the interdisciplinary fundamentals of knowing, thinking, doing and being, in close synergy with foundational research on future artificial cognitive systems, robots, smart artefacts and large scale cyber-physical systems. It aims at renewing ties between the different disciplines studying knowledge (especially beyond the 'declarative' and static action oriented kind of knowledge), cognition (e.g., perception, understanding, learning, action) and related issues (e.g., embodiment, thinking,

development, insight, knowledge as a social construct, identity, responsibility, culture…) from various perspectives (e.g., physical, biological, neuronal, **behavioural, social, epistemological,** ecological). The aim is to enable new synergies with engineering disciplines on smart and self-organising materials, embedded systems, robotics, hybrid systems or smart infrastructures and cities to take artificial cognitive systems beyond the level of dull task execution or repetitive problem solving.

Scope: Proposals must address at least one of the following elements:

- **New concepts and paradigms in cognitive systems such as new approaches to embodiment, learning, motivation, autonomy, knowledge and mind**, not limited to prior anthropocentric or bio-mimetic models. Proposals will aim to demonstrate these paradigms in robust performance of future robotic systems (possibly nano-, micro-, multi-, hybrid- or unconventional ones) in challenging changing environments, possibly co-habited with or linked to biological systems, and over long periods of time.

- **Integrative studies of knowing, thinking, doing and being** that bridge between low-level (e.g., neuronal, physiological) and high-level **(e.g., belief, intention, identity)** descriptions. These multidisciplinary studies are expected to go well beyond addressing the perception-action loop, and to tackle issues such as **development, experience, understanding, empathy, memory, attention, the emergence and development of self, social belonging and culture**. They are to be researched in close synergy with technological experiments, for instance in computational neuroscience, intelligent materials, robotics, cyber physical settings or large scale simulations that incorporate, test and refine insights gained.

- **Approaches for understanding the long-term development of individual and social knowledge and identities, especially in highly heterogeneous and dynamic settings (reflecting aspects of e.g., diversity, urban change, migration, social and gender divides, multiculturalism, inter-disciplinarity, etc.).** Proposals are expected to take into account the role of technologies and infrastructures in this, **as well as how these facilitate or hamper societal changes.**

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 4 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:

- New foundations for future robotics and other artificial cognitive systems with clear progress beyond current capabilities and design concepts.

- A deeper understanding of non-performative aspects of development and interaction in mixed human/technological settings.

- Improved understanding of the impacts of the technologically enhanced environments on the human behaviour, at the individual and collective levels

- Understanding the origins and development of synergies and divides in socio/technical contexts and ways to influence them.

Type of action: Research and Innovation Actions

Deadline: 01/04/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2075-fetproact-2-2014.html

Call - "FET-Open – novel ideas for radically new technologies"

Call Identifier: H2020-FETOPEN-2014/2015

Publication date: 11 December 2013

Deadline: please see information under the individual topics.

The Call "FET-Open – novel ideas for radically new technologies (H2020-FETOPEN-2014/2015)" is divided into several "sub-calls". The URL link to information on the participant portal is listed under the individual topics.

Topics with minor SSH relevance:

FETOPEN 1 – 2014/2015: FET-Open research projects

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1153-fetopen-1-2014.html

FETOPEN 2 – 2014: Coordination and Support Activities 2014

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/1154-fetopen-2-2014.html

3.4 European research infrastructures (including e-Infrastructures)

Call - Developing new world-class research infrastructures

Call Identifier: H2020-INFRADEV-2014/2015

Relevant Sub-call for 2014 topics: H2020-INFRADEV-1-2014-1

Publication date: 11 December 2013

Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-infradev-1-2014-1.html

Deadline for 2014 Topics: 02/09/2014, 17.00.00 Brussels local time

The Call "Developing new world-class research infrastructures (H2020-INFRADEV-2014/2015)" is divided into several "sub-calls". The URL Link to information on the participant portal is listed under the individual topics.

Topics with SSH relevance in 2014:

INFRADEV-1-2014: Design Studies

Specific challenge: New leading-edge research infrastructures in all fields of science and technology are needed by the European scientific community in order to remain at the forefront of the advancement of research, and to be able to help industry strengthen its base of knowledge and its technological know-how. The aim of this activity is to support the conceptual and technical design and preparatory actions for new research infrastructures, which are of a clear European dimension and interest. Major upgrades of existing infrastructures may also be considered if the end result is intended to be equivalent to, or capable of replacing, an existing infrastructure.

Scope: Design studies should address all key questions concerning the technical, legal and financial feasibility of new or upgraded facilities, leading to a 'conceptual design report' showing the maturity of the concept and forming the basis for identifying and constructing the next generation of Europe's and the world's leading research infrastructures. Conceptual design reports will present major choices for design alternatives and associated cost ranges, both in terms of their strategic relevance for meeting today's and tomorrow's societal challenges, and (where applicable) in terms of the technical work underpinning the development of new or upgraded research infrastructures of European interest. All fields of science are considered.

The activities that could be performed in a Design Study proposal include:

- Scientific and technical work, i.e. (1) the drafting of concepts and engineering plans for the construction, as well as the creation of final prototypes for key enabling technologies and implementation plans for transfer of knowledge from existing prototypes to the new research infrastructure; (2) scientific and technical work to ensure that the beneficiary scientific communities exploit the new facility from the start with the highest efficiency, including the introduction of new processes or software.

