

EU 7th Framework Programme Call 2013 – Cooperation Programme Topics with high potential for Mediterranean participation

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Theme2: Food, Agriculture and Fisheries, and Biotechnology

1) KBBE.2013.1.2-04: Control of pests and pathogens affecting fruit crops.

Call: FP7-KBBE-2013-7 – single stage

Pests and pathogens are a central concern for fruit crops and causing significant losses. Trade globalization and movement have facilitated the introduction and spread of plant harmful organisms. In the past years *Drosophila suzukii*, the spotted wing *Drosophila*, originally native in Asia has been described in Europe. Although the pest was recently introduced, serious damages have been reported in a number of fruits (cherries, berries, apricots, currants, figs and grapes). In addition, there is a number of other pests or pathogens of Plant Health concern (quarantine) affecting fruit production, some of which are already locally present in some EU Member States.

The project will look for effective and innovative solutions to control at least two pests/pathogens that cause big fruit losses and where management is a challenge. One of the studied pests/pathogens should be *Drosophila suzukii* and the other(s) should be quarantine pest(s)/pathogen(s). In the case of the latter, the quarantine pest(s) or pathogen(s) could be either present within EU territory or present(s) an increased threat for EU Member States.

Work will provide insight into the biology of the pests/pathogens. The knowledge needs to be translated into the development of practical solutions for controlling the pests/pathogens and limiting damages to fruit production. In addition, the pathways that allowed the introduction and dissemination of the proposed pests/pathogens (i.e. *Drosophila suzukii* and other quarantine pest(s)/pathogen(s) if present) into the EU should be investigated, aiming at the development of preventive strategies/recommendations against the introduction of other dangerous fruit pests/pathogens and diseases. The need for international cooperation and linkages to third countries affected by the studied pests/pathogens is encouraged. The economic viability of the proposed alternatives to fruit crop protection should also be assessed. Budget distribution for the work on the various pests/pathogens needs to be well justified.

Funding scheme: Collaborative Project (large-scale integrating project targeted to SMEs). One project may be funded.

Additional eligibility criterion:

- The requested European Union contribution shall not exceed EUR 6 000 000 per proposal.
- The estimated EU contribution going to SMEs shall be at least 15 % of the total requested EU contribution. This will be assessed at the end of the negotiation, before signature of the Grant Agreement.

Expected impact: Activities will result in increased knowledge and development of innovative solutions for pest and pathogen management, reduction of yield losses, and novel phytosanitary measures or products. The presence of Small and Medium Enterprises (SMEs) and industry will facilitate the translation of knowledge to practical solutions. This research is in support of EU Plant Health Policy.

2) KBBE.2013.1.3-01: Emerging viral vector borne diseases.

Call: FP7-KBBE-2013-7 – single stage

Profound environmental modifications such as climate change and pan-societal globalization are increasing the risk of food animal diseases emerging in new locations with greater frequency, in particular vector borne diseases. These diseases have a major impact not only on animal health but also on global food production, and trade. Some of these emerging diseases may also threaten human health. Reactive approaches are economical in the short term but may be far more expensive in the long run and may lead to irreparable consequences, such as enzootic establishment of previously exotic diseases. In consequence we need to get further knowledge on these emerging diseases and their potential spread all over Europe.

The project should develop knowledge on the emerging diseases and analyse surveillance systems in order to improve epidemiological surveillance strategies in domestic and wild species. It will also focus on disease detection and control tools. The role of vectors' ecology in virus transmission should be studied. The project should address diseases like Rift Valley Fever (RVF) and other newly revealed diseases, such as Schmallenberg virus. Participation of relevant third countries, in particular those where disease represents a major threat to the EU, as well as those more active in research, and international organisations should be sought. The project should build on results and experience from existing networks in this field.

Funding scheme: Collaborative Project (small or medium-scale focused research project targeted to SMEs).

One project may be funded.

Additional eligibility criteria:

- The requested European Union contribution shall not exceed EUR 3 000 000 per proposal.
- The estimated EU contribution going to SMEs shall be at least 20 % of the total requested EU contribution. This will be assessed at the end of the negotiation, before signature of the Grant Agreement.

Expected impact: Prevention and minimising, mitigating the impacts of these diseases.

3) KBBE.2013.1.4-03: Mediterranean agriculture – ERANET.

Call: FP7-ERANET-2013-RTD [in coordination with relevant actions foreseen by Work Programme 2013 of the INCO Capacities Programme]

Co-operation between European research funding bodies in the Mediterranean area started with a dedicated collaborative working group set up by the Standing Committee on Agricultural Research (SCAR). The ARIMNet ERA-NET on coordination of Agricultural Research in the Mediterranean stemmed from this working group and will finish by end 2012.

In that context, the countries of the Mediterranean basin identified common issues in relation to agriculture, mainly as regards the use and management of natural resources, such as soil

and water, crop protection and threats to the security and sustainability of agricultural production resulting from climate change.

A stronger scientific cooperation between EU members and Mediterranean Partner Countries (MPC) has been triggered and deserves to be continued, deepened and enlarged (in terms of topics –e.g. food security- and partnership). The link between research and innovation should be enhanced and an articulation with the Joint Programming Initiatives (JPIs) (e.g. FACCE) should be considered.

This project is expected to deepen the coordination of national research activities through a scientific research agenda shared among the countries of the Mediterranean area. During the negotiation and implementation phase, complementarities with actions that will be selected under the ERA-NET call targeting the Mediterranean Partner Countries to be launched in the Work Programme 2013 of the INCO Capacities Programme should be ensured.

Funding scheme: Coordination and Support Action (coordinating action).

Eligibility and evaluation criteria: please refer to Annex 4 of the Cooperation Work Programme including the Call Fiche "FP7-ERANET-2013-RTD".

Expected impact: The ERA-NET should: (i) provide mapping of ongoing research activities, (ii) Improve coordination and reduce overlapping between national and EU funding in relevant fields of research; (iii) achieve critical mass and ensure better use of limited resources in fields of mutual interests; (iv) share good practices in implementing research programmes; (v) promote transnational collaborations and new knowledge generation and innovation; (vi) mobilise SMEs in the transnational projects to enhance innovation; (vii) establish a network of research activities carried out at national and regional level, including a mutual opening of national and regional research programmes, and (viii) prepare and implement transnational joint calls.

4) KBBE.2013.1.4-02: Integrated Pest Management (IPM) – ERANET.

Call: FP7-ERANET-2013-RTD

European Union Member States are currently in the process of developing research programmes designed to support the National Action Plans and implement Integrated Pest Management practices required by Directive 2009/128/EC. The demanding legislative framework (Sustainable Use Directive, Regulation on Placing of Plant Protection Products on the market, Water Framework Directive) increases the need for further research and coordination for the development and mainstream application of IPM. It also reduces the availability of Plant Protection Products, thereby impacting in particular on the 'minor uses' sector mainly in fruits and vegetables, seeds, flowers and other plants which depend heavily on tailor made pesticides for protection.

The proposed ERA-NET will address the above mentioned issues and also deal with pesticide risk assessment for 'minor uses' along with IPM-type solutions to reduce dependency on pesticides for speciality or 'minor use' crops. It should aim at ensuring better communication between the various actors in this area, coordination with other initiatives and establishment

of interactions. It should create synergies and economies of scale and ensure a higher level of implementation of Integrated Pest Management among European farmers.

Funding scheme: Coordination and Support Action (coordinating action).

Eligibility and evaluation criteria: please refer to Annex 4 of the Cooperation Work Programme including the Call Fiche "FP7-ERANET-2013-RTD".

Expected impact:

The ERA-NET should: (i) provide mapping of ongoing research activities, (ii) Improve coordination and reduce overlapping between national and EU funding in relevant fields of research; (iii) achieve critical mass and ensure better use of limited resources in fields of mutual interests; (iv) share good practices in implementing research programmes; (v) promote transnational collaborations and new knowledge generation and innovation; (vi) mobilise SMEs in the transnational projects to enhance innovation; (vii) establish a network of research activities carried out at national and regional level, including a mutual opening of national and regional research programmes, and (viii) prepare and implement transnational joint calls.

5) KBBE.2013.1.4-09: Improving the capacity of agro-meteorological crop modelling to integrate climatic variability and extreme weather events.

Call: FP7-KBBE-2013-7 – single stage

The aim of this topic is to improve food security by improving the modelling of extreme weather events. In the framework of discussions related to food security and to the functioning of markets, whether at EU or world level, the capacity to produce short-term production forecasts is becoming increasingly important. In the EU a capacity to produce yield forecasts on the basis of agro-meteorological models has been developed in the last 20 years. These short-term forecasts are utilised, among others, by the Directorate General for Agriculture and Rural Development as part of its monitoring of agricultural markets. At the world level, agro-meteorological models are important tools to monitor food security and are at the root of early warning systems.

For addressing climate change impacts on global food production, food security and food prices there is a need to better integrate effects of changes in climatic variability and extremes, including heat waves, droughts and floods, into crop model assessments. Previous assessments have failed to account sufficiently for such effects which, given current projections of increases in some extreme weather phenomena under climate change, may lead to a severe underestimation of yield losses and yield variability under increase of extreme climatic events projected within climate change scenarios.

The project will aim at improving the capacity of agro-meteorological models to project the impact of extreme weather events, both in the short term and the long term. Extreme events are expected to increase under climate change. The research should aim to assess the capacity and the ability of the existing modelling approaches, both based on deterministic and on stochastic or probabilistic approaches, to address the increase in frequency and impact of climatic shocks or extreme events on crop yield forecasts and crop biomass formation. The

project should look at the assessment taking into account crop system diversity by geographic area.