- Strategic work, i.e. (1) plans to integrate harmoniously the new infrastructure into the European fabric of related facilities in accordance, whenever appropriate, with the Community objective of balanced territorial development; (2) the identification of the best possible site(s) for setting up new facilities; (3) the estimated budget for construction and operation (4) the design of a workable legal (e.g. an ERIC) and governance structure; (5) the planning of research services to be provided at international level.

The main outcomes of the projects funded under this action will be conceptual or technical design reports for new or upgraded research infrastructures,

When the Design study includes scientific and technical work it should be implemented as a Research and innovation action, otherwise as a Coordination and support action. 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:

- Funding bodies for research infrastructures become aware of the strategic and funding needs of the scientific community.

- Policy bodies at the national level (e.g. funding bodies, governments), at European level (e.g. ESFRI) and internationally (e.g. the Organisation for Economic Co-operation and Development's Global Science Forum) have a sound decision basis to

> establish long-range plans and roadmaps for new research infrastructures of pan-European or global interest.

- The technical work carried out under this topic will contribute to strengthening the technological development capacity and effectiveness as well as the scientific performance, efficiency and attractiveness of the European Research Area.

Type of action: Coordination and support actions or Research and innovation actions

Deadline: 02/09/2014, 17.00.00 Brussels local time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/60-infradev-1-2014.html

INFRADEV-4-2014/2015: Implementation and operation of cross-cutting services and solutions for clusters of ESFRI and other relevant research infrastructure initiatives

Specific challenge: If different research infrastructure initiatives such as ESFRI projects, other world class research infrastructures, ERICs, e-infrastructures and Integrating Activity projects are developed, implemented and operate in isolation, there is a risk of fragmentation, lack of interoperability between them and parallel development of divergent solutions to same problems. In order to avoid this, there is a need in Europe to coordinate common activities, to define harmonised policies for access to the infrastructures and data lifecycle (acquisition, access, deposit, sharing and re-use), to develop and deploy common underpinning technologies and services, and to implement common and efficient solutions on issues such as, for example, data sharing and provision, architecture of distributed infrastructures, distributed and virtual access management, and development of common critical physical and virtual components (e.g. detectors, components for data management).

Scope: This topic will contribute to the construction and operation of the research infrastructures identified in the ESFRI Roadmap, therefore proposals must be centred and built around ESFRI projects in a specific thematic area that is broad enough to gather critical mass (e.g. Biomedical Science, Advanced Light Sources, Astronomy, Environment and Earth Sciences). While the ESFRI projects represent the core component of any cluster, other relevant world class research infrastructures, ERICs, e-infrastructures and Integrating Activity projects should also be involved in a cluster.

To ensure coordination and synergies between the largest possible number of ESFRI projects and other research infrastructure initiatives in a thematic area, proposals should address a coherent set of common activities and be comprehensive.

Proposals should develop synergies and complementarity, optimise technological implementation, define workflows and ensure coordination, harmonisation, integration and interoperability of data, applications and other services between the ESFRI and other research infrastructure initiatives in specific thematic areas. They could focus on issues such as policies, models and solutions for data and knowledge handling, including access, preservation and management; protection of sensitive data and sample; technological innovation and innovative processes with key industry partners; harmonised access policies; deployment and management of networks of observatories; real time observations, sampling procedures; timescales; instrumentation; standards.

Proposals may address the development of skills and the specific training of staff managing and operating the research infrastructures, as well as fostering the innovation potential of research infrastructures, in complementarity with the horizontal activities supported under Call H2020-INFRASUPP-2014/2015 (in particular topics INFRASUPP-3-2014 and INFRASUPP-4-2015). Activities should contribute to a faster adoption of best practices and

foster the use of open standards and interoperability in data and computing services. When addressing common or interoperable data services, proposals should encompass the definition of metadata, ontologies and identifiers as well as models (e.g. open web services) to process semantics at machine level. Proof of concept, prototyping and deployment of advanced data services will be supported. The detailed list of activities that can be supported under this topic is given in part C of the section "Specific features for Research Infrastructures".

Consortia should include key participants of the involved infrastructures initiatives as well as other partners needed to develop the required solutions. Proposals should build upon the state of the art in ICT and e-infrastructures for data, computing and networking and work in cooperation with e-infrastructure service providers.

This topic is complementary with topics EINFRA-1-2014, Big research data, and EINFRA-9-2015, Virtual Research Environments - VRE: EINFRA-1-2014 addresses services that are potentially transversal and generic, VREs integrate data, network and computing resources for interdisciplinary communities whereas INFRADEV-4-2014/2015 address interoperability of services and common solutions for cluster of ESFRI and other research infrastructure initiatives in thematic areas.

The Commission considers that proposals requesting a contribution from the EU of between EUR 6 and 15 million would allow this topic to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact:

- Contribution to the realisation of the Innovation Union flagship initiative's Commitment n. 5: "to complete or launch the construction of 60% of the ESFRI projects by 2015";

- Common ready-to-use services, systems, standards or other types of components will be made available to the involved research infrastructures initiatives, including the non-ESFRI projects, thus contributing to the development of a consistent European research infrastructures ecosystem.

- Interoperability between research infrastructure services, including data services, enables novel research leading to innovation and new insights;

- The efficiency and productivity of researchers rise thanks to an easier and seamless access to complementary services provided by different infrastructures and/or to reliable and open data services and infrastructures for discovering, accessing, and reusing data;

- Research communities adopt common approaches to the data management lifecycle (data and metadata curation), which leads to economies of scale;

- Trust in a community's data improves;

- Economies of scale and saving of resources are realised due to the optimisation of implementation and operation through the common development of components and solutions.

Type of action: Research and innovation actions

Deadline: 02/09/2014, 17.00.00 Brussels local time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/61-infradev-4-2014-2015.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls, with different deadlines. Please check the link to the Participant Portal under each topic for more details.)

INFRADEV-2-2015: Preparatory Phase of ESFRI projects

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/62-infradev-2-2015.html

INFRADEV-3-2015: Individual implementation and operation of ESFRI projects

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/63-infradev-3-2015.html

Call – e-infrastructures

Call Identifier: H2020-EINFRA-2014/2015

Relevant Sub-Call for 2014 topics listed below: H2020-EINFRA-2014-2

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-einfra-2014-2.html

Publication date: 11/12/2013

Deadline: 02/09/2014 at 17.00.00 Brussels time

Topics with SSH relevance in 2014:

EINFRA-4-2014 – Pan-European High Performance Computing infrastructure and services

Specific challenge: In order to create a world-class pan-European infrastructure, and to provide state-of-the-art services and access to this infrastructure to users, independently of location, the HPC resources in Europe need to be further pooled, integrated and rationalised.

This topic contributes to the implementation of the EU strategy on High Performance Computing (HPC), in particular by providing access to the best supercomputing facilities and services for both industry and academia, and complements the activities of the Public-Private Partnership (PPP) in HPC in order to implement the HPC strategy.

Scope: Proposals should address the following activities:

(1) Provide a seamless and efficient Tier-0 service to users Europe-wide based on promoting research excellence and innovation; this includes peer-review procedures for the allocation of computing time; transparent billing; and specific services adapted to the needs of users, including ESFRI projects, Horizon 2020 projects/programmes, large institutional users or industry. Tier-0 are those services provided at pan-European level with machines devoted to the pan-European infrastructure for a significant fraction of cycles (to be agreed with the

Commission) and having a minimum performance level to be periodically defined by the consortium

(2) Carry out activities (training, service prototyping, software development etc.) that build on national HPC capabilities (Tier-1) and are necessary to support Tier-0 services or a functional European HPC ecosystem;

(3) Ensure openness to new user communities and new applications; promote industrial take-up of HPC services in particular by SMEs;

(4) Implement inclusive and equitable governance and a flexible business model to ensure long term financial sustainability; the business model should allow financial or in-kind contributions by research projects/programmes, institutions, industry and regions or countries; based on an auditable cost model for the operation of HPC Centres providing European services with different financing sources;

(5) Develop and maintain the strategy for the deployment of a rich HPC environment of world-class systems with different machine architectures - evolving towards exascale - including the implementation roadmap at EU and national level, taking into account financial aspects, best practices for reduction of operating and energy costs, and the specifications and technical requirements for a varied set of Tier-0 systems ensuring a broad coverage of user needs;

(6) Working in synergy with:

- the Centres of Excellence (see topic EINFRA-5-2015 – CoEs for computing applications);
- the European Technology Platform for HPC; the pan-European HPC infrastructure will consult its users in order to provide technical specifications to guide research activities for future exascale prototypes and systems;

(7) Design and execute training and skills development programmes tailored to the needs of research in academia and industry and relevant public services in order to stay at the forefront of scientific breakthroughs, as well as introduction of scientific computing and HPC in academic curricula;

(8) Develop an international cooperation policy and associated activities.

The infrastructure should provide core and basic services in coordination with other e-infrastructure providers to promote interoperability and a seamless user experience, in accordance with topic EINFRA-7-2014. Interworking with other computing infrastructures such as clouds and grids should be ensured.

Expected impact:

- Improved services and procedures for all users to access the infrastructure and the common services, and improved allocation schemes to ensure openness to new user communities and applications;

- Increased amount of computing cycles available to researchers at European level through user-friendly and efficient procedures, helping Europe to stay at the forefront of scientific breakthroughs and innovation;

- Increased number of industrial organisations (in particular SMEs), EU projects and institutional users benefiting from access to services including training in HPC;

- Increased investment in HPC infrastructure in Europe (national, regional and EU);

- Long term financial sustainability through flexible business models and inclusive governance;

- Better coordination between demand and supply in the European HPC ecosystem, with improved collaboration of the users and procurers with technology developers and suppliers to foster innovation;

Type of action: Research and innovation actions

Deadline: 02/09/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2139-einfra-4-2014.html

Topics with minor SSH relevance:

EINFRA-1-2014 – Managing, preserving and computing with big research data

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2137-einfra-1-2014.html

EINFRA-7-2014 – Provision of core services across e-infrastructures

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2141-einfra-7-2014.html

Topics with SSH relevance in 2015:
(This topic may refer to a different sub-call, with a different deadline. Please check the link to the Participant Portal under the topic for more details.)