Given the variety of types of extreme events also in other parts of the world, international research cooperation is encouraged. The dissemination of research results and in particular their integration into the yield forecasting system developed by the Joint Research Centre Monitoring Agricultural Resources (MARS)⁴¹ will be positively evaluated.

Funding scheme: Collaborative Project (small or medium-scale focused research project). One project may be funded.

Additional eligibility criterion:

- The requested European Union contribution shall not exceed EUR 2 000 000 per proposal.

Expected impact: Project results are expected to lead in an improvement of the capacity of agro-meteorological models to better deal with extreme events. At the EU level, this is expected to lead to better short-term and medium term forecasts. At world level, project results should contribute to improve food security monitoring and early warning systems.

6) KBBE.2013.3.1-01: Plant High Value Products - from discovery to final product.

Call: FP7-KBBE-2013-7 – single stage

The terrestrial plant biodiversity remains an untapped source of natural bioactive molecules of importance for various industrial applications, such as high value agro-chemicals, pharmaceuticals, biomaterials, cosmetics, flavours, food additives, food supplements etc. Their efficient utilization requires an integrated and comprehensive effort from the stage of biodiscovery, including plant bioprospecting, through identification of suitable bioactive compounds, then to optimised domestication and cultivation strategies for selected plant species or ecotypes, metabolic engineering of the selected biochemical pathways to improving the productivity and finally to product development and commercialisation.

The projects will engage in a full chain of research and innovation needed to bring to market new or improved products aiming at innovative methodologies in order to tackle the existing bottlenecks and addressing the needs of the bio-industry. The focus is on the efficient exploitation of the novel bioactivities, especially in case of unusual and/or underutilised plant species/ecotypes. This includes sustainable access to raw material, particularly in case of plants that are endangered, protected or difficult to collect and cultivate, and improvements in technical aspects of the metabolic engineering pipeline (e.g. metabolomics, new gene mining concepts, isolation of biomolecules, their purification and sustainable production either *in planta*, or in alternative biological systems). The projects can explore interactions of plants and other natural organisms (e.g. fungi, microorganisms) to achieve the objectives.

The targeted plants can originate from a broad range of European and/or non-European species (e.g. medicinal or aromatic), either cultivated (e.g. industrial crops) or collected from the wild. The full use of the residual plant biomass should be explored in a cascade

biorefinery approach. The projects are to be industry-driven and will include demonstration activities to prove the techno-economic feasibility and effectiveness of production and extraction systems. Downstream processing and separation aspects will form an integral part of the projects. Economic and regulatory issues should also be taken into account both in respect of conditions found in Europe and outside of Europe. SMEs may use advisory and support services to treat such issues and other aspects regarding market introduction. The project must adhere to relevant international rules on access to, the sustainable use of and the fair and equitable sharing of benefits arising from the utilisation of biological resources in line with the applicable domestic frameworks of source countries and the Convention on Biological Diversity and its Nagoya Protocol. Dissemination and training activities (e.g. summer schools, press releases, open days) will form an essential part of the projects.

Funding scheme: Collaborative Project (large-scale integrating project targeted to SMEs). The topic aims at financing a limited number of large collaborative projects within an overall maximum budget of EUR 20 000 000.

Additional eligibility criterion:

- The estimated EU contribution going to SMEs shall be at least 25% of the total requested EU contribution. This will be assessed at the end of the negotiation, before the signature of the Grant Agreement.

Expected impact:

The projects will advance the sustainable use of terrestrial plant biodiversity for diverse germplasm to enable a better assessment of species potential, and development of sustainable methods for obtaining the required feedstock, and then converting them to high value products. The European Added Value will lay in the development of novel plant-based 'eco-friendly' products with bioactive properties, especially in pharmaceutical, cosmetic or agrochemical sectors, leading to significant environmental and economic benefits for the society at large. The products developed will be advantageous to the consumers by being cheaper, more readily accessible and more environmentally friendly compared to the existing alternatives. The projects will strengthen the competitiveness of European plant biotechnology industry, as well as increase competition in research and innovation. This topic is particularly well suited for an active engagement of International Cooperation Partner Countries. Their involvement should strengthen the expected impact of the research to be undertaken. This will be assessed at the evaluation. The projects funded should be complementary and reinforce related on-going FP7 KBBE projects on the plant biotechnology. It is expected that the projects will anticipate future trends and consumer demands with a strong focus towards the market and product commercialisation.

Theme3: Information and Communication Technologies

**ICT-2013.10.3 International partnership building and support to dialogues
-Horizontal International Cooperation Actions**

Call Title: ICT call 10

The target is to support dialogues between the European Commission/the EU and strategic Partner countries and regions, and to foster cooperation with strategic third country organisations in collaborative ICT R&D both within the EU's Framework Programmes (FP7, Horizon 2020) and under relevant third country programmes. This could include in particular:

- The organisation of events synchronised with dialogue meetings¹, providing timely input and follow-up for example on common R&D priorities and future cooperation opportunities, assisting in focusing dialogue meetings as well as increasing their visibility.
- Strengthening of cooperative research links through the set-up of sustainable cooperative mechanisms or platforms between European organisations and relevant leading third country organisations, with the aim of establishing mutually beneficial partnerships based on synergies to be identified between the Digital Agenda for Europe's (DAE) international agenda and third countries/regions' ICT strategies.
- Reinforcement of industrial cooperation on ICT research and development, notably through a better networking between European ICT Technology Platforms and relevant associations in third countries,
- Increased co-ordination at EU level with horizontal Framework Programme instruments to promote international cooperation (such as BILAT, INCO-NET and ERA-NET), as well as relevant EU Member State and Associated Countries programmes.

Proposals should build upon the achievements by similar past or ongoing projects, in countries/or regions where applicable, while avoiding duplication of that effort in this Call.

Targeted countries/regions:

- a) ACP countries (in particular Africa)
- b) Asia (in particular China, India, South-East Asia)
- c) Eastern Europe and Central Asia
- d) High Income Countries: Subgroup 1: North America (Canada, USA)
- e) High Income Countries: Subgroup 2: East Asia/Oceania (Australia, Japan, Korea, New Zealand, Singapore, Taiwan)
- f) Latin America
- g) Mediterranean Partner Countries

It is expected that each targeted area will be covered by at least one project, and that duplication of effort in an area is avoided (i.e., if more than one proposal / area should be retained, preference will be given to proposals with different and/or additional country(ies) coverage).

Expected impact

- Reinforcement of strategic partnerships with key third countries and regions in areas of mutual interest and added value in jointly addressing important issues.

¹ This includes Information Society Dialogues (organised by DG INFSO), meetings under S&T Agreements (organised by DG RTD), and other relevant meetings (e.g. Senior Officials or Ministerial level regional meetings).
other relevant meetings (e.g. Senior Officials or Ministerial level regional meetings).

- Increased visibility for EU ICT R&D activities and research excellence.
- Support provided for European organisations/individuals in accessing third country programmes.

Activities under this objective should be covered in balanced partnership with relevant and highly qualified third country organisations, including in particular governmental actors (third country research ministries/agencies), relevant industry associations, and academic partners (research centres/universities). Measureable performance indicators should be included (e.g. minimum numbers of events to be organised, participants, new proposals assisted/helped to initiate, European organisations/individuals supported in accessing third country programmes, etc.).

Funding schemes

CSA (Support Actions)

Indicative budget distribution

CSA (SA): EUR 8 million (maximum EU grant of EUR 800 K per proposal)

Theme4: Nanosciences, Nanotechnologies, Materials and new Production Technologies – NMP

1) NMP.2013.4.0-5 Deployment of societally beneficial nano- and/or materials technologies in ICP countries.

Call: FP7-NMP-2013-CSA-7

Technical content/scope: The potential of nano- and/or materials technologies to address major societal challenges, e.g. in health, energy and environment is widely recognised and several leading industrial nations are actively pursuing significant R&D&I programmes for accelerating the deployment of nano- and/or materials technologies in societally beneficial applications. Nanosciences and nanotechnologies: An action plan for Europe 2005-2009 emphasised the importance of international cooperation with less industrially advanced nations in order to secure their access to knowledge and avoid any ‘nano divide’.

NMP Materials has created a particularly positive momentum with its calls with Africa, Middle-East Countries, Latin America, Eastern European Countries and South East Asia.

The goal of this topic is to support sustainable development in ICP countries through the deployment of societally beneficial nano- and/or materials technologies. The methods and solutions need to be tailored to meet the specific needs and circumstances using local knowledge and innovative ability, so that they will be adopted.

Activities may include, but are not limited to:

- Identification of tangible opportunities for pooling knowledge in the fields of: healthcare, clean energy, environment (including water);
- Networking of technology providers, representatives of ICP countries (scientists, industrialists, civil society representatives, decision makers) and potential sponsors for the development of implementation mechanisms (including appropriate business models);

- Education, training and exchange of scientists in the underlying technologies aiming at ensuring the sustainability and further development of the proposed solutions;
- Organisation of a series of events.

Proposals specifically addressing materials technologies may target networking of research projects funded at EU or National (EU and non EU) level as well as the creation of an open database of researchers; these two target issues are not called for in the case of nanotechnologies because dedicated measures are currently in place.

In order to create a particular benefit in the interaction amongst ICP countries, broad geographic areas and not individual countries should be addressed. The targeted geographic areas are:

- Eastern Partnership countries
- Mediterranean countries
- African countries
- Latin American countries
- ASEAN

A proposed support action may address one or more of above-mentioned geographic areas.

Funding Scheme: Coordination and Support Actions (support actions).