EINFRA-9-2015 – e-Infrastructures for virtual research environments (VRE)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2144-einfra-9-2015.html

Call – Support to innovation, human resources, policy and international cooperation

Call Identifier: H2020-INFRASUPP-2014/2015

Relevant Sub-Call for 2014 topics listed below: H2020-INFRASUPP-2014-2

Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-infrasupp-2014-2.html

Publication date: 11/12/2013

Deadline: 02/09/2014 at 17.00.00 Brussels time

Topics with SSH relevance in 2015:

INFRASUPP-3-2014 – Strengthening the human capital of research infrastructures

Specific challenge: The complexity of research infrastructures and the exploitation of their full potential require adequate skills for their managers, engineers and technicians, as well as users. Research infrastructures are built and operated at the cutting edge of what is technologically feasible, involving a high associated risk that needs to be managed. They may involve a multitude of partners in a consortium that fund and perform their construction and operation, either because they are distributed research infrastructures, or because certain problems are of a scale that can only be tackled by means of European and international cooperation. This renders their governance and the associated financial and legal issues a complex problem. Comparable issues are not usually faced by research institutions that do not operate research infrastructures, or in fields that do not yet have a long tradition of using research infrastructures. The skills and expertise specifically needed to construct, operate and use research infrastructures successfully therefore are not widely available.

EU funding will support the training of staff managing and operating research infrastructures of European interest, the exchange of staff and best practices between facilities, and the adequate supply of human resources in key disciplines, including the emergence of specific education.

While the human capital dimension will be embedded under other lines of activity of the research infrastructures work programme, specific actions will be needed to foster coordination across domains and types of infrastructures.

Scope: The activity will support the training of staff managing and operating research infrastructures. A proposal under this topic should build on the past activities and the experience gained in the projects such as RAMIRI (Realising and Managing International Research Infrastructures). It should engage with universities and prepare curricula and courses specifically for pan-European research infrastructures to address their intercultural and interdisciplinary nature as well as their diversity (global, highly distributed, single site etc.). A significant use of interactive online training material should be considered.

Expected impact: This activity will improve and professionalise the training of the staff managing and operating research infrastructures of European interest, strengthen the human capital of the involved research infrastructures, stimulating their efficient management and therefore promoting their development and competitiveness at national, European and international level.

Type of action: Coordination and support actions

Deadline: 02/09/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/67-infrasupp-3-2014.html

INFRASUPP-5-2014 – Policy measures for research infrastructures

Specific challenge: In the context of the recent communication for a reinforced ERA partnership for excellence and growth and the commitments of the Innovation Union flagship initiative, the focus of this action is related to the effective investment and use of research infrastructures.

Scope: Proposals will address one of the following areas:

- Support partnerships between relevant policy makers, funding bodies or advisory groups such as ESFRI and e-IRG; support cooperation and exchange of good practises between managers of research infrastructures and stakeholder networks; support survey, monitoring and assessment of the implementation and operation of research infrastructures with a view to provide advice and guidance to policy makers. Particular attention should be paid to the exchange of good practices between ESFRI projects and other world class research infrastructures as well as to the development of support actions underpinning the European strategy on research infrastructures. The proposals will build on the past experience and achievements gained in Seventh Framework Programme projects such as CoPoRi (Communication and Policy development for Research infrastructures).

- Support the development of a comprehensive database targeted at policy-makers on research infrastructures of more than national relevance in Europe. The database should be useable as a tool to support the development of a European strategy on research infrastructures. As such, the set of information to be collected should be agreed and validated by the Member States. The proposers should develop and update a portal where detailed information on the research infrastructures will be made available. The proposers should also carry out a comparative analysis of the research infrastructures landscape between Europe and strategic third country partners such as USA, Canada, Australia and the BRICS countries. The proposal should build on the experience gained in the Seventh Framework Programme MERIL (Mapping of European Research Infrastructure Landscape) project.

The Commission expects to fund up to one proposal for each area to avoid duplication of efforts.

Expected impact: This activity will:

- Strengthen the development of a consistent and dynamic European Research Area policy for research infrastructures;
- Facilitate the exchange of experiences and good practices between the national and/or regional policies and programmes;
- Enhance partnerships between policy makers and funding bodies and promote the development of appropriate monitoring tools for decision making;
- Support to ESFRI and thus contributing to the realisation of the Union flagship initiative on the implementation of 60% of the ESFRI projects by 2015;
- Contribute to the emergence of sustainable approaches, in the field of e-infrastructures, for the provision of cross-disciplinary research services;
- Encourage the pooling of resources between infrastructure operators at European level in order to face the grand challenges and to foster a culture of co-operation between them, spreading good practices and encouraging infrastructures to develop in complementary ways.

Type of action: Coordination and support actions

Deadline: 02/09/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/68-infrasupp-5-2014.html

INFRASUPP-7-2014 – e-Infrastructure policy development and international cooperation

Specific challenge: To optimise e-infrastructures investments in Europe it is essential to coordinate European, national and/or regional policies and programmes for e-infrastructures, in order to develop complementarities, and promote cooperation between e-infrastructures and activities implementing other EU policies (such as regional, cohesion, industrial, health, employment, or development policy). To promote sound policy development it is essential to ensure stakeholder consultation, monitor take-up and assess the impact of past actions. To promote innovation it is necessary to identify it and spin it out from projects. The cooperation of European e-infrastructures with their non-European counterparts also requires facilitation, to ensure their global interoperability and reach.

Scope: Proposals will support one or more of the following actions:

(1) Dissemination of information on the e-infrastructure programme and of project results, including coordination among projects;

(2) Stakeholder initiatives, including a user forum to provide orientations for e-infrastructure service interoperability and integration;

(3) Policy coordination at European or regional level with the relevant policy makers, including the collection of information needed for policy making as well as the wider use of e-infrastructures for public services and society;

(4) Support to monitoring results and assessing impact of the Horizon 2020 e-infrastructure activities, including through metrics and indicators;

(5) Monitor and analyse the take-up of digital science and e-infrastructures by researchers and possible other users, such as citizens and the education sector, per country, region and research domain or community;

(6) Support to technology transfer from the e-infrastructures projects to the market;

(7) Support to cooperation with developing countries and regions to promote connectivity, global e-infrastructure services, identification of use cases and promising applications of particular interest for developing regions.

Expected impact: A consistent and dynamic European policy for research infrastructures is developed and is coordinated EU-wide. Support actions provide solid ground for future choices and help in decision making and deployment of e-infrastructures. Impact and results analysis is available in real time and can inform policy choices. Novel technology and services with market potential are identified and spun off to the market. Support measures for international cooperation address specific issues regarding reciprocal use, openness or co-financing of e-infrastructures, as well as ensure Europe's persistent presence and influence in the global e-infrastructure.

Type of action: Coordination and support actions

Deadline: 02/09/2014 at 17.00.00 Brussels time

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/70-infrasupp-7-2014.html

Topics with SSH relevance in 2015:

(This topic may refer to a different sub-call, with a different deadline. Please check the link to the Participant Portal under the topic for more details.)

INFRASUPP-4-2015 – New professions and skills for e-infrastructures

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/72-infrasupp-4-2015.html

4. Science with and for Society

Call for Making Science Education and Careers Attractive For Young People

Call Identifier: H2020-SEAC-2014-2015,

Publication date: 11/12/2013

Sub Call for 2014 Topics: H2020-SEAC-2014-1

Sub Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-seac-2014-1.html

Deadline for 2014 Topics: 02/10/2014, 17:00:00 (Brussels local time)

Sub Call for 2015 Topics: H2020-SEAC-2015-1

Sub Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-seac-2015-1.html

Deadline for 2015 Topics: 16/09/2015, 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

SEAC.1.2014.2015 - Innovative ways to make science education and scientific careers attractive to young people

(SSH dedicated topic)

Specific challenge: The Union needs all its talents to boost creativity and competitiveness. It needs an innovative science education which shall enable todays' and tomorrows' citizens to play a more active role in the Research and Innovation process, to make informed choices and to engage in a democratic, knowledge-based society. It needs young boys and girls to pursue careers in science, technology, engineering and mathematics (STEM), while at the same time adhering to the values embedded in Responsible Research and Innovation. In such a manner, the Union will reach the objective of a R&D intensity of 3% of GDP which is essential. Yet it has been increasingly difficult to attract adequate numbers of young people, to these domains and to avoid a brain-drain of talent from Europe. Therefore, a shift to innovative and effective methods is necessary, so as to raise the attractiveness of science education and scientific careers and boost the interest of young people in STEM.

Scope: The action aims to support a range of activities, which will raise young boys' and girls' awareness of the different aspects encompassing science and technology in their societal content and to address the challenges faced by young people when pursuing careers in STEM. It aims at bringing both girls and boys into the scientific world via formal and informal teaching and learning and to orient them towards undertaking scientific careers. In order to

be more attractive, research careers should also be more closely linked to labour market needs. In this context, the potential orientation towards more entrepreneurial and multidisciplinary research careers should be recognised. The proposals shall focus on innovative, forward-looking science education methods and/or on incentives and measures to make scientific and technological careers attractive to young students, including actions addressing the challenges in offering long term career perspectives. They may inter alia make young people work with open-access educational resources; become familiar with the use of science media; make the link between creativity and science; appreciate the relevance of gender balance and dimension in research; understand the practical value of research ethics and integrity; actions.

The proposals shall also foster sustainable and cross-cutting interaction between the different levels of the education system, research institutions and other establishments, industry, Civil Society Organisations (CSOs). Such proposals shall improve the attractiveness of science education and scientific careers to young people; address challenges in offering long term career perspectives, as well as raise awareness of the importance of trans-disciplinary research and Responsible Research and Innovation in the education system.

The establishment of a link with SCIENTIX – The Community for Science Education in Europe – is strongly encouraged, since it consists of a multidimensional educational tool and would assist in spreading out STEM practices and better understanding of the relation between science and technology in practical terms.

When the proposed activities include scientific and technical work it should be implemented as a Research and Innovation Action, otherwise as a Coordination and Support Action

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 1.8 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: In the short term, the action will coordinate and leverage Member States activities with respect to innovative approaches in the field of science education and scientific careers. In the medium term, the action will position EU research teams on the map as leaders in innovative science education methods and meeting Europe's targets regarding R&D intensity and competiveness. It will increase the number of researchers and innovators, including women, in the public sector and in industry who will be able to better address societal challenge. As a result, in the long term, the action will contribute towards achieving the Europe 2020 education target by improving STEM skills among young people – less than 15% of pupils under-performing by 2020 – and increasing the range of innovative products that reflect societal needs.