Expected impact: One or more of the following: (i) Support the development and promotion of concrete projects making the benefits of new technologies; (ii) Contribute towards the United Nations Millennium development goals; and (iii) Contribute towards building and strengthening of science in low and middle-income countries through entrepreneurship.

2) NMP.2013.4.0-6 Safe Life Extension management of aged infrastructures networks and industrial plants

Call: FP7-NMP-2013-CSA-7

Technical content/scope: In Europe many industrial facilities, such as power production plants and large chemical installations, as well as infrastructure network elements, like bridges, tunnels and railway systems, are reaching the end of their designed operational life time. New ways to extend the service life of current infrastructure networks and industrial plants without jeopardising their safety requirements need to be investigated in order to guarantee a decrease of major accidents in the industry and major disruptions of economic activity. Safe life extension becomes even more critical when the structure is part of an interconnected infrastructure network, is located in an urban area where the related environmental impacts are amplified, or is at risk due to more frequent climate-induced extreme events.

Areas of investigation to be addressed include new risk-based inspection technologies, innovative reliability-based solutions, comparison between deterministic and probabilistic approaches, influence of degraded physical state on potential domino effects, and resilience. Methods and technologies vary between industrial sectors and therefore a benchmark study is necessary to understand the practices in the various industries and Member States, and to prepare the deployment of best practice solutions in Europe without compromising on safety and sustainability. In addition to the technical approaches, barriers linked to financing, risk insurance, decision making, public acceptance and regulations need to be addressed. Safety

risks have to be identified locally (at element level) and globally (at network level, taking into account the interconnection).

Deliverables should also include benchmarking with best practices outside Europe, and therefore this topic is particularly suitable for collaboration with partners from outside Europe.

Additional eligibility criterion: The requested EU contribution must not exceed EUR 1,000,000 per project.

Funding Scheme: Coordination and Support Actions (coordination action). No more than one coordination action will be funded.

Expected impact: (i) Improved synergy amongst major stakeholders in safe life extension; (ii) Identification of best practice solutions and research needs; (iii) Strategies for the systematic implementation of comprehensive life time extension solutions at European scale; and (iv) Significant contributions to new standards for life extension.

Theme5: Energy

ENERGY.2013.2.9.1: Research cooperation and knowledge creation in the area of renewable energy with Mediterranean partner countries

Open in call: FP7-ENERGY-2013-1

Content/scope: The Mediterranean Partner Countries (MPC) possess a vast potential of renewable energy resources. However, their research and development capacities to make most of this potential for both domestic use and export need strengthening. At the same time, European research centres would benefit from the possibility to test and validate new technologies in real conditions. One way to support both aims is to promote exchange of researchers, training through research and knowledge sharing. However, for this to be fully beneficial to MPC, such action should be coupled with capacity building and research infrastructure development in the MPC.

Therefore, this topic aims to support cooperation on research and innovation in the area of renewable energy between European research centres and research organisations in the MPC. Such cooperation would *a priori* involve a first period of joint research and development work in one or more European organisations, a second period of joint testing and validation in one or more research organisations in MPC and a third period of establishing a roadmap for further cooperation on RTD&D, technology transfer, technology deployment and research infrastructure development in the targeted areas. A balanced participation of both junior and senior researchers, the different relevant institutions and other key stakeholders from both regions will be a prerequisite for the grant. Ideally each individual project will cover at least 3 out of the following 6 renewable energy areas: photovoltaics, concentrated solar power, solarthermal, wind, bioenergy, grid integration.

Funding scheme: Collaborative Project for specific cooperation actions (SICA) dedicated to Mediterranean partner countries

Expected impact: The resulting projects are expected to substantially and sustainably increase the research and development capacity in the participating regions, to help establish sustainable cooperation networks amongst partner countries, to foster MPC participation in EU programmes, and to pave the way for long-lasting cooperation in renewable technologies and R&D more generally between the MPC and between them and Europe and thus also contributing to achieving the aims of the European external energy policy⁷.

Additional information: Up to 2 projects may be supported for a total period of implementation per project of 4 years, each one involving necessarily a balanced effort in terms of manpower, R&D responsibilities and renewable energy deployment objectives between the EU and MPC partners. This will be considered during the evaluation under the 'Implementation' criterion.

Theme6: Environment (Including Climate Change)

1) ENV.2013.6.5-4 Knowledge platforms, networking and uptake of research results for more strategic international R&I cooperation – FP7-ENV-2013- one-stage

Call: FP7-ENV-2013-one-stage

The objectives are to establish sustainable research and innovation cooperation between main EU and third country actors and to enhance uptake of research results on subjects of mutual interest in the areas of climate action, resource efficiency and raw materials, as described in the Commission proposal for Horizon 2020². Targeted regions are:

- a) Latin America³,
- b) ASEAN,
- c) The Mediterranean⁴ and the Black Sea,
- d) The North Atlantic.