Type of action: Research and Innovation Actions; Coordination and Support Actions.

Deadline: This topic will be open both for the sub call in 2014 and for the sub call in 2015. Deadline 2014: 02/10/2014, 17:00:00 (Brussels local time); Deadline 2015: 16/09/2015, 17:00:00 (Brussels local time)

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2423-seac-1-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2426-seac-1-2015.html

SEAC.2.2014 - Responsible Research and Innovation in Higher Education Curricula

(SSH dedicated topic)

Specific challenge: This topic will raise the importance and uptake of Responsible Research and Innovation (RRI) in Europe and beyond, via the design, production and dissemination of educational material and curricula for use by Higher Education Institutions and other higher education establishments, and their incorporation into educational programmes for science and engineering studies. The embedding of RRI in curricula will help Higher Education Institutions to shape more responsible and responsive researchers, able to better frame their research in a societal context, necessary for tackling societal challenges more effectively and in a more transdisciplinary manner.

Scope: The action assists the development of openly available curricula that embed all five RRI keys (societal engagement, gender equality and gender in research and innovation content, open access, science education and ethics), in a comprehensive approach for students, teachers, professional trainers and academic staff of Higher Education Institutions and other higher education establishments. Inspiration and good practices should be drawn from both the EU and third countries. Higher Education Institutions, other higher education establishments, research organisations and relevant institutions, as well as associations thereof, such as national science academies, and civil society organizations (CSOs), Science Museums and Science Centres should work together to explore the state of the art and develop a comprehensive methodological approach for RRI curricula. The creation of partnerships to this end would be an asset. The proposals shall provide ways for the testing, dissemination and widespread uptake of course material by academia in Europe and elsewhere. Ideally, both curricula and practical case-studies, theoretical and practical exercises, also embedding policy relevance, should be made easily and freely accessible on-line using the latest multimedia support. They shall benefit stakeholders, including business and industry[2], beyond participants in several educational systems in Europe; materials/results shall be equally relevant to other countries. The proposals shall identify the choice of the countries be based on transparent, appropriate criteria. An International Cooperation dimension is essential. A link shall be established with RRI Tools – a project to foster Responsible Research and Innovation for Society, with Society; links shall also be made with the education experts of the project's Advisory Board. Moreover, working on making a link – where applicable – with the cooperation and partnerships pillar of Erasmus+ programme is welcome.

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: Activities will enhance Higher Education Institutions and higher education establishments' social involvement and their role with and for society through the five RRI keys. It will provide future researchers and innovators with tools, skills and qualifications that facilitate and ensure engagement with society and ethical working methods. Commission action will position EU Higher Education Institutions (HEI) at a competitive advantage vis-a-vis their global partners. In the medium term, it will leverage complementary activities at regional and Member States level. It will kick start global debate on the setting of standards for the incorporation of RRI in Higher Education curricula. In the long term, seeding RRI principles at the earliest possible stage will reduce the training costs for Member States, and increase the social benefit and social relevance of European R&I.

Type of action: Coordination and Support Actions.

Deadline: 02/10/2014, 17:00:00 (Brussels local time)

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[2] http://ec.europa.eu/education/erasmus-for-all/

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2424-seac-2-2014.html

Topics with minor SSH relevance:

SEAC.3.2014 – Trans-national operation of the EURAXESS Service network

Topic information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2425-seac-3-2014.html

SEAC.4.2015 - EURAXESS outreach activities

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2427-seac-4-2015.html

Call for promoting Gender Equality in Research and Innovation

Call Identifier: H2020-GERI-2014-2015

Publication date: 11 December 2013

Sub Call for 2014 Topics: H2020-GERI-2014-1

Sub Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-geri-2014-1.html

Deadline for 2014 Topics: 02/10/2014, 17:00:00 (Brussels local time)

Sub Call for 2015 Topics: H2020-GERI-2015-1

Sub Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-geri-2015-1.html

Deadline for 2015 Topics: 16/09/2015, 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

GERI.4.2014-2015 - Support to research organisations to implement gender equality plans

(SSH dedicated topic)

Specific challenge: In the field of research, initiatives have been developed in European countries and beyond aiming at promoting gender equality. They include direct support to

female researchers' careers, specific awards, gender balance in decision-making, gender-budgeting the integration of a gender dimension in research and programmes. Some initiatives have a more comprehensive scope such as charters, performance agreements and gender equality plans. Others are tied with the funding of research organisations and Higher Education Institutions. They should have been initiated by public authorities or private organisations. Few of these initiatives have been evaluated so far and there is no common framework methodology to conduct such evaluations in Europe.

Scope: The proposals shall develop concepts and methodologies for the evaluation of initiatives mentioned above, providing an adequate analysis of how gender issues are considered in science management and policy-making and how they contribute to achieve three main objectives: equal participation and progression in research careers, gender balance in decision-making and the integration of a gender dimension in research content and programmes. The proposed evaluation framework shall also encompass analysis of impacts:

• on research quality and productivity as well as innovation;

• on research organisations and Higher Education Institutions in terms of structure; efficiency, competitiveness, quality of the workplace, recruitment capacity;

• at research system level in terms of intensity and productivity.

The proposed framework covers a selected range of initiatives from several EU countries using a comparative approach. It will contribute to develop a common understanding of the reach, value and limits of such evaluations. The proposals should also include an appropriate involvement of policy-makers to help integrate the findings of the evaluations in research and innovation policies.

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

Expected impact: The research will provide concepts and methodologies fitted to conduct evaluation of gender equality initiatives in Europe, which could be used at national and institutional levels. It shall also provide a better understanding of the impacts of current gender equality initiatives, from the science-management and policy-making perspectives.. This will help identify best practices to be promoted. In the medium term, it will help adapt gender equality initiatives and increase their efficacy, leading to an improved research intensity and productivity and furthering the progress towards the achievement of the European Research Area.

Type of action: Research and Innovation Actions.

Deadline: This topic will be open both for the sub call in 2014 and for the sub call in 2015. Deadline 2014: 02/10/2014, 17:00:00 (Brussels local time); Deadline 2015: 16/09/2015, 17:00:00 (Brussels local time)

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2413-geri-4-2014.html

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2707-geri-3-2015.html

Topics with SSH relevance in 2015:
(This topic may refer to a different sub-call, with a different deadline. Please check the link to the Participant Portal under the topic for more details.)

GERI.3.2015 - Evaluation of initiatives to promote gender equality in research policy and research organisations

Topic information (for 2015):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2707-geri-3-2015.html

Call for integrating Society in Science and Innovation

Call Identifier: H2020-ISSI-2014-2015

Publication date: 11 December 2013

Sub Call for 2014 Topics: H2020-ISSI-2014-1

Sub Call Information:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-issi-2014-1.html

Deadline for 2014 Topics: 02/10/2014, 17:00:00 (Brussels local time)

Sub Call for 2015 Topics: H2020-ISSI-2015-1

Sub Call Information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-issi-2015-1.html

Deadline for 2015 Topics: 16/09/2015, 17:00:00 (Brussels local time)

Topics with SSH relevance in 2014:

ISSI.5.2014.2015 - Supporting structural change in research organisations to promote Responsible Research and Innovation

Specific challenge: Many barriers exist to practical implementation of RRI in research organizations. Therefore it is crucial to encourage the modernisation of institutional practices and culture in research institutions, Higher Education Institutions and funding agencies, to promote Responsible Research and Innovation. It also aims at supporting common actions by research institutions to identify and implement the best systemic organisational approaches to increase Responsible Research and Innovation uptake in research organizations.

Scope: This topic aims at developing a Responsible Research and Innovation Plan covering five RRI keys (societal engagement, gender equality and gender in research and innovation content, open access, science education and ethics) in each participating institution. The proposals shall include an analysis of the main problems and challenges, as well as a set of specific implementing actions aiming at the necessary structural change on the basis of

specific situation and challenges. Action Plans shall be accompanied by an implementation roadmap. The RRI plans shall:

- Conduct impact assessment / audit of procedures and practices in order to identify RRI barriers at organisation level;

- Implement innovative strategies to address RRI barriers;

- Develop the RRI dimension in research content and programmes;

- Set targets and monitor progress via indicators at organisation level.

The proposals shall include a methodology for impartially monitoring and assessing the progress made throughout the duration of the project. This activity could be dedicated to a specific partner organisation or subcontracted.

The proposals should include an international dimension in particular with the following countries: Brazil, Republic of South Africa, India, Canada, Australia, Russia, United States of America, Japan and China.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 4 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: Activities shall produce tangible and measurable results in terms of organisational process and structures. They will improve the uptake of Responsible Research and Innovation in research organisations, as the Plans will continue to be implemented in the medium / long term. In the medium term, institutional change shall be scalable to research institutions across EU 28 and Associated countries, thus contributing towards European Research Area (ERA) objectives. In the long term, the action will increase research institutions' ability to generate innovation that reflects societal needs.

Type of action: Coordination and Support Actions.

Deadline: This topic will be open both for the sub call in 2014 and for the sub call in 2015. Deadline 2014: 02/10/2014, 17:00:00 (Brussels local time); Deadline 2015: 16/09/2015, 17:00:00 (Brussels local time)

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2418-issi-5-2014.html

Topic information (for 2014):

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2422-issi-5-2015.html

Call for developing governance for the advancement of Responsible Research and Innovation

Call Identifier: H2020-GARRI-2014-2015

Relevant Sub Call for 2014 topics: H2020-GARRI-2014-1

Publication date: 11 December 2013

Call information for 2014 topics:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-garri-2014-1.html

Deadline for 2014 topics: 02/10/2014, 17:00:00 (Brussels local time)

GARRI.1.2014 - Fostering RRI uptake in current research and innovations systems

Specific challenge: Responsible research and innovation has the potential to make research and innovation investments – public procurement included –, more efficient, while addressing global societal challenges by fostering better knowledge and innovation co-production with society. It has also the potential to draw better lessons from early warnings with a view to more efficient precautionary approaches. However, the current research and innovation system do not routinely take into account RRI requirements. Systemic barriers to the uptake of RRI approaches include lack of recognition in the career system of academic research for RRI/trans-disciplinary approaches, in evaluation criteria and by scientific journals, a lack of market incentives to internalise external costs of innovation (environmental, social, etc.) an insufficient training of researchers, institutional barriers, etc. It is key to develop concrete policy actions to overcome these barriers and to foster systemic change, e.g. towards better societal engagement in knowledge-production and innovation.