Each proposal should address one targeted region only. EU funded projects with high added value and relevance to the regional needs will be identified and clustered. Clusters will bring together, through bilateral or bi-regional meetings, EU and third country researchers and other relevant stakeholders, aiming at the identification of tools and instruments for enhancing cooperation at a more strategic level and exploitation of results, including twinning of projects.

The level of maturity of R&I relations with the EU, as well as cultural, political and administrative differences affecting international R&I cooperation with respective regions should be taken into account. Synergies will be sought with projects funded by other EU instruments (external cooperation) or other parts of the Framework Programme (International

² Commission Communication ' Horizon 2020 - The Framework Programme for Research and Innovation', COM(2011) 808 final of 30.11.2011

³ As defined in Annex 16 of the Cooperation work programme, List of International Cooperation Partner Countries (ICPC)

⁴ See footnote 2

Cooperation Activities in the Capacities Programme) and the consortium should build on their reports and recommendations. Consortia should include a sufficient number of eligible ICPC country partners or other international partners from the target regions to ensure adequate scale and scope of cooperation. Priority will be given to consortia which can ensure contacts with and sufficient additional financial commitment from research-related regional structures and/or national authorities or major research institutes in the region.

The final product will be concrete proposals for upgrading the joint research and innovation agenda at more strategic levels and linking major EU projects or clusters of them with projects/networks in the countries of the region and the potential users, such as policymakers and industry. It will also identify potential sources of funding (national, EU, international) other than FP7.

Funding scheme: Coordination and Support Action (coordinating action)

The requested EU contribution per project shall not exceed EUR 1 000,000. Up to one proposal per region can be selected.

Expected impact: More strategic, integrated and sustainable research and innovation collaboration in the field of climate change, resource efficiency and raw materials between the

EU and third countries from Latin America, ASEAN, the Mediterranean and the Black Sea, and the North Atlantic, by bringing the scientific communities and programmes closer to each other around specific challenges, linking their efforts and exploiting research results. Stimulation of future integrated and strategic cooperation activities, mobilisation of financial means from various sources and enhanced uptake and use of research and research results for meeting societal challenges in bi-regional and bilateral mutual priorities.

Theme8: Socio-economic sciences and Humanities

1) SSH.2013.2.1-3. the role of multinational companies in addressing global development Challenges

Call: FP7-SSH-2013 - Collaborative projects (small or medium-scale focused research projects) as well as coordination and support actions

Context

The beginning of the 21st century was marked by the United Nations Millennium Declaration which spelled out the societal challenges in an increasingly globalised world. It stipulated that every individual has the right to dignity, freedom, equality and a basic standard of living. This involved a global call to all actors to combat poverty and reinforce health care, to promote human rights and encourage tolerance and solidarity as well as, to improve the protection of the natural environment and strive for sustainable economic development.

In order to pursue the ideals set out in the Declaration, to which the EU is strongly committed, an engagement on the part of all actors is needed, including the business sector.

In particular, given that large multinational companies have become important economic and political actors influencing both international relations and economic and social development, they play a very significant role in addressing global societal challenges. Therefore, a better understanding is needed of how multinational companies integrate within both the traditional international and domestic environments to create shared value (value for the company itself and its investors as well as for other stakeholders and society at large).

Research dimensions

Research should include the following aspects:

- Developing a comprehensive framework to analyse the impacts of companies in order to assess how they contribute to socio-economic development and well-being, with a particular focus on the areas related to the Millennium Declaration. This needs to include development and use of specific methodologies and tools to measure the economic, social, and environmental and human rights impacts, both positive and negative, of commercial activities as well as their influence on the governance system at different levels, including combating corruption and promoting business ethics.
- Implementation of at least one small scale-case study of the impacts of companies using the developed framework, involving the relevant actors.
- Analysis of how international competitiveness and responsible business practices can be mutually reinforcing in a development context and what could be the role of public policy in supporting this.
- A comprehensive assessment of the consequences of complementarity and noncomplementarity of commercial activities with official development aid and operations of civil society organisations.

Collaboration with civil society organisations and other relevant stakeholders is strongly encouraged.

Funding scheme: Collaborative project (small or medium-scale focused research project) for specific cooperation action dedicated to international cooperation (*The requested European Union contribution shall not exceed EUR 2 500 000*).

Minimum conditions: At least 4 independent legal entities, 2 of which are established in a MS or AC, and none of which are established in the same MS or AC. The other 2 must be established in different international cooperation partner countries (ICPC).

2) SSH.2013.4.1-2. Facing transition in the South and East Mediterranean area: empowering the young generation

Call: FP7-SSH-2013 - Collaborative projects (small or medium-scale focused research projects) as well as coordination and support actions

Context

The South and East Mediterranean (SEMC) area extends from Morocco in the South-West to Turkey in the East. Currently this region is inhabited by nearly 300 million people, with one of the youngest age profiles in the world, as around half of the population is under 25. By

2030, the population of these countries will have increased by some 25% to around 370 million, while the working age population will have risen by some 50 millions.