Scope: The action addresses systemic barriers to the implementation of Responsible Research and Innovation in research and innovation practices. The proposals shall aim to set the ground for concrete progress in relation to one of the various barriers (e.g. develop roadmaps, policy agendas, networks, coordination etc. during the lifetime of the project), identifying ways for better professional recognition and uptake of RRI approaches. Action for concrete progress could also focus on how to use existing instruments in different ways to implement systemic change: for example stimulating RRI implementation via using public procurement to start pre-commercial projects and to purchase innovative and sustainable products and services.

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: The action will lower the barriers to the implementation of RRI approaches. It will lead to structural change in current research and innovation policies and systems, which will expand and consolidate the use of RRI methods and standards. Activities will signpost EU research teams seminal work in this domain; they will ensure complementary action at Member States level, and set best case examples and implementation standards for the industry. In the medium term, they will foster the capacity of research and innovation to tackle societal challenges in close cooperation with societal stakeholders, addressing the risks and benefits and the respect of fundamental values.

Type of action: Research and Innovation Actions.

Deadline: 02/10/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2403-garri-1-2014.html

GARRI.3.2014 - Scientific Information in the Digital Age: Text and Data Mining (TDM)

Specific challenge: TDM is the process of deriving information from machine-read material and is an essential feature in open science and innovation. It has enabled new innovations, with ramifications not only for research itself but also for the economy and society. Building upon present knowledge is an important component of research that leads to new innovations. TDM therefore has a huge potential for research and innovation and the economy as a whole. However, there are significant barriers which hinder the more widespread use of TDM in the European Union.

Scope: This proposals shall study TDM in the modern research environment and its relations with societal implications, with the following foci:

- Policy developments and legal framework in the EU and its Member States (including copyright exemptions);

- Increasing awareness of TDM in institutional settings and among stakeholders, as well as the skills, rewards and support involved in using this technology.

Technical requirements for an optimal TDM infrastructure shall be dealt as part of the call ion e-Infrastructures in the Research Infrastructures (including e-Infrastructure) Work Programme (topic EINFRA 1-2014 – Managing, preserving and computing with big research data). Nevertheless, the winning proposals in these two calls are expected to engage in a mutual dialogue and establish synergies in their work.

The Commission considers that proposals requesting a contribution from the EU of the order of EUR 1.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: This action will reduce barriers in order to increase the uptake of TDM by researchers and innovative businesses as a tool in the co-creation of knowledge, which will result in wider and more efficient circulation of knowledge and ultimately lead to a R&I policy that is more relevant for and responsive to society.

Type of action: Coordination and Support Actions.

 Deadline: 02/10/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2404-garri-3-2014.html

GARRI.5.2014 - Ethics in Research: Promoting Integrity

Specific challenge: Research misconduct mainly became a focus of attention in the 1980's with a few publicised cases in the US. This progressively led to adoption of guidelines and codes of conduct by the scientific community as well as to the set-up of governmental structures. The complexity and diversity of research misconduct, amplified by the expansion

of electronic communication still raises serious questions on the capacity of the actors concerned to adequately address the issue.

Scope: As there is no single approach to address research misconduct, the proposals examine the pros and cons of different methods. Among others, the real benefit of IT tools shall be evaluated. Clear figures are required on the number and variety of allegations in EU and other OECD countries, including the percentage of cases where original suspicion is confirmed and leads to some form of sanctions. Additionally, the in-depth study of representative cases shall bring a socio-economic and a psychological dimension which is critical to the design of effective responses. It will also be crucial to assess the possibility to unify the codes, principles and methods at EU and international level. The options to support the self-regulation mechanisms with an adapted legal framework shall also be studied.

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

Expected impact: In the short term, the action will improve the adherence to high standards in research integrity and thereby increase the return on publicly funded research. It will also decrease the number of cases of malpractice and the number of fabrications and cases of false positives in research and innovation results. The action will encourage transparency and ensure reliable knowledge transfer and ethical spill-over from academia to industry. In the medium term, improved research integrity will increase public trust in science and scientists; and boost trust in holders of research-related degrees shall they pursue other community leader position in politics and economics. In the long term, future researchers will be conscious of ethical principles from their educational years. Thereby the number of beneficiaries carrying out action in accordance with principles of research integrity will increase.

Type of action: Coordination and Support Actions.

Deadline: 02/10/2014, 17:00:00 (Brussels local time)

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2405-garri-5-2014.html

Topics with minor SSH relevance:

GARRI.6.2014 - Reducing the risk of exporting non ethical practices to third countries

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2406-garri-6-2014.html

Topics with SSH relevance in 2015:

(These topics may refer to different sub-calls, with different deadlines. Please check the link to the Participant Portal under the topics for more details.)

GARRI.2.2015 - Responsible Research and Innovation in industrial context

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2409-garri-2-2015.html

GARRI.4.2015 - Innovative approach to release and disseminate research results and measure their impact

Topic information:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2410-garri-4-2015.html