The recent popular revolts in some SEMC countries have pushed the region into a process of major political, economic and social transformations, the effects of which will extend beyond the Mediterranean region. In the context of globalisation, there are growing expectations and needs on the part of the citizens, especially the young, whose opportunities for personal development are currently very limited in many cases, particularly in the case of women. Continued demographic growth and rapid urbanisation will put even greater pressure on the emerging economic systems, which will need to provide more jobs, ensure social well-being and increase social cohesion in order to empower the young generation to become a driving force of socio-economic development and agents of social and cultural change.

Research dimensions

Research should include the following:

- An assessment of applicability and relevance of other experiences of socio-economic transformation in Europe and elsewhere in the world to address the challenges facing the South and East Mediterranean region in relation to managing economic, political and social change.
- Analysis of the underlying causes of youth unemployment, including among the highly educated, as well as education and market skills requirements in the region in order to address the challenge of creating better development opportunities for young people, with a particular focus on women.
- Assessment of the economic prospects for young people, especially in marginalised and poor areas, and how to promote greater social inclusion and engagement.
- Assessment of the political role of young people and their integration into new political and economic transformations in the region. Particular focus should be placed on the difficulties that young people, especially women, are finding in the transformation processes, and on the cases in which these difficulties have been overcome through the empowerment of social movements.
- Analysis of the nature and context of changes in social values and norms of young men and women in relation to family, politics, participation and religion and how the young generation can drive new cultural trends via new communication channels, including the impact of social media on youth empowerment and sustaining social movements.

Funding scheme: Collaborative project (small or medium-scale focused research projects) for specific cooperation action dedicated to international cooperation (*The requested European Union contribution shall not exceed EUR 2 500 000*).

Minimum conditions: At least 4 independent legal entities, 2 of which are established in a MS or AC, and none of which are established in the same MS or AC. The other 2 must be established in different international cooperation partner countries (ICPC).

Important: additional eligibility criteria apply to these two topics regarding the participation of targeted ICPC countries from the South and East Mediterranean area. These criteria are set out from **section III** as the following:

Call title: FP7-SSH-2013 — Collaborative projects (small or medium-scale focused research projects) as well as coordination and support actions

Call identifier: FP7-SSH-2013-2

- Date of publication 10 July 2012⁵;
- Deadline⁶: 31 January 2013 at 17.00.00 Brussels local time

Indicative budget:⁷ EUR 68 000000; *Indicative budget breakdown of this call per Activity is shown in the table below*

The budget for this call is indicative. The final budget awarded to actions implemented through calls for proposals may vary:

- The final budget of the call may vary by up to 10% of the total value of the indicated budget for each call; and
- Any repartition of the call budget may also vary by up to 10 % of the total value of the indicated budget for the call.

Eligibility conditions:

- The general eligibility criteria are set out in Annex 2 of this work programme, and in the Guide for Applicants. Please note that the completeness criterion also includes that part B of the proposal shall be readable, accessible and printable.
- The maximum requested EU contribution under the funding schemes is indicated for each topic in the table above.
- Only information provided in part A of the proposal will be used to determine whether the proposal is eligible with respect to budget thresholds and/or minimum number of eligible participants.

Additional eligibility criteria:

- SSH.2013.2.1-3 the role of multinational companies in addressing global development challenges: minimum conditions for ICPC partners apply to Africa, Asia, Latin America and the Caribbean.
- SSH.2013.4.1-2. Facing transition in the South and East Mediterranean Area: empowering the young generation: at least 4 ICPC partners from different countries of the South and East Mediterranean area.

Evaluation procedure:

- For collaborative projects: at least one proposal per topic will be selected for funding provided it passes all evaluation thresholds;
- A maximum of two collaborative projects per topic will be selected for funding with the exception of topics SSH.2013.7.1-1 and SSH.2013.8.1 where only one collaborative project will be selected provided it passes all evaluation thresholds;

⁵ The Director General responsible for the call may publish it up to one month prior or after the envisaged date of publication.

⁶ The Director General responsible may delay this deadline by up to two months.

⁷ Under the condition that the draft budget for 2013 is adopted without modifications by the budget authority.

- For Coordination and Support Actions: only the top-ranked proposal per Coordination and Support Action will be selected for funding provided it passes all required evaluation thresholds;
- The evaluation criteria and scoring scheme are set out in Annex 2 to the work programme;
- Proposal page limits: Applicants must ensure that proposals conform to the page limits and layout given in the Guide for Applicants, and in the proposal part B template available through the electronic Submission Services of the Commission;
- The Commission will instruct the expert evaluators to disregard any pages exceeding these limits;
- The minimum font size allowed is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers);
- A one-stage submission procedure will be followed;
- Experts will carry out the individual evaluation of proposals remotely, with the consensus session being held in Brussels;
- The evaluation criteria and sub-criteria, together with the eligibility, selection and award criteria for the different funding schemes are set out in Annex 2 to the work programme. For this call the scientific and/or technological excellence evaluation criterion will include the following additional sub-criterion: ‘appropriate comparative perspective and the largest possible European coverage in relation to the subject of research (though not necessarily simply by reason of a geographically diverse consortium)’.

Proposals will be ranked within each Activity according to the procedure described in Annex 2, taking into account the fact that at least one proposal per topic will be selected provided it passes all evaluation thresholds.

First, highest ranked proposals within each Activity will be selected for funding up to the budget limit envisaged for each Activity.

In each Activity, the rest of proposals ranked above the evaluation threshold will be put in a reserve list. Within each reserve list, proposals will also be ranked in strict order of marks.

Subsequently, any additional funds that may become available will be allocated to proposals across the different reserve lists, respecting only the strict order of marks (with no hierarchical order between Activities).

Procedure for prioritising proposals with equal scores

Between proposals of equal marks, priority will be given to proposals that address topics that are not otherwise covered by more highly-rated proposals. In cases where all topics concerned are already covered, priority will be given to proposals with the highest marks in the criterion of scientific quality. In cases of equal marks in the criterion of scientific quality, priority will be given to proposals with higher marks in the criterion of potential impact.

- **Indicative evaluation and contractual timetable:** evaluation of proposals will take place in May 2013 and first grant agreements are expected to be signed in November 2013.
- Participants are required to conclude a consortium agreement prior to grant agreement.
- **The forms of grant** which will be offered and the maximum reimbursement rates are specified in Annex 3 to the work programme.
- **Flat rates to cover subsistence costs:** In accordance with Annex 3 to this work programme, this call offers the possibility of using flat rates to cover subsistence costs incurred by beneficiaries during travel carried out within grants for indirect actions. For further information, see the relevant Guides for Applicants for this call. The applicable flat rates are available on the Participant Portal at: https://ec.europa.eu/research/participants/portal/page/fp7_documents under 'Guidance documents for FP7/Financial issues/Flat rates for daily allowances'.

Dissemination: Grant agreements for projects financed under this call for proposals will include the special clause 39 on 'Open Access in FP7'. Under this clause, beneficiaries are required to make their best efforts to ensure free access to peer-reviewed articles resulting from projects via an institutional or subject-based repository.⁸

Theme9: Space

SPA.2013.2.3-01: Space-weather events

Call: Space Call 6

Solar activity modulated effects on the Sun and in the helio- and magnetosphere affect the entire Earth environment from the magnetosphere down to the ionosphere and even to the lower atmosphere climate system. Space storms (particles, plasma or electromagnetic) are a recognised aerospace hazard and can cause major failures, e.g. onboard aircraft and spacecraft, in electrical power grids, in telecommunications links (satellite, launcher and ground-based) and in navigation systems (e.g. recent peak in the solar activity have disturbed the performance of GNSS and satellite-based augmentation (SBAS) systems). More accurate modelling and impact assessment on affected systems, in particular GNSS, of disruptive events that are to be expected as part of this cyclical phenomenon are particularly poignant.

Activities could focus on research areas such as:

- Modelling of ionospheric geographical and temporal gradients for different regions of the world (equatorial, mid-latitude and auroral regions), tracking and modelling of ionospheric disturbances such as travelling depletion, solar storms or scintillation, followed by an assessment of effects of ionosphere on navigation signals in the context of single and dual frequency usage and the definition of algorithms able to bound the maximum measurement errors caused by different ionospheric effects.

⁸ Please see:

http://ec.europa.eu/research/participants/portal/ShowDoc/Extensions+Repository/General+Documentation/Legal+documents+for+implementation/Model+grant+agreement/General/fp7-ga-clauses_en.pdf

- Modelling the interaction of satellites with the space environment, especially particle flows (ranging from sub-atomic flows to micrometeoroids and small debris) placing a particular focus on the different physical processes occurring simultaneously or sequentially as a result of impacts (e.g. discharges triggered by impacts).
- Development of mitigation means.

Cooperation with international partners from third countries (ICPC), or countries which have signed an agreement with the EU covering Science and Technology, as well as other spacefaring nations (e.g. US, Japan) will help to enhance research partnerships with emerging or established space powers. Therefore such international partners will be eligible to participate and to be funded and this aspect will be taken into account in the evaluation.

- Expected impact:

*Projects are expected to significantly contribute to the European capacity to improve the accuracy and reliability of the Galileo system and to **prevent damage / protect space assets** from space environment events. Projects are expected to significantly contribute to both identify **the impacts** of space environment events in particular on space-based navigation systems, including space- and ground-based infrastructures, and develop concrete solutions to mitigate these risks.*

Funding schemes: *Collaborative Projects* (small or medium-scale focused research project) with upper eligibility limit of EUR 2 000,000 European Union requested contribution.

Note: Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.